



32E12SW0065 20 HOBLITZELL

010

DIAMOND DRILLING

TOWNSHIP: HOBLITZELL TWP.

REPORT NO: 20

WORK PERFORMED FOR: Cogema Canada Ltd.

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

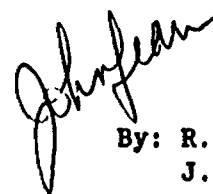
<u>Claim No.</u>	<u>Hole No.</u>	<u>Footage</u>	<u>Date</u>	<u>Note</u>
L 789332	BUR-01	200m	Feb/88	(1)(2)
	BUR-03	149m	Feb/88	(1)(2)
L 789335	BUR-04	200m	Feb/88	(1)(2)
L 789318	BUR-09	257m	Mar/88	(1)(2)
L 789326/ L 789329	BUR-10	244m	Mar/88	(1)(2)
L 789304	BUR-11	217m	Mar/88	(1)(2)
L 789239	BUR-12	191m	Mar/88	(1)(2)
L 789316/ L 789317	BUR-13	<u>188m</u>	Mar/88	(1)(2)

(1) W8808.002, date filed April 89

(2) comparable to onep submission 0m87-6-G-326
filed July 1991

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



32E12SW0065 20 HOBLITZELL

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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).

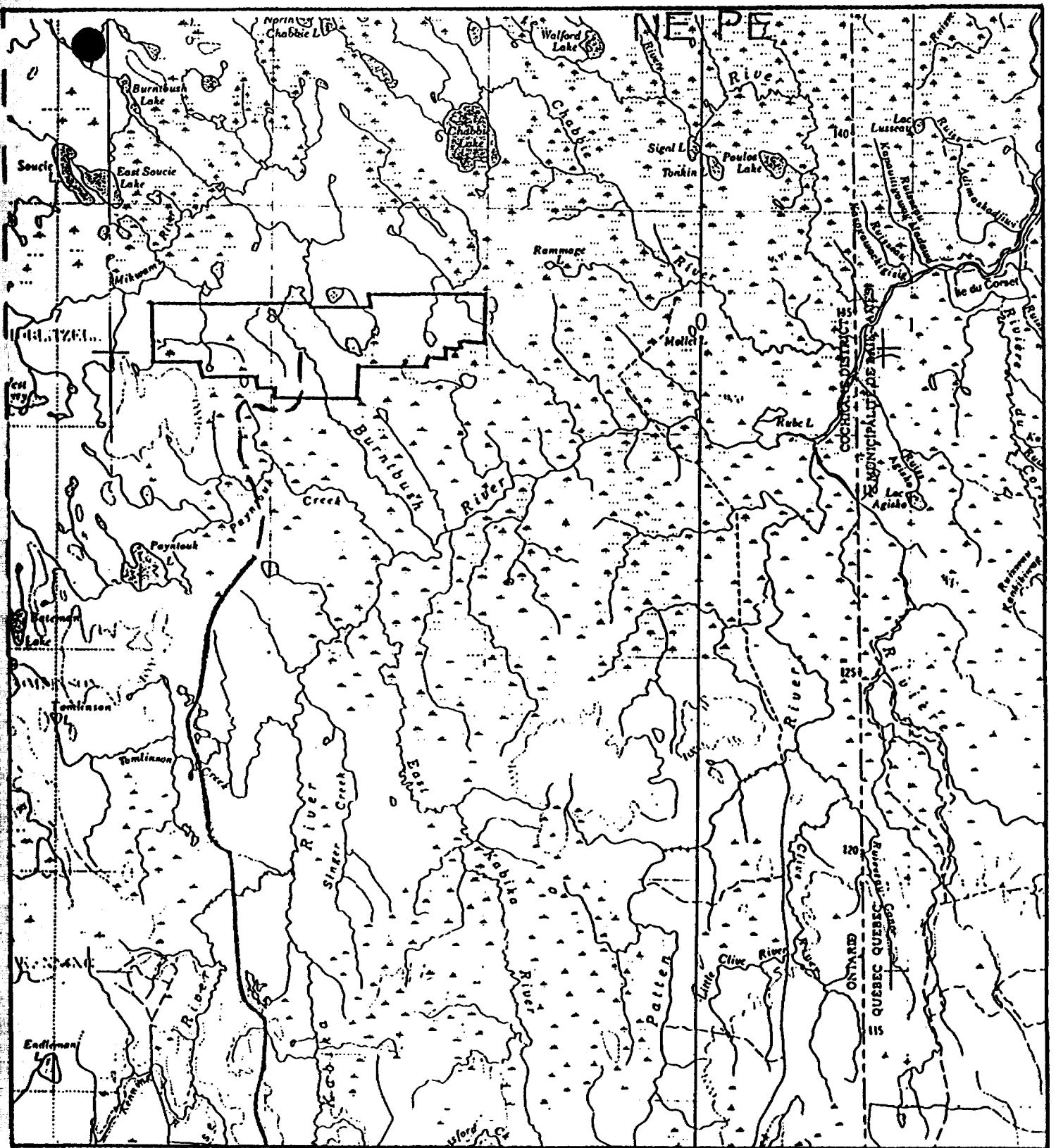


Figure 1

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:</u>				O/B :	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 micascists 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 2.2m 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 magnetic 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 ≈ 150 m to the west in an area of low magnetics, and one hole at ≈ 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 \pm 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 \approx 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 \pm garnet set in a finer grained mostly recrystallized groundmass of plagioclase, biotite and quartz \pm 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.

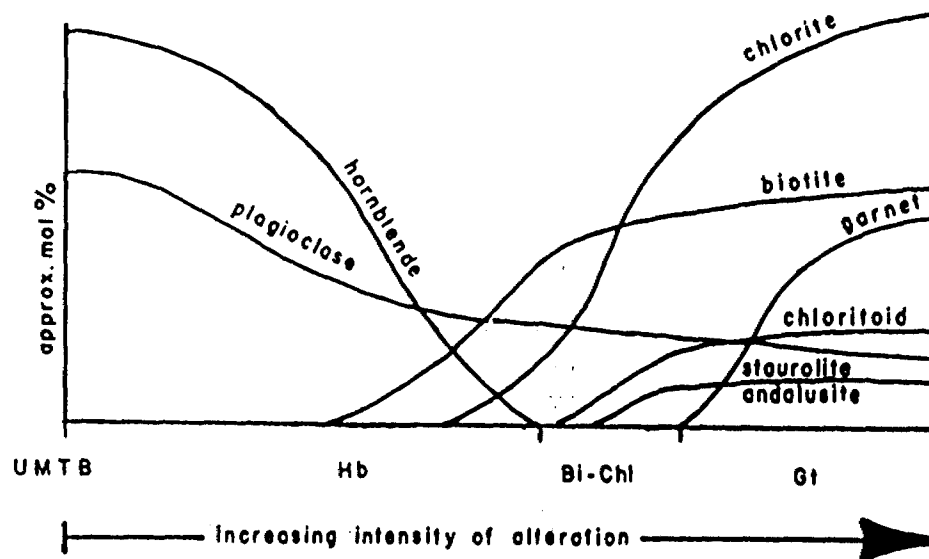


FIG. 7. Schematic representation of the variation in abundance of minerals indicative of alteration in mafic metavolcanic rocks in the ESC ore zone. Symbols: UMTB = unaltered metamorphosed tholeiitic basalt; Hb = hornblende or weakly altered facies; Bi-Chl = biotite-chlorite or moderately altered facies;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

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

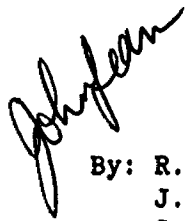
COGEMA CANADA LIMITED
BURNTBUSH RIVER PROJECT
FINAL REPORT 1988
"DIAMOND DRILL RESULTS"
VOLUME 2 of 3

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

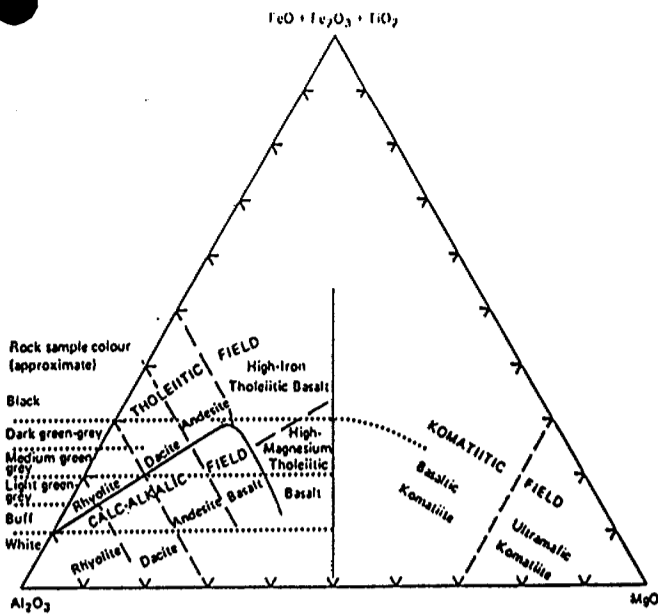
7.3- 28.5	amphibole ± garnet schist; flow
28.5- 38.8	amphibole ± garnet volcanoclastic schist; lapilli tuff
38.8- 55.6	amphibole schist; flow (5018, 5019)
55.6- 89.9	amphibole ± garnet volcanoclastic schists; lapilli tuff (5020)
89.9- 97.3	amphibole schist; flow
97.3-102.3	amphibole volcanoclastic schist;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

SUMMARY OF GOLD ANALYTICAL RESULTS

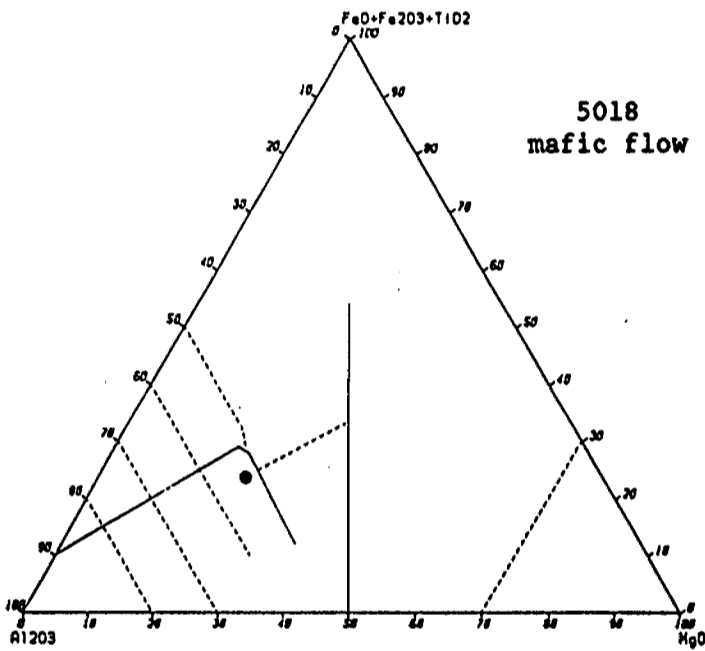
- 1) at 12.5-13.0: 0.2 g/t; relatively fresh, punctual sample
- 2) at 24-30 m: 20, 40, 15, 45 ppb; fractured, weakly pyritic zone;
at 32-34 m: 3 of 4 samples give 0.2 g/t; 2-5% pyrite
- 3) at 150.1-150.6: 0.2 g/t; weakly pyritic healed breccia;
at 156.0-157.0: 0.3, 0.2 g/t; 1-3% pyrite;
at 163.0-165.5: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

BUR-01

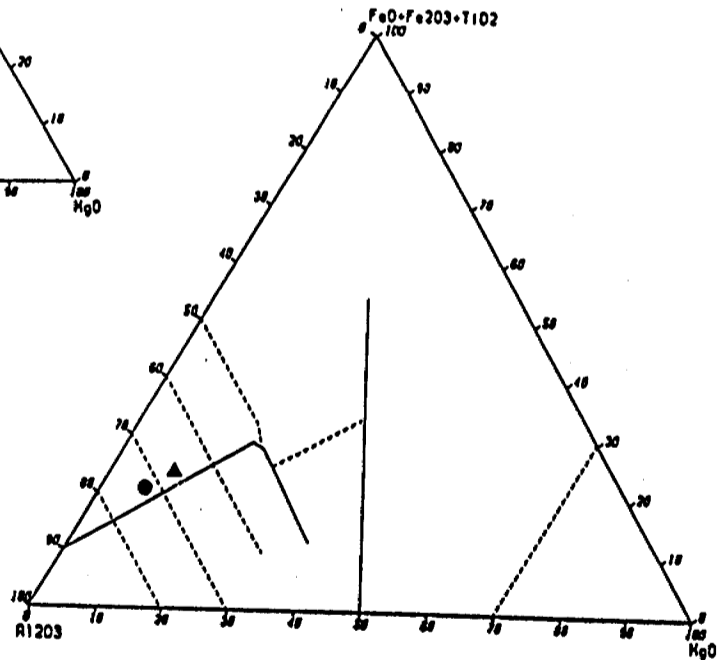
JENSEN CATION PLOTS



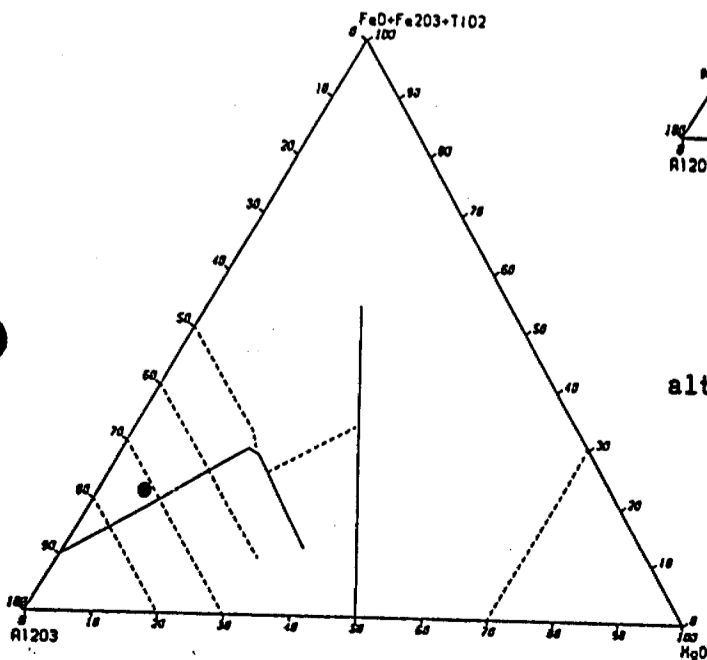
5018 mafic flow



● 5020 volcaniclastic
▲ 5026 probably volcaniclastic (clast: matrix not recorded)



5019 altered contact zone



SUMMARY LOG

BUR-02:

0 - 46.1

OVERBURDEN

46.1-132.3

METASEDIMENTARY ROCKS

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

MAFIC to INTERMEDIATE METAVOLCANIC ROCKS

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

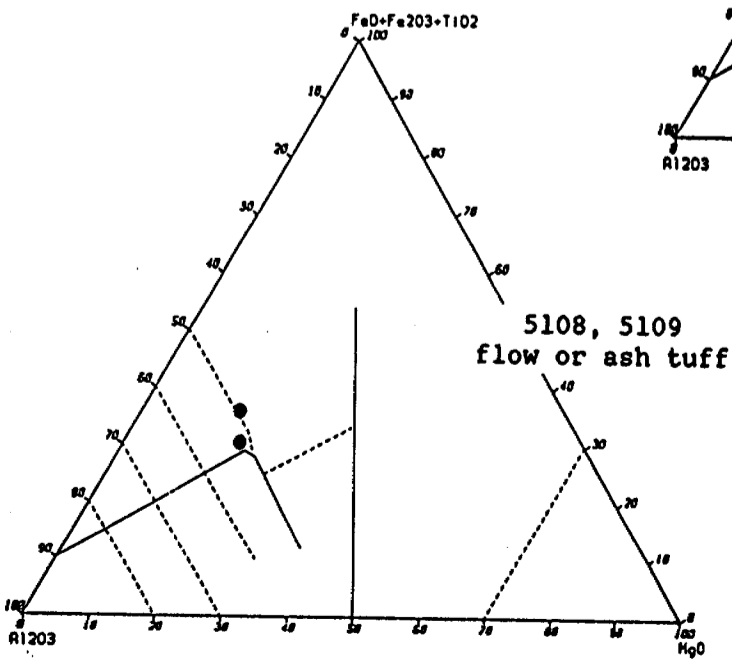
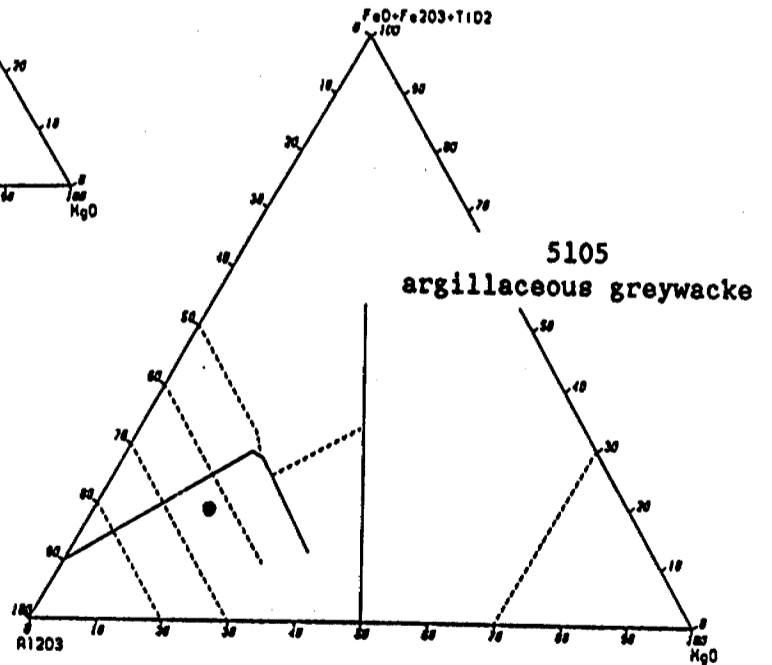
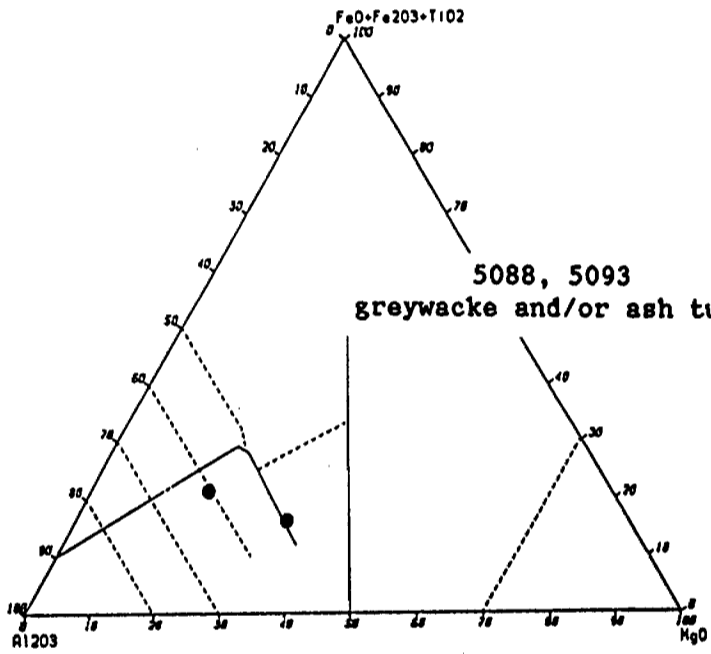
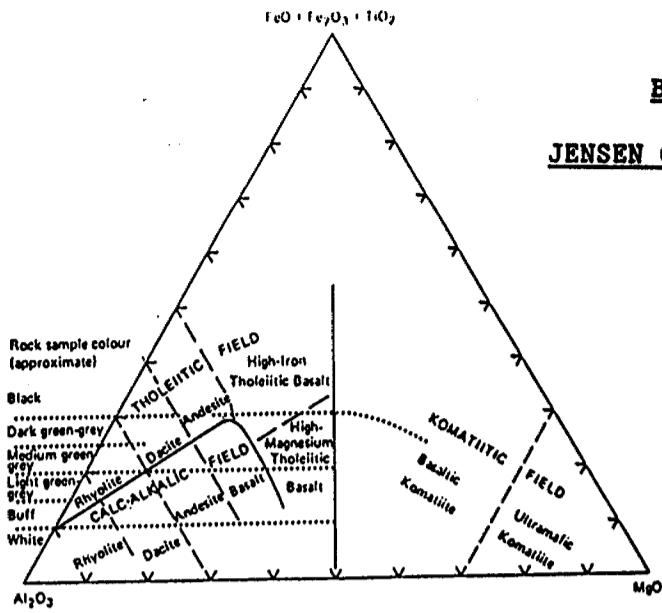
amphibole ± garnet schist; flow or ash tuff

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

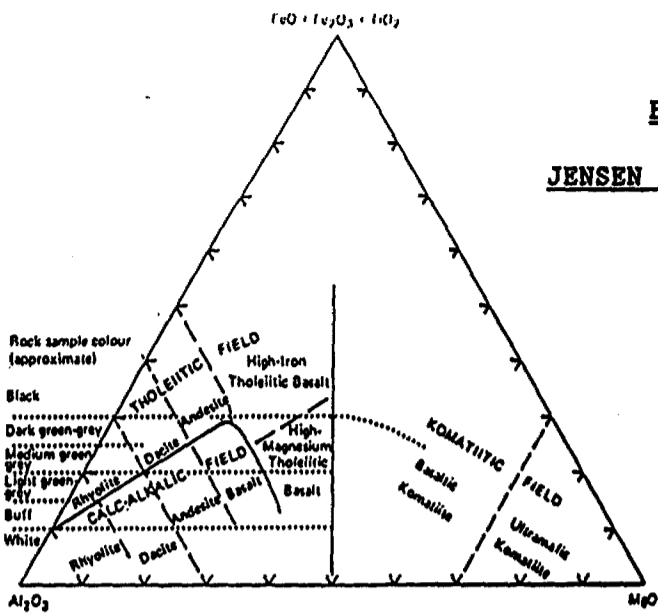
amphibole ± garnet schist; flow
(5049, 5050, 5055, 5057)

SUMMARY OF GOLD ANALYTICAL RESULTS

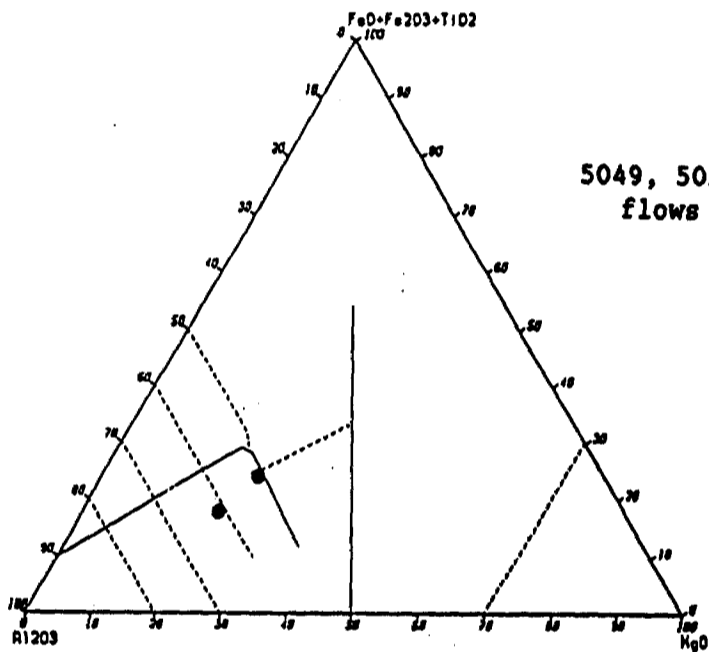
1) at 61.0-61.5: 0.2 g/t; weakly pyritic healed breccia, punctual sample

BUR-03

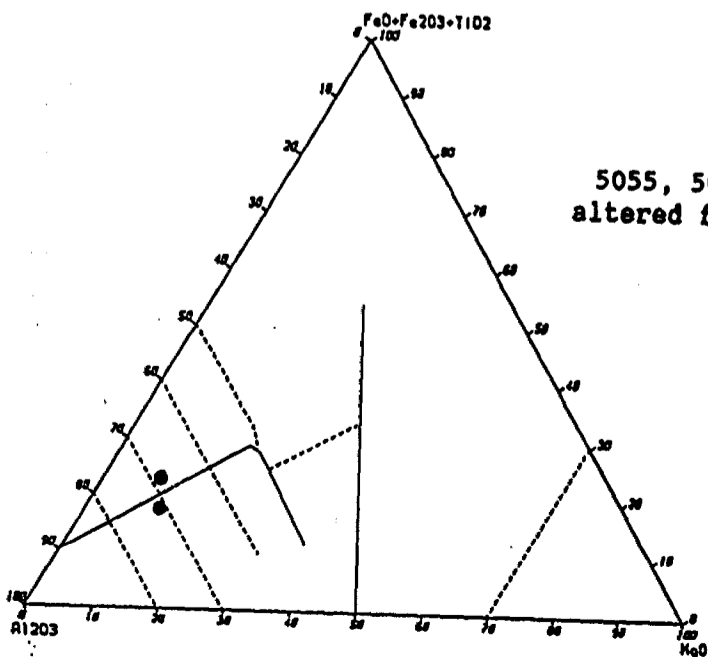
JENSEN CATION PLOTS



5049, 5050
flows



5055, 5057
altered flows



SUMMARY LOG

BUR-04:

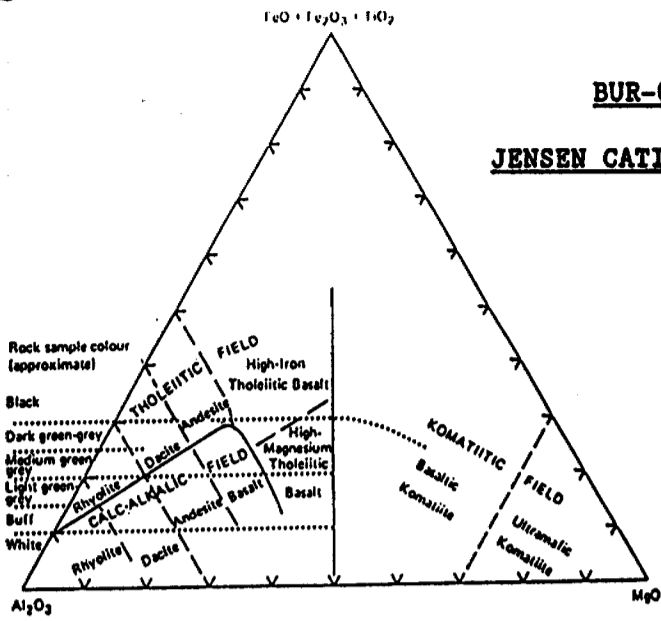
0 - 7.3	<u>OVERBURDEN</u>
7.3- 74.1	<u>INTERMEDIATE METAVOLCANIC ROCKS</u>
7.3- 74.1	sulfide-rich schist (pyrite < pyrrhotite); flow (5062, 5068, 5067)
74.1-124.9	<u>FELSIC METAVOLCANIC ROCKS</u>
74.1-124.9	stretched feldspar porphyry; porphyritic flow or sill (5074, 5075)
124.9-200.0	<u>MAFIC to INTERMEDIATE 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

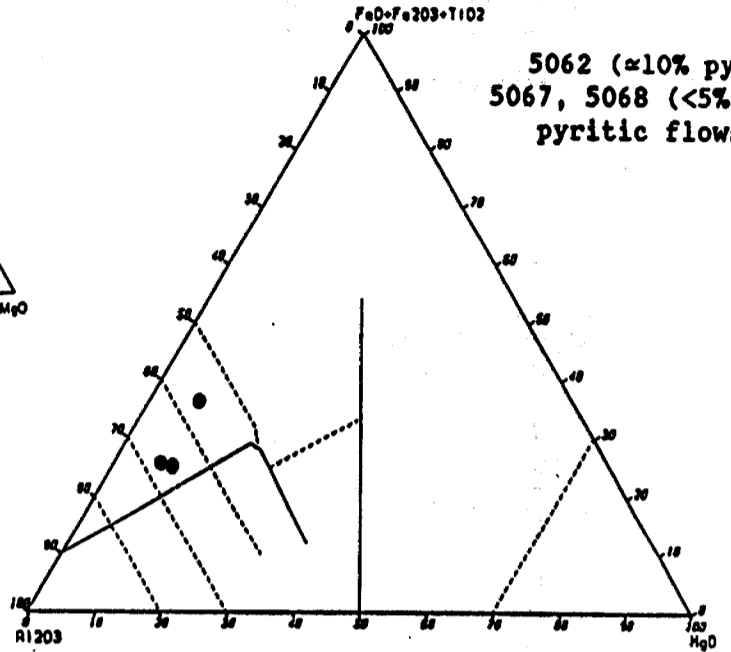
- 1) at 14.0-15.5: 40 ppb; up to 10% pyrite--pyrrhotite, quartz veinlets
at 17.5-25.5: 15, 60, 10, 15, 45, 24 ppb; up to 10% pyrite-pyrrhotite, quartz-pyrite veinlets
at 26.5-31.0: 25, 15, 15 ppb; 3-10% pyrite
- 2) at 81.0-82.5: 25 ppb; 3% pyrite
at 108.5-110.0: 20 ppb; relatively fresh sample
- 3) at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

BUR-04

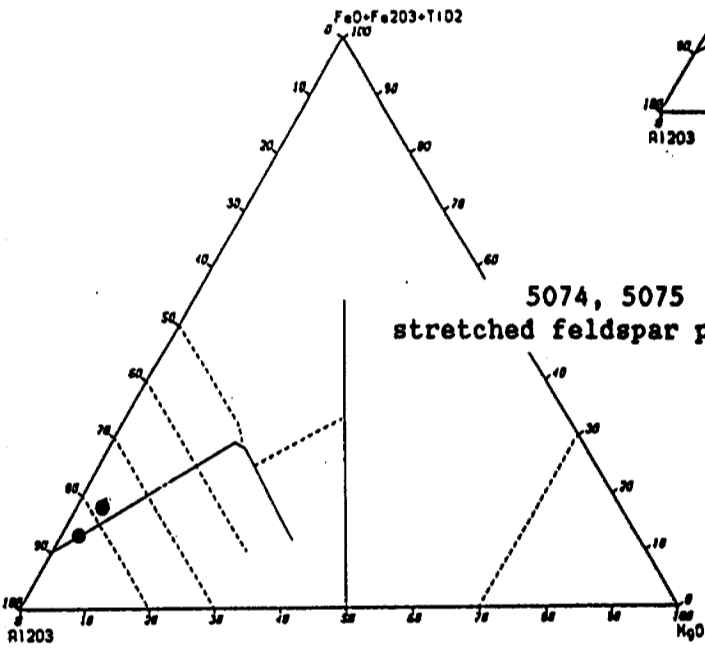
JENSEN CATION PLOTS



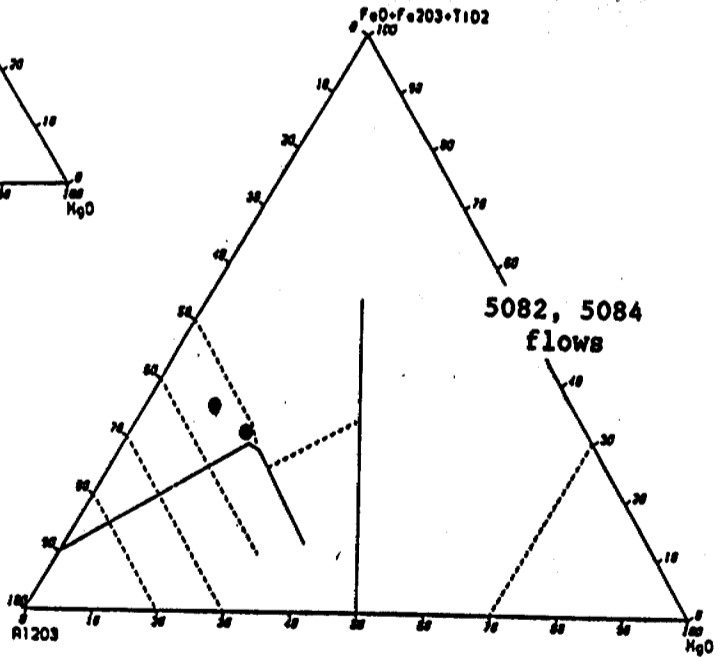
5062 ($\approx 10\%$ py)
5067, 5068 ($< 5\%$ py)
pyritic flows



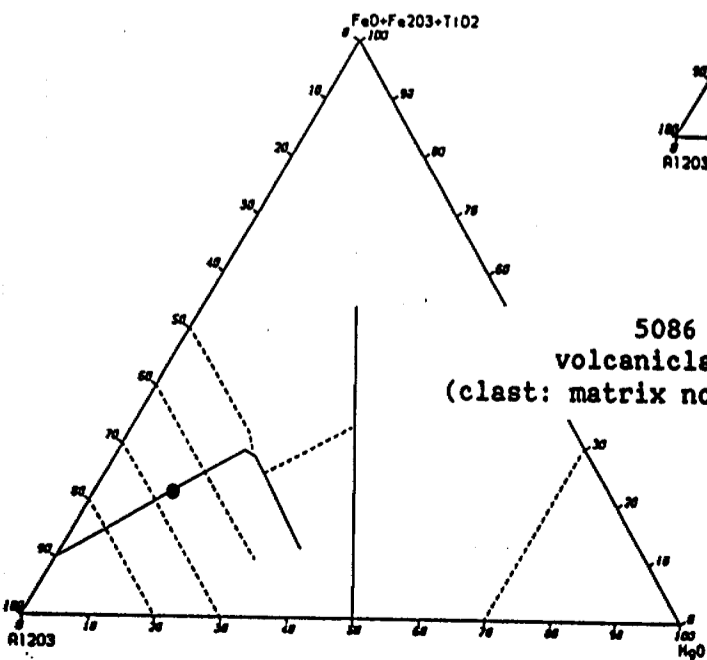
5074, 5075
stretched feldspar porphyry



5082, 5084
flows



5086
volcaniclastic
(clast: matrix not recorded)



SUMMARY LOG

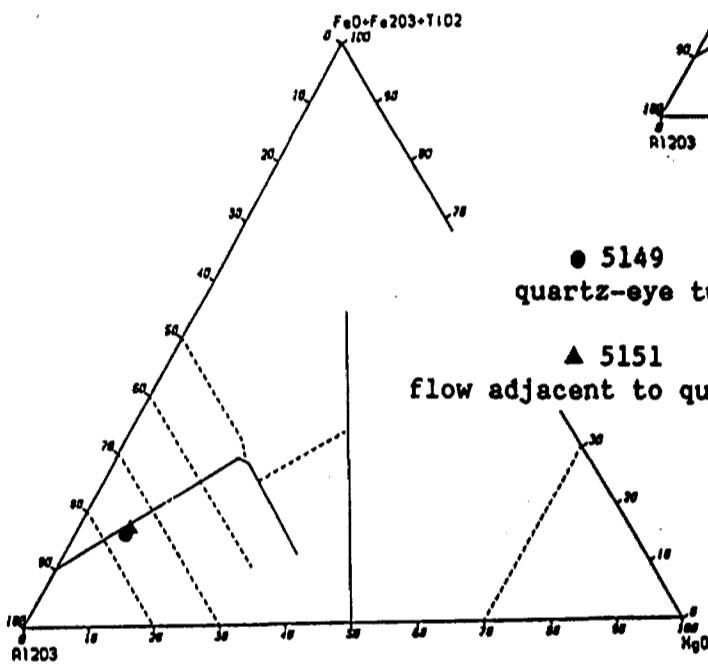
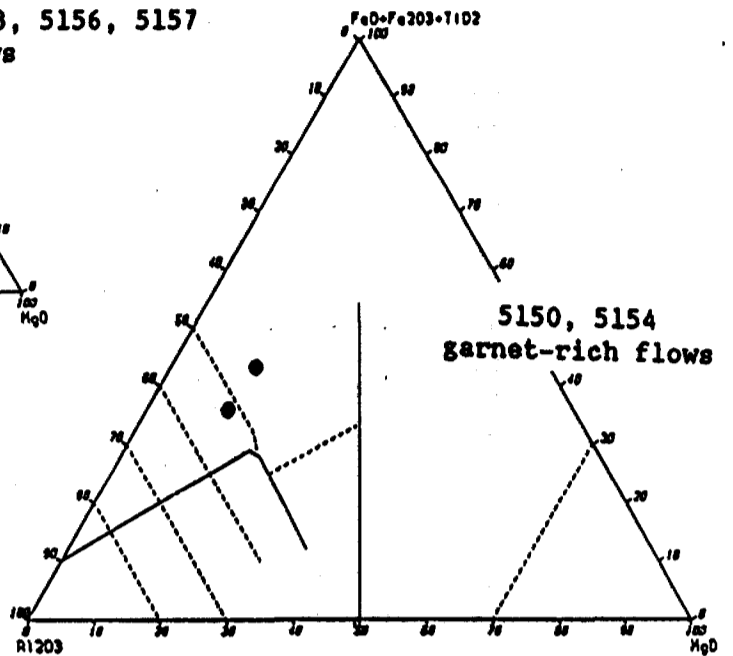
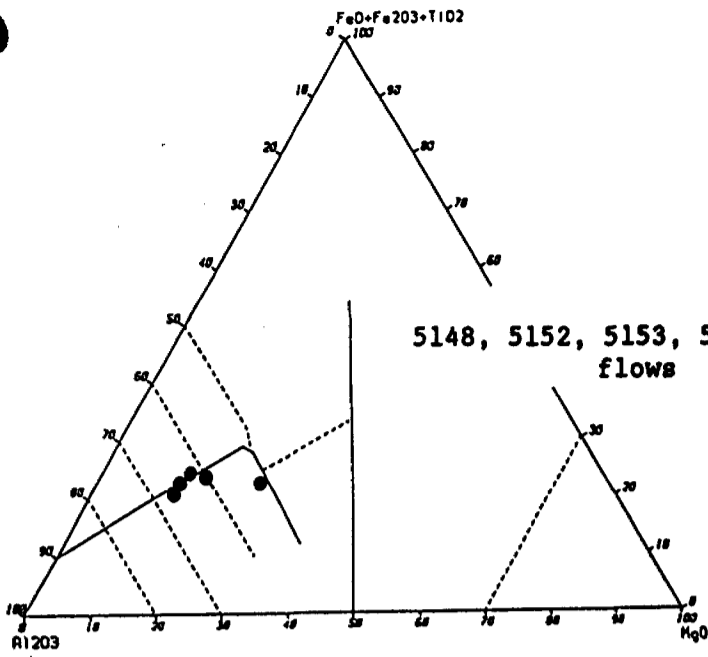
BUR-05:

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)

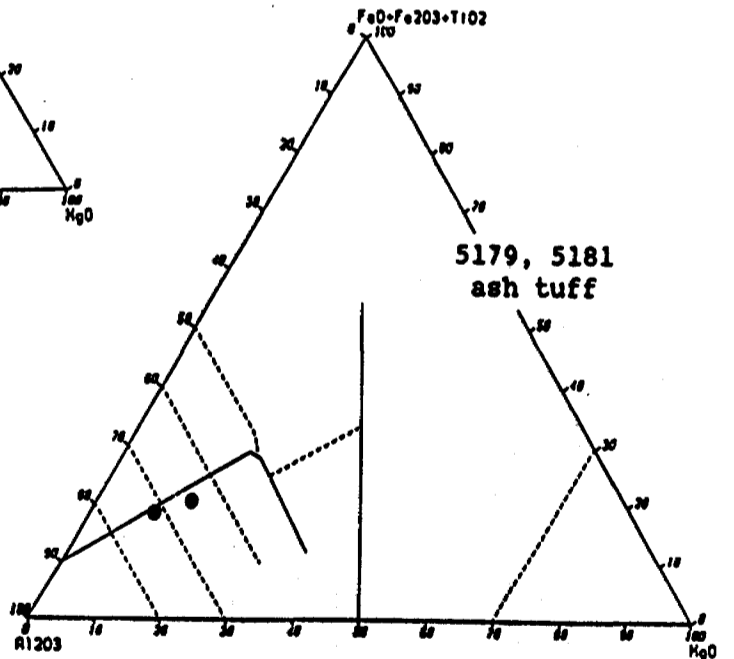
SUMMARY OF GOLD ANALYTICAL RESULTS

- 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

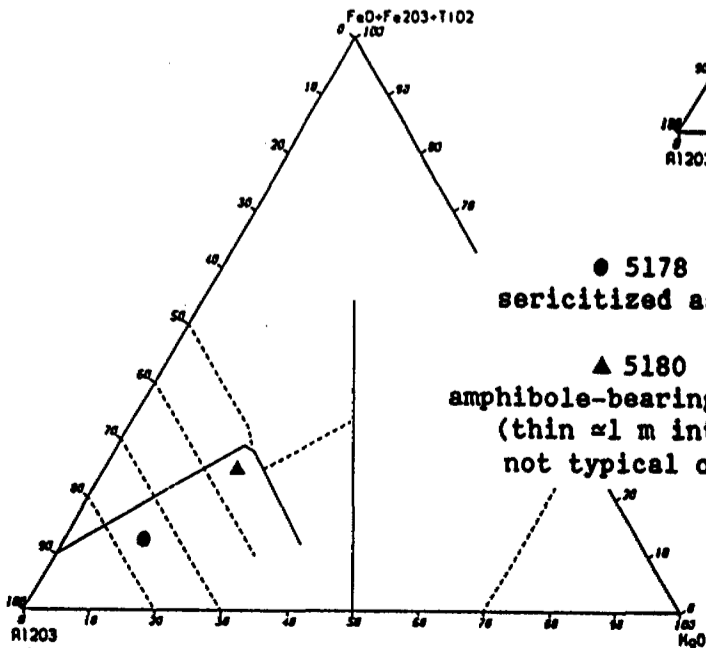


▲ 5151
flow adjacent to quartz vein



● 5178
sericitized ash tuff

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



SUMMARY LOG

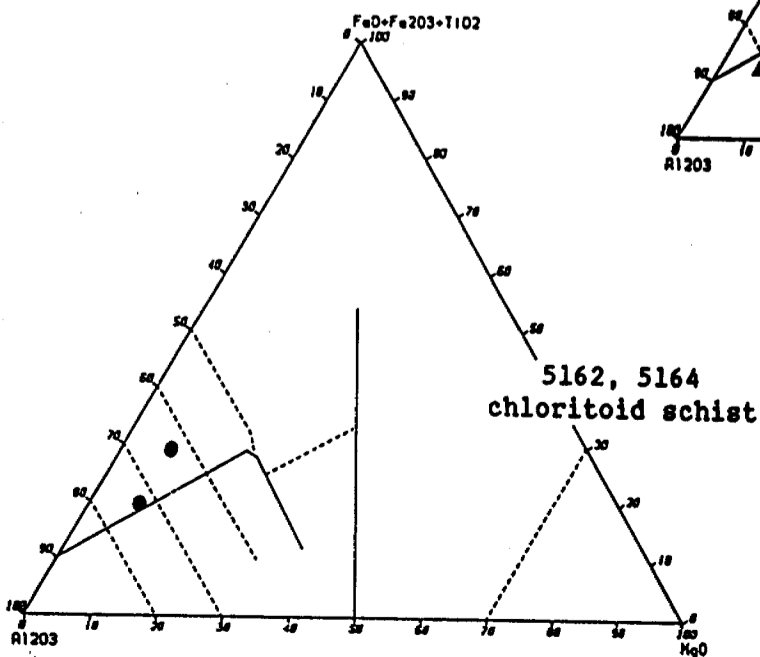
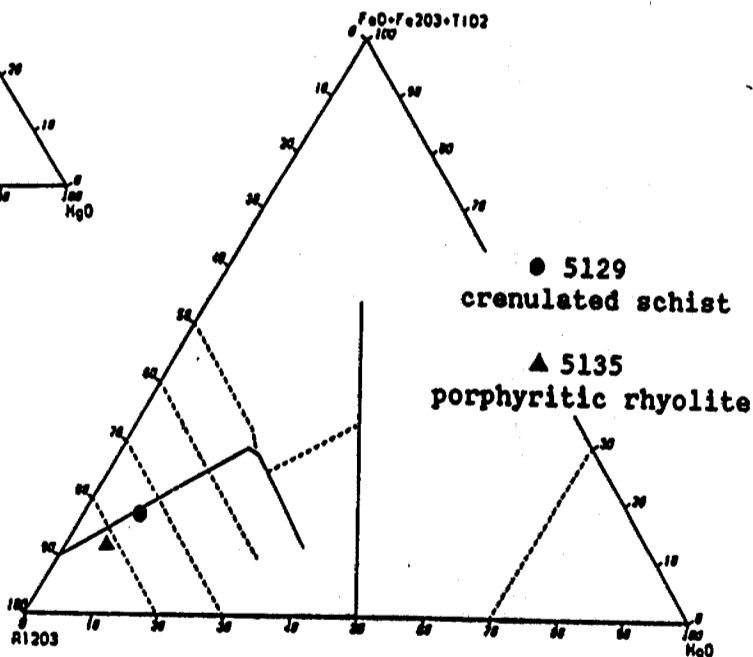
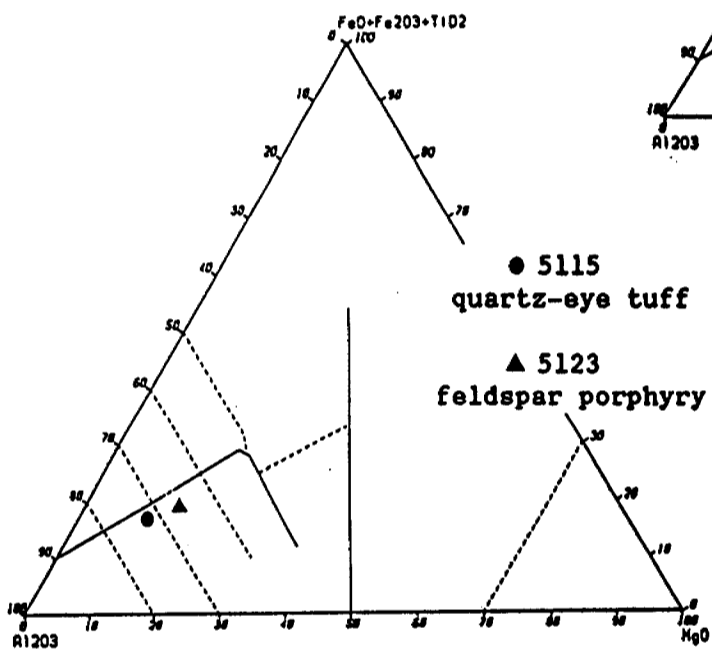
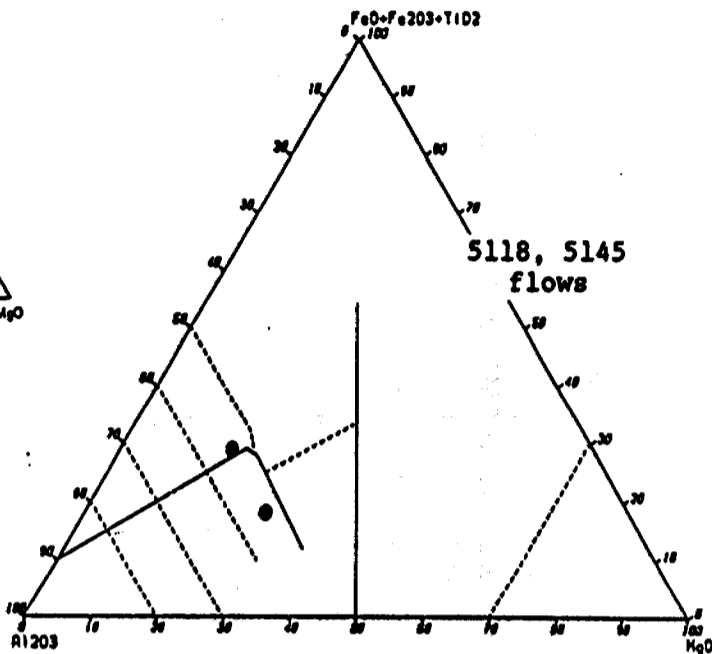
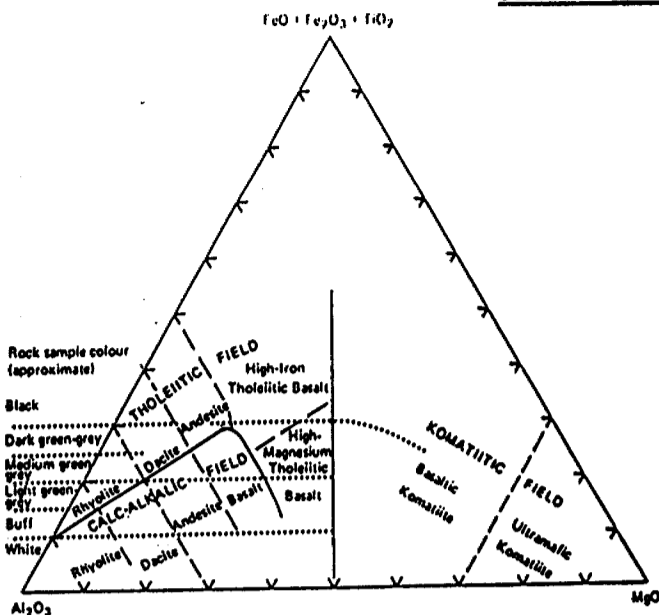
BUR-06:

0 - 40.0	<u>OVERBURDEN</u>
40.0-121.6	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
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	<u>FELSIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
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	<u>MAFIC to INTERMEDIATE METAVOLCANIC ROCKS</u>
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

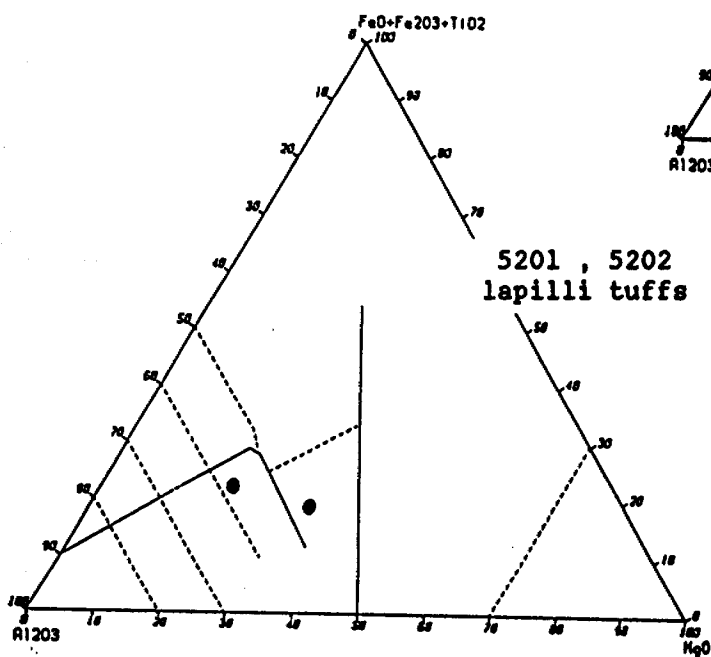
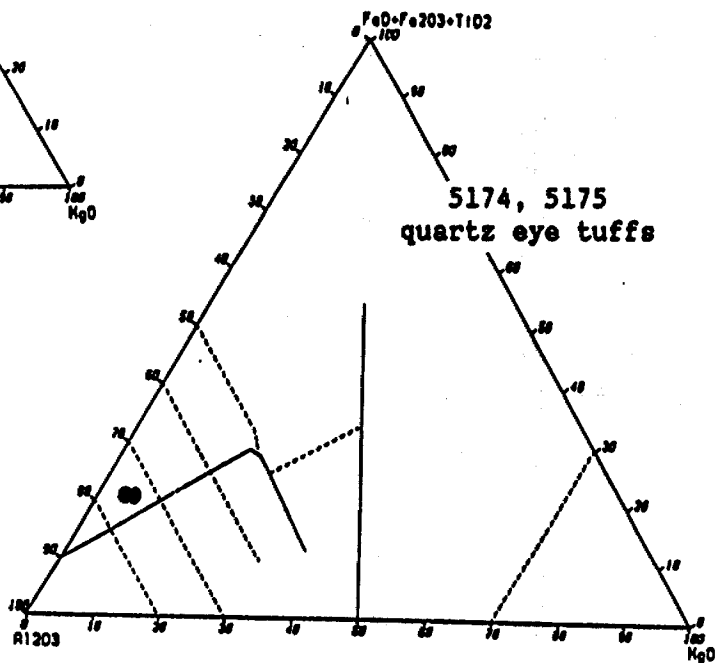
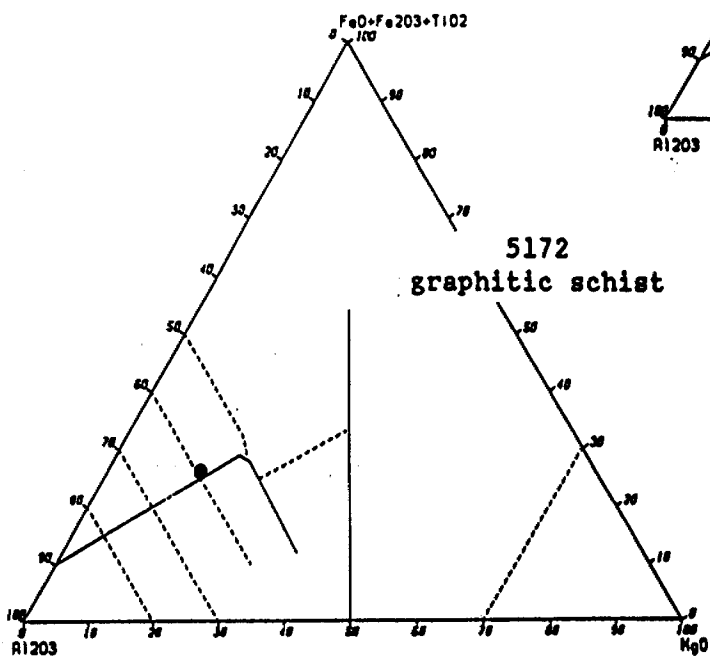
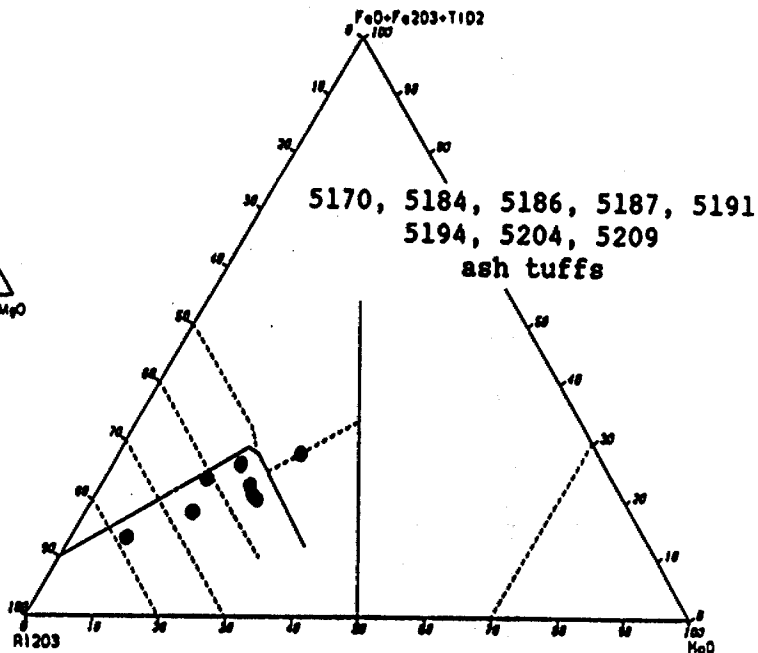
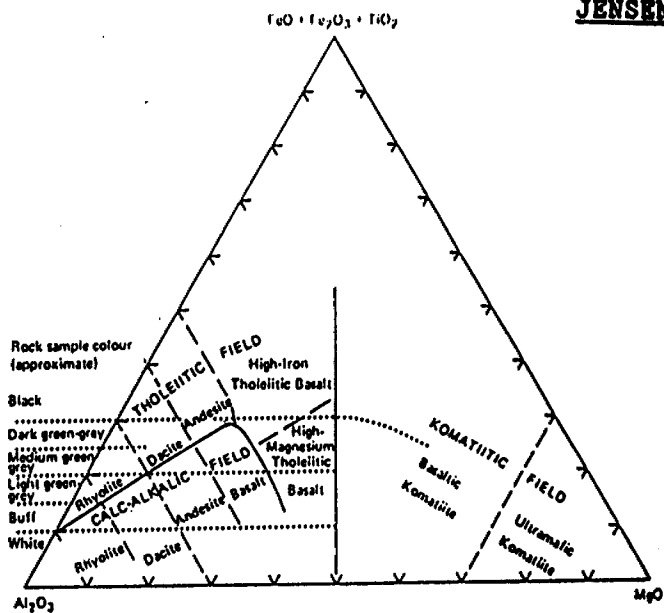
BUR-07:

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

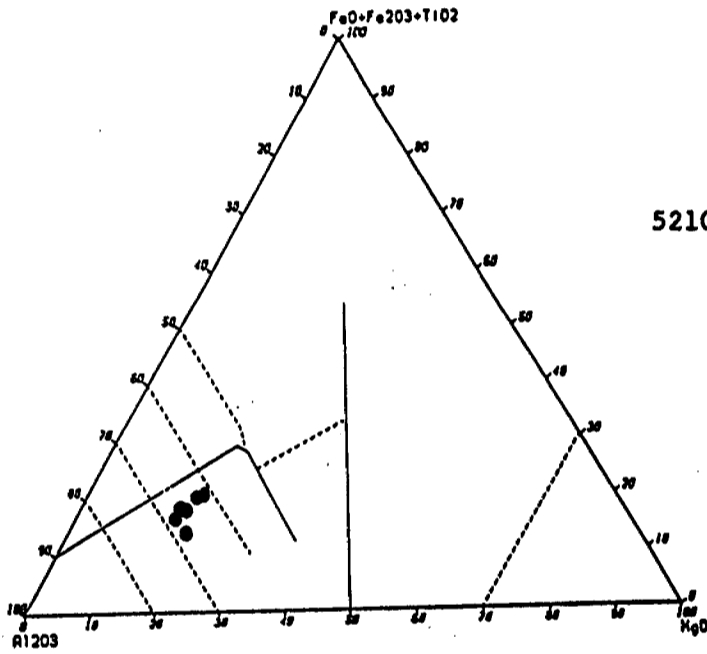
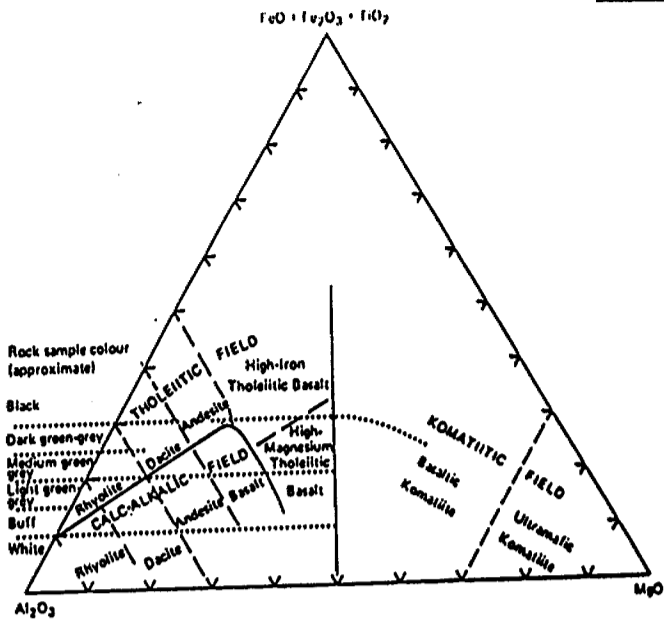
47.0-228.3

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

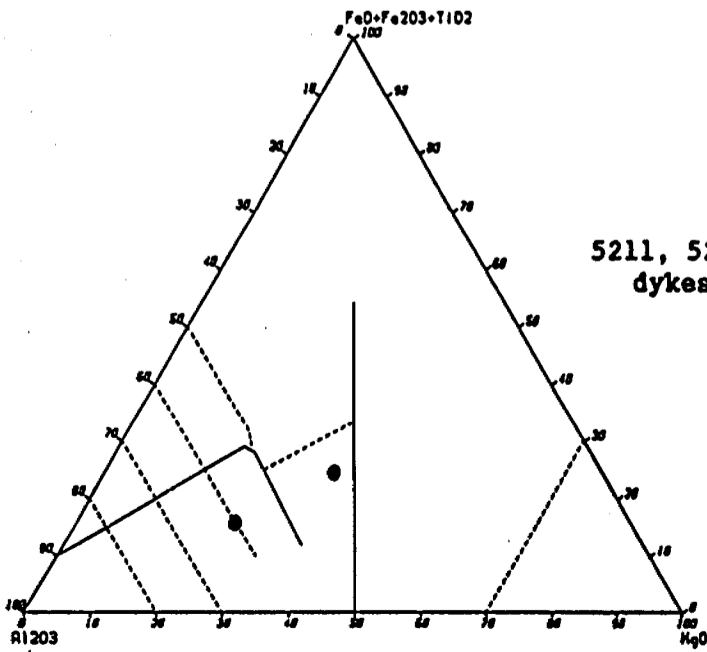
SUMMARY OF GOLD ANALYTICAL RESULTS

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

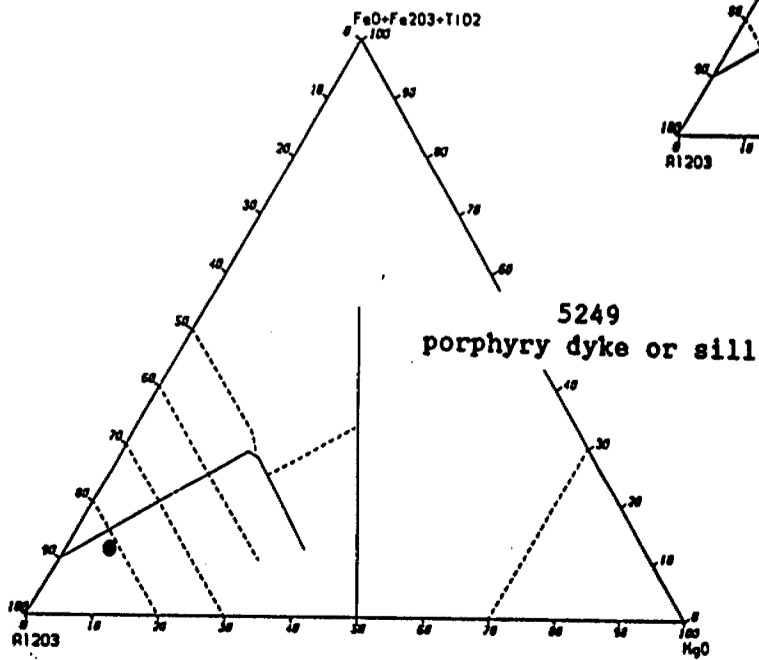
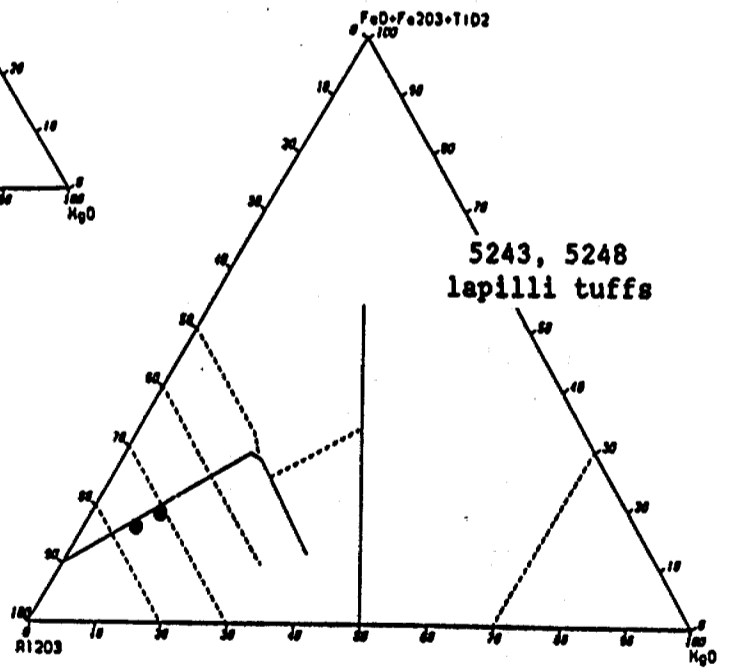
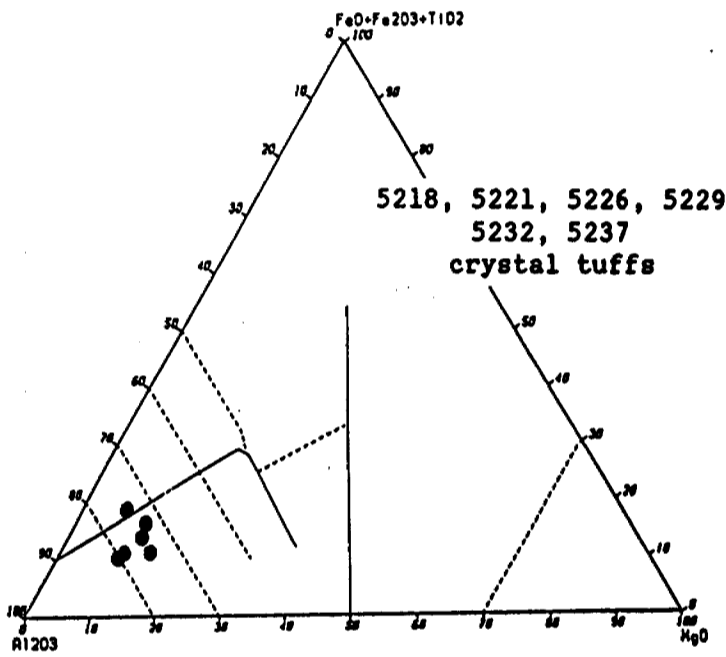
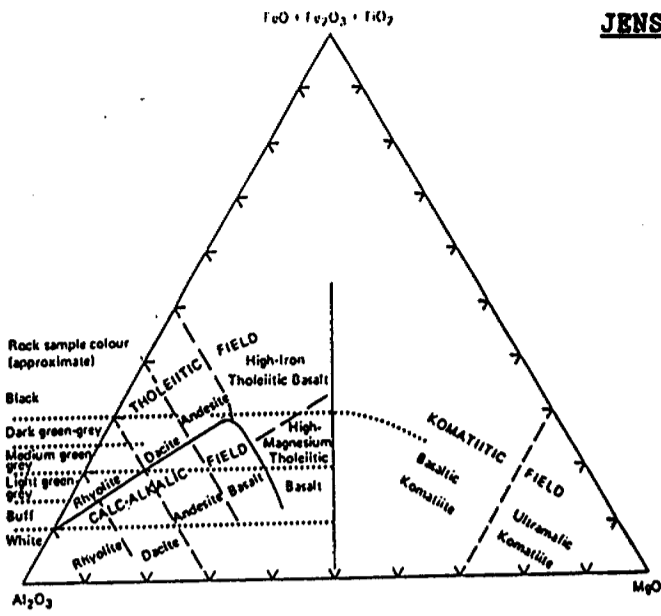
INTERMEDIATE (DACITIC) METAVOLCANIC ROCKS

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

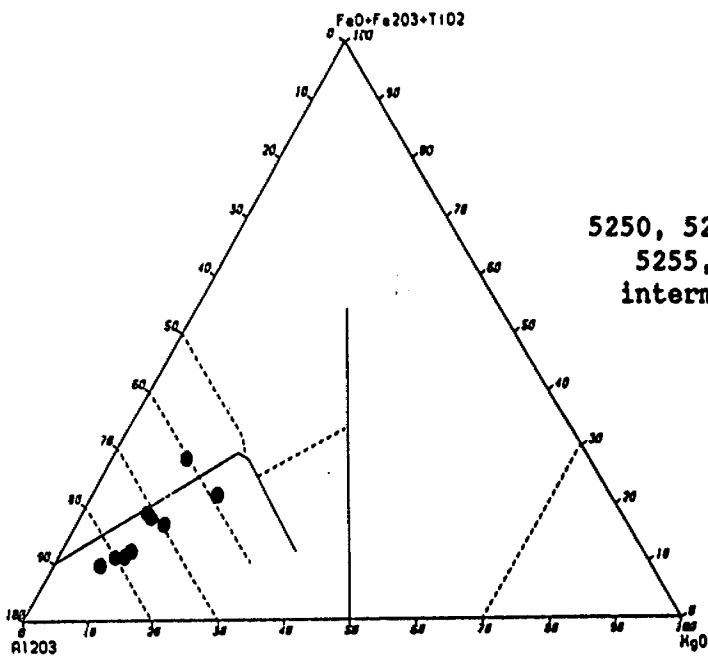
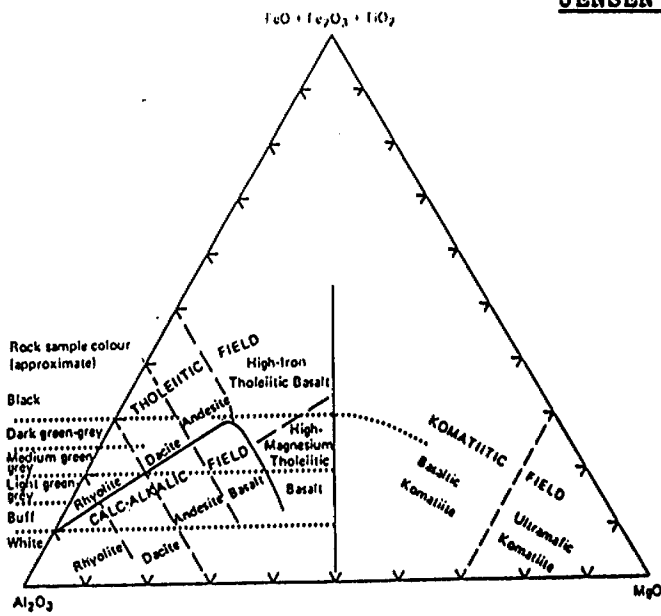
BUR-10:

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)

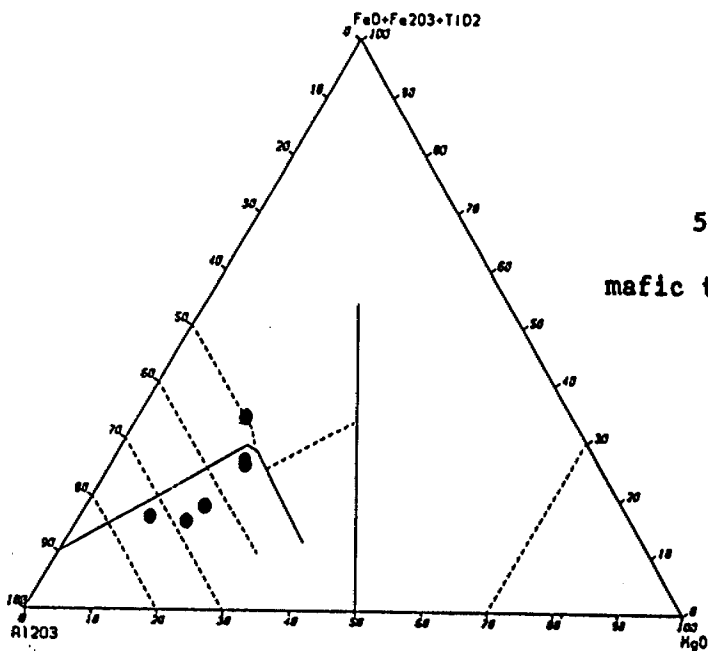
SUMMARY OF GOLD ANALYTICAL RESULTS

- 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

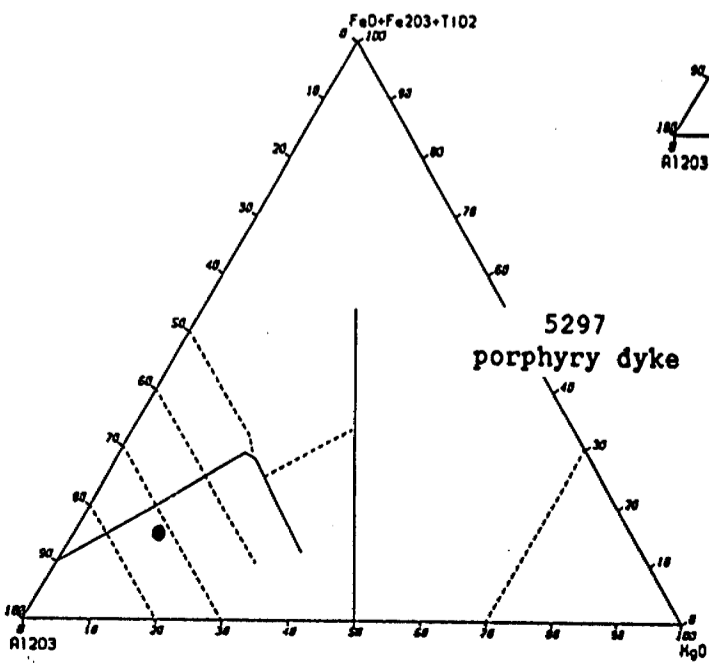
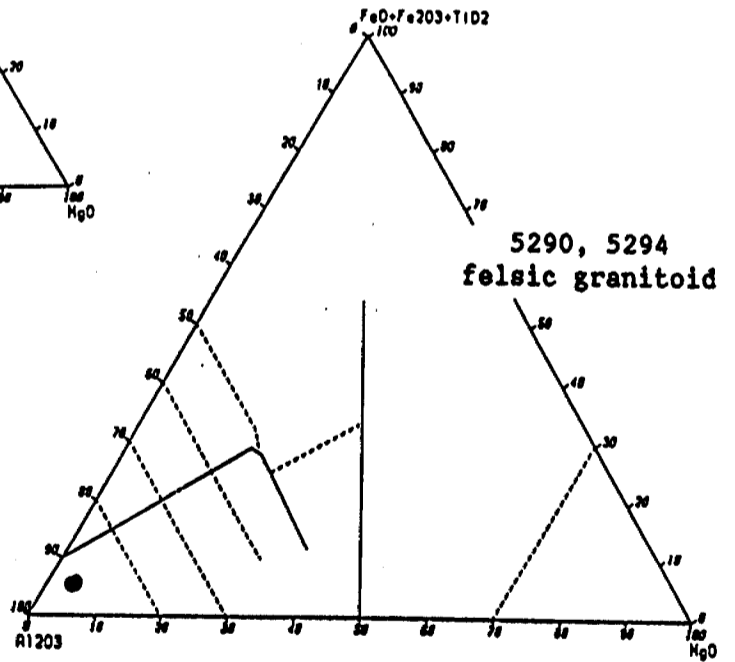
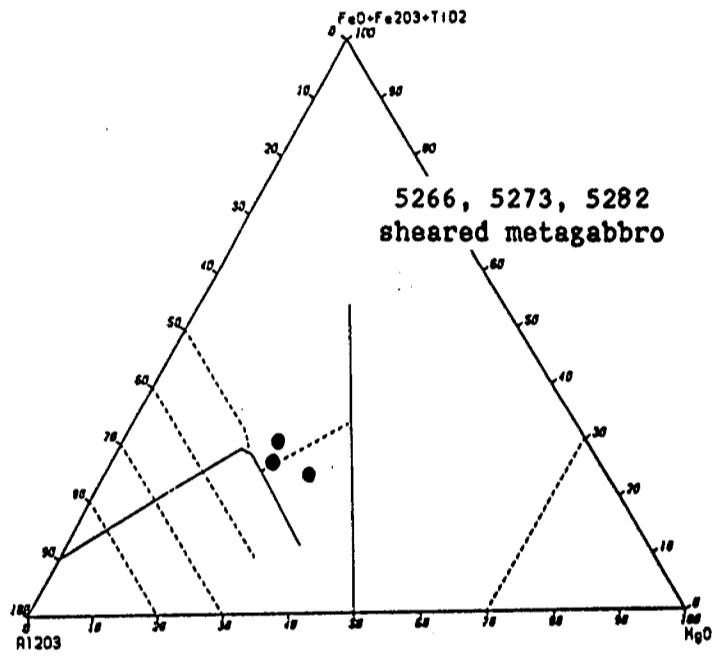
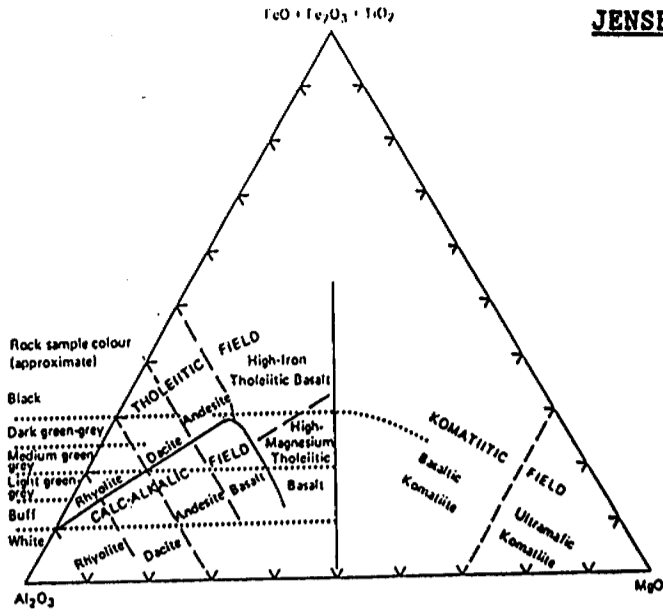
BUR-11:

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

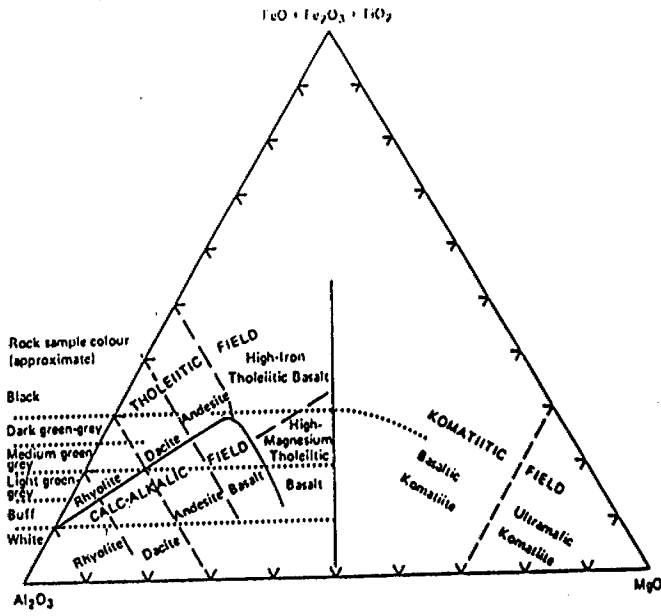
FELSIC INTRUSIVE ROCKS

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

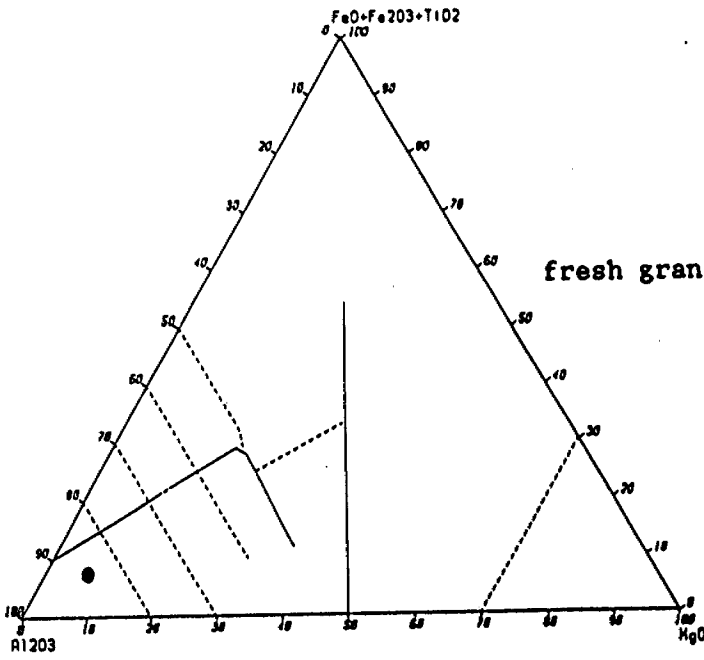
SUMMARY OF GOLD ANALYTICAL RESULTS

- 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

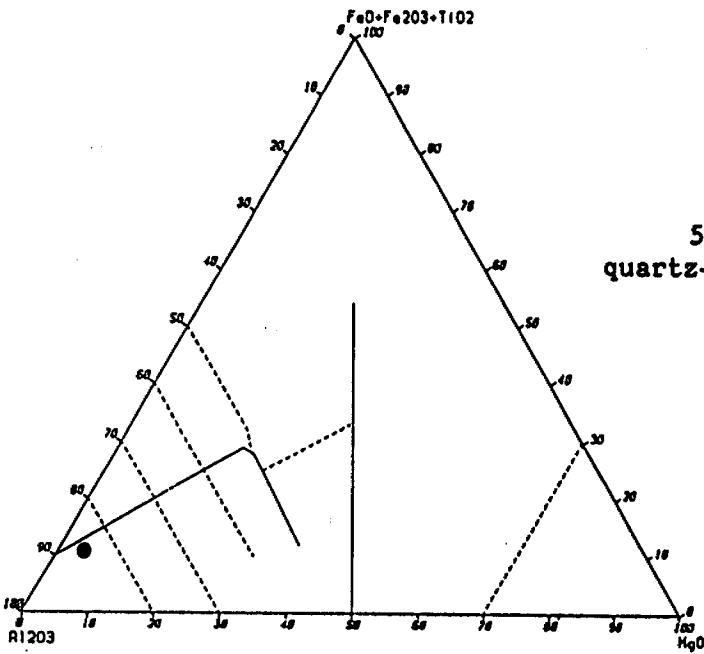
JENSEN CATION PLOTS



5301
fresh granodiorite porphyry



5309
quartz-eye tuff



SUMMARY LOG

BUR-13:

0 - 27.7

OVERBURDEN

27.7-188.0

MAFIC to INTERMEDIATE METAVOLCANIC ROCKS

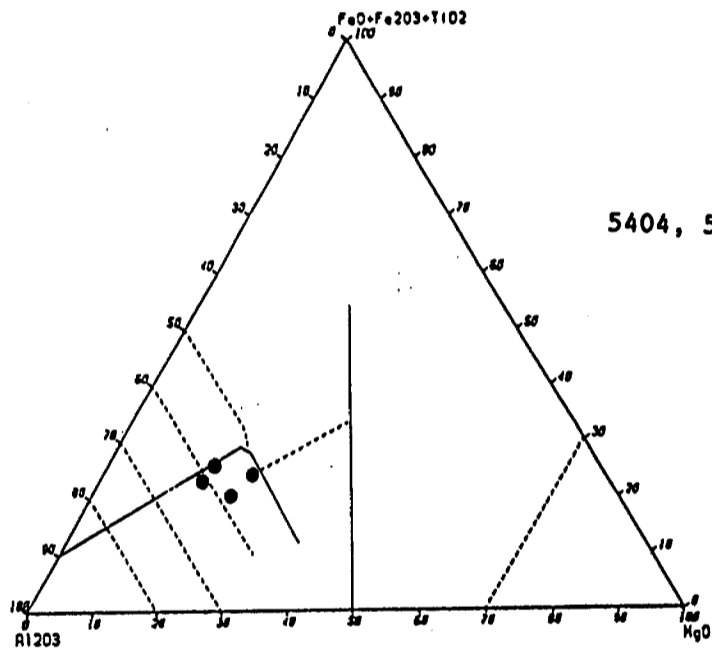
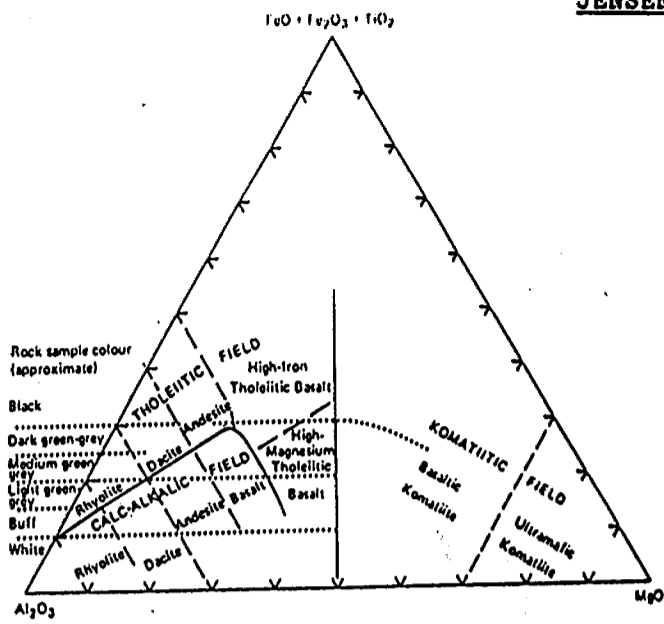
27.7-188.0

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



5404, 5406, 5407, 5411
flows

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</u> <u>TITLE</u>	<u>DESCRIPTION</u> <u>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-01

CLAIM NO(S): L789332

CONTRACTOR : Les Forages Foranord

TOWNSHIP : Hoblitzell

CORE SIZE : BQ

DATE BEGUN : 22/02/88

DRILL FLUIDS: H2O

COMPLETED : 25/02/88

LOGGED BY : R. St-Jean

COLLAR CO-ORDINATES

	GRID	UTM
X:	<u>900W</u>	<u>≈581250E</u>
Y:	<u>1340S</u>	<u>≈5481900N</u>
Z:	<u>≈288</u>	

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		44°	HF 4%
120m		43°	HF 4%
180m		43°	HF 4%

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

DEPARTURE: AZIMUTH: 180°

INCLINATION: -45.5°

CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 7.3m

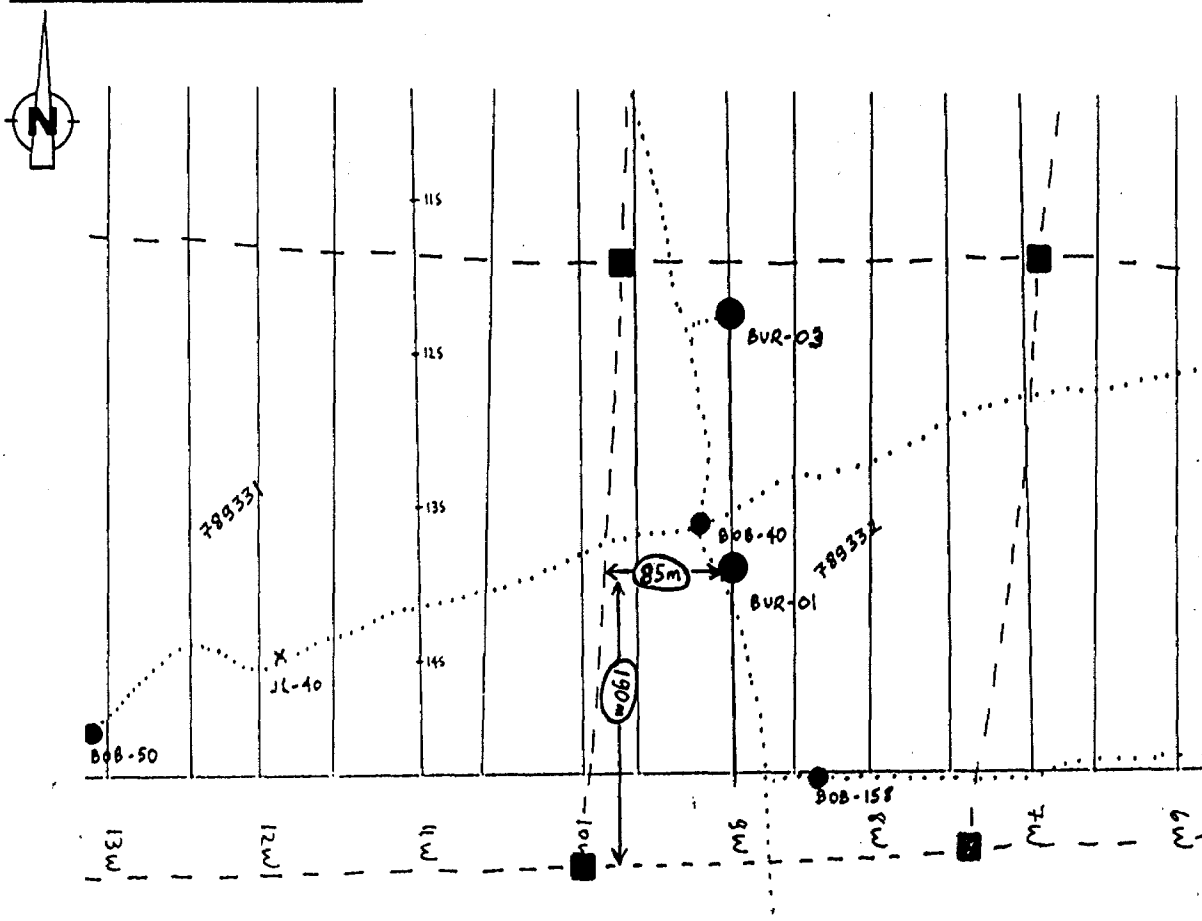
HORIZONTAL COMPONENT: 145m

END OF HOLE: 200m

VERTICAL COMPONENT : 138m

REMARKS: ground to drill floor 0.7m, casing pulled

LOCATION SKETCH 1:5000:



Box	Depth	% Rec	Log	Grain size mm -N40-N100	Texture	Structures to core axis	Fractures and Veins			Goot FR	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle	Nature						
	36											5014	t		
							F30	Rb, cb		dG-dGG		5015	t		
							F55	cc, cb, cc				5016	t		
	38					F70						5017	t		
6					massive	1cm V30	peg					I		38.5-38.7 Strong bleaching along microfractures, much calcite	
						JBx	cc					I			
						F35	cc (vein)					I			
						F60	cc					I			
	40											I			
					porphyroblastic							I			
	42											I			
												I			
	44											I			
												I			
	46											I			
												I			
	48											I			
												I			
	50											I			
												I			
	52											I			
												I			
	54											I			
												I			

38.75-55.6 Amphibole schist
 Fine grained massive mafic flow.
 Locally slightly folded
 Quartz pebbles from 39.6-40.2
 and 41.2-53.0

43.55-43.6 Large vugs, altered rock, bleaching

Box	Depth 54	% Rec	Log	Grain size mm - 20 - 200	Texture	Structures to core axis	Fractures and Veins			Geol. F/R	Colour	Minerals and Alterations pycc cb ep mt chl m i l ch cc	Sample #	TS #	Description	
							Dens.	Angle	Nature							
9	56	V	V	V	porphyroblastic						dGG			55.3-60.0 Strong bleaching along microfractures, much calcite. 55.7-56.9 Above becomes intense. Fault? 58.4-59.6 Above becomes intense. Fault?		
					massive											
					porphyroblastic											
10	58	V	V	V	porphyroblastic									55.6-59.9 Garnet amphibole schist. Fine grained mafic volcanoclastic rock, much clasts showing a good stretching along foliation. Generally well foliated. Some minor quartz veining or segregation. Calcite is frequent in quartz veins and carbonatization of rock is common. Some garnet and amphiboles porphyroblastic! Generally less than 1% pyrite seen disseminated or in small stringers. * Clasts are more felsic/silicified than matrix		
					massive											
					porphyroblastic											
					massive											
11	62	V	V	V	porphyroblastic											
					massive											
					porphyroblastic											
12	72	V	V	V	porphyroblastic											
					massive											
					porphyroblastic											

Box	Depth m	% Rec	Log	Grain size mm - 200 - 400 - 800	Texture	Structures to core axis	Fractures and Veins			Geot FR	Colour	Minerals and Alterations py, cc, cb, ep, nm, tm, sch, cc	Sample #	TS #	Description
							Dens.	Angle	Nature						
	72					f, 55									
12	74				mass									74.5-75.8 Massive mafic flow 75.8-76.2 Small brecciated zone very well healed	
	76				mass		2F35 H, Q, ch F35 H F85 H, Q, cc F10 H, Q					5021	t		
							6F45 H, Q, cc 5F30 H					5022	t		
	78				mass		1F5 H								
13	80				porphyro blastic		2F15 cc, Q, ch								
					mass		1F10 H								
	82					f, 65	1F10 H								
					porphyro blastic		2F30 H 1F15 H								
	84				mass		2F10 H								
14	86						F25 H								
					porphyro blastic										
							F25 Q, cc, ch								
15	88														
	90														

Box	Depth	% Rec	Log	Grain size mm	Texture	Structures to core axis	Fractures and Veins			Geot. FR	Colour	Minerals and Alterations	Sample		Description
							Dens.	Angle	Nature				#	TS	
	90		V V		porphyroblast		F35	H							89.9-97.3 Garnet amphibole schist Fine grained massive mafic flow Less than 1% pyrite disseminated and in small stringers Carbonatization of rock is common Some quartz veins and exsudate
15	92		V V		mass		F30	Ro			I				
			V V		porphyroblast		F20	SS, Sm							
	94		V V		mass		F15	H					5023	t	
			V V				F15	Sm							
			V V				F60	Sm		mg-dg					
			V V		porphyroblast		F25	py, cc							
			V V		blast		F20	H							
	96		V V			f, 60	F35	Ro							
			V V				F25	ch, H							
16			V V				F35	H							97.3-102.3 Amphibole schist Mostly volcaniclastic as above
	98		V V				F30	H							
			V V				F30	H		dg					99.1-99.9 Discoloration along fracture
	100		V V		mass		F0	H							
			V V				F20	H							
			V V				F35	Sm							
	102		V V				F10	H							
			V V												
17	104		V V				F20	F30	H		dg-mg		5024	t	101.3-102.8 slight bleaching along fractures. Fracturation is dense, but v. delicate and healed
			V V												
			V V												
18	108		V V			f, 55	F25	F0-10	H						102.3-200.0 Garnet amphibole schist Mostly massive mafic flow - as above - Pyrite is generally less than 1% disseminated and in small stringers
	100		V V												

Box	Depth	% Rec	Log	Grain size mm	Texture	Structures to core axis	Fractures and Veins			Goot	Colour	Minerals and Alterations					Sample #	TS #	Description
							Dens.	Angle	Nature			py	cc	ch	ser	ch			
	141		V					F20	Ro										
	146		V					F60 F15 F50	H, cc H, cc Sm, cc		dg-mg								
24			V																
			V																
			V																
			V																
	148		V					F30	ser, cc		mg-LBN							147.15-147.5 Brecciated and bleached	
			V					F30	H									147.3 Fracture covered with large crystals	
			V					F20	Sm									of sericite? Crystals up to 1cm!	
			V					F25	H		dg-mg								
			V					F25	H, cc									149.15-149.25 Brecciated and bleached	
			V					F25	H, cc									149.55-149.70 Brecciated (healed)	
	150		V					F10	H, cc									150.25-150.60 Brecciated (healed)	
			V					Bx	py, cc, ch		LBN								
25			V					Bx	py, cc, ch										
			V					Bx			dg-mg								
	152		V					Bx											
			V					F20	cc, hem										
			V																
	154		V					F575	H, cc										
			V					F55	Ro										
			V																
			V					F85	ch, cc, ser, py										
26	156		V					F25	Ro, cc										
			V					F15	H, cc										
			V																
	158		V					F30	Sm, cc										
			V																
			V																
27	160		V					F35	Ro, cc										
			V					F30											
	162		V																

Box	Depth	% Rec	Log	Grain size mm -N10 - N60	Texture	Structures to core axis	Fractures and Veins			Gout FR	Colour	Minerals and Alterations pycc, cbb, p, m, i, m, l, l, ker, l, cc	Sample #	TS #	Description
							Dens.	Angle	Nature						
27	162		V			f, 85					dg-mg	5041	t	163.55-165.2 Several large white quartz "pockets" with some feldspar and pyrite	
			V							I		5042	t		
			V									5043	0.2		
	164		V				F20 Ro				W+dg	5044	t		
			V				F30 Ro, pu, ch			I		5045	t		
			V									5046	t	166.9-167.9 Bleaching along microfractures	
	166		V		mass	f, 75	F30 H, Q, cc, hem					5047	0.2		
			V				F20 H, Q, cc, hem					5455	10	167.7-169.7 Foliation disturbed	
28	168		V				F30 Ro, cc, ch			I		5456	<5	169.0-169.3 Bleaching along fractures	
			V				F45 Sm, cc, ch					5457	<5		
	170		V				F30 Ro				dg-mg			170.5-171.0 Small folds	
			V				F25 cc, Q, hem								
			V				F40 Ro								
			V				F20 Ro, cc								
			V				F35 Ro, hem								
29	172	100	V		porphyro blastic		F30 H, Q, cc								
			V				F20 Ro								
	174		V		mass	f, 65									
			V		porphyro blastic		F45 Sm, cc								
	176		V		mass		F30 hv				dg				
			V				F30 Ro								
			V		porphyro blastic		F5 Sm, cc							178.5-179.4 Bleaching along fractures; slightly brecciated	
30	178		V				F5 H, cc, Q, hem								
			V		mass		F35 #					5458	<5	179.55 Healed fault? foliation sharply changes	
			V		porphyro	f, 80	F30 S					5459	<5		

Box	Depth	% Rec	Log	Grain size mm - No - No 0	Texture	Structures to core axis	Fractures and Veins			Geol FIR	Colour	Minerals and Alterations						Sample #	TS #	Description
							Dens.	Angle	Nature			quartz	calc	biot	pyrite	limonite	illite			
33	198		⊗		mass			Bx		dg-mG										
34	200	100	✓		Porphyro blastic			F25 Ry, cc, py										5469	200.0 End of Hole	

John Flann

DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-03

CLAIM NO(S): L789332
TOWNSHIP : Hoblitzell
DATE BEGUN : 25/02/88
COMPLETED : 26/02/88
LOGGED BY : R. St-Jean

CONTRACTOR : Les Forages Foranord
CORE SIZE : BQ
DRILL FLUIDS: H2O

COLLAR CO-ORDINATES

GRID UTM
X: 900W ≈581250E
Y: 1175S ≈5482050N
Z: ≈287

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		45°	HF 4%
120m		43°	HF 4%
CHECKED BY: J.Learn, R.St-Jean, S.Ball			

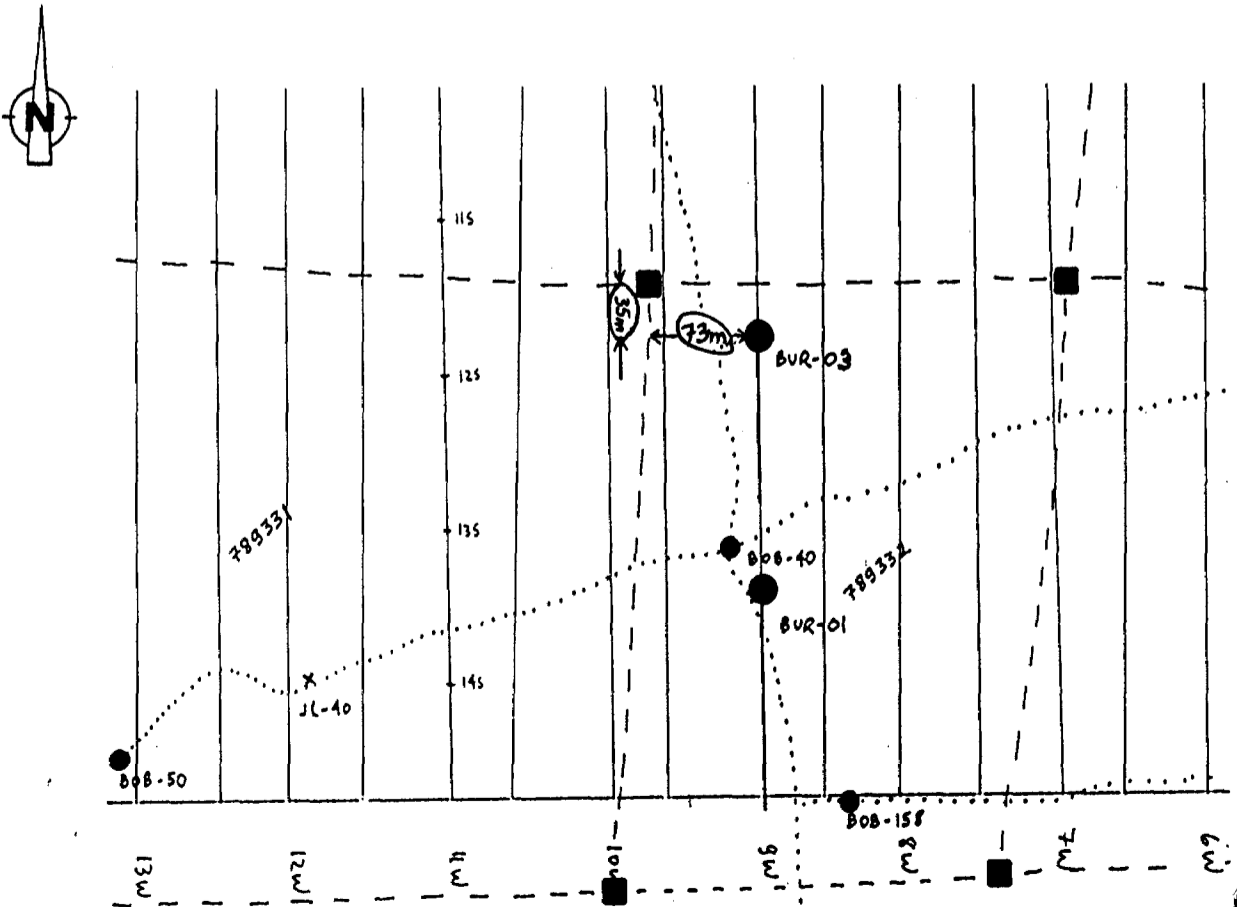
DEPARTURE: AZIMUTH: 180°
INCLINATION: -45.5°
CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 6.5m
 END OF HOLE: 149.0m

HORIZONTAL COMPONENT: 107m
VERTICAL COMPONENT : 104m

REMARKS: drill floor to ground level 0.5m, casing pulled

LOCATION SKETCH 1:5000:



Box	Depth	% Rec	Log	Grain size mm - 40 - 200	Texture	Structures to core axis	Fractures and Veins			Géol FIR	Colour	Minerals and Alterations										Sample #	TS #	Description	
							Dens.	Angle	Nature			py	ky	pl	mt	il	cc	lcc							
	0																								✓ font reqe. max Yrca-Virgna 0.2 g/t max chintec 6 pp/b
	2																								
	4																								0.0-6.5 OVERBURDEN
	6																								
	8		V F30			f.65																			6.5-82.1 Garnet amphibole schist massive mafic flow medium grain (Basalt to andesite in composition) frequent amphiboles porphyroblasts rare pyrite (< 1%) few quartz veins and pockets uniform foliation
1	10		V																						
	12		V																						6.5-24.8 very uniform texture
	14		V																						
2	16		V																						
	18		V																						
	19		V																						

AMPHIBOLE

PORPHYROBLASTIC

F30
R₁ cl?
H, py, cc

D3F30 R₀
D3F25 R₀, cc

F40 R₀, cc

F20 H₁ cc
F35 H₁ cc

F45 Sm

F20 V, Q, cc

f.60

5049

6h05

6

27

Box	Depth	% Rec	Log	Grain size mm -N10-N100	Texture	Structures to core axis	Fractures and Veins			Géot F R	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle	Nature						
2	18		V			f, 35	F35 2cm V30	Ro Q			m-dG				
	20		V				F40	Ro							
	22	100	V		mass		F45	Ro			mb-mG				21.45-21.55 Core is very coarse
3	24		V		mass		F35 F75 F65	Ro							23.6 Discoloration along microfractures
	26	50	V		mass	f, 50	F55 F30 F50 F45	Ro H, cc Ro Ro							24.8-41.65 Texture poorer with porphyroblast content. Few quartz 25.3-25.65 Core is broken, gtz pocket; very Vuggy. Fault?
4	28		V				F30	Ro			m-dG				
	30		V				F40 F25	Ro, cc cc							
	32	100	V			f, 55	F55 2.5cm V40	Ro Q, cc cc							32.4-32.5 Coarse core
5	34		V				F50 F70	cc, Ro			mg-mG	5050	5050	<2	
	36		V		mass	f, 55	F30	Ro, cc			mG-mG				

Box	Depth	% Rec	Log	Grain size mm -N0-N100	Texture	Structures to core axis	Fractures and Veins			Géol FR	Colour	Minerals and Alterations					Sample #	TS #	Description
							Dens.	Angle	Nature			pl	ky	po	mt	cc			
5	36		V		mass														
	38		V		mass	F50	F=8	F30	H,cc										
6	40		V		porphyroblast														
	40		V		mass			F60	Ro										
	40		V		porphyroblast mass			F30	Ro										
	40		V		porphyroblast	F70													
	42		V		mass			F45	Q,cc										
	42		V		mass			F60	cc										
	42		V		mass			F40	Ro,cc										
	44		V		mass			F40	Ro										
7	46		V		mass														
	46		V		mass														
	48		V		mass			F30	Ro,cc										
	48		V		mass			F30	H, bio cc										
	48		V		mass			F70											
	48		V		mass			F55	Ro										
	48		V		mass			F65	cc										
8	50		V		mass			F25	Ro										
	53		V		mass														
	53		V		mass			F30	cc										
9	54		V		mass														

41.65-44.40 Brecciated, relatively fine grained mafic rock no quartz veins or feldspar

42.5-47.0 Many microfractures with bleaching

44.9-82.1 Massive - very fine grained

45.5-47.5 Several fractures or veins with gtz, calcite + biotite! (Fractures are healed)

53.0-57.3 Reddish brown garnet porphyroblast forming up to 25% of rock content

GARNET

PORPHYROBLASTIC

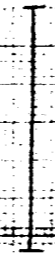
PORPHYROBLASTIC

MASSIVE

MASSIVE

Box	Depth	% Rec	Log	Grain size mm -N10-N100	Texture	Structures no. core axis	Fractures and Veins			Géol. F/R	Colour	Minerals and Alterations				Sample #	TS #	Description	
							Dens.	Angle	Nature			py	ilcp	do	mt				icc
	54.5		V			f, 70													
	56		V				F20 Ro, cc												54.5-57.7 Strongly magnetic
	58		V			f, 50	F25 cc, tm												
	60		V			f, 60	F60 Sm, cc												
	62		V				F50 tm												58.75-58.85 Foliation is parallel to fracturation
	64		V				F35												
	66		V				F40 Q, cc												60.0 Fracture is bleached
	68		V				F55 Ro, cc												61.2-61.5 Healed breccia?
	70		V				F15 B, cb												
	72		V				F35 cc, Ro												
	74		V				F45 cc, Ro												
	76		V				F30 Ro, cc												
	78		V				F50 Ro												
	80		V				F40 Ro												
	82		V				F35 Sm												
	84		V				F30 Ro												
	86		V				F30 cc												
	88		V				F20 Ro												
	90		V				F45 Sm, ss												
	92		V				F75 Sm, cc												
	94		V				F30 Ro												
	96		V				F55 Ro, cc												
	98		V				F25 cc												
	100		V																

PORPHYROBLASTIC



5053 0.2

Box	Depth	% Rec	Log	Grain size mm -N10-N100	Texture	Structures to core axis	Fractures and Veins			Géot F R	Colour	Minerals and Alterations					Sample #	TS #	Description
							Dens.	Angle	Nature			py	act	pm	l	ser			
	72		V					F30	Sm, cc										
	74		V					F25	Sm, Ss, cc		dG								
12			V			f160		F40	Sm, cc lim									75.9-76.2 Healed breccia	
	76		V		mass						dG-dB	I	I		5054	t			
	78		V					F45	Ro, cc									77.1-82.1 Massive mafic rock with up to 10% reddish brown garnets	
			V					F30	Ro, S, lim		dG, mB								
13	80		V			f155													
			V					F15	Ro, cc lim										
	82	100	V					F10	Ro				I					82.1-95.0 Garnet amphibole schist fine grained, banded mafic flow Andesite to basalt, in composition few porphyroblasts few quartz pockets or veins rare pyrite	
			V					F45	cc						5055	5055	5		
	84		V		mass			F45	Sm, Ss										
			V			f160		F55	cc, Ro										
			V								mG								
	86		V																
			V																
			V					F25	Ro, cc										
			V					F60	Ro, cc										
14			V																
			V																
	90		V																

0227

Box	Depth	% Rec	Log	Grain size mm -N10-N100	Texture	Structures to core axis	Fractures and Veins			Géot FR	Colour	Minerals and Alterations		Sample #	TS #	Description
							Dens.	Angle	Nature			py	ser			
	126		V		mass											
21	128		V		porphyro blastic	f ₁₆₀										
	130		V			f ₁₆₅										
	132		V		mass	f ₂₅₅							5057	22		
22	134		V			f ₁₆₅							5058	6	134.6-149.0	Amphibole schist
	136		V													
	138		V			f ₁₄₅										
23	140		V													
	142		V													
	144		V													

medium to fine grained massive mafic flow
large amphibole porphyroblasts
rare quartz < 1%
few quartz veins or pockets

PORPHYROBLASTIC

Box	Depth m	% Rec	Log	Grain size mm -N10 - N100	Texture	Structures to core axis	Fractures and Veins			Geot. FR	Colour	Minerals and Alterations pl cc po m l	Sample #	TS #	Description
							Dens.	Angle	Nature						
			V												
24	146		V		PORPHYROBLASTIC			F40	Ro, lin			5059	t		
			V			f.47			F40	H, Q, cc					
			V						F30	Q, cc, lin	m, G				
25	148		V					F45							
			V					F55	Ro, cc						149.0 End Of Hole.
	150														

John Fedak

02
17



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-04

CLAIM NO(S): L789335
TOWNSHIP : Hoblitzell
DATE BEGUN : 26/02/88
COMPLETED : 29/02/88
LOGGED BY : R. St-Jean

CONTRACTOR : Les Forages Foranord
CORE SIZE : BQ
DRILL FLUIDS: H2O

COLLAR CO-ORDINATES

	GRID	UTM
X:	900W	≈581250E
Y:	775S	≈5482450N
Z:	≈282	

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		45°	HF 4%
120m		44°	HF 4%
180m		43°	HF 4%

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

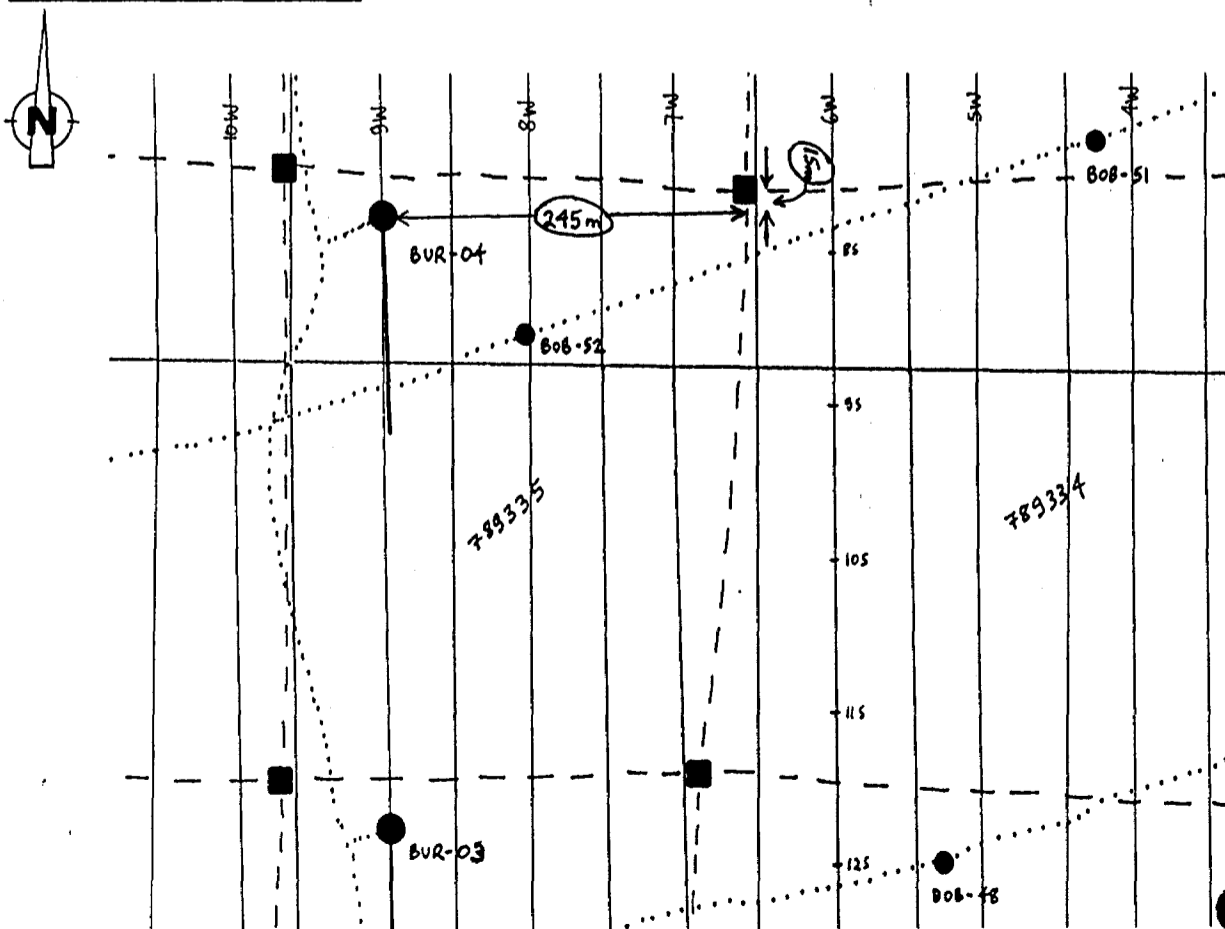
DEPARTURE: AZIMUTH: 178°
INCLINATION: -45.5°
CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 7.3m
END OF HOLE: 200.0m

HORIZONTAL COMPONENT: 143m
VERTICAL COMPONENT : 140m

REMARKS: drill floor to ground level 0.4m, casing pulled

LOCATION SKETCH 1:5000:



Depth (m)	% Log	Grain size mm	Structure	Structures to core axis	Fractures and Veins	Gent	Colour	Minerals and Alterations	Sample #	S	Description
0											✓ <i>envoyé pour magalnes selement: 5068</i> max Yvon Vespera 0.2 g/t max Chimitec 60 ppb 0.0-7.3 OVERBURDEN
2											
4											
6											
8	V								5351	<5	
10	V								5352	<5	
12	V								5353	<5	
14	V								5060	t	
16	V								5355	5	
18	V								5356	10	
20	V								5357	40	
22	V								5358	10	
24	V								5061	t	
26	V								5359		

✓ *envoyé pour magalnes selement: 5068*
 max Yvon Vespera 0.2 g/t
 max Chimitec 60 ppb

0.0-7.3 OVERBURDEN

5351 <5
 5352 <5
 7.3-25.15 Garnet-Amphibole schist medium to fine grained massive mafic flow. Foliation is weak but regular. Few garnet and rare amphiboles porphyroblasts
 5353 <5
 5060 t
 5355 5
 Pyritisation starts at 10.8m and is seen in foliation planes along fractures and in brecciated zones
 -> Basalt to andesite composition
 5356 10
 14.9 Fracture filling material is porous
 5357 40
 14.0-14.3, 15.3-16.8, 17.6-18.4, 21.9-22.8, 23.0-23.9, 24.9-25.15 : Very strong pyritisation - up to 10% pyrite-pyrrhotite elsewhere; 1-3% pyrite-pyrrhotite
 5358 10
 5061 t
 5359

* mag → mag not be MC or PO

Elev	Depth	%	Grain size mm	Structures	Fractures and Veins	Geol	Colour	Minerals and Alterations	Sample #	TS #	Description
2	18			mass	5F25 H, cc, Q 10F45 F10 Ro	70.0	m-dG		5359	15	18.1 → 18.35 Core is brecciated
	20			porphyrobl.	3F20 cc Bx H, py, Q	70.0	mG		5360	60	19.95 → 20.75 Core is brecciated
3	22			-f, 85	Bx H, Q, py F45 Q, py	66.7			5361	10	21.65 → 22.0 Core is brecciated
	24			mass	F30 H, py, Q F30 H, Q, py	100			5362	15	
	26				4F30 Q, py Bx? H, Q, py F30 Ro, py, ch	100			5363	45	25.15 - 30.40 Amphibole schist
4	28	100			F20 py, ch F45 Ro	73.3			5062	24	Fine grained Pillowed basalt or brecciated mafic flow. foliation is disturbed or very weak. Pyritisation is strong (3-10%) and along foliation planes and in brecciated zones. Frequent pyrite stringers < 1cm thick sometimes "porous" - ruggy.
	30			-f, 60	F15 ch, py Bx H, Q, py	80.0			5364	5	
	32				F20 Q, py, ch				5063	t	
	34				F15 H Bx H, Q, py				5365	25	
5	36			OROPHYROBLASTIC	F55 Ro F40 Ro F40 H, cc				5366	15	30.40 - 52.50 Garnet-amphibole schist, medium to fine grained, massive intermediate to mafic flow, showing weak but regular foliation. Several brecciated intervals (top flow breccia?). Pyritisation is generally strong and develops in foliation planes and in breccia. Zones with garnets show lowest pyrite content. Quartz is present only in brecciated intervals.
	38			-f, 55?					5367	15	
	40			-f, 70					5064	t	
	42								5368	5	
	44								5369	15	
	46								5370	<5	

Interval	Depth (m)	% Pyrite	Grain size (mm)	Texture	Structures	Fractures and Veins	Geo. Notes	Colour	Minerals and Alterations	Sample #	Description	
6	36-38	< V	GARNET	mass		F30 R,pych				5370 5065	t	
		V >		porphyroblastic		F30 H,ch				5371	<5	39.1-39.3 Marcassite
		V >				F30 H,ch				5372	5	
		< V				F30 H,ch				5373	5	40.1-40.9 Fracture along core axis with filling up to 1cm thick of carbonates, chlorite & pyrite.
		V >		mass	f,80	F30 Sm,cc				5374	<5	
		V >				F30 H,ch				5375	<5	32.5-32.7, 33.4-33.6, 31.6-36.85, 38.0-39.0, 39.9-41.9, 41.5-42.2, 43.3-47.1, 47.7-47.9, 49.4-50.6, 51.25-51.4, 51.75-51.8 all have 5-10% pyrite - pyrrhotite all other intervals have 1-5% pyrite - pyrrhotite.
7	42-44	V >				F25 Ro				506b	t	
		V >				F40 R,pych				5376	5	
		V >				F40 R,py,cc		mG		5377	<5	
		V >				F40 Sm,cc				5068	n/a	
		V >				F35 H				5378	<5	
8	48-50	V >				F55 Sm,ss				5379	<5	
		V >				F45 H,py,ch				5380	<5	From 51.8 - 65.8 1-5% pyrite.
		V >		mass		F45 G,pych				5381	<5	
		V >		porphyroblastic		F40 R,py,cc				5067	8	
		V >				F40 R,py,cc				5382	<5	52.50-55.40 Amphibole schist, medium to fine grained, massive mafic flow (Basalt composition) with frequent amphibole porphyroblasts. Disseminated pyrite. Brownish staining (iron carbonates?)
		V >		mass	f,80	F40 R,py,cc				5381	<5	
		V >				F10 py,ch		mG+dG		5067	8	
		V >				F30 H,ch				5382	<5	
9	54	V		Porphyroblastic	f,80	F40 cc,ser		mG				

Box	Depth	% Rec	Log	Grain size min - 40 - 100	Texture	Structures to core axis	Fractures and Veins			G60t F:R	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle	Nature						
	54		V		porphyroblastic							5382			
			V		mass			F25 Ro cc F25 py ch							
			V		Porphyroblastic							5383	<5		
9	56		< V >		mass							5069	t		
			V		mass	f,75									
			>		mass	porphyroblastic		4F30 H, cc				5384	<5		
	58		< V >					2F20 py, ch							
			V									5385	<5		
	60		< V >			f,85									
			>									5386	<5		
			< V >					5 F25 py cc				5070	t		
	62		< V >									5387	<5		
10			V												
			>												
	64		< V >					F45 Ro py F40 Ro				5388	<5		
			>					F5 H cc				I 5389	<5		
	66		< V >		mass	f,70									
			>					2F30 cc py				5390	<5		
			< V >					D F10 H							
11	68		< V >									5391	<5		
			>									5071	t		
			V			f,75									
			>									5392	<5		
			< V >												
			>												
12			V					F50 Ro cc F30 cc ch py				5393	<5		
	72		V												

55.4-74.1 Garnet-Amphibole Schist
 Fine grained, intermediate to mafic, banded flow
 Good foliation and flow banding?
 parallel to foliation.
 Pyrite is found disseminated
 and in stringers and veinlets
 in foliation planes.

Few quartz remaining
 56.40-56.55 Quartz pocket
 56.55-56.65 Fold.

65.8-74.1 ≤ 1% pyrite

AMPHIBOLE

PORPHYROBLASTIC

GARNET

PORPHYROBLASTIC

Box	Depth	% Rec	Log	Grain size mm - 200 - 2000	Texture	Structures to core axis	Fractures and Veins			Geot. FR	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle	Nature						
12	72		< V		PORPHYROBLASTIC	f, 85	F25	Ro, py, cc, ch	33	mg-dg		5394	<5		
	74		V >		PORPHYROBLASTIC	f, 70	F30 F25-10	cc, H cc, ch, py		dg-dg		5395	<5	72.5-74.1 Garnets show increasing flattening ratio up to 15:1.	
			^		mass		F55	cc		mg+dg				74.1-124.9 Massive felsic flow rock	
		76		^ ^			f, 75	F35	py, cc, ch	33			5396	<5	Dacitic porphyry composition
				^ ^				F25	cc, py, ch				5072	t	Sodic? plagioclase porphyres seen in almost all flow
				^ ^			f, 60	F20	H, cc, ch				5397	<5	Few quartz remaining, calcite is in foliation planes.
		78		^ ^		PORPHYRITIC		F10	Ro, lim	33			5398	<5	Pyrite is in foliation and disseminated mainly in upper part of flow
	13	80		^ ^				F50	peg(Vein?)				5399	<5	Plagioclase porphyres are consistently stretched by foliation
				^ ^		mass		F35	py, cc						74.1-75.9 Strongly sheared
			82		^ ^		mass		F25	cc			5400	<5	75.9-94.5 Sheared and possibly folded rock
					^ ^		mass								Generally strong pyritization up to 3% pyrite in foliation planes.
	14	84		^ ^		mass					mg-lg		5412	<5	78.2-78.9 Core is broken - Fault?
			^ ^		porphyry							5074	3		
			^ ^				F25	Ro, cc, py, ch	30			5073	t	84.7-84.9 Core is broken	
		86		^ ^		mass		F35	cc, py, ch			5413	<5	85.1-85.2 Core is broken	
				^ ^			F45	Ro, cc				5414	<5		
				^ ^			F60	Ro, musc							
15	88		^ ^				F25	Ro, cc, ch, lim				5415	<5		
			^ ^				F5	cc, py, ch							
	90		^ ^		porphyry		F35	py, cc, ch				5416	<5		

Box	Depth	% Rec	Log	Grain size mm	Structure	Structures to core axis	Fractures and Veins	Geol.	Colour	Minerals and Alterations	Sample		Description
											#	TS	
	90		Π						mg-1G		5417	5	
15	92		Π		porphyry		F40, Ro, cc F15 H				5418	<5	
	94		Π				F30 ch F30 Ro, cc, py ch				5419	<5	94.5-115.4 Rock is still sheared but less altered
	96		Π		mass		F35 ch, py F5 Ro, cc, ch F55 cc, ch		mg+dG		5420	<5	Pyrite is generally less than 1% and disseminated.
16	98		Π		porphyry		F85?				5421	<5	Plagioclase porphyroblasts show a very clear stretching along foliation.
	100		Π				F20 Sm, cc py				5422	<5	
	102		Π				F30 Ro F15 H, py F20 Q				5423	<5	10% Euhedral Quartz crystals
17	104		Π				F25 Ro F35 Ro F40 H, ch		dG		5424	<5	
	106		Π				F45 H, ch F3 F45 H, ch				5425	<5	
	108		Π				F20 H F40 H, cc F40 Sm, cc F45 Sm, cc F30 H, ch				5426	<5	
18	110		Π				F85				5075	<2	
	112		Π				F60				5427	<5	107.35 Foliation bends along fracture →108.05
	114		Π				F5, H, cc F60 H, cc				5428	<5	

Box	Depth	% Rec	Grain size mm	Texture	Structures to core axis	Fractures and Veins		Geol.	Colour	Minerals and Alterations	Samples		Description
						Dens.	Angle Nature				#	#	
	108				f, 60	F60	Ro, hcc				5428		
18						F5	H				5429	20	
	110					F40	H						
				porphyry		F70	Ro, peg				5430	CS	111.5 Foliation follows vein
	112				f, 80 f, 45	F40 F45 F70	H, cc Q, ch Ro, cc, py		mg, rdg				
						F10	H				5431	CS	
						F20	cc, H						
19	114				f, 85	F235 F20	Sm Ro, cc				5432	CS	114.7 → 117.1 Foliation is disturbed by fracturation.
						F25	cc, Ro						115.4 Rock becomes more altered & shearing is more intense
						F765 F630 F25	Q, ch, py H, cc Ro				5433	CS	
	116			mass	f, 65	F45 F40	Ro Sm						
					f, 60	F320 F15 F70	H H, Q Ro				5076	t	116.9 - 117.9 Several quartz veins - peritubular foliation
20	118					F20 F15	Ro Ro				5434	CS	
						F340	Sm, cc				5435	CS	
	120			PORPHYRITIC	f, 85	F30 F15	H, cc Sm, cc Ro				5436	CS	
	122					F15	H, cc				5437	5	122.5 → 124.9 Many bleached microfractures. Microfracturation becomes very intense as we move towards contact at 124.9m → strong shearing, bleaching
				mass		F30	H, cc				5438	5	
	124			porphyry	f, 80	F15	H		dg, mg		5077	t	
						F20	Ro, cc				5439	10	
21				porphyro blastic		F40	cc, ch				5078	t	
						F15	Ro, cc, py				5440	CS	
	126					F30	cc						

2 F20 H, cc → F40 Sm, cc

Depth	Log	Grain size mm	Texture	Structures to core axis	Fractures and Veins			Geol. FIR	Colour	Minerals and Alterations	Sample #	TS #	Description
					Dens.	Angle	Nature						
126	V												
21 127	>		Porphyroblastic								5440	<S	124.9-178.0 Garnet-amphibole schist, medium to fine, massive, intermediate to mafic flow (Basalt to andesite). Strong foliation shown by alignment of amphiboles and stretching of garnets.
128	<		mass	F, 85							5441	<S	
	V												
130	>										5442	<S	Garnets are seen at top (125.2-127.2) and at base (174.0-178.0) of flow.
	<										5443	<S	Pyrite is disseminated and also in rare small stringers.
	V										5079	t	Foliation is relatively regular.
22 132	<												124.9-129.9 Strongly sheared, laminated
	V												127.15-128.25 Very strongly sheared, tightly folded.
134	>			F, 60									128.6-129.0 Fault - clay gouge, brecciated
	V												127.15-129.0 Mylonite?
136	>												
23 138	>		AMPHIBOLIC										
	<		PORPHYROBLASTIC										
140	V												
24 142	>												143.1-144.4 Intense bleaching along microfractures
	<												144.1-144.7 Quartz peining, breccia
144	<												

Box	Depth	% Rec	Log	Grain size mm	Texture	Structures	Fractures and Veins	Geol.	Colour	Minerals and Alterations	Sample #	TS #	Description
				N ₁₀ - N ₁₀ ⊙			Lens. Angle Nature			py, po, mag	CC		
	144		V				F5X H F3 Sm, cc, py, ch F50 Sm, cc, ch		m-gg+db				
24	146		>				F30 H, cc F35 H, cc F80 Bx, H, cc F30 Ro, cc SF50 ch, H, cc		m-dg		5080	0.2	
	148		V				F15 H F35 Ro, cc						
25	150		V				F40 Sm, cc F10 cc, ch F30 Ro, cc F10 Ro, H, cc, py F25 H, cc						
	152		V				F30 cc, ch F35 H, py F30 Ro, cc F30 Ro, cc, py, ch						
	154	100	V				F30 cc, ch F35 H, py F30 Ro, cc F30 Ro, cc, py, ch						
26	156		V				F20 H, cc F40 cc, hm F30 Bx, H F30 H, cc						
	158		V				F20 Ro, cc, hm F30 cc, hm F25 cc F10 H, cc				5081	0.2	
			V				F50 Ro, py F25 Ro, cc hem						

AMPHIBOLE

POPHYROBLASTIC

f, 75

f, 65

f, 50

151.0-151.7 Quartz veining, slightly transposed foliation

Box	Elev	% Dip	Grain size mm	Texture	Structures to core axis	Fractures and Veins			Geot. F.R.	Colour	Minerals and Alterations	Sample #	TS	Description
						Dens.	Angle	Nature						
27	162	V				F20 Ro, cc, hem								162.6 - 163.1 Quartz + pegmatitic material in vein
	164	K				F40 Ro, cc, py								
	164	V				F45 Sm, cc								
	165	K				F35 cc, hm								
	165	V				F55 H, cc								
28	166	K				F15 Ro, cc, hm								
	168	V				F50 Ro, cc								
	168	V				F40 Ro, cc								
	170	V				F30 Bx, H, cc						5082		
	170	V				F40 Ro, cc								
	170	V				F35 cc, Ro								
	170	V				F45 Ro, cc								
	172	V				F15 cc, hm								
29	172	V				F20 H, cc								
	172	V				F25 Ro, cc								
	174	V										5083		174.0 - 174.5 Quartz, veining, strong pyritization
	176	V				F35 Ro, cc								
	176	V				F40 Ro, cc						5084		174.0 - 178.0 Garnets forming up to 20% of rock, garnets show stretching by foliation
	178	V												178.0 - 179.1 Core is broken. Fault?
30	178	V				F50 Ro, cc								
	180	V				F40 H, Bx								
	180	V										5085		
	180	V				F25 cc, py								

Box	Depth	% Rec	Log	Grain size mm -250 - 2500	Texture	Structures to core axis	Fractures and Veins			Geol F.C.	Colour	Minerals and Alterations				Sample		Description	
							Dens.	Angle	Nature			py	po	mag	cc	#	#		
	180		V > < II																
	182		V > II II																
31	184		V > II ^			f,60													
	186		V > II II V ^																
	188		V > II ^																
32	190	100	V > II ^ V > II ^ V > II ^																
	192		V > II ^																
	194		V			f,85													
33	198		V																

178.0 - 193.45 Mixed unit of rapidly alternating massive mafic flow (basalt-andesite) and massive porphyritic intermediate to felsic flow (dacite?). Alternances are on a centimetric to decimetric scale. The mafic rock show presence of porphyroblastic amphiboles and occasional garnets. The felsic rock show plagioclase phenocrysts. The unit is apparently more mafic (toward top of hole) becoming more felsic (toward bottom of hole). Pyrite is disseminated and generally less than 1%. Foliation is weak but regular.

180.9 - 181.3 Quartz-pegmatite remaining? disturbs foliation.
 181.8 - 184.8 Bleaching along micro-fractures.
 184.2 - 184.4 Quartz peining
 187.7 - 188.0 Quartz peining
 192.6 - 193.45 Composition becoming very felsic. (Acid Truff?)

193.45 - 200.00 Garnet amphibole schist. Fine to medium grained, massive mafic flow. Amphiboles and garnets porphyroblasts. Foliation is strong to moderate and is shown by the alignment of amphiboles and by the stretching of garnets.

AMPHIBOLE
 FELDSPAR PHENOCRYSTS

AMPHIBOLE
 GARNET

PORPHYROBLASTIC

Box	Depth 19.8	% Rec	Log	Grain size mm			Texture	Structures to core axis	Fractures and Veins			Geol F/R	Colour	Minerals and Alterations										Sample #	TS #	Description
				-200	-250	0			Dens.	Angle	Nature			qu	po	mag										
34	200	100	V							F65			dG-dGG													200.0 End of Hole.
	202																									
	204																									
	206																									
	208																									
	210																									

John Jean



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-09

CLAIM NO(S): L789318
TOWNSHIP: Hoblitzell
DATE BEGUN: 15/03/88
COMPLETED: 18/03/88
LOGGED BY: R. St-Jean

CONTRACTOR: Les Forages Foranord
CORE SIZE: BQ
DRILL FLUIDS: H₂O

COLLAR CO-ORDINATES

	GRID	UTM
X:	2000W	≈580150E
Y:	325S	≈5482900N
Z:	≈288	

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		43°	HF 4%
120m		42°	HF 4%
180m		39°	HF 4%
240m		37°	HF 4%

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

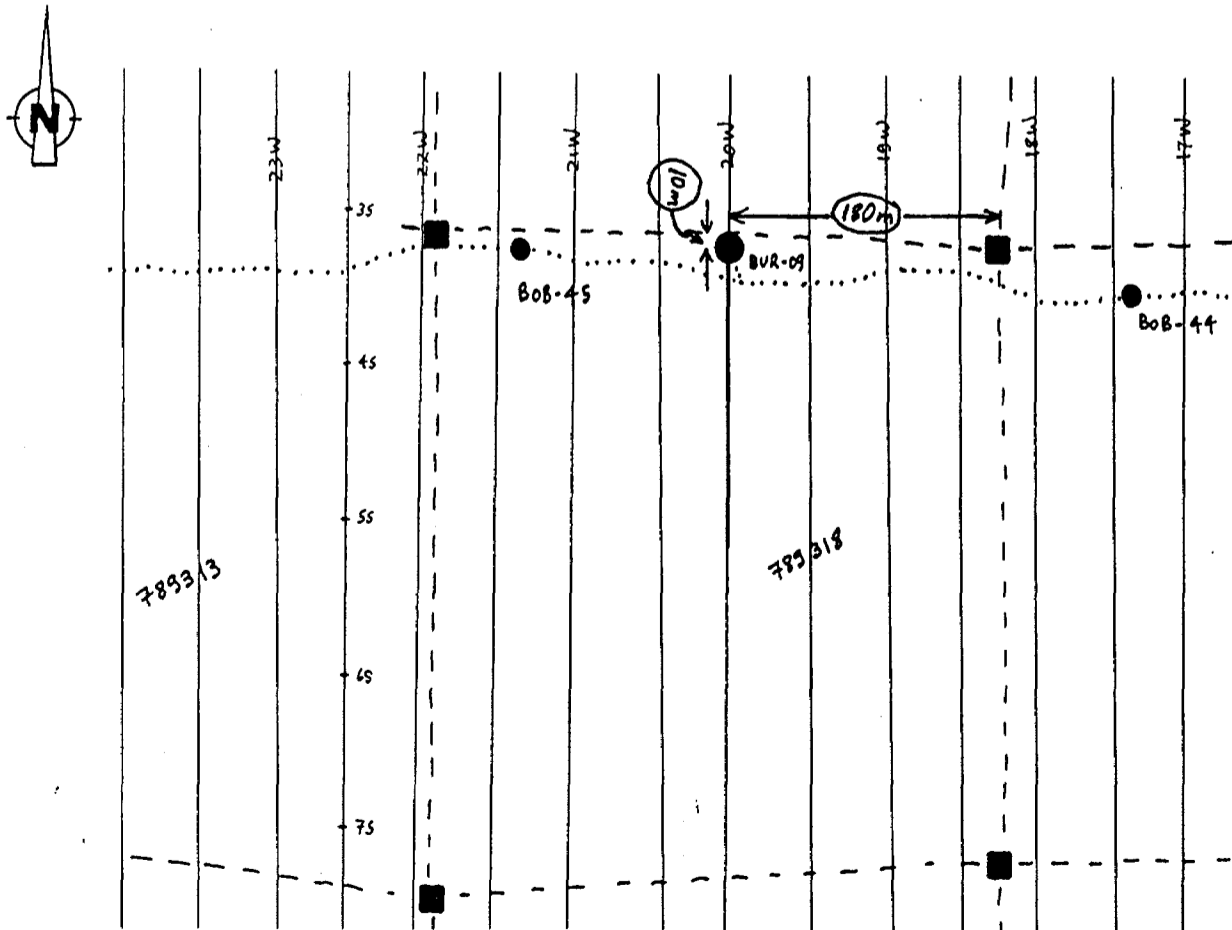
DEPARTURE: AZIMUTH: 180°
INCLINATION: -45.5°
CHECKED BY: R. St-Jean

DEPTHS: OVERBURDEN: 20.85m
END OF HOLE: 257.00m

HORIZONTAL COMPONENT: 194m
VERTICAL COMPONENT: 169m

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

LOCATION SKETCH 1:5000:



Depth (m)	Grain size (mm)	Structures	Structures and Values	Minerals and Alterations	Sample #	TS
12						
14						
16						
18						
20						
22	V	S, 45	F35 Ro F55 Ro F20 Ro, cc F35 Ro, cc, ch			
24	V	S, 55	F40 Ro, cc F45 Ro F55 Ro, cc			
26	V		F45 Ro, cc, ch F55 Rock F25 cc, ch		5218	3
28	V	S, 50	F40 Ro, cc F40 Ro			
30	V					

0.0 - 20.85 OVER BURDEN

max 95 ppb
 mus 70 ppb (chromite)
 mus 69 ppb

20.85 - 31.80 Amphibole Quartz schists
 fine grained, well foliated mafic flow?
 Several quartz pockets with chlorite
 and calcite.
 Few pyrites
 Rounded "blue quartz" dispersed
 in this facies

QTZ-PHENOS
 Porphyritic

mG-dG
 27%

Depth (m)	Structure	Fractures and Veins	Geot.	Colour	py. mt.	Minerals and Alterations	Sample #	TS #	Description
30									29.9 → 31.8 Foliation is disturbed
2							5219	t	
32							5571	<5	31.80 - 76.4 Feldspar - Quartz porphyritic schists
							5572	<5	Coarse grained, massive to well foliated, feldspar phenocrysts, blue quartz "crystal tufts".
34							5573	<5	Locally shows strong shearing with distorted feldspar phenocrysts intermediate to felsic composition
3							5574	<5	32.8 - 34.9 Massive.
36							5220	t	34.9 - 46.1 Strongly sheared
38							5575	<5	
4							5576	5	
40							5221	<2	
							5577	<5	
							5222	t	
42							5578	<5	
44							5579	<5	
5							5580	<5	
46							5223	t	46.1 - 52.7 Massive.
							5581	<5	47.5 - 52.0. Several white quartz veins? in foliation.
48									

Elev.	Structures	Fractures and Voids	Minerals and Alterations	Sample	Description
48		J2F55 Ro V55 H, cc, Q V65 H, cc, Q			
50		V50 Q, H, cc F50 Ro, Q			
52		F65 Ro, ch		5582	52.7-85.9 Strongly sheared
54		F70 Ro, cc V30 H, Q, cc		5583	53.75-85.5 Strong pyritization, hemidial pyrite disseminated in groundmass
56		F40 Ro, cc V60 H, Q, cc F30 H, B, cc F30 Sm, Si, ch, py F160 H, cc, ch		5224	55.4-55.7 Bleached zone surrounding fault.
58		F50 cc, ch J2F70 H, cc, ch F750 ch, ch F15 ch, ch F25 Ro, cc F10 Ro, cc, py, ch		5584	56.3-56.5 Bleached zone surrounding fault.
60		J2F15 Ro, cc, ch F45 Bl, musc F40 Ro		5585	
62		F30 H, cc		5586	
64		F60 Ro, Si F40 Sm, cc F50 Sm, cc, ch, py F55 Ro, cc, ch F30 Ro, cc, ch		5225	
66				5587	
				5588	
				5226	62.7-71.3 Foliation is disturbed
				5589	
				5590	

Depth (m)	%	Grain size (mm)	Structure	Fractures and Veins	Geot.	Colour	py. mt.	Minerals and Alterations	Sample #	Description
8	66			S ₁ 50	F55 Ro D2F45 Ro DF20 Ro,cc				5227	t
9	68				IF10 Sm, ch F45 Ro, py F45 Ro, py					
9	70		FOLDS		IV45 Q, py, ch F55 Ro, py F45 Ro	mg-dg				
	72			S ₁ 45	F60 Ro D5F45 Q, H, cc					
	74			S ₁ 50	F25 Ro, cc F65 Ro F65 Ro, py				5591	5
10	74				IF0 H, py?		5-7%		5228	t
	76								5592	<5
	76				F60 Ro				5593	<5
	78			S ₁ 55	F30 Ro, cc F25 Ro, py				5229	17
	80								5594	<5
	80			S ₁ 55	F25 ch, H, Si, py	mg			5595	<5
11	80				F55 Ro DF15 H, cc F25 H, Si				5230	t
	82								5596	<5
	82								5597	<5
	84			S ₁ 60					5231	t
	84								5598	20

75.45 - 75.60 Dark green dyke?
fine grained, chloritized

76.4 - 86.0 Blue quartz schists
fine grained, blue quartz porphyries,
well foliated, folate tuff
Strongly sheared
Augen texture - quartz are slightly
flattened

Depth (m)	%	Grain size (mm)	Structures	Fractures and Veins	Geo.	Colour	Minerals and Alterations	Sample #	TS #	Description
102				F40 Ro, Q, CP				5603	<5	
104				F20 H, ch F50 Ro, musc F60 Ro, Bl F30 Ro V2F10 Ro, cc, ch				5604	<5	104.2 - 105.9 massive, bleaching is intense along some fracture
15			S,70	F50 H, Bl, cc F65 Ro, ch, cc, Bl F60 Ro, cc, Q V80 H, ch, cc				5605	<5	105.9 - 112.7 Sheared; few quartz veins in foliation, few bleached zones.
106				V35 H, py F40 Ro				5606	<5	
108				V35? V, Q, py F40 H, cc F55 Bl, Ro F45 Bl, H, cc F50 Ro, cc		dG + mG		5607	<5	
110				F35 Ro F65 Ro, Bl				5608	<5	
16			S,85	V60 Q, py F0 H, ch				5609	<5	112.7 - 130.8 Blue quartz schist
112			S,160	F50 Ro, cc				5610	10	Fine grained, well foliated, blue quartz phenocrystals, felsic tuff
114				V2F65 Ro, py				5235	t	Generally strongly pyritized, hexahedral pyrite crystals
116			S,80	V25 H, py F40 H, py				5611	10	Well foliated Augen texture Slightly stretched quartz
17				V5 H, py V40 H, Q, py F70 Ro, ch, py				5612	15	
118			S,75					5613	10	
18				F70 Sm F60 Ro F0 Ro		mG		5614	5	

Depth (m)	Structure to core axis	Fractures and Veins	Colour	py int	cc	Depth (m)	Description
120		F40 Sm				5615	15
18	122	S,55	F30 Ro,cc,py			5236	t
			V45 H,cc	mGG		5616	10
			V365 Q, ch F40 Ro,py F30 Ro,cc,py			5237	21
124	S,70				5617	5	
19	126		F45 Sm, ch			5618	5
			F15 Ro, ch				
			ZF3 Ro, py				
128	S,65		mG+dG		5238	t	
130	130		V760 H, ch, py			5619	15
			F35 H, ch				
			V45 Q, cc, py				
			F45 Ro, py				
132	S,70				5620	5	
20	134		F55 Ro			5239	t
			F30 Ro				
			F20 Ro, cc F40 Ro, cc			5621	10
21	136		F40 Ro, cc F30 Ro, cc			5622	70
						5240	t
		S,75				5623	95
21	138		ZF20 H, cc			5624	55
			F50 Sm, S, sp F40 Ro, cc F10 H, cc ZF30 H, cc			5625	15

127.1-130.8 Very sheared tuff?
Blue quartz phenocrysts are getting scarce.
128.75-130.8 Much "formless" quartz pockets.

130.8-195.4 Biotite schists.
Very fine to fine grained, generally well foliated intermediate composition, tuff.

131.2-137.7 Several large quartz pockets. Pyrite. Foliation is disturbed, folded.

137.0-138.9 Foliation is disturbed.

Depth (m)	Grain size (mm)	Structures	Fractures and Veins	Geot.	Colour	py, mt.	Minerals and Alterations	cc	Sample #	Description
138			F15 Sm, cc F60 Q, ch, py						5625	
140		S, 55	F20 Ro F50 Ro			I				139.4-163.0 Lapilli tuff. Generally felsic fragments in intermediate matrix. Clasts are stretched in foliation plane. Clasts are rounded and have a maximum diameter of 10-15 cm. Matrix of andesite is magnetic and has calcic alteration.
142			F65 Ro, cc, py F45 Ro, cc F35 Ro, cc F20 Ro, cc F30 Sm, Ss, cc			I				
144		S, 60	F35 Ro, cl			I				141.2-141.3 Pyroxenite and chalcopyrite.
146	100		F35 Ro, cc, py F20 Ro, cc F40 Ro, cc, H F45 cc, H F50 Ro, cc F55 Ro, cc, py			I				
148			F30 Sm, cc F40 Ro, cc F10 H, cc F30 Ro, py F60 V, py, cc						5241	0.2
150			F35 Ro, py, cc F20 Ro, cc		m Gldg					
152		S, 60	F60 Ro, py F45 Ro, cc F0 cc						5242	t
154			F40 Ro, Q							
156		S, 60								

Core No.	Depth (m)	% Rec	Grain size (mm)	Texture	Structure	Facies and Dip		Color	py (mt)	Minerals and Alterations	Compos	CC	Remarks
						Sens.	Angle						
24	156	100											
	158	100											
	160	100											
	162	100											
	164	100											
25	166	100											
	168	100											
	170	100											
	172	100											
	174	100											
26	156	100											
	158	100											
	160	100											
	162	100											
	164	100											
27	166	100											
	168	100											
	170	100											
	172	100											
	174	100											

S, 65

S, 65

S, 70

S, 70

S, 70

5243

5244

5626

5627

5628

69

0.3

5

<5

<5

163.0-165.5 fine grained tuff with quartz "fillings", fragments, much bleaching

165.5-181.4 Lapilli tuffs as above.

169.1-169.3 Quartz veins and pockets.

Box	Depth (m)	Angle (°)	Diens.	Angle (°)	Nature	PY:mt	cc	Notes
	174	0						
27	176	0			LF40 Ro,cc LF10 Ro,py,cc LF25 Ro,cc LF30 Ro,cc		5,75	
	178	0						
28	180	0			LF40 Ro,cc LF15 H,BI LF15 Ro,cc LF25 Ro,cc LF30 Ro,cc		5,60	
	182	0			LF35 Ro,cc			
	184	100			LF25 H LF35 Ro LF30 Ro LF60 Ro,cc LF65 H,cc,py LF60 Ro LF40 Ro,py LF40 Ro	dg:mg		5245 t
29	186	0			LF45 Ro LF15 Ro,py LF25 Ro,cc LF40 Ro,cc			
	188	0			LF40 H,cc			5,60
	190	0			LF15 cc LF35 Ro,py,cc			5,65
30	192	0			LF20 Ro LF45 cl LF50 Ro,cc LF45 Ro LF50 Ro LF25 Ro,py,cc LF15 H,BI,Ro LF30 Ro,cc			5629 <5 5630 <5 5631 5

181.4 - 183.7 fine grained tuff with quartz "fillings" and pyrite

183.7 - 195.4 Lapilli tuff as above. Maximum fragment size is greater or equal to 20 cm. Fragments are rounded.

190.5 - 191.4 Bleaching along microfractures

Depth (m)	Dip (%)	Grain size (mm)	Texture	Structures to core axis	Fractures and Veins		Géol.	Colour	Minerals and Alterations	Sample #	TS #	Description
					Devs.	Angle						
192												
30	100				S, 60	6F45	H, cc	dg+mg		5631		
194						F15	H, cc					
					S, 60	F30	Ro, cc					
196					S, 55?	F30	Ro, cc					
31						F30-5	H, cc					
						F30	Ro, cc					
						F35	H, Si					
						F55	Ro, py					
						F35	Ro, cc					
198						V65	Ro, cc					
						F60	Ro					
						F55	Ro					
						F35	Ro, cc, ch					
200					S, 50	F50	H, cc	dg-dpg				
						F25	H, cc					
						V45	cc					
						F55	H, cc					
						F20	Ro, cc					
						F50	Ro, cc					
						F0	Ro, cc					
202					S, 60	F20	Ro, cc					
32						F30	Ro, th					
204						F25	Ro, cc					
						F40	Ro, cc					
					S, 60	F50	Ro, cc					
						F40	H, cc					
206						V40	Q, musc					
						F50	Ro, Si					
						F10	H, Si					
						F35	H, cc					
						F0	H, cc					
208						F20	Ro, cc, ch					
33						F45	Ro, cc, ch					
						F20	Ro, cc					
						F20	H, cc					
						3F10	H, cc					
210					S, 60	F35	Ro, cc	dg+mg				
						F70	Ro, cc					

195.4 - 209.7 Feldspar - Quartz porphyritic schists
 coarse grained, massive to weakly foliated
 rounded feldspar phenocrystals, few quartz
 crystals pinkish coloured "crystal tuff"

209.7 - 210.5 Biotite schists
 fine grained, bleached, lapilli tuff

Depth (m)	Core Case	Stratigraphic Unit	Structure	Fractures	Angle	Nature	Color	Py	Int	CC	Description
210		GRANOBLASTIC PORPHYRIC									
33											210.5 - 214.5 Feldspar-Quartz porphyritic schists as above
212											
214			S, 50								
34		LEPIDOBLASTIC									
216			S, 70								214.5 - 222.5 Lapilli tuff
218			S, 70								
220											
35		LEPIDOBLASTIC									
222			S, 60								222.5 - 224.7 Mostly tuff (ash fall?)
224											224.7 - 224.9 Quartz filling in lapilli tuff
226			S, 65								224.9 - 225.9 Lapilli tuff 225.9 - 226.2 tuff (ash fall?) 226.2 - 226.4 Quartz filling 226.4 - 238.7 Lapilli tuff

Depth (m)	%	Grain size (mm)	Structures	Fractures and Veins	Geot.	Colour	py, mt	Minerals and Alterations	Sample #	TS #	Description
228											
36											
230											
232											
37											
234											
236											
238											
38											
240											
242											
39											
244											
246											

LEPIDOBLASTIC

GRANOBLASTIC PORPHYRIC

PHENOS

S₁₆₀

S₁₇₀

S₁₆₀

S₁₆₅

S₁₆₅

F0 H, cc

F20 Bl, H
 F35 Bl, H
 V70 O, cc, py
 F30 Ro

F45 Ro, cc

F15 Ro, cc, py

F2F30 Ro, cc

F35 Ro, ch

F45 H, cc

F15 H, cc

F35 H, Bl

V760 O, fl, py, mt, cc

F05 Bl, H

V40 O, musc, fl, py, mt, cc

F35 H, Bl, cc

F250 O, fl, py, mt, cc

F25 O, fl, py, mt, cc

F50 O, fl, py, mt, cc

F40 O, fl, py, mt, cc

V45 O, fl, py, mt, cc

F50 O, fl, py, mt, cc

F0 H

dg-imb

dg-dpg

233.1 - 233.5 Slightly brecciated?
 healed - bleached along
 microfractures.

238.7 - 257.0 Feldspar-quartz porphyritic
 schists
 as above
 moderately sheared



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-10

CLAIM NO(S): L789326 / L789329

CONTRACTOR : Les Forages Foranord

TOWNSHIP : Hoblitzell

CORE SIZE : BQ

DATE BEGUN : 16/03/88

DRILL FLUIDS: H₂O

COMPLETED : 19/03/88

LOGGED BY : J. Learn

COLLAR CO-ORDINATES

GRID UTM
X: 900W ≈581250E
Y: 350S ≈5482900N
Z: ≈279

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		39°	HF 4%
122m		39°	HF 4%
180m		39°	HF 4%
240m		37°	HF 4%

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

DEPARTURE: AZIMUTH: 180°

INCLINATION: -45°

CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 16.2m

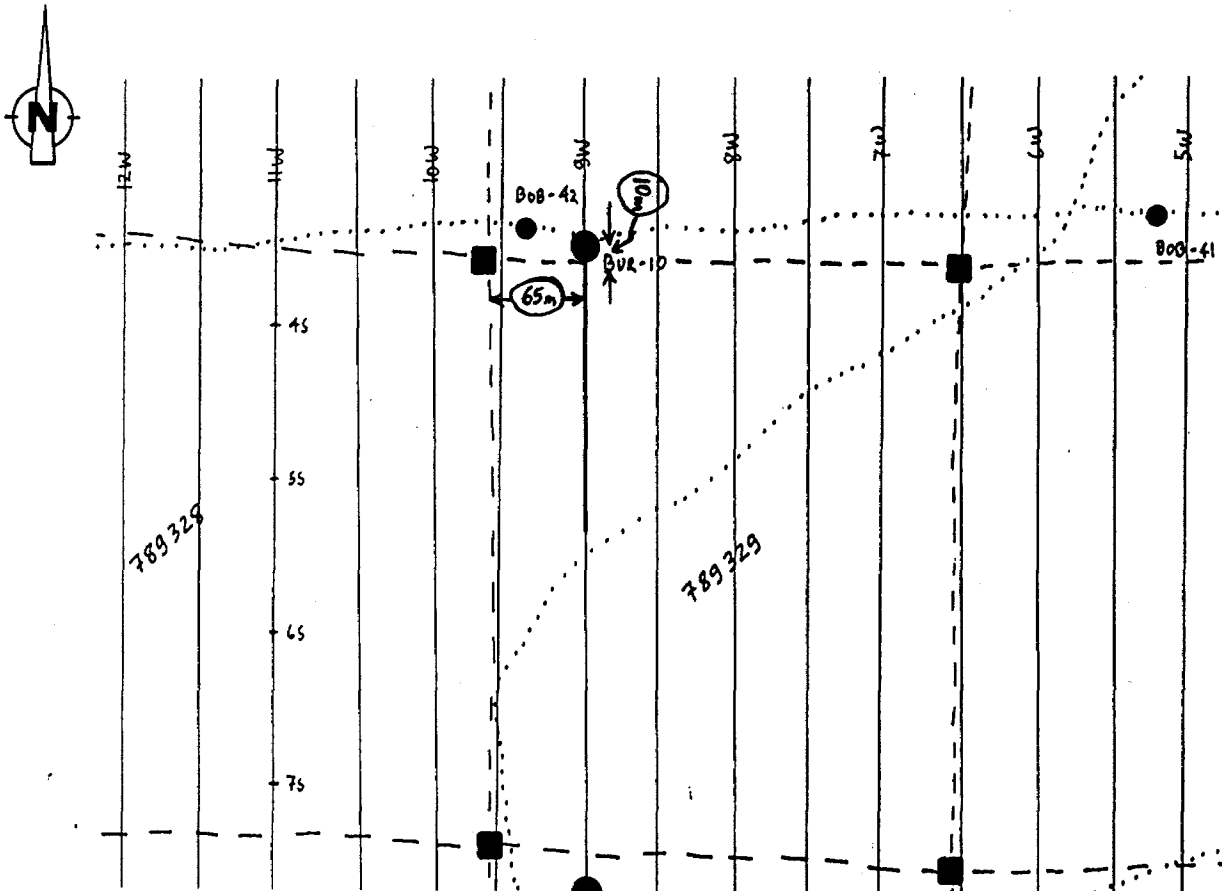
HORIZONTAL COMPONENT: 188m

END OF HOLE: 244.0m

VERTICAL COMPONENT : 155m

REMARKS: drill floor to ground level 0.5m, casing pulled

LOCATION SKETCH 1:5000:



Box	Depth	% Rec	Log	Grain size mm -N ₄₀ - N ₁₀₀	Texture	Structures to core axis	Fractures and Dens.	Veins Angle Nature	Geol. F/R	Colour	Minerals and Alterations	Sample #	TS #	Description		
1	20					S1.65		LAFER LASS F95 F45	SM, CHALC SM, CHALC SM, CHALC SM, CHALC	75				5633	16.2 - 91.35 Mixed intermediate tuffs, overall this subdivision quite non-uniform, refer to descriptions below:	
						S1.80		BKN F30 F20					dg			5250
2	22					S1.65		F35 F45 B20	SM, CHALC SM, CHALC SM, CHALC	95				5634	23.05 - 25.1 heterogeneous, common injected quartz more felsic composition, more feldspar, less biotite, occasional quartz eyes, especially at 24.0 - 24.2 ~ 5% mm colour banding (biotite-rich, poor bands) 1-4 well laminated and well foliated. calcite wispy discontinuous mostly // S ₁ , minor pyrite disseminated throughout	
						S1.60		V V50					dg			
3	24					S1.60		F30 F40 F50 F60	NE, CC NE, CC NE, CC NE, CC	85				5636	26.0 - 28.0 heterogeneous, two principal lithologies alternate, thicknesses from 5cm to >2m mostly dark grey rock; waxy foliated biotite-feldspar, fine garnet with disseminated pyrite, mostly random orientation. S ₁ (if it exists) emphasized by calcite (wispy) but calcite also present in ground mass - pervasive rare quartz eyes, whereas in above unit these are round, here they may be angular but with bands of light green rock; this rock composed mostly of feldspar, with ~ 5% qtz eyes (<0.1mm) and minor wispy sericite, also minor dissem py, calcite, and few calcite veinlets, rock appears to be foliated but in fact it is oriented - elongate feldspar quartz appears to be not affected.	
						S1.80		V V50					dg			
4	26					S1.60		F30 F40 F50 F60	NE, CC NE, CC NE, CC NE, CC	85				5251	✓	30.0 - 32.0 heterogeneous, two principal lithologies alternate, thicknesses from 5cm to >2m mostly dark grey rock; waxy foliated biotite-feldspar, fine garnet with disseminated pyrite, mostly random orientation. S ₁ (if it exists) emphasized by calcite (wispy) but calcite also present in ground mass - pervasive rare quartz eyes, whereas in above unit these are round, here they may be angular but with bands of light green rock; this rock composed mostly of feldspar, with ~ 5% qtz eyes (<0.1mm) and minor wispy sericite, also minor dissem py, calcite, and few calcite veinlets, rock appears to be foliated but in fact it is oriented - elongate feldspar quartz appears to be not affected.
						S1.80		V V50					dg			
3	28					S1.60		F30 F40 F50 F60	NE, CC NE, CC NE, CC NE, CC	85				5639	34.0 - 36.0 heterogeneous, two principal lithologies alternate, thicknesses from 5cm to >2m mostly dark grey rock; waxy foliated biotite-feldspar, fine garnet with disseminated pyrite, mostly random orientation. S ₁ (if it exists) emphasized by calcite (wispy) but calcite also present in ground mass - pervasive rare quartz eyes, whereas in above unit these are round, here they may be angular but with bands of light green rock; this rock composed mostly of feldspar, with ~ 5% qtz eyes (<0.1mm) and minor wispy sericite, also minor dissem py, calcite, and few calcite veinlets, rock appears to be foliated but in fact it is oriented - elongate feldspar quartz appears to be not affected.	
						S1.80		V V50					dg			
3	30					S1.60		F30 F40 F50 F60	NE, CC NE, CC NE, CC NE, CC	85				5640	38.0 - 40.0 heterogeneous, two principal lithologies alternate, thicknesses from 5cm to >2m mostly dark grey rock; waxy foliated biotite-feldspar, fine garnet with disseminated pyrite, mostly random orientation. S ₁ (if it exists) emphasized by calcite (wispy) but calcite also present in ground mass - pervasive rare quartz eyes, whereas in above unit these are round, here they may be angular but with bands of light green rock; this rock composed mostly of feldspar, with ~ 5% qtz eyes (<0.1mm) and minor wispy sericite, also minor dissem py, calcite, and few calcite veinlets, rock appears to be foliated but in fact it is oriented - elongate feldspar quartz appears to be not affected.	
						S1.50		V V50					dg			
3	32					S1.65		F30 F45	SM, CHALC SM, CHALC	75				5642	42.0 - 44.0 heterogeneous, two principal lithologies alternate, thicknesses from 5cm to >2m mostly dark grey rock; waxy foliated biotite-feldspar, fine garnet with disseminated pyrite, mostly random orientation. S ₁ (if it exists) emphasized by calcite (wispy) but calcite also present in ground mass - pervasive rare quartz eyes, whereas in above unit these are round, here they may be angular but with bands of light green rock; this rock composed mostly of feldspar, with ~ 5% qtz eyes (<0.1mm) and minor wispy sericite, also minor dissem py, calcite, and few calcite veinlets, rock appears to be foliated but in fact it is oriented - elongate feldspar quartz appears to be not affected.	
						S1.60		V V50					dg			
4	34					S1.65		F30 F45	SM, CHALC SM, CHALC	75				5643	46.0 - 48.0 heterogeneous, two principal lithologies alternate, thicknesses from 5cm to >2m mostly dark grey rock; waxy foliated biotite-feldspar, fine garnet with disseminated pyrite, mostly random orientation. S ₁ (if it exists) emphasized by calcite (wispy) but calcite also present in ground mass - pervasive rare quartz eyes, whereas in above unit these are round, here they may be angular but with bands of light green rock; this rock composed mostly of feldspar, with ~ 5% qtz eyes (<0.1mm) and minor wispy sericite, also minor dissem py, calcite, and few calcite veinlets, rock appears to be foliated but in fact it is oriented - elongate feldspar quartz appears to be not affected.	
						S1.60		V V50					dg			
4	36					S1.55		F30 F45	SM, CHALC SM, CHALC	75				5643	50.0 - 52.0 heterogeneous, two principal lithologies alternate, thicknesses from 5cm to >2m mostly dark grey rock; waxy foliated biotite-feldspar, fine garnet with disseminated pyrite, mostly random orientation. S ₁ (if it exists) emphasized by calcite (wispy) but calcite also present in ground mass - pervasive rare quartz eyes, whereas in above unit these are round, here they may be angular but with bands of light green rock; this rock composed mostly of feldspar, with ~ 5% qtz eyes (<0.1mm) and minor wispy sericite, also minor dissem py, calcite, and few calcite veinlets, rock appears to be foliated but in fact it is oriented - elongate feldspar quartz appears to be not affected.	
						S1.55		V V50					dg			

Box	Depth	% Rec	Log	Grain size mm -N10 - N100	Texture	Structures to core axis	Fractures and Veins			Gcct.	Colour	PY (Po.)	Minerals and Alterations	KNAICC	Sample #	TS #	Description					
							Dens.	Angle	Nature													
4	38					S1.80					dG						36.6-36.8 clasts of green rock in the grey rock up to 5cm x 2cm					
5	40					S1.70											40.0-43.3 this rock the same as the grey rock above, but strongly injected with quartz					
						S1.60																
						S1.60																
						S1.35									mg							note that I can now recognize that this grey rock is also lineated
6	42										w											
7	44					S1.45											43.3-45.7 quartz-eye tuff (intermediate)					
						S1.65																
8	46																					
9	48					S1.60											45.7-52.9 very fine grained well foliated, well laminated tuff, mostly composed of biotite and feldspar.					
10	50					S1.65											biotite content variable causing colour banding in shades of greys					
11	52																					
12	54					S1.60																

Box	Depth	% Rec	Log	Grain size mm - 20 - 100	Texture	Structures to core axis	Fractures and Veins		Geot.	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle						
13	92					S ₁ 70	F 25 F 30 V 70	ROCKFACE # q						<p>91.35 - 130.4 Quartz-eye crystal tuff</p> <p>both upper and lower contacts marked by quartz veins, relationship with adjacent rock obscured.</p> <p>Note however that grain size decreases at upper and lower contacts, this is possible evidence that rock is a porphyritic intrusive</p> <p>well foliated/laminated to locally only weakly foliated</p> <p>quartz eyes are rounded, blue and abundant 5% of rock</p> <p>a few quartz eyes contain biotite inclusions</p> <p>foliation defaced by biotite ~5%, and wispy sericite ~1%, generally also by pyrite ~0.5%</p> <p>groundmass mostly plagioclase feldspar calcite generally; microstructures // S₁</p> <p>98.6 - 102.8 quartz veins impart lighter colour to wall rock</p>
14	94	100				S ₁ 65	V 20 q							
	96						V 70 q							
	98						V 20 cc				5662	LS		
	100					S ₁ 65	8 V 60 F 30 8 V 60 q q				5663	LS		
15	102						V 20 cc							
	104	100				S ₁ 70	2 V 25 V V 30 qcc							
	106						2 V 35 V 70 qcc							
16	108						V 50 qcc							
	110						V 60 qcc							
	112						V 70 qcc							
	114						V 70 qcc							
	116					S ₁ 80	F 10 V q							
	118						V 65 qcc							

Box	Depth	% Rec	Log	Grain size mm - 410 - 410 0	Texture	Structures to core axis	Fractures and Veins			Giot F/P	Colour	Minerals and Alterations		Sample #	TS #	Description
							Dens.	Angle	Nature			Py	KH/CC			
16																
	110	100				S, 60										
17	112															
	114					S, 70							5260	✓	22	
	114					S, 45										
	116					S, 30										
18																
	118					S, 60										
	120					S, 60										
	122					S, 60										
19																
	124					S, 60										
	126															

Box	Depth (m)	% Loss	Fractures and Veins Type, Direction, Size	Structures Type, Direction, Size	Fractures and Veins Type, Direction, Size	Geo. Nature	Colour	Minerals and Alterations				Sample #	TS	Description	
								Py	PO	Fe	CHCC				
20	128	100			S ₁ 70	V20 NR, CC V00 Q, CC V60 Q, CC A20 SM, CH, CC									
	130				S ₁ 70	V40 Q, CC F40 RO, CHL A30 AR, CC						5261 ✓	11.	130.4 - 133.6 very fine grained black argillaceous tuff, uniform, massive to weakly foliated except locally where diffuse calcite emphasizes foliation (folded at 133m) pyrite locally ~1% eg 131.6-132m	
21	132		open folds			F45 AR, CHL A45, 50 AR, CHL	B					5665	<5	133.6 - 149.1 fine grained intermediate tuff (?) well foliated rock composed mainly of feldspar, - lesser biotite, chlorite, pervasive calcite in matrix and in foliation planes - uniformly disseminated microscopic pyrite.	
	134				S ₁ 60	A15 AR, CHL, CC V20 Q, CC F25 SM, CHL						5666	<5		
22	136					A25 AR, CHL, CC F20 NR, CC V40 NR, CC, EP F25 AR, CHL, CC	d G					5667	<5	137.7 - 149.1 abundant veins containing quartz and pyrite dolomite; wall rock adjacent to veins lighter grey than before 137.7	
	138				S ₁ 70	V50 Q, DOL F25 AR, CHL, CC V40 Q, DOL V30 Q, DOL V20 Q, DOL						5668	<5		
23	140				S ₁ 60	V70 Q, DOL A70 AR, CHL, CC V Q, DOL F40 AR, CHL, PY F30 AR, CHL, CC V Q, DOL V40 Q, DOL V40 Q, DOL V40 Q, DOL	mg lp					5669	<5	137.7 euhedral Fe carbonate in vein	
	142	100				V40 AR, CHL, PY F30 AR, CHL, CC V Q, DOL V40 Q, DOL V40 Q, DOL						5670	5		
23	144					V40 AR, CHL, PY F30 AR, CHL, CC V Q, DOL V40 Q, DOL V40 Q, DOL						5671	<5		
	144.5					V40 AR, CHL, PY F30 AR, CHL, CC V Q, DOL V40 Q, DOL V40 Q, DOL						5672	<5		
	144.5					V40 AR, CHL, PY F30 AR, CHL, CC V Q, DOL V40 Q, DOL V40 Q, DOL						5673			

Box	Depth	% Rec	Log	Grain size mm	Texture	Structures to core axis	Fractures and Veins			Gcol F.R	Colour	Minerals and Alterations					Sample #	TS #	Description
							Dims.	Angle	Nature			PVI	Ve	Chl	CC				
23	146	100				S ₁ 70	FMS	SM, CC, ZP							5673	<5			
							20 60	DOL, P							5674	<5			
															5262	✓ 5			
24	148					S ₁ 70		9 DOL											
	150						DX 20 60	Q, DOL											
							V 60	Q, DOL											
							F 60	RD, CHL, CL											
25	152					S ₁ 70		RD, CHL											
	154						V 60	Q											
							F 60	RD, CHL											
							F 15	RD, CHL											
26	156					S ₁ 65													
	158						F 20	SM, CC, DOL											
	160					S ₁ 75		RD, CC, ZP											
	162					S ₁ 80		RD, CC							5263	✓ <2			

149.1-183.0 massive to weakly foliated to locally well foliated intermediate metavolcanic (Tuff?) major constituents are feldspar and biotite locally porphyritic (shadony feldspar outlines) abundant bands a few cm to 10cm rich in chlorite/amphibole and also containing small randomly oriented needles (resembling tremolite) pervasive calcite in matrix and in foliation, somewhat lesser amounts in chloritic bands generally fresh unfractured rock, but wispy calcite locally becomes very intense emphasizing foliation, here rock may be weakly sheared eg 170.8-172.8 upper and lower contacts of this unit are not abrupt, arbitrary choice of unit based on presence of short chloritic / feldspar porphyritic intervals

Box	Depth	% Calc	Log	Core size mm Core ID	Structures Dip	Structures and Veins			Geot FIR	Colour	Minerals and Alterations PYIPOI CHACC	Sample		Description
						Dip	Angle	Nature				#	#	
26	164				S ₁ 80	U90	45	Q, CC						
	166					7R45	45	HE, CC						
						F30	45	RD, EP						
						F35	45	RD, CC, CHA						
						V70	45	CSQ						
27	168				S ₁ 75	V80	45	Q				5675	<5	
	170					F30	45	RD, CC, CHA RD, CC, CHA, Q, EP				5676	<5	170.4
					S ₁ 70							5264	✓ <2	ruggy fracture with abundant py cubes (~0.5mm) on calcite
	172					F25	45	RD, CH, CC				5677	<5	
28	174					V	45	RD, CH, EP				5678	<5	174.6
												5679	<5	1cm broken tourmaline crystal in quartz-calcite vein
	176				S ₁ 70									
						F55	45	RD, CC, CHA						
						F30	45	RD, CC, CHA RD, CC, CHA, Q, EP						
						F20	45	RD, CH						
29	178				S ₁ 80									

Box	Depth	% Rec	Log	Grain size min - No - No	Texture	Structures to core	Enclosures and Angles	Veins Nature	Gent	Colour	Minerals and Alterations		Sample #	TS #	Description		
											pyl	CHLCC					
29	182					S, 70				dG							
	184																
	186												5265	3			183.0 - 198.1 fine grained to very fine grained rock very similar to above but lacking chloritic or porphyritic sections → intermediate tuff(?)
30	188					S, 80											
	190																
31	192					S, 60				dG							
	194																
	196												5680	<5			195.7-196.3 increase in pyrite content in wall rocks adjacent to quartz vein; minor pyrite also in quartz vein close to vein walls
32	198												5681	<5			
	195																

Box	Depth	% Rec	Grain size mm	Structures	Fractures and Veins		Geol	Colour	Minerals and Alterations		Sample #	TS #	Description	
					to core axis	Ben.			Nat.	py				mt
32	205		FST	S ₁ 80	F34	sm, cc, rhl		dG			5682	✓	6	198.1 - 244.0 mafic (to intermediate) tuffaceous section
					F45	SM								
	203													
33	204			S ₁ 85	F35	RP, OP								as above but with abundant amphibole / chlorite rich bands
					F15	H, cc								
	202													
	206			cm folds										calcite occasionally present in S ₁ planes and on fractures
	206			S ₁ 70	F30	RP, CC, CHL								py uncommon, generally in qtz
	208													well foliated
	208				F30	RP		dG						upper contact not at all abrupt
34	210			S ₁ 80	F40	RP								
					V70	Q								
	212													
	212			S ₁ 65	V60	Q								
	212				F45	RP, CC								
	212				F35	RP, CC								
35	214			S ₁ 75	F35	RP, CHL, CC								
					F60	RP								
	216				F50	RP								

Box	Depth	Grain size	Structure	Minerals and Alterations	Sample #	TS #	Description
35	218	S ₁ 75	F50 R ₁ , CHL, CC ZF35 R ₁ , CHL, CC		5683	✓	5
	220		V50 Q F15 SM, CHL				
36	222	S ₁ 75	F50 R ₁ , CC				
	224	S ₁ 65	V Q, PY, tm F30 R ₁ , CC F20 R ₁ , CC ZF20 R ₁ , CC	alg			
	226		F60 SM, CHL F30 R ₁ , CC				
37	228	S ₁ 75	F20 R ₁ F15 R ₁ , CC				
	230	S ₁ 65	F20 R ₁ , CHL F15 R ₁ , CC F30 R ₁ , CHL	20.5% possibly minor <u>po</u>	5684		10
	232		ZF60 M, CHL, CC, PY F60 R ₁ F30 SM, CHL F60 R ₁ , CHL				231.0 coarse py > 1cm
38	234	S ₁ 65	F30 R ₁ , CC F20 R ₁ , CC				

Box	Depth	Grain size mm	Structure	Fossils and		Colour	Materials and Alterations	Samples		Description
				Dens.	Single			#	TS	
38	236		S ₁₈₀		V70 Q					
					F60 SM					
	238				F60 SM, CR 2F60 SM, LHL					
39	240		S ₁₈₀		F40 RB, LL					
					V70 Q F40 RB, CC					
	242		S ₁₆₅							
40	244				F30 SM, CC			5685	<5	
										EDH 244

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John Lewis



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-11

CLAIM NO(S): L789304
TOWNSHIP : Hoblitzell
DATE BEGUN : 18/03/88
COMPLETED : 22/03/88
LOGGED BY : R. St-Jean

CONTRACTOR : Les Forages Foranord
CORE SIZE : BQ
DRILL FLUIDS: H₂O

COLLAR CO-ORDINATES

GRID UTM
X: 2000W ≈580150E
Y: 775N ≈5484000N
Z: ≈285

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
60m		41°	HF 4%
120m		41°	HF 4%
180m		40°	HF 4%
CHECKED BY: J.Learn, R.St-Jean, S.Ball			

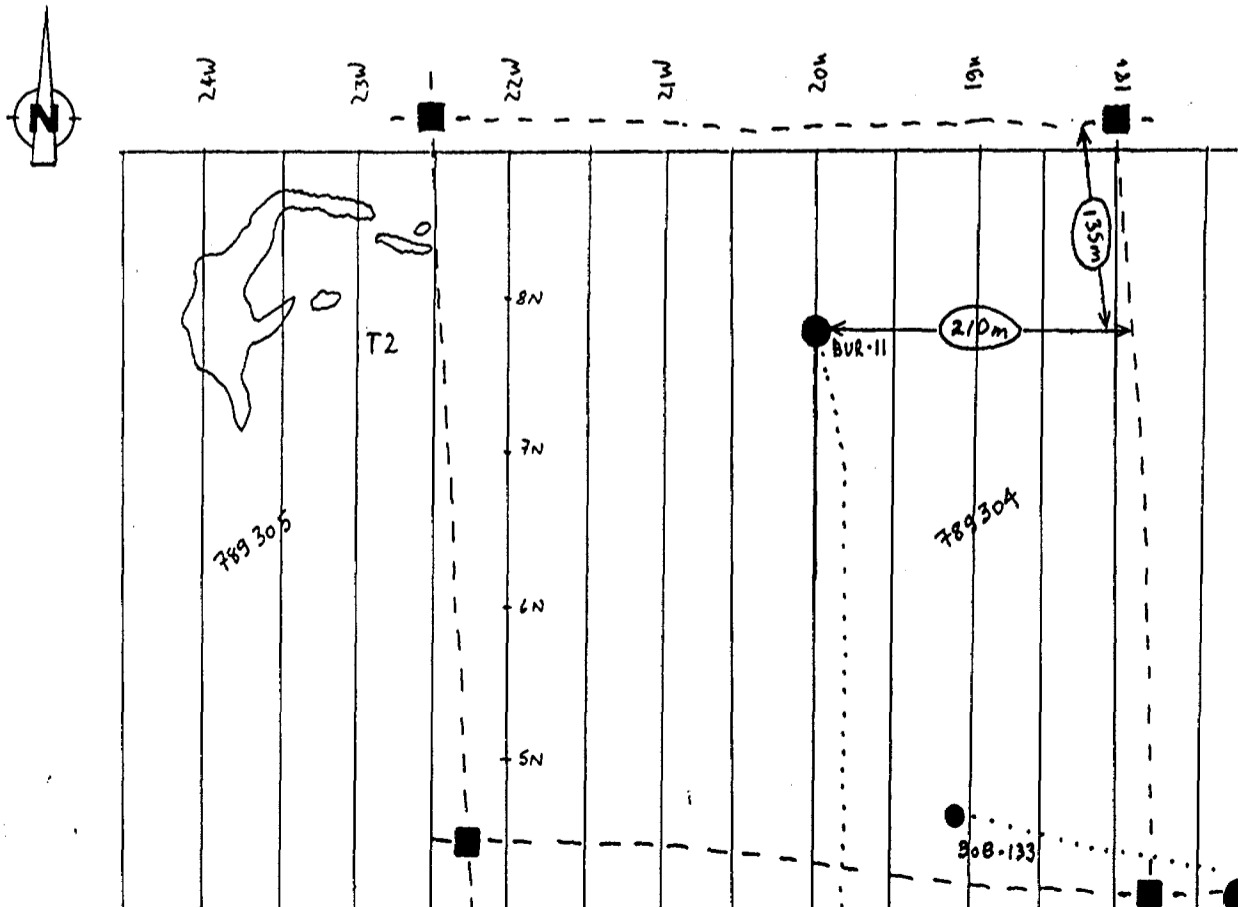
DEPARTURE: AZIMUTH: 180°
INCLINATION: -45.5°
CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 19.3m
END OF HOLE: 217.0m

HORIZONTAL COMPONENT: 163m
VERTICAL COMPONENT : 143m

REMARKS: drill floor to ground level not measured, ≈0.5m; casing pulled

LOCATION SKETCH 1:5000:



Box	Depth	% Rec	Log	Grain size mm - N10 - N100	Texture	Structures to core axis	Fractures and Veins			Gent FR	Colour	Minerals and Alterations						Sample #	TS #	Description		
							Dens.	Angle	Nature			py	mt	ep	cl	py	cc				cc	
	16																					
	18																			max 480 ppb / 53 ppb (Chromite) plus 30 ppb 0.00 - 19.30 OVERBURDEN		
	20	V				S ₁ 75														5686 <5	19.30-149.4 Feldspar amphibole schists	
		V																				Fine grained well foliated mafic flow (or sheared gabbro?)
	22	V																				Pervasive chlorite alteration
		V																				Pervasive carbonates (calcite) alteration; calcite is found on most fractures and frequently in veinlets on foliation planes
	24	V				S ₁ 65																
		V				S ₁ 37																
	26	V				S ₁ 55																
		V																				
	28	V				S ₁ 70																
		V																				
	30	V																				
		V																				
	32	V				S ₁ 70																
		V																				
	34	V																				
		V																				

19.30-149.4 Feldspar amphibole schists
 Fine grained well foliated mafic flow
 (or sheared gabbro?)
 Pervasive chlorite alteration
 Pervasive carbonates (calcite) alteration;
 calcite is found on most fractures and
 frequently in veinlets on foliation
 planes
 Pyrite and pyrrhotite are common
 and found finely disseminated or
 in small veinlets.
 Several quartz "pockets" are found
 - generally contacts are very unclear.

19.3-26.0 Much calcite stringers
 20.1 } Dark grey, metallic luster
 21.5 } soft mineral - 1mm flakes
 Graphite??
 23.5-23.6 Transposed foliation
 30.9-31.1 Bleached along
 microfractures

Box	Depth	% Rec	Log	Grain size mm - N10 - N100	Texture	Structures to core axis	Fractures and Veins			Geot. F/R	Colour	Minerals and Alterations				Sample #	TS #	Description
							Dens.	Angle	Nature			py	mt	po	ky			
3	34	100	V			S, 74								5267	5	35.4-36.1 Fault with 15cm clay gouge, "dissolved" foliation planes.		
	36	60	V				BKN	F25	Ro, ch					5695	<5			
								BKN	F25	Ro, ch cc, Ro					5696		<5	
4	38		V			S, 75								5268	<5	40.25-40.85 } 41.05-41.25 } Porphyritic dyke 42.10-42.30 } "in-situ contact"		
	40		V											5697	<5			
								BKN	F25	Ro, cc, ch					5698		<5	
															5699		<5	
															5700		<5	
5	42	100	V			S, 55										46.9-49.8 Much calcite stringers		
	44		V			S, 65								5701	<5			
	46		V			S, 65								5702	<5			
6	48		V													50.35-50.90. Fault, core breaks easily, quartz veins.		
	50		V			S, 75								5703	<5			
														5704	<5			
	52		V											5705	<5	52.0- Possibly transposed foliation		

Box	Depth	% Rec	Grain size	Structure	Fractures and Veins	Colour	Minerals and Alterations		Sample #	TS #	Description								
							Py	Polcpn											
6	52	100	V	S ₁₇₀	BKN	K	I		5706	LS									
	54											V	BKN	K	I	5707	LS		
																		56	V
7	58	V	S ₁₆₅	BKN	K	I	5709	LS											
										60	V	BKN	K	I	5710	LS	59.4-62.6	Finely disseminated Py, Po, Cpy	
																			62
8	64	V	S ₁₆₀	BKN	K	I	5269	15	60.8-60.9	2 mm garnets									
											66	V	BKN	K	I	5270	LS	61.15-61.42	Very sheared quartz veins - saccaroidal texture, pyrite, amphiboles
9	70	V	S ₁₇₀	BKN	K	I	5713	LS											
										72	V	BKN	K	I	5714	LS			
																	74	V	BKN
76	V	BKN	K	I	5716	LS													
								78	V	BKN	K	I	5717	LS					
															80	V	BKN	K	I

Box	Depth	%	Loc	Strat. (z) (m)	Texture	Structures	Fractures and Veins	Geo	Colour	Minerals and Alterations	Sample	Description
						to core axis	Dens. Angle Nature	F.R.		(mt) (pcpy)		
9	70		V				J8KN		mGG		5717	
			V				F45 H, Q, cc V70 Q, ch				5718	<5 71.15-73.15 White quartz vein, includes some white feldspar and chlorite.
	72		Q				F35 Ro F30 Ro F2740 Ro		W		5719	<5 73.15-74.7 Extremely sheared, chloritized
			Q				F25 Ro, cc				5720	<5 74.7-75.9 Quartz as above
10	74		V			S ₂ 30-50	F65 Ro, cc, py F40 Sm, ch, cc F20 H, cc, py		dGG		5721	<5 75.9-76.8 Sheared rock with chloriteous quartz
			V				F50 Ro F55 Ro F20 Ro		W		5722	<5 76.8-77.7 Quartz as above
	76		Q				F40 Ro, ch F40 Ro, py, ch F50 Ro		W+dGG		5723	5
			V				V55 ch, peg Q, peg				5724	5
11	78		V			S ₁ 65	J2F30 Sm, cc, ch				5725	10
			V				F40 Ro, cc, ch F40 Sm, cc, ch				5726	<5
	80	100	V				F50 Ro, ss		dG-dGG		5727	15
			V				F45 cc, Bl, Br F30 H, cc				5728	<5
	82		V				F25 Ro, py F55 Sm, cc				5729	10
			V				FQ-20 H, cc				5730	<5
12	84		V			S ₁ 70 S ₁ 65	F45 H, cc F45 H, cc				5731	10
			V				F50 Sm, cc		dG-mG		5732	<5
	86		V			S ₁ 75 S ₁ 65	F70 Ro, cc				5733	10
			V				F40 Ro, cc F30 cc, ch, py F45 Sm F55 Sm				5734	<5
			V				F50 Ro, cc, py F30 Ro, cc, py				5735	<5
	88		V				F50 Ro, cc, py				5736	<5

Depth	% Rec	Lithology	Grain size mm	Texture	Structures	Fractures and Veins			Color	Minerals and Alterations	Sample No.	Description
						Dens.	Angle	Natural				
88		V								5729	<S	
90		V			S, 55					5730	<S	90.6 - 104.6 Poor foliation
92		V								5731	<S	
94		V								5732	<S	
96		V			S, 40					5275	<S	
98	100	V			S, 60					5733	<S	
100		V			S, 65					5276	<S	
102		V								5734	<S	
104		V								5735	<S	
106		V								5736	<S	
		V								5277	<S	
		V								5737	<S	
		V								5738	<S	
		V								5278	<S	103.0 - 103.1 transposed foliation
		V								5739	<S	
		V								5740	<S	
		V								5279	20	

Box	Depth	% Rec	Log	Grain size mm - N10 - N60 - N100	Texture	Structural to core axis	Fractures to core axis	Minerals to core axis	Colour	Minerals and Alterations			Sample #	TS #	Description
										py	mt	po			
16	106		V										5741	LS	
	108		V										5742	LS	
	110		V		S, 55				dg-m66				5743	LS	
	112		V										5744	LS	
	114		V		S, 75								5745	LS	113.0-114.0 Brown alteration
17	114		V						mbN-dg				5280	70	
	116	100	V		S, 65								5746	LS	
	118		V										5747	LS	
	120		V										5281	5	
18	122		V										5748	LS	
	124		V										5282	4	
	126		V						dg-d6N				5749	LS	118.05-118.15 } Strong carbonates 119.1-119.4 } alteration
	128		V		S, 75								5750	LS	
	130		V		S, 70								5283	80	
19	132		V										5751	LS	
	134		V		S, 80								5752	LS	123.7-124.0 Garnets, diameter up to 1 cm
	136		V												
	138		V												

Box	Depth 124	% Rec	Log	Grain size mm - 4.75 - 4.75	Texture	Structures to core axis	Fractures and Veins			Cent F.R.	Colour	Minerals and Alterations				Sample #	TS #	Description							
							Dens.	Angle	Nature			py	int	po	ce				py	ICC					
19	126	V	V		NEMATOBlastic + LEPI DOBLASTIC	S, 75																			
20	132	V	V		NEMATOBlastic + LEPI DOBLASTIC	S, 75																			
21	138	V	V		NEMATOBlastic + LEPI DOBLASTIC	S, 75																			
22	142	V	V		NEMATOBlastic + LEPI DOBLASTIC	S, 85																			

128.8-130.7 Foliation perturbed,
 becciated, healed

131.7-135.8 Foliation perturbed,
 faulted, becciated.

133.9-134.1 Soft clay gouge,
 becciated

138.3-140.6 Massive porphyritic
 dyke

140.8 3cm porphyritic dyke as
 above

Box	Depth	% Rec	ug	Grain size mm	Texture	Structures	Fractures and Veins	Geo	Colour	Minerals and Alterations	CC	Description	
				- 2.0 - 0.10		No core axis	Dens. Angle Nature	FIR					
	142		V				LF65 Ro, cc LF40 Ro, cc, ch LF50 Ro, cc, ch LF60 Ro, cc, ch LF20 Ro, cc, ch				5764		
22	144		V			S, 50	LF270 Ro, cc LF25 Ro, cc LF40 Ro, cc, ch				5765	25	
			V				LF60 ch Ro, Sm, cc LF45 H, cc				5766	25	
	146		V								5288	25	
			V								5767	25	
	148		V								5768	5	
23			V			S, 60			dg-mg			149.4 - 151.4 Dioritic schist	
	150		X			S, 65	LF45 Ro, cc LF25 Ro, cc				5769	10	
			X								5289	25	
			X			S, 55	LF40 Ro, cc, py LF20 H						Coarse grained, granoblastic? texture, massive slightly sheared intrusive Diorite shows a weak foliation.
	152	100	V			S, 70	LF60 Ro LF30 H, cc				5770	25	
			V				LF20 H						151.4 - 159.2 Feldspar amphibole schist fine grained weak foliation, garnet porphyroblasts mafic flow (or sheared gabbro?)
	154		V				LF5-10 H, cc, py LF10 Ro, py LF35 Sm, cc				5771	20	
24			V				LF45 Ro, py LF10 Ro, py LF40 Ro, py						Slightly pyritized Few quartz veins
	156		V			S, 70	LF30 Ro, py				5772	5	
			V										
	158		V			S, 70	LF60 Ro, cc, py				5773	480	
25			V				LF30 Ro, cc, py						
			V				LF5 Ro, cc, py LF15 H, cc				5774	15	
	160		X				LF10 H, cc				5775		

NOT DONE

Box	Depth	% Rec	Log	Grain size mm - N ₀ - N ₁₀ - N ₆₀ - N ₁₀₀	Texture	Structures to core axis	Fractures and Veins			Colour	Minerals and Alterations					Sample #	S #	Description
							Dens.	Angle	Nature		py	mt	po	py	l			
25	160	X				S ₆₀ ?				dG-lG							159.2 - 177.0 Diorite schists as above	
		X																
	162	X								dG-mG								
		X																
26	164	X				S ₄₅											164.15 - 164.45 Feldspar amphibole schists as above. (May be a piece of wall rock "floating" in diorite?)	
		X																
	166	X								mG-lG								
		X																
	168	X																
27	170	X				S ₆₀											170.0 - 170.5 Sheared quartz vein?	
		X								mG								
	172	X	X															
		X																
28	174	X															174.5 - 175.35 Sheared quartz vein?	
		X																
	176	X				S ₆₀												
		X																
28	178	V				S ₄₀											177.0 - 178.5 Feldspar amphibole schists as above	
		V																

NOT DONE

100%

1-2%

1-2%

GRANITE
G
SCHIST

Box	Depth 178	% Sec	Grain size mm - No. - No. 2	Texture	Structure to core	Fractures and Veins			Colour	Minerals and Alterations	Remarks
						Tens.	Angle	Nature			
											177.9-178.1 Diabase schists as above
28	180	100			S, 45	F40 F15	Ro, py, cc Ro, py	dg-mG	I		
						F30	Ro, cc, py	lg-mG		5294-5294	53
						F15 F15	Ro, cc Ro, cc				
	182				S, 75				I		
						F10	H, cc, ch	dg-mG	I		
29	184					F50 V30 F40 F0-5	H, cc, ch cc, ch, Q Ro, cc, py H, Q, ch		I	NOT DONE	
						F15 F30	H, cc H, cc				
	186					F0 F40	H, cc, ch Ro, py, ch	lg-mG	I		
						F20 F45 F40	H, cc, ch Ro, cc, py H, cc		I		
	188				S, 80 S, 70	F5 F30	H, cc Sm, cc, py	dg-mG	I	5295	25
30	190					F0-5 V55 V45	Q, ch Q, cc, ch Q, cc, ch	lg-mG			
	192					F15	H, cc				
	194							dg-mG			
31	196					V45 F65 V55	Q, ch Ro, ch Q, ch, py				

Core No.	Depth (m)	Core No.	Core No.	Core No.	Texture	Structures to core axis	Fractures and Veins			Geol. FIP	Colour	Minerals and Alterations				Sample #	Description
							Dens.	Angle	Nature			py	mt	po	ccpy		
31	196	X														197.4 - 199.55 Porphyritic dyke? or xenolith - with rounded quartz - light argon texture	
	198	X						V55 Q					5296	LS			
	200	X						F25 Q, cc, py F30 Q, cc, ch F15 Q, ch F30 Q, cc					5297	9			
32	202	X						F20 M, cc		dg-mGg						205.4 - 210.5 Several altered silicified zones	
	204	X						F30 Q F50 Q, cc V30 Q, cc									
	206	X						F40 Q, cc, py					5298	LS			
33	208	X						F30 Q, cc								210.5 - 214.5 Several altered silicified zones	
	210	X						F20 Q, cc, py F15 B, cc V50 Q, ch, py		dg+mGg							
	212	X						F25 Q, cc, py F60 Q, py F20 Q, py V35 Q, ch, py									
34	214	X															

Box	Depth m	% Rec	Grain size mm -N10 - N60	Texture	Structures to core axis	Fractures and Veins			Geol FIR	Colour	Minerals and Alterations					Sample #	Description
						Dens.	Angle	Nature			py	mt	po	cc	cc		
34	214						V55	Q, ch, po							5299	214.5 - 215.5 Several altered silicified zones	
	216	100	X		S, 80	V70	Q, ch, po										
				X			F10	H, cc									
35			X				V40	Q, cc								217.0 FOH	
	218																

NOT DONE

John Jones

DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-12

CLAIM NO(S): L789239
TOWNSHIP : Hoblitzell
DATE BEGUN : 20/03/88
COMPLETED : 23/03/88
LOGGED BY : R. St-Jean

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

COLLAR CO-ORDINATES

	GRID	UTM
X:	<u>5900W</u>	<u>≈576200E</u>
Y:	<u>0+50N</u>	<u>≈5483000N</u>
Z:	<u>≈289</u>	

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
62m		45°	HF 4%
122m		42°	HF 4%
182m		43°	HF 4%

DEPARTURE: AZIMUTH: 180°
INCLINATION: -45°
CHECKED BY: R. St-Jean

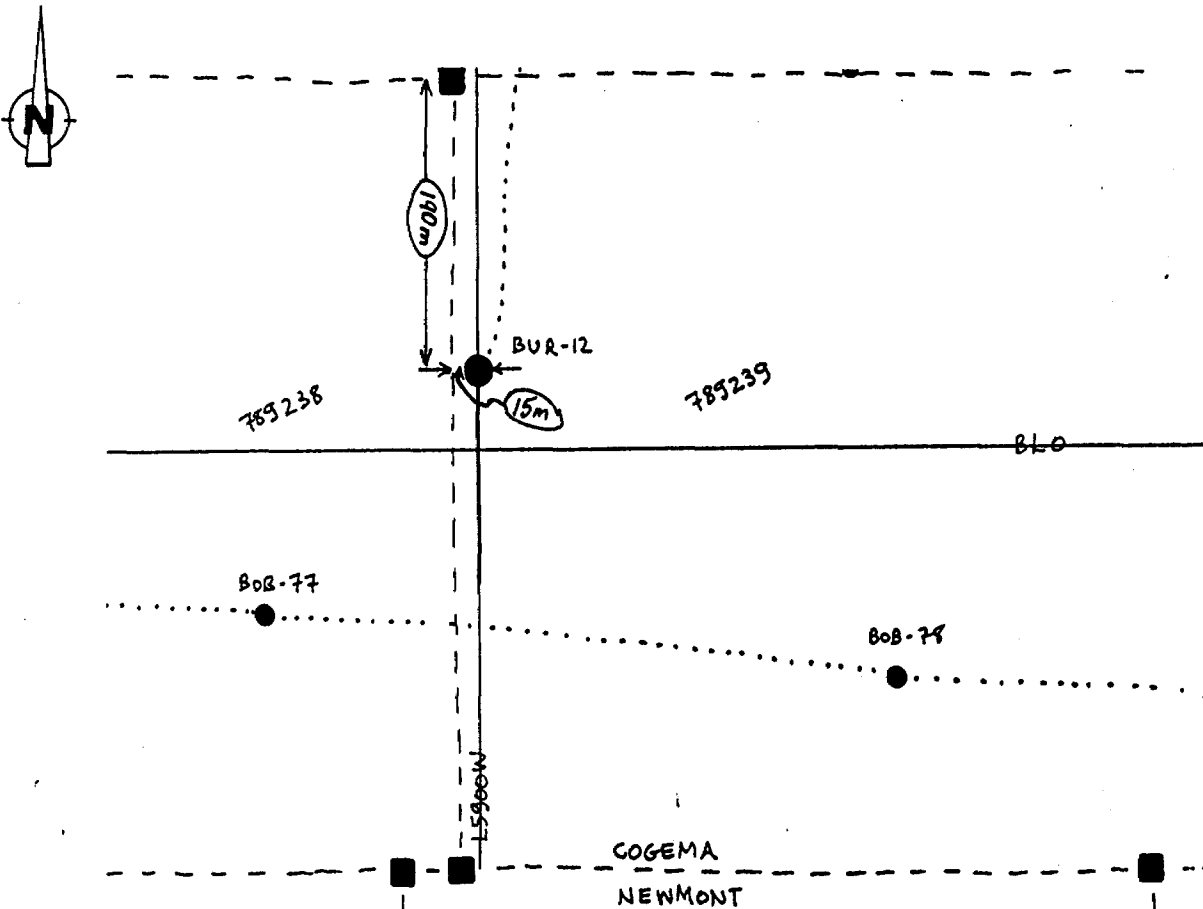
CHECKED BY:
J.Learn, R.St-Jean, S.Ball

DEPTHS: OVERBURDEN: 41.0m
END OF HOLE: 191.0m

HORIZONTAL COMPONENT: 138m
VERTICAL COMPONENT : 132m

REMARKS: drill floor to ground level 0.6m, casing pulled

LOCATION SKETCH 1:5000:



Depth (m)	Dip	Strike	Fractures and Veins	Dens.	Angle	Nature	R	Colour	Mineral. and Alterations		S. No.	#	Description
									py	tm			
38													
40													0.0 - 41.00 OVER BURDEN
42	+							dg-lGG			5315		<p><5 41.00-147.35 Granodiorite porphyry intrusion. Coarse grained, granoblastic texture, more or less rounded quartz porphyry granodiorite. Slightly foliated, slightly sheared relatively fresh rock.</p>
44	100	+									5316	<5	
44	100	+						m PG			5317	<5	
46	+										5318	45	41.0 - 77.7 Strongly to extremely sheared, strongly to extremely altered, pyritized. Recovery is very bad
48	95	+									5319	20	41.0 - ~44 Mylonite "fluidal folding" pinkish colour locally strongly pyritized.
50	+										5320	30	~44 - ~53 Very strongly sheared, faulted
52	50	+									5321	40	~49 - ~60 Bluish, soft, fibrous mineral -> Vivianite
52	50	+									5322	65	~53 - ~55 Mylonite
56	20	+											~55 - ~59 Fault, very broken core, limonite

NOT DONE

MYLONITE

STRONGLY SHEARED

MYLONITE

FOLDS

BKN

BKN

BKN

F35
F30
F25
F20
F15
F10
F5
F0

F35
F30
F25
F20
F15
F10
F5
F0

F30
F20
F15
F10
F5
F0

py
tm

py
tm

py
tm

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

0

10

15

Interval	Depth (m)	% Rec	Log	Diameter (mm)	Texture	Dens.	Angle	Nature	FIR	Colour	Minerals and Alterations		Sample #	TS #	Description	
											py	lim				
3	56-60	+	TT													
	58	30	TT							mBN, mGG			5323	140		
	60	30	TT										5324	550		~59-67.7 Mylonite; "Fluidal" deformation Many quartz injections with arsenopyrite? or white pyrite. Strong pyritization. Strong limonitization.
	62	+	TT													
	64	90	+													
4	64-66	+	TT													
	66	40	TT													
	68	+	+													
	70	70	TT													
5	70-74	+	TT													
	74	+	TT													

NOT DONE

MYLONITE

STRONGLY SHEARED

~59-67.7 Mylonite;
"Fluidal" deformation
Many quartz injections with
arsenopyrite? or white pyrite.
Strong pyritization.
Strong limonitization.

67.7-68.5 Fault; soft white
clay gouge

68.5-~77.7 Very strongly
sheared, quartz injections
with pyrite and arsenopyrite?

Box	Depth (m)	Log	Grain size (mm)	Structure	Strat. to core axis	Dens.	Angle	Veins Nature	Minerals and Alterations	Sample #	S #	Description
5	74	+										
	76	+								5330	170	
	77.7 - 83.8			GRANOBLASTIC / PORPHYRIC								Relatively fresh granodiorite, lightly limonitized.
	78	Π								5331	20	
6	80	+								5332	<5	
	82	+								5333	<5	
	84	Π								5334	<5	
7	86	+		STRONGLY SHEARED						5335	5	
	87.5 - 87.6			STRONGLY SHEARED								Strongly altered strongly sheared mafic flow xenolith? Strongly pyritized blue quartz eyes
	88	+								5336	150	
	90.4 - 90.4			GRANOBLASTIC PORPHYRIC								Relatively fresh granodiorite
	92	+								5337	30	
	96	+								5338	480	
	97.5 - 97.6											Strongly sheared, pyritized.
	99.4 - 99.4											Mylonite Shows plastic deformation. Strong alteration, pyritization. Quartz veining and injection with pyrite.

NOT DONE

QZ PHENOS

BKN

BKN

BKN

mg-ld

mg-ld

mg-ld

mg-ld

F30

F30

F30

F30

F30

F40

F50

F20

F25

F5-10

Ro, lim

Ro, lim

Ro

Ro

Ro, lim

Ro, lim

Ro

Sm, lim

Sm, ch

H

Sp, musc

Sp, lim

Sp

Sp, lim

Borehole	Depth (m)	Dip	Strike	Fractures to core axis	Fractures and Veins		Colour	Minerals and Alterations	Sample #	TS #	Description
					Dens.	Angle					
8	92										
	94	50°	+				0 mg-mD		5339	135	
9	96	90°	+						5340	15	~96 - ~104 Fractured granodiorite with limonitization, chloritization
	98		+						5341	45	37.55 Tourmaline with pink alteration around it.
	100		+						5342	15	101.0 -> 101.6 "Dissolved" foliation planes.
	102		+						5343	5	
10	104	100°	+						5344	45	~104 - 114.5 Relatively fresh granodiorite.
	106		+						5345	5	
	108		+						5346	5	
	110		+						5347	45	

MYLONITE

GRANOBLASTIC PORPHYRIC

QTZ

S,70

S,80

F0-10 Sm, Ro

F45 Ro
F45 Ro
F55 Ro, lim

F10 Ro, lim
F15 Ro, lim
F80 Ro, ch

F20 Ro, ch
F35 Ro, ch, lim

F45 Ro, lim
J2F50 Ro, lim
F50 Ro, lim

F45 Ro, ch
F35 H

F0 Cr, ch
-V Cr, ch, lim

F40 Sm, ch
JF10 Ro, ch
JF20 Ro, ch

F55 Ro
F25 Ro
F30 Ro
F50 Ro
F50 Ro

F40 Ro
JF10 Ro
JF20 Ro

JF20 Ro
J3F40 Ro

NOT ONE

100 mg
-mGP

12.9°

mpg-mD

mpg
-mGP

Dip	Depth	Dip	Log	Size min	Features	Structures to core axis	Fractures and Veins		Colour	Mineralogy		Sample #	Description
							Dens.	Angle		Nature	Py		
	110		π										
	112		+		QTZ		F35 F25 F30 F35 F30	Ro Ro Ro Ro Ro					
	114		+				F50	Ro					
	116		π				F15 F30 F25 F40	Ro, Q Ro, ch Ro, ch Ro, ch					
	118		+			-S, 75	F45 F70 F35 F35 F35	H, V, Q Ro, ch H, V, Q Ro, ch Ro, ch					
	120		π				F50	H, ch					114.0 - 123.0. Tension fractures?
	122		+			-S, 75	F0 F25 F25	Ro, ch Ro H, ch			5300	<5	
	124		π				F45 F0.5	Q, ch Ro H, Q, cc			5348	<5	
	126		+			-S, 70	F35 F35	Ro, lim Ro			5301	<2	
	128		+				F50 F15 F0	Ro. Ro. Ro, cc			5349	<5	
	128		π				F35	Ro, lim			5350	<5	127.3-132.7 Sheared granodiorite, stretched feldspar and quartz, silicified. Several pegmatitic veins with K-feldspar.

Box	Depth 128	% Rec	Core L	Grain size mm - 0.15 - 0.10 0	Texture	Structures and Veins Dip Angle Nature	Colour	Minerals and Alterations			Sample #	TS #	Description
								py	tm	mag			
						F40 V50 Ro, cc					5350		
						V55 Q, musc Fpr					5401	<5	
	130					V85 Q, lim					5302	<5	
15						F10 V40 Q, cc, lim			I		5303	<5	
						F20 V55 Q, fpr					5402	<5	
	132					F20 V20 Q, cc, ch			DPG -mPG		5403	<5	
						F30 Ro					5304	<5	
	134					F15 H, cc							
						V45 V, Q							
						F20 Ro, lim							
						F0 Ro, py, cc, lim							
						V45 F30 Q, py, H, cc							
16	136	100				F30 Ro							
						F15 Ro, cc, m							
						F20 Ro, ch							
						F20 Ro, lim, m							
	138					F30 Ro, lim, ch							
						F35 Ro, lim							
						F20 H, Q							
						V40 D, cc, cpg							
	140					F20 Sm, lim, ch			DPG -mPG				
						F30 Ro							
						F15 Ro, ch, ch							
						F20 Ro, ch, ch							
17	142					F15 Sm, cc, Ro, cc, ch							
						F10 H, cc							
						F30 Ro							
						F20 H, Q, fpr							
						F60 Ro							
						F250 Ro, cc							
						F15 H, Q					5305	5	
18	146					F60 Ro, cc					5306	5	

144.7 - 145.05 Sheared, altered
granodiorite.
145.05 - 145.5 Tuffaceous peralith
pyritized, sheared.

Box	Depth 146	% Rec	Log	Grain size mm - 250 - 2500	Fractures and Veins Dens. Angle Nature	Geol. F R	Colour	Minerals and Alterations py (H) po mag	Sample #	S #	Description
18	146		+		F10 Ro, cc F30 H, cc						147.35-158.20 Feldspar Amphibole schists. fine to very fine grained, banded to massive, well foliated mafic to intermediate tuffs. Blue quartz rounded "eyes" Pyrite, pyrrhotite is common. Quartz injections
	148		+		F56 H, cc F35 Ro F45 Ro, cc				5307 5308	10 25	
	150				F20 Ro, cc						
	152	100			V70 Q, py, py F25 Ro, cc		dg-mb				
	154				F40 Ro F50 Ro, cc F50 Ro, cc				5309	8	
19	154										158.20-181.60. Granodiorite porphyry intrusive As above. large rounded feldspar porphyry 158.2-161.0 Sheared granodiorite
	156				F35 Ro, cc F70 Hc						
	158				V80 Sc, q F90 Sc, q V85 q, cc, py, th V90 q, cc, py, th						
	158		+		F05 Hc, py F05 Hc, py F25 Hc, cc				5310	5	
20	160		II								
	160				F30 S F30 S						
	164		+		F35 Sm F50 Ro, py F40 Ro						
	164		+		F60 Ro F55 Ro F05 S						
	164										

NEMATOBlastic

GRANOBlastic PORPHYRIC

PHENOLS

S, 80

S, 60

S, 75

S, 65

147.35-158.20 Feldspar Amphibole schists.
fine to very fine grained, banded to massive, well foliated mafic to intermediate tuffs.
Blue quartz rounded "eyes"
Pyrite, pyrrhotite is common.
Quartz injections

158.20-181.60. Granodiorite porphyry intrusive
As above.
large rounded feldspar porphyry
158.2-161.0 Sheared granodiorite

Box	Depth	Core size min	Structure to core axis	Fractures and Veins	Color	Py	Fe	Mn	Ca	Mg	Si	Al	Other	Description
				Dens. Angle Nature										
	164		S, 70	F50 Ro										
				F40 Ro, cc F35 Sm V80 R, cc										
21	166		S, 90											
				F40 Ro F20 Ro F85 Ro, cc F55 Ro, cc F30 Sm F30 Ro, py F40 Ro										
	168													
	170		S, 75	F50 Ro										
22				F20 Ro, cc										
				F20 He, Bl, cc F60 He, Py, cc F55 Ro, cc F55 Ro F35 Sm F35 He, Bl, py V85 Py, St, Bl, cc V30 R, py, bl F30 He										
	172													
	174		S, 75	R60 Ro V30 R, Im F60 Ro										
	176		S, 60	F55 Ro F65 Ro F40 Ro F15 Sm, py										
23														
	178			F20 He F45 Ro, cc F40 Sm, py F50 Sm F25 Ro										
	180			F15 He, cc F45 He, cc F40 He, cc F40 Sm										
	182		S, 50											
24				F40 Sm F30 Sm, py F25 He, cc V30 He, cc, py F35 Sm F50 He, cc										
	182		S, 65											

PHENOS
 GRANOBlastic
 PORPHYRIC

dp-dG

dbN-dP

5311

160

173.40-173.75 Galena in quartz vein

5312

<5

174.3 Tourmaline in quartz vein

181.60-191.00

Feldspar Amphibole schists

As above

5313

<5

Box	Depth 182	% Rec	Grain size mm - N ₆₀ - N ₁₀₀ Q	Texture	Structures No core axis	Fractures and Veins		Geo	Colour	py (temp, mag)	Minerals and Alterations	lum. CC	Sample #		Description			
						Dens.	Angle Nature						#	#				
24	182																	
	184				S, 90				dg-mg									
25	186			NEMATOClastic														
	188				S, 70													
	190																	
	192																	
	194																	
	196																	
	198																	
	200																	
	202																	
	204																	
26	190				S, 75							5314	<5	191.0	EOH			

John St. Jean



DIAMOND DRILL HOLE RECORD
BURNTBUSH RIVER PROJECT

DRILL HOLE NO.: BUR-13

CLAIM NO(S): L789316 / L789317
TOWNSHIP : Hoblitzell
DATE BEGUN : 22/03/88
COMPLETED : 24/03/88
LOGGED BY : S. Ball

CONTRACTOR : Les Forages Foranord
CORE SIZE : BQ
DRILL FLUIDS: H₂O

COLLAR CO-ORDINATES

	GRID	UTM
X:	2000W	≈580150E
Y:	200N	≈5483400N
Z:	≈283	

<u>DEVIATION RECORD</u>			
DEPTH	AZIMUTH	DIP	METHOD
53m		45°	HF 4%
120m		42°	HF 4%
188m		40°	HF 4%
CHECKED BY: J.Learn, R.St-Jean, S.Ball			

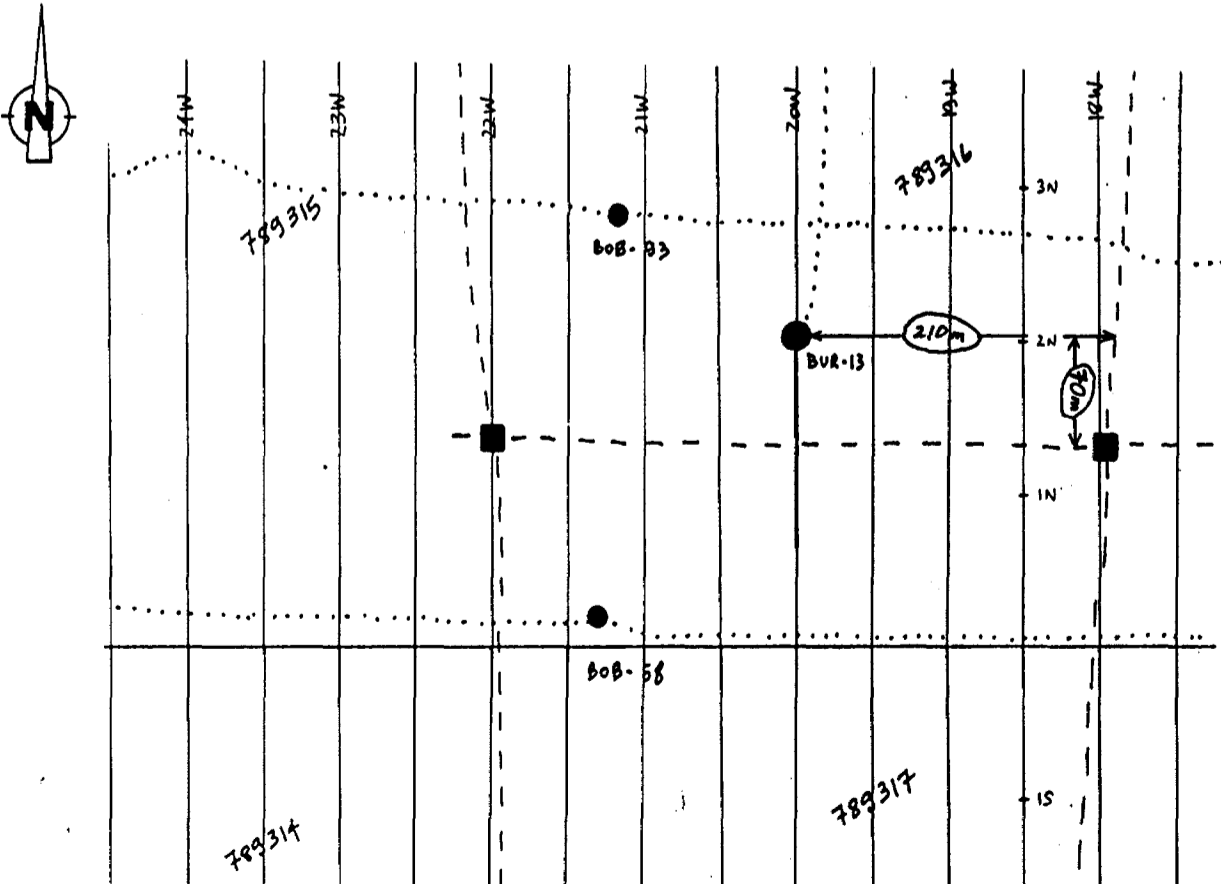
DEPARTURE: AZIMUTH: 180°
INCLINATION: -45°
CHECKED BY: J. Learn

DEPTHS: OVERBURDEN: 27.7m
END OF HOLE: 188.0m

HORIZONTAL COMPONENT: 137m
VERTICAL COMPONENT : 128m

REMARKS: drill floor to ground level 0.5m, casing pulled

LOCATION SKETCH 1:5000:



Box	Depth	% Rec	Lith	Grain size (mm)	Fractures to core axis	Fractures and Veins			Colour	Minerals and Alterations		Sample #	Description
						Dens.	Angle	Nature		py	po. wt.		
	24												
	26		o/b										260 ppb max 21 ppb 0.00-27.70 OVERBURDEN
	28					S, 55	BKN	F60 F40 F35 F60	5mm 5mm 5mm 5mm				27.7 → 30.5 Porphyritic Dyke, Subhedral feldspar phenocrysts in a medium grained groundmass. Intermediate composition. Contacts not observed.
1	30						BKN						27.7 → 28.5 Core is broken. Fault
	32						BKN						30.5 → 188.0 Amphibole Schist, fine grained mafic to intermediate flow. Contains numerous hornblende porphyro - and rarer subhedral to euhedral feldspars. Much of the pyrite is very finely disseminated. Foliation is mostly weak to moderate.
	34						BKN	2F75	mg, y	mg			≈ 30.0 → 33.2 Fault. Core is broken.
	36					S, 85	BKN	F10-15 F35	5mm 5mm				
2	38						BKN	F10 F45 F15	5mm 5mm 5mm				
	40						BKN						
3	42						BKN	F85	mg, y	mg			

GROUND MASS
 PORPHYROBLASTS

Box	Depth m	% Rec	Log	Grain size mm -N10 - N100	Texture	Structures to core axis	Fractures and Veins			Colour	Mineral and Alterations			Sample		Description	
							Dens.	Angle	Nature		Py	Po	Mt	TS	#		
3	42					S, 70	V75	Q									
	44						F50	He, Bl									
							25F75	He, Bl									
4	46				NEOMATOBlastic		F40	He									
								29F45	He								
								3F0-5	He, cc								
4	48					S, 60	1F25	Sm, cc									
							2F35	He, cc									
							5F20	He, cc					5404	TS	L2		
	50	100					3F45	He									
5	52						22F0	He									
							22F0	He									
5	54					S, 50	F25	He									
							F15	He									
6	56						F0-5	Sm, cc									
							V55	Q, py									
6	58						2F35	He, cc									
							2F0	He									
						S, 85											
	60																

49.7 -> 50.8 Massive to very weakly foliated

Box	Depth	% Rec	Log	Grain size mm	Texture	Structures	Fractures	Minerals and Alterations	Sample #	TS	Description
				— 4.75 — 0.075		to scale axis	Dens. Angle Nature	py: po: mt: cc			
6	60										
	62				S, 60						
	64										
7	66	100									
	68				S, 55						
8	70										
	72										
	74										
9	76				S, 70						
	78										

mg
-
lg

75.7 → 76.9 Massive to very weakly foliated

Box	Depth	% Rec	Log	Grain size mm - 0.075 - 0.250	Texture	Structures to core axis	Fractures and Vains		Geot F R	Colour	Minerals and Alterations				Sample #	TS	Description
							Dens.	Angle			Nature	Py	IP	MI			
	78					S, 80	F5-10	Ro, PY									
	80						F35	Ro, PY		mg							
							F15 F20	He, cc He, cc		lg							
10	82						V-65	a, cc, ch								84.3 - 84.6 Folds	
	84	100					V-50	a, ch					5405 ^A	260			
						S, 75	F0 F20 F20	Py, cc, V, Hm Ro, Hm Sm, epi								83.3 - 107.0 Pyrite appears as clots and stringers parallel to S ₁ , as well as finely disseminated	
	86						F45	Ro Sm, cc He, cc		mg							
							F0-5	Sm		BN							
11	88						F45	Ro, Hm									
							F20	He		35%						85.7 - 86.2 Core is bleached	
							F20	cc, H, Ro									
							F50	Ro									
							V-50	a									
	90						F0-5	Sm, cc, Ro									
							F0	He, cc									
	92					S, 80											
12	94						F45	cc Sm, Ro									
						S, 80											
							F50	Sm, cc					5406 ^{TS}	5			
							F50	Bl, cc									
	96																

GROUND MASS
FOR PHYROBLASTS

Sex	Depth	% Rec	Log	Grain size min - 200 - 400 - 600 - 800	Texture	Structures to core axis	Fractures and Veins		Geot. FIR	Colour	Minerals and Alterations PY, PO, MI, ...	Sample #	Description
							Dens.	Angle					
	96												
	98					C30	F55 Sm, cc F30 He, cc F30 Sm, cc F30 Q, cc F30 He, cc F50 Sm, cpi, cc						97.0 → 98.0 Feldspar porphyry dyke same as before. Upper contact not observed. Lower contact parallel quartz veins
13	100					S, 70	F45 Ro, py, cc F0-5 cc, py F60 Sm, cc, py						
	102	0				S, 75	F10 He, cc		MG				98.0 → 188 Amphibole Schist; as before
	104	10				S, 60	F45 Ro		BN				
14	106					S, 60	F60 Sm, cc F45 Ro F60 He, cc F60 Sm, cc, cpi						99.2 → 109.3 Foliation moderate to strong. Pyrite stringers 11.5,
	108					S, 65	F60 Sm, cc, cpi F60 Py, Sm, cc, cpi						
	110					S, 85	F2F5-15 He						109.3 → 188.0 Pyrite is finely disseminated
	110						F55 Ro, cc F50 Ro, cc		MG				
15	114					S, 60	F2F30 Sm, cc, cpi F30 Ro, cc F30 He, cc F25 Sm, cc F30 Ro, cc F30 Ro, cc		DG				

Box	Depth	% Rec	Log	Grain size mm		Texture	Structures to core axis	Fractures and veins			Dens.	Angle	Nature	Mica and Alterations	Sample #	TS #	Description
				— ϕ —	— ϕ —			Dens.	Angle	Nature							
	114						S, 80	F30 F25	H, cc Sm, cc, ch								
	116						S, 65	F5 V40 F0-5	Sm, cc, ch H, cc Ro, cc					5407	TS 10	111.2-7 184.5 Many fractures contain chlorite	
16								F15 F30 F30 F5	Ro, cc Sm, cc ch, ss Sm, cc								
	118							F30	Sm, cc, ch								
	120						S, 65	F30 F35 F30	Ro, cc Sm, ch, cc Ro, cc								
	122						S, 40	F30 F40 F30	Sm, cc Ro, cc Ro, cc								
17	122																
	124						S, 60	F30 F40 F20	Ro, cc py H, cc								
	126						S, 55	V30	cc, py								
	128						S, 60	F60	cc								
18	128							F30 F30 F45 F40 F30 F30	ss, cc, ch Ro, cc Ro, cc, ch Ro, cc Ro, cc Ro, cc								
	132						S, 55	F35	Ro, py								
19	132																

Box	Depth	% Rec	Log	Grain size mm - 4.75 - 0.075	Texture	Structures to core axis	Fractures and Veins		G&T FIR	Colour	Minerals and Alterations	Sample #	TS #	Description
							Dens.	Angle						
	132													
	134													
19														
	136													
	138													
	140	100												
20														
	142													
	144													
21	146													
	148													
22	150													

PORPHYROBLASTIC

MG
-
BN

PYIP, mt
2-6.20
1.75
5.1%
I
1.0%

5408AV <5

5409AV <5

5410AV <5

Box	Depth 150	% Feil.	Log	Grain size mm - 4.75 - No. 20	Texture	Structures to core axis	Fractures and Veins			Geot. F R	Colour	Minerals and Alterations py, pyrit	CC	Sample # 5410	TS #	Description
							Dens.	Angle	Nature							
								V30	Q, ch							
	152					S, 55										
22								F0	Sm, ch, cc, py							
	154					S, 60										
	154					S, 65		F55	Ro, cc, F5-10 py, cc							
	156					S, 50		F45	Ro, cc							
	158					S, 50		F60	Ro							
23	158	0						F55	Ro							
	160					S, 70		F75	Q, ch							
	162					S, 65		F60	Ro, cc							
	162					S, 55		F45	Ro, cc							
24	164					S, 80		F60	Sm, cc							
	164					S, 65		F45	Ro, ch, py, cc							
	166					S, 65		F55	Ro							
	168					S, 75		F45	Q, ch, py, cc							
25	168					S, 75		F50	Ro, cc							

GREEN MASS
PORPHYROBLASTS

MG
BN

1%
1%
1%

Box	Depth	% Rec	Log	Grain size mm -200 - 2000	Structure to core axis	Structures and Veins			Gent F/R	Colour	Minerals and Alterations	Sample #	TS #	Description
						Dens.	Angle	Nature						
28	186													
	188	100			S, TO				mg 26					188.0 EOH
	190													

Johanna

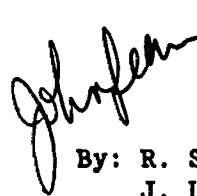
COGEMA CANADA LIMITED
BURNTBUSH RIVER PROJECT
FINAL REPORT 1988
"DIAMOND DRILL RESULTS"
VOLUME 3 of 3

A P P E N D I X II

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.
	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.
100	BUR-04	5364	25.50	26.00	5	0.00	TEC
101	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.
170	BUR-04	5420	94.50	96.00	-5	0.00	TEC
171	BUR-04	5421	96.00	97.50	-5	0.00	TEC
172	BUR-04	5422	97.50	99.00	-5	0.00	TEC
173	BUR-04	5423	99.00	100.50	-5	0.00	TEC
174	BUR-04	5424	100.50	102.00	-5	0.00	TEC
175	BUR-04	5425	102.00	103.50	-5	0.00	TEC
176	BUR-04	C5425	102.00	102.00	-5	0.00	TEC
177	BUR-04	5426	103.50	105.00	-5	0.00	TEC
178	BUR-04	5427	105.00	107.00	-5	0.00	TEC
179	BUR-04	5428	107.00	108.50	-5	0.00	TEC
180	BUR-04	5429	108.50	110.00	20	0.00	TEC
181	BUR-04	5430	110.00	111.50	-5	0.00	TEC
182	BUR-04	5431	111.50	113.00	-5	0.00	TEC
183	BUR-04	5432	113.00	114.50	-5	0.00	TEC
184	BUR-04	5433	114.50	116.00	-5	0.00	TEC
185	BUR-04	C5075	115.99	115.99	0	-0.20	MYV
186	BUR-04	5076	116.00	116.50	0	-0.20	MYV
187	BUR-04	5434	116.50	118.00	-5	0.00	TEC
188	BUR-04	5435	118.00	119.50	-5	0.00	TEC
189	BUR-04	5436	119.50	121.00	-5	0.00	TEC
190	BUR-04	5437	121.00	122.50	5	0.00	TEC
191	BUR-04	5438	122.50	123.90	5	0.00	TEC
192	BUR-04	5077	123.90	124.40	0	-0.20	MYV
193	BUR-04	5439	124.40	125.00	10	0.00	TEC
194	BUR-04	5078	125.00	125.50	0	-0.20	MYV
195	BUR-04	5440	125.50	127.00	-5	0.00	TEC
196	BUR-04	5441	127.00	128.50	-5	0.00	TEC
197	BUR-04	5442	128.50	130.00	-5	0.00	TEC
198	BUR-04	5443	130.00	131.00	-5	0.00	TEC
199	BUR-04	5079	131.00	131.50	0	-0.20	MYV
200	BUR-04	5080	146.50	147.00	0	0.20	MYV
201	BUR-04	5081	157.50	158.00	0	0.20	MYV
202	BUR-04	5083	174.00	174.50	0	-0.20	MYV
203	BUR-04	5085	179.00	179.50	0	-0.20	MYV
204	BUR-04	5087	194.00	194.50	0	0.20	MYV
205	BUR-05	5470	126.50	128.00	-5	0.00	TEC
206	BUR-05	5471	128.00	129.50	-5	0.00	TEC
207	BUR-05	5472	129.50	131.00	-5	0.00	TEC
208	BUR-05	5473	153.50	155.00	-5	0.00	TEC
209	BUR-05	5474	155.00	156.50	-5	0.00	TEC
210	BUR-05	5475	156.50	158.00	-5	0.00	TEC
211	BUR-05	C5475	156.50	156.50	-5	0.00	TEC
212	BUR-05	5476	177.50	179.00	5	0.00	TEC
213	BUR-05	5477	179.00	180.50	-5	0.00	TEC
214	BUR-05	5478	180.50	182.00	-5	0.00	TEC
215	BUR-05	5155	191.50	192.00	0	-0.20	MYV
216	BUR-05	C5155	191.50	191.50	0	-0.20	MYV
217	BUR-05	5482	200.00	201.50	-5	0.00	TEC
218	BUR-05	5483	201.50	203.00	5	0.00	TEC
219	BUR-05	5484	203.00	205.00	-5	0.00	TEC
220	BUR-05	5485	205.50	206.00	40	0.00	TEC
221	BUR-05	5486	206.00	209.00	5	0.00	TEC
222	BUR-05	5487	209.00	212.00	-5	0.00	TEC
223	BUR-05	5488	212.00	215.00	10	0.00	TEC
224	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.
	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.
506	BUR-10	5671	140.50	142.00	-5	0.00	TEC
507	BUR-10	5672	142.00	143.50	-5	0.00	TEC
508	BUR-10	5673	143.50	145.00	-5	0.00	TEC
509	BUR-10	5674	145.00	146.00	-5	0.00	TEC
510	BUR-10	5675	168.00	169.50	-5	0.00	TEC
511	BUR-10	C5675	168.00	168.00	-5	0.00	TEC
512	BUR-10	5676	169.50	171.00	-5	0.00	TEC
513	BUR-10	5677	171.50	173.00	-5	0.00	TEC
514	BUR-10	5678	173.00	174.50	-5	0.00	TEC
515	BUR-10	5679	174.50	176.00	-5	0.00	TEC
516	BUR-10	5680	195.00	196.50	-5	0.00	TEC
517	BUR-10	5681	196.50	198.00	-5	0.00	TEC
518	BUR-10	5684	228.50	230.00	10	0.00	TEC
519	BUR-10	5685	242.50	244.00	-5	0.00	TEC
520	BUR-11	5686	19.30	21.00	-5	0.00	TEC
521	BUR-11	5687	21.00	22.50	-5	0.00	TEC
522	BUR-11	5688	22.50	24.20	-5	0.00	TEC
523	BUR-11	5689	24.70	26.00	-5	0.00	TEC
524	BUR-11	5690	26.00	27.50	-5	0.00	TEC
525	BUR-11	5691	27.50	29.00	-5	0.00	TEC
526	BUR-11	5692	29.00	30.50	-5	0.00	TEC
527	BUR-11	5693	30.50	32.00	-5	0.00	TEC
528	BUR-11	5694	32.00	34.00	-5	0.00	TEC
529	BUR-11	5267	34.00	34.50	5	0.00	TEC
530	BUR-11	5695	34.50	36.50	-5	0.00	TEC
531	BUR-11	5696	36.50	38.00	-5	0.00	TEC
532	BUR-11	5268	38.00	38.50	-5	0.00	TEC
533	BUR-11	5697	38.50	40.00	-5	0.00	TEC
534	BUR-11	5698	40.00	41.50	-5	0.00	TEC
535	BUR-11	5699	41.50	43.00	-5	0.00	TEC
536	BUR-11	5700	43.00	44.50	-5	0.00	TEC
537	BUR-11	C5700	43.00	43.00	-5	0.00	TEC
538	BUR-11	5701	44.50	46.00	-5	0.00	TEC
539	BUR-11	5702	46.00	47.50	-5	0.00	TEC
540	BUR-11	5703	47.50	49.00	-5	0.00	TEC
541	BUR-11	5704	49.00	50.50	-5	0.00	TEC
542	BUR-11	5705	50.50	52.00	-5	0.00	TEC
543	BUR-11	5706	52.00	53.50	-5	0.00	TEC
544	BUR-11	5707	53.50	55.00	-5	0.00	TEC
545	BUR-11	5708	55.00	56.50	-5	0.00	TEC
546	BUR-11	5709	56.50	58.00	-5	0.00	TEC
547	BUR-11	5710	58.00	59.50	-5	0.00	TEC
548	BUR-11	5711	59.50	60.50	-5	0.00	TEC
549	BUR-11	5269	60.50	61.00	15	0.00	TEC
550	BUR-11	5270	61.00	61.50	-5	0.00	TEC
551	BUR-11	5712	61.50	63.00	10	0.00	TEC
552	BUR-11	5713	63.00	64.50	-5	0.00	TEC
553	BUR-11	5271	64.50	65.00	10	0.00	TEC
554	BUR-11	5714	65.00	66.00	-5	0.00	TEC
555	BUR-11	5715	66.00	67.50	-5	0.00	TEC
556	BUR-11	5272	67.50	68.00	-5	0.00	TEC
557	BUR-11	5716	68.00	68.50	-5	0.00	TEC
558	BUR-11	5717	69.00	70.50	-5	0.00	TEC
559	BUR-11	5718	70.50	72.00	-5	0.00	TEC
560	BUR-11	5719	72.00	73.50	-5	0.00	TEC
	BUR-11	5720	73.50	75.00	-5	0.00	TEC

Line	Hole no	Sample	From	To	Au ppb	Au g/t	Lab.
5	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
620	BUR-11	5763	139.50	141.00	-5	0.00	TEC
621	BUR-11	5764	141.00	142.50	-5	0.00	TEC
622	BUR-11	5765	142.50	144.00	-5	0.00	TEC
623	BUR-11	5766	144.00	145.00	-5	0.00	TEC
624	BUR-11	5288	145.50	146.00	-5	0.00	TEC
625	BUR-11	5767	146.00	147.50	-5	0.00	TEC
626	BUR-11	5768	147.50	149.00	5	0.00	TEC
627	BUR-11	5769	149.00	150.00	10	0.00	TEC
628	BUR-11	5289	150.00	150.50	25	0.00	TEC
629	BUR-11	5770	150.50	152.00	-5	0.00	TEC
630	BUR-11	5771	152.00	153.50	-5	0.00	TEC
631	BUR-11	5772	153.50	155.00	20	0.00	TEC
632	BUR-11	5773	155.00	156.50	5	0.00	TEC
633	BUR-11	5774	156.50	158.00	480	0.00	TEC
634	BUR-11	5775	158.00	159.50	15	0.00	TEC
635	BUR-11	C5775	158.00	158.00	-5	0.00	TEC
636	BUR-11	5776	159.50	161.00	-5	0.00	TEC
637	BUR-11	5291	170.00	170.50	65	0.00	TEC
638	BUR-11	5292	174.50	175.00	20	0.00	TEC
639	BUR-11	5293	177.00	177.50	5	0.00	TEC
640	BUR-11	5295	187.50	188.00	-5	0.00	TEC
641	BUR-11	5296	197.50	198.00	-5	0.00	TEC
642	BUR-11	5298	205.50	206.00	-5	0.00	TEC
643	BUR-11	5299	214.50	215.00	-5	0.00	TEC
644	BUR-12	5315	41.00	42.50	-5	0.00	TEC
645	BUR-12	5316	42.50	44.00	-5	0.00	TEC
646	BUR-12	5317	44.00	45.50	-5	0.00	TEC
647	BUR-12	5318	45.50	47.00	45	0.00	TEC
648	BUR-12	5319	47.00	48.50	20	0.00	TEC
649	BUR-12	5320	48.50	50.00	30	0.00	TEC
650	BUR-12	5321	50.00	53.00	40	0.00	TEC
651	BUR-12	5322	53.00	56.00	65	0.00	TEC
652	BUR-12	5323	56.00	59.00	140	0.00	TEC
653	BUR-12	5324	59.00	62.00	550	0.00	TEC
654	BUR-12	5325	62.00	63.50	180	0.00	TEC
655	BUR-12	C5325	62.00	62.00	-5	0.00	TEC
656	BUR-12	5326	63.50	65.00	130	0.00	TEC
657	BUR-12	5327	65.00	68.00	35	0.00	TEC
658	BUR-12	5328	68.00	71.00	160	0.00	TEC
659	BUR-12	5329	71.00	74.00	230	0.00	TEC
660	BUR-12	5330	74.00	77.00	170	0.00	TEC
661	BUR-12	5331	77.00	78.50	20	0.00	TEC
662	BUR-12	5332	78.50	80.00	-5	0.00	TEC
663	BUR-12	5333	80.00	81.50	-5	0.00	TEC
664	BUR-12	5334	81.50	83.00	-5	0.00	TEC
665	BUR-12	5335	83.00	84.50	5	0.00	TEC
666	BUR-12	5336	84.50	86.00	150	0.00	TEC
667	BUR-12	5337	86.00	89.00	30	0.00	TEC
668	BUR-12	5338	89.00	92.00	480	0.00	TEC
669	BUR-12	5339	92.00	95.00	135	0.00	TEC
670	BUR-12	5340	95.00	96.50	15	0.00	TEC
671	BUR-12	5341	96.50	98.00	-5	0.00	TEC
672	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.
672	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 %	HgO %	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	99.81	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	0.30	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	3.63	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	6.18	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	9.99	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 %	MgO %	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	2.15	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	0.59	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	1.45
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	0.25	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 ppb	Ba ppb	Cd ppb	Cs ppb	Cr ppb	Co ppb	Eu ppb	Hf ppb	Ir ppb
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	5218	25.50	26.00	3	0.8	0.2	490	-5	0.2	100	14	1	3	-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 ppm	Mo ppm	Ni ppm	Rb ppm	Sc ppm	Se ppm	Ag ppm	Ta ppm	Tb ppm	Th ppm	W ppm
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	110.50	111.00	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 %	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	210	-2.0	0.3	3.80
53	08	5213	145.50	146.00	2.2	2	180	61	2.85	-100	-10	-200	-2.0	0.3	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 ppm	Yb ppm	Zn ppm	Ce ppm	Na I	Sn ppm	Te ppm	Zr ppm	Br ppm	Lu ppm	Sa ppm
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
61	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
67	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

2. THIN SECTION DESCRIPTIONS

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-01

Sample No.: 5018

Depth : 40.5

Field Rock Name: Mafic flow

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

Qz } 44% groundmass

Fp }

Amphiboles 35% green hornblende - Porphyroblastic

Chlorite 13%

Minor Minerals:

Opaques 3%

Calcite 5%

Epidote Tr

Veins, Fractures:

Thin calcite veinlets 0.3mm.

Alterations:

Amphiboles locally corroded to calcite-epidote (well shown in shearing zones)

Rock Texture:

Some shearing - much recrystallization of

Qz-Fp

Good foliation

Rock Name:

Mafic flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-01

Sample No.: 5019

Depth : 55.7

Field Rock Name: Brecciated mafic flow

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

Qz } 25% mostly groundmass
Fp (plag) } and broken crystals

Calcite 40%

Sericite 30%

Minor Minerals:

Opagues 2%

Chlorite 2%

Amphiboles 1% "shadows"

Tourmalines tr

Veins, Fractures:

Calcite veinlets

Alterations:

Pervasive calcite-sericite alteration

Rock Texture:

Lepidoblastic - Some recrystallization of Qz-Fp
Moderate shearing - Strongly altered

Rock Name:

Altered intermediate? flow?

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-01

Sample No.: 5020

Depth : 71.9

Field Rock Name: Felsic volcaniclastic fragment in mafic matrix
* Description of felsic fragment.

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

Qz } 90% very fine grained
Fp plag }

Biotite 5% chloritized

Minor Minerals:

Opaques 3%

Sericites 2%

Amphiboles 1% broken fragments.

Veins, Fractures:

Alterations:

Sericite - Calcite alteration

Rock Texture: Mean grain size 0.05 mm, grain size increases
near border of fragment. - layered texture.

Rock Name: Rhyolite - felsic rock

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION Hole No.: BUR-01 Sample No.: 5026
Depth : 127.0

Field Rock Name: Felsic fragment in mafic flow

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

Qz } 53% mostly recrystallized
Fp }

Carbonates 35% pervasive
Biotite 5% chloritized
Muscovite 3% small flakes and some sericite.

Minor Minerals:

Opagres Qz recrystallization around pyrites.
Tourmalines
Epidote.

Veins, Fractures:

Alterations: Strong carbonate alteration

Rock Texture: Lepidoblastic

Rock Name: Intermediate fragment

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

BUR-φ3

14.3m

Sample No.:

5049

Field Rock Name: Massive mafic flow (massive sub-facies)

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

Q ≈ } * 40% groundmass + 15% ± Recrystallized shadows
Fp }

green Amphiboles ** 25% Porphyroblastic, poeciloblastic

Biotite 5%

Pyrox ?

** Amphiboles are very broken

* Most Quartz-Feldspars are recrystallized, some plag show perthites

Minor Minerals:

Opaques 5% (some needle like opaques!)

Carbonates (calcite) 10%

Apatite tr.

Epidote tr.

Veins, Fractures:

Alterations:

Calcite alteration (pervasive)

Rock Texture:

Lepidoblastic ± nematoblastic, sheared, ± cataclased

Large amphiboles floating in a matrix of Quartz Feldspar biotite - Some obs

Rock Name:

Intermediate flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-03

Sample No.: 5050

Depth : 323.0m

Field Rock Name:

Mafic flow

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

Qz } 38% groundmass (0.002 → 0.005 mm)
Fp }

Amphiboles < 1%

Biotite 10%

Chlorite 20% very fibrous.

Carbonates 30%

Minor Minerals:

Opagres 2%

Tourmaline tr

Veins, Fractures:

Carbonates veinlets

Alterations: Orange brown iron oxide staining (in carbonates)
Pervasive carbonate alteration

Rock Texture:

Lepidoblastic, slightly sheared, altered

Rock Name:

Intermediate flow? not representative of sample?
= discordant with chemistry and
Jensen plot.

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-03

Sample No.: 5055

Depth : 83.1

Field Rock Name: Mafic flow (banded sub-facies)

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

Qz } 45% (0.05 → 0.07 mm) some shadows
Fp } of Fp plagioclase porphyry
Amphibole < 1%
Chlorite (Fc) 37%
Carbonates < 1
Muscovites 4%
Sericitic 3%

Minor Minerals:

Opaques 3%
Sphene < 1%

Veins, Fractures:

Alterations:

Rock Texture: Lepidoblastic, sheared, crenulated

Rock Name: Altered intermediate flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

BUR-Ø3

130.8m

Sample No.: 5057

Field Rock Name: Mafic flow - fine grained altered
(banded sub-facies)

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

Quartz } 45%
Feldspar }

Chloites (Fe) 5% poeciloblastic
Muscovite / Sericites 2%
Calcite 35%

Minor Minerals:

Opaques 3%
Epidotes 10%
Tourmaline < 1%

Veins, Fractures: Calcite - epidote

Alterations: Feldspars are altered to clay (pericite)
Epidote - Calcite - chloite alteration

Rock Texture: Xenoblastic, very strongly altered

Rock Name: Altered intermediate tuff? or flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5062

Depth : 25.4m

Field Rock Name: Mafic pillow lava.

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

Quartz } 83% ref. grained
Feldspar }
Chlorite (Mg Al Fe) 12%
Calcite 2%

Minor Minerals:

Opagues: 3%
Rutile Tr in Quartz

Veins, Fractures:

Pyrite - calcite - quartz veins.

Alterations:

Reaction rims around pyrite (chlorite)
Iron oxides around pyrite vein

Rock Texture:

Lepidoblastic, alternating sheared - not sheared
Grain size is coarser near pyrite vein.
Generally fresh rock -

Rock Name:

Intermediate flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5067

Depth : 52.8m

Field Rock Name: Mafic flow with dark brown banding

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

Quartz	}	80%	p.f.-grained
Feldspar			
green Amphiboles (hornblende)	7%		porphyroblastic, porphyroblitic
Biotites	7%		
Chlorites	5%		
Calcite.	4%		

Minor Minerals:

Opaques 5%
Epidotes —
Muscovites < 1%
Tourmaline Tr

Veins, Fractures:

— Quartz calcite (muscovite) vein.
— Calcite vein

Alterations:

Amphiboles are very altered.
Pyrite crystals are surrounded by chlorite - carbonates
rim.

Rock Texture:

Lepidoblastic, Strongly altered
few clasts or amygdules. Somewhat layered

Rock Name:

Intermediate flow - pyriteous

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5068

Depth : 47.2m

Field Rock Name: Banded mafic to intermediate flow.

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

Quartz } 65 % r.f. grained
Feldspar }

sericite 29 %

chlorite < 1 %

Carbonates 1 %

Minor Minerals:

Opagues. 3 % flattened

Tourmaline 1 %

Garnet 1 % Poeciloblastic, Porphyroblast.

Apatite tr.

Veins, Fractures:

Quartz - calcite - muscovite - pyrite vein.
chlorite.

Alterations:

Some alteration of feldspar.

Rock Texture:

Lepidoblastic, moderately sheared.
very strongly foliated - augen texture around
quartz "module" (amygdalae?)

Rock Name:

Intermediate flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5074

Depth : 83.7

Field Rock Name: Felsic flow

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

Qz	} 60% groundmass
Fp plags	
Chlorite	5%
Muscovite	10%
Biotite	2%
Carbonates	10%

+10% as corroded, poeciloblastic^{Fp} phenocrysts

Minor Minerals:

Opques	3%
Tourmaline	<1%
Apatite	tr

Veins, Fractures:

Alterations: Chlorite rim around pyrite.
Clay altered feldspar phenocrysts.

Rock Texture: Lepidoblastic, slightly sheared

Rock Name: Felsic porphyritic flow or tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5075A

Depth : 105.2m

Field Rock Name: Massive felsic flow (porphyritic)

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

Qz } 60% groundmass +

Fp plag. } 10% plagioclase phenocryst - corroded.

Biotite 11%

Sericite 14%

Calcite 5%

Minor Minerals:

Opaques 2%

Apatite tr.

Veins, Fractures:

Alterations: Strong clay alteration of feldspar phenocrysts. Feldspar are replaced by sericite.

Rock Texture: Lepidoblastic, some shearing, layered, rapid change of granulometry with layering.

Rock Name: Felsic porphyritic flow or tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5075 B

Depth : 105.3 m

Field Rock Name: _____

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

See 5075 A

Minor Minerals: _____

See 5075 A

Veins, Fractures: _____

Alterations: _____

Rock Texture: _____

Rock Name: Felsic feldspar porphyry "flow" or "tuff"

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5082

Depth : 169.9

Field Rock Name: Mafic porphyroblastic flow

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

Quartz	}	48%	recrystallized groundmass
Feldspath			
Amphiboles		39%	porphyroblastic, poecilitic
Chlorites (Mg Al Fe)		3%	
Calcite		1%	

Minor Minerals:

Opagres	8%
Epidote	1%
Apatite	tr

Veins, Fractures:

Calcite. Epidote in veins

Alterations:

Strongly corroded amphiboles
 Chloritic reaction rims around pyrite.
 Strong sericite - epidote alteration

Rock Texture:

± Nematoblastic, diablastic, strongly to moderately sheared.

Rock Name:

Porphyroblastic intermediate flow

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5084

Depth : 176.0

Field Rock Name: Mafic flow

Amphibole-garnet porphyroblasts

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

Qz } 22% groundmass

Fp } + 3% plagioclases porphyro

Amphib 30% porphyroblastic, poeciloblastic

Chlorite (Fe) 10%

Calcites 2%

Garnets 30% porphyroblastic, poeciloblastic

Minor Minerals:

Opaques 2%

Epidotes 1%

Zirconia tv in amphiboles

Veins, Fractures:

Alterations: Strongly corroded garnets, altered amphiboles
Strongly altered plagioclases

Rock Texture: Sheared, lepidoblastic

Rock Name: Porphyroblastic intermediate flow

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5086

Depth : 182.1m

1- Mafic facies

Field Rock Name: Tuffs or volcanoclastic or lapilli tuff rapidly alternating mafic / intermediate layers

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

Qz } 50 as groundmass +

Fp } 10% plagioclase porphyres

Amphiboles 25% (green hornblende + actinolite) - porphyroblastic - porphyroblastic-Idiog morphs

Biotite 5%

Calcite 1%

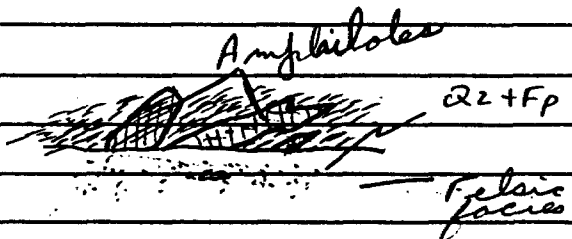
Chlorite 3%

Minor Minerals: Opagros 1%

Sphene tr

Veins, Fractures:

Mafic facies is discontinuously cut by felsic facies



Alterations: Amphiboles are broken and somehow corroded, calcite alteration. Strong clay alteration of plagioclases

Rock Texture: lepidoblastic strongly sheared.

Rock Name: Porphyroblastic intermediate tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-04

Sample No.: 5086

Depth : 182.1

Z- Felsic-facies

Field Rock Name:

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

Qz } 85% groundmass
Fp } +10% plagioclase phenocrysts idiomorphic.

Muscovite 2%

Calcite 2%

Minor Minerals:

Opagres 1%

Apatite <1%

Chloite tr

Veins, Fractures:

Alterations: Pervasive carbonate alteration.
Plagioclases are "clay altered"

Rock Texture: Fine grained, homogenous "fresh"
massive

Rock Name: Porphyritic felsic tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5218

Depth : 25.65

Field Rock Name: Blue quartz schist (tuff)

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

Qz } 40% mostly recrystallized groundmass
Fp } +24% rounded ^{stained} quartz eyes + altered plagioclase phenocrysts
Biotite 10%
Muscovite 3%
Sericite 12%
Calcite 10%

Minor Minerals:

Opagres 1%
Apatite ≤ 1% = euhedral
Oligiste tr.
Epidote < 1%

Veins, Fractures:

Alterations: Strong sericitization along foliation planes

Rock Texture: Lepidoblastic schist

Rock Name: Intermediate crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5221

Depth : 40.12

Field Rock Name: Crystal tuff

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

Quartz	50%	mostly recrystallized? groundmass	(Am3)
Feldspar	31%	rounded stained polycrystalline quartz eyes + altered Fp plagioclase phenocrysts	(11%) (20%)
Biotite	10%	greenish	
Muscovite	3%		
Calcite	3%		
Chlorite	1%		

Minor Minerals:

Opagres	≤ 1%	Epidote	tr
Zircon	tr	chloritoid	tr
Apatite	≤ 1% phenocrysts	rutile	tr
Sphene	tr		

Veins, Fractures:

Alterations: Clay - Calcite alteration of plagioclases

Rock Texture: Augen schist

Rock Name: Intermediate crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5226

Depth : 61.90

Field Rock Name: Crystall tuff

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

Quartz } 50% mostly recrystallized groundmass.
Feldspar } 15% rounded strained ± polycrystalline quartz phenocrysts.
Calcite - 10%
Biotite 7%
Sericite 15%

Minor Minerals:

Opaques 3% some euhedral crystals
Tourmalines tr.
Garnet? <1%
Apatite tr. phenocryst?

Veins, Fractures: Calcite vein.

Alterations: Pervasive calcite sericite

Rock Texture: Lepidoblastic, banded. augen schist.

Rock Name: Intermediate crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5229

Depth : 76.96

Field Rock Name: Felsic crystal tuff

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

Quartz } 33% recrystallized groundmass.

Feldspar } 20% rounded, strained, polycrystalline quartz phenocryst augen.

Sericite 35% 35%

Biotite 3% 3%

Chlorite 1% 1%

Minor Minerals:

Opaque (pyrite) ~7% mostly euhedral

Apatite ~1% phenocryst

Veins, Fractures:

Alterations:

Perazine sericit
reaction rim around pyrite.

Rock Texture:

Lepidoblastic augen schist

Rock Name:

Felsic crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5232

Depth : 89.25

Field Rock Name: Crystal tuff

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

Quartz } 40% recrystallized groundmass.
 Feldspar } 35% rounded stained ± polycrystalline quartz auger + altered Fp plag. phenocrysts (20%)
 Calcite 7%
 Biotite 5%
 Muscovite 10%
 Chlorite < 1%

Minor Minerals:

Opaque 2% ± euhedral pyrite.
 Apatite 1% phenocrysts

Veins, Fractures:

Alterations: Clay altered plagioclases

Rock Texture: Auger schist

Rock Name: Felsic crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5237

Depth : 124.10

Field Rock Name: Quartz augen tuff

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

Quartz } 63% mostly groundmass
 Feldspar } 10% rounded strained + polycrystalline quartz augen + altered plagioclase phenocrysts 6%
 Sericite 17%
 Biotite 3%
 Chlorite 4%

Minor Minerals:

Opaque 3% ± euhedral
 Tourmalines tr
 Apatite tr

Veins, Fractures:

Alterations: Strongly rounded / altered plagioclase
 Sericitization?
 reaction rim around feldspars

Rock Texture: Lepidoblastic augen schist

Rock Name: Intermediate crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5243

Depth : 157.4

Field Rock Name: Lapilli tuff

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

	Light	Dark bands	
Qz	47%	10%	mostly groundmass
Fp	25%	25%	rounded strained poly-crystalline quartz augen + altered Fp plagioclase phenocrysts

Biotite 2% 47% greenish.

Sericite 20% 0

Calcite 3% 15%

Minor Minerals:

Opagone 2% ± euhedral Zircon tr

Tourmaline tr in quartz

Apatite 1%

Epidote tr

Veins, Fractures:

Alterations:

Rock Texture: Lepidoblastic banded augen schist

finer grained light felsic band, layered with coarser darker band.

Rock Name: Intermediate lapilli tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: —

Depth : 199.02

Field Rock Name: Crystal tuff

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

Qz } 40% recrystallized granoblastic "interstitial"
Fp } 35% mostly altered Fp plagioclase (An 35) phenocrysts. ± idiomorphic
Biotite 15%
Sericite 16%
Calcite 1%
Chlorite tr.

Minor Minerals:

Opaques 2%
Apatite < 1% ± euhedral

Veins, Fractures:

Alterations: Strong clay alteration of plagioclases
Calcite alteration of chlorite.

Rock Texture: Angular schist

Rock Name: Intermediate dyke

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: _____

Depth : 204.80

Field Rock Name: Crystal tuff

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

Quartz } 38% mostly groundmass.
 Feldspar } 25% rounded strained ± polycrystalline quartz + altered ± idiomorphic ^{5%} feldspar (Am₃) phenocrysts.
 Biotite ~ 10%
 Muscovite / Sericite ~ 15%
 Calcite 10%

Minor Minerals:

Opaque 2%
 Azurite < 1%

Veins, Fractures:

Alterations: Strongly clay altered plagioclases

Rock Texture: Augen schist.

Rock Name: Dyke ?

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5248

Depth : 224.23

Field Rock Name: "Ash fall" tuff

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

Quartz	56%	recrystallized	groundmass
Feldspar	20% *	rounded strained	± polycrystalline quartz augen
Muscovite / Sericite	20%		
Biotite	2%		
Calcite	2%		

* rare altered Fp phenocrysts.

Minor Minerals:

Opques	~ 1%
Tourmaline	tr.
Apatite	tr.

Veins, Fractures:

Alterations:

Rock Texture: Lepidoblastic augen schist.

Rock Name: Intermediate lapilli tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-09

Sample No.: 5249

Depth : 246.10

Field Rock Name: Crystal tuff

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

Quartz } 40% recrystallized groundmass
 Feldspar } 32% 27% altered ± idiomorphic Fp plag (An2) phenocrysts + 5% ^{straggled} rounded quartz angular
 Biotite 4%
 Muscovite 5
 Sericite 3
 Calcite 4%

Minor Minerals:

Opaque 2%
 Tourmaline tr
 Apatite tr

Veins, Fractures:

Alterations: Strong calcite / sericite alteration.
 Strong plagioclase alteration

Rock Texture: Angular

Rock Name: Felsic porphyritic tuff? or dyke?

(Doc. #0005U - 11.05.88)

88-06-01

88-06-02

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THIN SECTION DESCRIPTION

Hole No.: BUR-10
Depth : 19.5

Sample No.: 5250

Field Rock Name: Intermediate tuff

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

Quartz } 28% mostly fine grained recrystallized groundmass
Feldspar } 5% rounded, strained ^{poly}crystalline quartz ovoid - lathlike?
Biotite 50%
Sericite 10%
Chlorite 5%

Minor Minerals:

Opaques 3% ± euhedral Oligiste tr.
Tourmaline < 1%
Pistachite (epidote) tr
Zirconia tr in biotite

Veins, Fractures: Calcite veins?

calcite abundant in coarser grained segregations (veins?)
and as discrete grains adjacent to quartz eyes total ~ 5%

Alterations: Pervasive sericite alteration.

minor green mica (alteration of biotite?) → fuchsite?

Rock Texture: Lepidoblastic sheared schist

Rock Name: Intermediate crystal tuff

* (doesn't look like a basalt)

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10
Depth : 26.5

Sample No.: 5251

Field Rock Name: "transition" facies

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

Quartz } 46% recrystallized groundmass. mean grain size 0.05µm
Feldspar } 20% rounded + stretched? quartz phenocryst
Sericite 30%
Calcite 2%

Minor Minerals:

Opques ≤ 1%
Iron oxide tr
Clinopyroxite ~ 1%?
Apatite tr

Veins, Fractures:

Alterations: Feldspars? are corroded and are coated with
Iron oxide film

Rock Texture: lepidolastic lightly sheared schist

Quartz phenocryst are relatively small -

Rock Name: felsic crystal tuff

* sheared S₁/S₂ @ 15°
Very homog. T.S.

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5252

Depth : 29.5

Field Rock Name: dark gray facies

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

Quartz } 33% mostly groundmass
Feldspar } only a few rounded quartz phenocrysts.
Sericite 25%
Calcite 25%
Chlorite <1%
Biotite 12% greenish

Minor Minerals:

Opaenes. 4% ± euhedral. (including iron oxides)
Pistachite ~1%
Tourmaline tr.

Veins, Fractures:

Alterations: Strong calcite - epidote - chlorite alteration

Rock Texture: ± altered Schist

Rock Name: Intermediate ash tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5-7

Depth : 34.9

Field Rock Name: green rock facies

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

Quartz } 15% fine grained groundmass
Feldspar } 7% rounded ± stretched ± strained quartz phenocrysts. (augen?)
Sericite 77%

Minor Minerals:

Opaque 3% including iron oxides
Tourmaline tr
Epidote tr

Veins, Fractures:

Alterations: Altered, iron oxide coated, plagioclase

Rock Texture: Lepidoblastic augen schist.

Rock Name: Sericitic ash tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-17

Sample No.: 5253

Depth : 43.5

Field Rock Name: Crystal tuff

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

Quartz } 30% fine grained groundmass.
Feldspar } 40% ← 30% altered rounded Fp plag. + 10% rounded, strained ± polycrystalline quartz
Biotite 10%
Sericite 10%
Calcite 2%

Minor Minerals:

Opague 8% Apatite tr.
Clinopyroxene < 1%
Tourmaline (green) tr.
Zircon tr in biotite

Veins, Fractures:

* Feldspar phenocryst show abundant opague inclusions

Alterations: Strongly clay altered porphyric plagioclases

Rock Texture: Lepidoblastic augen schist.

Several polycrystalline slightly stretched rounded clasts.

Rock Name: Intermediate crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10
Depth : 48.5

Sample No.: 5254

Field Rock Name: Intermediate tuff

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

Quartz } 15% fine grained ground mass.
Feldspar } 12% 6% altered Fp "shadow" phenocrysts + 6% rounded = polycrystalline "quartz eyes".
Sericite 60%
Biotite 3% greenish
Calcite 8%

Minor Minerals:

Opaques 2% euhedral pyrite.
Tourmalines < 1%
Zoisite / Clinzoisite tr.
Sphenes tr.

Veins, Fractures: Calcite vein?

Alterations:

Pervasive calcite-sericite alteration.
one zone shows high calcite content low sericite on each side; high calcite low sericite.
very altered Fp phenocrysts.

Rock Texture:

lepidoblastic altered augen schist.

Rock Name:

Felsic crystal tuff

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THIN SECTION DESCRIPTION

Hole No.: BUR-10

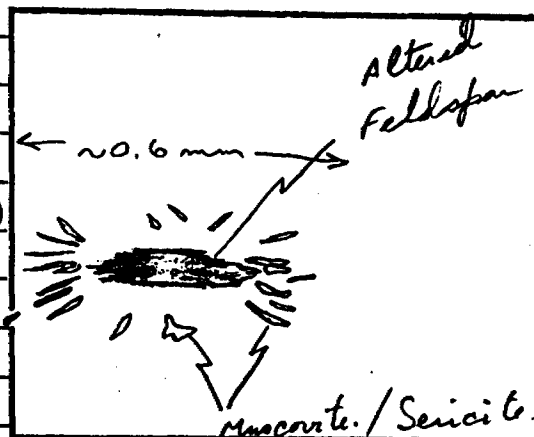
Sample No.: _____

Depth : 58.8

Field Rock Name: Orange banding

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

Qz } 20% fine grained groundmass
 Fp } 56% strongly altered Feldspar phenocryst (50%)
 +/- rounded strained +/- polycrystalline quartz
 phenocrysts (6%)
 Sericite 20% fascicular? radiating from
 feldspar phenocryst.

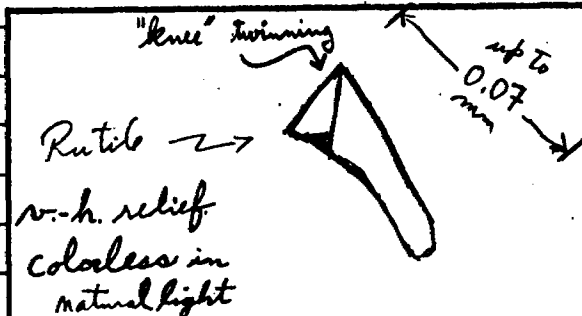


Minor Minerals:

Opagues. ~2%
 Rutile ~2% acicular, needles

Albite tr.

Veins, Fractures:



Alterations: Strongly altered feldspar (plag?) Iron-Titanium oxides

Rock Texture:

Angen schist
 Fibro radiated sericites around altered feldspars.
 Slight crenulation

Rock Name: Intermediate crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-18

Sample No.: 5255

Depth : 64.0

Field Rock Name: Transition facies

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

Quartz } 9% groundmass

Feldspar } 2% ± rounded quartz phenocrysts

Sericite 80%

Minor Minerals:

Opagues (pyrites + Iron oxides) ~ 4%

Epidotes (Zoisite + Clinzoisite) 5%

Veins, Fractures:

Epidote filling fractures

Alterations:

Strong sericite/epidote alteration.

Rock Texture:

Sheared? (augen) schist

Rock Name:

Intermediate sericitic ash tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5256

Depth : 69.0

Field Rock Name: Intermediate tuff

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

Quartz	19%	fine grained groundmass.
Feldspar	8%	mostly altered feldspar phenocryst. - some "shadows"
Calcite	29%	29%
Sericite	30%	30%
Biotite	10%	10%

Minor Minerals:

Opagres	3%	some euhedral pyrites
Tourmaline (green)	~1%	

Veins, Fractures: Tourmaline filled vein. (dark contorted relicts)

Alterations: Strong sericite - calcite alteration
strong Feldspar alteration.

Rock Texture: altered, slightly sheared, schist.

Rock Name: Intermediate crystal tuff.

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THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5257

Depth : B1.0

Field Rock Name: Intermediate tuff quartz augen

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

Qz } 3% ground mass
Fp } 70% large ± flattened poly(^{30%}crystalline quartz "lapilli" + altered ± recrystallized Fp (^{40%}phenocryst
Biotite 15%
Chlorite Mg AP 3%
Epidote + Clinzoisite 3%
Carbonates (calcite) < 1%
Muscovite / Sericite 3%

Minor Minerals:

Opagues 3% ± euhedral pyrite

Zircon tr in biotite.

Veins, Fractures:

Thin opaque minerals in feldspar crystals.

Alterations: Chlorite - Sericite - Epidote alteration + carbonates

Strong sericite alteration of Feldspar.

Rock Texture: Sheared. altered lepidoblastic schist.

Rock Name: Intermediate crystal tuff

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BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5260

Depth : 113.0

Field Rock Name: Blue quartz eye tuff

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

Quartz } 34% fine grained groundmass
Feldspar } 20% ± rounded ± polycrystalline quartz phenocrysts.
Sericite 40%
Biotite 3% somehow chloritized
Calcite 2%

Minor Minerals:

Opaque 1% corroded.
Epidote <1% Oligiste tr
Zircon tr in biotites
Tourmaline tr

Veins, Fractures: Carbonates (calcite) veinlets.
polycrystalline quartz vein

Alterations: Strong sericite - carbonate alteration.

Rock Texture: Lepidoblastic lightly sheared? augen schist.

Rock Name: Intermediate crystal tuff

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THIN SECTION DESCRIPTION

Hole No.: BUR-10
Depth : 131.0

Sample No.: 5261

Field Rock Name: fine grained tuff

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

Quartz } 2% interstitial
Feldspar } 18% mostly altered feldspar ± interstitial
Amphibole 52% diablastic generally poeciloblastic.
Biotite 8%
Garnet 4% poeciloblastic euhedral
Calcite 1%
Chlorite 10%

Minor Minerals:

Opagres 5% ± euhedral.
Zircon tr in biotite
Epidote tw.

Veins, Fractures:

Alterations: Some calcite - chlorite alteration of amphiboles
(epidote)
Strongly sericitized / clay altered plagioclases

Rock Texture: Foliated ± sheared. schist

Rock Name: Mafic crystal tuff
Dyke?

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5262

Depth : 146.0

Field Rock Name: intermediate tuff

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

Quartz } 42% mostly groundmass
Feldspar }
Chlorite (Fe) 10%
Calcite 25
Sericite / Muscovite 20%

Minor Minerals:

Opaque 3%
Epidote tr
Oligiste tr

Veins, Fractures:

Alterations: Strong calcite alteration. (Pervasive)
very altered rock.
chlorite apparently mostly derived from biotite

Rock Texture: Strongly altered ± foliated schist

Rock Name: Intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5263

Depth : 161.0

Field Rock Name: Intermediate volcanic

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

Quartz } 55% fine grained ± recrystallized groundmass.
Feldspar } 4% quartz + altered feldspar phenocrysts.
Biotite 12%
Amphibole 15% porphyroblastic.
Chlorite 3%
Carbonate 7% calcite
Sericite 2%

Minor Minerals:

Opaque 2%
Oligoclase tr

Veins, Fractures: Calcite vein

Alterations: Strong carbonate alteration.

Rock Texture: Fine grained, lepto-nematoblastic, well foliated lightly sheared schist

Rock Name: Intermediate ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5264

Depth : 171.0

Field Rock Name: Intermediate Volcanic.

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

Quartz } 40% fine grained ± recrystallized groundmass
Feldspar } 8% ± rounded quartz + altered feldspar phenocrysts.
Amphiboles (green hornblends) 24% porphyroblastic, poeciloblastic
Chlorite 1%
Biotite 17%
Calcite 5%

Minor Minerals:

Opaques 5%
Zircon garnet tr in amphiboles and Biotites.
tr.

Veins, Fractures:

Alterations: Strong calcite alteration.

Rock Texture: Lepido-nematoblastic
± flattened polycrystalline quartz lapilli
± crenulated

Rock Name: Intermediate - ash tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5265

Depth : 185.0

Field Rock Name: Intermediate tuff

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

Quartz } 40% fine grained + recrystallized ground mass
Feldspar } 10% large fuzzy polycrystalline quartz + altered feldspar phenocryst.
Amphibole 35% porphyroblastic - poeciloblastic, diablastic
Chlorite 5%
Biotite 4%
Calcite 2%

Minor Minerals:

Opacites 4%
Zircon tr in amphiboles / biotites
Tourmalines tr
Apatite tr

Veins, Fractures: Quartz - calcite veinlet.

Alterations: Calcite alteration

Rock Texture: fine grained Nematoblastic, slightly sheared schist

Rock Name: Mafic crystal tuff

becoming mafic at one end of T.S

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5282⁶

Depth : 200.0

Field Rock Name: Mafic - Intermediate tuff

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

Quartz } 30% mostly recrystallized groundmass
Feldspar } 10% large polycrystalline quartz lathilli + altered plagioclase phenocryst.
Sericite 35%
Kaolinite 3%
Carbonates 15%

Minor Minerals:

Opaques 3% rod-like, ± acicular
Oligiste tr
Epidote + Chloritoid 4% pumpellyite <1%

Veins, Fractures: Epidote - calcite - silica veinlet

Alterations: Very strong carbonate - chlorite - epidote alteration.
pervasive

Rock Texture: Lepidoblastic, augen schist
± crenulated

Rock Name: Intermediate crystal tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-10

Sample No.: 5283⁶

Depth : 217.5

Field Rock Name: Mafic - Intermediate tuff

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

Quartz } 38% mostly: strongly altered plagioclase (~10%) stretched?
 Feldspar } polycrystalline quartz lapilli (23%) and rounded stained quartz phenocrysts
 Amphibole 30% (green hornblende) poecilloblastic, porphyroblastic
 Chlorite 10%
 Biotite 3%
 Calcite 15%
 Epidote / Pistachite 1%

Minor Minerals:

Opaques 3%
 Zirconia to in amphiboles

Veins, Fractures: Calcite veins

Alterations: Strong pervasive calcite alteration.
 Clay alteration of feldspar

Rock Texture: Nematoblastic, well foliated, sheared. augen schist

Augen texture around Feldspathic "clasts"
 Rock Name: Mafic lapilli tuff or dyke

could be a sheared dyke!

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: 5266

Depth : 24.55

Field Rock Name: Sheared Gabbro

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

Quartz } ~20% interstitial
Feldspar }
Amphiboles 73% (green hornblende + actinolite) diastatic porphyroblastic.
Chlorite 5%

Minor Minerals:

Opaques 2%
Zircon tr. in amphiboles

Veins, Fractures: —

Alterations: light clay alteration of feldspar

Rock Texture: Nematoblastic sheared (foliated) schist.

Rock Name: Sheared metagabbro

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: 5270

Depth : 61.45

Field Rock Name: Sheared quartz vein? or dyke?

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

Quartz	67%	} mostly granoblastic groundmass
Feldspar (plagioclase)	10%	
Amphiboles	15%	poeciloblastic
Biotite	4%	
Carbonates	< 1%	
Chlorite	2%	

Minor Minerals:

Opagres	2%	
Zircon	tr	in amphiboles.
Apatite?	tr	

Veins, Fractures: Clay altered alongs fractures

Alterations: Pervasive clay alteration of rock. (light alt.)
Some carbonate alteration

Rock Texture: Granoblastic - porphyroblastic

Rock Name: Sheared metagabbro

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11
Depth : 68.55.

Sample No.: 5273

Field Rock Name: Sheared Gabbro.

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

Quartz	}	15%	mostly interstitial, recrystallized
Feldspath			
Amphibol.		43%	(green hornblende and actinolite) porphyroblastic
Biotite		25%	± poeciloblastic
Chlort.		10%	fascicular
Sericite		4%	

Minor Minerals:

Opagues.	3%
Zircons	tr. in biotite and amphiboles
Apatite	tr

Veins, Fractures:

Alterations: Pleochroic haloes around zircons in biotites and amphiboles

Rock Texture: Sheared, lepidoblastic, ± cataclased gabbro

Rock Name: Sheared metagabbro

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: _____

Depth : 113.78

Field Rock Name: Sheared gabbro or massive mafic flow.

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

Quartz } 33% mostly as ± recrystallized groundmass
Feldspar }
Amphiboles 15% porphyroblastic hornblende - actinolite
Chlorite
Biotite 20%
Sericite 20%
Carbonates 5%?

Minor Minerals:

Opaques 2%
Zoisite 5%

Veins, Fractures: Carbonate (calcite) veinlets

Alterations: Strong calcite - sericite - epidote alteration.

Rock Texture: Lepidoblastic (± nematoblastic) sheared, altered schist.

Rock Name: Strongly sheared. metagabbro

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: 5282

Depth : 117.05

Field Rock Name: Mafic flow or gabbro.

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

Quartz } 43% mostly recrystallized

Feldspar }

Amphiboles 39% green hornblende / actinolites, poeciloblastic, porphyroblastic

Chlorites 3%

Biotites 7%

Sericites -

Carbonates 5%

Minor Minerals:

Opaques 3% large size

Apatite tr.

Veins, Fractures: Calcite / clay alteration on fractures

Alterations: Moderate to strong clay alteration.

Rock Texture: Nematoblastic, altered, ± cataclased, ± sheared schist.

Rock Name: Sheared metagabbro

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: 5290

Depth : 165.40

Field Rock Name: Diorite?

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

Quartz 35 mostly interstitial and large granoblastic "pockets"
Feldspar 43 mostly as altered plagioclase with much inclusions
Chlorites (Fe) 10%
Biotites 8%
Muscovites <1%

Minor Minerals:

Opaques 4%
Calcite tr.
Zircon in chlorites
Apatite tr.

Veins, Fractures:

Alterations: Plagioclases show a clay alteration

Rock Texture: ± Granoblastic ± cataclased

Quartz crystals in "veinlets" show a mosaic texture (w.f. grained opaques)
Rock Name: Felsic "granitoid"

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: 5294

Depth : 180.8

Field Rock Name: Diorite schist. - sheared quartz vein. -

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

Quartz 46% mostly large polycrystalline
Feldspar 40% ± altered plagioclases - some phenocrysts - mostly groundmass
Chlorite (Fe) 6%
Muscovite 6%

Minor Minerals:

Opaques 2%
Zircons tr in chlorites.
Sphenes tr.

Veins, Fractures: Chlorite along fractures.

Alterations: Clay alteration of feldspars.

Rock Texture: Granoblastic ± cataclased

Rock Name: Felsic granitoid

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: _____

Depth : 196.25

Field Rock Name: Diorite?

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

Quartz 42% mostly ± large recrystallized sutured crystals
Feldspar 36% mostly groundmass and ± altered phenocrysts - plagioclases
Chlorite 10% dark green chlorite
Muscovite 2%
Biotite 2%
Carbonates 2%

Minor Minerals:

Opaques 3% poeciloblastic Oligite tr.
Apatite tr.
Garnets 3%
Zircon tr. in garnets.

Veins, Fractures:

Alterations: Some calcite alteration.
Strongly corroded garnets
Clay altered plagioclases (light alteration)

Rock Texture: ± granoblastic ± altered

Rock Name: Intermediate crystal tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-11

Sample No.: 5297

Depth : 199.0

Field Rock Name: Dyke? quartz eye xenolith?

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

Quartz } 60% mostly recrystallized ± granoblastic groundmass
Feldspar } 10% large ± altered ± rounded plagioclase phenocrysts.
Biotite 20%
Calcite 8%
Muscovite 1%

Minor Minerals:

Opagones 1% sub-euhedral, frequent muscovite rim!
Apatite <1%
Zircon tr in biotite

Veins, Fractures:

Alterations:

Clay altered feldspar
slightly chloritized biotites.
Pervasive calcite alteration.

Rock Texture:

Lepidoblastic well foliated schist.

Rock Name:

Intermediate porphyritic dyke?

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION Hole No.: BUR-12 Sample No.: 5301
Depth : 124.67

Field Rock Name: Granodiorite slightly sheared.

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

Quartz } 30% very fine grained ± recrystallized groundmass
Feldspar } 32% large strained rounded quartz eye (7%) + altered plagioclase phenocrysts (25%)
Sericite 15%
Calcite 10%
Biotite 12% chloritized?

Minor Minerals:

Opagues 1%
Apatite <1% sub euhedral.
Tourmaline tr. dark green
Iron oxides

Veins, Fractures: Small polycrystalline quartz veinlet

Alterations: Strong calcite-sericite alteration

Rock Texture: Sheared, foliated augen schist.

Rock Name: Granodiorite porphyry

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-12

Sample No.: 5309

Depth : 154.80

Field Rock Name: Tuff

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

Quartz } 42% mostly medium grained groundmass (0.35-.05mm)
Feld. } 10% strained angular quartz phenocrysts. (0.1-0.5mm)
Sericite 25%
Calcite 20%

Minor Minerals:

Opaque 3%
Apatite tr.
Pumpellyite tr.

Veins, Fractures:

Alterations: Clay and sericite alteration of feldspar.

Rock Texture: Lepidoblastic altered schist.

Rock Name: Felsic quartz eye tuff

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-13

Sample No.: 5404

Depth : 47.5

Field Rock Name: Mafic to intermediate flow.

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

Quartz } 50% quartz feldspar groundmass
Feldspar } 4% altered feldspar phenocrysts - mostly broken crystals
Amphiboles 40% green hornblende - porphyroblastic - poeciloblastic
Chlorite 1%
Biotite 3%

Minor Minerals:

Opagues 2%
Apatite < 1%
Epidote (Pistachite) tr.
Zircon tr in biotite.

Veins, Fractures: Clinzoisite - Pistachite in veins.

Alterations: Clay alteration of feldspars.

Rock Texture: Nematoblastic lightly sheared, foliated schist.

Rock Name: Mafic flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-13

Sample No.: 5406

Depth : 95.0

Field Rock Name: Mafic to intermediate flow

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

65
Quartz } 60% mostly groundmass
Feldspar } 5% large polycrystalline quartz clasts (~5%) + altered plagiocl f. phenocr. (<1%)
Amphib. 26% porphyroblastic, poeciloblastic
Chlorite. 2%
Calcite. 1%
Muscovite tr
Biotite 3%

Minor Minerals:

Opaques 3% mostly as "rodlike" needles (Ti?)
Apatite tr

Veins, Fractures: Quartz - calcite vein

Alterations: Clay alteration of feldspars

Rock Texture: Nematoblastic sheared well foliated schist.

Rock Name: Intermediate flow.

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-13

Sample No.: 5407

Depth : 115.9

Field Rock Name: Mafic - intermediate flow

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

Quartz } 50% recrystallized? groundmass
Feldspar } 3% polycrystalline stretched quartz clast. (Lafilli?)
Biotite 8% + some plagioclase phenocryst
Chlorite < 1%
Amphiboles 35% (green hornblende + actinolite) diablastic, porphyroblastic
Carbonates 1% calcite?

Minor Minerals:

Opagres. 3%
Zircon tr in biotite
Epidotes tr
Apatite tr

Veins, Fractures: Calcite veinlets.
polycrystalline Quartz veinlets

Alterations: Clay alteration of plagioclases.

Rock Texture: Nemato blastic foliated schist

Rock Name: Mafic flow

COGEMA CANADA LIMITED

BURNTBUSH RIVER PROJECT

THIN SECTION DESCRIPTION

Hole No.: BUR-13

Sample No.: 5411

Depth : 187.5

Field Rock Name: Amphibole schist

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

Quartz } 57% mostly fine grained groundmass
Feldspar } ± recrystallized
Amphib. 33% green hornblende + actinolites / porphyroblastic blastic
Chlorite 2%
Biotite 5%

Minor Minerals:

Opaque 3%
Apatite tr
Zircon tr in Amphiboles
Epidote tr

Veins, Fractures: Quartz-Calcite veinlets (several)

Alterations:

Rock Texture: Nematoblastic ± cataclastic, sheared, schist

Rock Name: Intermediate flow



Ministry of Northern Development and Mines

Report of Work

DOCUM W890



32E125W0065 20 HOB LITZELL

900

Hoblitzelle Resources
Name and Postal Address of Recorded Holder

COGEMA CANADA LIMITED

T-4677

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)	See attached list								
<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									

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

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.	Work Sketch (as above) in duplicate
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.	Nil	Nil
Land Survey	Name and address of Ontario land surveyor.		

MINING LANDS: PLEASE COMPLETE THIS FORM & RETURN IT WITH REPORT TO THE ASSESSMENT FILES OFFICE

DATE REMOVED: MARCH 9th
(from AFO)

DATE RETURNED: _____
(to AFO)

REPORT # : DD20 - Hoblitzell Twp

FICHE NO. : _____ (where applicable)

REASON FOR REQUESTING REPORT (complete #1-4 below):

1. INFORMATION ADDED TO EXISTING PAGES OF REPORT:

IF YES, SPECIFY PAGES: _____
: _____
: _____

2. a) PAGES/MAPS ADDED TO THIS REPORT: _____ TOTAL PAGES ADDED
: _____ TOTAL MAPS ADDED

b) TYPE OF PGS ADDED: _____ CORRESPONDENCE
: _____ WORK REPORTS (AMENDED)
: _____ WORK RPTS (NEW)
: _____ MISSING PAGES OF TEXT
: _____ OTHER (PLEASE SPECIFY)

3. a) REMOVAL OF PGS FROM REPORT: _____ TOTAL PGS REMOVED

b) TYPE OF PAGES REMOVED : _____ CORRESPONDENCE
: _____ WORK REPORTS
: _____ PGS OF TEXT
: _____ OTHER (PLEASE SPECIFY)

4. REPORT NEEDED FOR REFERENCE ONLY:

NO INFORMATION ALTERED :

NO INFORMATION ADDED :

NO INFORMATION DELETED :

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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 12
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		

25
128

160

313

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.

DETAILED GEOLOGIC LEGEND

PROTEROZOIC

8 Dike as gneiss

ARCHEAN

6 FELSIC INTRUSIVE ROCKS

- 6a Spade Lake porphyry
- 6b Apatite granite
- 6f Feldspar porphyry
- 6g Green quartz diorite

5 MAFC INTRUSIVE ROCKS

4 METASEDIMENTARY ROCKS

- 4a Argillite, mudstone
- 4b Greywackes (Group 1)
- 4c Greywackes (Group 2)
- 4g Graphitic argillite, luffaceous rocks
- 4v Volcaniclastic 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/agglomerate
- 2f Porphyritic flow or tuff/crystal tuffs
- 2r Mixed rapidly alternating mafic/felsic tuffs

1 MAFC METAVOLCANIC ROCKS

- 1a Fine-grained/aphanitic flow and/or ashfall tuff
- 1b Porphyroblastic/massive flows
- 1c Lapilli tuffs/agglomerate
- 1e Pillow lava
- 1g Gabbro sill

sf: Sulfides very abundant >10% over part of drill hole
 q: Thick quartz veins present (eg = 1m).

SYMBOLS

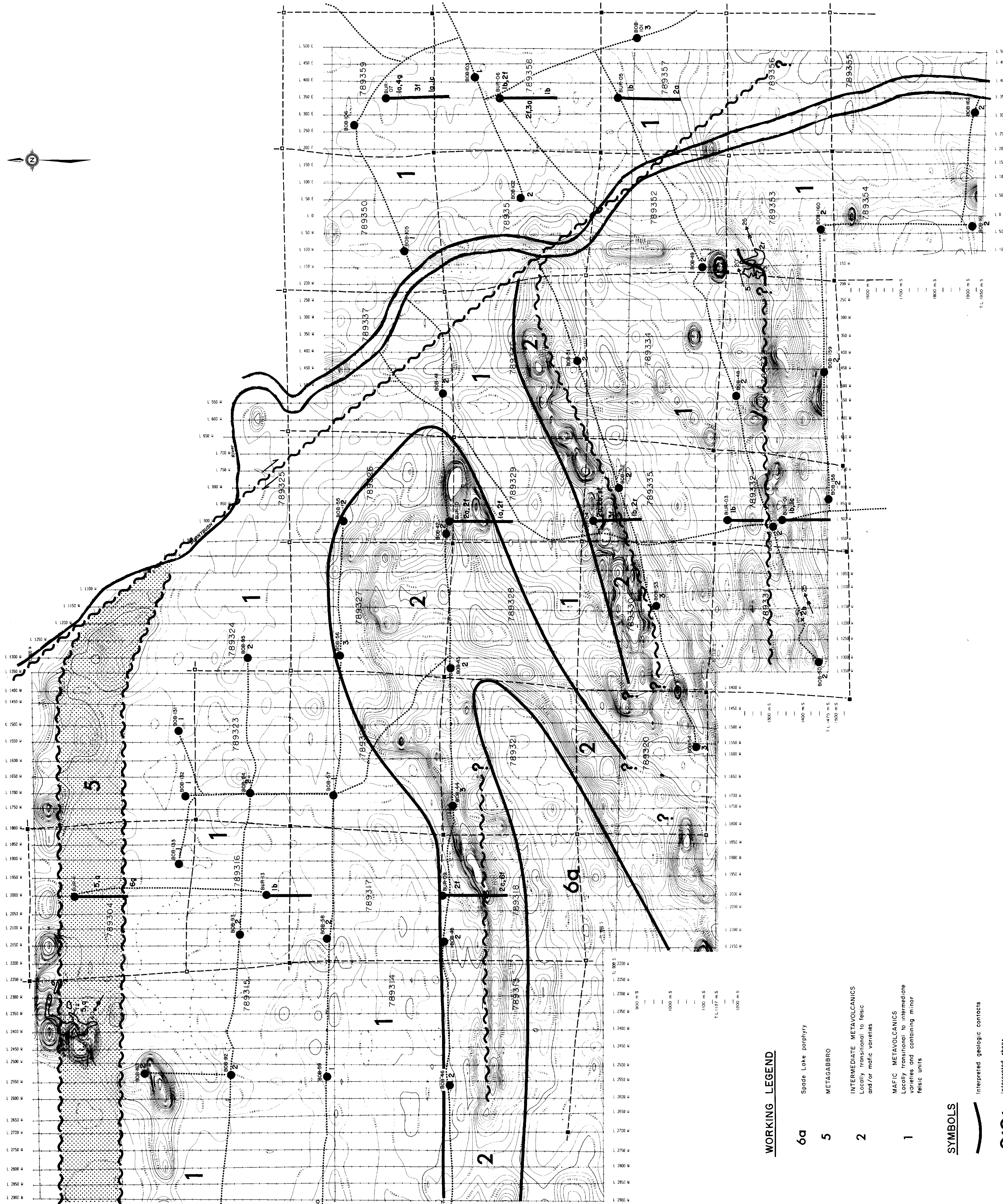
- 25 Minor fold axis
- Mineral lineation

WORKING LEGEND

- 6a Spade Lake porphyry
- 5 METAGABBRO
- 2 INTERMEDIATE METAVOLCANICS
Locally transitional to felsic
and/or mafic varieties
- 1 MAFC METAVOLCANICS
Locally transitional to intermediate
varieties and containing minor
felsic units

SYMBOLS

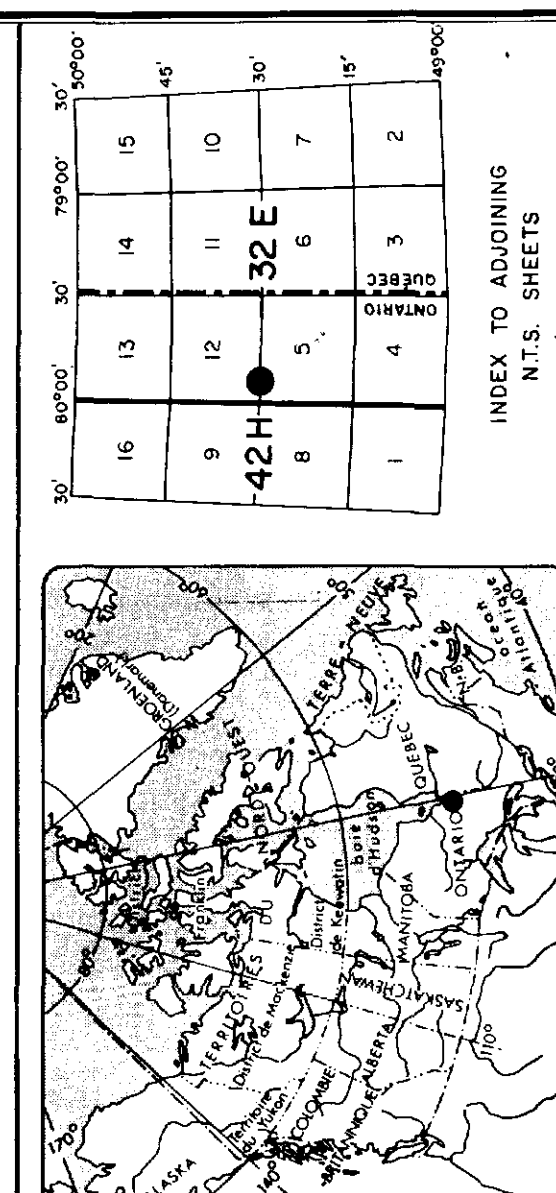
- Interpreted geologic contacts
- Interpreted shear
- Interpreted shear showing
sense of movement
(horizontal component only)
- Shear zone of substantial width



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
 56000 gammas



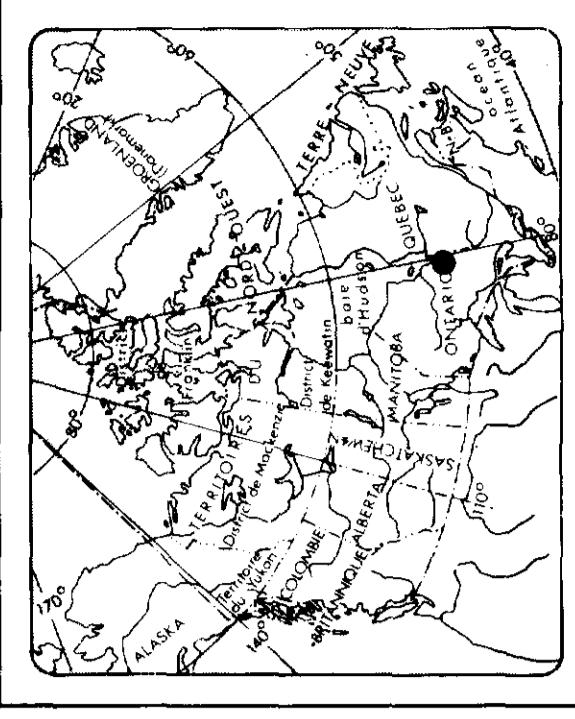
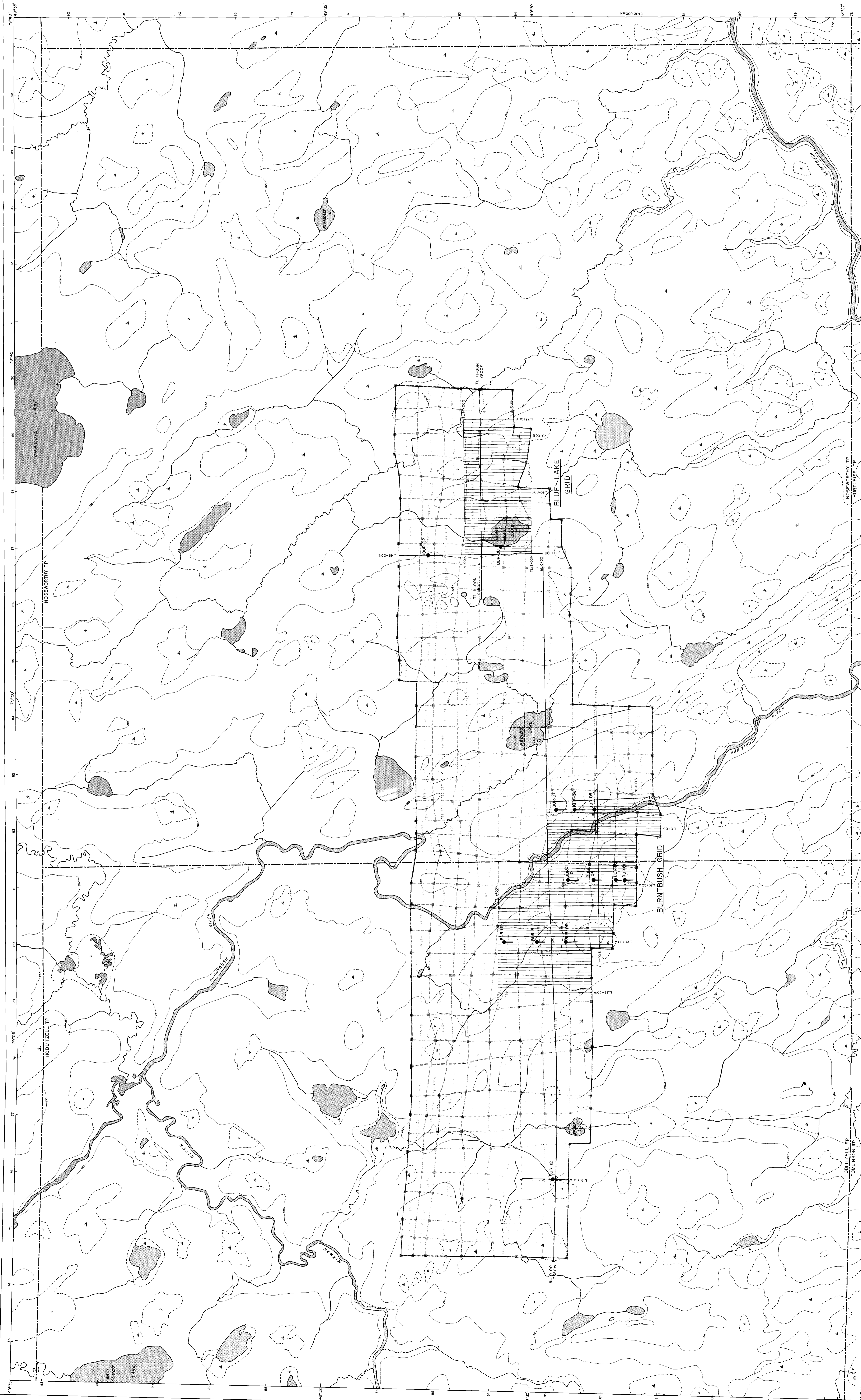
COGEMA Canada
 Geo. Ltd.

SCALE 1/50000

BURNTBUSH RIVER PROJECT
 Burntbush grid

GEOLOGIC INTERPRETATION

Interpretation by: J. LaRra, R. Si-Jean
 Date: 12/68
 Drawn by: R. LaRra
 Scale used: E. W. Exploration Inc.
 Revised by: E. W. Exploration Inc.
 MAP NO. 11



COCEMA CONSULTING ENGINEERS

BURNT BUSH RIVER PROJECT

DIAMOND DRILL HOLE LOCATIONS

Scale: 1" = 1000'

Map No. 1

Drawn by: J. Latta, E. St. John, S. J. ...

Checked by: G. ...

Date: 12/28/08

Project No: 08-CIP-01.03

LEGEND

- OVERSEEN UNITS:**
- Organic
 - Carbon III
 - Oilshale II (Siderite-bearing clay and sand)
 - Metashale III

DIAMOND DRILL HOLE GEOLOGICAL SYMBOLS:

- Overburden / bedrock contact
- Contact observed, unisolated using S, to core only
- Shearings
- Boundary observed, unislated using S, to core only
- Recovery, RDB only drilled when necessary 5-99% RDB per 100m interval, etc.

SAMPLING:

- Sample 1
- Sample 2
- Sample 3
- Sample 4
- Sample 5
- Sample 6
- Sample 7
- Sample 8
- Sample 9
- Sample 10
- Sample 11
- Sample 12
- Sample 13
- Sample 14
- Sample 15
- Sample 16
- Sample 17
- Sample 18
- Sample 19
- Sample 20

REMARKS:

- 111 sample 1
- 111 sample 2
- 111 sample 3
- 111 sample 4
- 111 sample 5
- 111 sample 6
- 111 sample 7
- 111 sample 8
- 111 sample 9
- 111 sample 10
- 111 sample 11
- 111 sample 12
- 111 sample 13
- 111 sample 14
- 111 sample 15
- 111 sample 16
- 111 sample 17
- 111 sample 18
- 111 sample 19
- 111 sample 20

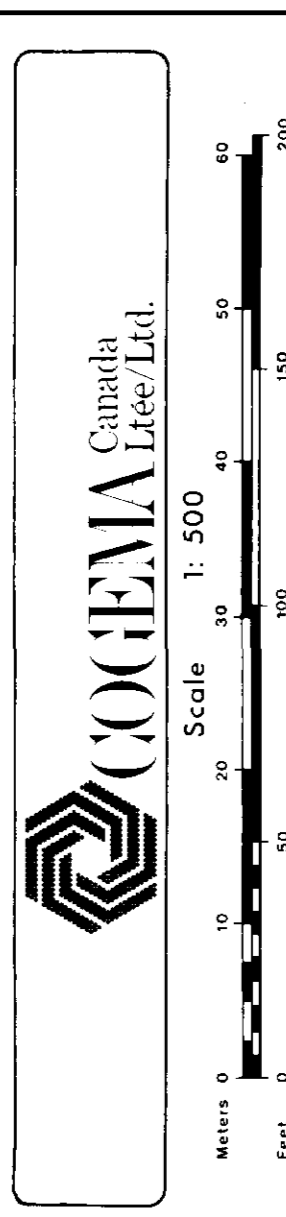
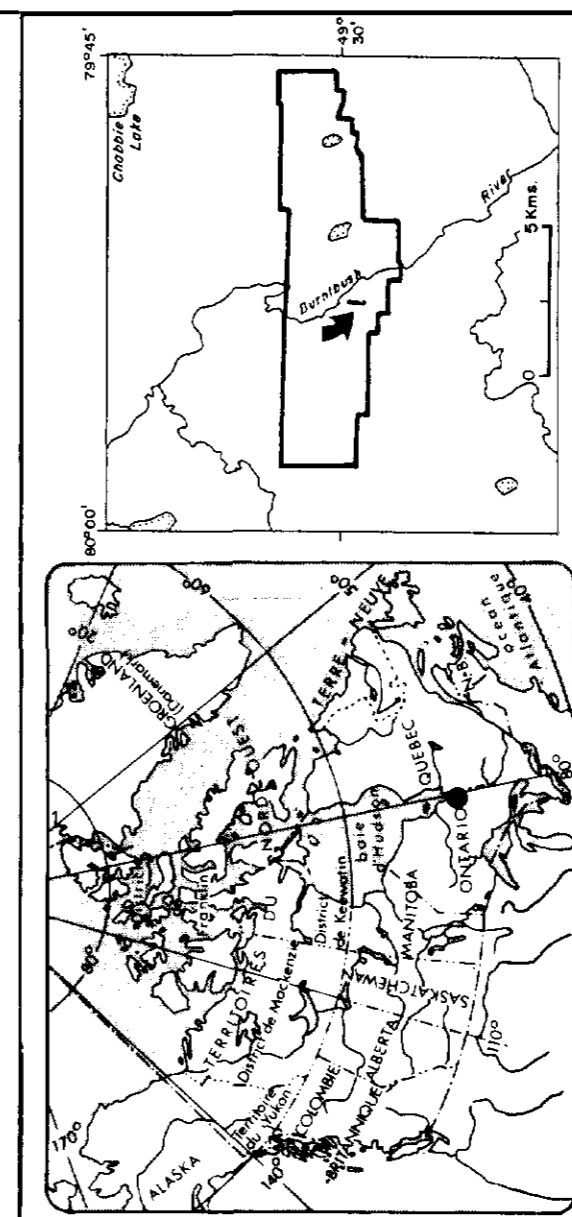
Diamond Drill Hole:

- 5/1 Au
- 5/2 Au
- 5/3 Au
- 5/4 Au
- 5/5 Au
- 5/6 Au
- 5/7 Au
- 5/8 Au
- 5/9 Au
- 5/10 Au
- 5/11 Au
- 5/12 Au
- 5/13 Au
- 5/14 Au
- 5/15 Au
- 5/16 Au
- 5/17 Au
- 5/18 Au
- 5/19 Au
- 5/20 Au

Miss from Vastina analysis
Detection limit 0.2g/t Au

GROUND GEOPHYSICS PROFILES:

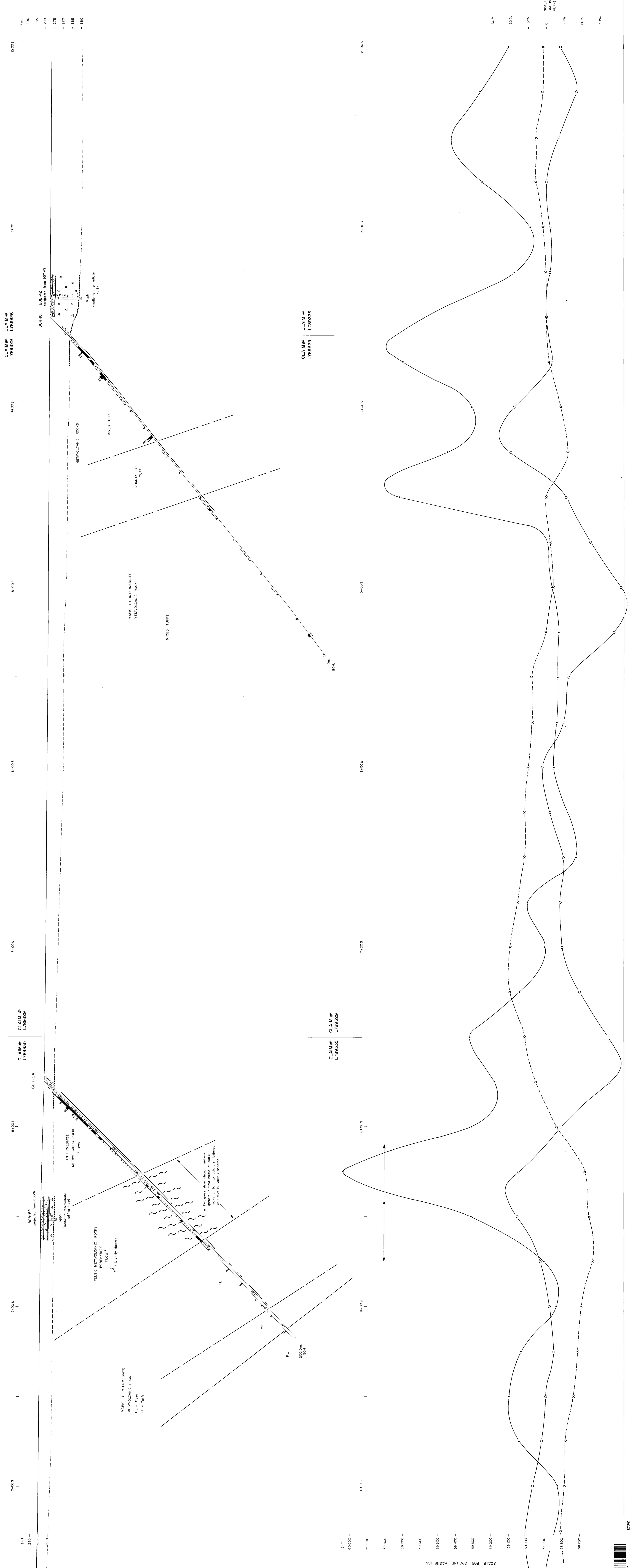
- Interpreted IP anomaly
- Magnetics (loop trace)
- VLF-EM in - phase
- VLF-EM in + phase
- VLF-EM derivative



BURNBUSH RIVER PROJECT

L-900W (North)
DIAMOND DRILL HOLES
BUR-04, BUR-10
CROSS - SECTION

Prepared by: J. Leppin, R. St. John
Date: 5/98
Project No: BR-04-03
Map No: 7



LEGEND

OVERBURDEN UNITS

- Organics
- Coarse fill
- Claystone fill
- Glauconitic clay and sand
- Mudstone fill

DIAMOND DRILL HOLE GEOLOGICAL SYMBOLS

- Overburden / bedrock contact
- Contact: observed, extrapolated using S₁ to core exit
- Shearing
- Boundary sheared, unmineralized using S₁ to core exit

SAMPLING

REVERSE CIRCULATION

- Till sample, 0 Au grain, 140 ppb Au in HMC
- Fill sample, 0 Au grain, 61 ppb Au in HMC
- Bedrock sample, 0 Au grain, 11 ppb Au in HMC
- Bedrock sample Au result
- < 2 ppb

Diamond drill hole:

ppb Au

- 0 - 5
- 5 - 49
- 50 - 99
- 100 - 199
- 200 - 499
- 500 - 999
- 1000

Chimelite analyses:
Detection limit 2ppb or
5ppb depending on method

Mine Yvan Veining analyses:
Detection limit 0.2g/t

GROUND GEOPHYSICS PROFILES:

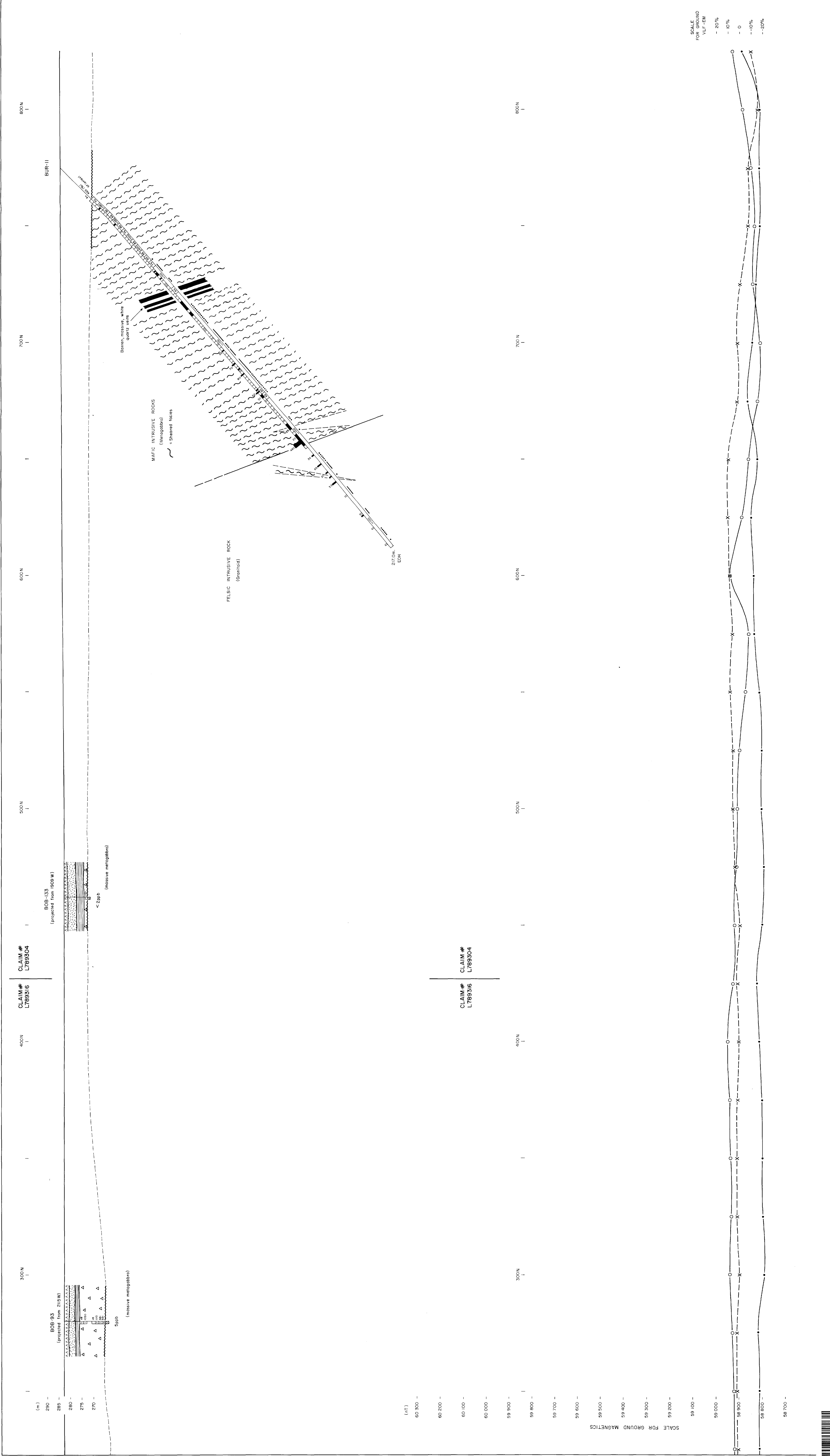
- Interpreted IP anomaly
- Magnetite (total field)
- VLF-EM in phase
- VLF-EM quadrature

COGEMA CONSULTING LIMITED

BURNBUSH RIVER PROJECT

L2000W (North)
DIAMOND DRILL HOLE
BUR-II
CROSS-SECTION

Prepared by: J. Lafren, R. St-John
Checked by: R. F. Hill
Date: 5/98
Report no: BR-C010-47-03
MAP NO. 9



LEGEND

OVERBURDEN UNITS:

- Organics
- Cochrane Hill
- Oilshaw II glaciolacustrine clay and sand
- Marathon Hill

DIAMOND DRILL HOLE GEOLOGICAL SYMBOLS:

- Contact, observed, extrapolated (using S₁ to core axis)
- Shearing
- Boundary sheared, unshaded (using S₁ to core axis)
- Sulfide (principally pyrite); ~1%, >1%

SAMPLING:

REVERSE CIRCULATION:

DIAMOND DRILL HOLE:

PPP Au: <5, 5-49, 50-99, 100-199, 200-499, ≥ 500

Chimney analyses

GROUND GEOPHYSICS PROFILES:

- Magnetics
- VLF-EM in-phase
- VLF-EM quadrature

DIAMOND DRILL HOLE:

HMC Till sample; 1Au grain, HQ pot Au in HMC
 EL Till sample; 0 Au grain, EL pot Au in HMC
 BR Bedrock sample; Au result

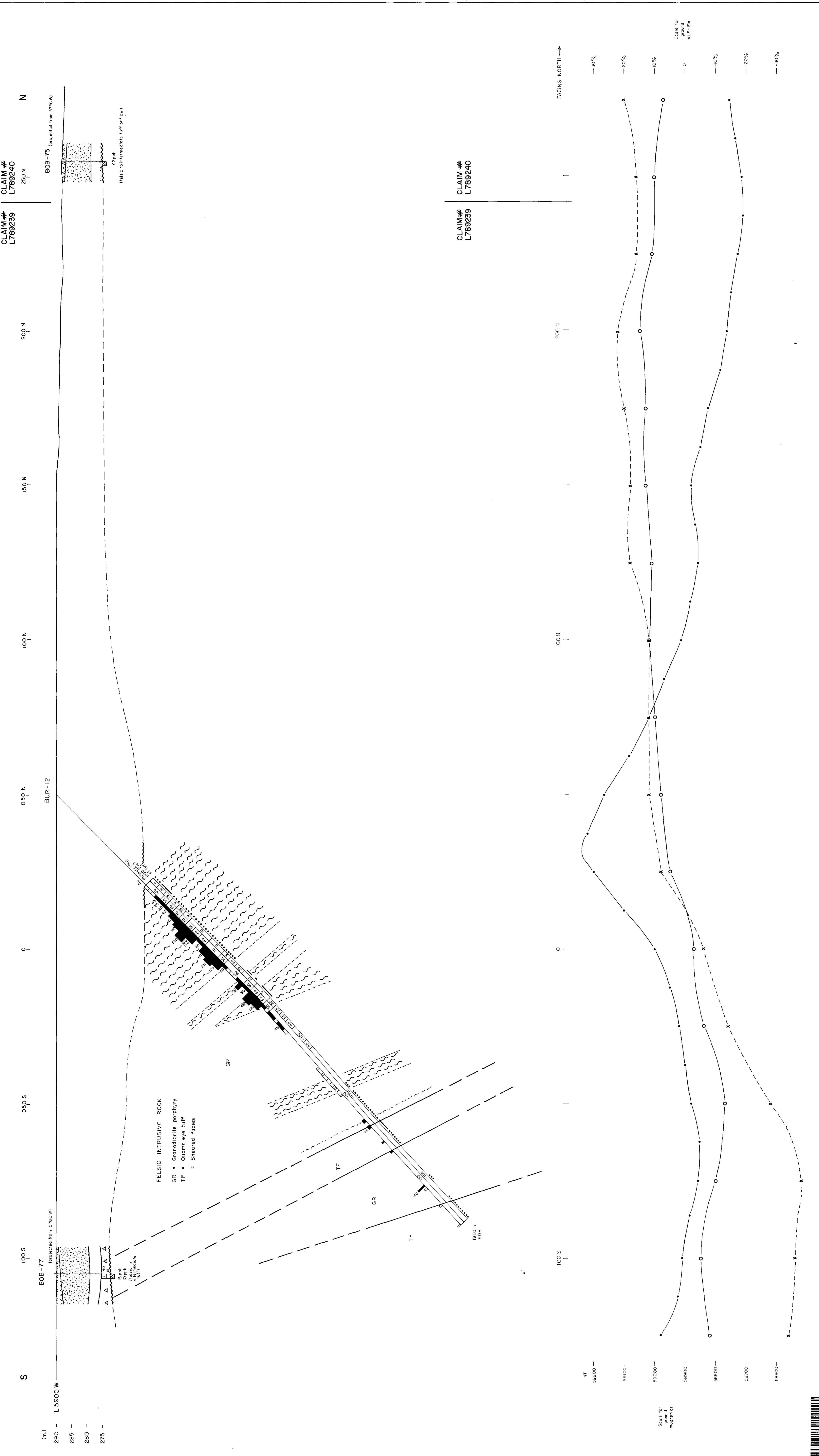
COGEMA Canada
 Live/Ltd

Metres 0 10 20 30 40 50 60
 Feet 0 30 60 90 120 150 180 210

BURNBUSH RIVER PROJECT

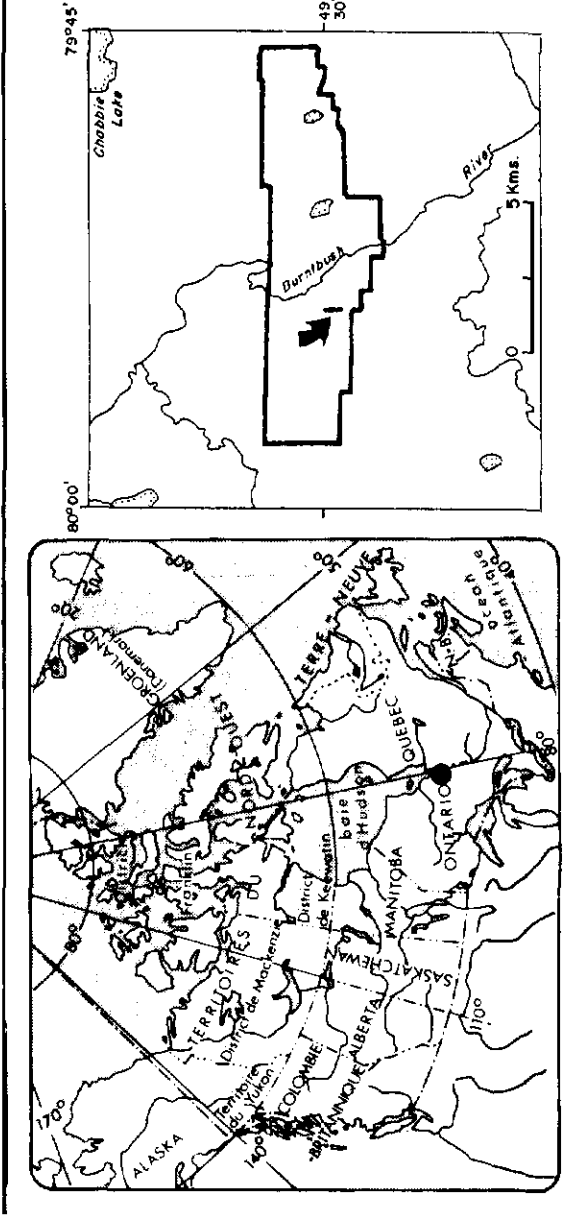
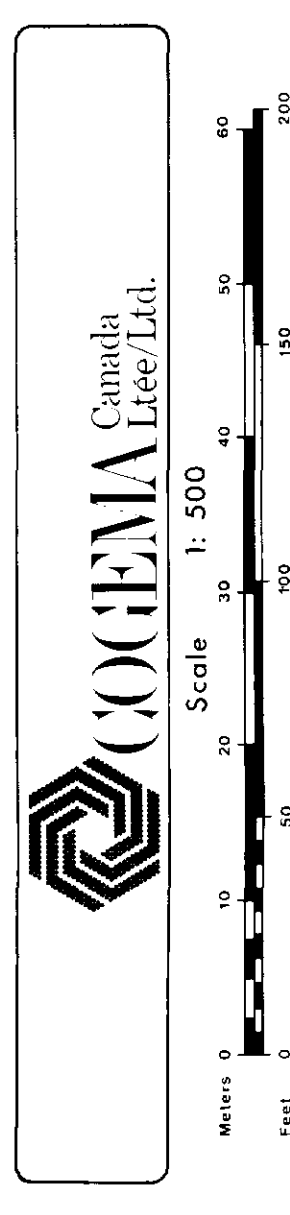
L.5900 W
 DIAMOND DRILL HOLE
 BUR-12
 CROSS-SECTION

Interpretation by: S. Leves, R. St-Jean
 Drawn by: M. Leves, R. A.
 Date: 07-06
 Sheet no. 88-ND-07-03
 Annex no.
 MAP NO. 10

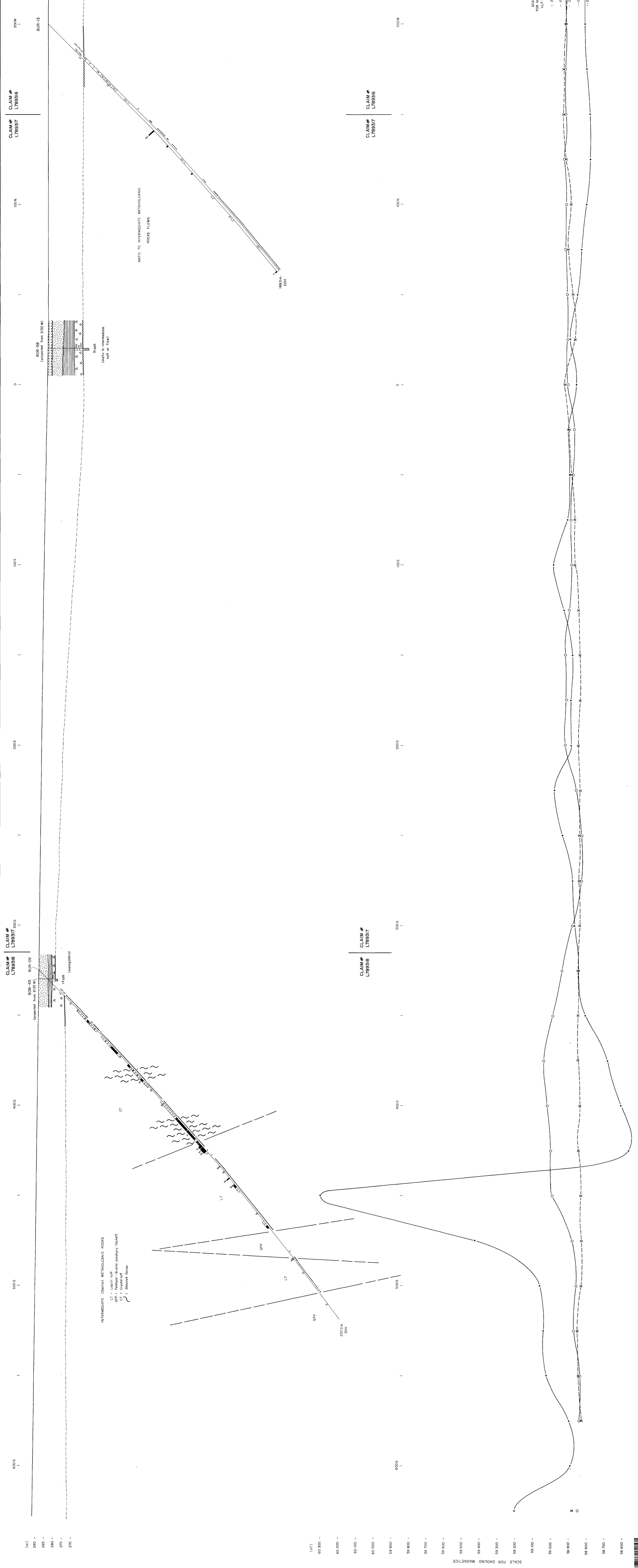
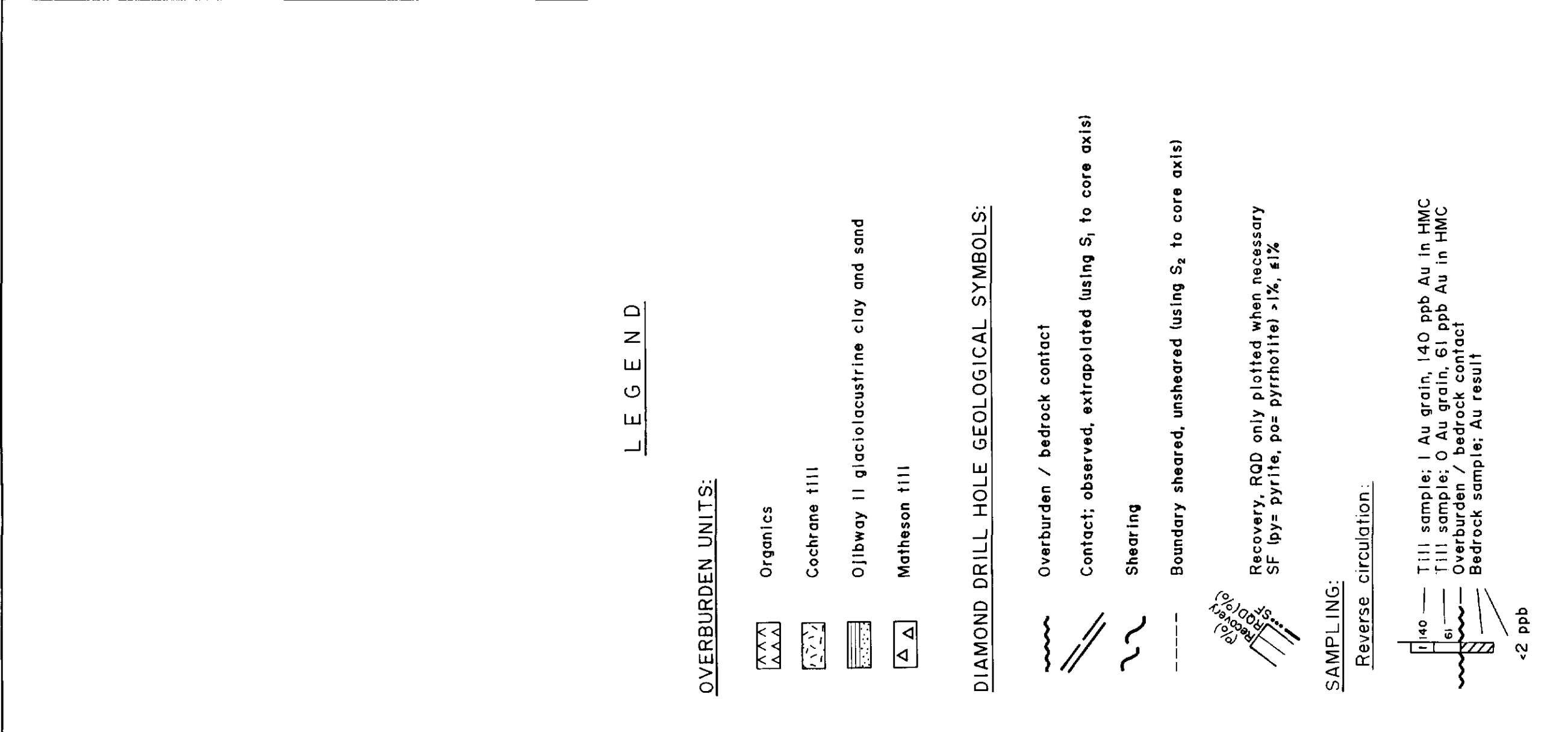
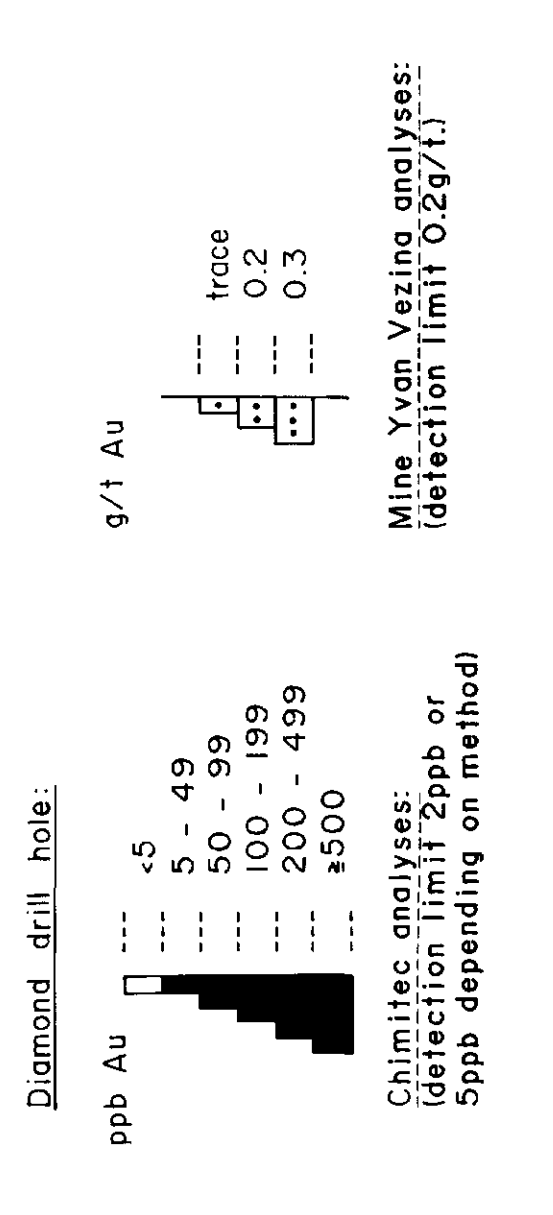




BURNTBUSH RIVER PROJECT
 L2000 W (South)
 DIAMOND DRILL HOLES
 BUR-09, BUR-13
 CROSS - SECTION



- LEGEND**
- OVERBURDEN UNITS:**
- Object 4
 - Object 3
 - Object 2
 - Object 1
 - Object 0
- DIAMOND DRILL HOLE GEOLOGICAL SYMBOLS:**
- Overburden / bedrock contact
 - Contact, observed, anticipated (along S to core out)
 - Shearing
 - Boundary sheeted, unsheeted lining S, to core out
- SAMPLING:**
- Recovery, RDD only drilled when necessary
 - Sp. for p.p.p. for synchroneity, etc.
- GROUND GEOPHYSICS PROFILES:**
- Interpreted IP anomaly
 - Magnetics (NMI field)
 - VLF-EM In - phase
 - VLF-EM quadrature



Scale for Ground Magnetics: 1:10000

Scale for Ground VLF-EM: 1:10000