

GM 61286

FORAGES D'EXPLORATION, PROPRIETE FOXTROT

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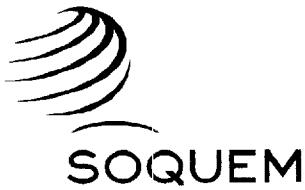


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CENTRE DE SERVICES DES MINES
27 AOÛT 2004
REÇU

**COENTREPRISE UNGAVA
FORAGES D'EXPLORATION, PROPRIÉTÉ FOXTROT
HIVER 2004**

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SOMMAIRE

Des anomalies magnétiques sur la propriété Foxtrot ont mené au forage d'exploration de neuf (9) sites. Au total, 11 trous de forage ont été complétés totalisant une longueur de 2 122,2 m avec 163,1 m de morts-terrains et 1 959,1 m de carotte. Au site G04-184 (Lynx), l'orientation d'un dyke kimberlitique a été définie comme ayant une direction approximative de 345 degrés et un pendage de 50 degrés vers l'est. Au site G04-219 (Lynx nord), une nouvelle zone de dykes kimberlitiques a été découverte cependant, il semblerait que ces dykes ne produisent pas la source des anomalies magnétiques retenues comme cible de forage. La texture et la minéralogie de Lynx et Lynx Nord semblent visuellement identiques. Les anomalies magnétiques des sept autres cibles de forage ont été expliquées par la présence de gneiss et de pegmatite magnétique.

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APPENDICE

Appendice 1 Journaux de sondages

INTRODUCTION

La découverte des corps kimberlitiques diamantifères de l'essaim de Renard a grandement encouragé l'exploration sur la propriété. Cette exploration comporte de la géophysique et des prélèvements de minéraux indicateurs. Parmi les cibles géophysiques offertes, 8 cibles ont été vérifiées par forage à couronne de diamant durant les mois de mars et avril 2004. Durant cette campagne de forage, une nouvelle occurrence de dyke kimberlitique a été découverte (Lynx Nord). Le neuvième site a tenté de déterminer l'orientation du dyke Lynx découvert en octobre 2003.

REMERCIEMENTS

Les travaux de description des carottes ont été accomplis par M. Tyson Birkett, ing. de SOQUEM INC. et Mme Isabelle Lépine, géo. d'Ashton Mining of Canada. La description géotechnique et la manutention des carottes ont été accomplies par M. Éric Gilbert, M. Renaud Robinson, et M. Jean-Pierre d'Ambroise de SOQUEM INC. M. Robert Lucas, géo. et M. Allan O'Connor, géo. d'Ashton Mining of Canada ont supervisé les opérations de forage sur le terrain.

LOCALISATION ET ACCÈS

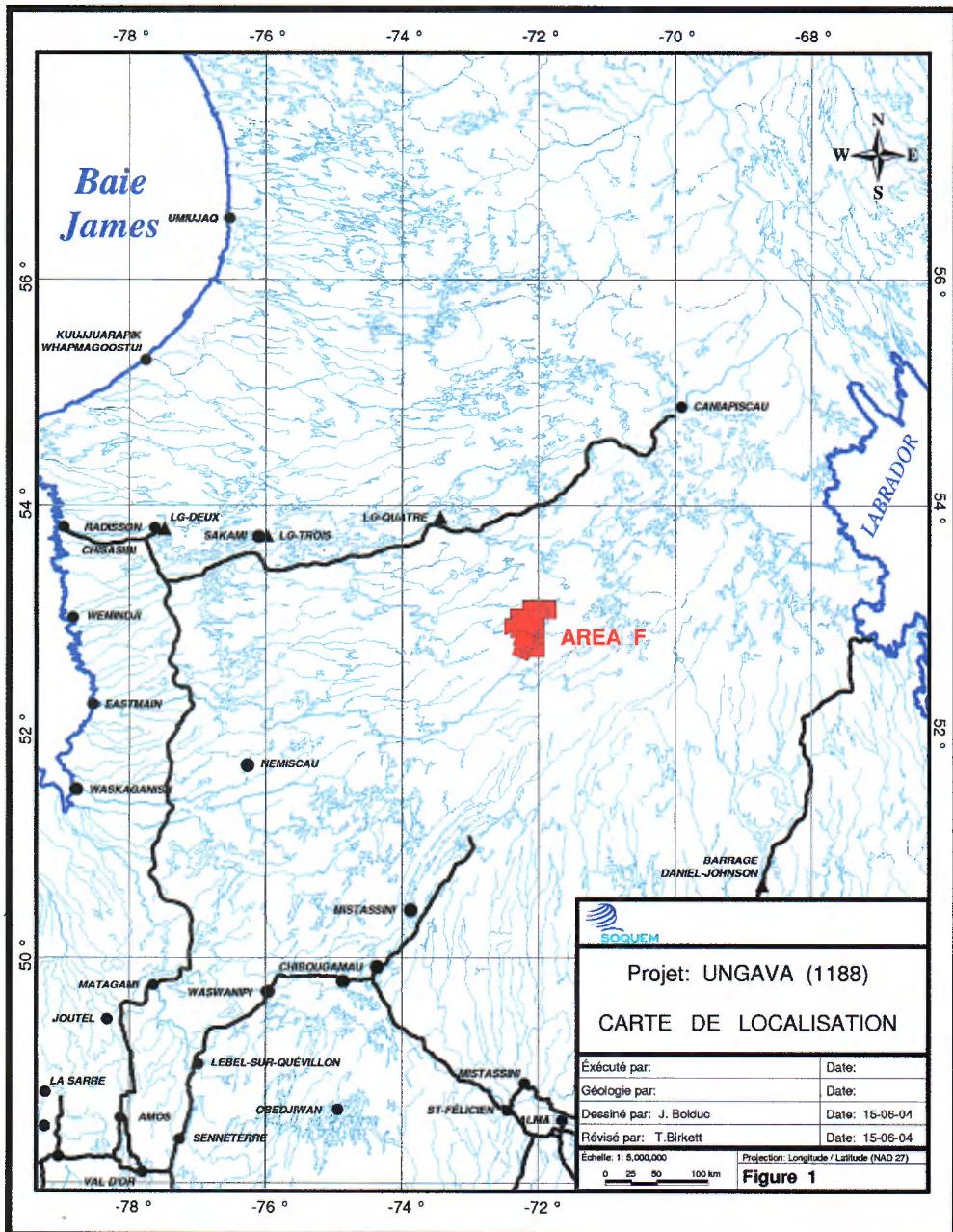
Le permis PEM 1555 se trouve à quelques 150 km sud-est du complexe hydroélectrique LG4 (figure 1) et à environ 400 km au Nord de Chibougamau. L'accès aux sites de forages (figure 2) s'est fait par hélicoptère à partir du camp d'exploration temporaire Lagopède.

CLIMAT, TOPOGRAPHIE, FAUNE ET FLORE

Le permis PEM1555 se situe dans la partie sud du territoire de la Baie-James et offre un climat typique du Nord Canadien avec des températures hivernales pouvant atteindre -50 degrés Celsius et des températures estivales pouvant atteindre +30 degrés Celsius. Durant les forages d'exploration, des températures variant entre -20 degrés et 0 degré ont été observées. Le territoire couvert par la propriété Foxtrot 1555 démontre un relief relativement faible à moyen avec quelques montagnes pouvant atteindre une dénivellation verticale d'environ 250 m. La végétation est éparses et typique de la taïga, elle se compose principalement d'épinettes noires et d'un type de lichen appelé communément mousse à caribou (cladonie boréal). La faune est relativement peu abondante, durant la saison hivernale, seuls des caribous et des renards, ont été observés cependant, en saison estivale, quelques loups, ours, orignaux de même que des buses à queue rousse et autres oiseaux sont présents sur le territoire.

TRAVAUX ANTÉRIEURS

La géologie à l'échelle régionale a été cartographiée par Hocq (1983) et permet d'établir une base géologique pour l'exploration minière de cette région. Il n'y a pas de travaux d'exploration antérieurs à l'exploration diamantifère SOQUEM – Ashton connue sur la propriété. La coentreprise a eu recours à l'échantillonnage de minéraux indicateurs, à des levés géophysiques et au forage sur cette propriété. Ces travaux ont été documentés et soumis comme travaux statutaires.



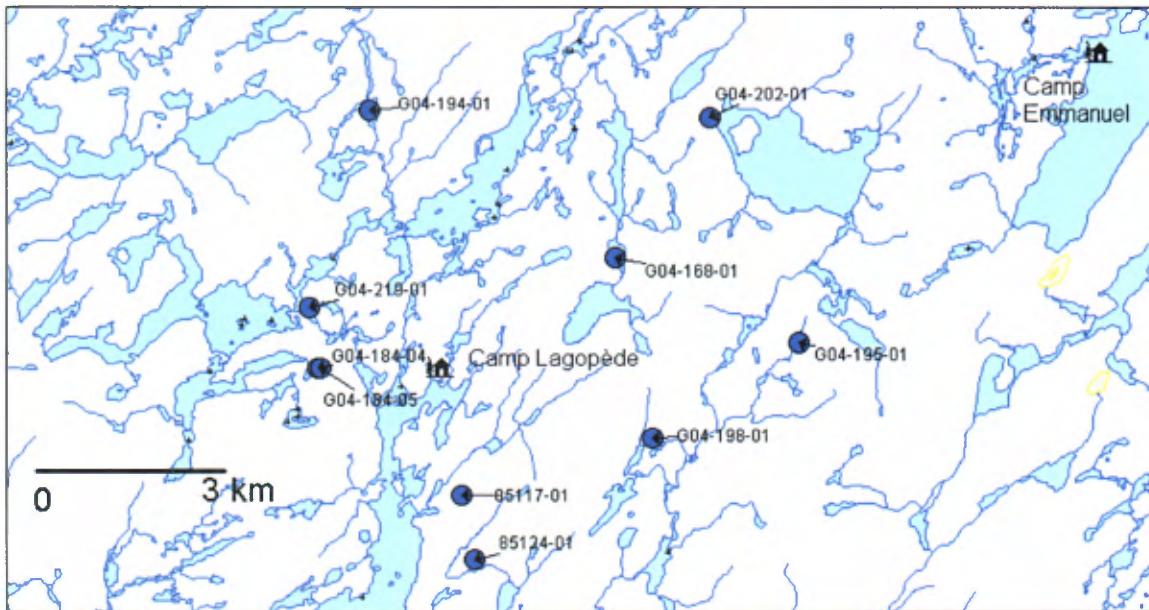


Figure 2 : Localisation des forages.

PROGRAMME DE FORAGES

Neuf anomalies magnétiques ont été vérifiées par 11 trous de forages à couronne de diamant. Tous ont démontré des lithologies magnétiques cependant les proportions de ces lithologies observées ne sont pas suffisantes pour expliquer la cause de toutes les anomalies. Au total, 11 trous de forage ont été complétés totalisant une longueur de 2 122,2 m avec 1 63,1 m de morts-terrains et 1 959,1 m de carottes (tableau 1).

Tableau 1 – Localisations des forages, longueurs

Forage	Permis	Est	Nord	Azimut	Dip	Longueur	Morts-terrains	Roc	Casing
Numéro	(PEM)	(m)		(degrés)		(m)			retiré
		NAD 27	Zone 18						
85117-01	1555	688842	5853519	0	-45	198.0	2.8	195.2	oui
85124-01	1555	689045	5852473	324	-50	195.0	24.5	170.5	non
G04-168-01	1555	691298	5857349	60	-45	204.3	18.3	186.0	oui
G04-194-01	1555	687354	5859719	90	-45	132.7	34.5	98.2	non
G04-195-01	1555	694263	5856000	227	-50	222.0	4.9	217.1	oui
G04-198-01	1555	691911	5854458	338	-50	180.0	8.0	172.0	oui
G04-202-01	1555	692815	5859603	204	-45	240.0	40.0	200.0	non
G04-184-04	1555	686530	5855566	292	-50	171.0	3.0	168.0	non
G04-184-05	1555	686570	5855571	270	-50	160.0	2.3	157.7	non
G04-219-01	1555	686386	5856550	270	-50	147.0	13.0	134.0	oui
G04-219-02	1555	686386	5856550	270	-55	162.2	11.8	150.4	oui
Total						2012.2	163.1	1849.1	

SÉLECTION DES CIBLES

Les cibles de forage ont été sélectionnées à partir de levés magnétiques. Les anomalies recherchées devaient coïncider avec les résultats des levés magnétiques et de résistivité électrique des cheminées kimberlitiques de l'essaim de Renard et si possible, avec des traînées de minéraux indicateurs.

RÉSULTATS DU PROGRAMME DE FORAGES D'EXPLORATION

Le forage exécuté sur l'anomalie G04-184 a permis une meilleure compréhension de l'orientation des dykes de kimberlites découverts pendant la campagne de forage d'exploration de l'automne 2003. L'anomalie G04-219 a démontré de petits dykes kimberlitiques similaires à G04-184 (l'occurrence Lynx). Il est peu probable que ces dykes ont causé l'anomalie magnétique observée sur ce site. Le forage sur les anomalies 85117, 85124, G04-168, G04-194, G04-195, G04-198 et G04-202 n'a récupéré que du matériel gneissique et pegmatitique magnétique dépourvu de valeur économique.

Dans l'échantillonnage du diamant, l'effet de pépite domine les résultats. Par conséquent, des échantillons de moins que quelques centaines de kg n'offrent pas d'information valable. Des échantillons de carottes d'exploration de quelques kg ne sont pas considérés assez fiables pour être analysés. Donc les forages de Lynx et de Lynx Nord n'ont pas été analysés pour leurs contenus en diamant.

DESCRIPTION DES CAROTTES DE FORAGE

Paramètres d'observation

Le programme de forage d'exploration pour l'hiver 2004 a été établi afin d'expliquer les présences de certaines anomalies magnétiques détectées par des levés aéroportés et des levés terrestres de magnétomètre. Plusieurs de ces anomalies étaient associées avec une faible résistivité apparente. Dû au fait que la kimberlite faisait l'objet principal de cette campagne d'exploration, une attention particulière a été donnée aux roches brèchifiées, aux veines de composition anomale dans la roche encaissante, à la présence de calcite, d'hématisation ou autres altérations des feldspath et zones démontrant des anomalies magnétiques. Ces éléments étaient décrits en plus des observations sur la lithologie et les fabriques que peuvent démontrer les carottes.

La susceptibilité magnétique a été mesurée avec un espacement aux 0,5 m sur toutes les carottes de forage d'exploration. Pour les carottes contenant des dykes kimberlitiques, des mesures aux 0,2 m ont aussi été effectuées sur des zones autour les dykes. Des mesures aux 0,1 m ont été effectuées localement pour les dykes kimberlitiques afin d'avoir un profil de susceptibilité magnétique plus détaillé.

Lithologies

Durant la campagne de forage d'exploration, trois groupes de lithologies ont été répertoriés : gneiss gris, granite et kimberlite. La présence de petits dykes de diabase a aussi été observée sur trois sites de forage.

Le gneiss gris compose plus de 80 % du sous-sol en se basant sur les affleurements et les forages sur la propriété. Ces gneiss sont composés principalement de plagioclase, quartz et biotite; on y retrouve aussi du clinopyroxène, de l'orthopyroxène et de la hornblende. De petites quantités de magnétite peuvent être observées localement et la présence de grenat est sporadique. Les roches de cette famille sont généralement à grains fins et représentent des textures et un assemblage de minéraux hétérogènes. Vus au microscope, ces gneiss démontrent une texture polygonale du quartz et du feldspath de même que des cristaux tabulaires de biotite modérément à fortement orientés parallèles à la gneissosité. Les couches de pegmatite riche en feldspath sont généralement parallèles à la gneissosité formée par la différentiation de minéraux et elles démontrent des rémanences de charnière de plis. Ces couches forment typiquement 10 % des unités de gneiss, elles sont interprétées comme étant des roches d'origine métamorphique qui ont subi une rotation pour se conformer à la gneissosité obtenue pendant un épisode de déformation subséquente. De petites zones de fractures remplies par des minéraux secondaires, notamment de quartz, de pyrrhotite et de pyrite ont été observées dans la plupart des carottes. Ces fractures semblent être des éléments reliés à une période de déformation tardive à faible température. De petites veines de calcite accompagnent localement ce type de fractures.

Le granite est commun dans certaines parties de la propriété, il est généralement de couleur rose à beige rosâtre, à grains moyens et est composé de quartz, feldspath potassique et de plagioclase. De petites quantités de minéraux mafiques, notamment de la biotite, du hornblende et pyroxènes y sont aussi présents. On y retrouve parfois des traces de grenats qui semblent être concentrés près du contact entre le granite et le gneiss. Les unités de granite sont généralement massives cependant, quelques unités démontrent des effets de déformations représentées par une faible orientation préférentielle des minéraux ou par des couches de différentiation de certains minéraux.

La kimberlite, intersectée par le forage d'exploration, forme de minces unités au travers du gneiss et du granite. Ces occurrences ont été désignées comme étant des dykes de kimberlite qui ont infiltré la roche encaissante. Ces dykes ont une épaisseur de quelques centimètres pouvant atteindre jusqu'à 2 mètres. Ils sont composés de macrocristaux d'olivines (maintenant serpentinisés) pouvant atteindre une longueur de 1,5 cm et d'une masse microcristalline de serpentine, de calcite et autres minéraux trop petits pour identifier sans avoir de spécimens en lames minces. Les macrocristaux démontrent une zonalité à l'intérieur des dykes. On y retrouve une population à grains plus grossiers au centre des dykes et graduellement, la taille et le nombre de macrocrysts d'olivines diminuent vers le contact entre le dyke et la roche encaissante. La présence de ségrégation de calcite peut être observée dans les dykes cependant, une quantité plus abondante est visible en marge des dykes. De petites veines de calcite présentes, soient seules ou groupées et mesurant de 1 à 2 mm d'épaisseur, se retrouvent aussi principalement en marge des dykes et semblent avoir en majorité une orientation parallèle à la marge. Le magnétisme des dykes semble être proportionnel à l'épaisseur des dykes. Les petits dykes sont pas ou peu magnétiques et les dykes plus épais ont un magnétisme modéré à fort. Les dykes de kimberlite sont de couleur gris-foncé à l'exception du dyke retrouvé à G04-219-02 qui est de couleur grise et possède 10 % de petits xénolites altérés. Des macrocristaux d'ilménite et de grenat sont présents dans tous les dykes observés durant le forage d'exploration. Ces minéraux sont tous visiblement semblables à ceux qui ont été retrouvés dans les blocs de surface près de l'occurrence Lynx découverte en automne 2003. L'ilménite démontre un clivage, plusieurs petites inclusions de sulfures et aucune altération. Tous les pyropes sont

entourés d'une bordure de kelyphite interprété comme étant un produit d'altération du grenat. Pour certains individus, seulement la kelyphite est présente due à une altération complète du minéral original. Ces individus sont interprétés comme étant originellement des grenats. À la zone de contact entre le dyke et la roche encaissante, cette dernière est fortement serpentiniée sur une distance maximale de plus de 10 cm du dyke. La serpentinitisation semble être proportionnellement reliée à l'épaisseur du dyke.

De minces dykes de diabase mesurant 1,5 m, 0,8 m et 0,3 m ont été interceptés aux sites G04-184, G04-194 et G04-219 respectivement. La diabase est massive, grise, homogène et possède une petite quantité de cristaux foncés d'olivine ou de pyroxène dans une masse microcristalline dominée par des plagioclases et un minéral mafique (pyroxène ?) de taille trop petite pour être identifiée. Les petits dykes de diabase interceptés sont typiquement non magnétiques et les plus épais, faiblement à modérément magnétiques.

Susceptibilité magnétique

Toutes les carottes de forage procurent une signature de susceptibilité magnétique neutre avec des pics faibles à moyennement magnétiques. Ces patrons résultent de couches pegmatitiques, granitiques et gneissiques minces à l'intérieur d'une unité non magnétique de gneiss gris. Le granite est typiquement non magnétique; cependant les quelques grains de magnétite présent peuvent produire des pics positifs dans le profil de susceptibilité magnétique. Le granite pegmatitique possède un plus grand pourcentage de magnétite diffuse produisant un patron de susceptibilité magnétique irrégulier.

Les petits dykes kimberlitiques ou de diabase sont typiquement non magnétiques et les dykes plus volumineux démontrent une susceptibilité magnétique moyennement à hautement élevée. Certains dykes de diabase de la région qui ont été forés par le passé ont démontré une susceptibilité magnétique élevée.

DISCUSSION

Géologie régionale

Le sous-sol rocheux de la région est d'âge archéen à l'exception des intrusions kimberlitiques. La cartographie de la géologie régionale par Hocq (1985) a démontré que les forages d'exploration de l'hiver 2004 sont localisés dans une ceinture de roches hautement métamorphisées à quelques km au Nord du granite de la rivière Misasque. La présence d'hyperstène et de biotite est fréquente dans les gneiss intermédiaires et felsiques indiquant des conditions métamorphiques du faciès de granulites. La cordierite retrouvée dans la région suggère un métamorphisme de faible pression. Les dykes de diabases de l'essaim de Mistassini ne semblent aucunement métamorphisés.

Les roches archéennes qui forment le socle rocheux de la région démontrent des plis ptygmatisques définis par de petites zones pegmatitiques et des flancs de charnières déchirés. Ces caractéristiques démontrent plusieurs périodes de déformations et de métamorphismes intenses accompagnées par de la fusion partielle.

Les textures des roches granitiques observées durant le forage d'exploration démontrent qu'elles ont subi une faible déformation. Les granites sont soupçonnés être liés à l'emplacement du granite de la rivière Misasque. Une population de roches granitiques altérées retrouvées comme xénolites dans la roche kimberlitique composant l'essaim de Renard suggère la présence de granite en profondeur.

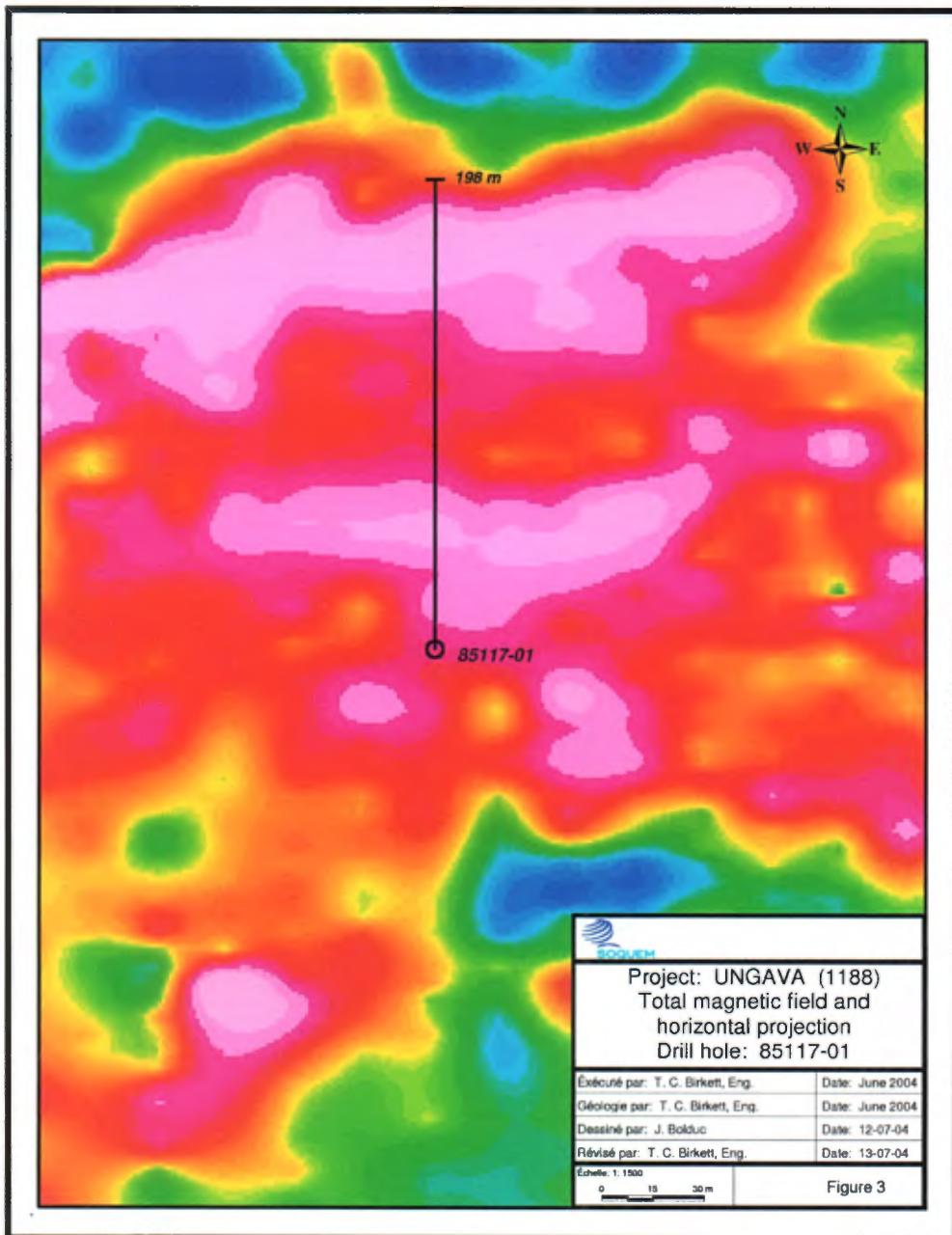
Le forage accompli dans des vallées linéaires semble démontrer que la roche possède généralement une fracturation plus développée à ces endroits. Les zones de fracturations semblent être reliées aux failles créant ces vallées. Dans certaines régions, de telles zones de failles sont reliées aux roches kimberlitiques en facilitant la montée de magma à la surface.

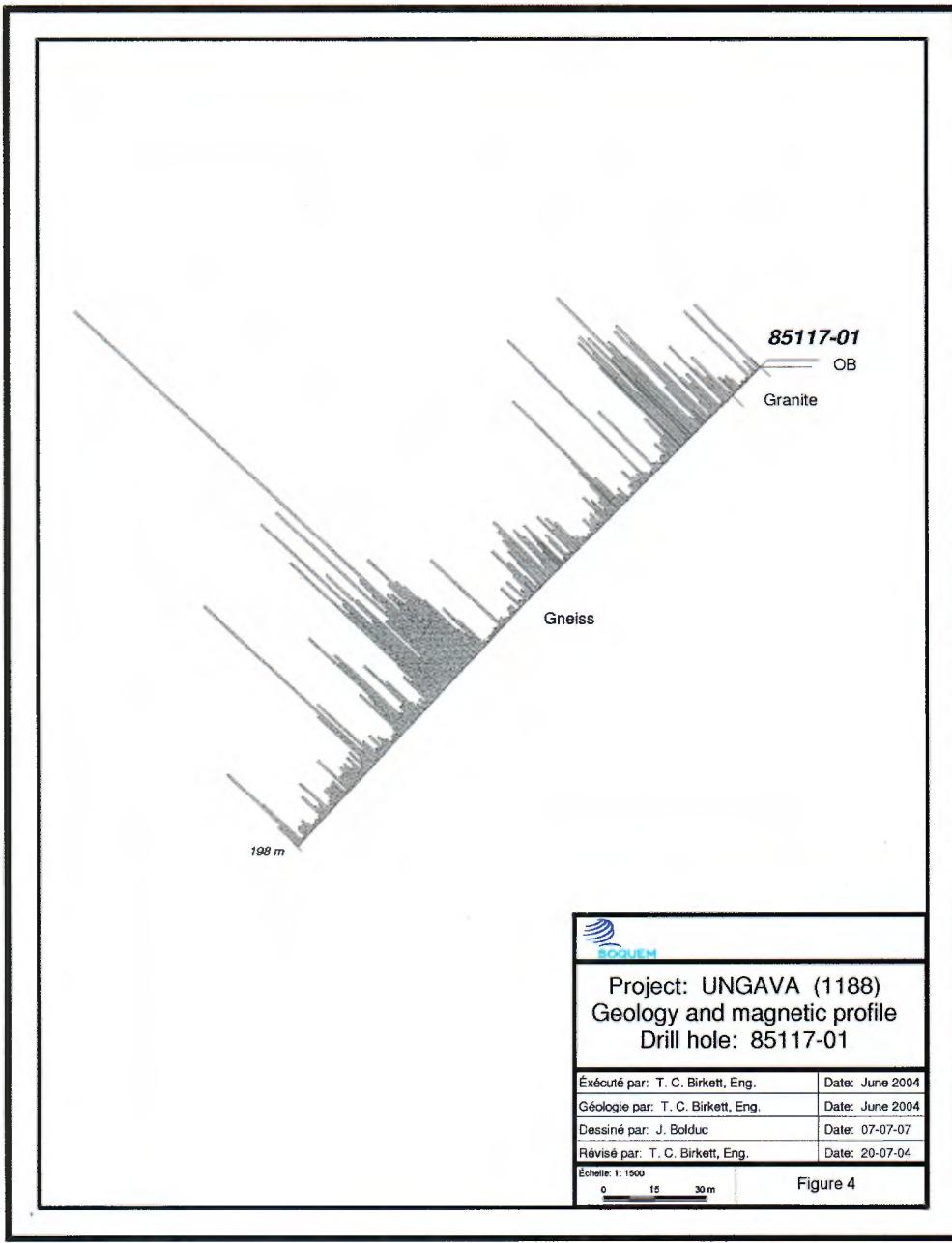
Géologie locale

Les lithologies intercalées et une abondance de structures mineures indiquent une complexité de la géologie locale. L'orientation de la foliation de même que les contacts majeurs entre les différentes lithologies est encore méconnue et ne permet pas de corrélation précise avec les données de géophysique de la région. Les structures démontrées par les roches métamorphiques se répètent typiquement à plusieurs échelles, devenant donc fractales. Les critères de sélection pour cibles de forage ont effectivement isolé une population de pegmatite et de gneiss magnétique. Des contacts quasi-horizontaux peuvent être la cause de certains de ces anomalies qui ne peuvent être expliquées de manière quantitative. Le forage passerait donc en dessous des cibles magnétiques et la carotte ne démontrerait qu'une faible proportion de roches magnétiques. Les zones de faibles résistances électriques n'ont pas été expliquées par l'observation des carottes de forage d'exploration.

Cible 85117

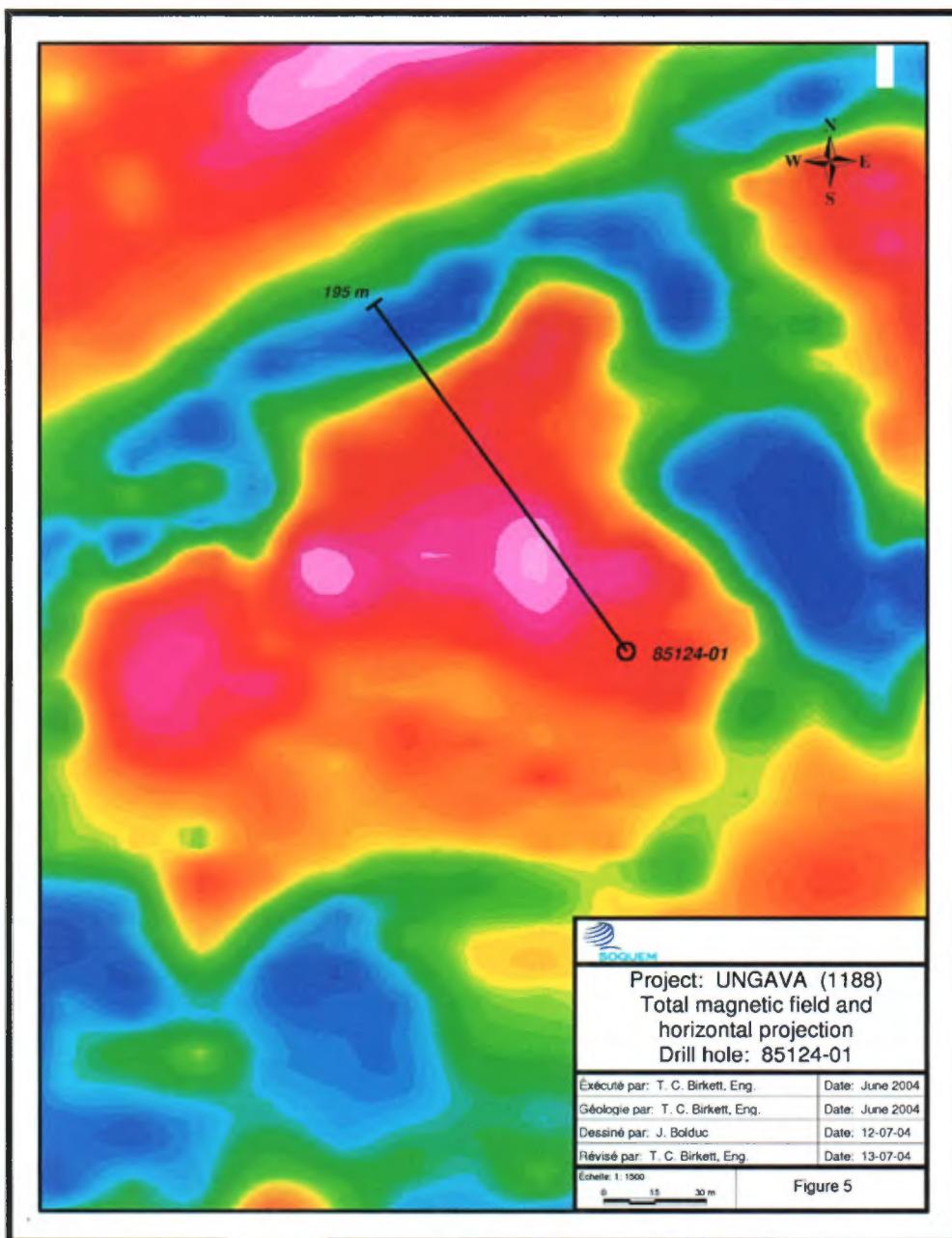
La cible 85117 est illustrée à la Figure 3. Elle est située sur ce qui semble être la tête d'une traînée de minéraux indicateurs. Une section magnétique (Figure 4) démontre une anomalie complexe possédant deux zones anomalies expliquées par des roches magnétiques.

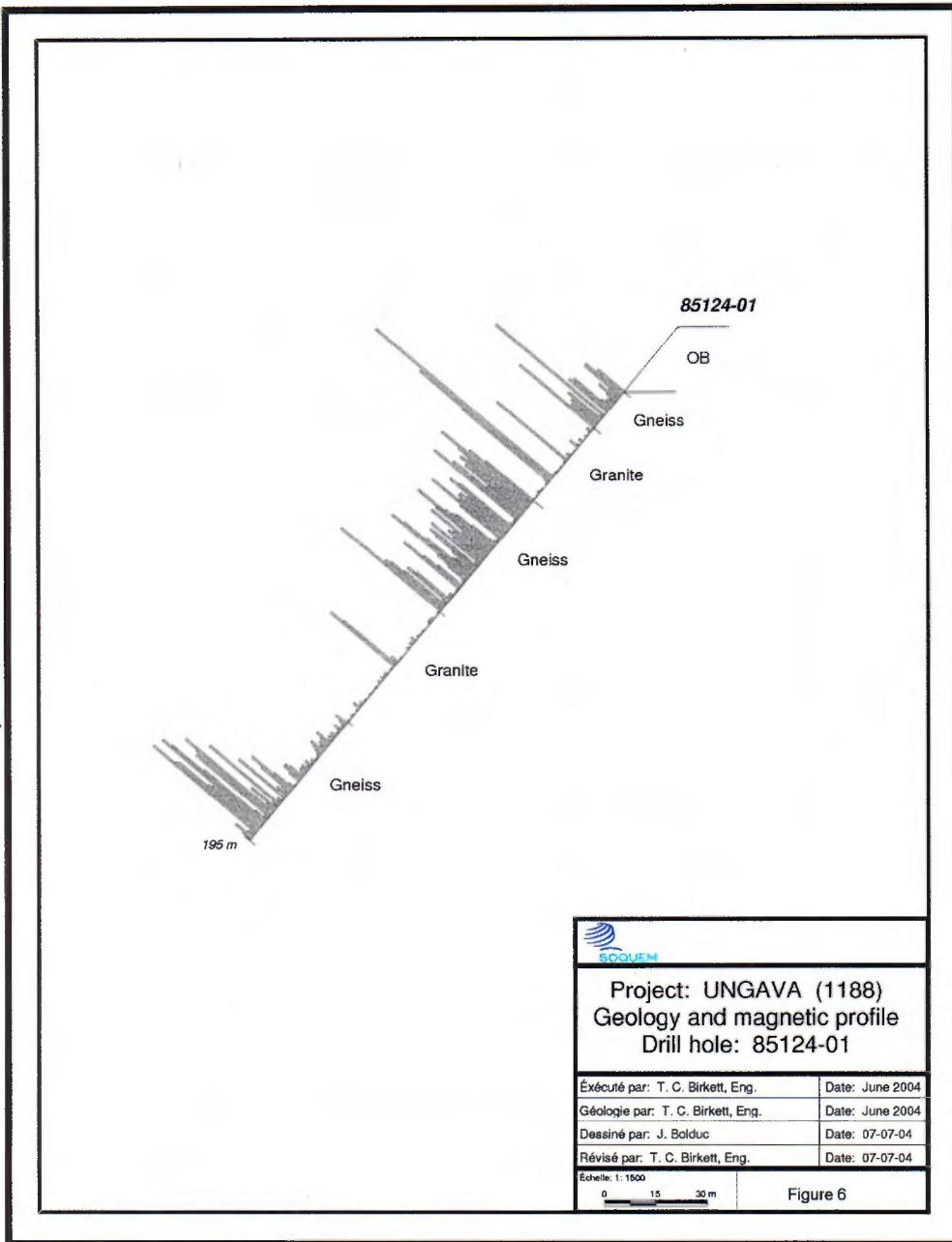




Cible 85124

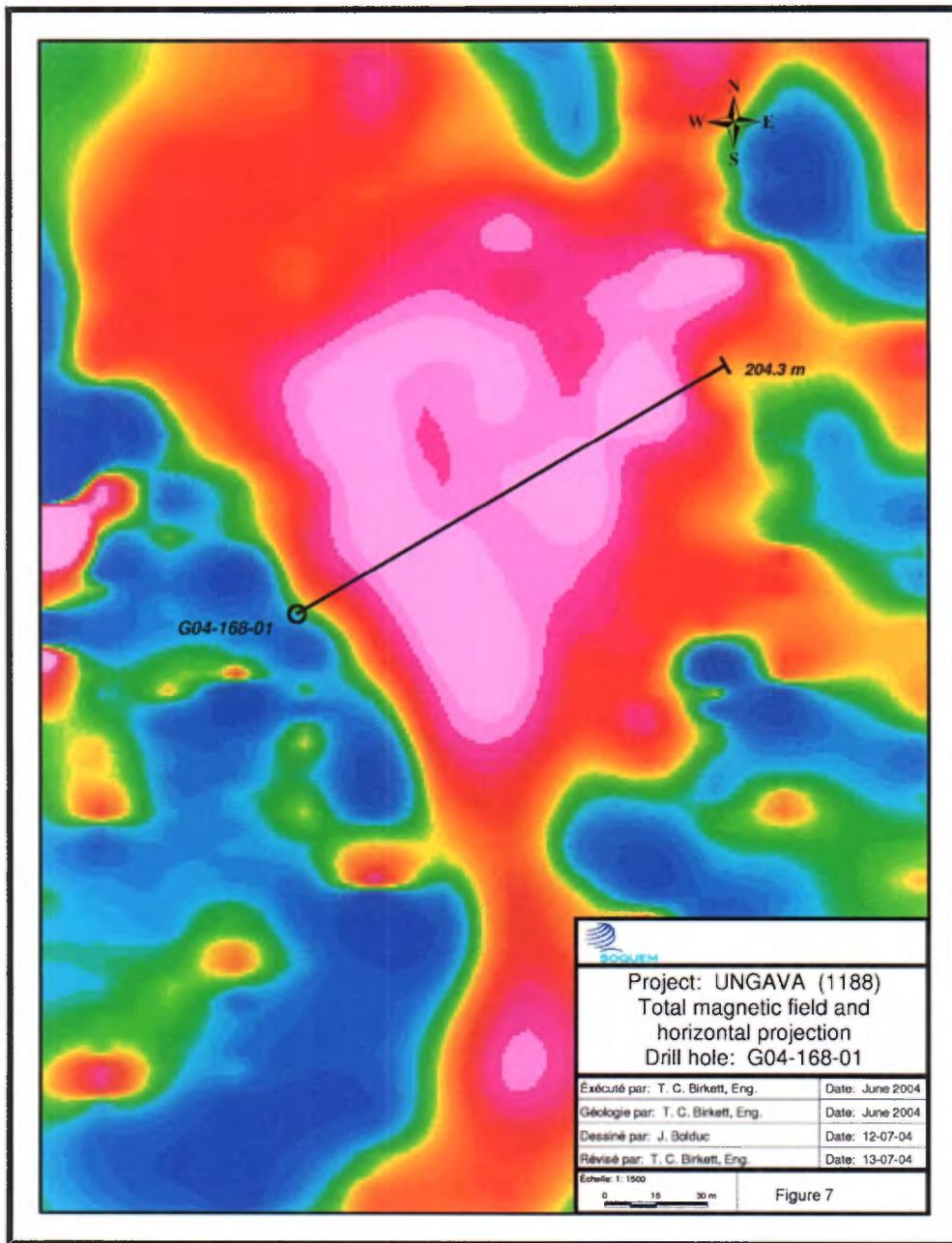
Une carte magnétique de la cible 85124 (Figure 5) démontre deux sites positifs et une vallée prononcée, confirmés sur le profil de susceptibilité magnétique de la figure 6 et expliqués par la variation de la susceptibilité magnétique de la roche encaissante.

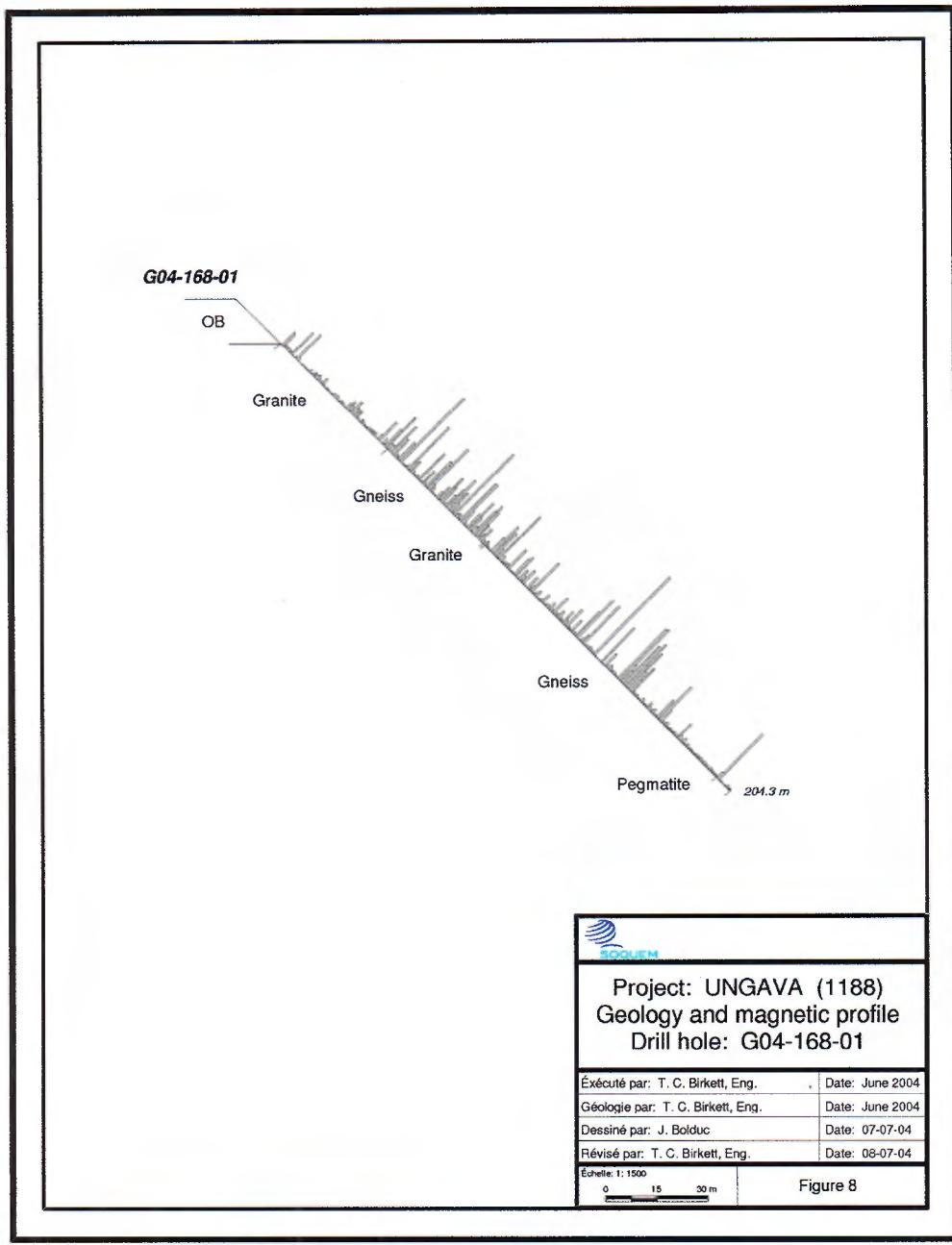




Cible G04-168

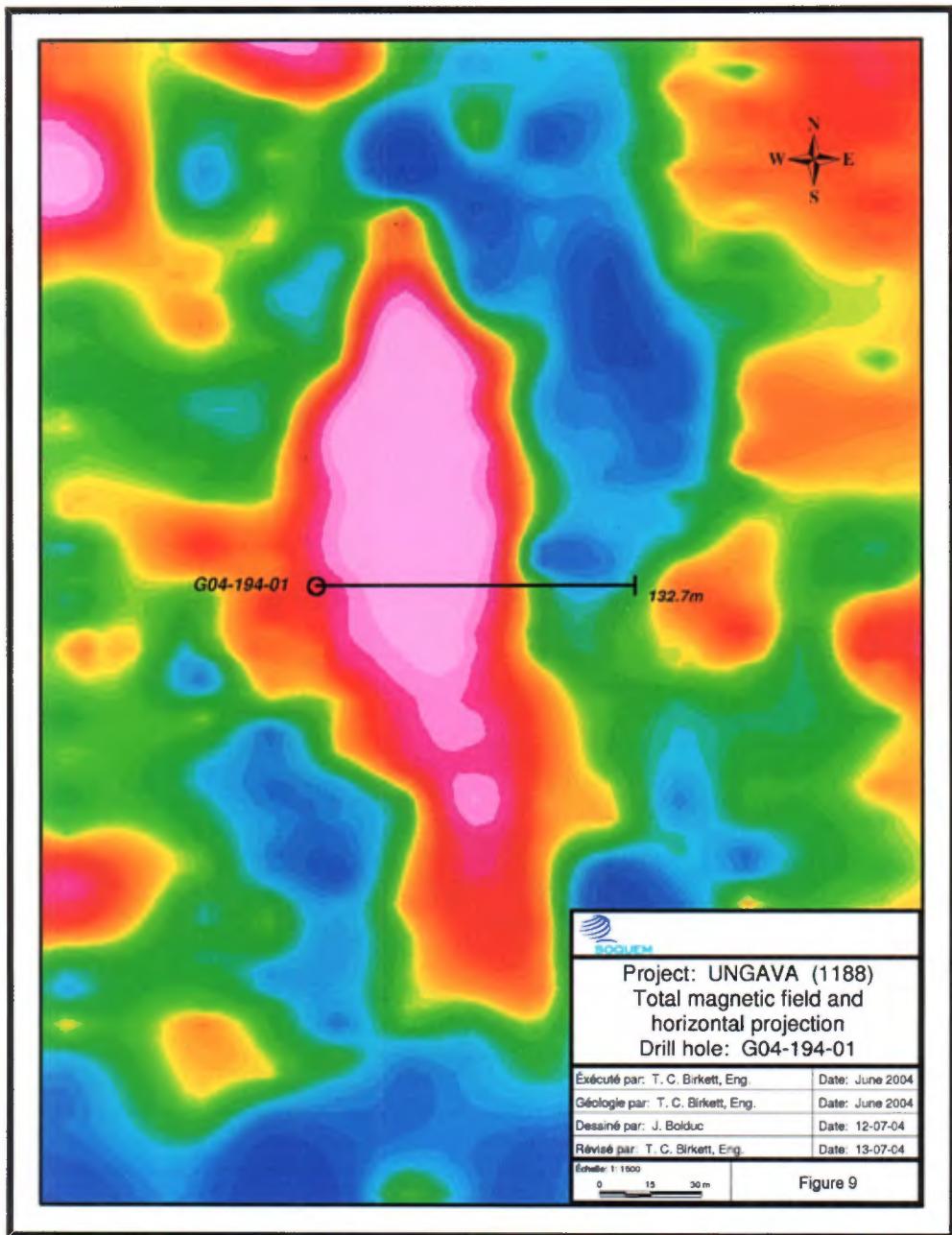
Une anomalie magnétique positive au site du forage G04-168 est illustrée sur la figure 7 de même qu'une projection horizontale du trou d'exploration G94-168-01. Bien que les lectures de susceptibilité magnétique de G04-168-01 ne soient pas intenses, le contraste des lectures illustré sur la figure 8 correspond au site et à l'étendue de l'anomalie magnétique.

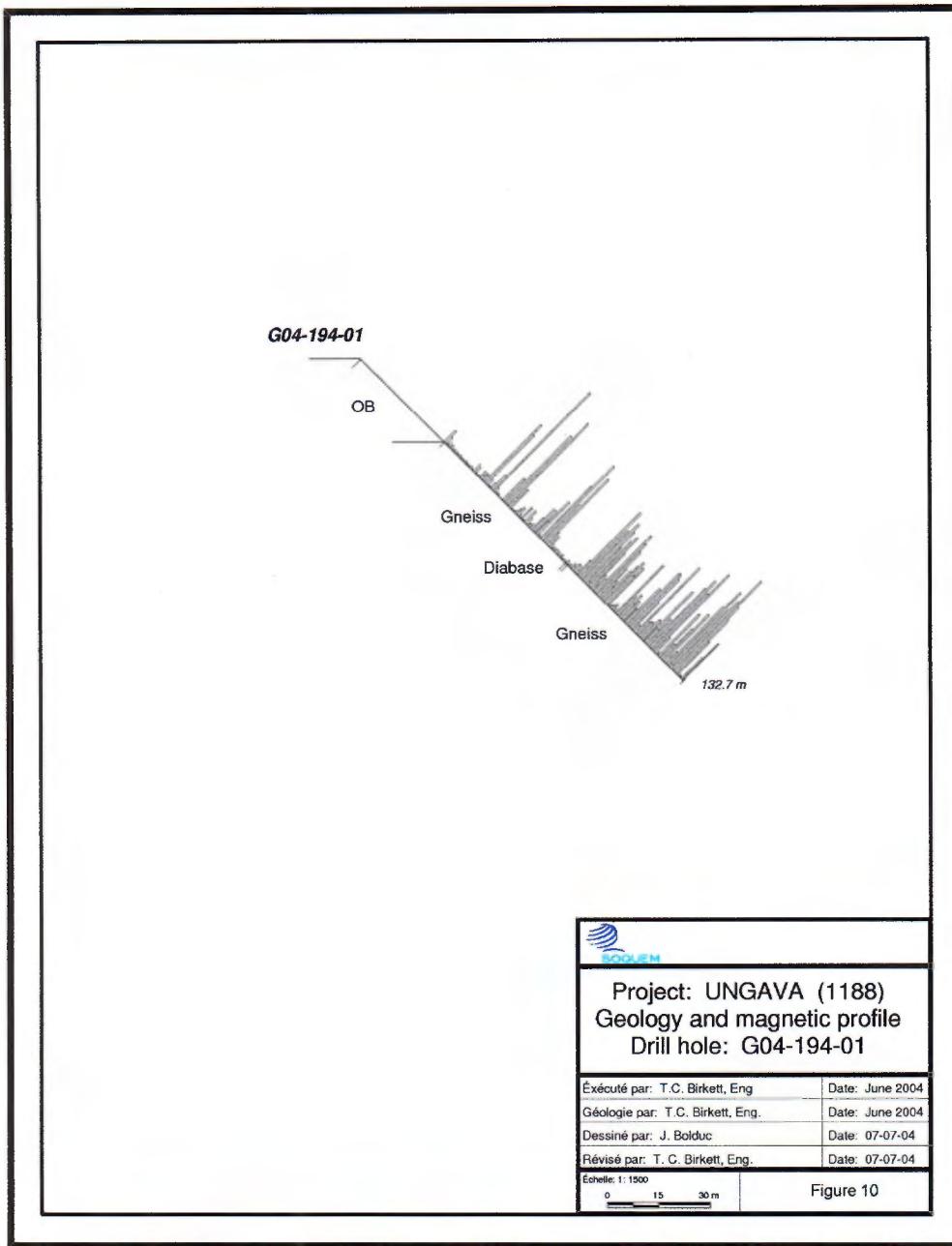




Cible G04-194

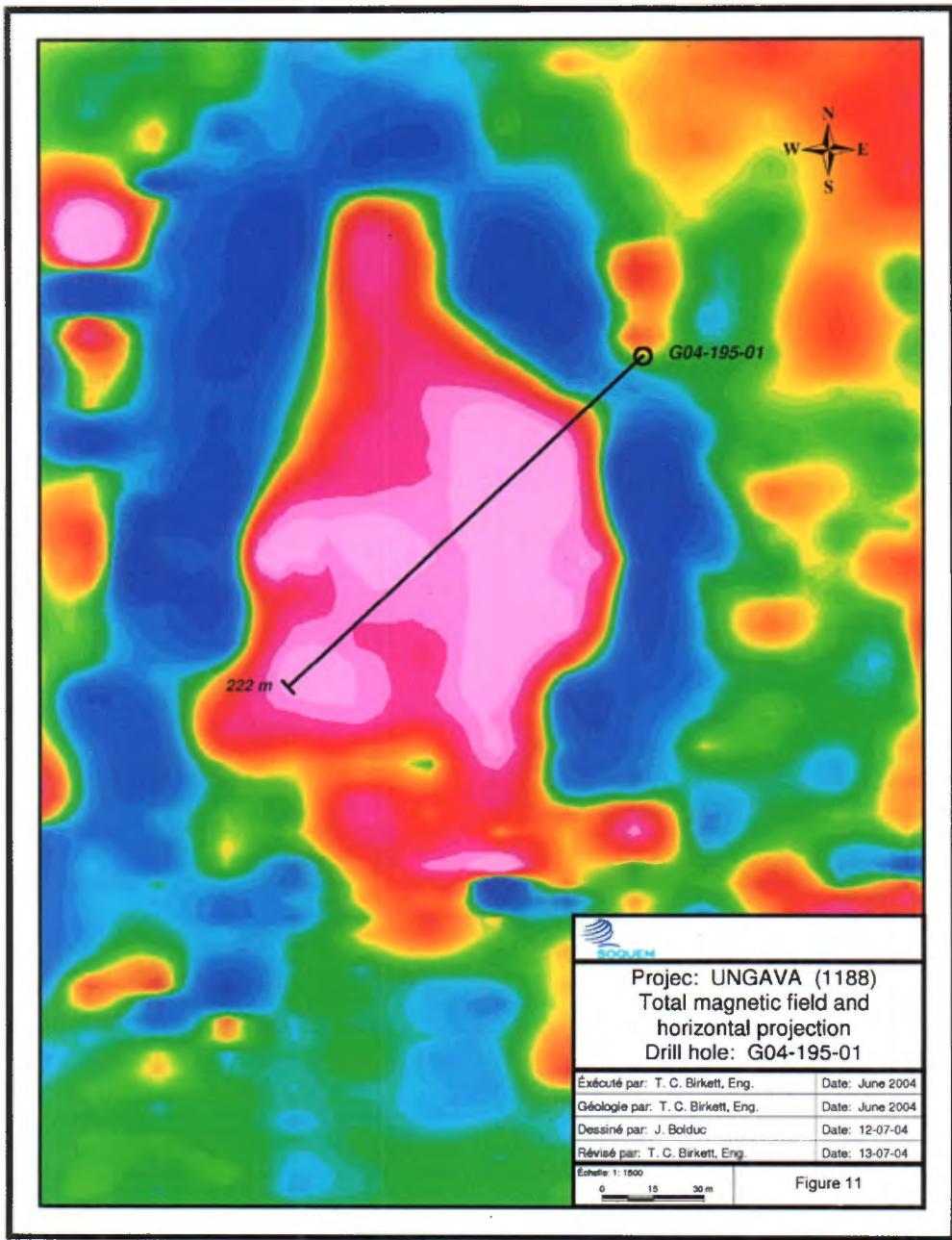
Une petite anomalie magnétique avec une élongation nord-sud était recherchée et identifiée par le forage d'exploration G04-194 (figure 9). Du gneiss et de la pegmatite magnétique semblent être la cause de l'anomalie magnétique (figure 10).

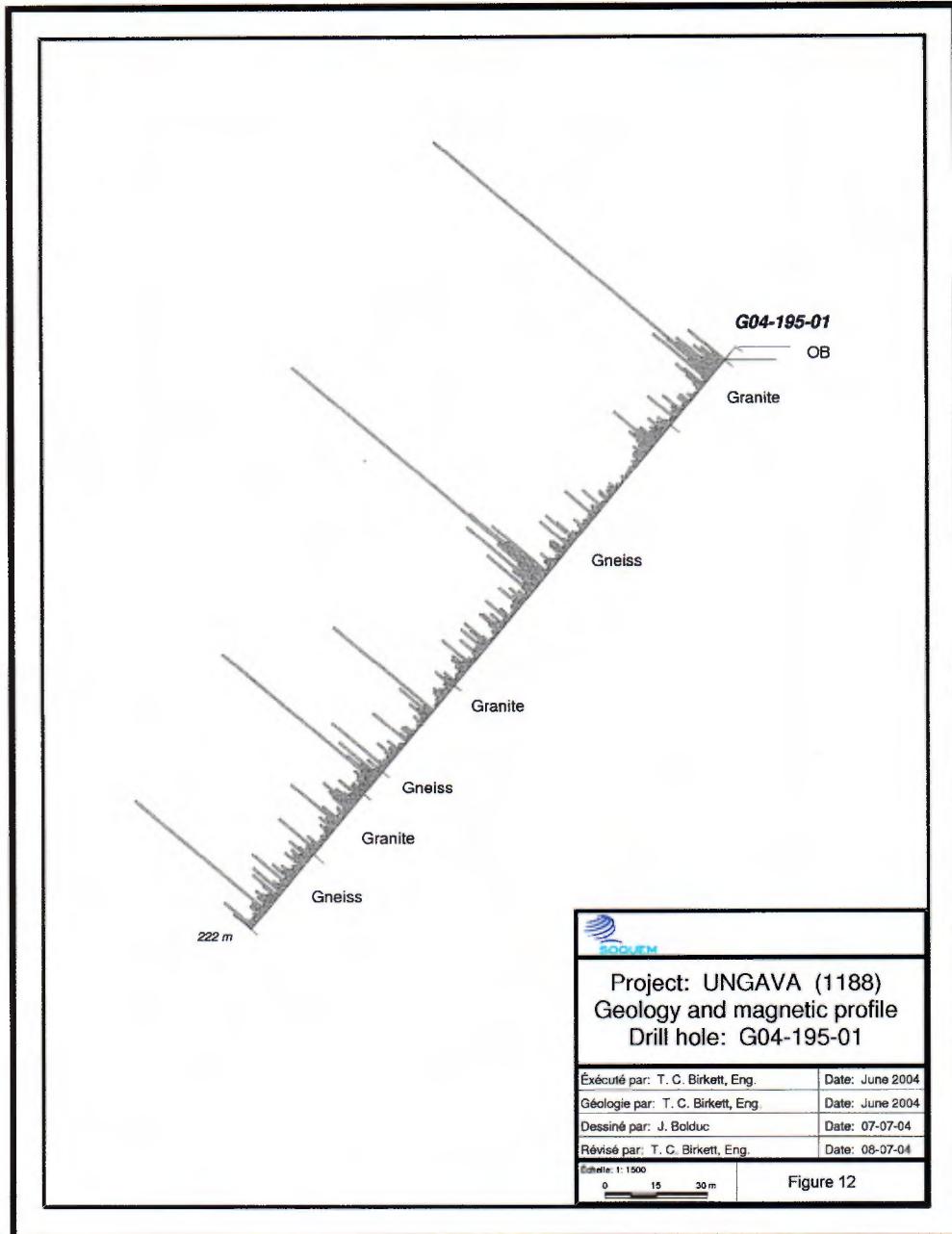




Cible G04-195

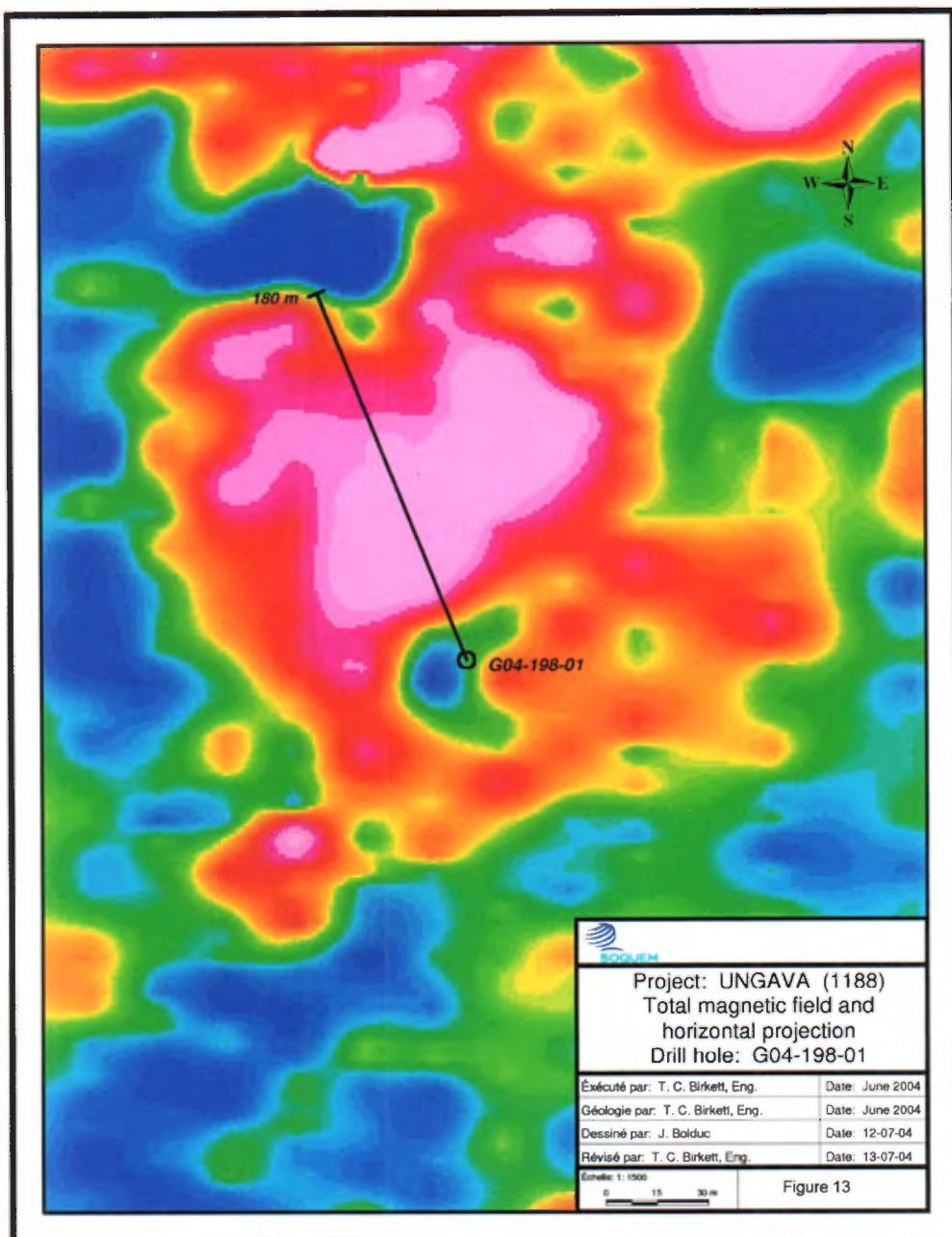
Le levé de champ total magnétique au sol, illustré à la figure 11 démontre une petite et complexe anomalie qui est représentée par de petites sections à intensité élevée de susceptibilité magnétique sur la carotte (Figure 12).

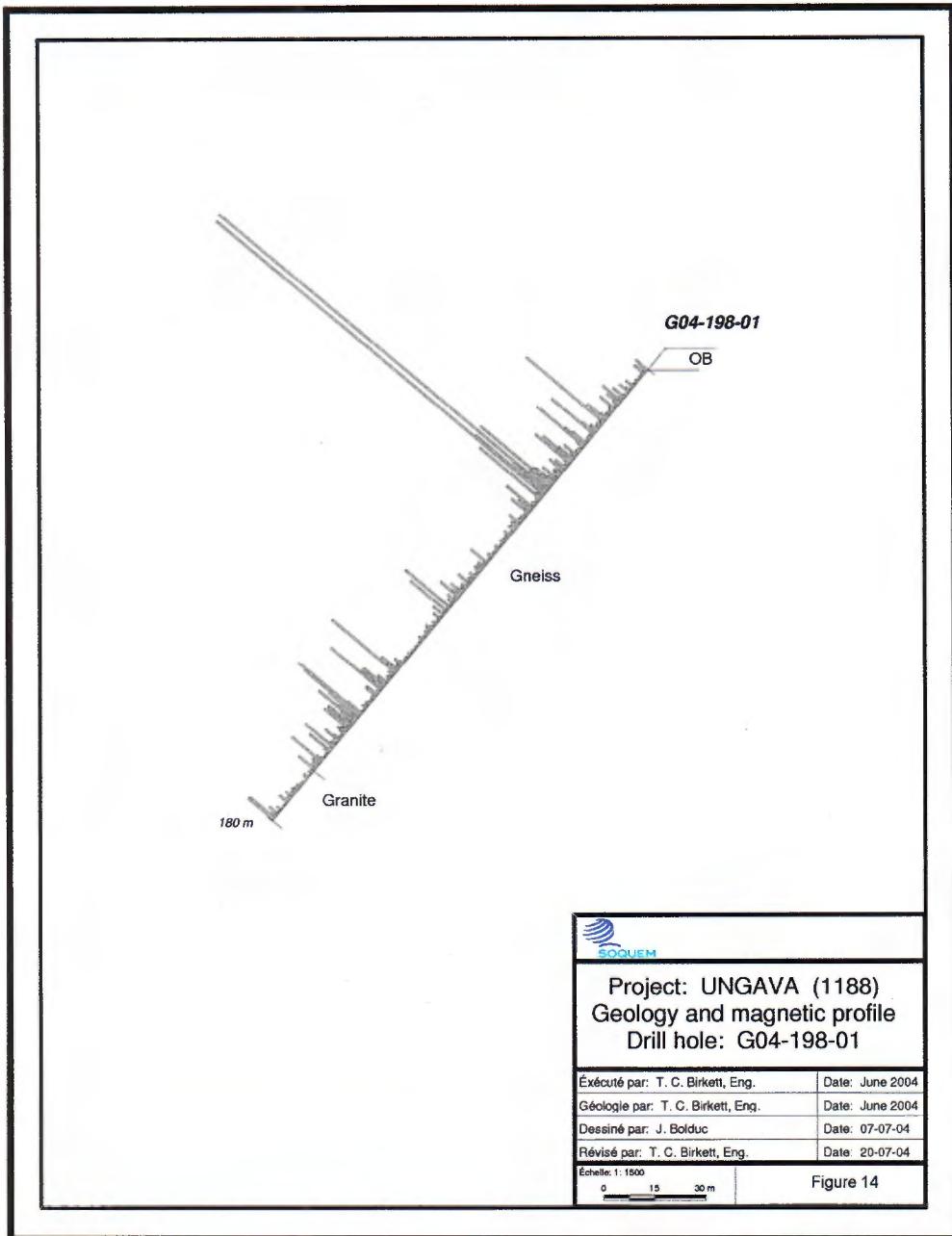




Cible G04-198

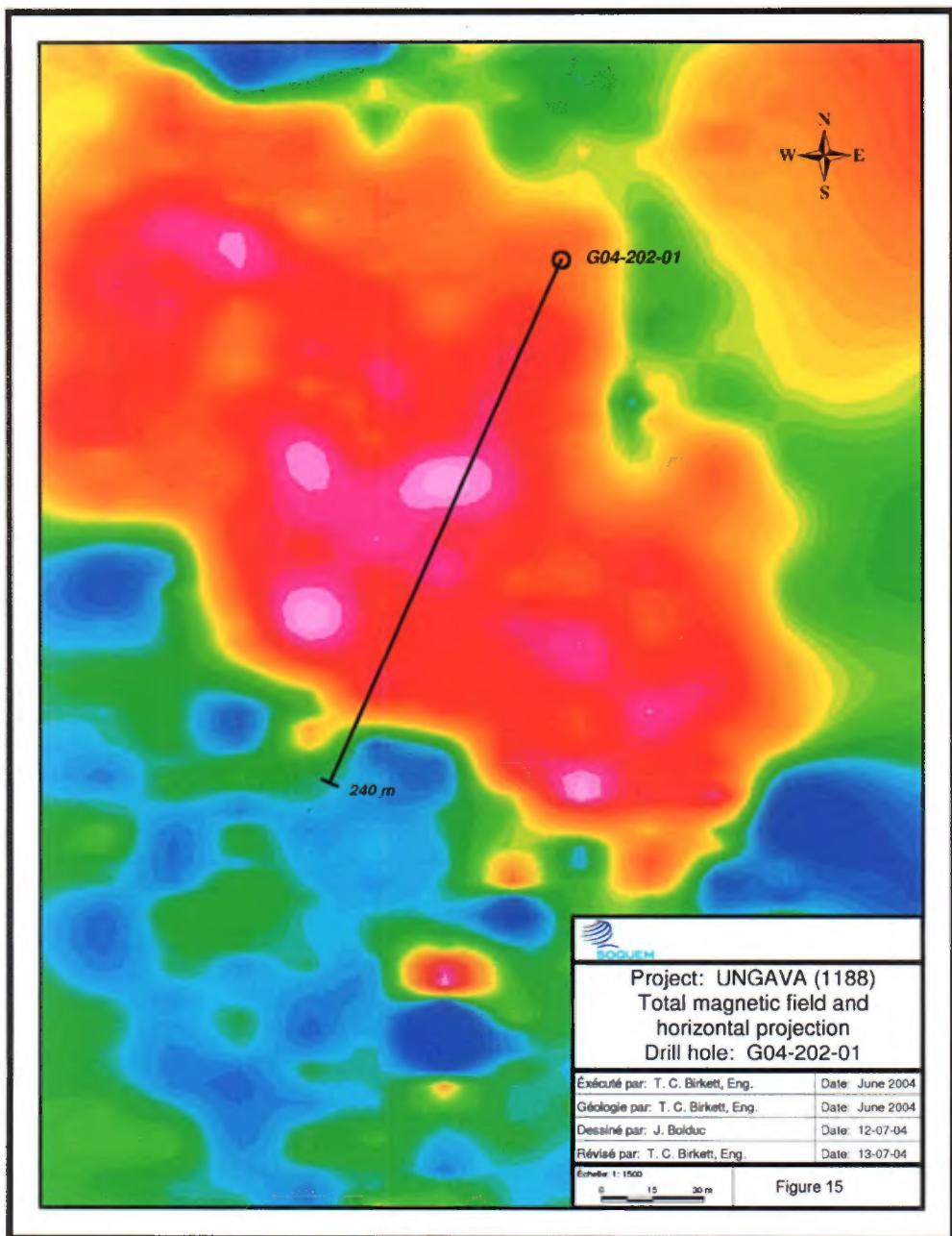
Des mesures magnétiques sur le sol (Figure 13) démontrent une anomalie positive qui est confirmée par les mesures de susceptibilité magnétique de la carotte. Celle-ci possède une zone mince fortement magnétique (Figure 14).

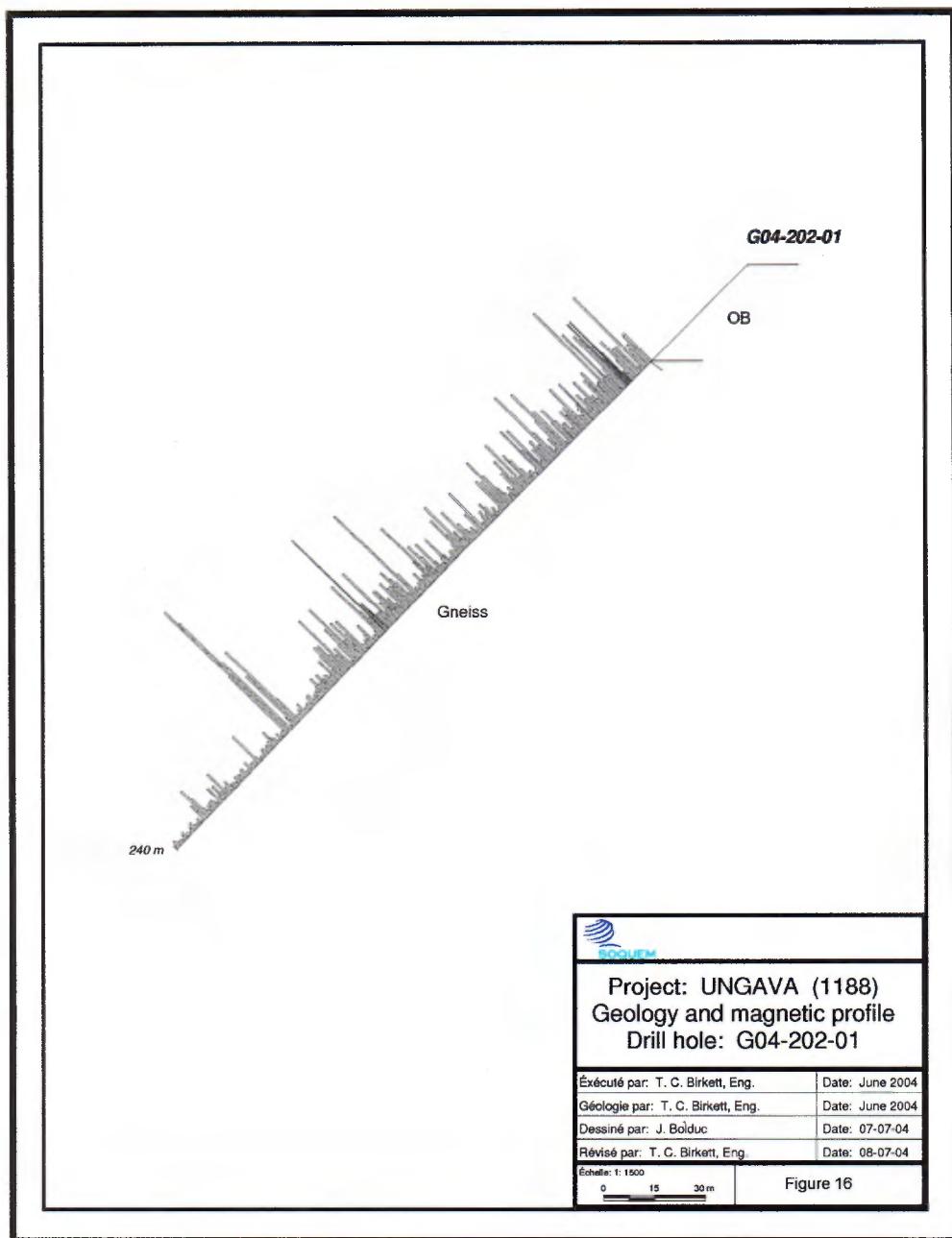




Cible G04-202

Un levé magnétique au sol (Figure 15) a permis de discerner un petit complexe positif. Les mesures de susceptibilité magnétique de la carotte, illustrées à la figure 16 démontrent un certain contraste qui permet d'expliquer l'anomalie.





Cible G04-184 (Lynx)

Le forage d'exploration de l'automne 2003 a permis la découverte de minces dykes kimberlitiques au site G04-184 (Lynx). Le programme d'exploration de l'hiver 2004 avait pour but de déterminer l'épaisseur et l'orientation de ces dykes.

Une carte du champ magnétique total est illustrée à la figure 17. Les figures 18 à 20 représentent des sections géologiques et magnétiques des trous de forage. Les dykes kimberlitiques possèdent localement une signature de susceptibilité magnétique très élevée et restreinte. Il est possible que la petite anomalie magnétique positive de la figure 17 est due aux dykes, cependant le bruit de fond et/ou du gneiss magnétique pourraient aussi en être la cause. L'orientation des dykes kimberlitiques est à 350 degrés penchant 40 degrés Est, estimés par leur angle près de 90 degrés avec le forage G04-184-01.

Cible G04-219 (Lynx Nord)

Un levé magnétique au sol (Figure 21) démontre une anomalie démarquée par un faible magnétisme. La susceptibilité magnétique mesurée sur la carotte (Figure 23) supporte le faible magnétisme retrouvé sur le levé au sol; cependant ce faible magnétisme n'est pas dû aux dykes kimberlitiques identifiées qui sont subhorizontales (Figure 23).

CONCLUSION

Le forage d'exploration a expliqué les causes probables de la plupart des anomalies magnétiques retenues comme cibles de forage. Les anomalies n'ayant aucune explication évidente démontrent une certaine proportion de minéraux magnétiques qui, en proportion plus élevée pourrait expliquer les anomalies. Le forage au site G04-219 a permis la découverte d'un nouveau dyke kimberlitique.

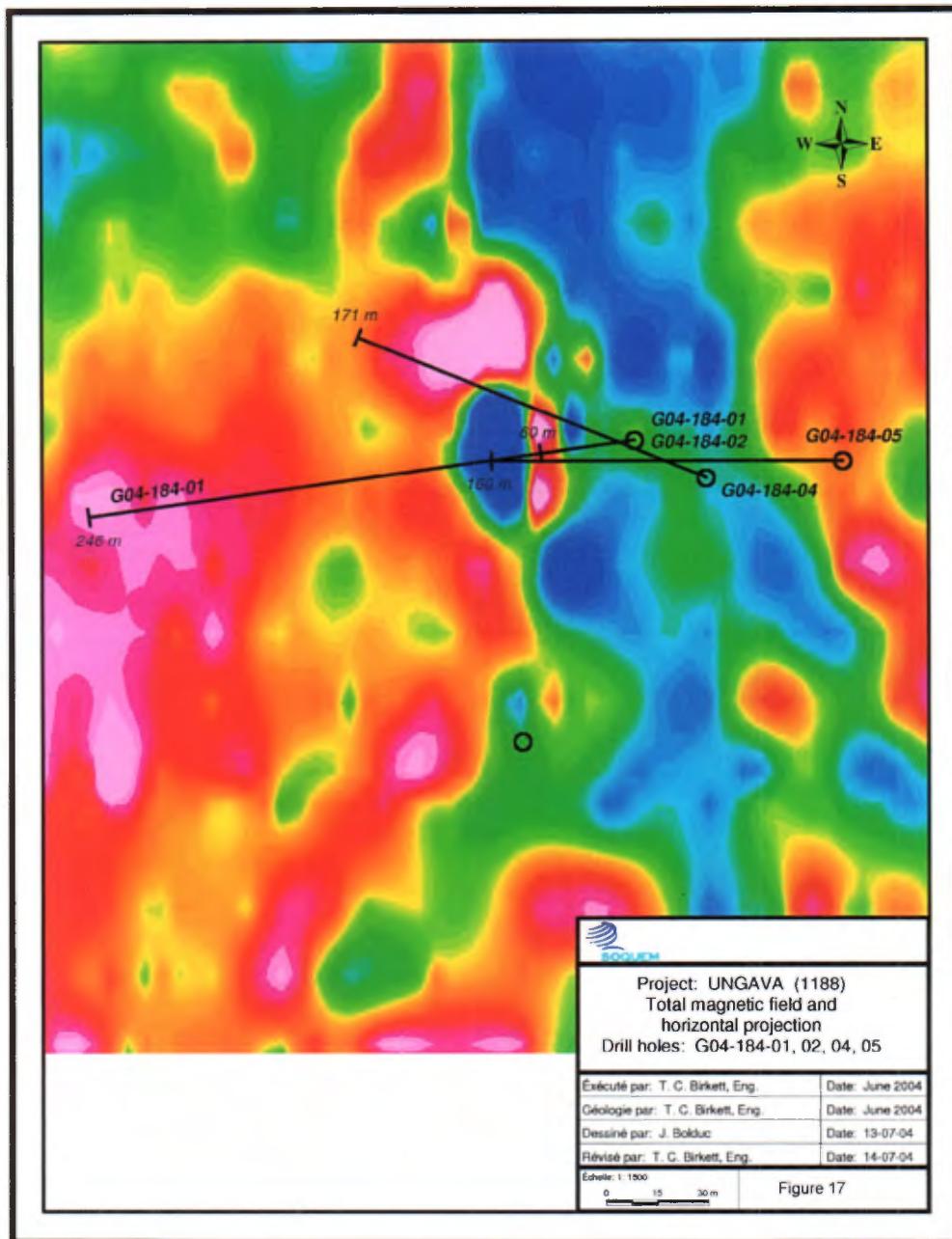
RECOMMANDATIONS

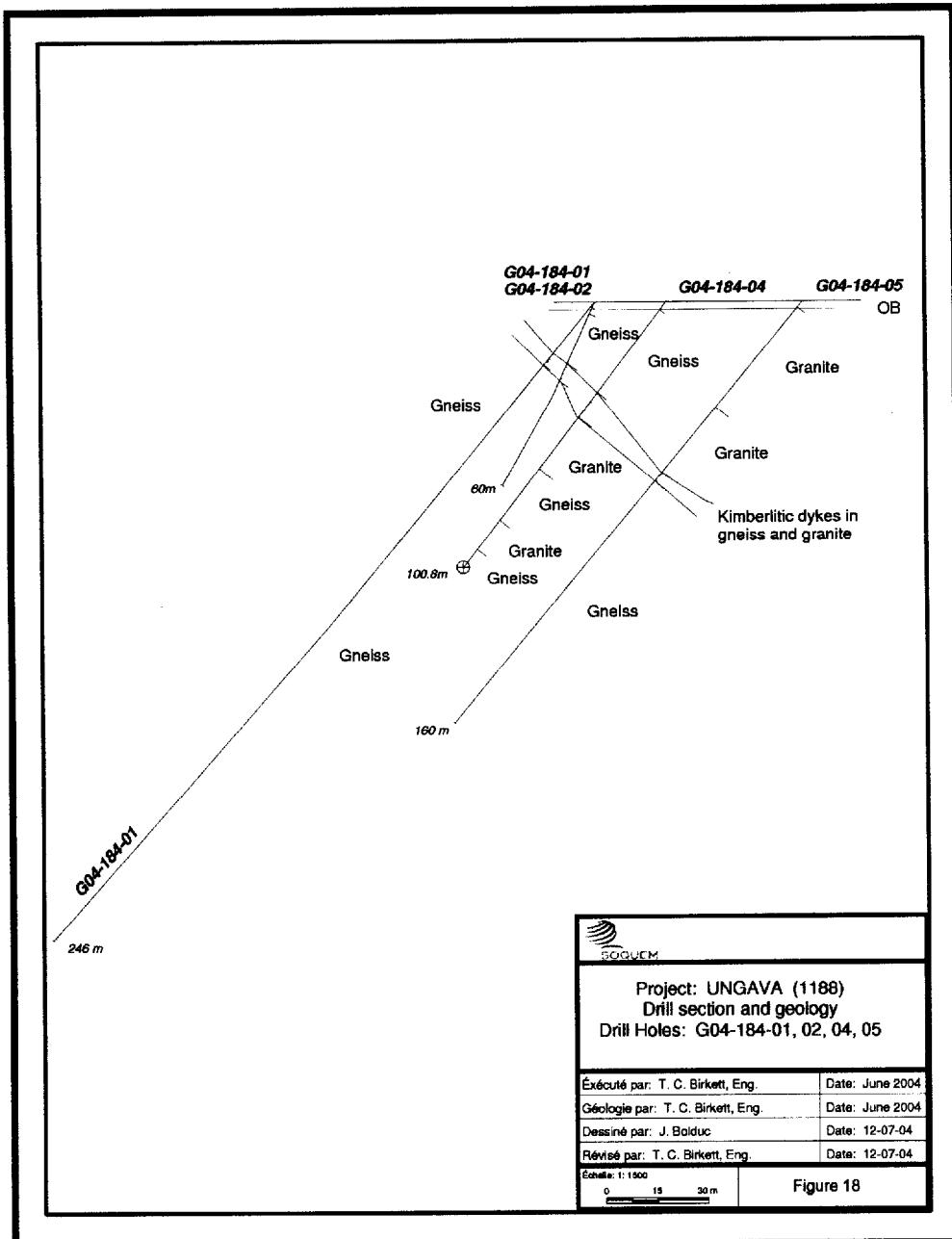
La découverte d'un seul dyke de kimberlite sur 7 nouvelles cibles de forage démontre que les cibles de forage ne peuvent être générées que par des anomalies magnétiques et de résistivité électrique. Bien que ces outils ont permis la découverte de roches kimberlitique, il est évident que d'autres méthodes ou la combinaison d'autres méthodes permettant un meilleur taux de réussite doivent être essayées. Une combinaison de traînées de minéraux indicateurs, géochimie, géologie de surface et autres méthodes de levés géophysiques devrait permettre un meilleur taux de réussite. Il est aussi recommandé de forer trois autres trous sur G04-219 afin de connaître l'étendue et l'orientation de ce dyke kimberlitique.

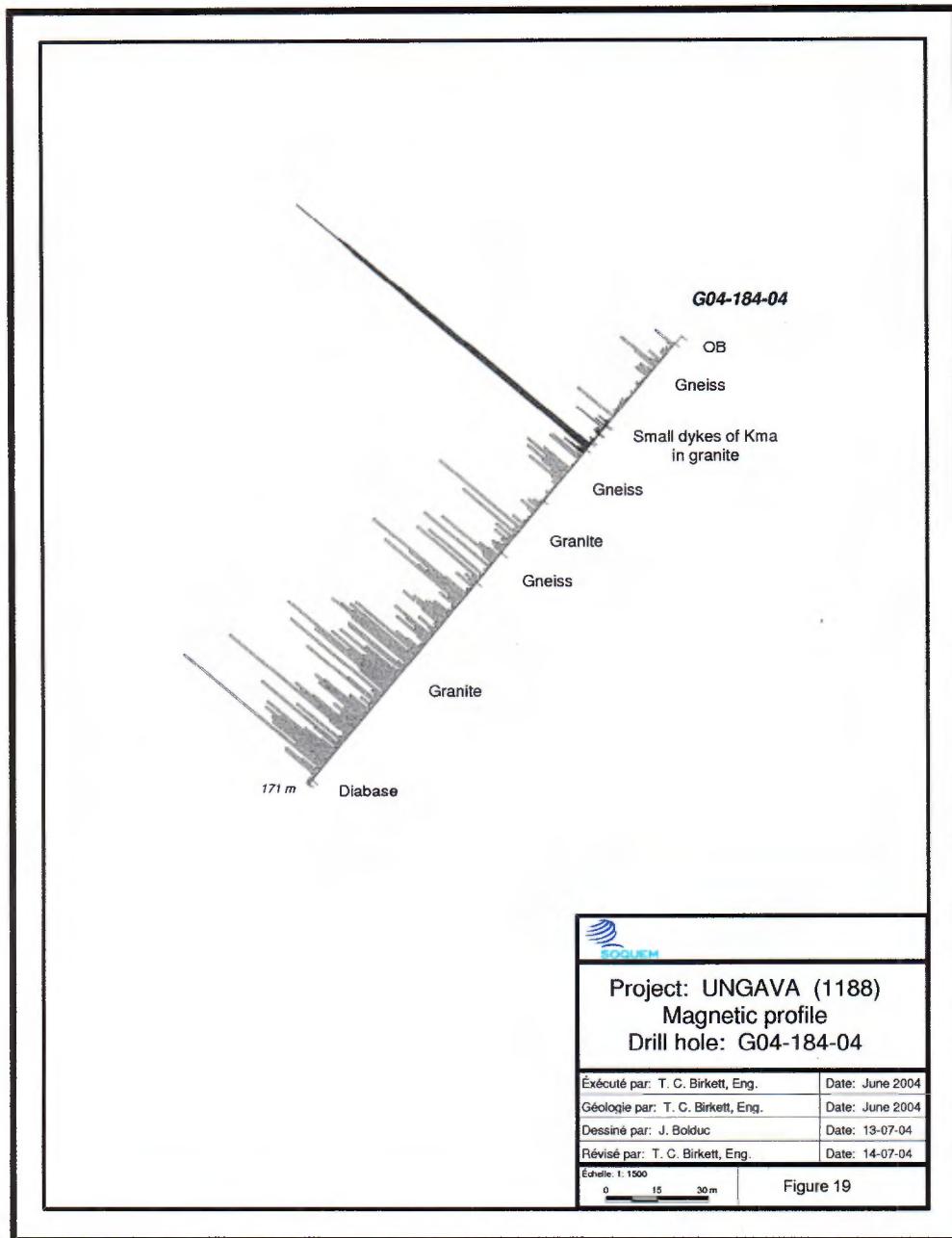


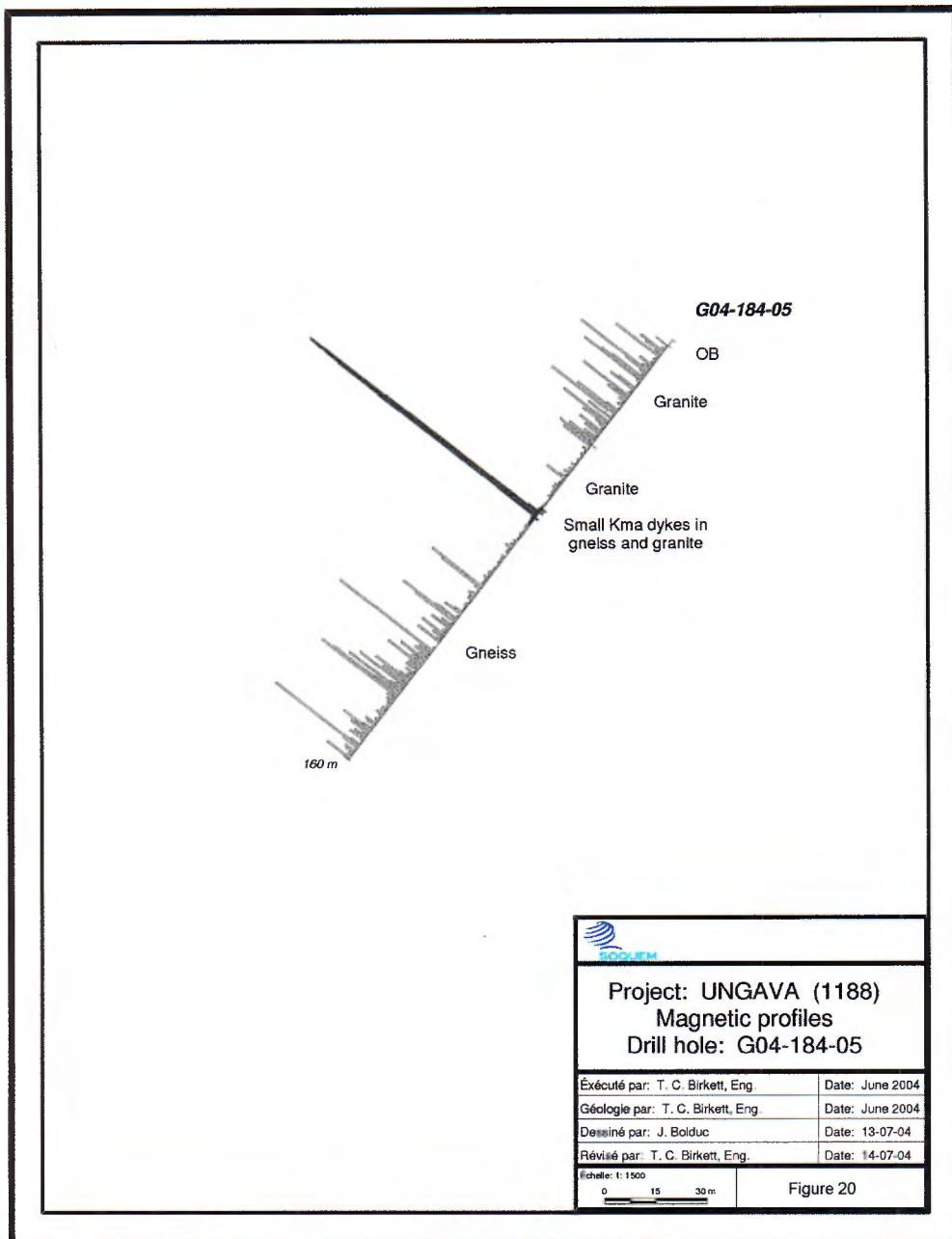
Tyson Birkett, ing.

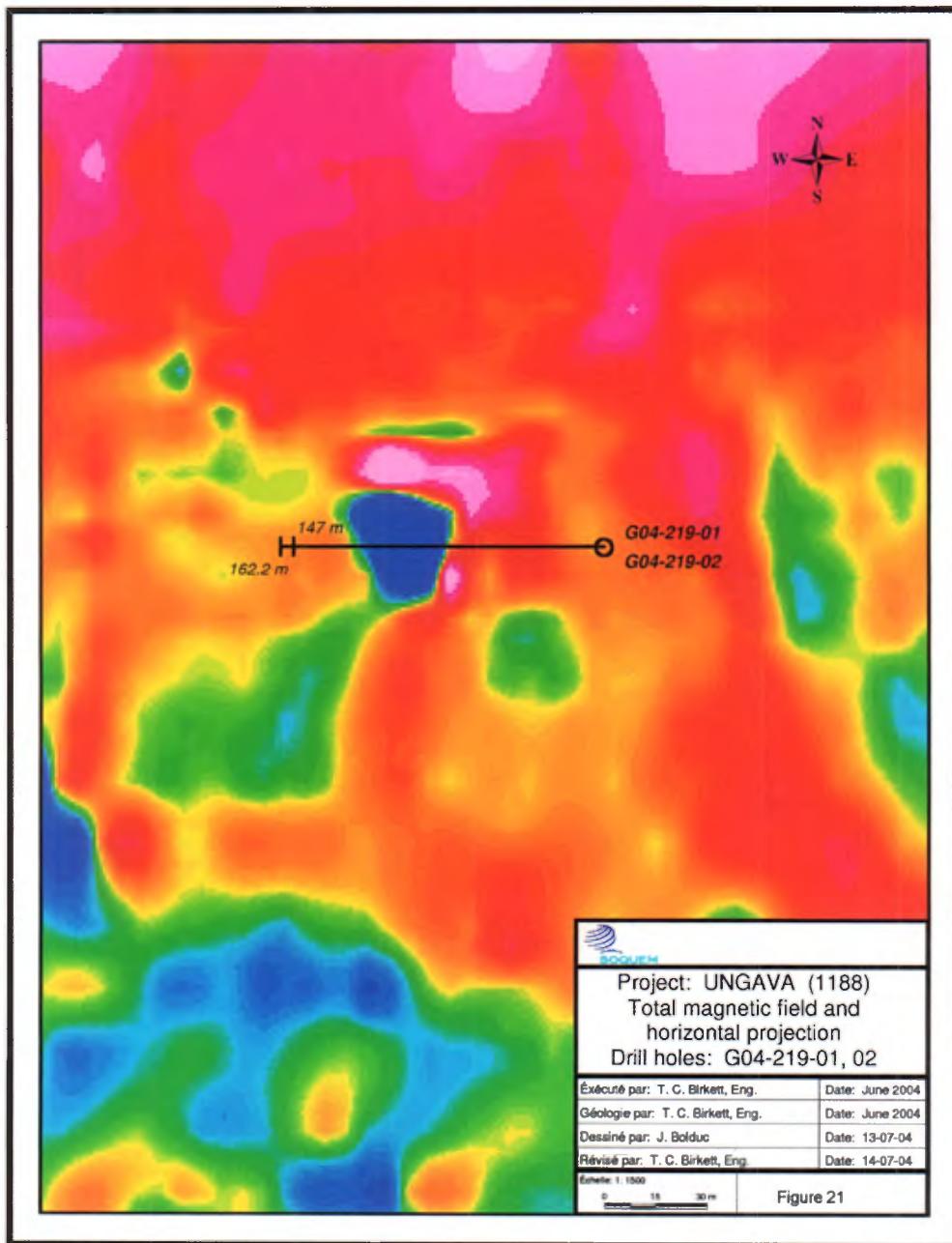
Antoine Cloutier, géo. sta.

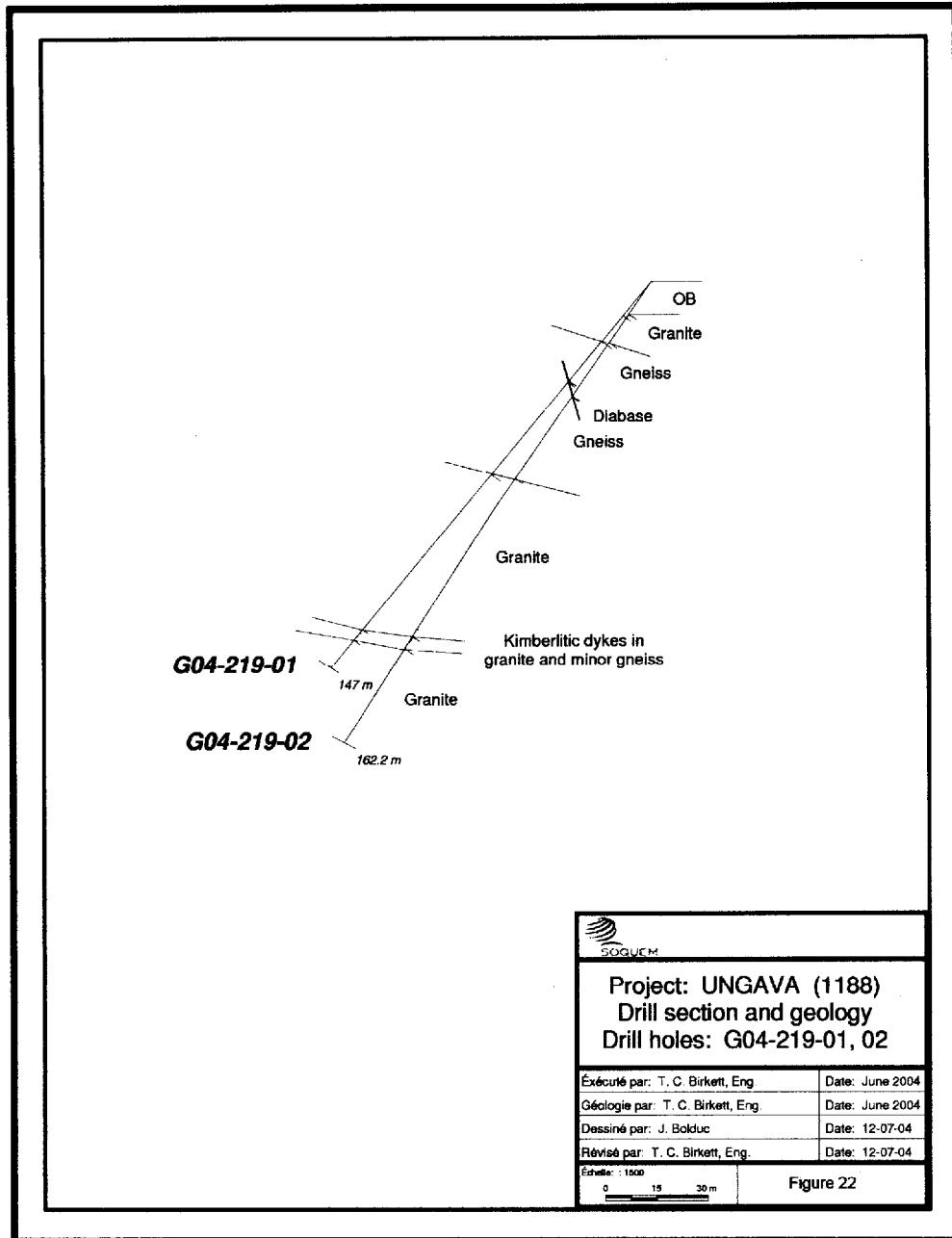


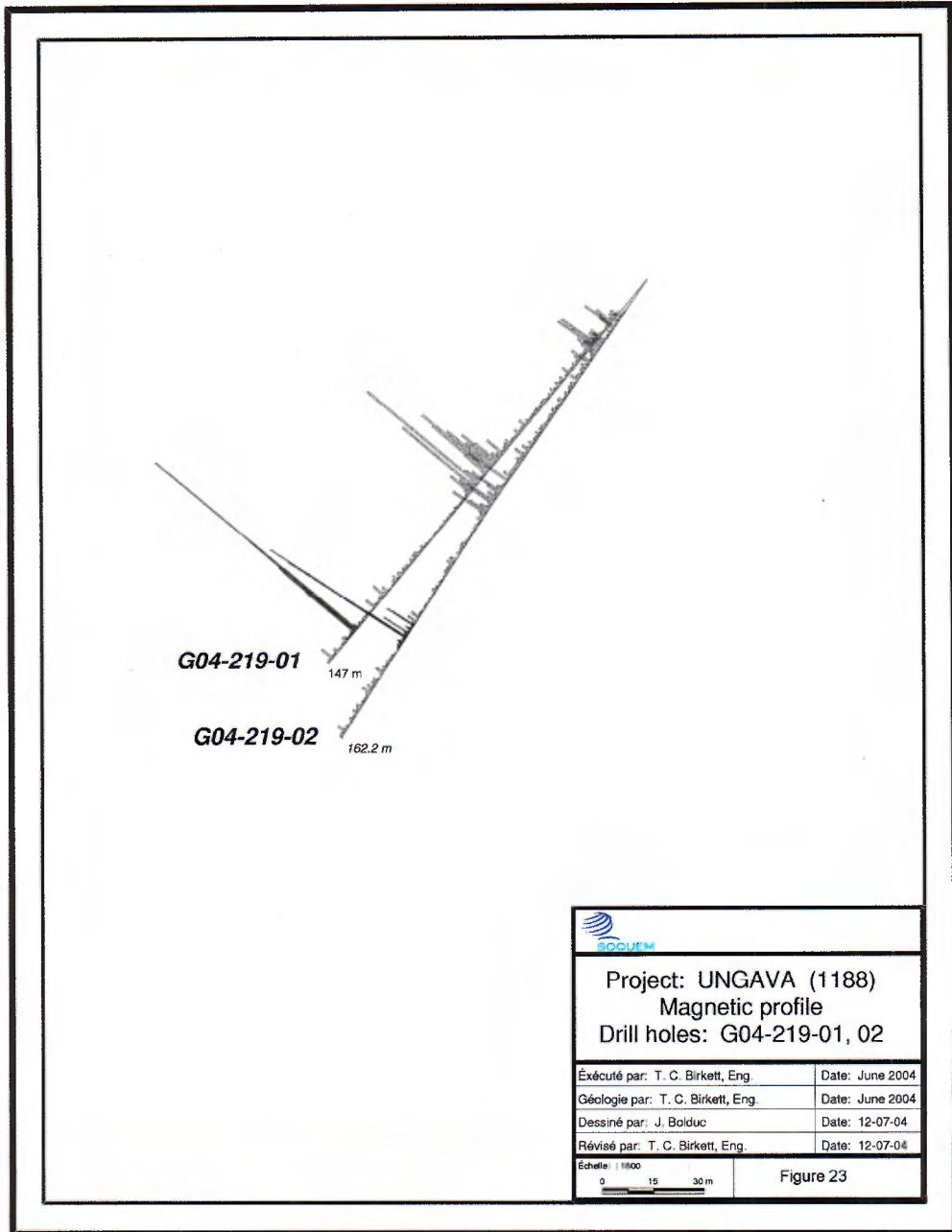












BIBLIOGRAPHIE

Hocq, M. (1985): Géologie de la région des Lacs Campan et Cadieux. Ministère de l'Énergie et des Ressources, Québec, ET 83-05, 178 p.

APPENDICE 1

Journaux de sondages



Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for 85117-01

HOLE-ID	85117-01				
Anomaly	85117	Start Date	25-mars-04	Claim Name	1555
Property	Foxtrot #2	End Date	27-mars-04	Tag #	
Easting	688842	Contractor	Forages Chibougamau	JV	SOQUEM INC.
Northing	5853519	Core Size	NQ	District	
Elevation	490	Length (m)	198	Geologist	
UTM Zone	18	Azimuth	0	Date Logged	27-mars-04
Mapsheet	33A/16	Dip	-45	Logged by	Tyson Birkett, Eng.
Purpose	test magnetic anomaly 85117				
Comments	logged by Tyson Birkett, Eng. March 26 and 27, 2004. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core. Total boxes : 45 boxes 23 and 24 shipped to Vancouver, others stored at Lagopède.				
Interval (m)	Description				
0 to 2,8	OB	Overburden, till, one block of gneiss recovered			
2,8 to 14,5	GRANITE	Granite Pale pink to grey, medium grained, massive, non-magnetic			
		A few thin layers of gneiss are present: 3.3 to 3.5 m; 3.7 to 3.8 m; 7.7 to 7.75 m; 7.9 to 8.1 m; 11.0 to 11.2 m; 11.6 to 11.9 m; 14.0 to 14.2 m. The gneiss layers are generally magnetic, grey, fine grained rock with small amounts of white pegmatite as thin layers parallel with the gneissosity. The gneissic banding is at 45 to 80 degrees to the core axis. More digested gneiss patches are present here and there as zones richer in biotite in the granite.			
14,5 to 198	GN	Gneiss Grey gneiss, fine grained, Pl + Bt + Opx + Qtz, with approximately 5 % metamorphogenic pegmatite as thin bands parallel to the gneissic banding. The gneiss is commonly magnetic, although the intensity is variable. Gneissosity is normally at 70 degrees to the core axis, locally as low as 45 degrees. Lower in the section, 80 to 90 m for example, it is mostly at 60 degrees to the core axis.			
		Layers of grey to pink granite, non-magnetic, are present: 22.2 to 23.8 m; 24.8 to 25.2 m; 27.5 to 28.0 m; 30.0 to 31.0 m; 32.7 to 33.5 m; 36.2 to 37.3 m; 55.8 to 56.7 m; 69.0 to 69.9 m; 82.7 to 84.0 m; 94.0 to 101.5 m (with some small bands of gneiss); 115.3 to 117.3 m; 118.15 to 118.8 m; 122.5 to 123.4 m; 130.85 to 131.2 m; 132.45 to 133.3 m; 135.3 to 136.2 m; 136.4 to 136.8 m; 138.5 to 139.0 m; 145.05 to 147.15 m (magnetic); 148.2 to 149.3 m (magnetic);			
		From 49 m to 67 m the rock is slightly coarser grained, with more pegmatite and less regular pegmatite bands; this zone is interpreted as a fold closure. White, coarse-grained pegmatites with wide biotite-rich selvages are common throughout this interval.			

HOLE-ID 85117-01

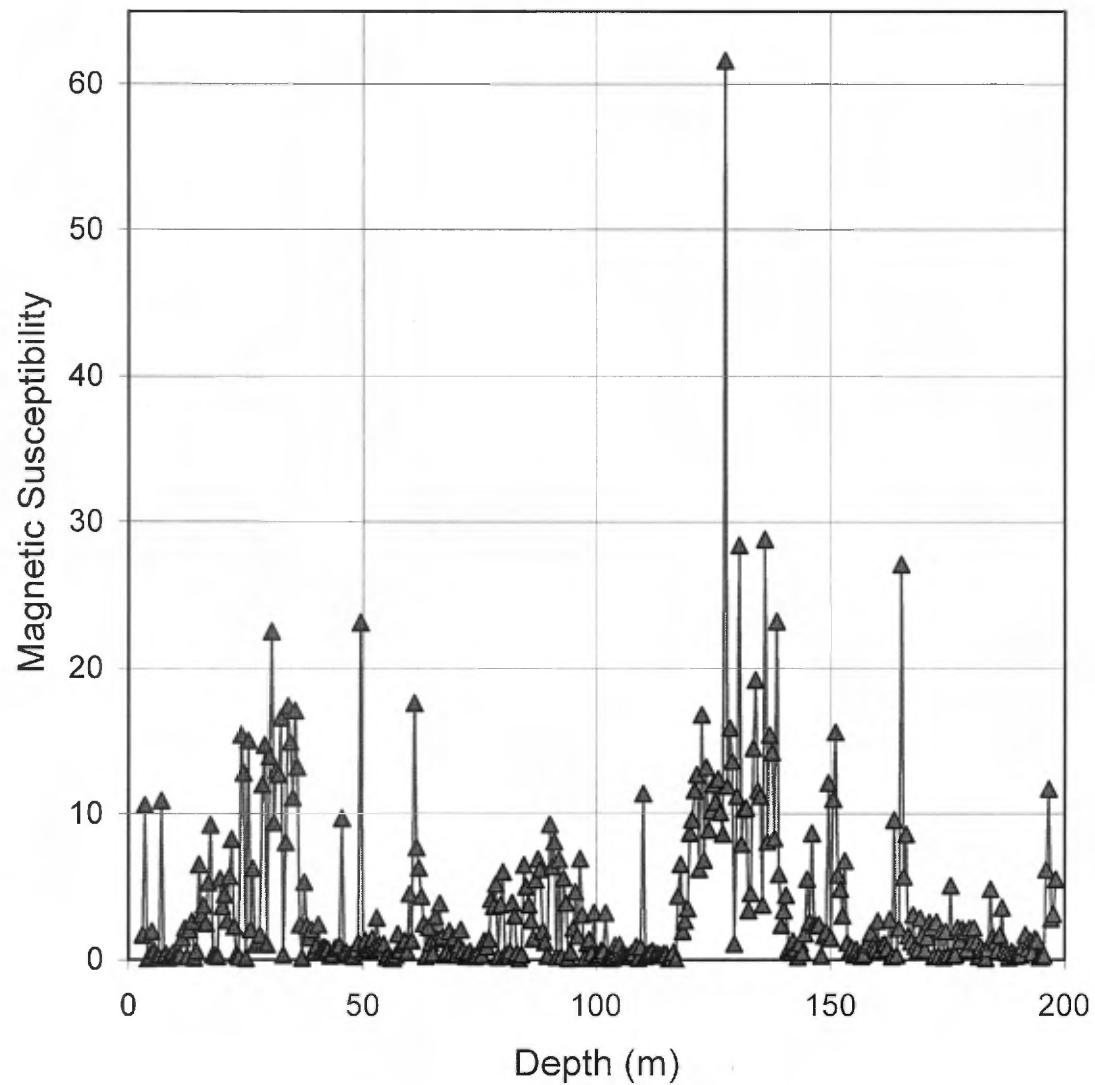
From 145 to 150 m the rock is 40 to 50 % coarse grained, magnetic, probably locally derived pink to grey pegmatite. From 125 m to 150 m and 164 to 165 m the pegmatite portions of the core are also magnetic (as is the gneiss) with scattered crystals of magnetite up to 0.5 cm wide in a few cases.

At 141 m is a 5 cm sand seam of disaggregated pink pegmatite.

From 170 to 186 m white, foliated pegmatites are common forming 30 to 40 % of the core.

198 EOH (m)

85117-01





Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for 85124-01

HOLE-ID	85124-01		
<i>Anomaly</i>	85124	<i>Start Date</i>	23-mars-04
<i>Property</i>	Foxtrot #2	<i>End Date</i>	25-mars-04
<i>Easting</i>	689045	<i>Contractor</i>	Forages Chibougamau JV
<i>Northing</i>	5852473	<i>Core Size</i>	NQ
<i>Elevation</i>	490	<i>Length (m)</i>	195
<i>UTM Zone</i>	18	<i>Azimuth</i>	324
<i>Mapsheet</i>	33A/16	<i>Dip</i>	-50
<i>Purpose</i>	explain magnetic anomalies. Total boxes of core: 40, box 23 sent to Vancouver, others stored at camp Lagopède.		
<i>Comments</i>	logged by Tyson Birkett, Eng. March 24 and 25, 2004. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core. casing left in hole (could not be removed).		

<i>Interval (m)</i>	<i>Description</i>
0 to 24,5	OB Overburden, till with a few blocks of granite and gneiss
24,5 to 38,3	GN Gneiss grey gneiss, broadly intermediate in composition, fine grained, Pl + Bt + Opx + Qtz, locally moderately magnetic, with 10 % light buff to white pegmatitic veins of local derivation and small interlayers of pink granite or tonalite (32.1 to 33.3 m and 33.8 to 34.6 m).
38,3 to 65,9	GRANITE granite or tonalite Pink, massive, Qtz - Pl - Kfs - Grt with local patches of quartz. Small pink-red garnets are scattered throughout the core and are most abundant near contacts with enclaves of grey gneiss. Grey gneiss as bands up to about 1 m wide forms 5 % of the rock, it is notably magnetic, probably as a result of partial digestion in the granite. Bands are at 50.4 to 50.6 m, 56.65 to 57.0 m, 57.35 to 58.4 m. The granite is uniformly non-magnetic to very weakly magnetic.
65,9 to 108,5	GN Gneiss grey gneiss of broadly intermediate composition, Pl + Bt + Hbl + Opx + Qtz, moderately magnetic, layering mostly near 80 degrees to the core axis, 5 % pale to cream locally derived metamorphogenic pegmatite. In the lower portion of unit disseminated garnet is common in the gneiss Interlayered pink granite is present: 73.0 to 75.7; 80.5 to 82.7 m; 96.8 to 97 m; 97.4 to 102.9 m; 107.2 to 107.95 m (see description of following unit)
108,5 to 150,15	GRANITE

HOLE-ID **85124-01**

Pink to grey granite, massive, medium grained, with common disseminated small garnets, non-magnetic with Qtz, Bt, Kfs, Pl. Locally are a few grains of Epi. Garnets are larger and more abundant near contacts with gneiss.

Interlayers of gneiss; 120.05 to 120.7 m with minor retrograde alteration, 127.75 to 129.25 m; 132.6 to 133.1 m; 144.3 to 144.7 m.

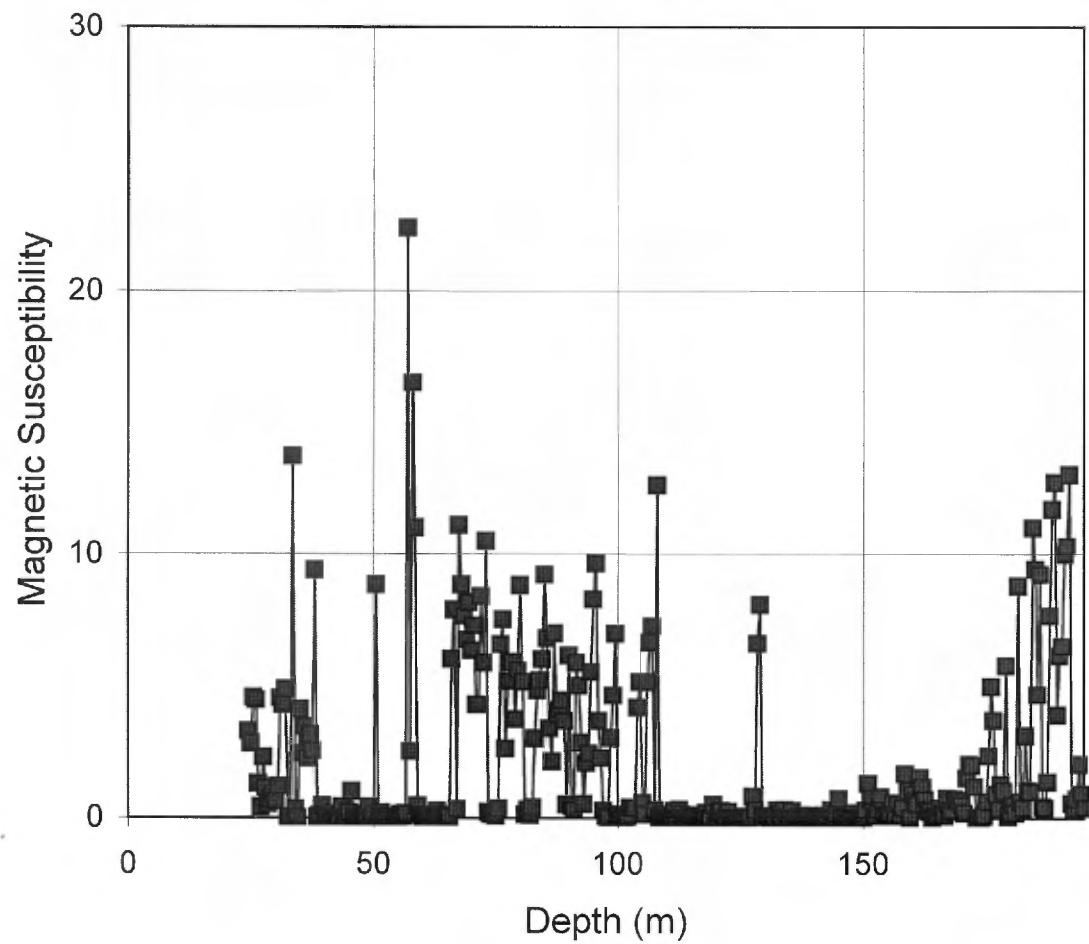
150,15 to 195 **GN**
Gneiss

Grey gneiss of broadly intermediate to mafic composition, Pl + Bt + Grt + Qtz + Cpx + Opx, 5 % locally derived metamorphogenic pegmatite as thin 1 - 5 cm pale bands. Gneissic compositional banding is typically at 50 to 60 degrees to the core axis. The rock is only very weakly magnetic, scarcely different than the granite, until approximately 172 m when it becomes moderately to locally strongly magnetic and has no garnet, or Cpx. Thin foliation planes with chlorite and a little calcite are sparsely scattered throughout the gneiss portions of the core (but not the granite).

Interbands of pale grey granite: 159.35 to 159.65 m; 163.9 to 165.3 m; 165.9 to 166.7 m; 172.7 to 174.2 m; 174.3 to 174.85 m; 186 to 187.5 m.

195 **EOH (m)**

85124-01 mag profile





Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for G04-168-01

HOLE-ID	G04-168-01				
Anomaly	168	Start Date	30-mars-04	Claim Name	1555
Property	Foxtrot #2	End Date	02-avr-04	Tag #	
Easting	691298	Contractor	Forage Chibougamau	JV	SOQUEM
Northing	5857349	Core Size	HQ	District	
Elevation		Length (m)	204,3	Geologist	B. Lucas
UTM Zone	18	Azimuth	60	Date Logged	02-avr-04
Mapsheet	33A16	Dip	-45	Logged by	Isabelle Lepine
Purpose	Testing geophysical anomaly 168				
Comments	Log by I. Lepine, Geo Magnetic susceptibility meter from Explorarium (Kappameter KT-9). All the boxes left at Lagopede				

Interval (m)	Description
0 to 18,3	OB Cobles of granite. No casing block in the core to indicate where the bedrock starts. It is estimated (from the last block) at approximately 18.3 m.
18,3 to 62,5	GRANITE Granite This unit is mainly composed of hematized, coarse grained red granite (pegmatite?) with decimetric (up to 60 cm) bands of grey gneiss. The gneissic bands represent approximately 20% of the rock. The granitic unit is composed of 20% quartz, 10% beige feldspar, 65% red feldspar with minor chlorite (5%). They gneiss part is composed of 60% mafic mineral (biotite and amphibole) and 40% feldspars. The rock is strongly fractured with some chloritic material filling the fractures. The first bands of grey gneiss are magnetic (see magnetic susceptibility meter readings). From 18.3 m to 27 m and from 32 m to 45 m the core is extremely broken. From 41.0 m to 54.0m the rock looks more like a potassic rock (no more quartz is observed in the rock). It is mainly composed of coarse grained pink to reddish feldspar and 5%-10% chlorite between the grains. Locally the rock looks like it was brecciated (brecciated granite).
62,5 to 101,95	GN Gneiss Fine grained, grey gneiss intercalated by 45%-50% decimetric to metric coarse grained granitic to pegmatitic bands. This part of the core is less hematized than the previous unit. The upper contact is gradational over a few metres and marked by the increase of grey gneiss bands and the decrease in hematite alteration. It is composed of 65% mafic minerals (mica and amphiboles), 30% feldspar and 5% quartz. It is strongly foliated at approximately 40 degree tca, but the foliation is variable. The granite parts are composed of 15-20% quartz, 75% feldspar (white and reddish) and 5% mica. Locally some chlorite minerals are observed in bands that are richer in quartz. From 82 to 101.95 no more hematization is present in the rock. The grey gneiss is usually more magnetic than the granitic bands, creating a profile that is

HOLE-ID **G04-168-01**

really spiky magnetic (see susceptibility readings). In the granite magnetite is associated with the mica rich bands.

101,95 to 108,2 GRANITE

Granite

This part of the core is mainly composed of granite, it is probably a big granitic band in the grey gneiss observed in the upper unit. Coarse grained, white to pink granite that is mainly composed of 25%-30% quartz, 60% feldspars and 5%-10% biotite and chlorite. Magnetite (up to 5%) was observed in the core, and is generally associated with mica and chlorite. It is creating an irregular magnetic anomaly (see magnetic susceptibility readings).

102,8 to 198,5 GN

Gneiss

Same unit as between 62.5 m to 101.95 m. The feldspar in this part of the unit are getting more pink in colour.

From 141.0 m to 159.0 m the rock contains more decimetric bands of orange coarse grained pegmatite (it represents up to 60% of the rock). The feldspar that composed the unit are reddish in colour (hematised). The hematization is mainly around the edge of the felspar grains.

From 159.0 m to 163.0 m the rock is a well mixed gneiss with coarsely grained granite. The foliation in this part is strong and highly variable. This part of the rock is characterised by high magnetic susceptibility readings (see chart) probably caused by magnetite (usually associated with the biotite rich part).

From 163.0 to 198.5 m the rock is mainly characterised by the grey gneiss intercalated with centimetric to decimetric bands of coarsely grained granite to locally pegmatite. The gneiss is predominating. The foliation is strong and varies between 30 and 60 degree tca, with some local parasite folding observed. Within this part of the rock some mm scale (up to 5%) chlorite rich veinlets were observed. They cut the rock and are injected between the quartz and feldspar grains, almost giving a breccia feeling.

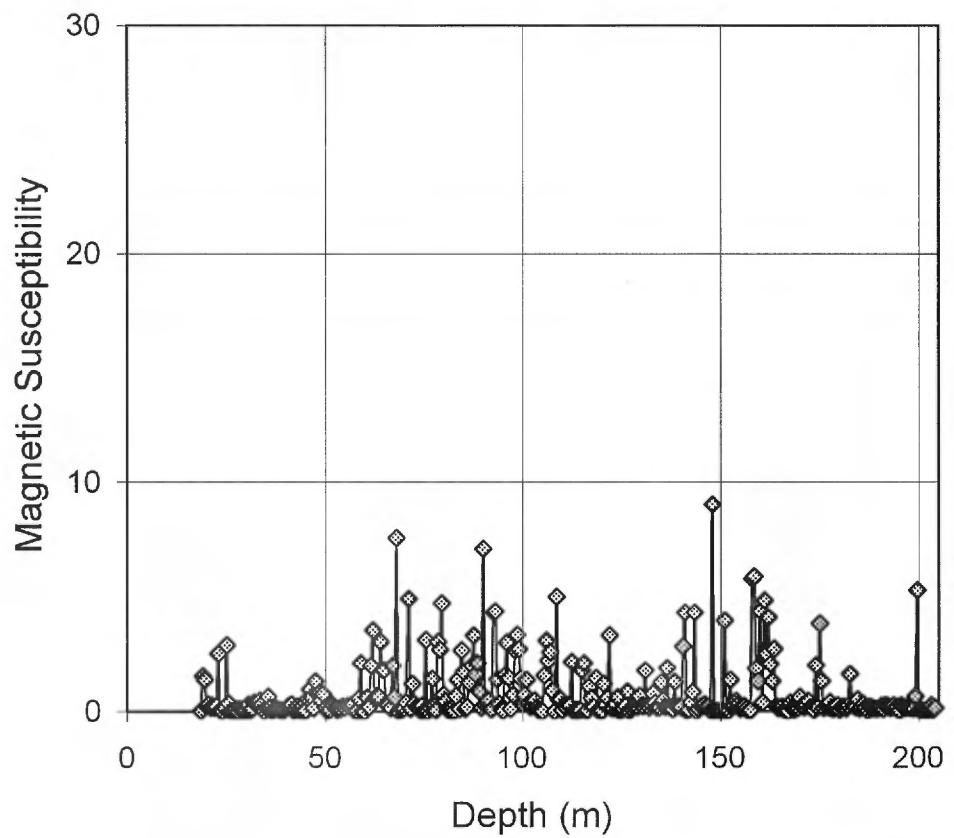
198,5 to 204,3 PEG

Pegmatite

Coarse grained pegmatite, that is white in colour and mainly composed of quartz (15%) and feldspar (80%) with minor biotite and chlorite. The chlorite is observed in the upper part of the unit. Minor gneissic bands are observed in the rock and comprise less than 5% of this part of the unit.

204,3 EOH (m)

G04-168-01





Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for G04-194-01

HOLE-ID	G04-194-01		
Anomaly	194	Start Date	03-avr-04
Property	Foxtrot #2	End Date	04-avr-04
Easting	687354	Contractor	Forage Chibougamau
Northing	5859719	Core Size	HQ
Elevation		Length (m)	132,7
UTM Zone	18	Azimuth	90
Mapsheet	33A/16	Dip	-45
Purpose	To test magnetic anomaly on target 194.		
Comments	Log by I. Lepine, Geo to 95.5 m and by Tyson Birkett, Eng. from 95.5 m to 132.7 m. Magnetic susceptibility meter from Exploranium (Kappameter KT-9). All the boxes left at Lagopede		
Interval (m)	Description		
0 to 34,5	OB big granitic boulder found in the casing.		
34,5 to 84,15	GN Gneiss From 34.5 to 62.6 Grey to green, fined grained gneiss intercalated with approximately 40-45% decimetric to metric reddish pegmatite bands. Within the upper part of the unit the gneiss and pegmatite are extremely broken (from 34.5 m to 49.0m). Within this zone the rock looks like it is weakly brecciated with the fractures filled by chlorite and mica material. No kimberlitic material was observed in the rock (no reaction to dilute HCl). The grey gneiss is mainly composed of 40% mafic mineral (biotite, chlorite and amphibole), 40-45% feldspars, 5% quartz and locally up to 5% magnetite (generally associated with the mica). It is strongly foliated between 30 and 45 degree tca. The pegmatite bands are composed of hematized felspars (80%), quartz (15%) and mica (5%). They seem to be more brecciated than the gneiss component. The mafic component of the gneiss are generally more magnetic than the felsic parts.		
	From 62.6 to Same gneiss as described above with the exception that the pegmatite bands represent only 10-15% of the rock and they are usually less than 50 cm in size. They also are not as developed as the pegmatite observed in the upper unit. Locally some fractures are filled by epidote (less than 1% of the rock).		
84,15 to 84,95	Db Diabase Fine grained, dark grey diabase. The grains are so small that they are hard to identify (mainly feldspar and mafic mineral). Some (1%) disseminated pyrite was observed in the rock. The upper contact is broken but sharp at approximately 85 degree tca. The lower contact is also broken, sharp and at approximately 90 degree tca. Both contacts are parallel. The dyke is not magnetic and does not react to dilute HCl. Trace of white, weakly developed calcite veinlets are observed cutting the dyke. They have no preferential orientation.		

HOLE-ID G04-194-01

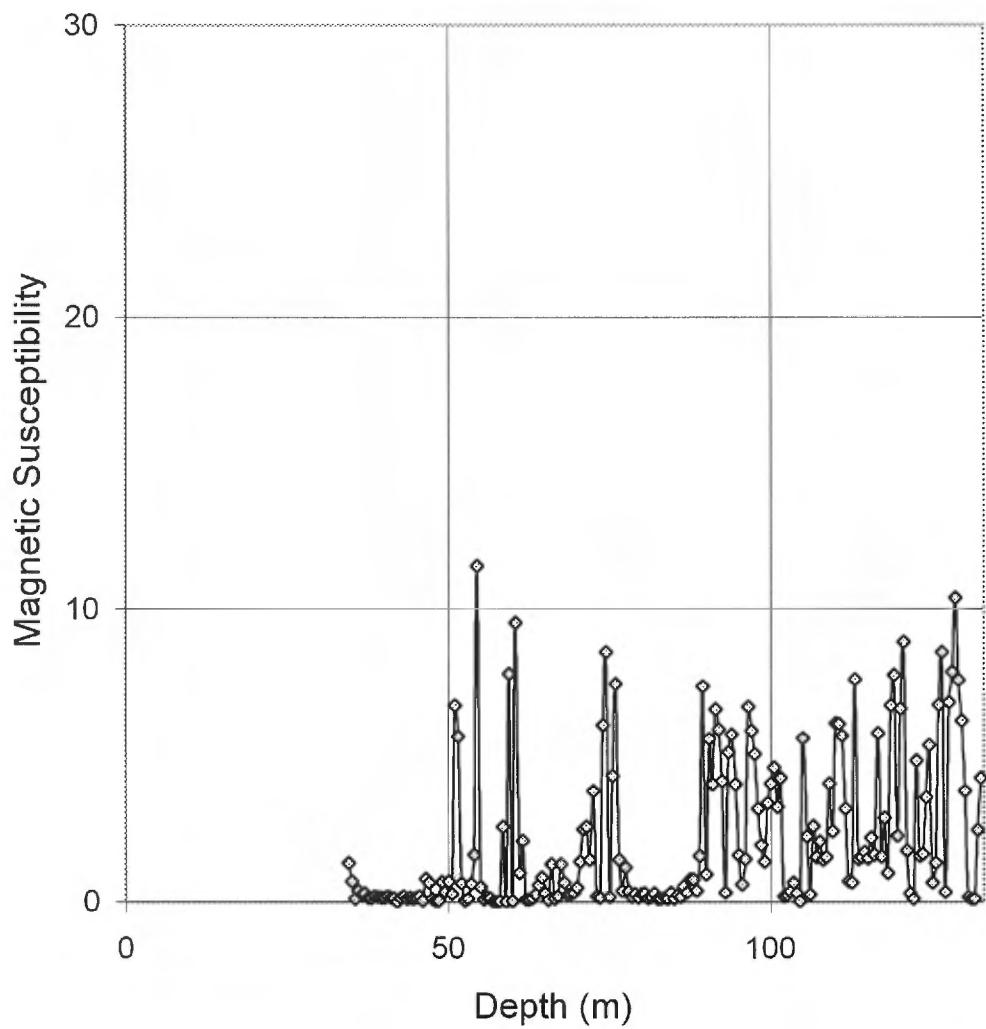
84,95 to 132,7 GN

Gneiss

Fine grained, grey gneiss that is mainly composed of quartz (20%), feldspar (40%) and biotite (35-40%). The gneiss is intercalated with minor coarse grained pink to orange pegmatite mainly composed of quartz (20-25%), felspar (70%) and minor biotite (5%). The pegmatite bands range in size from cm to decimetric. Magnetite is associated with the mica rich zone in the core (see mag susceptibility readings). The gneiss is strongly foliated at approximately 25-30 degree tca. The gneiss also contains minor amounts of hornblede and - or pyroxene as small dark green or dark brown crystals (depending on the particular band they are in).

132,7 EOH (m)

G04-194-01





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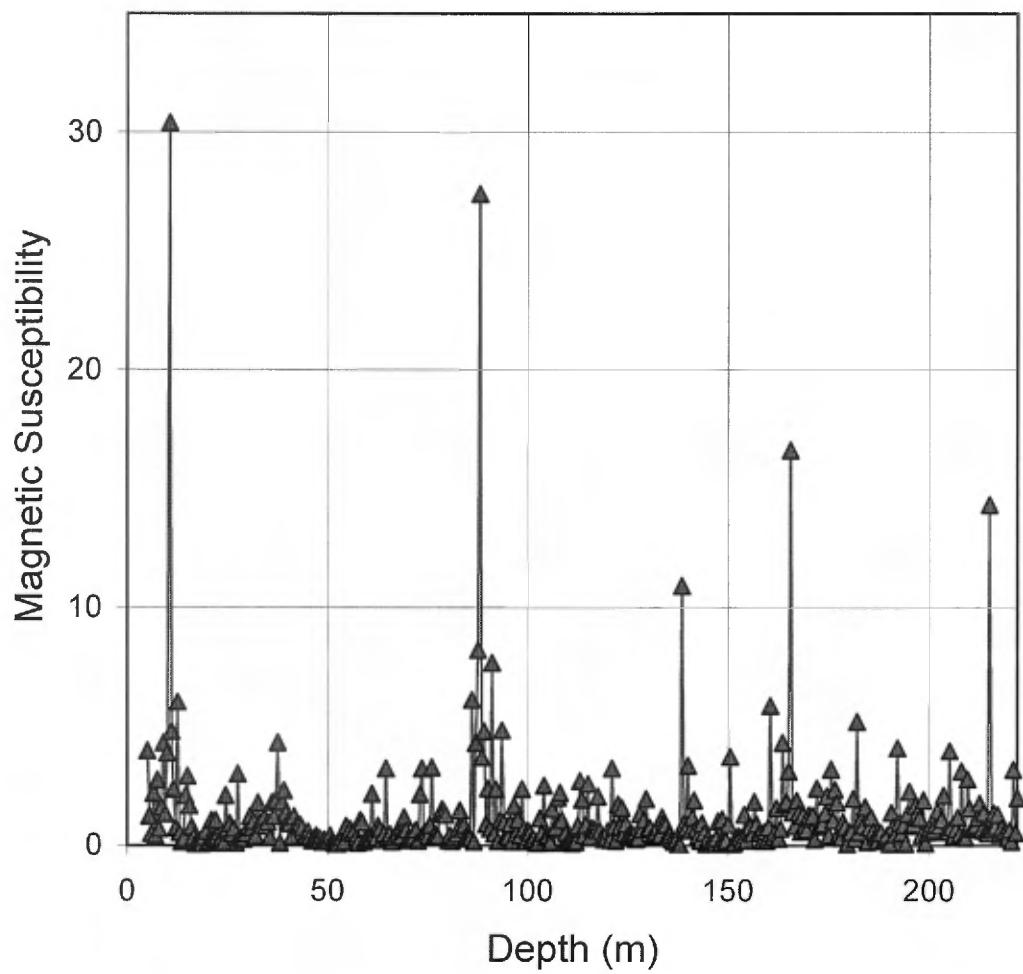
Diamond Drill Hole Summary Log for G04-195-01

HOLE-ID	G04-195-01				
Anomaly	G04-195	Start Date	30-mars-04	Claim Name	1555
Property	Foxtrot #2	End Date	01-avr-04	Tag #	
Easting	694263	Contractor	Forages Chibougamau	JV	SOQUEM INC.
Northing	5856000	Core Size	NQ	District	
Elevation	490	Length (m)	222	Geologist	
UTM Zone	18	Azimuth	227	Date Logged	01-avr-04
Mapsheet	33A/16	Dip	-50	Logged by	Tyson Birkett, Eng.
Purpose					
Comments	logged by Tyson Birkett, Eng. March 31 and April 1, 2004. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core. Total boxes: 50 all stored at Lagopède.				
Interval (m)	Description				
0 to 4,9	OB	Overburden, till with a few blocks of granite and gneiss			
4,9 to 29,9	GRANITE	Granite			
		Pale grey to slightly pinkish granite, somewhat gneissose with elongate bands and patches of mafic minerals in an equigranular matrix of quartz and felsapars. There are minor passages of grey gneiss, mostly with diffuse boundaries against the granite. The rock is generally non-magnetic, but a few scattered crystals of magnetite are present.			
		Main bands of grey gneiss: 5.4 to 5.6 m; 10.0 to 10.5 m; 11.3 to 11.5 m; 15.0 to 15.6 m; 22.1 to 22.5 m; 25.9 to 26.9 m; 28.35 to 28.5 m.			
		At 16.5 m is a 2 cm zone of minor cataclastic deformation and silicification. No calcite detected by testing with dilute HCl.			
29,9 to 129,1	GN	Gneiss			
		Grey gneiss, fine grained, with approximately 30 to 50 % bands of leucocratic rock (either granite or locally derived metamorphogenic pegmatite, non-differentiated here, but dominantly granite) distributed throughout the unit.			
		Gneissosity and compositional layering are regular at 55 to 80 degrees to the core axis, with a small fold closure at 34 to 37 m.			
		Compositional layering is generally regular at 50 degrees to the core axis to 70 m, then at 70 to 80 degrees to the core axis to the end of the unit. Small ptygmatic folds (probably early and now rootless) are locally present. Small fold closures are evident at 61 to 62 m and 83 to 84 m.			

HOLE-ID	G04-195-01
	Main granite intervals (as opposed to many smaller bands): 51.3 to 52.7 m; 53.7 to 54.4 m; 57.0 to 58.5 m; 63.5 to 65.9 m; 71.8 to 73.1 m; 92.4 to 93.4 m; 101.8 to 103.2 m; 105.1 to 106.1 m; 108.5 to 112.9 m (with minor gneiss included); 120.25 to 123.4 m.
	The rock is generally weakly magnetic, but a few crystals of magnetic are present in the granite, e.g. 37.6 m up to 0.5 cm wide; small scattered quartz-rich pegmatitic patches tend to be magnetic, as well.
	At 65.0 m is 5 % disseminated pyrite and 5 % magnetic coarse grained pyrrhotite in granite over a length of 5 cm.
	At 118.55 to 119.05 m is a zone of minor brittle deformation healed with quartz.
129,1 to 162	GRANITE Granite
	Dominant pale grey to pale pink granite with subordinate but common bands of grey gneiss. The lithological descriptions are those of 29.9 to 129.1 m, with only the proportions changed.
	The principal bands of grey gneiss are: 132.4 to 133.4 m; 114.2 to 115.5 m;
	Gneissosity is relatively constant near 60 degrees to the core axis.
162 to 170,5	GN Gneiss
	Dominantly grey gneiss with 30 to 50 % interlayers of granite. Descriptions of lithologies are the same as 29.9 to 129.1 m, only the relative proportions have changed somewhat.
	Main band of granite: 165.25 to 166.8 m.
	The gneissosity is relatively constant at 70 degrees to the core axis.
	At 166.7 to 177.6 m is a single band of more mafic gneiss, Pl + Bt + Hbl, medium brown, strongly gneissose with aligned biotite and amphibole, medium grained.
170,5 to 193,5	GRANITE Granite
	Dominant pale grey to pale pink granite with subordinate but common bands of grey gneiss. The lithological descriptions are those of 29.9 to 129.1 m, with only the proportions changed.
	Main bands of grey gneiss are: 171.0 to 171.5 m; 182.3 to 183.6 m; 184.9 to 185.6 m;
	The gneissosity is relatively constant at 70 to 80 degrees to the core axis.
193,5 to 222	GN Gneiss
	Dominantly grey gneiss with 30 to 50 % interlayers of granite. Descriptions of lithologies are the same as 29.9 to 129.1 m, only the relative proportions have changed somewhat.
	The gneissosity is relatively constant at 70 to 80 degrees to the core axis.
	Main bands of granite are: 196.8 to 197.9 m; 198.2 to 198.9 m; 214.2 to 216.7 m.

HOLE-ID G04-195-01
 222 EOH (m)

G04-195-01



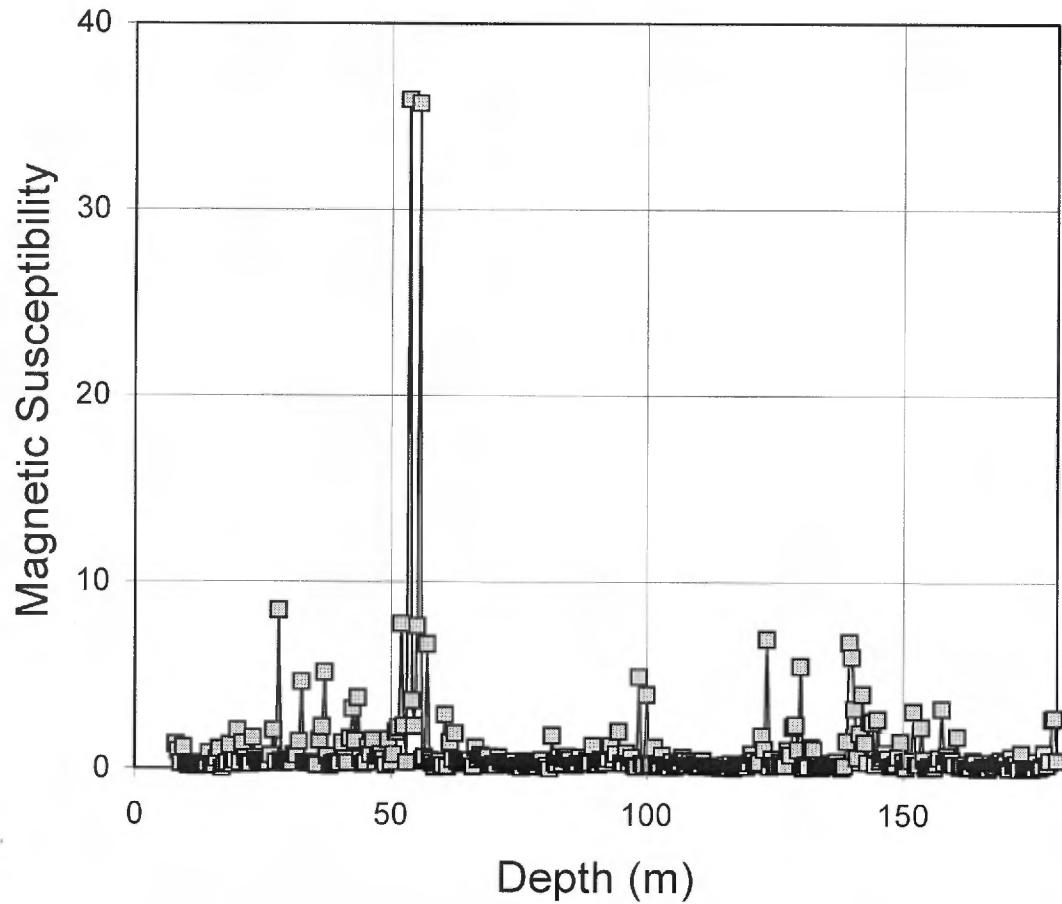


Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for G04-198-01

HOLE-ID	G04-198-01				
Anomaly	G04-198	Start Date	27-mars-04	Claim Name	1555
Property	Foxtrot #2	End Date	29-mars-04	Tag #	
Easting	691911	Contractor	Forages Chibugamau	JV	SOQUEM INC.
Northing	5854458	Core Size	NQ	District	
Elevation	490	Length (m)	180	Geologist	
UTM Zone	18	Azimuth	338	Date Logged	29-mars-04
Mapsheet	33A/16	Dip	-50	Logged by	Tyson Birkett, Eng.
Purpose	test magnetic anomaly G04-198				
Comments	logged by Tyson Birkett, Eng. March 28 and 29, 2004. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core. Total boxes : 40, all stored at camp Lagopède.				
Interval (m)	Description				
0 to 8	OB	Overburden, till with a few pebbles and cobbles of gneiss recovered.			
8 to 161,1	GN	Gneiss			
		Grey gneiss of broadly intermediate composition with abundant (10 to 50 % over 3 m) locally derived metamorphogenic pegmatite (with a few scattered 0.5 mm crystals of magnetite in small clots with Grt + (Hbl + Chl) after pyroxene). The rock is fine grained, Pl + Bt + Hbl + Qtz + Grt (trace).			
		Gneissosity is variable, to 30 m near 60 degrees to the core axis, 30 m to 60 m irregular with much near zero degrees to the core axis, 60 m to 130 m irregular but mostly near 90 degrees to the core axis with intervals near zero degrees.			
		Pink, medium to coarse grained granite (with clots of retrograded Px and magnetite): 25.8 to 28.0 m; 31.6 to 32.0 m; 53.3 to 55.6 m (strongly magnetic); 59.2 to 61.2 m; 72.1 to 73.7 m; 80.8 to 82.0 m;			
		Thin 1 mm to 1 cm quartz-rich veins with a little calcite locally: 74.5 to 74.75 m, subparallel to the core axis, 2 mm wide; 90.3 to 91.2 m, 2 - 10 mm wide, subparallel to the core axis; 99.5 to 100.0 m, 2 mm wide, subparallel to the core axis; 102.4 to 102.9, 2 mm wide, subparallel to the core axis; 112.6 to 113.2 m, 1 to 2 cm wide, irregular; (several other similar examples, all short and thin veins or small vein systems).			
161,1 to 180	GRANITE	Granite			
		White to pale pink, medium grained, Qtz + Pl + Kfs + Hbl + Bt, a few bands of grey gneiss (especially 166.5 to 169 m and 178 to 180 m). In general the unit is non-magnetic.			
180	EOH (m)				

G04-198-01



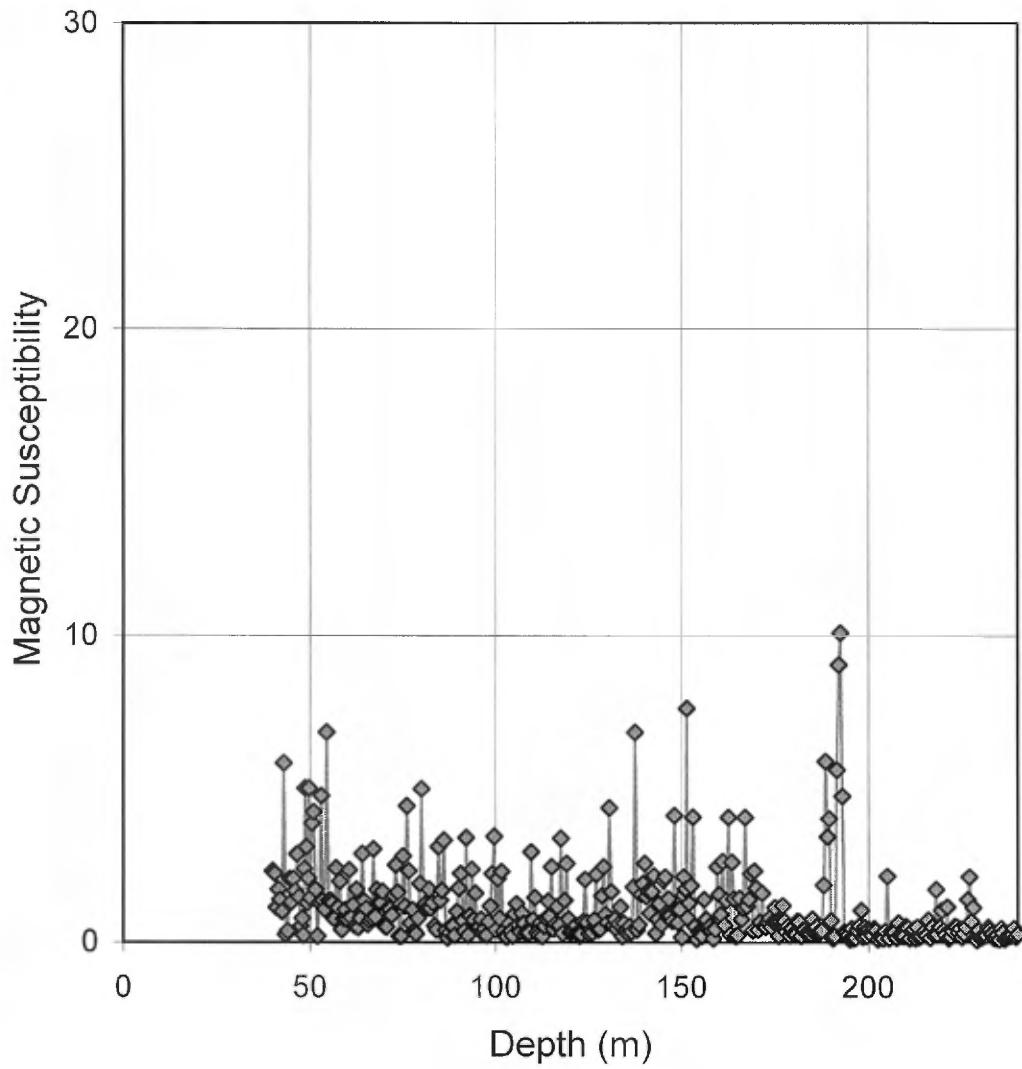


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Diamond Drill Hole Summary Log for G04-202-01

HOLE-ID	G04-202-01				
Anomaly	G04-202	Start Date	02-avr-04	Claim Name	1555
Property	Foxtrot #2	End Date	04-avr-04	Tag #	
Easting	692815	Contractor	Forages Chibougamau	JV	SOQUEM INC.
Northing	5859603	Core Size	NQ	District	
Elevation	490	Length (m)	240	Geologist	
UTM Zone	18	Azimuth	204	Date Logged	04-avr-04
Mapsheet	33A/16	Dip	-45	Logged by	Tyson Birkett, Eng.
Purpose					
Comments	logged by Tyson Birkett, Eng. April 3 and 4, 2004. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core. Total boxes : 46, all stored at camp Lagopède.				
Interval (m)	Description				
0 to 40	OB	Overburden, till with a few cobbles of gneiss and granite			
40 to 240	GN	Gneiss			
		Grey gneiss, fine grained, with 10 to 20 % thin interlayers of white, locally derived, metamorphogenic pegmatite. The rock is mostly non-magnetic to weakly magnetic, but some of the pegmatite bands have scattered small crystals of magnetite. Compositional layering is mostly at 70 to 80 degrees to the core axis and regular, but there are a series of small zones where the layering becomes parallel to the core axis over a few tens of cm, probably representing small fold closures. These features recur at approximately 5 m intervals.			
		At 191.5 to 193 m the rock is slightly more magnetic.			
		At 236.6 is a small (2 cm wide) brecciated vein cemented with quartz with a trace of disseminated pyrite at 40 degrees to the core axis.			
		At 219.5 to 223.8 m there is a preponderance of white pegmatite, also from 228.3 to 229.3 m and from 236.6 to 237.1 m.			
		From 190.25 to 191.15 is a passage of granitic rock, fine grained and silicified in the centre, coarse grained at the edges, non-magnetic, non-foliated.			
240	EOH (m)				

G04-202-01





Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for G04-184-04

HOLE-ID	G04-184-04				
Anomaly	G04-184	Start Date	18-mars-04	Claim Name	1555
Property	Foxtrot #2	End Date	20-mars-04	Tag #	
Easting	686530	Contractor	Forages Chibougamau	JV	SOQUEM INC.
Northing	5855566	Core Size	NQ	District	
Elevation	490	Length (m)	171	Geologist	
UTM Zone	18	Azimuth	292	Date Logged	20-mars-04
Mapsheet	33A/16	Dip	-50	Logged by	Tyson Birkett, Eng.
Purpose	exploration, identify cause of magnetic response G04-184. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core				
Comments	logged by Tyson Birkett, Eng., 19 to March 20, 2004. Total boxes 38, boxes 7 to 11 inclusive and boxes 37 and 38 shipped to Vancouver, other boxes stored at Lagopède. Casing pulled.				
Interval (m)	Description				
0 to 3	OB	overburden, no material recovered			
3 to 34,22	GN	Gneiss and granite			
		This unit is a grey gneiss with injections of pinkish to grey coarse grained granite. The gneiss is dark grey, fine grained, Pl + Bt, non-magnetic, with a few darker bands of apparent restite and lighter bands richer in Pl. Banding is typically at 45 + or - 5 degrees to the core axis. The granite is medium to coarse grained, homogeneous and massive with a few patches richer in Qtz or Bt and locally a few Grt.			
		At 24.25 m there is a small zone of 5 cm with reaction to dilute HCl in a quartz-rich gneiss.			
34,22 to 34,65	Kma	Kimberlite, macrocrystic, segregational textured groundmass			
		This unit is interpreted as a dyke. The upper part, 34.22 to 34.48 is clearly kimberlitic. The remainder is mostly altered gneiss with some kimberlitic component.			
		The upper contact is at 70 degrees to the core axis. Within the unit, the rock is finer grained and with more calcite-rich microbands than in the centre of the unit.			
		The groundmass is pale grey, non-magnetic, with abundant calcite as determined by reaction with dilute HCl. A few (15 %) of small serpentinised olivine macrocrysts are dispersed throughout the core. From 34.48 to 34.65 the rock is broken gneiss with a calcite-rich matrix, but in badly broken core and difficult to distinguish.			
34,65 to 37,48	GRANITE	Granite, pale pink to pink, coarse grained			
37,48 to 37,81	Kma				

HOLE-ID **G04-184-04**

This unit is interpreted as a dyke. The upper contact is at 70 degrees to the core axis. The lower contact is in broken core, but appears parallel to the upper contact.

The groundmass is medium grey, non-magnetic, and rich in calcite as small segregations as determined by reaction with dilute HCl. A few (10 to 15 %) of serpentinised olivine macrocrysts to 1 cm long are present in the rock. They show a crude flow alignment parallel to the upper contact. Two xenoliths of grey gneiss are present, lying subparallel to the upper contact and forming 20 % of the rock.

37,81 to 40,53 GRANITE

Granite, coarse grained, pale pink, with 10 cm of grey gneiss at the beginning of the unit.

40,53 to 40,57 Kma

Kimberlite, macrocrystic, uniform textured groundmass

This unit is interpreted as a small dyke. It lies at 55 degrees to the core axis, with inclusions of the immediate wallrock suggesting an anastamosing dyke set.

Small serpentinised olivine macrocrysts are set in a calcite-rich groundmass. The macrocrysts show weak flow alignment parallel to the contacts.

40,57 to 41,22 GRANITE

Granite, pale pink, coarse grained

41,22 to 43,57 Kma

Kimberlite, macrocrystic, segregational textured groundmass

This unit is interpreted as a dyke.

Macrocrysts of serpentinised olivine form 30 to 35 % of the rock, they are almost all in the size range 0.5 to 1 cm long. Scattered garnets with broad kelyphitic rims are present throughout the unit, although forming only a trace of the rock. The matrix is magnetic, dark grey and rich in calcite. Small calcite-rich segregations form 1 % of the rock, they are mostly less than 3 mm wide. The top 30 cm of the dyke are disaggregated and form a pile of loose material in the core tray (this may be altered country rock, although calcite is abundant as tested with dilute HCl.). The upper contact is in broken and disrupted core, but the lower contact is at 75 degrees to the core axis. The upper and lower contact zones are finer grained than the body of the dyke, with contact-parallel calcite veinlets over 5 cm and more obvious calcite-rich segregations. Outboard of the dyke in the gneiss are 10 cm wide zones of alteration and serpentinisation.

A trace to 0.25 % of ilmenite is present in the rock as small polycrystalline very fine grained nodules, some included in olivine, with small amounts of sulphide (?) inclusions in the oxides. These oxide clots are up to 0.5 cm long. One to 2 % of the rock is small (less than 0.3 cm) strongly altered xenoliths of country rock.

43,57 to 63,1 GRANITE

Granite, medium to coarse grained, pink to grey. The unit includes about 10 % of grey gneiss as metric bands.

63,1 to 82,7 GN

Gneiss, grey, mostly fine grained, with a few percent of locally derived pegmatitic melt, and 10 % of granite as metric bands. Pegmatitic portions of the gneiss are locally magnetic and include scattered crystals of Cpx. Metric zones are medium grained, Pl + Bt + Opx rocks with some quartz.

82,7 to 93,9 GRANITE

Granite as 43.57 to 63.1 m

HOLE-ID G04-184-04

93,9 to 169,23 GN

Gneiss, grey, fine grained, with metric intervals of granite forming 20 % of the unit. Gneissic banding is contorted and at varying angles to the core axis. Similar to 63.1 to 82.7 m. The rock is overall moderately magnetic but with large variations in susceptibility and with increasing susceptibility with depth. Below 120 m the unit is approximately 30 % granite.

169,23 to 170,74 Db

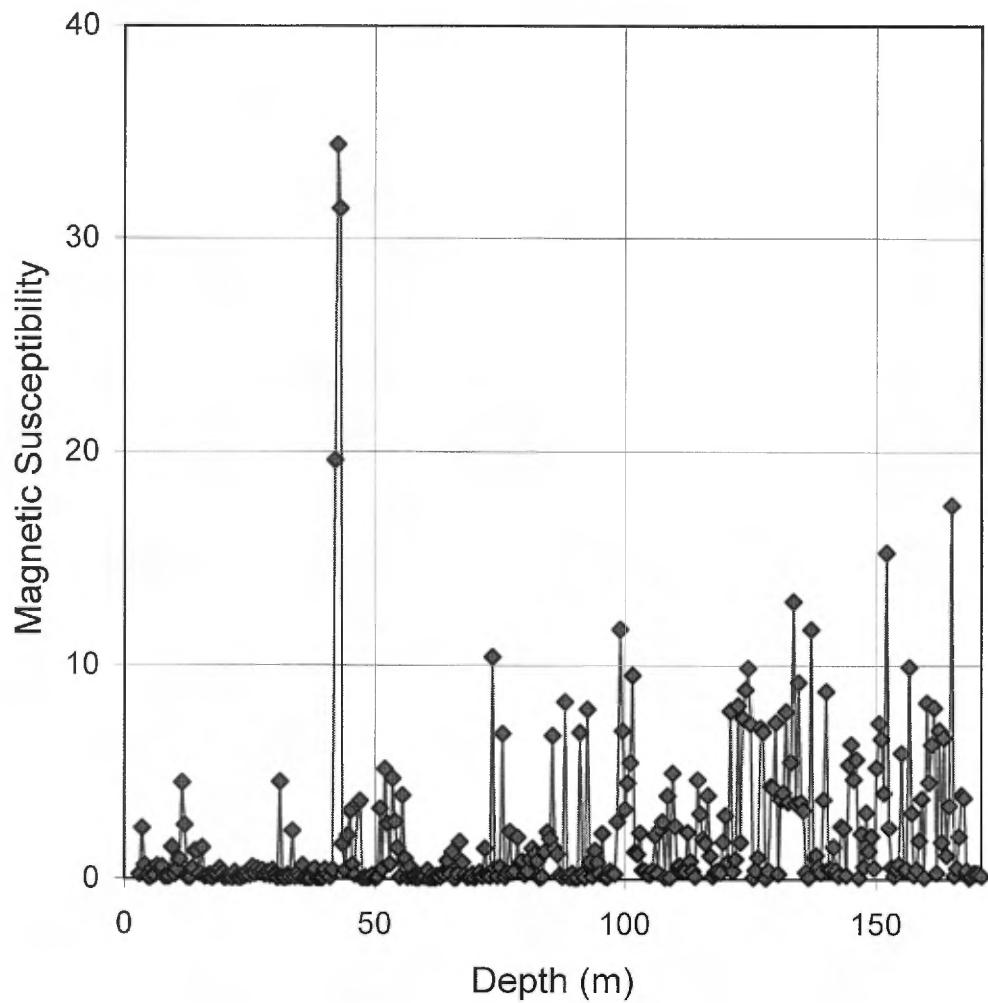
Diabase, fine grained, grey, no reaction to dilute HCl, non-magnetic. The mineralogy is Pl + Px + a few small black grains probably olivine.

170,74 to 171 GRANITE

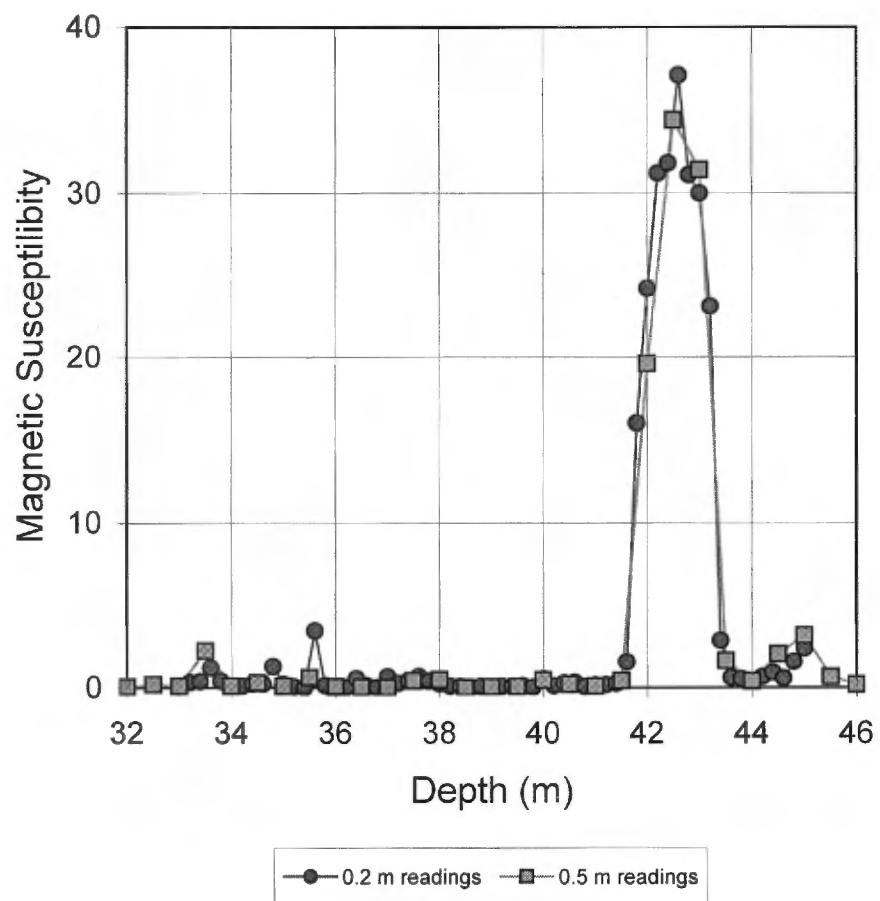
Granite, as in bands in the grey gneiss of the earlier units

171 EOH (m)

DDH - G04-184-4



Detail of G04-184-4





Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for G04-184-05

HOLE-ID	G04-184-05			
Anomaly	G04-184	Start Date	20-mars-04	Claim Name
Property	Foxtrot #2	End Date	22-mars-04	Tag #
Easting	686570	Contractor	Forages Chibougamau	JV
Northing	5855571	Core Size	NQ	District
Elevation	490	Length (m)	160	Geologist
UTM Zone	18	Azimuth	270	Date Logged
Mapsheet	33A/16	Dip	-50	Logged by
Purpose	exploration, identify cause of magnetic response G04-184. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core			
Comments	logged by Tyson Birkett, Eng. 21 and 22 March, 2004. Total boxes of core: 37. Boxes 8, 14, 15, 16, 18 and 24 were sent to Vancouver, dip test not legible. Casing pulled.			

Interval (m)	Description
0 to 2,3	OB Overburden, no material recovered
2,3 to 40	GRANITE Granite, medium grained, Qtz - Kfs - Pl - Bt - Opx, mostly non-magnetic, with approximately 30 % grey gneiss, magnetic, Pl - Bt - Opx, fine grained as bands 10 to 60 cm wide. Geissic banding is constant at approximately 50 degrees to the core axis.
40 to 64,68	GRANITE Granite, coarse grained pale pink, non magnetic, with 20 to 30 % non-magnetic grey gneiss interlayered. From 43.5 to 45 m there are small quartz - carbonate veins with traces of pyrite and associated retrograde alteration of the grey gneiss to Chl - Pl - Epi. Gneissic banding is regular but varies from 45 to 30 degrees to the core axis.
64,68 to 65	Kma Kimberlite, sparsely macrocrystic, uniform textured groundmass This unit is interpreted as a dyke. The groundmass is pale grey, with strong reaction to dilute HCl. The texture is fine and even grained, with calcite distributed evenly throughout. A few 1 cm macrocrysts of serpentinised olivine are present. A central septum of altered country rock 6 cm wide forms the centre of the dyke.
65 to 65,5	GRANITE Granite, medium grained, pale pink, a little gneiss, mostly broken core, trace of 1 mm serpentine veinlets
65,5 to 65,6	Kma Kimberlite This unit is rubble cemented by calcite, only intact because it is still frozen at the time of logging. Crystal

HOLE-ID G04-184-05

fragments, rock fragments and a few olivine grains are held in a poorly crystalline calcite matrix.

65,6 to 65,91 GN

Gneiss, grey, fine grained, trace of serpentine veinlets

65,91 to 67,65 Kma

Kimberlite, macrocrystic, segregationary textured groundmass

This unit is interpreted as a dyke. The upper and lower contacts are at approximately 80 degrees to the core axis.

The groundmass is medium grey, magnetic, with strong reaction to dilute HCl. Calcite-filled segregations are developed at the upper and lower contact zones. Small 1 mm calcite veins at 90 degrees to the core axis are scattered throughout the central portion of the unit. Macrocrysts of serpentinised olivine up to 1.5 cm long form 15 % of the rock, concentrated in the upper contact, lower one-third of the unit and the lower contact zones. Macrocrysts of ilmenite up to 1 cm long are present, forming a trace of the rock. A few garnets with kelyphitic rims form a trace of the rock (much less than the ilmenite).

67,65 to 67,85 GN

Gneiss, almost entirely altered to serpentine

67,85 to 67,98 Kma

Kimberlite, macrocrystic

This unit is interpreted as a small dyke. The lower contact is at approximately 80 % to the core axis. The rock is similar to 65.91 to 67.65 m.

67,98 to 68,04 GN

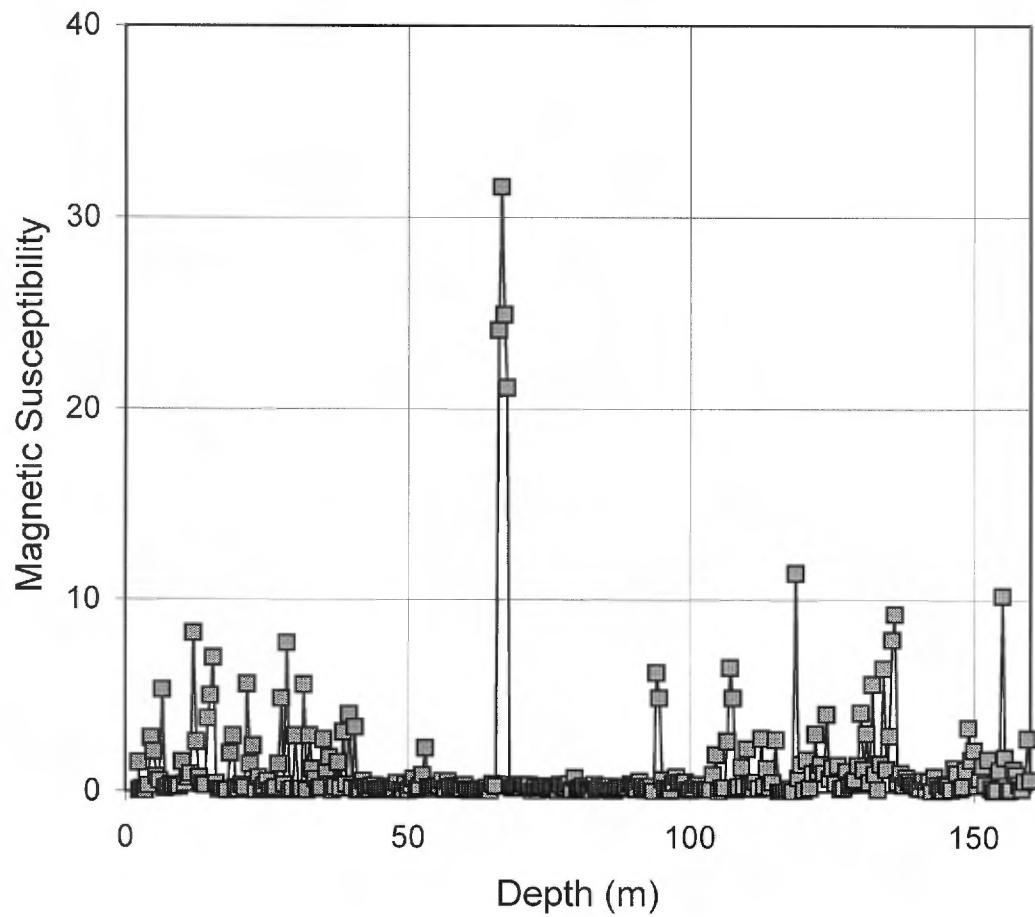
Gneiss, almost totally altered to serpentine. Most of the core is broken. There are pieces of a 1 cm wide kimberlite dyke with small macrocrysts of serpentinised olivine within this unit.

68,04 to 160 GN

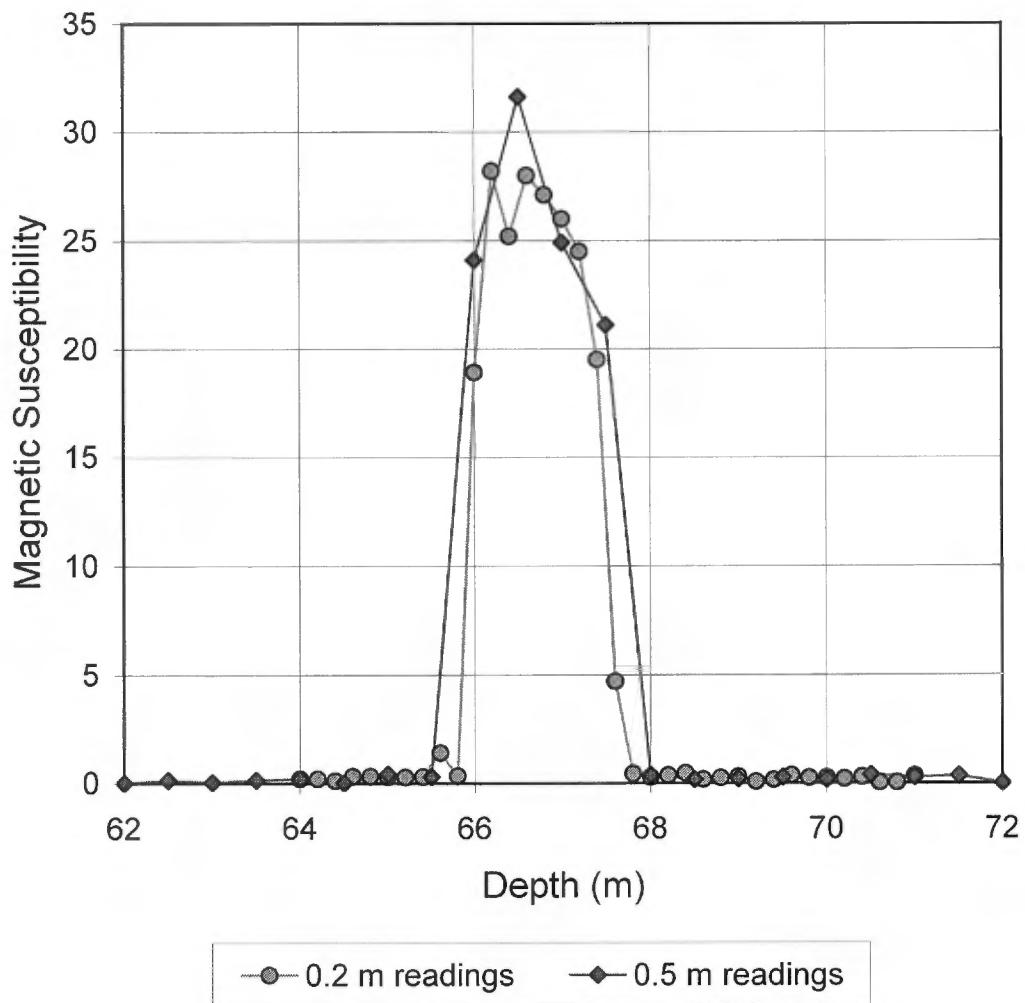
Gneiss, grey fine grained, non-magnetic, with approximately 25 % bands of pale pink granite, also non-magnetic, up to about 1 m wide. From 80 to 81 m are a few 1 to 2 cm quartz - calcite veins at 30 degrees to the core axis with traces of pyrite. Minor brecciation of the gneiss is associated with these veins. At 103.8 is 5 % disseminated pyrite over 10 cm in grey gneiss. The gneissosity is typically at 50 degrees to the core axis, but with local variation to 90 or to zero degrees to the core axis. Below 100 m the unit is sporadically slightly magnetic (the gneissic portion, not the granitic). Below 137 m the gneissic part of the unit is redder and more fractured than above. Below 137 m the unit is approximately 50 % granite.

160 EOH (m)

G04-184-05



G04-184-05 Detail





Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for G04-219-01

<u>HOLE-ID</u>	G04-219-01		
<i>Anomaly</i>	G04-219	<i>Start Date</i>	04-avr-04
<i>Property</i>	Foxtrot #2	<i>End Date</i>	05-avr-04
<i>Easting</i>	686386	<i>Contractor</i>	Forages Chibougamau
<i>Northing</i>	5856550	<i>Core Size</i>	NQ
<i>Elevation</i>	490	<i>Length (m)</i>	147
<i>UTM Zone</i>	18	<i>Azimuth</i>	270
<i>Mapsheet</i>	33A/16	<i>Dip</i>	-50
<i>Purpose</i>			

Comments Logged by Tyson Birkett, Eng. April 5 and 6, 2004. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core. Total boxes : 32, 28 to 30 sent to Vancouver, rest stored at camp Lagopède.

<u>Interval (m)</u>	<u>Description</u>
0 to 13	OB Overburden, till with cobbles of granite and of gneiss, some moderately magnetic
13 to 22,8	GRANITE Granite Pink to pale grey, medium to coarse grained, non-magnetic, massive and non-deformed. Bands of grey gneiss from 13.7 to 15.3 m and from 16.0 to 17.1 m.
22,8 to 37,85	GN Gneiss Grey gneiss, fine grained with approximately 10 % white, locally derived metamorphogenic pegmatite. Composed of Qtz + Bt + Pl + Px or Hbl. A few bands of granite are present: 25.3 to 26.4 m; 37.0 to 37.6 m.
37,85 to 38,2	Db Diabase (Core is broken in this interval). Fine grained, medium grey, non-magnetic rock. Pl + Px or Ol, Chl on fractured surfaces.
38,2 to 73,5	GN Gneiss, as 22.8 to 37.85 m. Compositional layering is dominantly at low angles to the core axis. Near the lower contact the rock is moderately magnetic (possibly because of contact effects of the underlying granite).
73,5 to 132,61	GRANITE Granite

HOLE-ID G04-219-01

Pink to pale grey fine to medium grained granite, with mafic minerals Px - Hbl + Bt. Near the upper contact are minor layers of grey gneiss, mostly magnetic, suggesting a contact zone of mixed rock over 10 m. The granite is non-magnetic, vaguely layered near the upper contact, then massive with no apparent texture. A few small zones retrograded to epidote are present.

From 102 to 114.2 m there are layers of grey gneiss mixed with the granite, layering is at a low angle to the core axis, and subparallel from 129.1 to 131.2 m.

132,61 to 132,71 Kma

kimberlite, macrocrystic, segregationary textured groundmass

The rock is light olive green in colour, fine grained with a few serpentinised olivine macrocrysts up to 1 cm long in a calcite-rich groundmass. The upper contact is marked by a 7 mm wide calcite vein, the contact is at 65 degrees to the core axis. The lower contact is less observable in broken core but appears to be at the same angle as the upper contact.

132,71 to 133,79 GRANITE

Granite, pale pink, medium grained, massive, non-magnetic.

133,79 to 135,06 Kma

Kimberlite, macrocrystic, segregationary textured groundmass

This unit is interpreted as a dike. The upper contact is at 70 degrees to the core axis, marked by a 3 to 4 mm wide calcite vein. The lower contact is at 70 degrees to the core axis, with a 6 cm wide outboard zone of intense serpentinisation in the country rock (from 135.06 to 135.12 m).

The groundmass is fine grained to granular, dark grey, and magnetic. Macrocrysts of serpentinised olivine form 20 % of the rock, they are up to 1.5 cm long. Macrocrysts have an inhomogeneous texture and appear to be concentrated in bands due to flowage of the magma. Small segregations of calcite are common throughout the unit. Two sections of strongly serpentinised country rock are present in the unit, at 134.38 to 134.42 m and 134.61 to 134.66 m. These may be xenoliths or septa indicating a multiple dyke occurrence. Their contacts are subparallel with the dike outer contacts. The distribution of macrocrysts is in the centres of the dike segments, leaving finer-grained zones around the country rock inclusions, tentatively considered to support the hypothesis of multiple dikes.

A few garnets with kelyphite rims and many ilmenite grains or clusters of grains up to nearly 0.5 cm long are observed in the unit.

135,06 to 136,46 GRANITE

Granite, as 132.71 to 133.79 m.

136,46 to 136,51 Kma

Kimberlite, macrocrystic

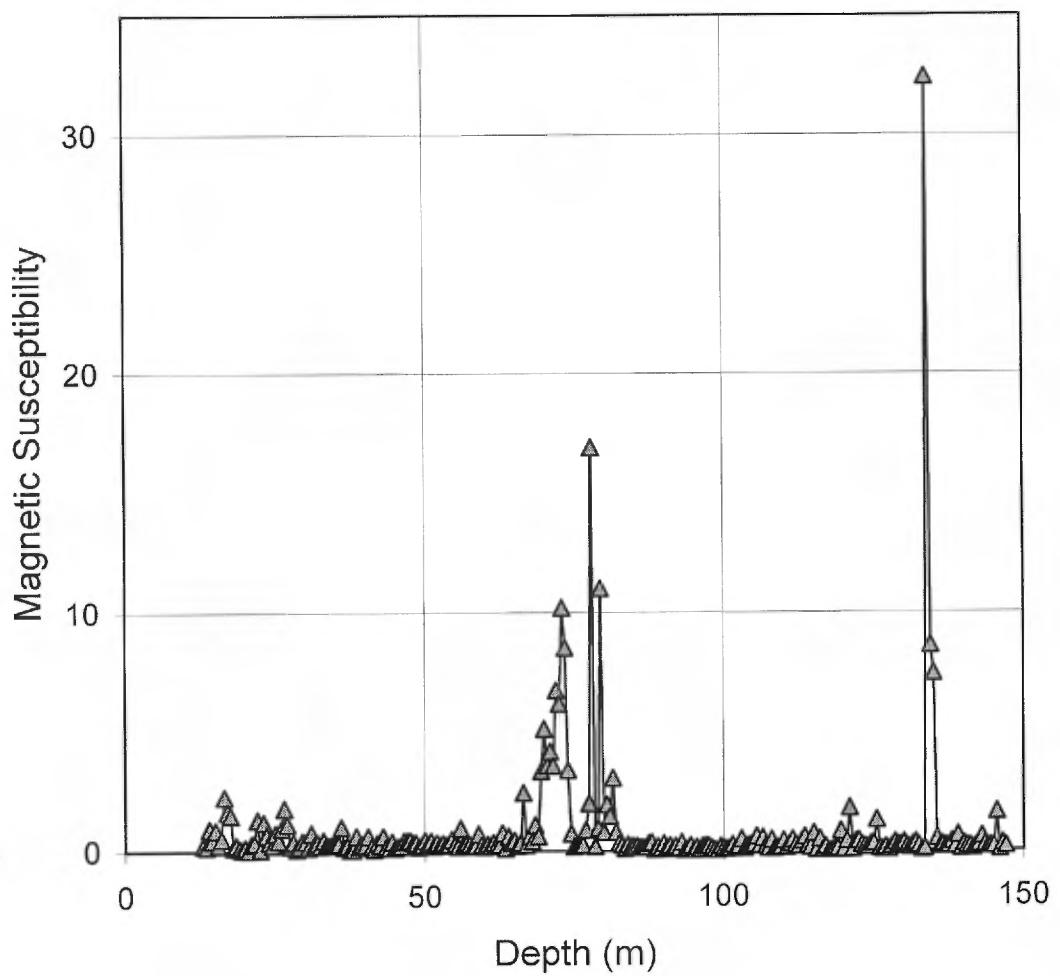
This rock is dominated by calcite with a few altered macrocrysts of olivine in a pale grey fine grained groundmass. The contacts are at 65 to 70 degrees to the core axis. Within the unit are several small (less than 1 mm wide) calcite veins parallel to the contacts. Some of the calcite veinlets have small amounts of pyrite as thin platings on portions of their surfaces.

136,51 to 147 GRANITE

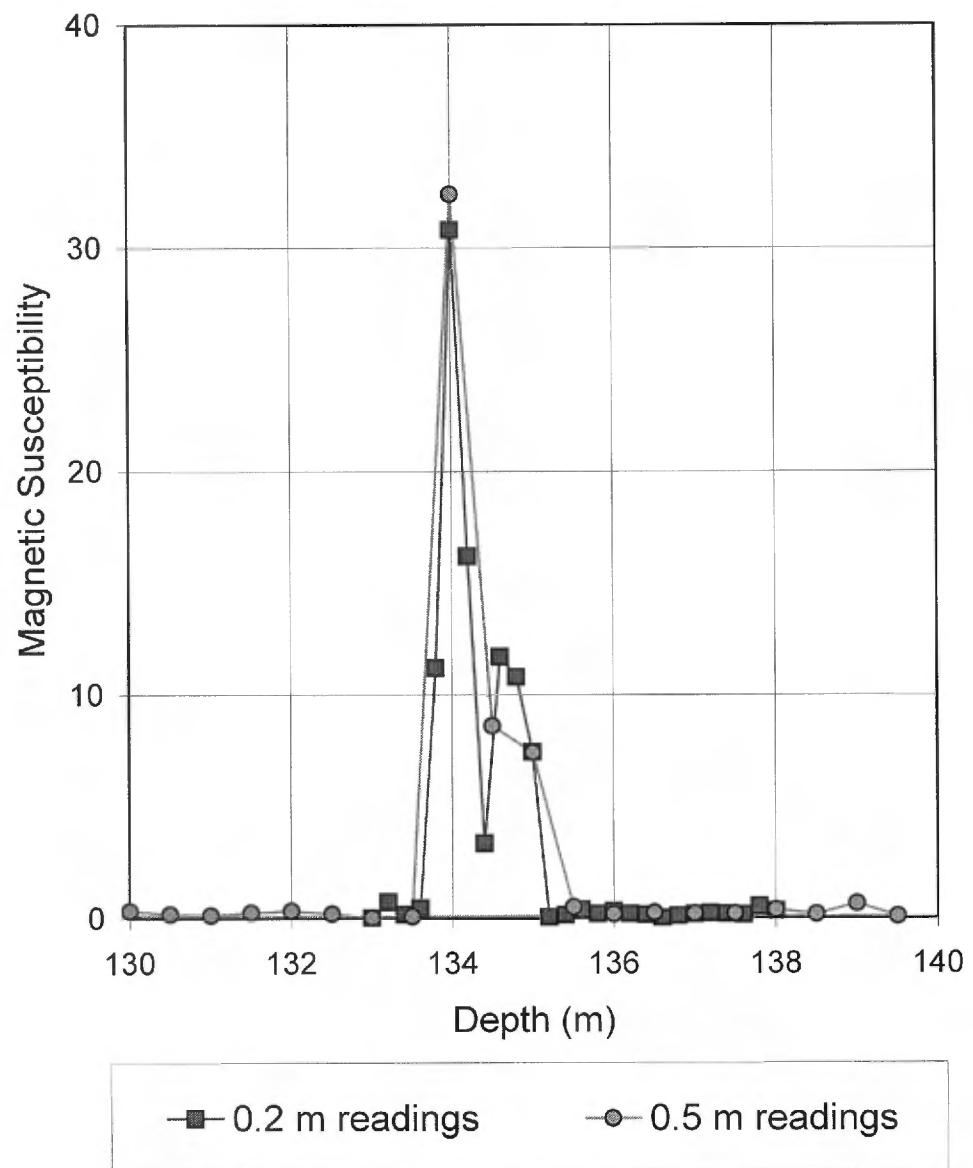
Granite, as 132.71 to 133.79, with a few (25 %) irregular bands or layers of grey gneiss at low angles to the core axis, up to 30 degrees to the core axis.

147 EOH (m)

G04-219-01



G04-219-01 Detail





Ashton Mining of Canada Ltd.

Diamond Drill Hole Summary Log for G04-219-02

HOLE-ID	G04-219-02				
Anomaly	G04-219	Start Date	05-avr-04	Claim Name	1555
Property	Foxtrot #2	End Date	07-avr-04	Tag #	
Easting	686386	Contractor	Forages Chibougam	JV	SOQUEM INC.
Northing	5856550	Core Size	NQ	District	
Elevation	490	Length (m)	162,2	Geologist	
UTM Zone	18	Azimuth	270	Date Logged	07-avr-04
Mapsheet	33A/16	Dip	-55	Logged by	Tyson Birkett, Eng.
Purpose					
Comments	Logged by Tyson Birkett, Eng. April 6 and 7, 2004. Magnetic susceptibility meter from Exploranium (Kappameter KT-9 serial number 5208) set to 5 cm diameter of drill core. Total boxes : 36, boxes 26 to 29 to Vancouver, others stored at Lagopède.				
Interval (m)	Description				
0 to 11,8	OB	Overburden, till with cobbles of granite and of gneiss			
11,8 to 21,8	GRANITE	Granite			
		Pink, massive, non-magnetic granite with a few bands or layers of grey gneiss. (most of 12.3 to 17.6 m)			
21,8 to 40,8	GN	Gneiss			
		Grey gneiss, fine grained, with 10 to 20 % locally derived metamorphogenic pegmatite as layers and pods. Mineralogy is Pl + Qtz + Bt + Hbl or Px + locally minor Grt. Compositional layering is dominantly at low angles to the core axis, up to locally 45 degrees.			
40,8 to 41,07	Db	Diabase, fine grained, medium grey-green, non-magnetic, contacts with surrounding rock at 70 degrees to the core axis.			
41,07 to 70,15	GN	Gneiss, grey and as 21.8 to 40. 8 m. There are a few bands of pink granite within the unit; 42.6 to 43.1 m; 61.9 to 62.3 m; 66.1 to 67.1 m. Compositional layering is dominantly at low angles to the core axis.			
70,15 to 122,8	GRANITE	Granite, pink to pale pink, medium to coarse grained, non-magnetic, massive. There are a few layers of grey gneiss; 73.9 to 75.0 m (silicified with 1 to 2 % of disseminated fine grained pyrite from 74.8 to 75.0 m); 76.6 to 78.1 m; 84.3 to 85.2 m, contacts at low angles to the core axis; 101.9 to 103.8 m; 104.6 to 105.7 m; 107.3 to 108.2 m; 118.6 to 119.15 m.			
122,8 to 122,94	Kma				

HOLE-ID G04-219-02

This unit is interpreted as a thin dike.

The rock is dark green, with serpentinised olivine macrocrysts in a calcite-rich groundmass with small calcite segregations. It is weakly magnetic. The upper and lower contacts are at 65 degrees to the core axis, the upper contact is wavy. Thin dikelets, irregular and anastamosing, up to 4 mm wide penetrate 10 cm into the wallrock below the unit. Thin (1 mm) veinlets of calcite parallel to the contacts are present within the dike.

122,94 to 125,55 GRANITE

Granite with minor bands of grey gneiss, as 70.15 to 122.8 m.

125,55 to 125,68 Kma

Kimberlite, macrocrystic, segregational textured groundmass

This unit is interpreted as a thin dike.

The rock is dark green, with serpentinised olivine macrocrysts in a calcite-rich groundmass with small calcite segregations. It is weakly magnetic. The upper and lower contacts are at 80 and 60 degrees to the core axis, respectively. Macrocrysts are concentrated in the lower one-third of the unit.

125,68 to 126 GN

Gneiss, grey, fine grained with the last 12 cm of the unit granite. At 125.88 to 125.91 m is a small zone of thin injections of kimberlite as dikelets in an irregular crackle pattern in the rock

126 to 126,06 Kma

Kimberlite, macrocrystic, segregational textured groundmass

This unit is interpreted as a thin dike.

The rock is dark green, with serpentinised olivine macrocrysts in a calcite-rich groundmass with small calcite segregations. It is weakly magnetic. The upper and lower contacts are at 60 and 75 degrees to the core axis, respectively. The upper contact is marked by a zone of calcite veinlets 1.5 cm wide in aggregate parallel to the contact. Macrocrysts of ilmenite are observed.

126,06 to 126,15 GN

Gneiss, somewhat serpentinised.

126,15 to 126,33 Kma

Kimberlite, macrocrystic, segregational textured groundmass

This unit is interpreted as a thin dike.

The rock is dark green, with serpentinised olivine macrocrysts in a calcite-rich groundmass with small calcite segregations. It is weakly magnetic. The upper and lower contacts are at 85 and 80 degrees to the core axis, respectively. Macrocrysts of ilmenite are observed. The upper contact is marked by a calcite veinlet 2 to 3 mm wide.

126,33 to 126,71 GRANITE

Granite with small patches of digested gneiss. At 126.64 to 126.66 m is a thin complex dikelet of kimberlite filling brittle fractures in the host.

126,71 to 126,81 Kma

Kimberlite, macrocrystic, segregational textured groundmass

HOLE-ID G04-219-02

This unit is interpreted as a thin dike.

The rock is dark green, with serpentinised olivine macrocrysts in a calcite-rich groundmass with small calcite segregations. It is weakly magnetic. The upper and lower contacts are at 45 and 60 degrees to the core axis, respectively. The upper contact is marked by a 2 to 3 mm wide calcite vein.

126,81 to 126,88 GRANITE

Granite, somewhat serpentinised

126,88 to 127,33 Kma

Kimberlite, macrocrystic, segregational textured groundmass

This unit is interpreted as a thin dike.

The rock is dark green, with serpentinised olivine macrocrysts in a calcite-rich groundmass with small calcite segregations. It is weakly to moderately magnetic. The upper and lower contacts are at 75 and approximately 80 degrees to the core axis, respectively. A strongly serpentinised inclusion of country rock with irregular contacts is at 127.06 to 127.13 m, but does not occupy the entire core throughout this interval.

127,33 to 129,33 GRANITE

Granite with minor layers of gneiss, core is broken.

129,33 to 129,58 Kma

Kimberlite, macrocrystic, segregational textured groundmass

This unit is interpreted as a thin dike.

The rock is medium grey, with serpentinised olivine macrocrysts in a calcite-rich groundmass with small calcite segregations. There are crystal and rock fragments of the wallrock forming 10 % of the unit. It is non-magnetic. The upper and lower contacts are in broken core and angles cannot be measured.

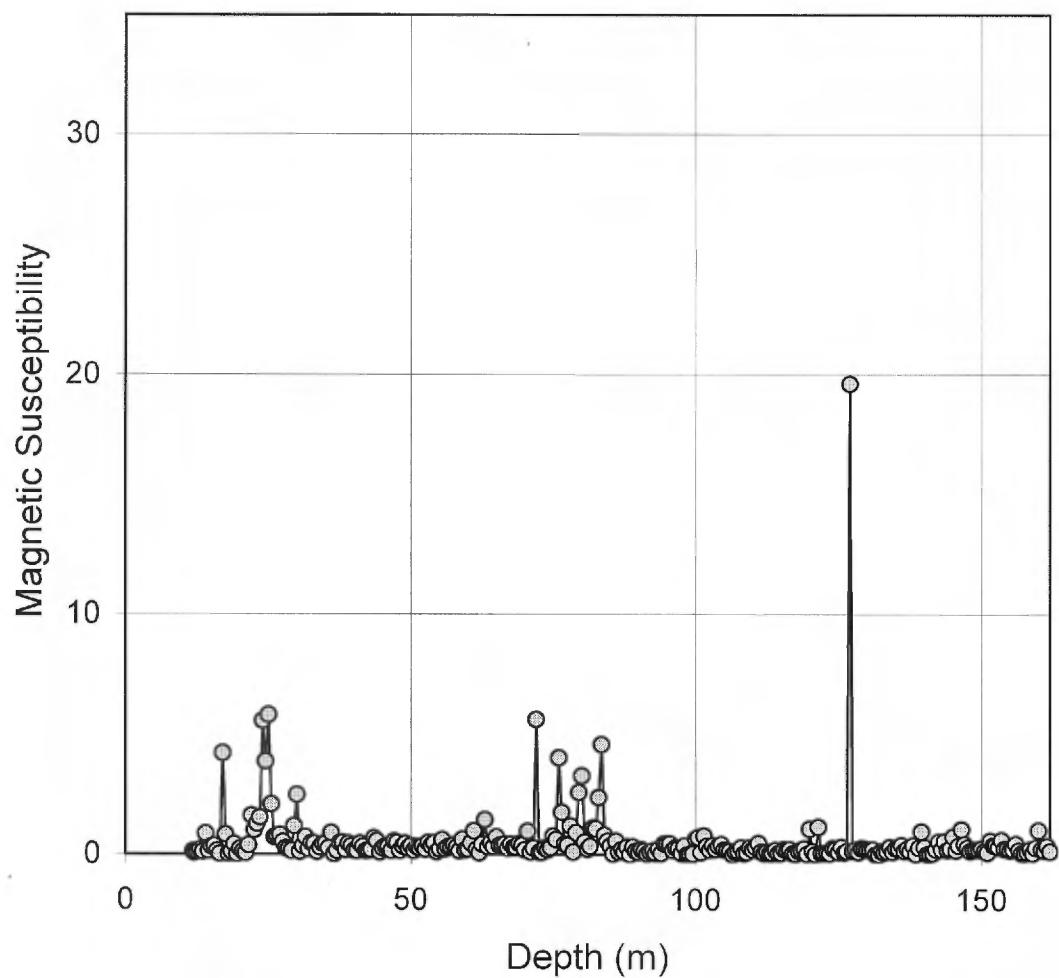
129,58 to 162,2 GRANITE

Granite with common bands of grey gneiss (130.7 to 131.8 m; 134.6 to 135.7 m; 142.2 to 145.5 m; 146.7 to 149.9 m; 152 to 162 is 50 % gneiss with compositional layering throughout the unit mostly at low angles to the core axis).

Broken core is common, 128 to 142 m.

162,2 EOH (m)

G04-219-02



G04-219-02 Detail

