

**EL 43/1992**

**MELBA PROJECT**

**ANNUAL REPORT**

**March 2006**

*Prepared for:*

**Allegiance Mining NL  
Level 11 Quantum House  
49-51 York Street  
Sydney 2000**

*Prepared by:*

**Lindsay Newnham, Bsc, FAusIMM, CPGeo  
Newnham Exploration and Mining Services  
PO Box 183 Exeter Tasmania 7275  
Ph: (03) 6394 3434 Fax: (03) 6394 3435**



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**Appendix A: 'EL 43/1992 - Melba Flats. North Cuni-Genets Area: Data Review & Project Recommendations' prepared for Allegiance by Newnham Exploration & Mining Services, 20 August 2005**

**Appendix B: 'Melba Flats Gradient IP Survey: Logistics Summary' prepared for Allegiance by Zonge Engineering & Research Organisation, January 2006**

## 1. SUMMARY

Identified resources of nickel and copper sulfides at Melba Flats have previously been estimated (Annual Report 2005) as:

North Cuni-Genets:

Indicated: 83,000 t 0.7% Ni, 0.6% Cu, 0.02% Co

Inferred: 12,000 t 1.2% Ni, 3.3% Cu, 0.04% Co

Nickel Reward:

Inferred: 30,000 t 3% Ni

The resources in both areas are shallow and considered amenable to open-cut mining.

However, because of their limited size as currently drill defined, these resources are unlikely to support the cost of a stand-alone total operation including milling. Commercial development will probably depend upon either discovery of additional resources and/or processing in a nearby existing mill.

Allegiance is currently progressing with the permitting and financing of a nickel sulfide milling operation based on the Avebury deposits west of Zeehan, approximately 30 road kilometres from Melba. Construction of this mill in the near future will stimulate early development of the identified Melba resources.

During 2005-06 a thorough review of all existing mining and exploration data in the North Cuni-Genets area was undertaken to determine if there was potential for additional resources in that area. This review highlighted the untested presence of large mineralised gabbroic bodies to the north-west and west of Genets and North Cuni respectively. Further investigation of this area was therefore recommended.

In early 2006 a gradient array IP survey was completed to better define anomalous zones within this area of interest. The survey has identified several strong chargeability anomalies in the area and initial drill testing of these anomalies is planned in April 2006, at an estimated cost of \$60,000. Encouragement from this initial drilling will be followed up with more focused drilling.

## **2. OBJECTIVES and STRATEGY**

The known Melba Flats Ni-Cu deposits are regarded as hydrothermal deposits introduced along structures into a gabbro dike host rock.

A series of shallow deposits are well known from historical mining and recent drilling. These deposits occur over a strike length of 3 km, and appear to be largely confined to only one gabbro dike. Mineralisation is typically disseminated throughout the dike but appears to be more concentrated (massive in places) on the footwall of the dike, which dips east at approximately 50°.

Mineralisation is principally pentlandite-millerite-chalcopyrite-pyrite. Significant cobalt, gold and PGM are associated with either (or both) nickel and copper sulfides.

The deepest historical mining was 50 vertical metres, whilst the deepest drilling to date is 70 m at Nickel Reward.

Chemically, the gabbro dikes appear to be related to and derived from ultramafic bodies such as that outcropping to the east of Melba.

Given the body of existing petrological data which suggests the Melba sulfides are hydrothermal replacement deposits, it is possible the mineralisation was sourced at depth by the interaction of a hydrothermally fertile granite ridge known to underlie this area, with a deeper and larger nickeliferous ultramafic body.

Allegiance's immediate exploration objective in the Melba area is to identify larger resources of Ni and Cu sulfides at depth beneath the relatively small identified resources at North Cuni-Genets and Nickel Reward.

### **3. WORK COMPLETED - CURRENT YEAR**

With the exception of one medium length drill hole at Nickel Reward, all other drilling and mining at Melba has failed to identify significant sulfide mineralisation below about 50 m beneath surface. Both the mineralisation and the gabbro dikes appear to disappear at shallow depth.

On reflection, this does not appear to make much logical sense, especially if the dikes are derived from a deeper, more extensive ultramafic body.

It was, therefore, decided to take a fresh look at all the existing mining and exploration data in the North Cuni-Genets area to see if explanations and new exploration directions were possible.

Results of this review are presented as Appendix A in a report titled:

*'EL 43/1992 - Melba Flats: North Cuni-Genets Area. Data Review & Project Recommendations'* by LA Newnham for Allegiance Mining NL, 20 August 2005

The principal conclusions in this report were:

- (i) Mineralisation may be terminated at shallow depth by an east dipping normal fault. The disrupted upthrown continuation of the mineralised gabbros would lie to the west of the North Cuni-Genets line of workings.
- (ii) Drilling has identified major gabbro dikes lying west of the North Cuni-Genets area (upthrown side of the postulated fault).
- (iii) Geophysical surveys have identified substantial EM and SP anomalies west of North Cuni-Genets.
- (iv) Soil sampling surveys by CRA also identified an extensive geochemical anomaly in the same area as the geophysical anomalies.

The concept of a shallow dipping normal fault, parallel in strike to the gabbros and displacing the upper section of the mineralised gabbros, could also explain other intriguing geological observations in the Melba area:

- (a) the Devereaux Workings to the west of Nickel Reward might be the continuation of the Nickel Reward dikes on the upthrown side of the fault
- (b) the large deep-seated aeromagnetic anomaly north-west of North Cuni-Genets may be related to a deeper mass of gabbro or ultramafic from which the Melba dikes were derived

The recent drilling program also demonstrated potential for shallow extensions

of mineralisation along strike to the north-east and south of the current drilling.

The resource as it stands is considered capable of supporting a small contract open-cut operation supplying crushed ore to a nearby existing mill. Any increase in the resource base would benefit such an operation.

An IP survey was completed to follow this potential exploration opportunity to the west and north-west of North Cuni and Genets respectively.

A series of grid lines was cut in early January 2006 to facilitate this work, and a gradient array IP survey on 25 m centres was completed by Zonge Engineering & Research Organisation in late January 2006. Results of this survey are attached as Appendix B and as Maps 2 and 3, where it has been merged with IP data completed further south along strike, by Allegiance several years previous.

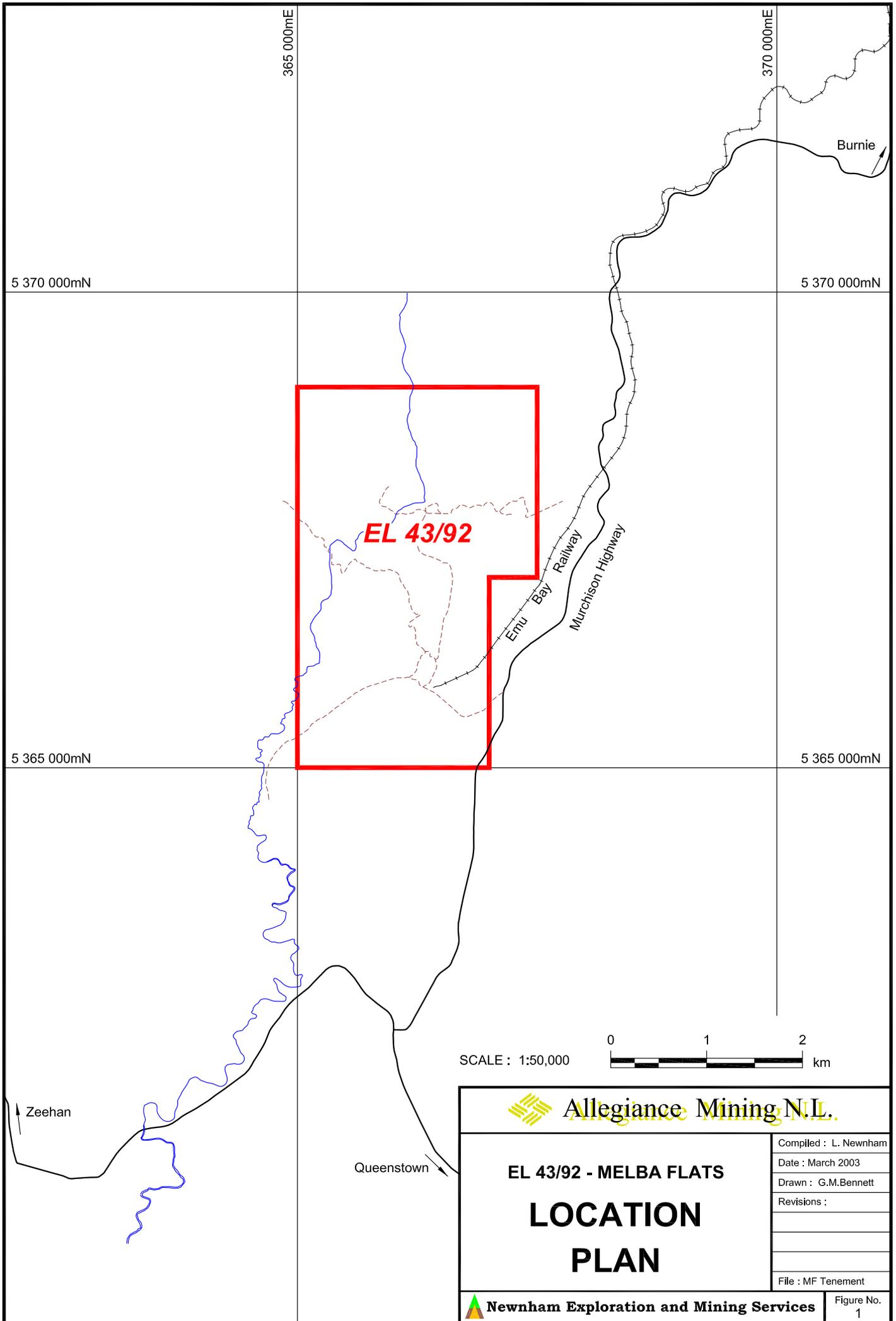
Substantial chargeability anomalies have been defined west of the line of known mineralisation extending between South Cuni-North Cuni and Genets. Of special interest are high chargeability anomalies north-west of Genets in an area of high resistivity. This may indicate possible disseminated sulfides in gabbroic bodies.

#### **4. WORK PLANNED NEXT YEAR**

The following work is planned for 2006-07 year:

- (a) Core drilling in April-May 2006 to test the IP anomalies defined in the recent survey to the west of North Cuni and the north-west of Genets. The amount of drilling will reflect results in the first 2-3 holes.
- (b) Core drilling north-east of Genets workings to test for potential extensions of mineralisation identified by previous drilling.
- (c) Further investigation of opportunities to develop a small open-cut on the shallow Cu-Ni resources identified at North Cuni-Genets.

Estimated expenditure on this work program during 2006-2007 is \$90,000.



SCALE : 1:50,000



 **Allegiance Mining N.L.**

**EL 43/92 - MELBA FLATS**

**LOCATION  
PLAN**

Compiled : L. Newnham

Date : March 2003

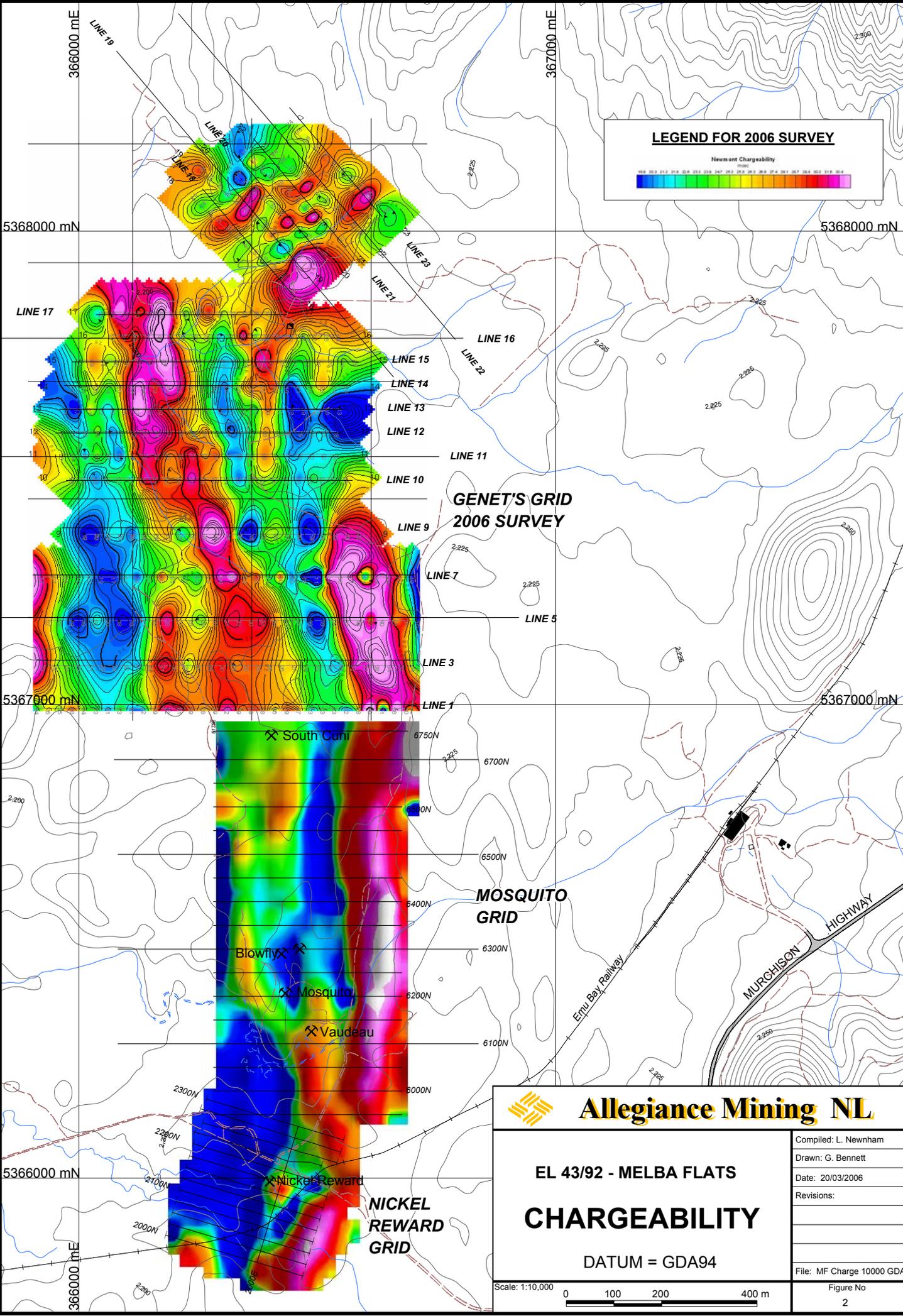
Drawn : G.M.Bennett

Revisions :

File : MF Tenement

 **Newnham Exploration and Mining Services**

Figure No.  
1



**Allegiance Mining NL**

**EL 43/92 - MELBA FLATS**

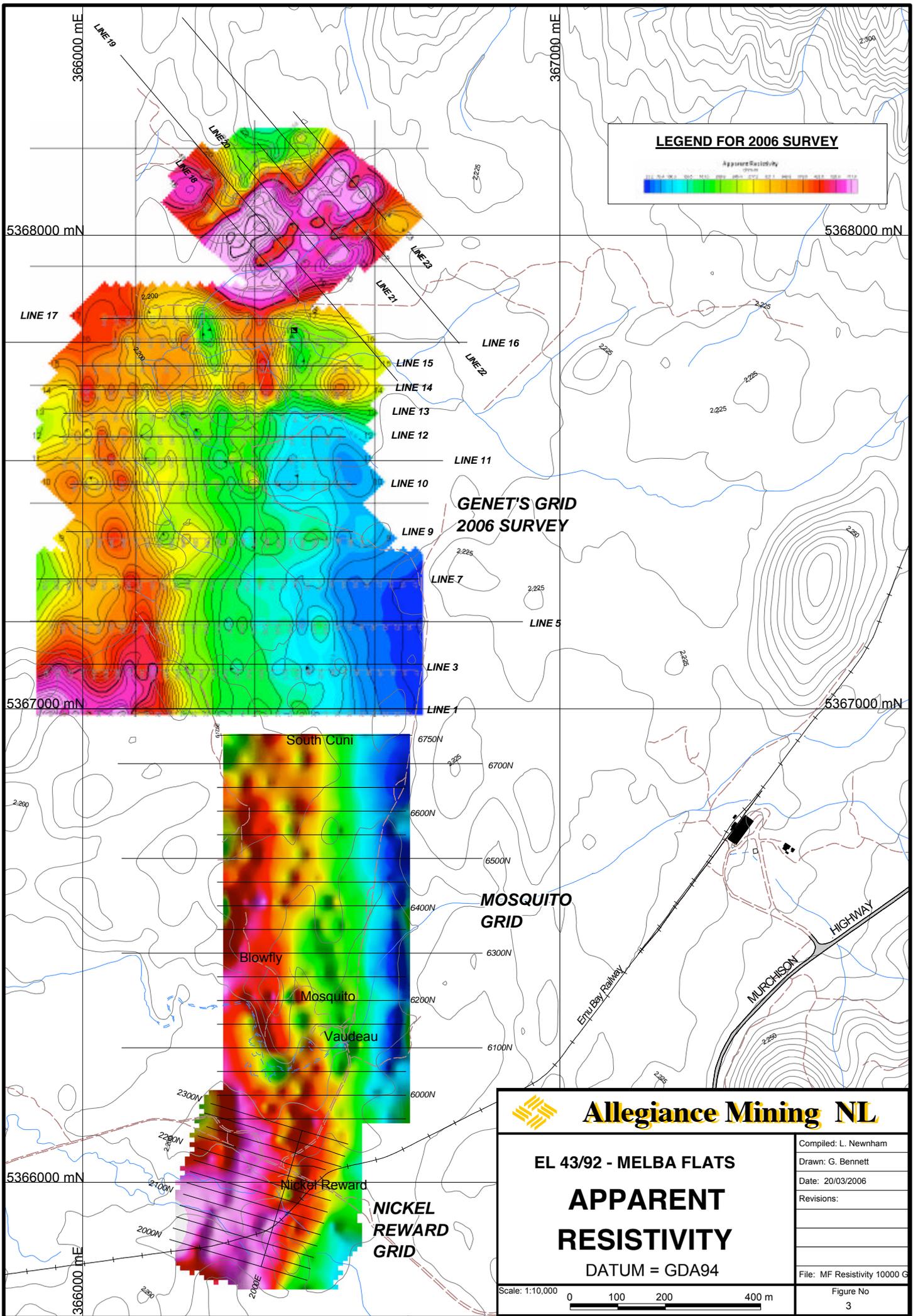
**CHARGEABILITY**

DATUM = GDA94

Scale: 1:10,000

0 100 200 400 m

Compiled: L. Newnham
Drawn: G. Bennett
Date: 20/03/2006
Revisions:
File: MF Charge 10000 GDA
Figure No 2



 <b>Allegiance Mining NL</b>	<b>EL 43/92 - MELBA FLATS</b>		Compiled: L. Newnham
	<b>APPARENT RESISTIVITY</b>		Drawn: G. Bennett
DATUM = GDA94		Date: 20/03/2006	
Scale: 1:10,000		Revisions:	
		File: MF Resistivity 10000 G	
		Figure No 3	

## **APPENDIX A**

### ***'EL 43/1992 - Melba Flats. North Cuni-Genets Area: Data Review & Project Recommendations'***

# **ALLEGIANCE MINING NL**

**EL 43 / 1992 - MELBA FLATS  
NORTH CUNI - GENETS AREA**

## **DATA REVIEW & PROJECT RECOMMENDATIONS**

*Prepared for:*

**Allegiance Mining NL  
Level 11 Quantum House  
49-51 York Street  
Sydney NSW 2000**

**20 August 2005**



*Prepared by:*

**Lindsay Newnham, Bsc, FAusIMM, CPGeo  
Newnham Exploration and Mining Services  
PO Box 183 Exeter Tasmania 7275  
Ph: (03) 6394 3434 Fax: (03) 6394 3435**

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## 1. SUMMARY

A shallow core drilling program was completed at the North Cuni-Genets area in 2004 for the purpose of defining a shallow open-cuttable resource in that area.

Mick McKeown estimated an indicated and inferred resource at North Cuni-Genets of 95,000 t 0.8% Ni, 0.94% Cu, including 1,600 t of massive sulfides averaging 9.2% Ni, 6.0% Cu, 0.2% Co.

This supplements an earlier estimate at Nickel Reward of 30,000 t 3% Ni. As with most of the previous mining and drilling work in the Melba Flats area, this latest round of drilling indicated that the mineralisation cut out at about 50 m depth.

Following the drilling, a review was undertaken of all data on the North Cuni-Genets area. This review highlighted the following:

- (i) Mineralisation may be terminated at shallow depth by an east dipping normal fault. The disrupted upthrown continuation of the mineralised gabbros would lie to the west of the North Cuni-Genets line of workings.
- (ii) Drilling has identified major gabbro dikes lying west of the North Cuni-Genets area (upthrown side of the postulated fault).
- (iii) Geophysical surveys have identified substantial EM and SP anomalies west of North Cuni -Genets.
- (iv) Soil sampling surveys by CRA also identified an extensive geochemical anomaly in the same area as the geophysical anomalies.

The concept of a shallow dipping normal fault, parallel in strike to the gabbros and displacing the upper section of the mineralised gabbros, could also explain other intriguing geological observations in the Melba area:

- (a) the Devereaux Workings to the west of Nickel Reward might be the continuation of the Nickel Reward dikes on the upthrown side of the fault
- (b) the large deep seated aeromagnetic anomaly north-west of North Cuni-Genets may be related to a deeper mass of gabbro or ultramafic from which the Melba dikes were derived

The recent drilling program also demonstrated potential for shallow extensions of mineralisation along strike to the north-east and south of the current drilling.

The resource as it stands is considered capable of supporting a small contract open-cut operation supplying crushed ore to a nearby existing mill. Any increase in the resource base would benefit such an operation.

The following program is recommended for 2005-06 at Melba:

1. Apply for a Mining Lease over the North Cuni-Genets area.
2. Prepare a DPEMP for North Cuni-Genets which reflects the 'lean-mean' style of contract mining operation envisaged for this resource.
3. Drill two (2) cored holes into the anomalous area west of Genets.
4. Drill two (2) shallow cored holes north-east and south along strike of North Cuni-Genets (4 holes total) to test for resource extensions.
5. Complete ground IP-EM survey over the area west of North Cuni-Genets.
6. Re-estimate the resources at Nickel Reward, North Cuni and Genets with classical methods using re-interpreted data.

The budget for this program is:

***Open-cut development planning:***

	\$
Project design and management	50,000
Consultant inputs	100,000

***North Cuni-Genets exploration:***

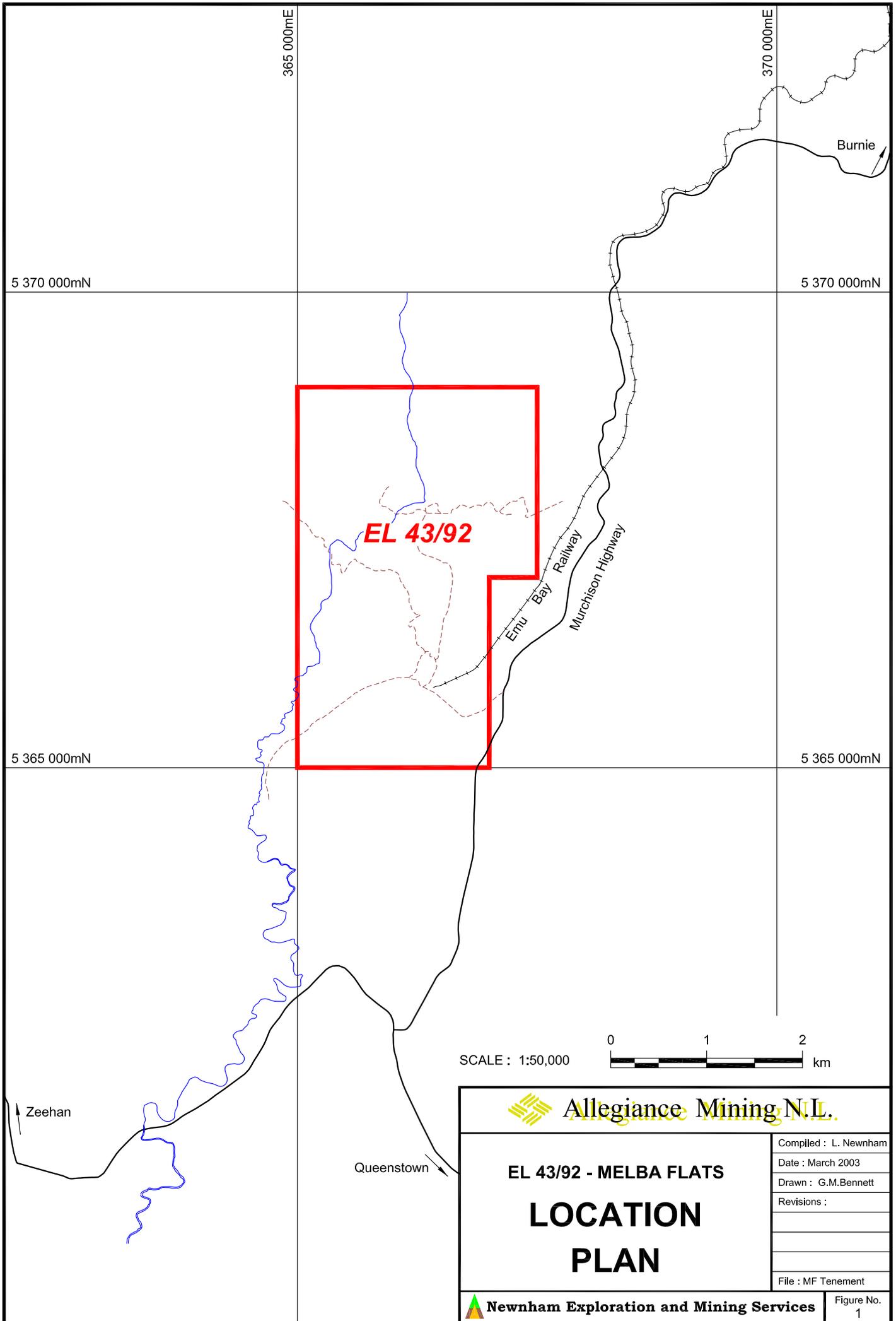
Access development (track cutting, road construction)	20,000
Geophysical surveying	30,000
Drilling 800 m	80,000
Field supplies	10,000
Assaying, drafting, reporting, surveying	20,000
Management and supervision	<u>30,000</u>
<b>TOTAL</b>	<b><u>\$340,000</u></b>

The schedule for the program is:

Development planning : September 2005-June 2006

Geophysical surveying : January-February 2006

Drilling : April-May 2006



 **Allegiance Mining N.L.**

**EL 43/92 - MELBA FLATS**

**LOCATION  
PLAN**

Compiled : L. Newnham
Date : March 2003
Drawn : G.M.Bennett
Revisions :
File : MF Tenement

 **Newnham Exploration and Mining Services**

Figure No.  
1

## 2. NORTH CUNI-GENETS

### 2.1 2004 Drilling Program:

In 2004, a 38-hole core drilling program totalling 2,322 m was completed at North Cuni-Genets to better identify the shallow Ni-Cu resource in that area.

The drilling data was interpreted by Mick McKeown and results presented in the report titled:

***“Allegiance Metals Pty Ltd, Melba Flats Nickel Project, Mineral Resource Report, October 2004” prepared by Michael V McKeown***

*In summary*, McKeown estimated resources in this area as:

Indicated	:	83,000 t	0.7% Ni, 0.6% Cu, 0.02% Co
Inferred	:	12,000 t	1.2% Ni, 3.3% Cu, 0.04% Co

Included in this resource was a massive sulfide zone estimated to contain:

1,600 t 9.2% Ni, 6.0% Cu, 0.2% Co, 29.5% S

The mineralisation is confined to the footwall of one gabbro dike over a strike length of 300 m and to a vertical depth of 50 m.

This mineralised dike is one of several close spaced dikes which dip approximately 50° to the east and strike north-south through the North Cuni area and swing north-east through the North Cuni area.

The dike is typically 5-10 m thick and the mineralised zone is 2-5 m thick. The massive sulfide always occurs in the dike on its contact with the underlying siltstones, and varies from 0.2-2 m thick.

Several cross faults disrupt the dike, particularly where it changes strike from north-south to north-east.

The attached drawings of this area show a number of drill holes completed by previous workers in the area. The quality and records of data on this drilling are variable (logs, surveys, assays, etc) and this should be kept in mind when interpreting this data.

The principal outcomes of the 2004 drilling program were:

- (a) better definition of the shallow resource
- (b) interpretation that the resource may be open along both strike directions at shallow depth

- (c) confirmation that the resource beneath the workings does not extend below 50 vertical metres

The limited vertical extent of both mineralisation and the gabbro dikes at Melba has always been an intriguing problem. Workings such as Vaudeau, South Cuni, Genets, North Cuni all ran out of mineralisation at <50 m depth, and the gabbros appeared to die out. This has been confirmed by drilling around these workings. The one possible exception to this is Nickel Reward, where the deepest drill hole (70 vertical metres) intersected high grade mineralisation in gabbro.

A number of the 2004 drill holes intersected mineralised gabbro with a faulted footwall, which often truncated the mineralisation. When plotted on longitudinal projection and sections, this fault was interpreted as striking parallel or sub-parallel to the dike and dipping at approximately 30° to the east.

Another very important feature of previous and current drilling in this area is the presence at depth and west of the mineralised gabbro dike of additional large gabbro dikes (or intrusive gabbro bodies) cf, DDH MF35, MFP111. These dikes are not mapped in outcrop on the old plans, when outcrop was better than it is today because of vegetation clearance. Disseminated Ni-Cu mineralisation has been identified by drilling in the footwall of this western gabbro body.

An interpretation of this data is that the western gabbro lies beneath the fault which truncates the North Cuni-Genets mineralisation and is in fact the faulted depth continuation of the shallow mineralised gabbro.

## **2.2 Other Relevant Exploration Data:**

In the mid 1990s CRA completed a soil geochemical survey over the North Cuni-Genets area. They defined a large anomaly to the west of the workings. Following is an extract from a CRA memo on this anomaly:

***“Soil geochemistry data indicates a coherent, 850 m plus long zone with highly anomalous Cu-Ni values in the North Cuni-Genets Winze area. The amplitude is indicative of Ni-Cu sulfides, rather than high background mafic units. The anomaly exceeds the amplitude, length and width of the geochemical response over known massive sulfide mineralisation over the North Cuni-Genets Winze line. No previous exploration has been undertaken on the geochemical anomaly.”***

This geochemical anomaly plots approximately 100 m west of North Cuni and coincides with the projected outcrop position of the shallow east dipping fault described above.

In the early 1930s the BMR completed turam and SP surveys over the North Cuni-Genets area. They defined a series of anomalies west of the workings including a strong SP anomaly over an old trenched area. These anomalies coincide with the area of the CRA geochemical anomaly.

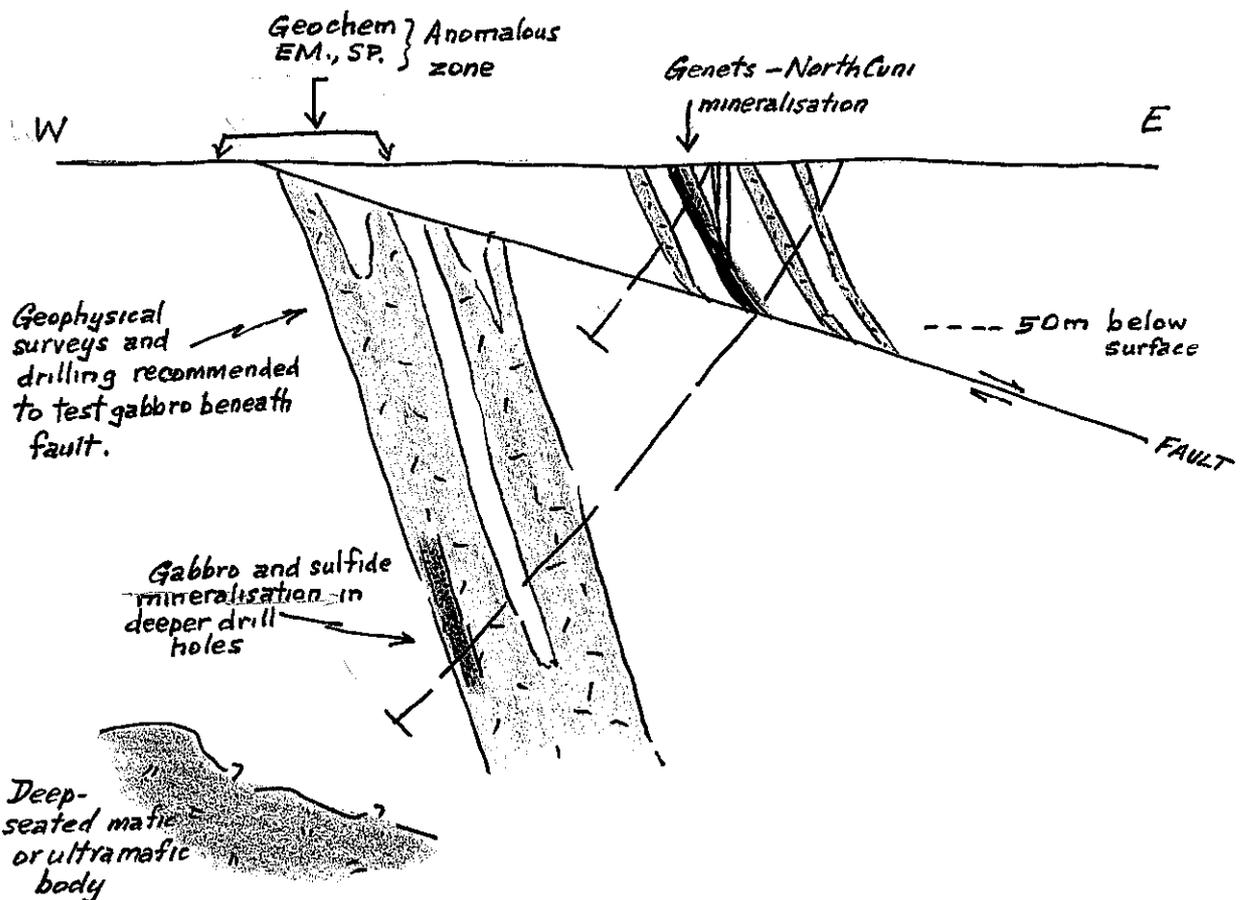
In the early 1970s EZ completed a turam survey over the same area and also defined conductive anomalies in this western area, coinciding with previous BMR anomalies.

It should be noted that only the massive sulfide at North Cuni is conductive. The disseminated sulfide is not. Both styles would be chargeable and respond to IP, but IP surveys have not been completed in this area to date.

Aeromagnetic surveys completed by CRA in the mid-1990s and by Allegiance in the late 1990s defined a large deep seated anomaly to the north-west of North Cuni. To date this anomaly has remained unexplained. Genetically, explorers have always attempted (with difficulty) to link the Melba dikes with the Serpentine Hill gabbros and ultramafics to the east. However, it is possible that the larger gabbro mass now identified west of North Cuni is derived from a large deep-seated intrusion further to the north-west.

### 2.3 Interpretation of Data:

The interpretation of the above collective data is illustrated in the sketch below:



**Interpreted cross-section: North Cuni-Genets**

The resource implications of this interpretation are obvious. An open-cut operation developed on the identified resource would benefit from both economies of scale and a lower waste rock:ore ratio should additional shallow resources be identified to the west.

### **3. PROPOSED EXPLORATION PROGRAM**

A three-pronged exploration program is proposed in the coming year at Melba:

- (i) gridding, geophysics and drilling on the area west of North Cuni-Genets
- (ii) drilling along strike of identified North Cuni-Genets resource
- (iii) review of Nickel Reward-Devereaux data and re-estimation of North Cuni-Genets resources

**(i) Western area:**

It is recommended that the area west of North Cuni and Genets be gridded and surveyed with EM & IP. Grid lines should be 50 m apart.

Consideration should also be given to soil sampling these lines at 20 m intervals. Two (2) cored drill holes are recommended to initially test any substantial anomalies (2 x 250 m = 500 m).

**(ii) Strike extension drilling:**

Two (2) shallow drill holes are recommended along strike to the south of the North Cuni shaft (2 x 75 m = 150 m).

Two (2) shallow drill holes are recommended along strike to the north-east of the Genets resource (2 x 75 m = 150 m).

**(iii) Data re-assessment:**

The identified resource at Nickel Reward should be reviewed in the light of the new interpretations emerging at North Cuni-Genets. Nickel Reward is a significant resource which has not yet been fully defined. In addition, the existing resource estimate on North Cuni-Genets should be reviewed.

#### 4. PROPOSED DEVELOPMENT PROGRAM

It is hoped the exploration program recommended above will add to the current resource base. However, in the meantime it is recommended that a program to develop the currently identified resource be initiated.

The basis for such a development would be a small open-cut extracting 50,000 tpa, over a 2-year period, crushing on site, and toll treating in a nearby mill.

The operation would clearly have to be a 'lean-mean' totally contracted operation, which could even be a tribute operation.

A 'nearby mill' might be Hellyer, Renison, Avebury, or Comstock.

Basic parameters would be:

Production:	50,000 tpa
Waste:ore:	10:1
Head grade:	0.8% Ni, 0.8% Cu (0.9% Ni equivalent)
Recovery:	85%
Ni (equivalent) in concentrates:	382 tpa

#### Revenue:

Ni price:	A\$16,000/t
Net smelter:	A\$11,000/t
Rec. Ni/tonne ore:	\$84/t
Gross NS revenue:	\$4.2M pa
Royalties :	\$0.2M pa
Net revenue:	\$4.0M pa = \$80/t ore

**Expenses:**

Capex: Nil

Opex: (per tonne ore)

Planning & permitting:	\$150,000
Met testing:	\$50,000
Bonds, insurances, etc:	\$50,000
<b>Sub-total:</b>	<b>\$250,000 = \$2.50/t over 2 years</b>
Mining:	ore : \$3.50 cu. m. = \$1.50/t waste: \$2.50 bcm = \$1.00/t = \$10/t ore
Access development:	\$50,000 )
Site preparation:	\$50,000 ) = \$1.00/t over 2 years
Crushing:	\$5/t
Transport:	15c p.t.km. = \$4.50/t
Treatment:	\$25/t
Conc. transport:	\$0.50/t ore
Services (survey, assay):	\$1.00/t
Management:	\$4.00/t
<b>Total:</b>	<b>\$55.00/t</b>

Surplus:  $\$(80-55)/t = \$25/t = \$1.25M \text{ pa}$ 

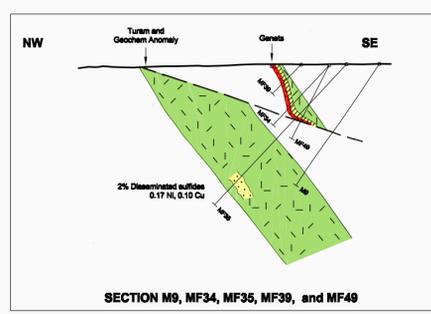
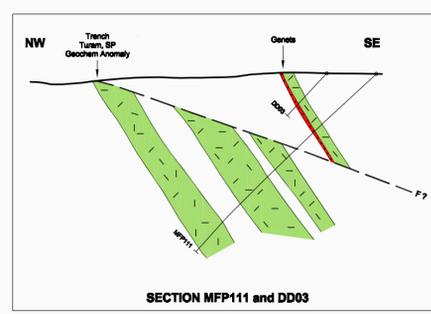
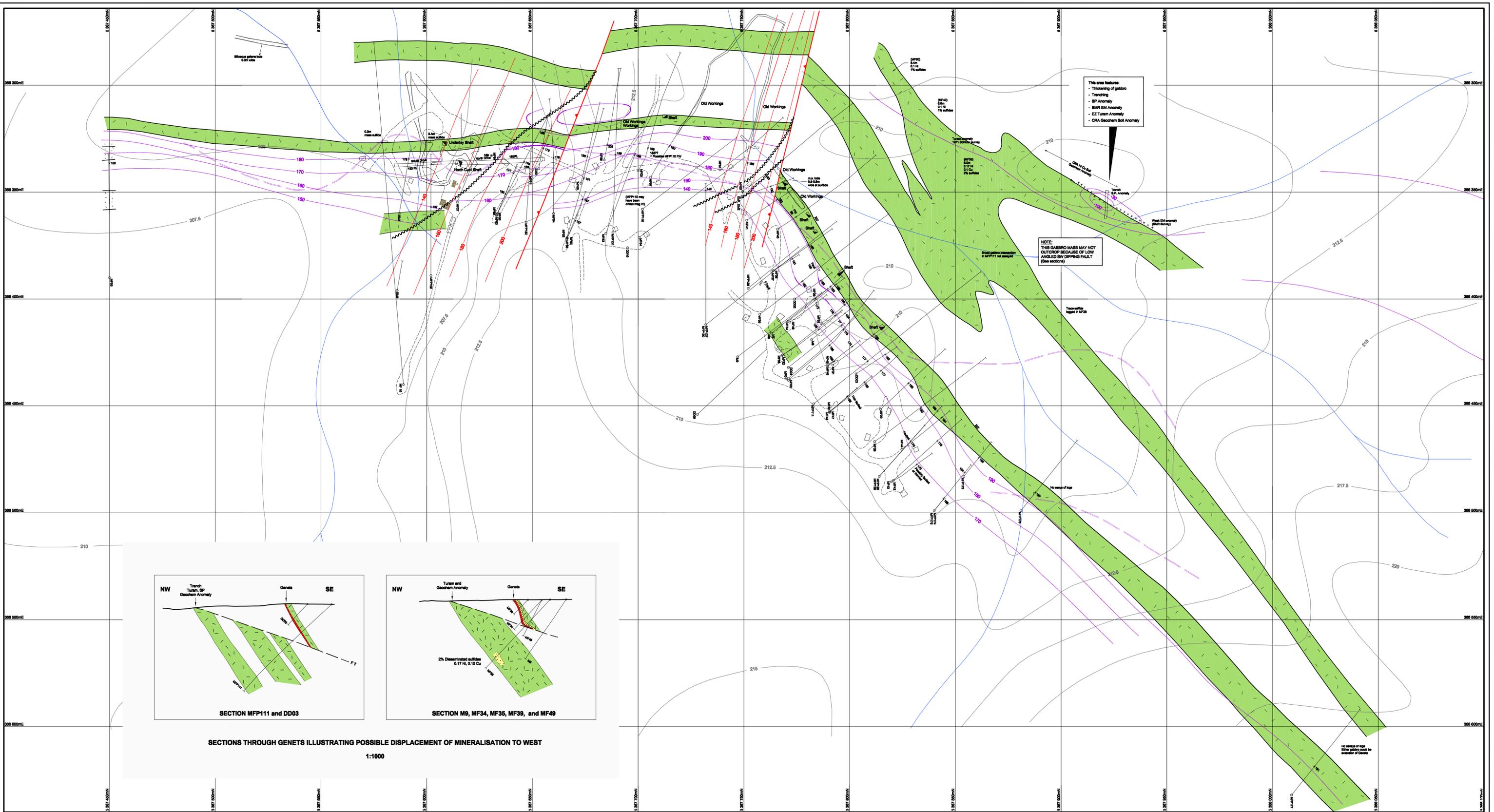
This is initially a small operation but would benefit from any new resource discovery. If developed as a contract or tribute operation, it would involve no capital, and need not be a distraction from the main game at Avebury.

**Initial recommendations for this project are:**

- (a) apply for Mining Lease (LAN)
- (b) complete DPEMP on basis of 10:1 waste ore ratio and 50,000 tpa ore production over 2 years (LAN)

- (c) complete metallurgical testing - this would be a **minimal** program, but one (1) drill hole would be required (BRL or SGS)

By the time the DPEMP was completed, the exploration program recommended above would also have been completed and decisions on the future of the project could be made.



SECTIONS THROUGH GENETS ILLUSTRATING POSSIBLE DISPLACEMENT OF MINERALISATION TO WEST  
1:1000

LEGEND

- Gabbro projected outcrop
- Fault
- Interpreted fault FW contours
- Gabbro FW Contours
- Gabbro fault intersection
- BMR Turam anomalies (1934)
- Scribner EM Anomalies (1971)
- Gabbro FW and RL in drill holes

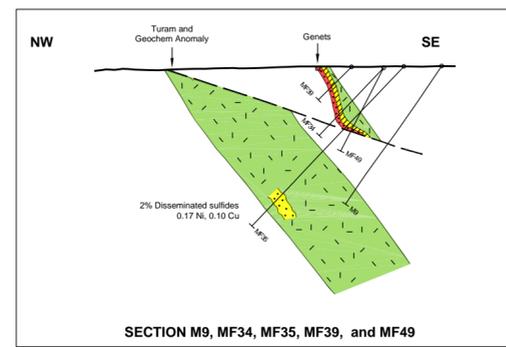
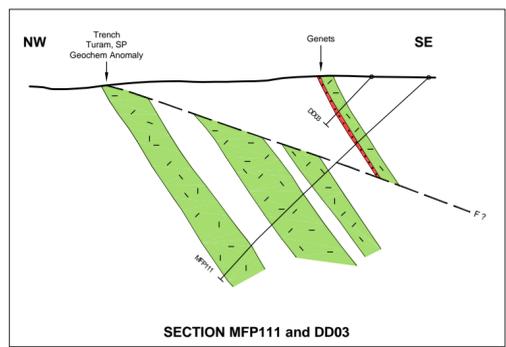
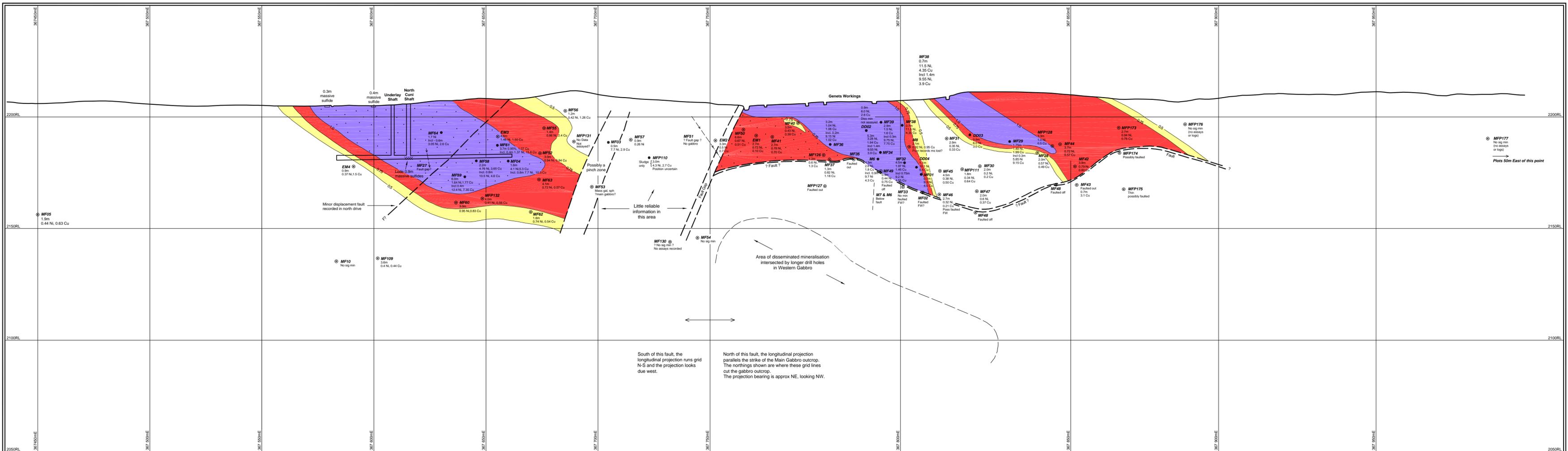
SCALE: 1500 0 20 25m

Allegiance Metals Pty Limited

EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL HOLE LOCATION  
PLAN and GEOLOGICAL  
INTERPRETATION

Completed: \_\_\_\_\_  
Date: \_\_\_\_\_  
Drawn: \_\_\_\_\_  
Revisions: \_\_\_\_\_  
File: \_\_\_\_\_  
Figure No: \_\_\_\_\_

Newham Exploration and Mining Services



SECTIONS THROUGH GENETS ILLUSTRATING POSSIBLE DISPLACEMENT OF MINERALISATION TO WEST

1:1000

**LEGEND**

- MF58 Drillhole number
- 2.2m Drill width of intersection, normally close to true width
- 1.2 Ni % Ni in intersection
- 1.2 Cu % Cu in intersection
- MF58 Massive sulfide intersection
- 0.5 Nickel grade contours
- Area of massive sulfide
- 0.5 - 0.75% Ni
- 0.75 - 1.0% Ni
- >1.0% Ni

**NOTES:**  
 Grid shown as AMG  
 RL = M.S.L. + 200m.

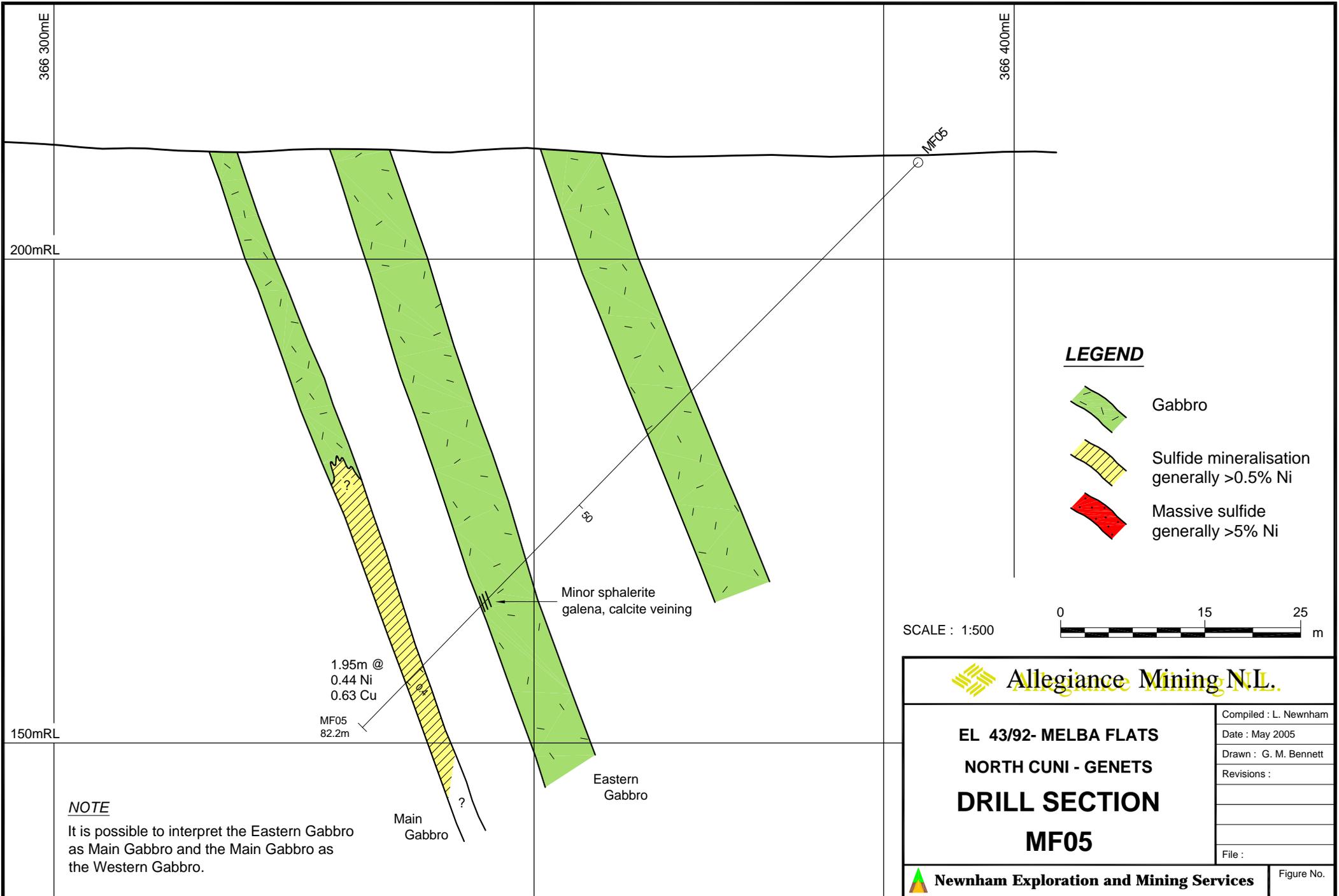


**Allegiance Metals Pty Limited**

EL 43/92- MELBA FLATS  
 NORTH CUNI - GENETS  
 LONGITUDINAL  
 PROJECTION

Compiled: L. A. Newham  
 Date: 24 May 2005  
 Drawn: G.M. Bennett  
 Revisions:  
 File: NCuni-Genets LS 05  
 Figure No.

**Newham Exploration and Mining Services**



**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



**Allegiance Mining N.L.**

**EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL SECTION  
MF05**

Compiled : L. Newnham

Date : May 2005

Drawn : G. M. Bennett

Revisions :

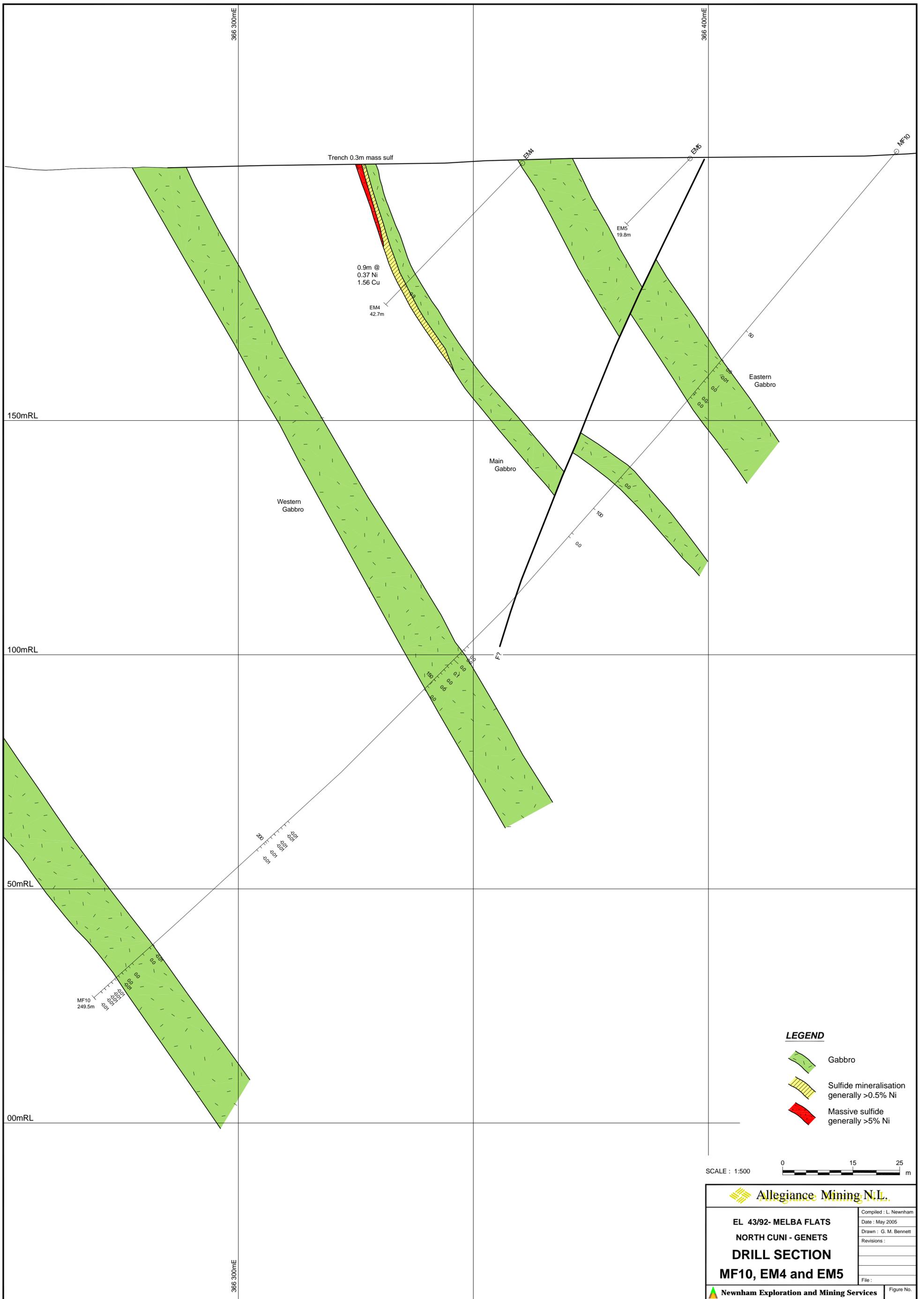
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**Newnham Exploration and Mining Services**

Figure No.

**NOTE**

It is possible to interpret the Eastern Gabbro as Main Gabbro and the Main Gabbro as the Western Gabbro.



Trench 0.3m mass sulf

0.9m @  
0.37 Ni  
1.56 Cu

EM4  
42.7m

EM5  
19.8m

Western  
Gabbro

Main  
Gabbro

Eastern  
Gabbro

150mRL

100mRL

50mRL

00mRL

366 300mE

366 400mE

MF10

EM4

EM6

F2

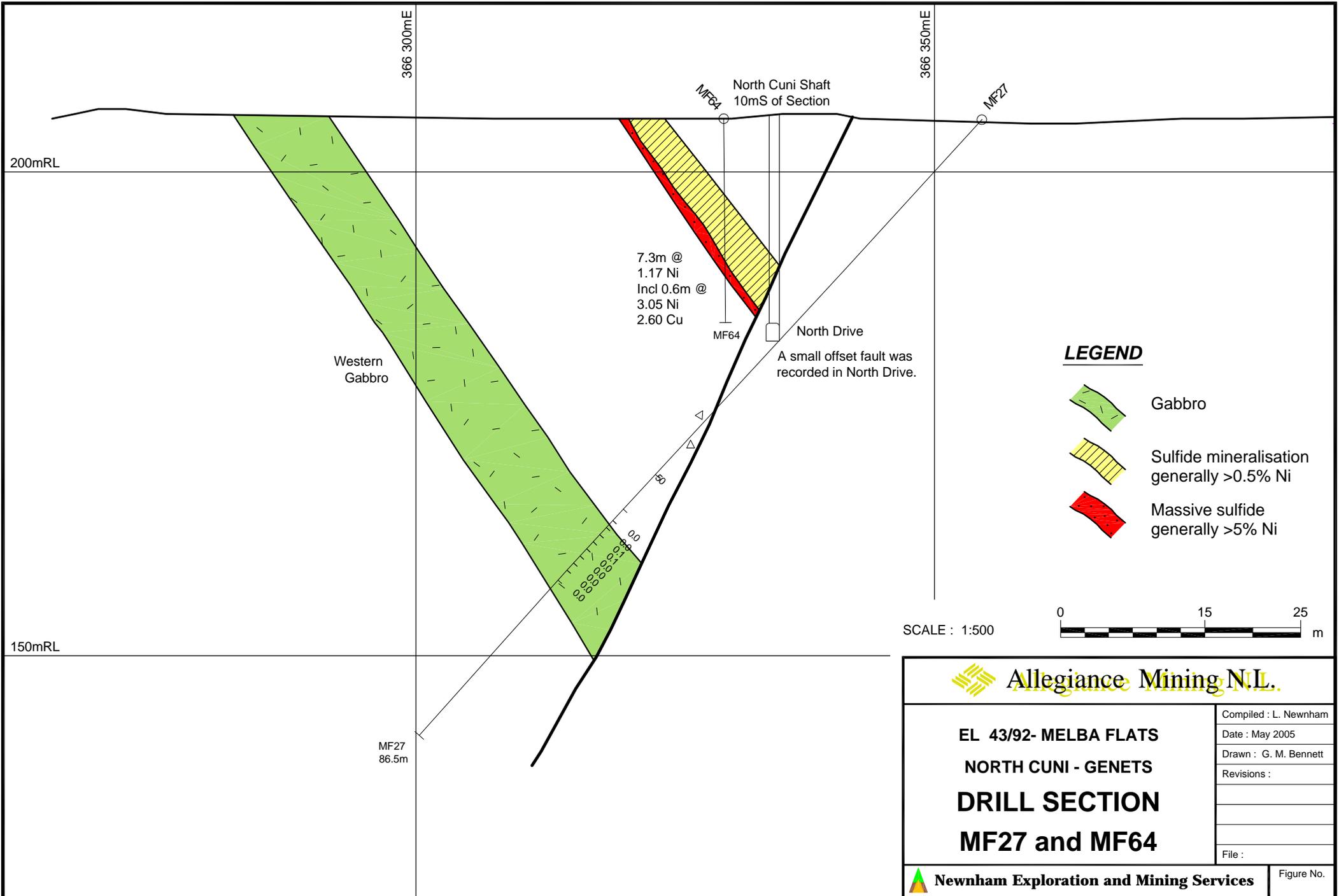
MF10  
249.5m

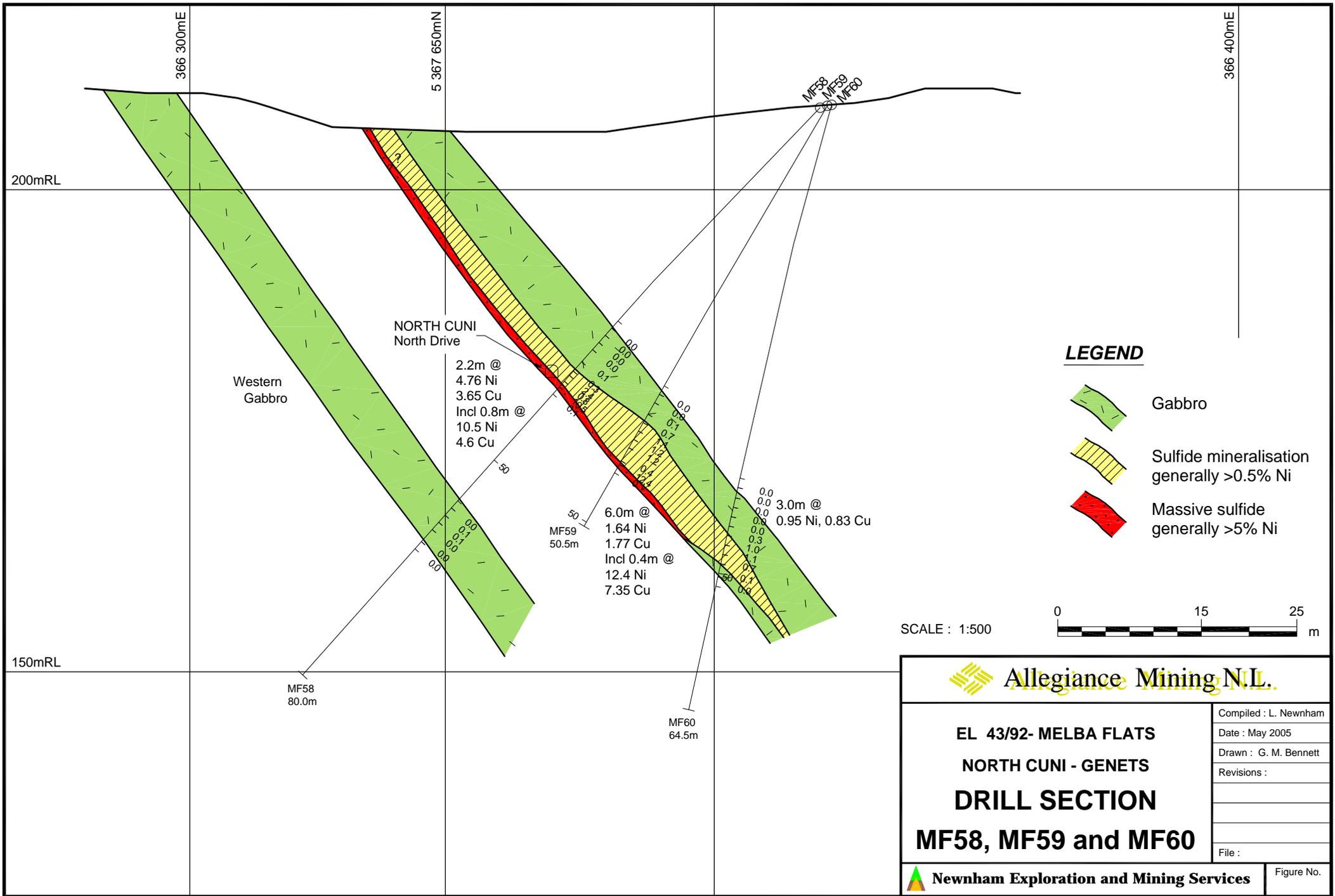
**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500  m

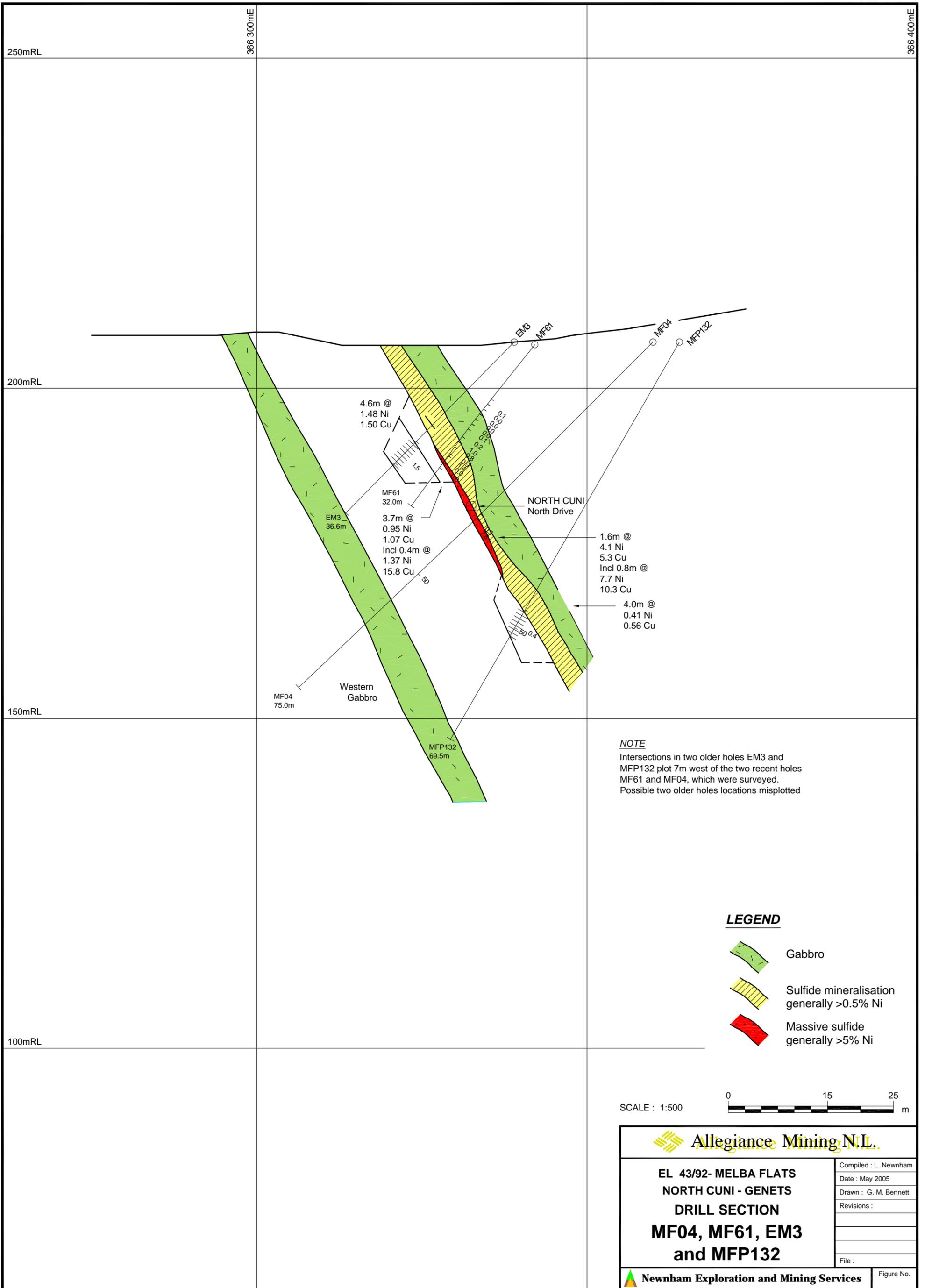
 <b>Allegiance Mining N.L.</b>	
<b>EL 43/92- MELBA FLATS NORTH CUNI - GENETS DRILL SECTION MF10, EM4 and EM5</b>	
Compiled : L. Newnham Date : May 2005 Drawn : G. M. Bennett Revisions : File :	Figure No.
 <b>Newnham Exploration and Mining Services</b>	





**Allegiance Mining N.L.**

Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :



250mRL

366 300mE

366 400mE

200mRL

150mRL

100mRL

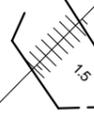
EM3

MF61

MF04

MFP132

4.6m @  
1.48 Ni  
1.50 Cu



MF61  
32.0m  
3.7m @  
0.95 Ni  
1.07 Cu  
Incl 0.4m @  
1.37 Ni  
15.8 Cu

NORTH CUNI  
North Drive

1.6m @  
4.1 Ni  
5.3 Cu  
Incl 0.8m @  
7.7 Ni  
10.3 Cu

4.0m @  
0.41 Ni  
0.56 Cu

MF04  
75.0m

Western  
Gabbro

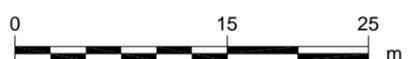
MFP132  
69.5m

**NOTE**  
Intersections in two older holes EM3 and MFP132 plot 7m west of the two recent holes MF61 and MF04, which were surveyed. Possible two older holes locations misplotted

**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



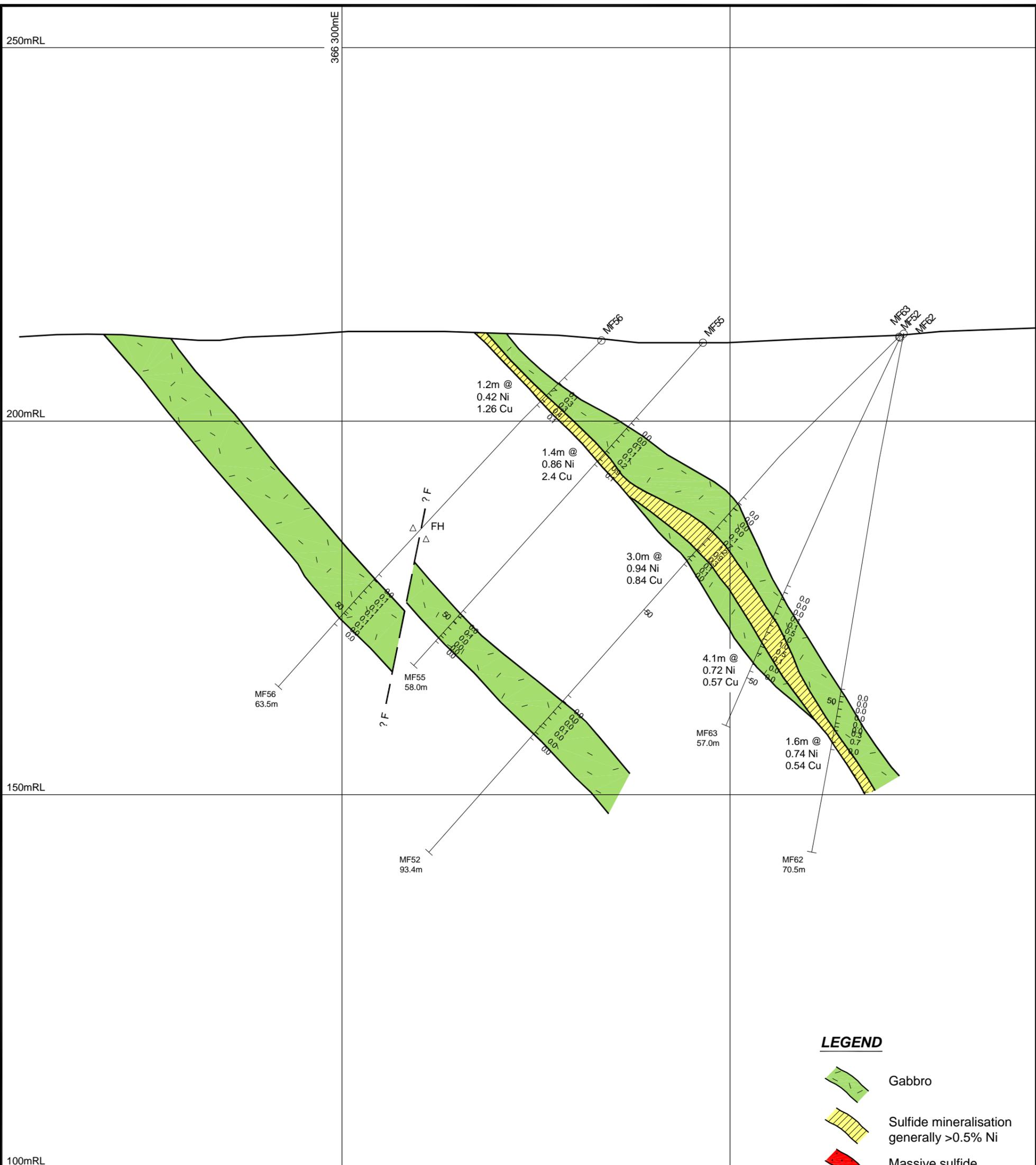
 Allegiance Mining N.L.

**EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL SECTION  
MF04, MF61, EM3  
and MFP132**

Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :

 Newnham Exploration and Mining Services

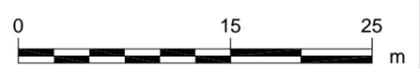
Figure No.



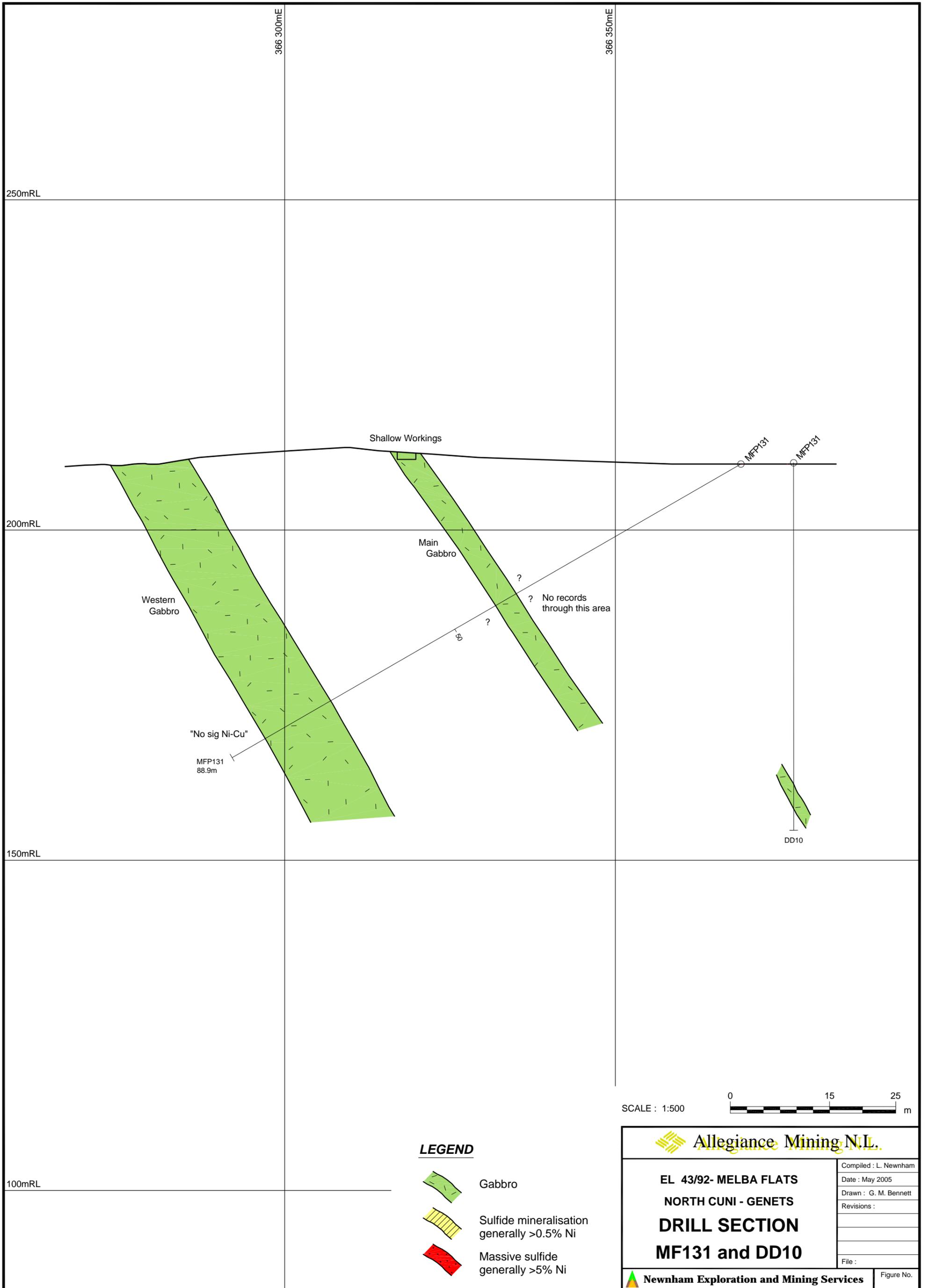
**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



 <b>Allegiance Mining N.L.</b>	
<p><b>EL 43/92- MELBA FLATS</b>  <b>NORTH CUNI - GENETS</b>  <b>DRILL SECTION</b>  <b>MF52, MF55, MF56,</b>  <b>MF62 and MF63</b></p>	<p>Compiled : L. Newnham  Date : May 2005  Drawn : G. M. Bennett  Revisions :    File :</p>
 <b>Newnham Exploration and Mining Services</b>	Figure No.



**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



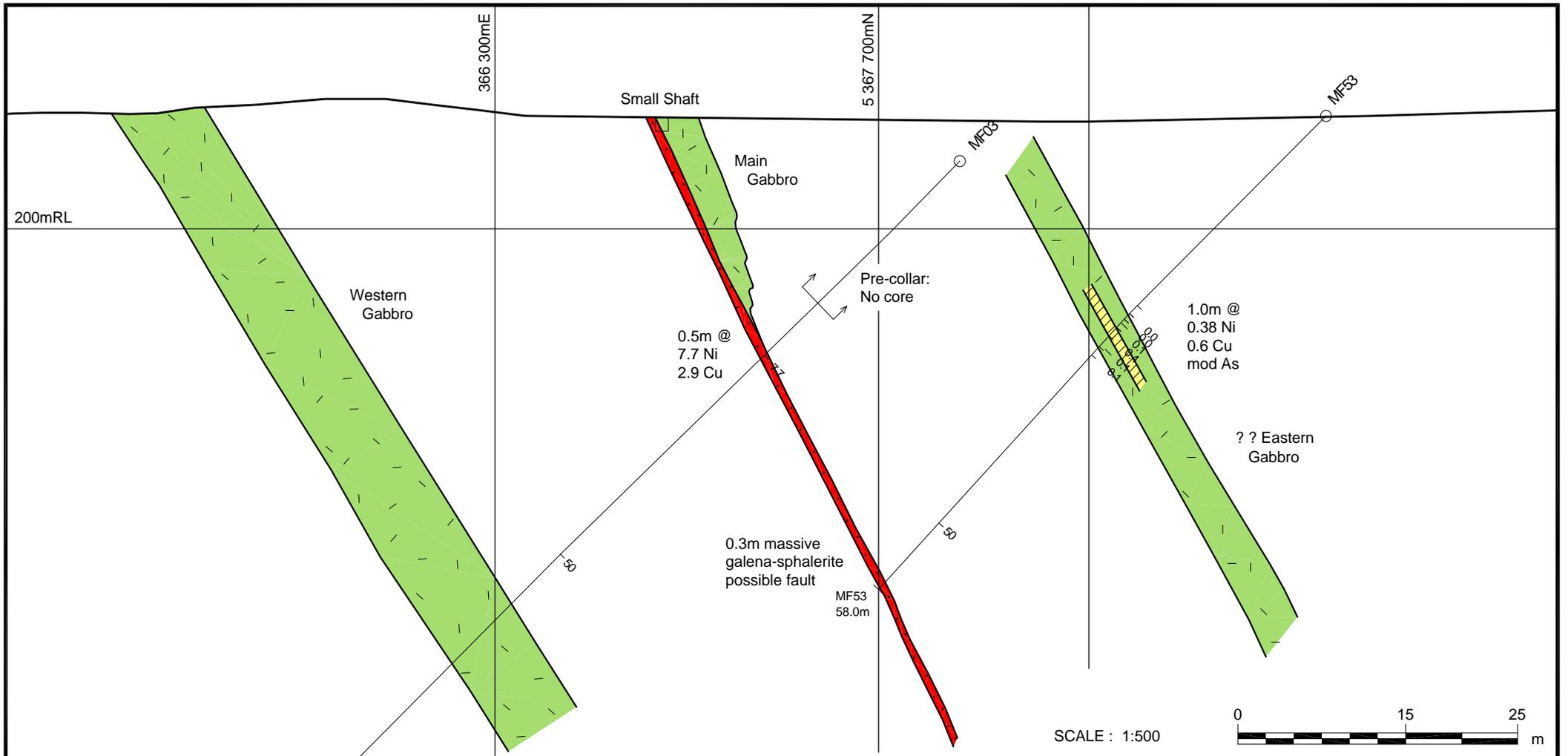
 **Allegiance Mining N.L.**

**EL 43/92- MELBA FLATS**  
**NORTH CUNI - GENETS**  
**DRILL SECTION**  
**MF131 and DD10**

Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :

 **Newnham Exploration and Mining Services**

Figure No.

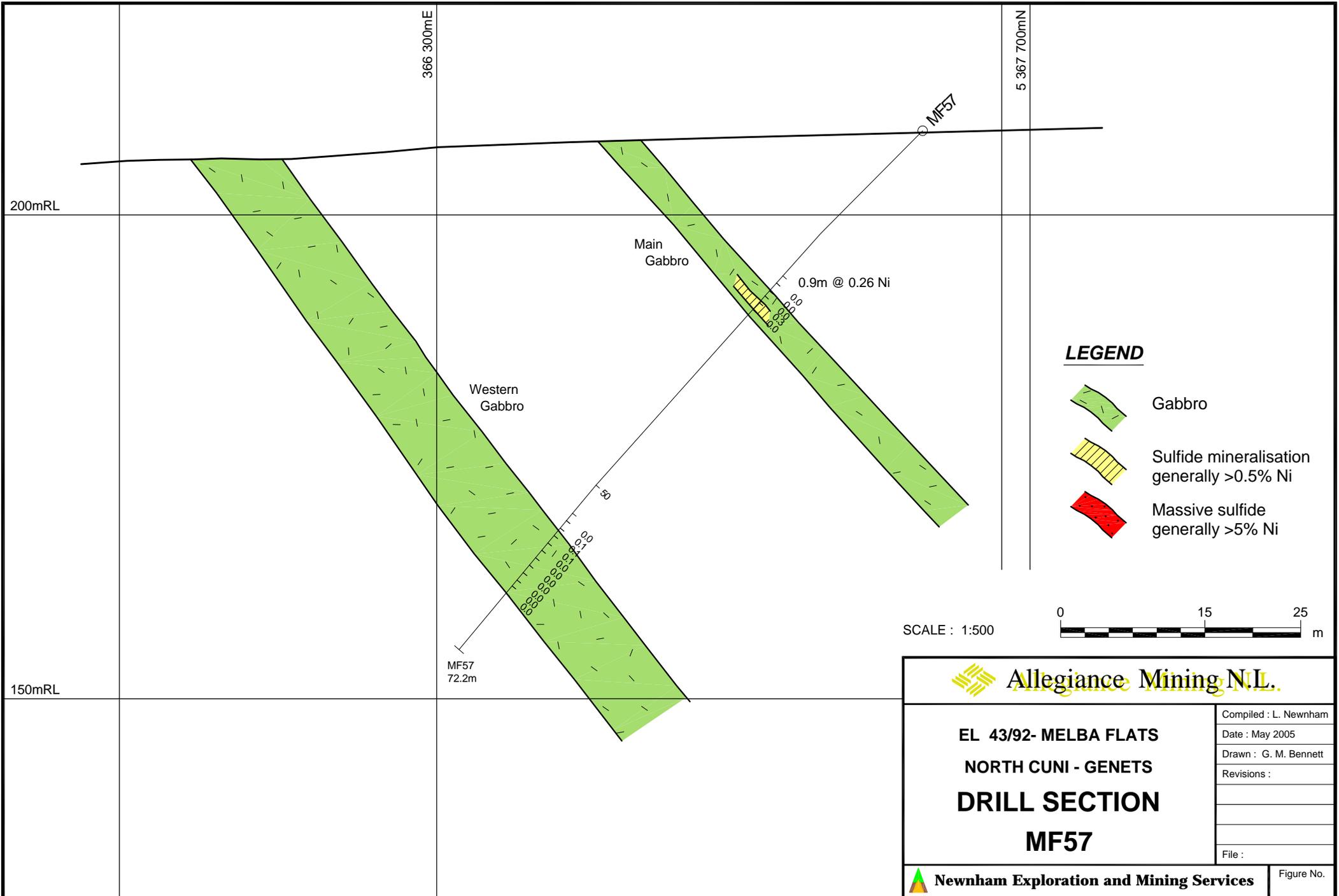


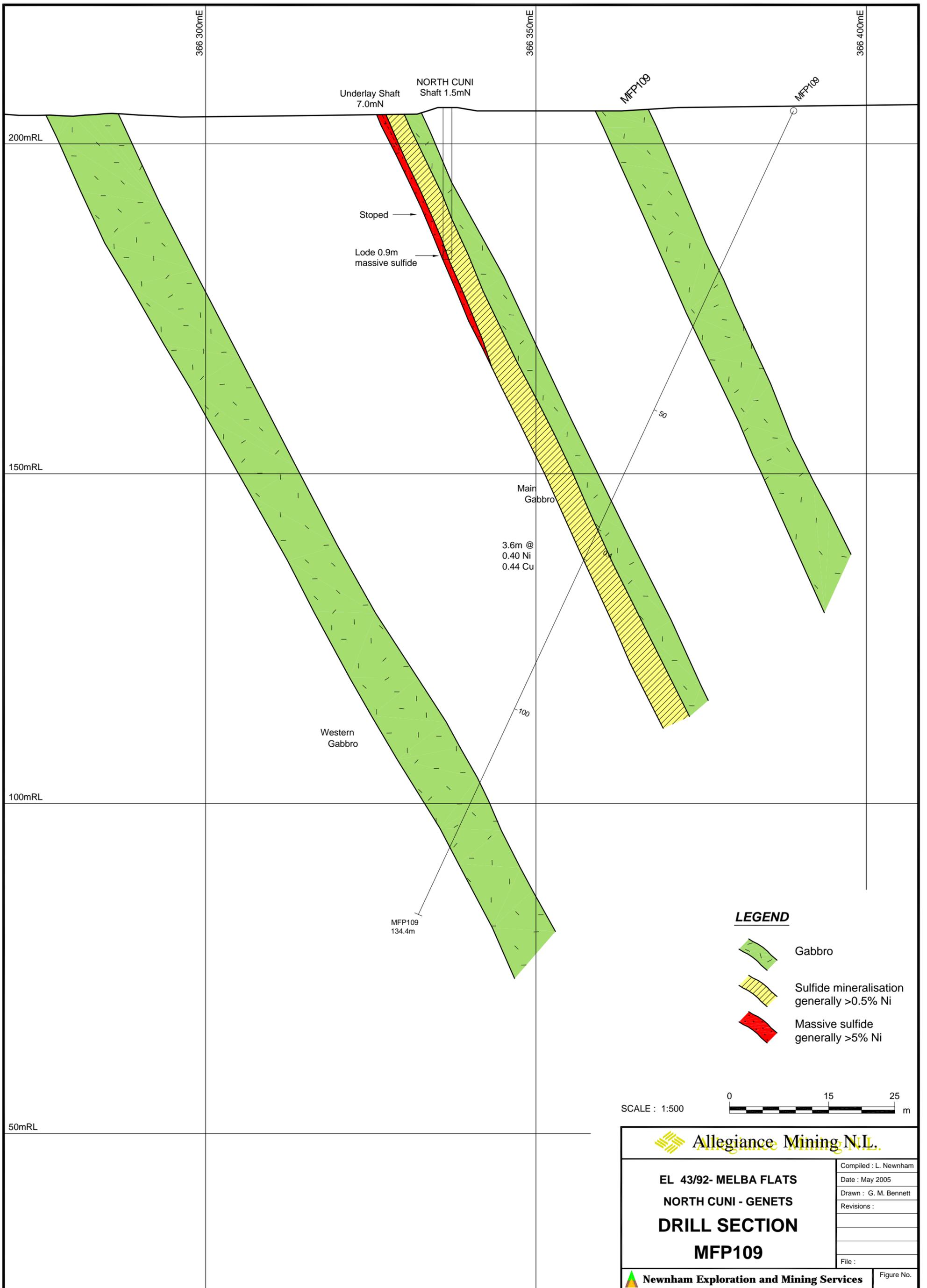
**LEGEND**

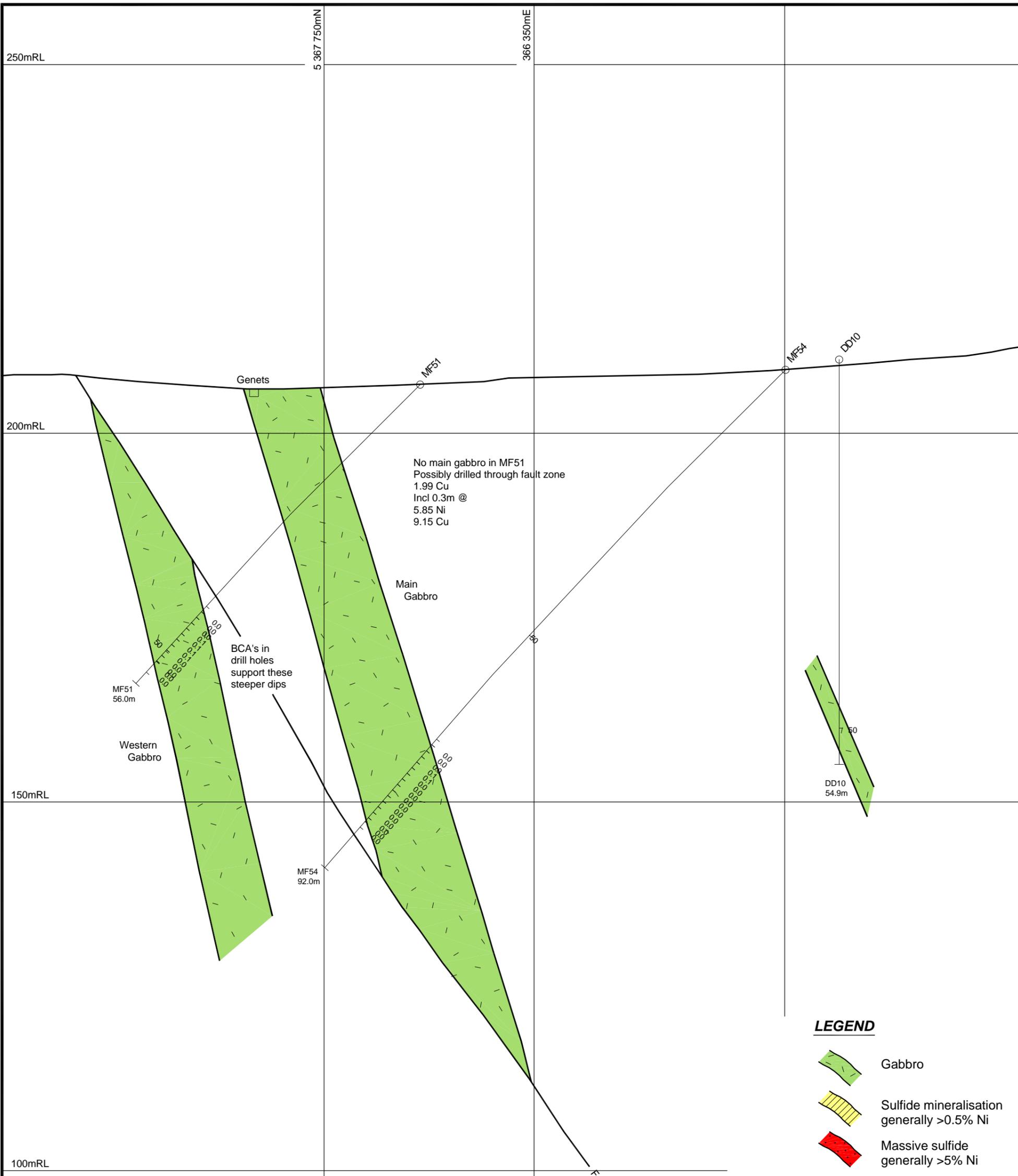
-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni



<p><b>EL 43/92- MELBA FLATS</b></p> <p><b>NORTH CUNI - GENETS</b></p> <p><b>DRILL SECTION</b></p> <p><b>MF03 and MF53</b></p>	Compiled : L. Newnham
	Date : May 2005
	Drawn : G. M. Bennett
	Revisions :
	File :







250mRL

200mRL

150mRL

100mRL

5 367 750mN

366 350mE

Genets

MF51

MF54

DD10

No main gabbro in MF51  
Possibly drilled through fault zone  
Incl 0.3m @  
5.85 Ni  
9.15 Cu

Main  
Gabbro

BCA's in  
drill holes  
support these  
steeper dips

MF51  
56.0m

Western  
Gabbro

MF54  
92.0m

DD10  
54.9m

**LEGEND**



Gabbro

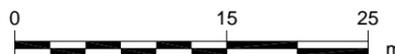


Sulfide mineralisation  
generally >0.5% Ni



Massive sulfide  
generally >5% Ni

SCALE : 1:500



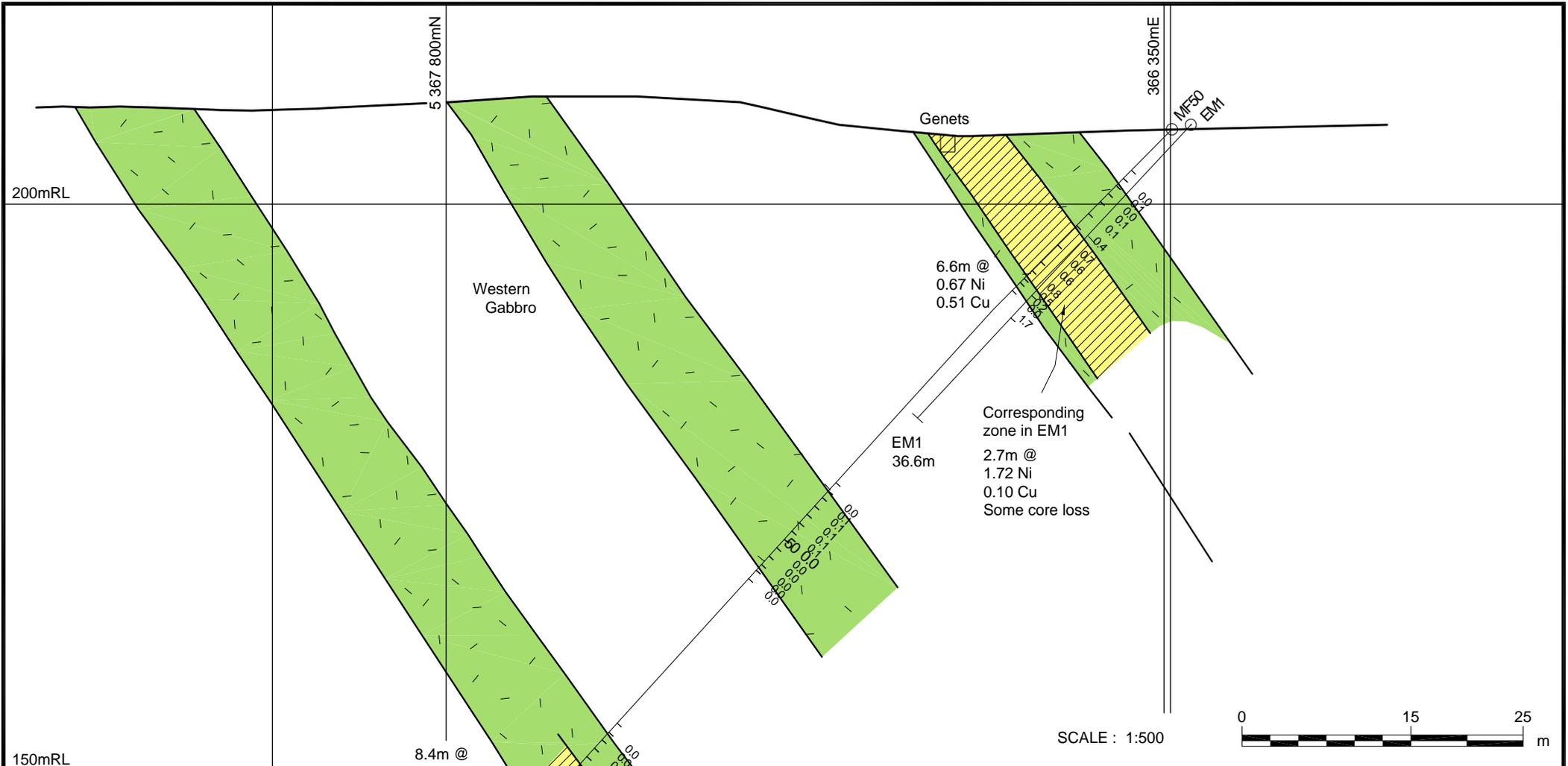
Allegiance Mining N.L.

**EL 43/92- MELBA FLATS**  
**NORTH CUNI - GENETS**  
**DRILL SECTION**  
**MF51, MF54 and DD10**

Compiled : L. Newham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :

Newham Exploration and Mining Services

Figure No.



**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

 Allegiance Mining N.L.

**EL 43/92- MELBA FLATS**  
**NORTH CUNI - GENETS**  
**DRILL SECTION**  
**MF50 and EM1**

Compiled : L. Newnham

Date : May 2005

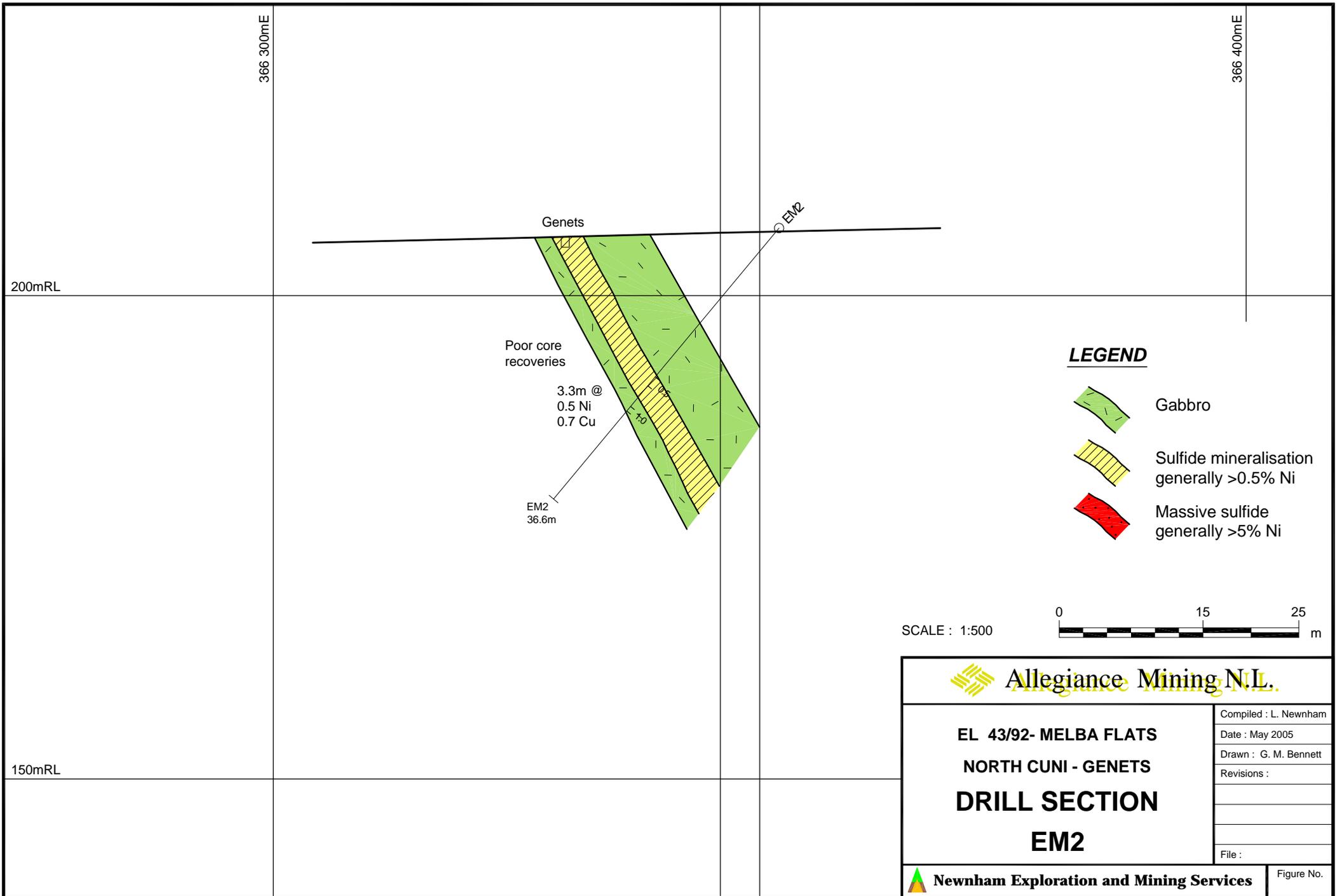
Drawn : G. M. Bennett

Revisions :

File :

 **Newnham Exploration and Mining Services**

Figure No.

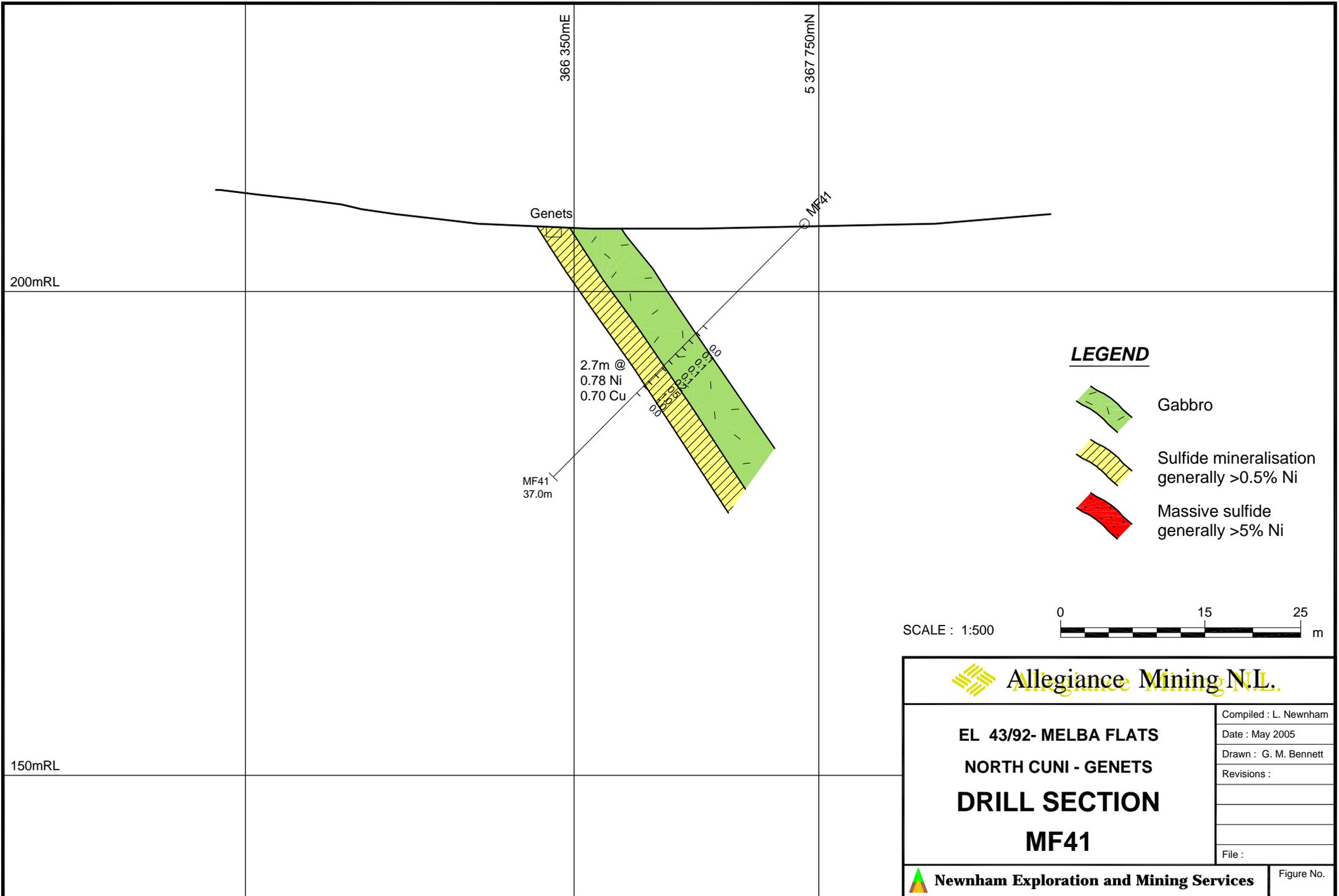


**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni



 <b>Allegiance Mining N.L.</b>	
<b>EL 43/92- MELBA FLATS NORTH CUNI - GENETS DRILL SECTION EM2</b>	Compiled : L. Newnham Date : May 2005 Drawn : G. M. Bennett Revisions :  File :
 <b>Newnham Exploration and Mining Services</b>	Figure No.



**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



 Allegiance Mining N.L.

**EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL SECTION  
MF41**

Compiled : L. Newnham

Date : May 2005

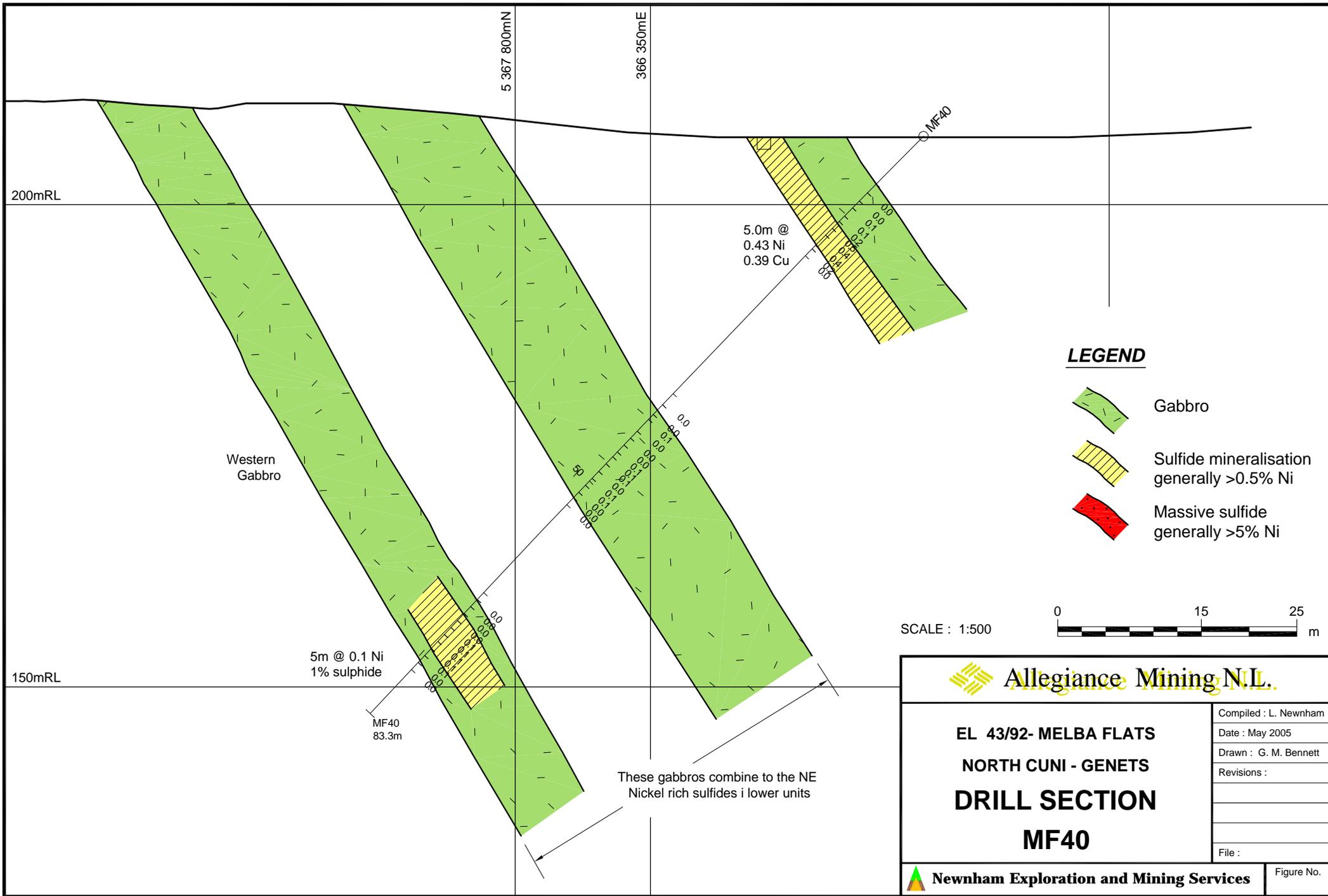
Drawn : G. M. Bennett

Revisions :

File :

 Newnham Exploration and Mining Services

Figure No.



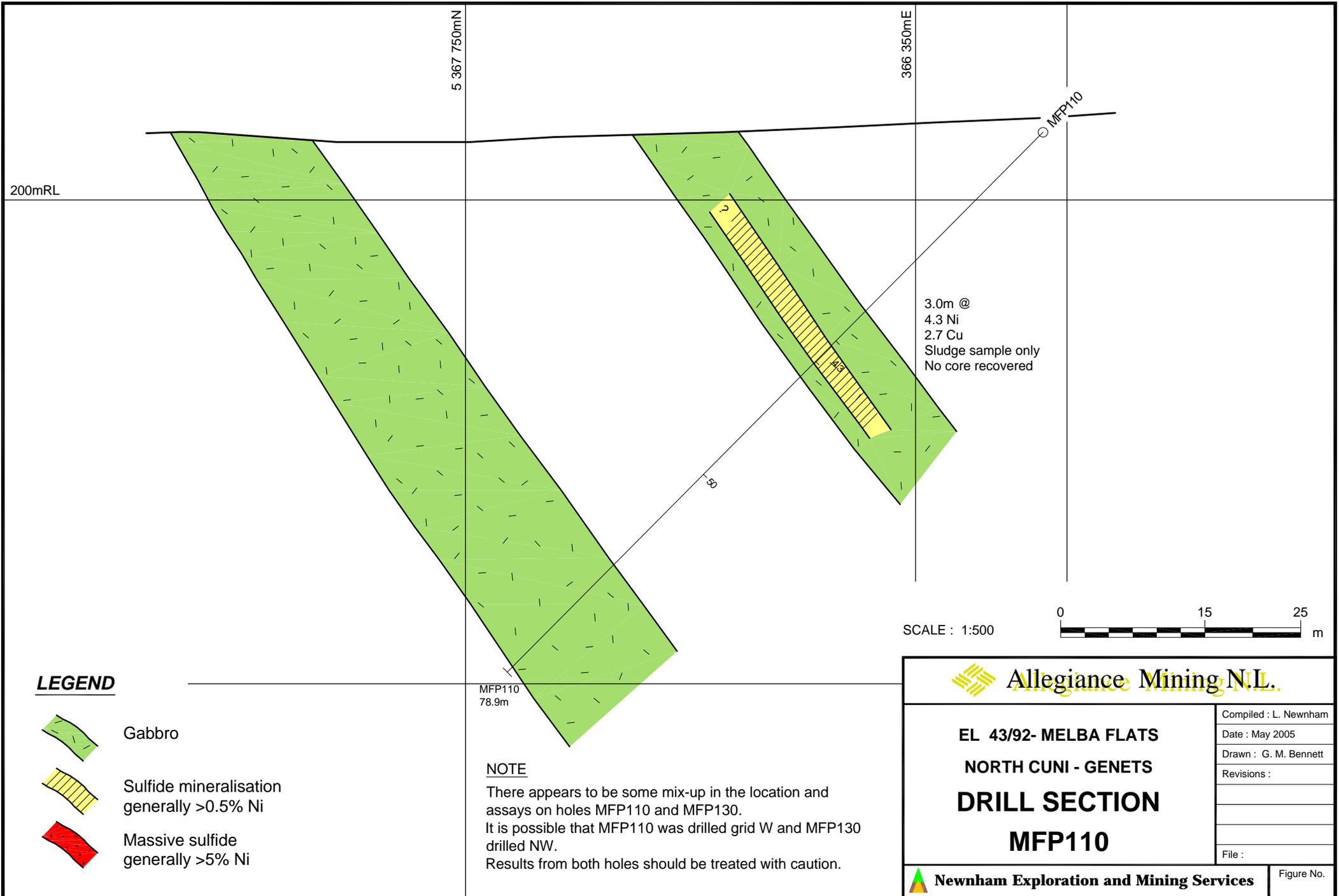
**Allegiance Mining N.L.**

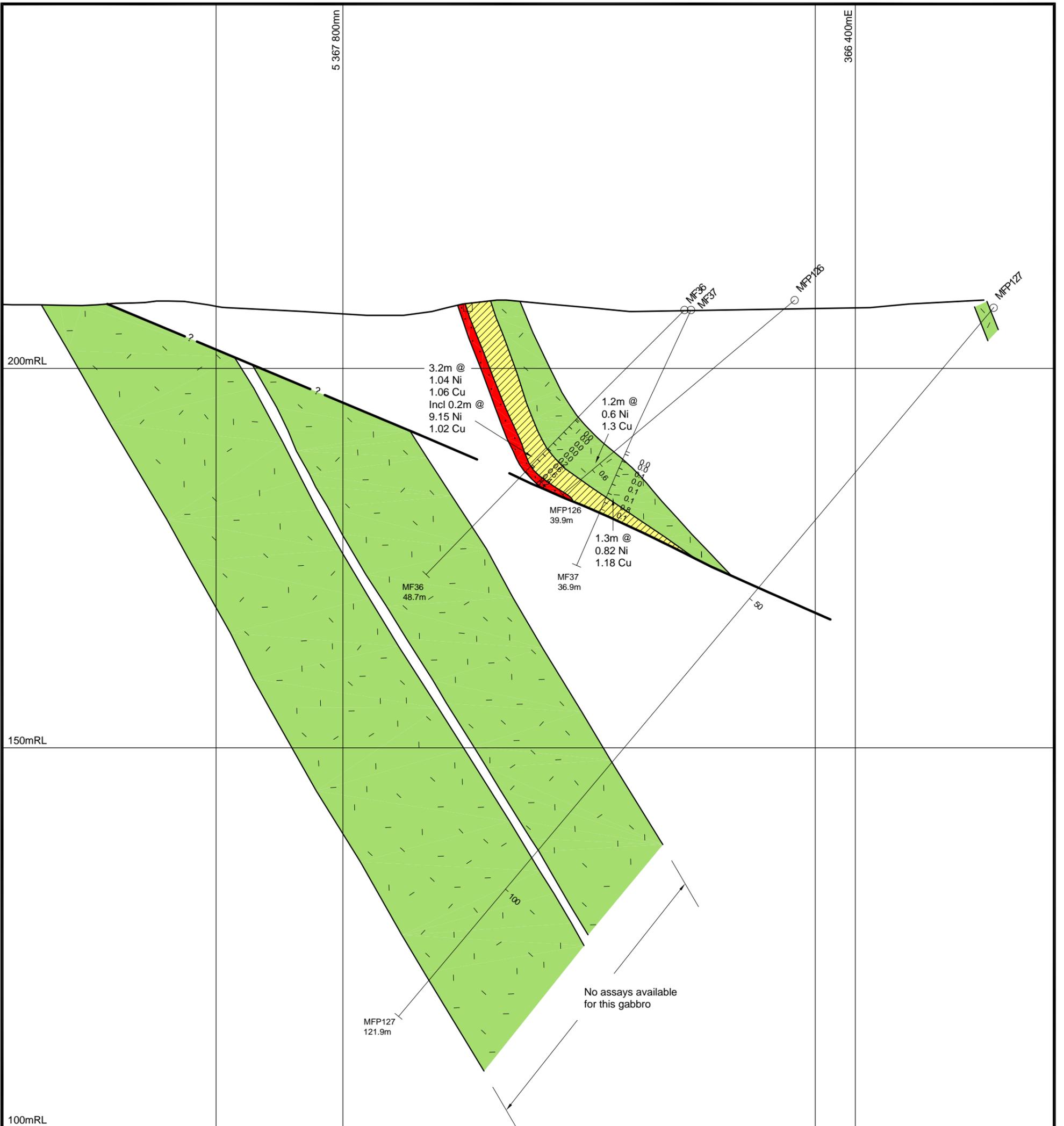
**EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL SECTION  
MF40**

Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :

**Newnham Exploration and Mining Services**

Figure No.



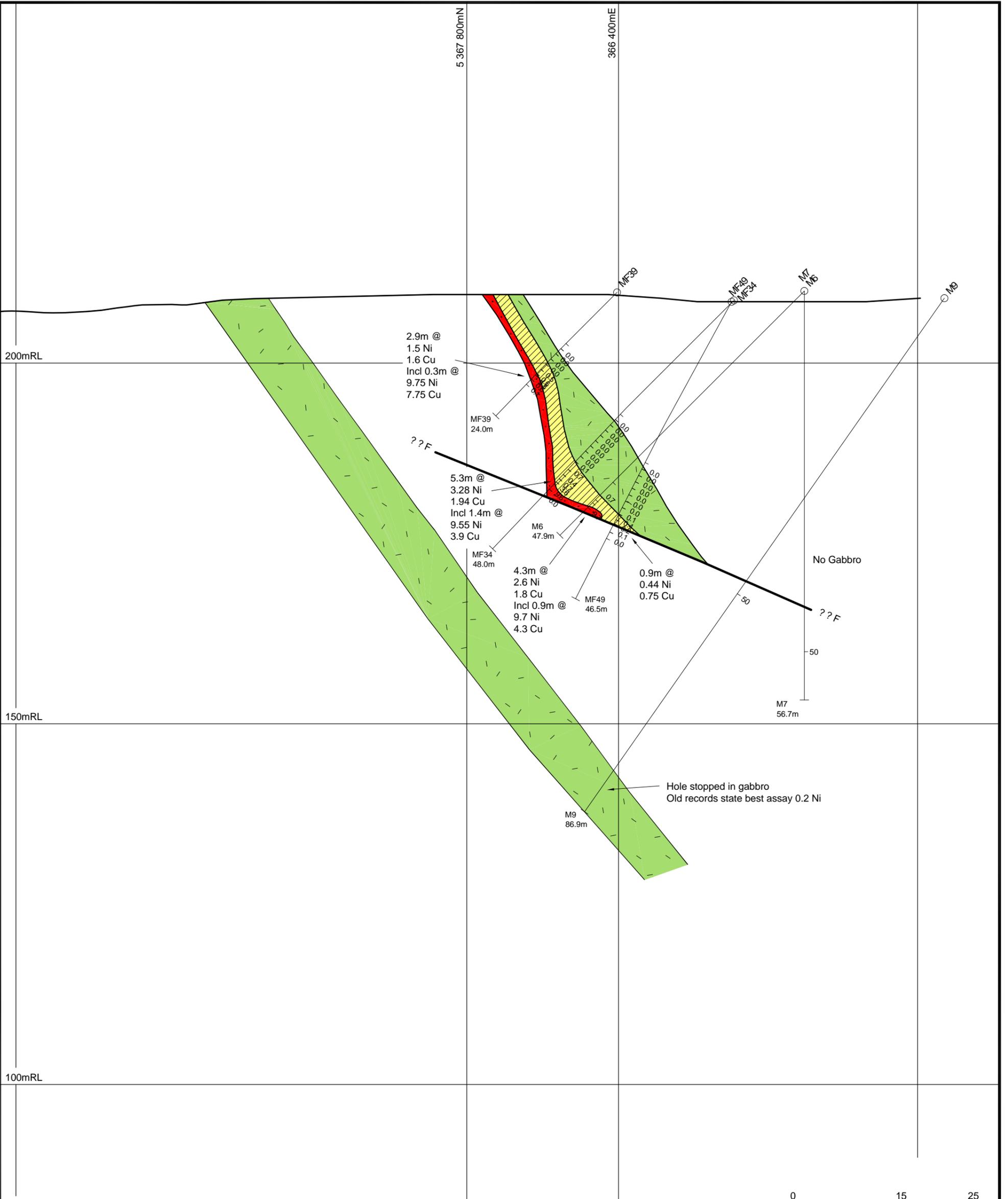


**LEGEND**

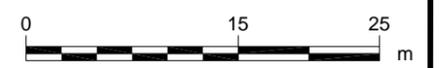
-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

 <b>Allegiance Mining N.L.</b>	
<b>EL 43/92- MELBA FLATS NORTH CUNI - GENETS DRILL SECTION MF36, MF37 MF126 and MF 127</b>	
<small>Compiled : L. Newnham Date : May 2005 Drawn : G. M. Bennett Revisions : File :</small>	<small>Figure No.</small>
 <b>Newnham Exploration and Mining Services</b>	





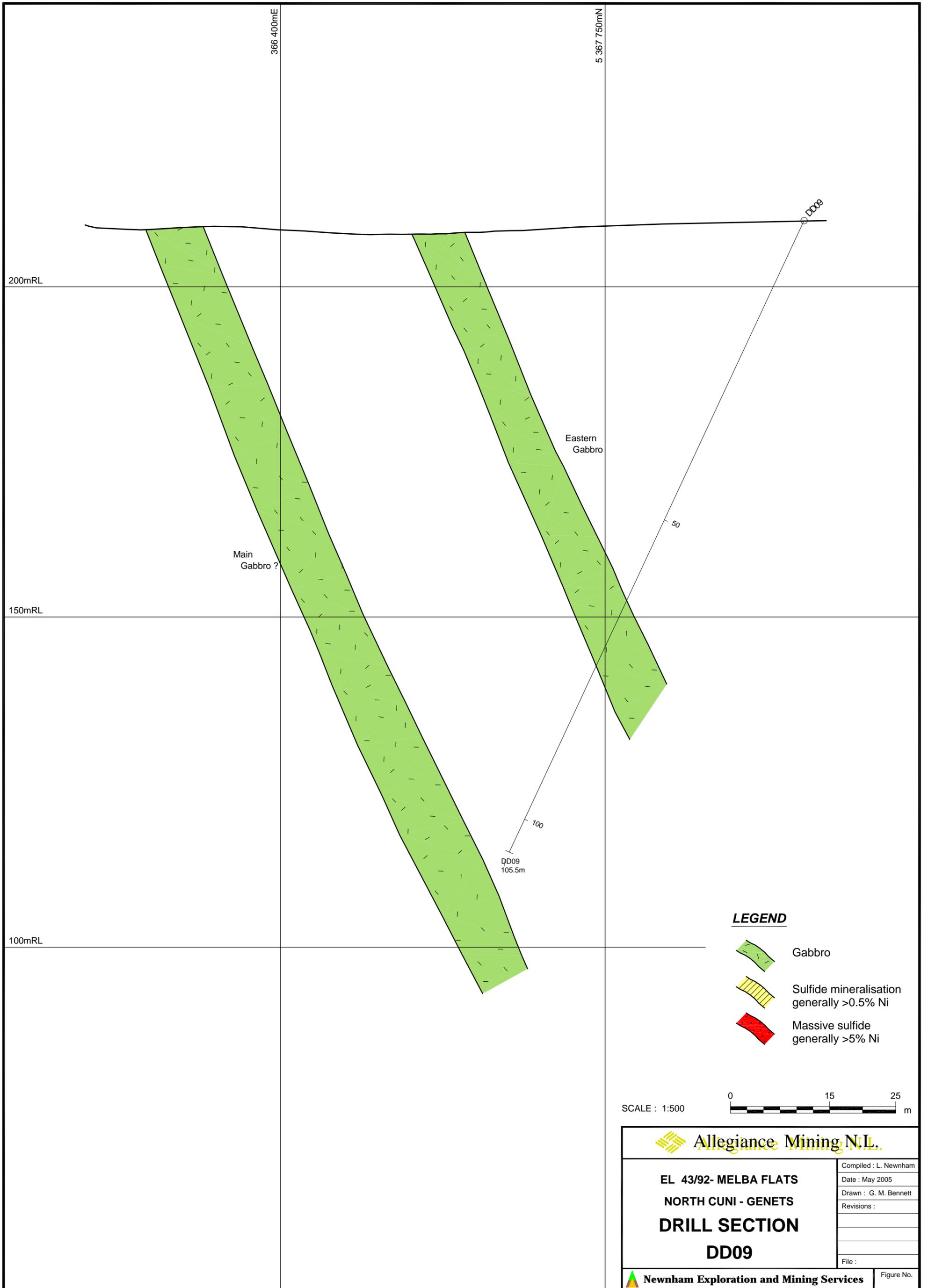
SCALE : 1:500



**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

 <b>Allegiance Mining N.L.</b>	
<b>EL 43/92- MELBA FLATS NORTH CUNI - GENETS DRILL SECTION M6, M7, M9, MF39 and MF49</b>	
<b>Compiled :</b> L. Newnham	<b>Date :</b> May 2005
<b>Drawn :</b> G. M. Bennett	<b>Revisions :</b>
<b>File :</b>	<b>Figure No.</b>
 <b>Newnham Exploration and Mining Services</b>	



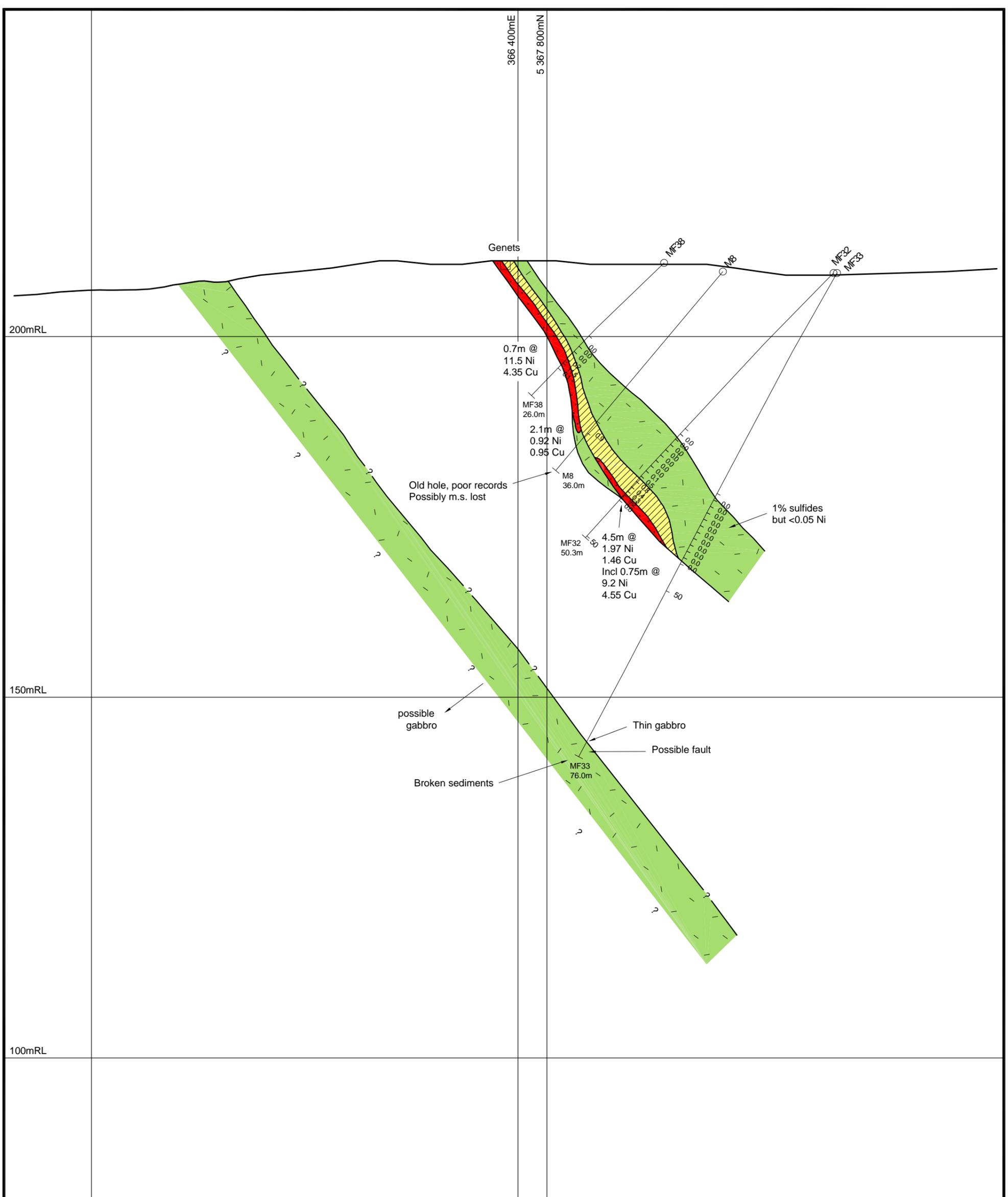
**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



 <b>Allegiance Mining N.L.</b>	
<p><b>EL 43/92- MELBA FLATS</b></p> <p><b>NORTH CUNI - GENETS</b></p> <p><b>DRILL SECTION</b></p> <p><b>DD09</b></p>	<p>Compiled : L. Newnham</p> <p>Date : May 2005</p> <p>Drawn : G. M. Bennett</p> <p>Revisions :</p> <p>File :</p>
 <b>Newnham Exploration and Mining Services</b>	Figure No.

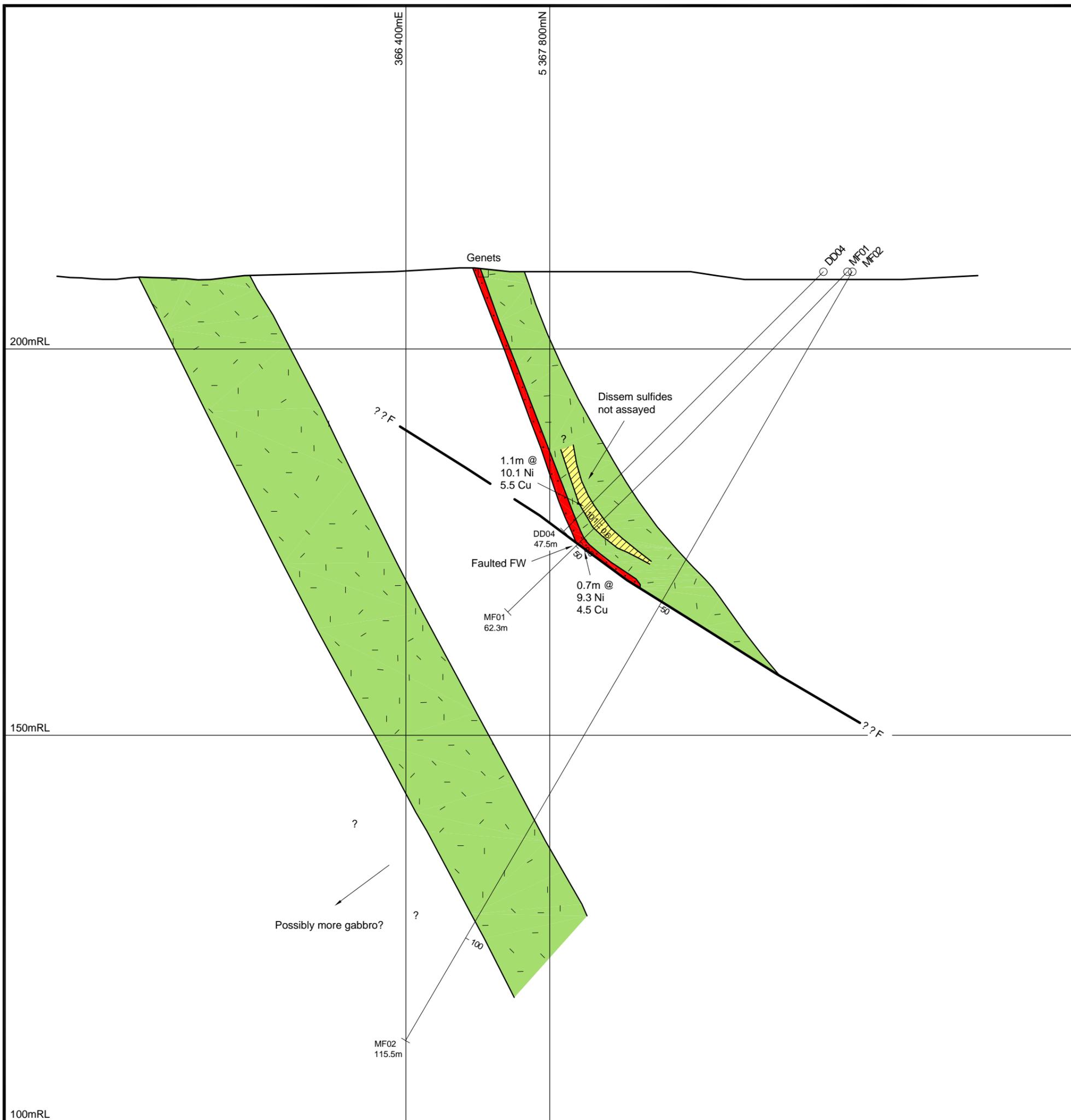


**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni



 <b>Allegiance Mining N.L.</b>	
<b>EL 43/92- MELBA FLATS NORTH CUNI - GENETS DRILL SECTION MF32, MF33 MF38 and M8</b>	
<small>Compiled : L. Newnham Date : May 2005 Drawn : G. M. Bennett Revisions :  File :</small>	<small>Figure No.</small>
 <b>Newnham Exploration and Mining Services</b>	

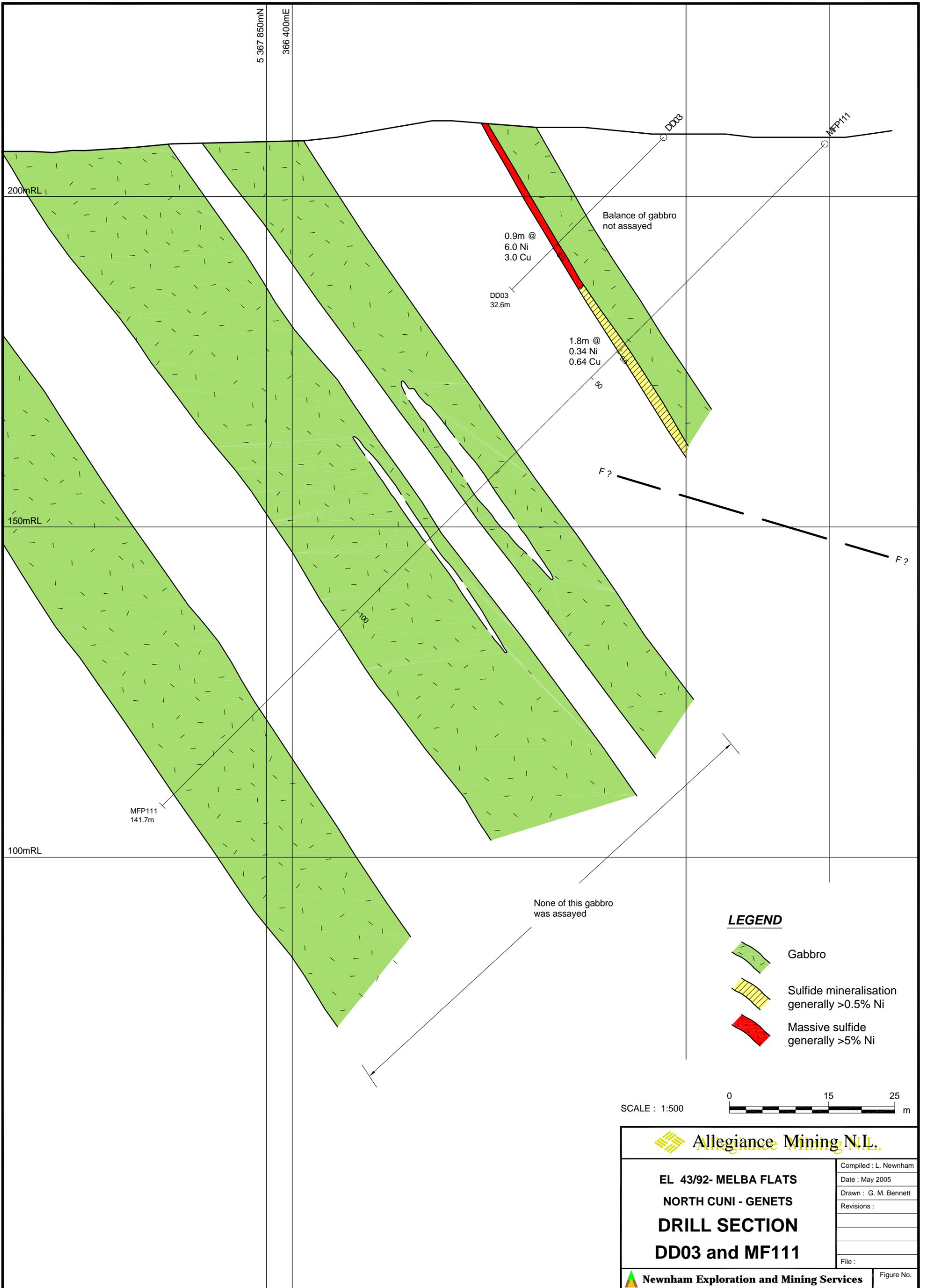


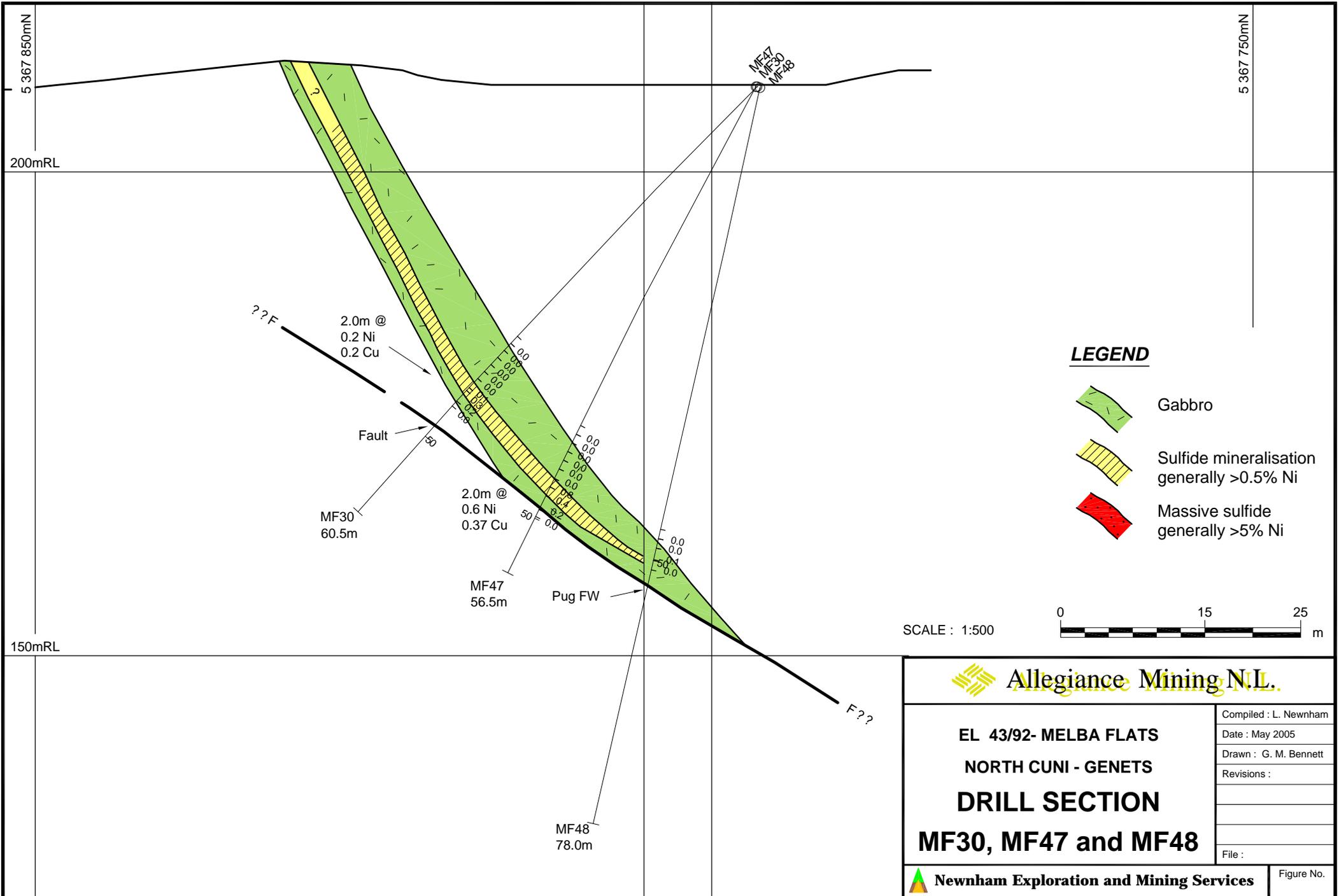
**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

 <b>Allegiance Mining N.L.</b>	
<b>EL 43/92- MELBA FLATS</b>	
<b>NORTH CUNI - GENETS</b>	
<b>DRILL SECTION</b>	
<b>DD04, MF1 and MF2</b>	
<small>Compiled : L. Newnham</small>	<small>Date : May 2005</small>
<small>Drawn : G. M. Bennett</small>	<small>Revisions :</small>
<small>File :</small>	<small>Figure No.</small>
 <b>Newnham Exploration and Mining Services</b>	







**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



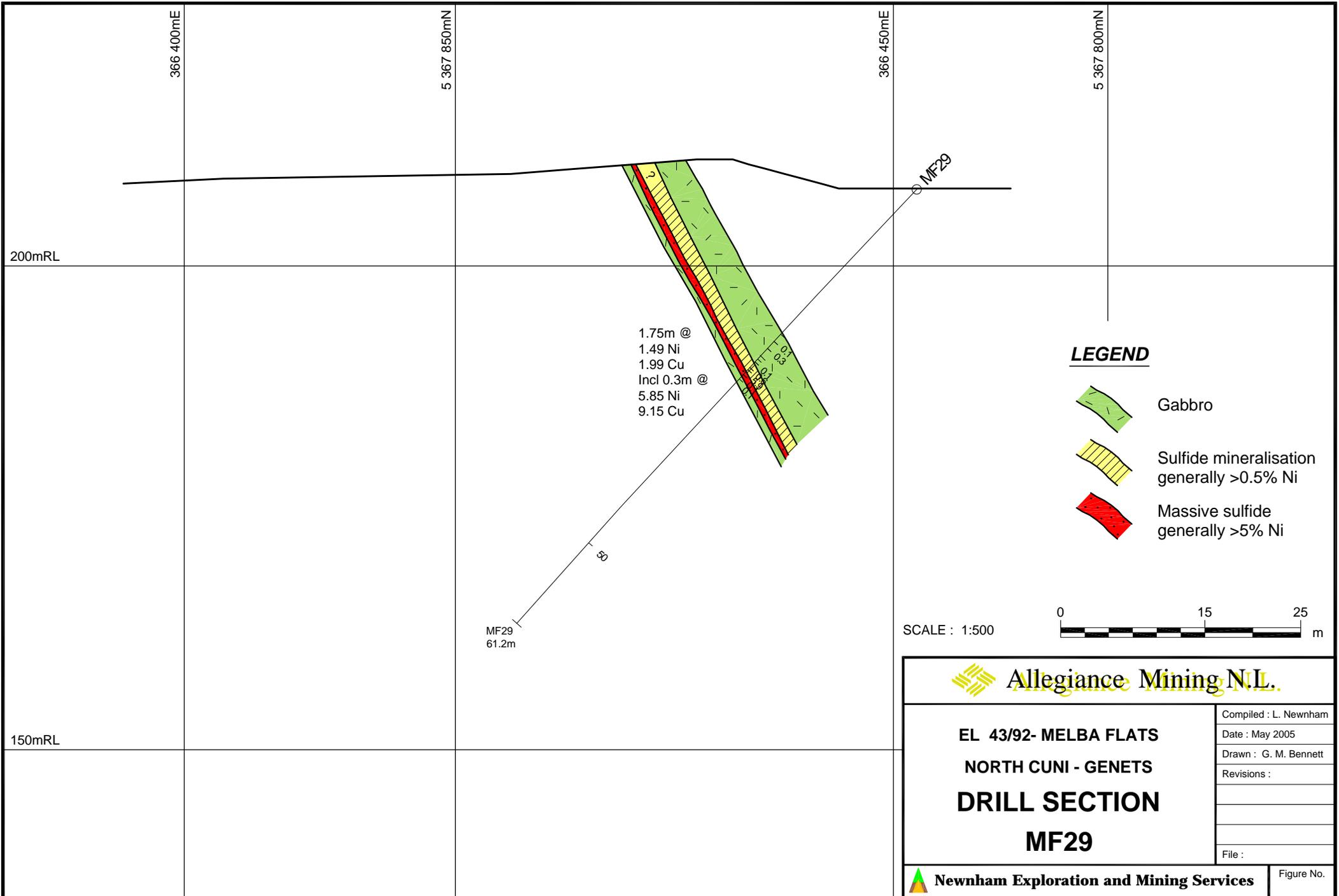
**Allegiance Mining N.L.**

**EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL SECTION  
MF30, MF47 and MF48**

Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :

 **Newnham Exploration and Mining Services**

Figure No.



**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



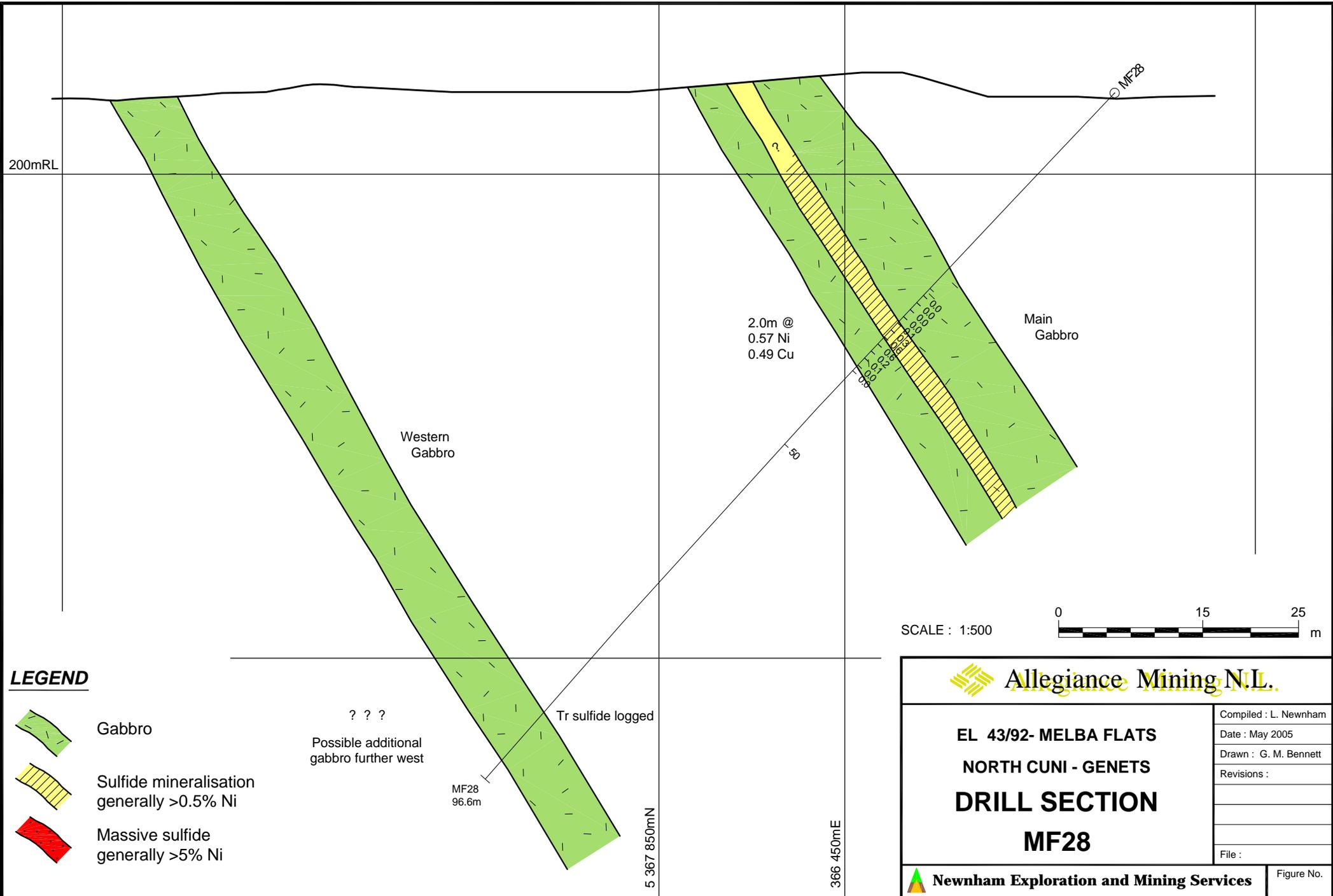
 Allegiance Mining N.L.

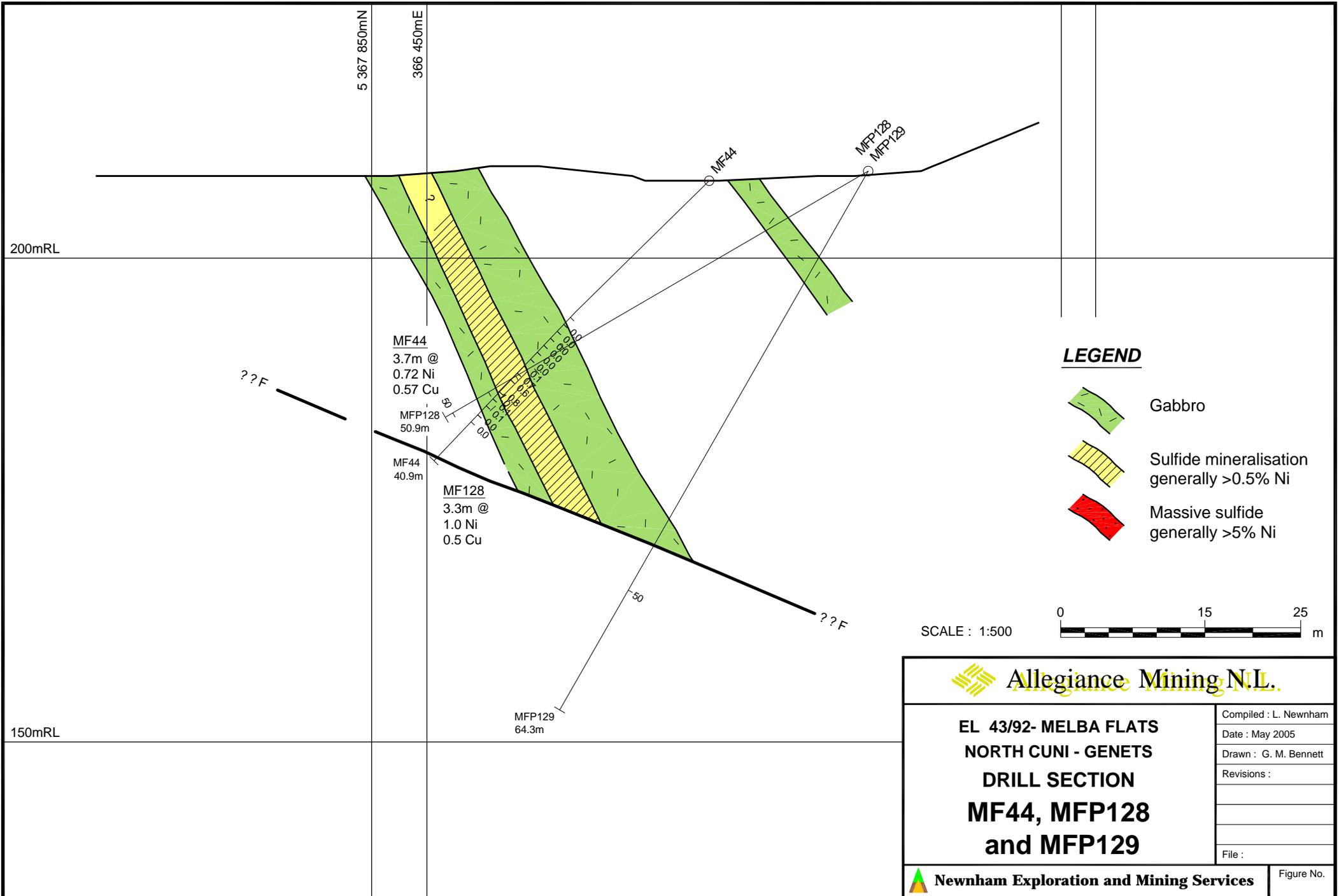
**EL 43/92- MELBA FLATS**  
**NORTH CUNI - GENETS**  
**DRILL SECTION**  
**MF29**

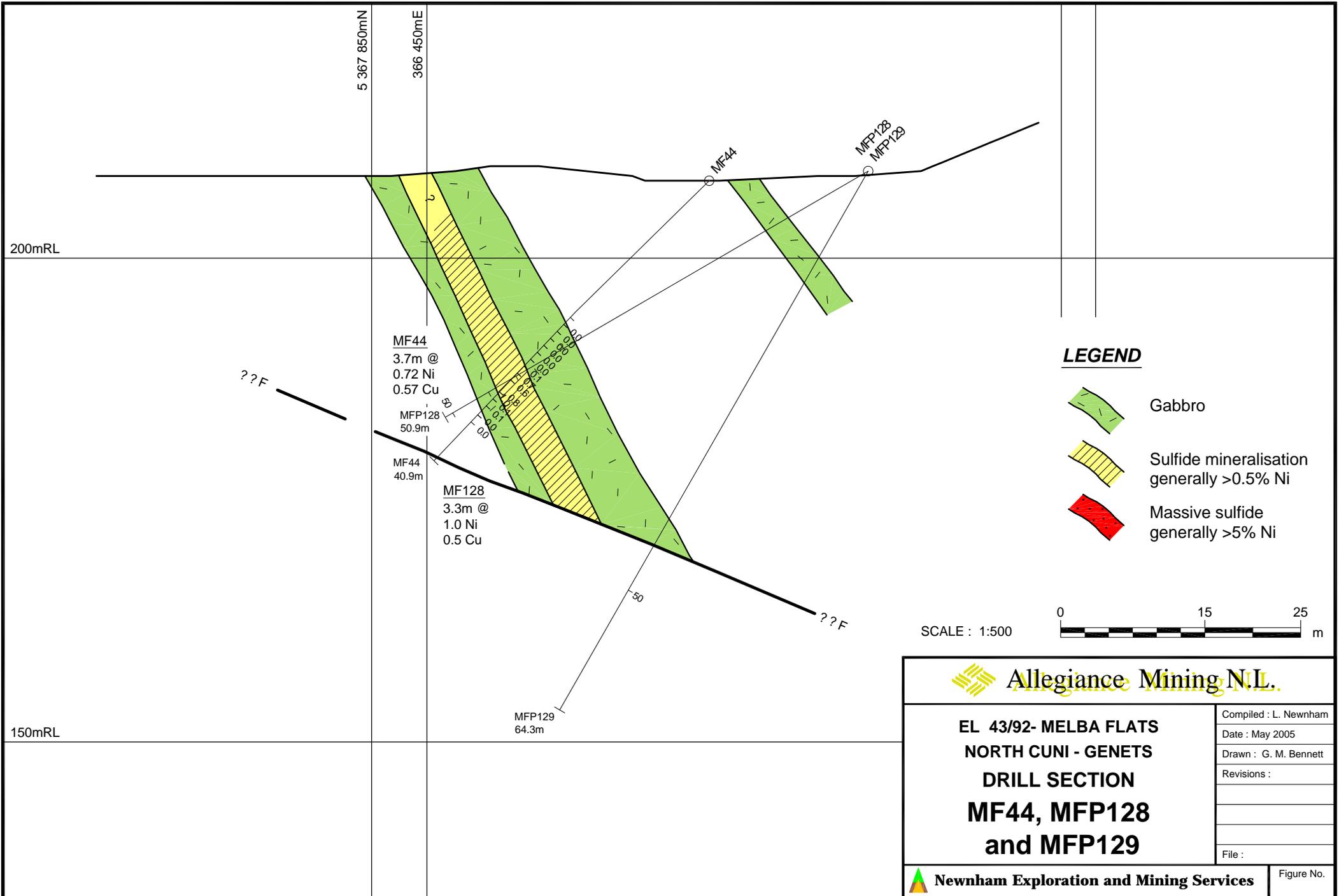
Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :

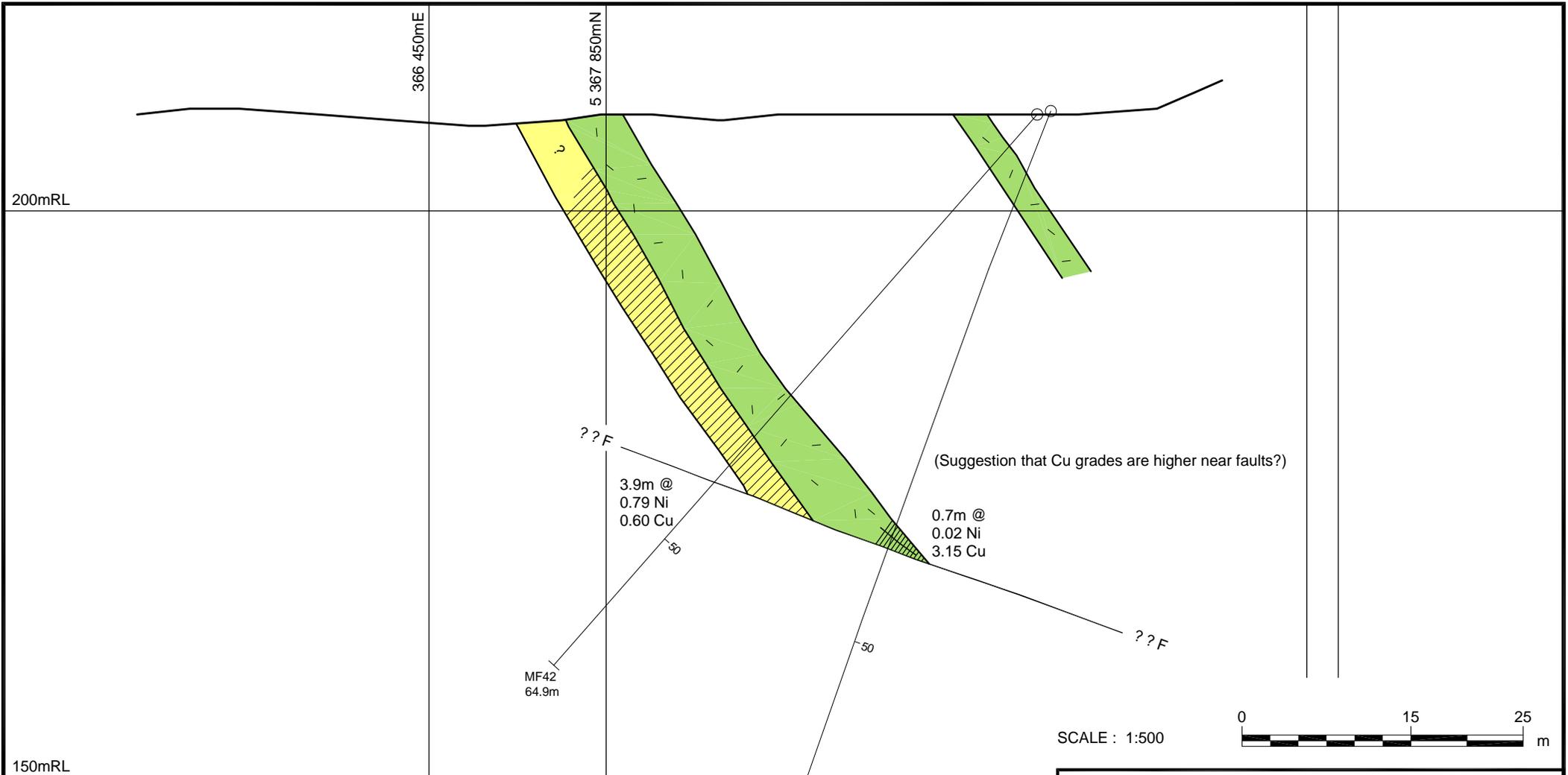
 Newnham Exploration and Mining Services

Figure No.









**LEGEND**

-  Gabbro
-  Sulfide mineralisation  
generally >0.5% Ni
-  Massive sulfide  
generally >5% Ni

 Allegiance Mining N.L.

**EL 43/92- MELBA FLATS**  
**NORTH CUNI - GENETS**  
**DRILL SECTION**  
**MF42 and MF43**

Compiled : L. Newnham

Date : May 2005

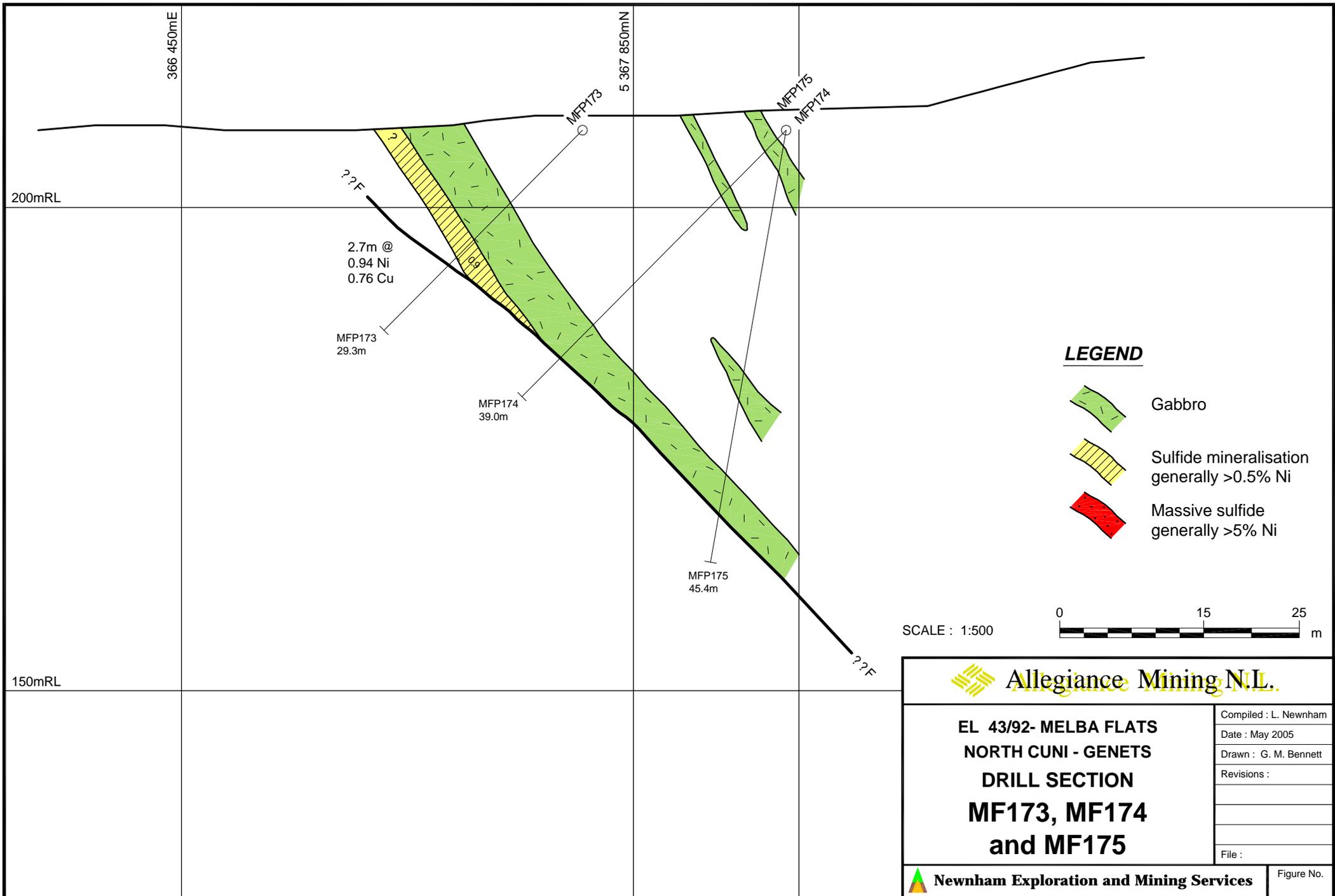
Drawn : G. M. Bennett

Revisions :

File :

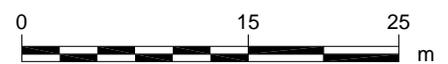
 Newnham Exploration and Mining Services

Figure No.



**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

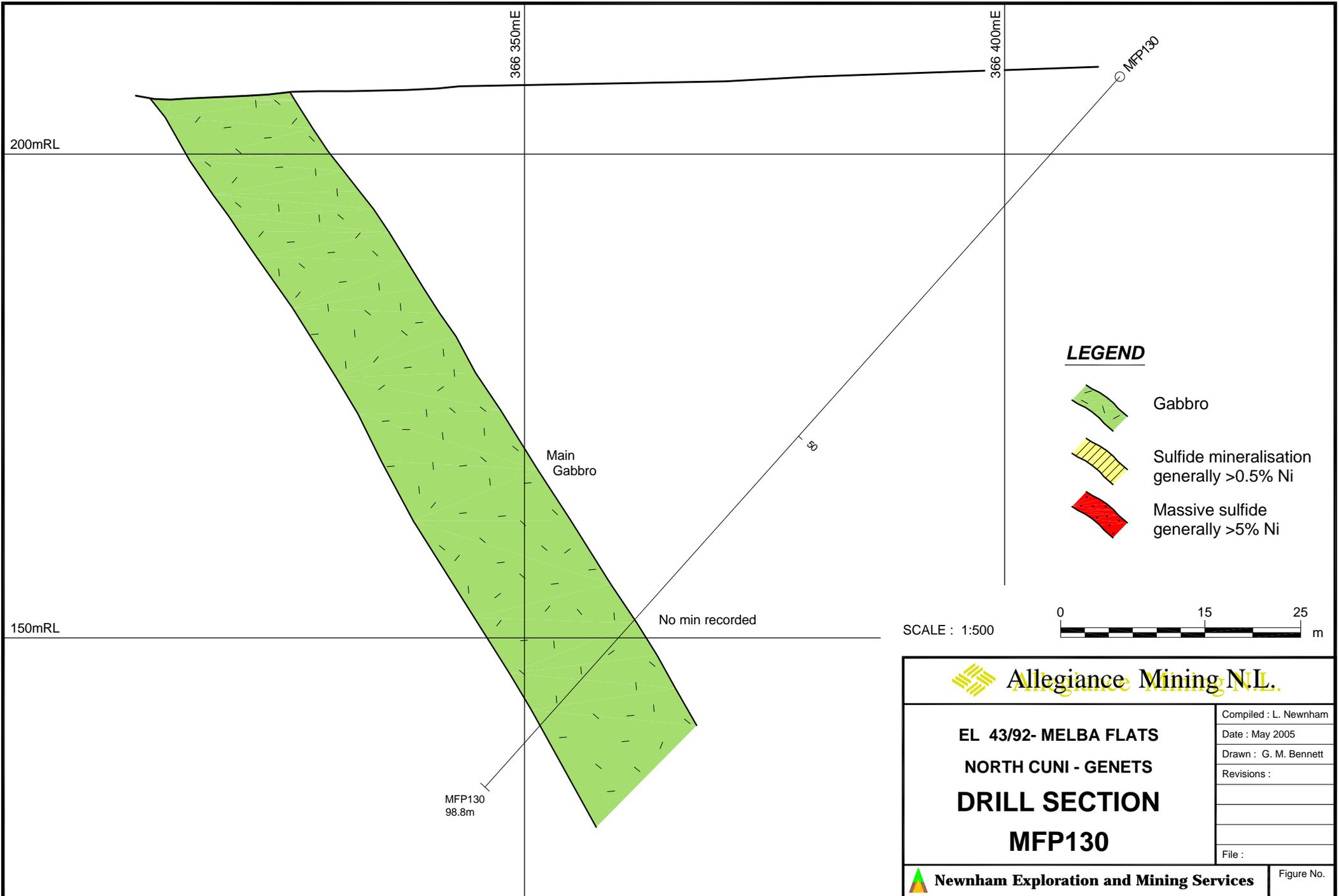


SCALE : 1:500

**Allegiance Mining N.L.**

**EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL SECTION  
MF173, MF174  
and MF175**

Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :



200mRL

150mRL

366 350mE

366 400mE

MFP130

Main Gabbro

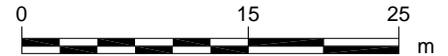
50

No min recorded

MFP130  
98.8m

**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni



SCALE : 1:500

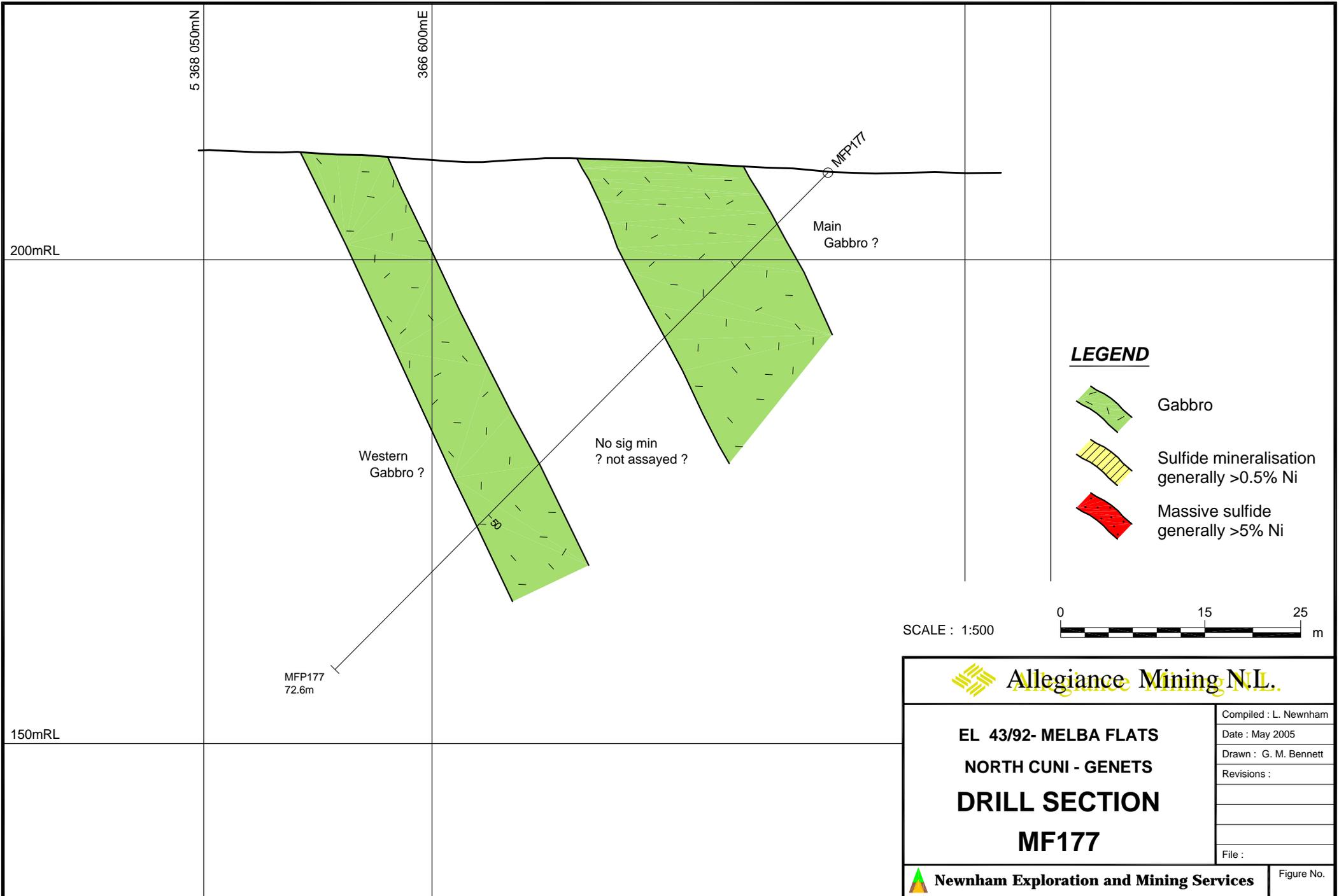
**Allegiance Mining N.L.**

**EL 43/92- MELBA FLATS**  
**NORTH CUNI - GENETS**  
**DRILL SECTION**  
**MFP130**

Compiled : L. Newnham  
Date : May 2005  
Drawn : G. M. Bennett  
Revisions :  
File :

**Newnham Exploration and Mining Services**

Figure No.



5 368 050mN

366 600mE

200mRL

150mRL

MFP177

Main Gabbro ?

Western Gabbro ?

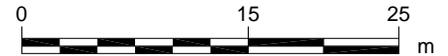
No sig min ? not assayed ?

MFP177  
72.6m

**LEGEND**

-  Gabbro
-  Sulfide mineralisation generally >0.5% Ni
-  Massive sulfide generally >5% Ni

SCALE : 1:500



**Allegiance Mining N.L.**

**EL 43/92- MELBA FLATS  
NORTH CUNI - GENETS  
DRILL SECTION  
MF177**

Compiled : L. Newnham
Date : May 2005
Drawn : G. M. Bennett
Revisions :
File :

**Newnham Exploration and Mining Services**

Figure No.

## **APPENDIX B**

### ***'Melba Flats Gradient IP Survey: Logistics Summary'***