



## **Blythe Project, Northern Tasmania Annual Report for EL 35/2006 (“Hampshire 1”)**

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EL352006\_200901\_01\_annualreport.pdf  
EL352006\_200901\_02\_groundmaghamp.txt  
EL352006\_200901\_03\_groundmagnolans.txt  
EL352006\_200901\_04\_groundmageaslug.txt  
EL352006\_200901\_05\_drillloghampshire.txt  
EL352006\_200901\_06\_drilllognolans.txt  
EL352006\_200901\_07\_drilllogseaslug.txt  
EL352006\_200901\_08\_primaryanalyseshamp.txt  
EL352006\_200901\_09\_secondaryanalyseshamp.txt

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January 2009

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## **Abstract**

Throughout the past year work on this tenement has involved evaluation of past exploration, and detailed ground magnetic surveys of areas thought to be prospective for magnetite. This has led to the identification of three prospects: Hampshire, Nolan's Hill, and Sea Slug. A reverse circulation drilling program was carried out within the prospects to establish the presence of potential iron ore bodies. This produced a total of 41 holes with a combined depth of 2254 m.

Skarns at the Hampshire Prospect contain a westerly-dipping lens of semi-massive to massive magnetite, 270 m long and 5 to 12 m thick, carrying grades of up to 64.8 % Fe.

Data is currently being reviewed as to the future direction of exploration during the next permit year.

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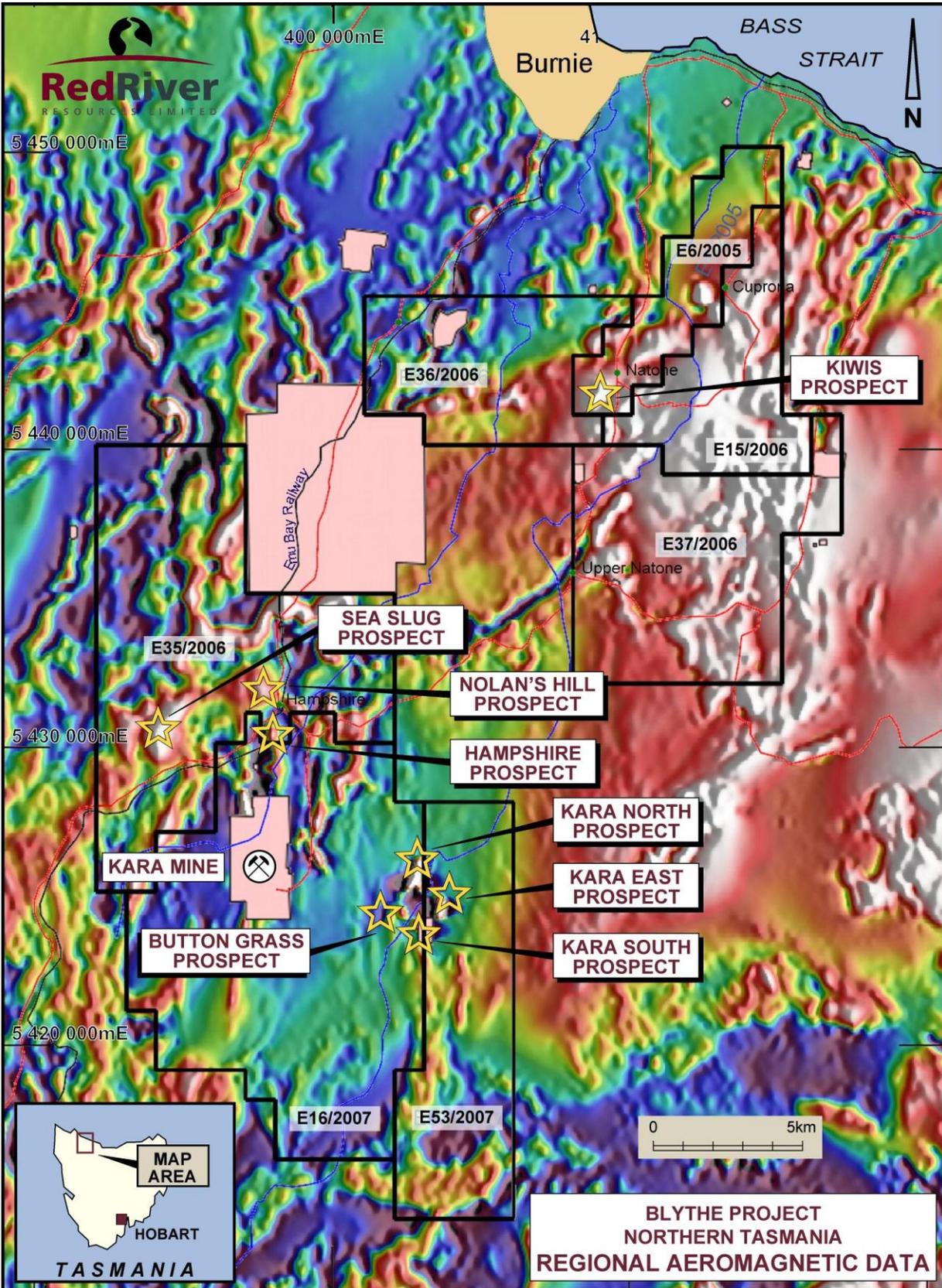
## 1.0 Introduction

### 1.1 Tenement Details

The licence is one of a group of 7 licences held by either Red River Resources Ltd or Iron Mountain Mining Ltd and managed by Iron Mountain Mining Ltd as part of the Blythe Joint Venture.

Exploration Licence EL35/2006 is held in the name of Red River Resources Ltd. It covers an area of 89 km<sup>2</sup> in northern Tasmania, just over 20 km south west of Burnie (see **Figure 1**). The tenement is known as *Hampshire 1* (*Hampshire 2*, EL 18/2007 being situated immediately south). This report details exploration on the second permit year of the tenement for the period January 2008 to January 2009. The exploration license was initially granted on 26<sup>th</sup> February 2007.

**Figure 1** on the next page shows a summary map indicating all tenement areas in the Blythe Joint Venture Program.



**Figure 1 – Blythe Summary Map.**

The *Hampshire 1* tenement occurs in the western part of the project area and contains numerous exploration targets evidenced as aeromagnetic highs.

## 1.2 Exploration Rationale

Current exploration is focused towards delineating semi-massive to massive magnetite mineralisation hosted by skarns adjacent to the Housetop Granite.

## 1.3 Geology

The regional geological setting comprises Proterozoic aged Burnie Formation shales and quartzites that are folded about north-easterly axes and generally dip steeply to the southeast. The overlying Proterozoic Oonah Formation forms an unconformity to the east and consists of 100 m of haematitic and micaceous siliceous siltstones which have shallower dips of about 40° south east. This unit is overlain to the east by a steeper south-easterly dipping sequence of conglomerates, sandstones and pebbly limestones, which correlate lithologically with the Cambrian to early Ordovician Denison and Dial Groups. During the Tertiary, the region was almost completely covered by basalt flows, forming a plateau that was subsequently eroded by rivers that re-exposed the older sediments and associated iron deposits.

To the south-east, Upper Devonian Housetop granite outcrops as a medium to coarse grained adamellite. This tenement is situated on its western margins.

Contact metamorphism of the older sediments during emplacement of the granite resulted in the formation of skarn deposits.

## 2.0 Previous Exploration

The first mining lease in the area was held in 1891. **Appendix 1** is a list of company reports for work undertaken within the Blythe Joint Venture Area. It is based on this data that current exploration is focused on magnetite skarn bodies as a source of direct shipping grade iron ore.

## 3.0 Work Program – Exploration completed during the report period

As summarised in the *Abstract* above, work during this period involved:

- Evaluation of past exploration
- Ground magnetic
- Drilling

### 3.1 Evaluation of Past Exploration

**Appendix 1** details the reports which were evaluated during this stage.

A regional aeromagnetic map, see **Figure 1**, was used to define which areas should be investigated in more detail using ground magnetics. Three prospects were identified within the tenement area: Hampshire, Nolan’s Hill and Sea Slug.

### 3.2 Ground Magnetics

Detailed ground magnetic surveys were undertaken over a number of prospect areas. **Figures 2, 3 and 4** show the ground magnetic contours and drill hole layouts of the Hampshire, Nolan’s Hill and Sea Slug Prospects respectively. The locations of these prospects are shown in **Figure 1**.

The raw data for the ground magnetic surveys are provided in **Attachments 1, 2 and 3**.

### 3.3 Drilling

Drilling (reverse circulation) was completed over the three prospect areas and consisted of 41 holes with a combined depth of 2254 m. The contractor was EDrill Pty Ltd. A summary of each drill hole for each prospect is given in **Table 1** below (the raw data taken directly from the drill logs can be found in **Attachments 4, 5 and 6**). The drill hole locations are also plotted on the ground magnetic maps (**Figures 2, 3, and 4**).

The Hampshire Prospect (see **Figure 2**) included 31 holes and a total depth of 1537 m. This comprised drill hole numbers BHRC001 to BHRC0018 and BHRC020 to BHRC032. The Sea Slug and Nolan’s Hill Prospects both contained 5 holes each and consisted of total depths of 377 m and 340 m respectively. Sea Slug (see **Figure 4**) comprised drill hole numbers BSSRC001 – BSSRC005 and Nolan’s Hill (see **Figure 3**) comprised NHRC001- NHRC005.

Prospect	Drill Hole Number	Easting (GDA 94)	Northing (GDA 94)	Azimuth	Dip	Depth (m)
Hampshire Prospect	BHRC 001	397942	5430450	000	-90	7
	BHRC 002	397900	5430461	000	-90	10
	BHRC 003	397933	5430489	000	-90	46
	BHRC 004	397897	5430488	000	-90	71
	BHRC 005	397990	5430530	000	-90	46
	BHRC 006	397943	5430541	000	-90	52
	BHRC 007	397927	5430568	000	-90	60
	BHRC 008	397967	5430569	000	-90	46
	BHRC 009	397961	5430567	090	-60	46
	BHRC 010	397930	5430610	087	-60	39

	BHRC 011	397970	5430610	098	-60	21
	BHRC 012	397937	5430686	000	-90	28
	BHRC 013	397925	5430651	000	-90	40
	BHRC 014	397925	5430651	000	-90	28
	BHRC 015	398006	5430488	000	-90	52
	BHRC 016	397923	5430491	210	-60	50
	BHRC 017	397939	5430454	302	-60	98
	BHRC 018	397952	5430528	090	-60	64
	BHRC 020	397965	5430491	000	-90	30
	BHRC 021	397875	5430490	000	-90	88
	BHRC 022	397895	5430460	000	-90	70
	BHRC 023	397895	5430560	000	-90	46
	BHRC 024	397895	5430540	000	-90	46
	BHRC 025	397895	5430610	000	-90	46
	BHRC 026	397895	5430650	000	-90	34
	BHRC 027	397895	5430690	000	-90	34
	BHRC 028	397930	5430730	000	-90	34
	BHRC 029	397850	5430460	000	-90	90
	BHRC 030	397850	5430490	000	-90	100
	BHRC 031	397850	5430560	000	-90	60
BHRC 032	397850	5430610	000	-90	55	
Nolan's Hill Prospect	NHRC 001	398413	5434999	000	-90	100
	NHRC 002	398416	5434909	000	-90	70
	NHRC 003	398477	5434949	000	-90	60
	NHRC 004	398511	5435014	000	-90	60
	NHRC 005	398595	5434900	000	-90	50
Sea Slug Prospect	BSSRC 001	394191	5430458	000	-90	100
	BSSRC 002	394506	5430933	000	-90	75
	BSSRC 003	394499	543100	000	-90	75
	BSSRC 004	394500	5431315	000	-90	52
	BSSRC 005	394989	5431540	000	-90	75

**Table 1** - Drilling details from Hampshire, Sea Slug and Nolan's Hill prospects.

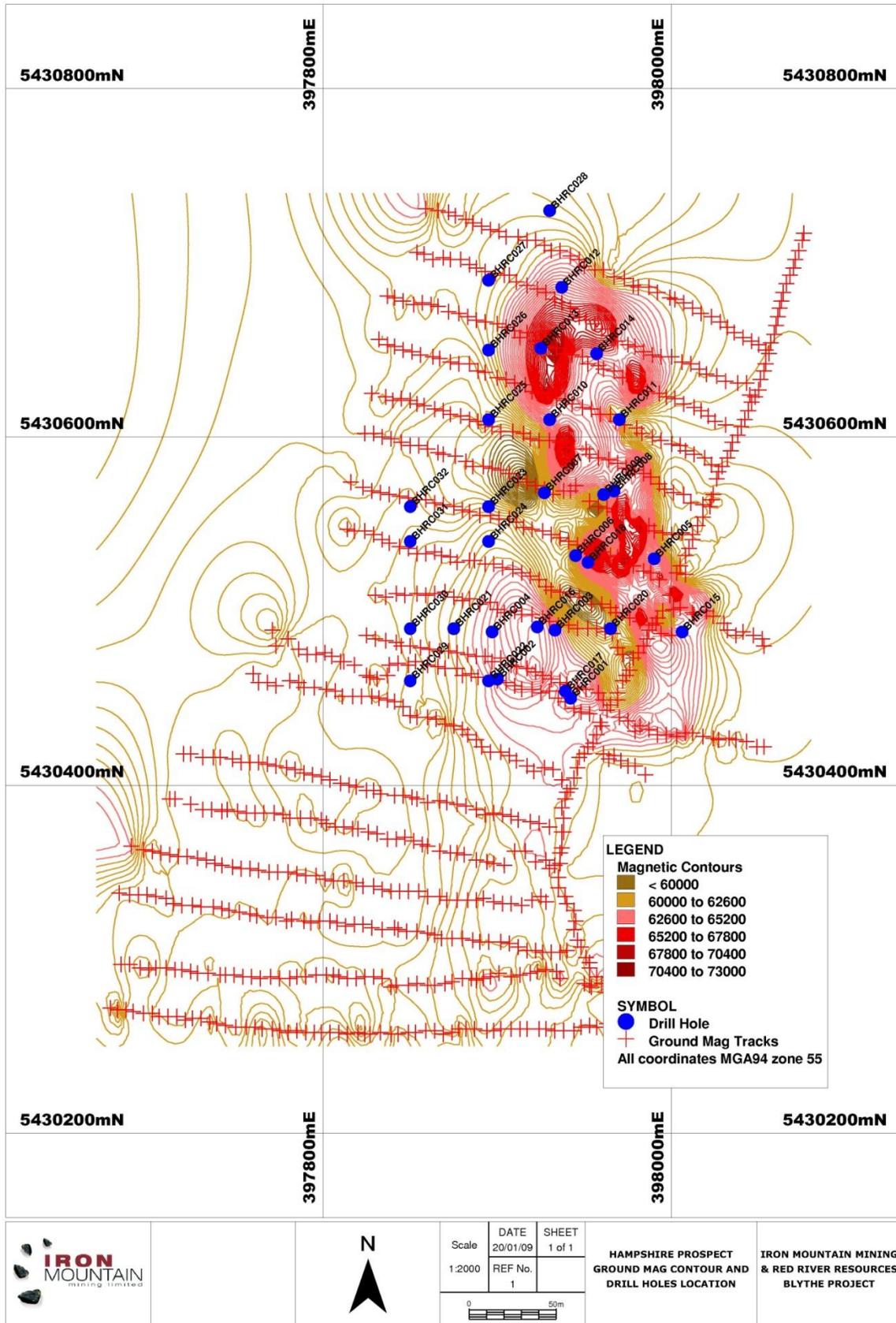


Figure 2 – Hampshire Prospect Ground Magnetics and Drill Hole Locations

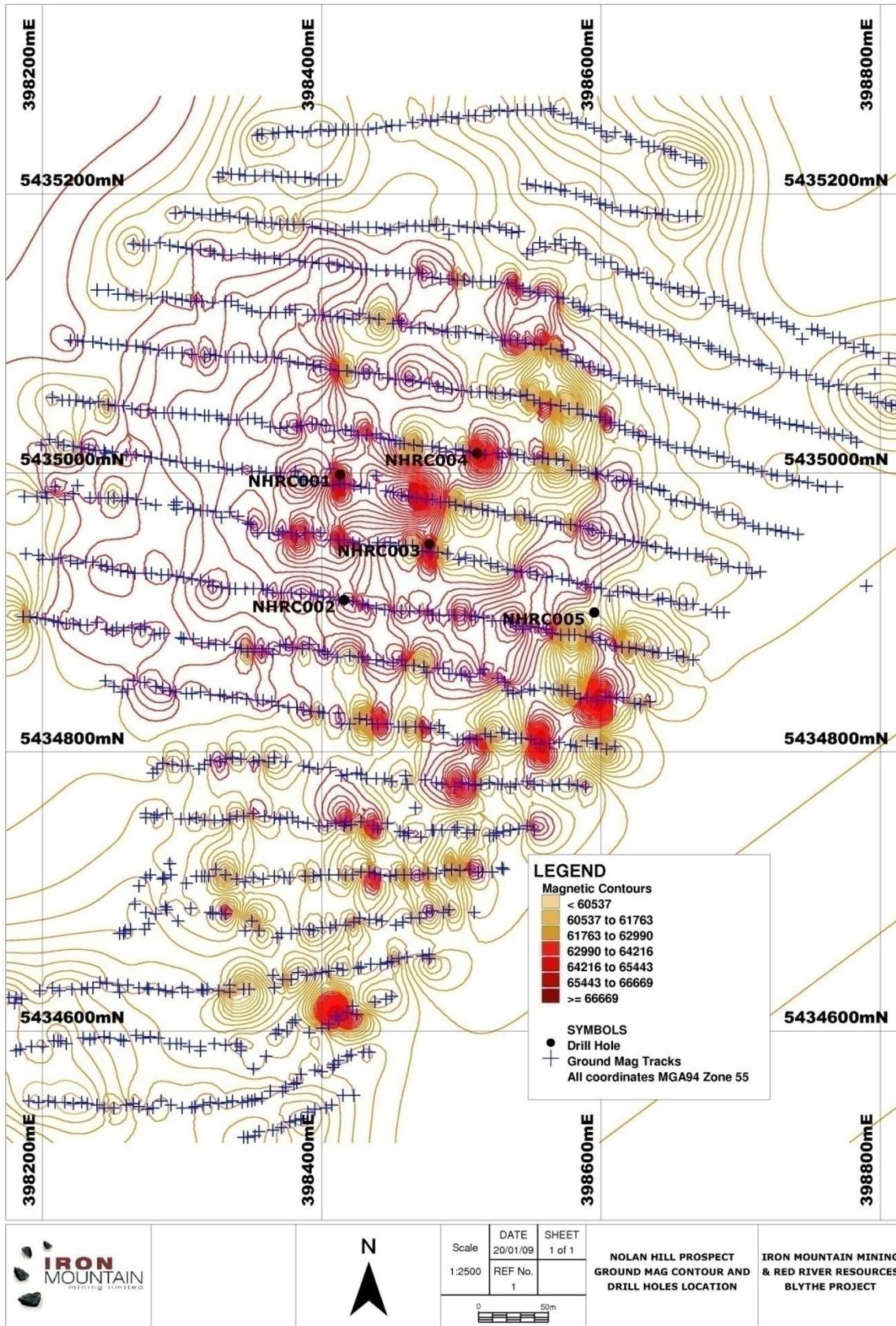
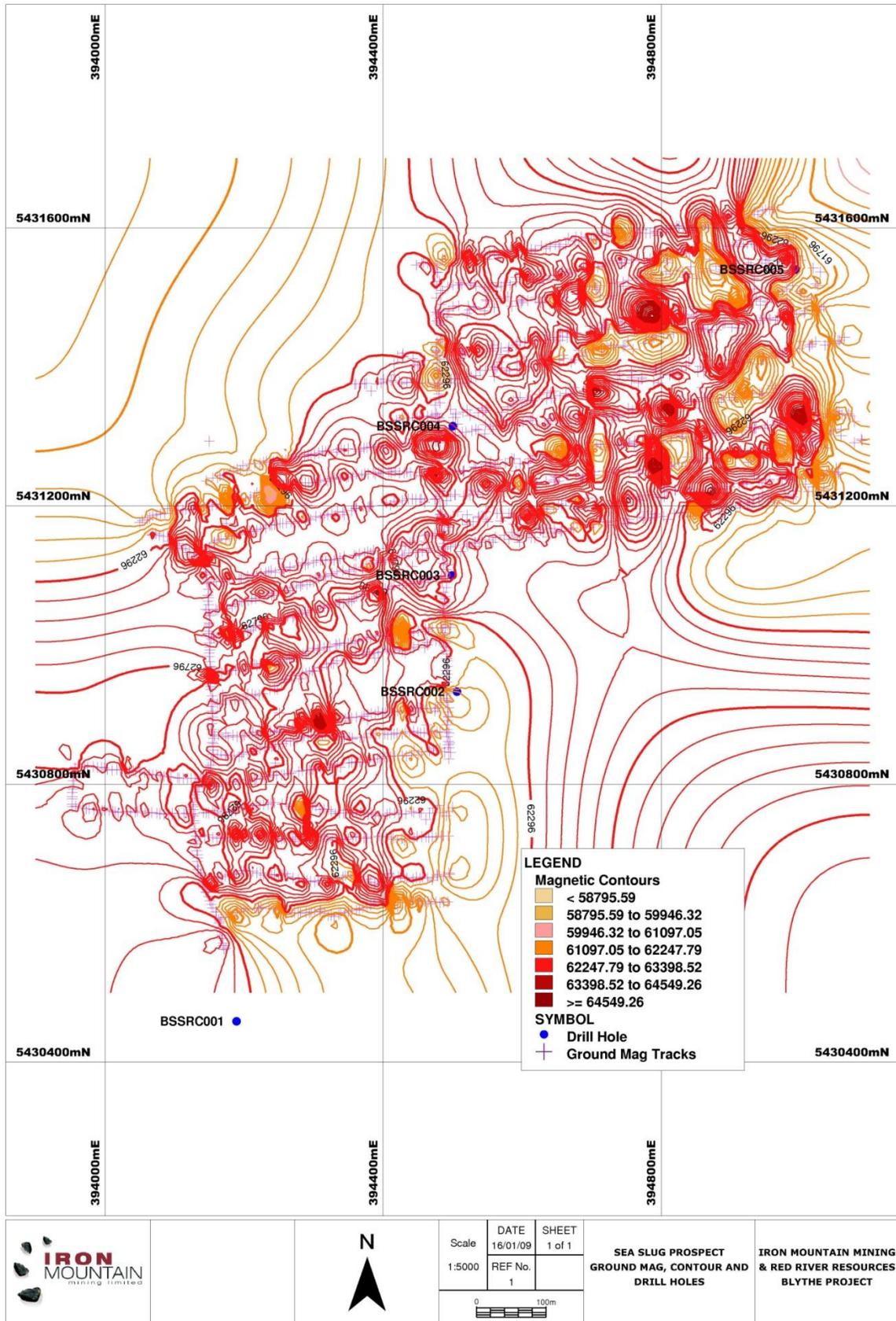


Figure 3 – Nolan’s Hill Prospect Ground Magnetics and Drill Locations



**Figure 4 – Sea Slug Prospect Ground Magnetics and Drill Hole Locations**

#### **4.0 Grid Datum**

The Geodetic Datum for the project is GDA 94.

#### **5.0 Discussion of Results and Conclusions**

Lithological logs from the **Hampshire Prospect** are given in **Attachment 4**, from the **Nolan's Hill Prospect** in **Attachment 5**, and from the **Sea Slug Prospect** in **Attachment 6**. Analytical results for the **Hampshire Prospect** are provided in **Attachments 7 and 8**.

##### **5.1 Hampshire Prospect**

Drilling at the Hampshire Prospect yielded a number of magnetite intersections and these are listed in **Table 2**.

Drill hole cross sections, running from south to north, detailing thicknesses of magnetite-bearing zones, with average grades for Fe and Sn, are shown as **Figures 5 – 12**.

Hole Number	From (m)	To (m)	Thickness (m)	Fe %	Al %	P %	Si %	S %	Sn %	East MGA	North MGA	Azimuth	Dip
BHRC003	13	22	9	45.1	4.37	0.35	20.4	0.03	0.05	397933	5430489	0	-90
BHRC004	30	37	7	38.6	5.58	0.33	24.4	0.02	0.1	397897	5430488	0	-90
BHRC004	40	50	10	44.2	1.86	0.3	20.5	0.02	0.03	397897	5430488	0	-90
BHRC006	7	12	5	55	1.46	0.2	12.1	0.02	0.06	397943	5430541	0	-90
BHRC007	13	20	7	40	2.01	0.2	20.4	0.04	0.05	397927	5430568	0	-90
BHRC008	0	4	4	54.2	4.55	1.14	11.1	0.05	0.02	397967	5430569	0	-90
BHRC009	0	6	6	64.8	1.94	0.13	4.22	0.03	0.02	397961	5430567	90	-60
BHRC010	10	17	7	46.4	3.5	0.2	17	0.05	0.03	397930	5430610	87	-60
BHRC011	0	4	4	48	5.37	2.16	14.4	0.05	0.03	397970	5430610	98	-60
BHRC012	8	20	12	29.1	5.3	0.27	31.6	0.06	0.08	397937	5430686	0	-90
BHRC013	15	23	8	48.3	2.26	0.47	17.4	0.02	0.03	397925	5430651	0	-90
BHRC014	3	8	5	43.5	4.9	0.76	21.9	0.08	0.07	397925	5430651	0	-90
BHRC015	0	4	4	46.2	7.02	1.74	14.3	0.06	0.03	398006	5430488	0	-90
BHRC016	37	50	13	52	2	0.17	13.8	0.02	0.03	397923	5430491	210	-60
BHRC017	20	32	12	47.2	2.9	0.4	18.1	0.02	0.07	397939	5430454	302	-60
BHRC018	3	9	9	45.2	3.7	0.7	19	0.05	0.06	397952	5430528	90	-60
BHRC020	5	12	7	53.3	3.1	0.4	12.4	0.03	0.09	397965	5430491	0	-90
BHRC021	79	86	7	26.3	2.9	0.4	34.2	0.03	0.04	397875	5430490	0	-90
BHRC022	59	66	7	37.8	1.9	0.4	23.5	0.01	0.02	397895	5430460	0	-90
BHRC023	33	41	8	48.7	1.9	0.5	16.6	0.01	0.03	397895	5430560	0	-90
BHRC024	37	42	5	54.8	1.4	0.1	11.9	0.01	0.04	397895	5430540	0	-90
BHRC025	33	42	9	35.1	3.1	0.2	24.7	0.02	0.04	397895	5430610	0	-90

**Table 2 – Summary of Significant Intersections for Hampshire Prospect**

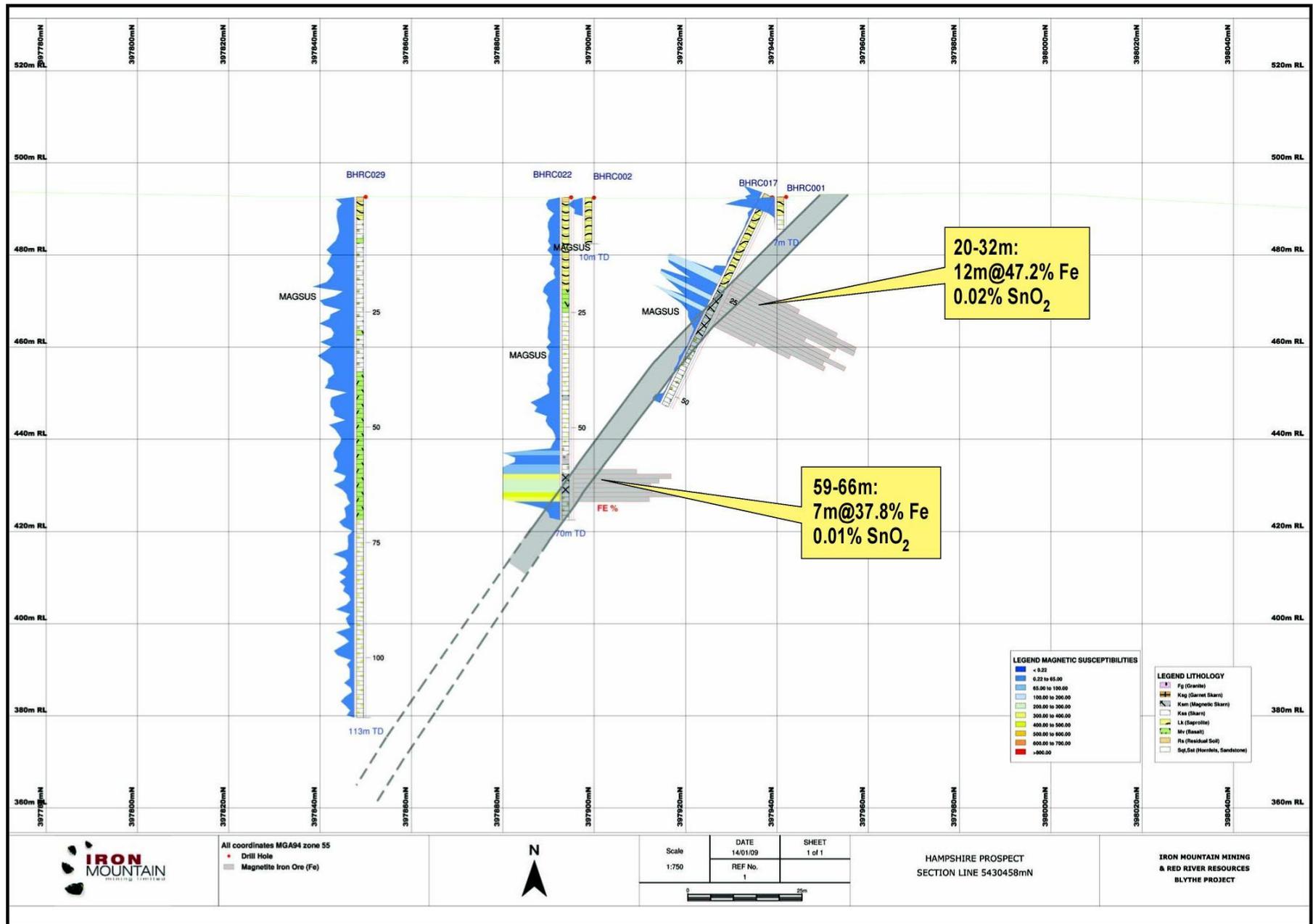


Figure 5 - Hampshire Prospect Cross Section 5 430 458 mN

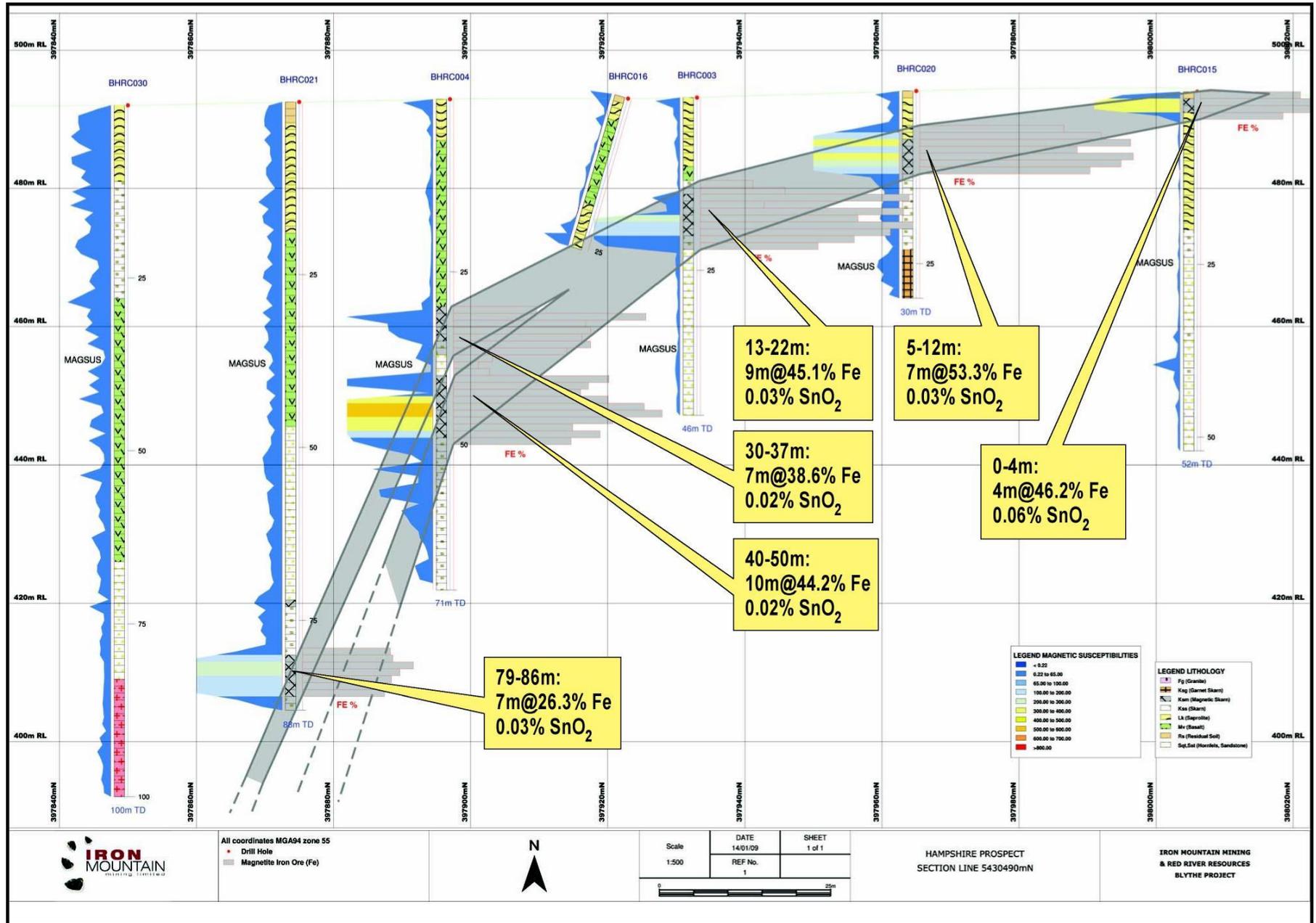


Figure 6 - Hampshire Prospect Cross Section 5 430 490 mN

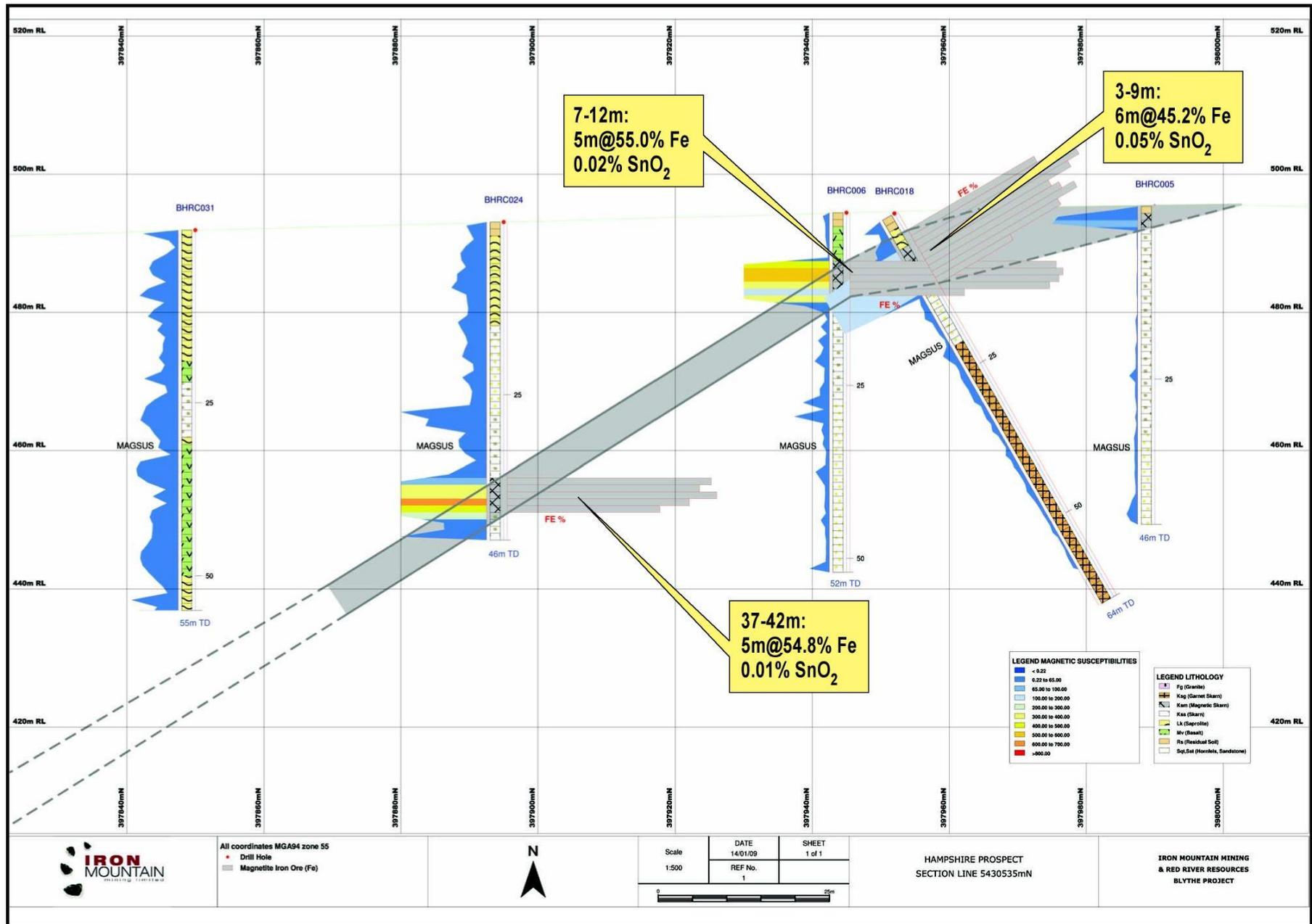


Figure 7 - Hampshire Prospect Cross Section 5 430 535 mN

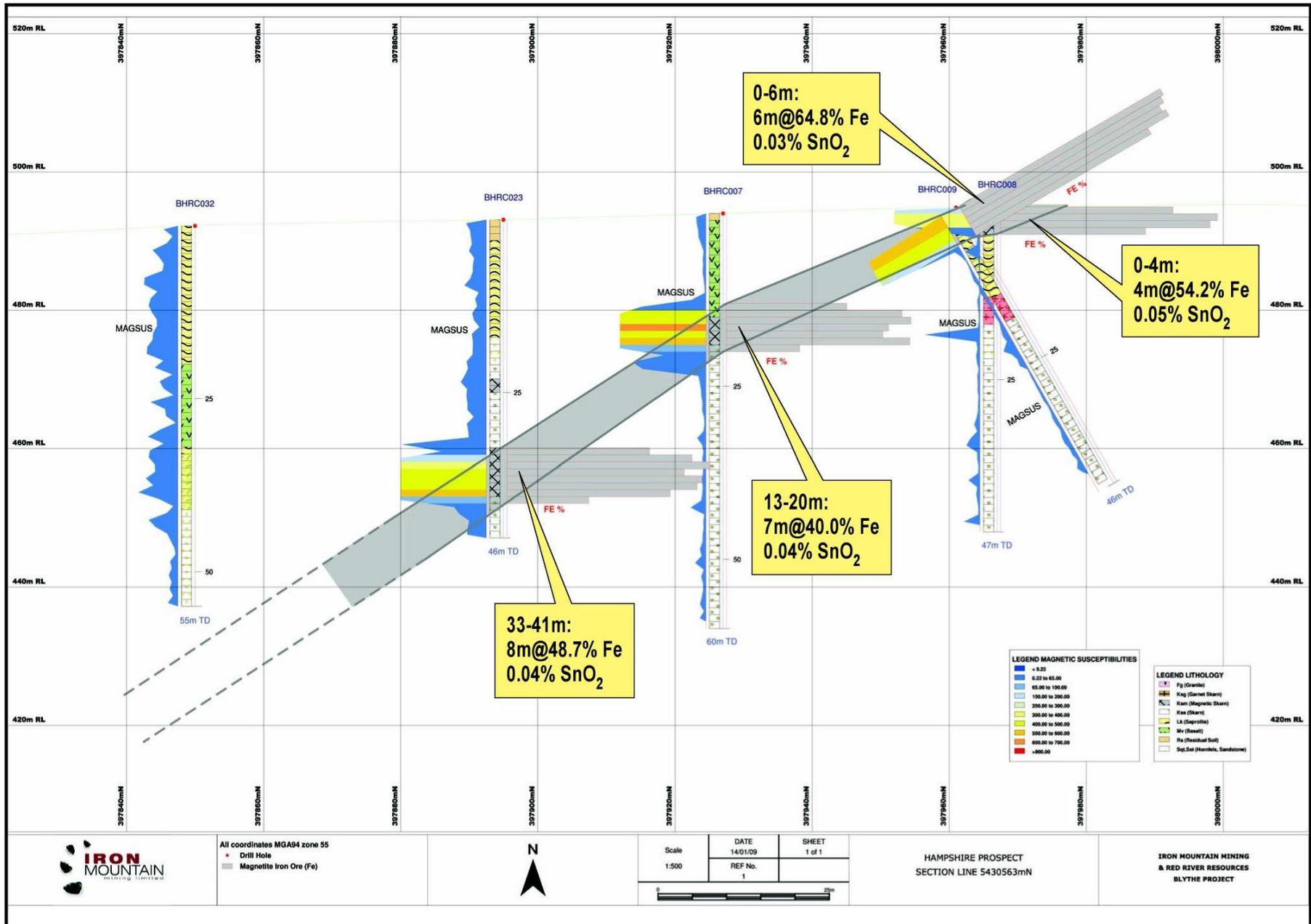


Figure 8 - Hampshire Prospect Cross Section 5 430 563 mN

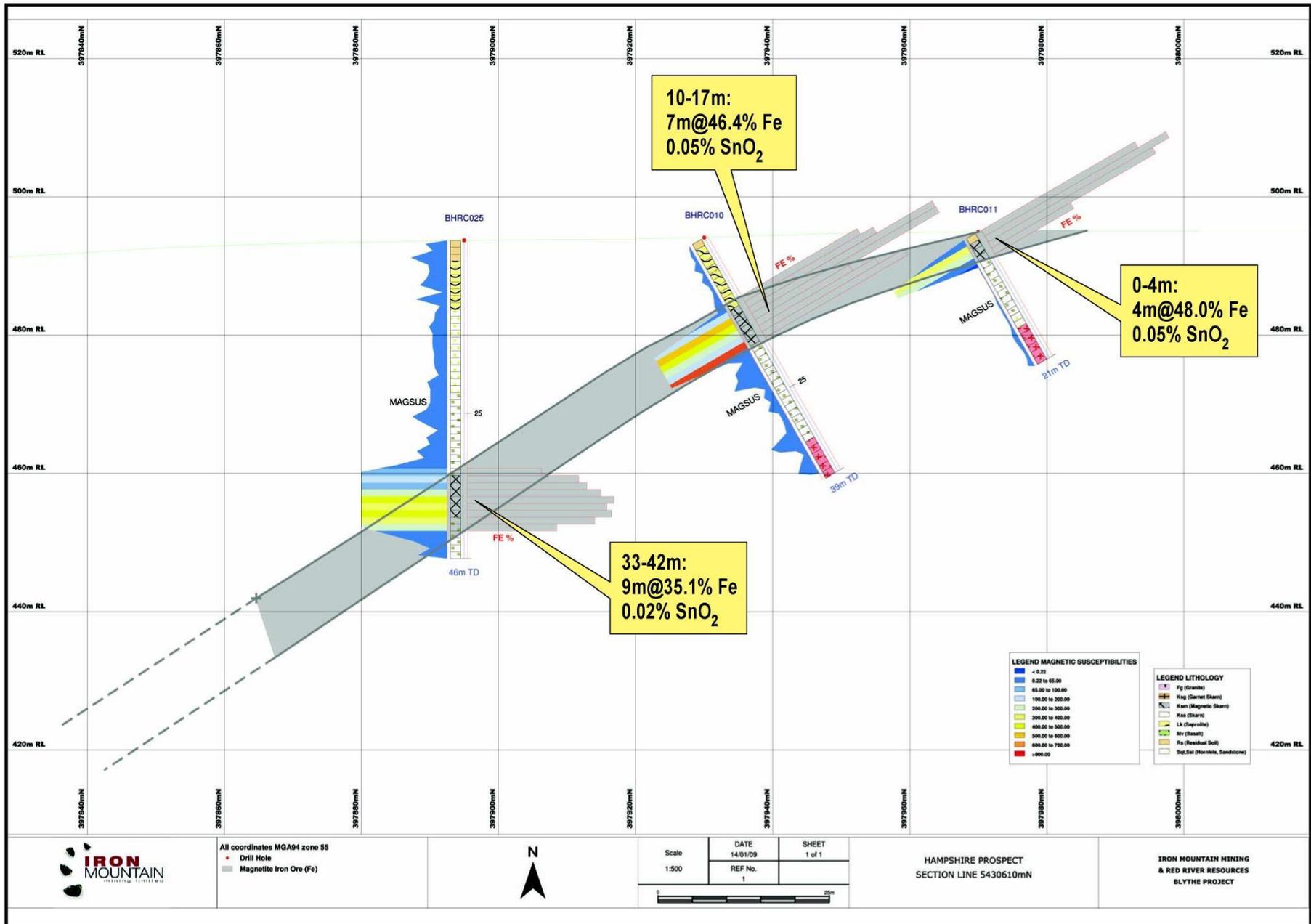


Figure 9 - Hampshire Prospect Cross Section 5 430 610 mN

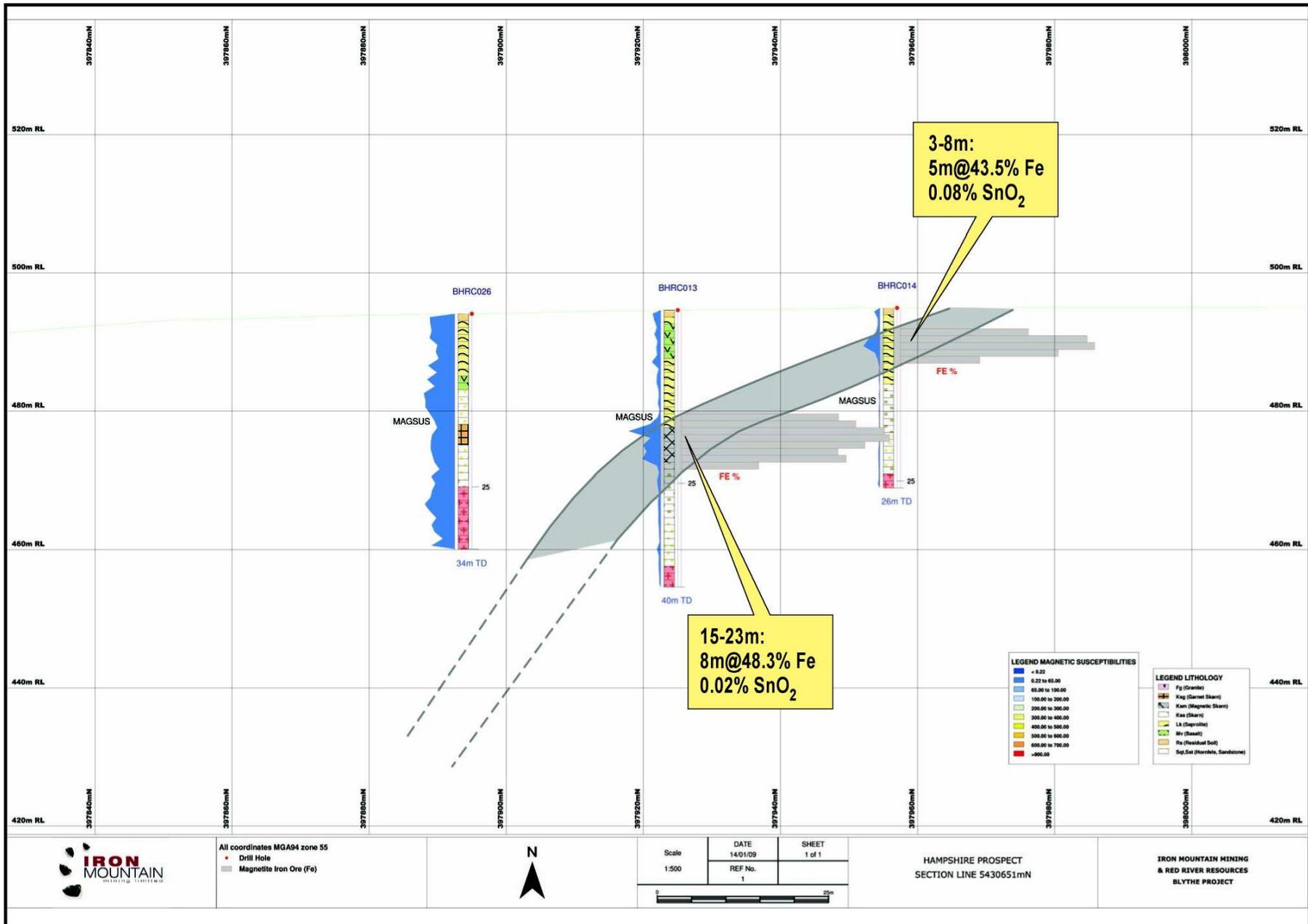


Figure 10 - Hampshire Prospect Cross Section 5 430 651 mN

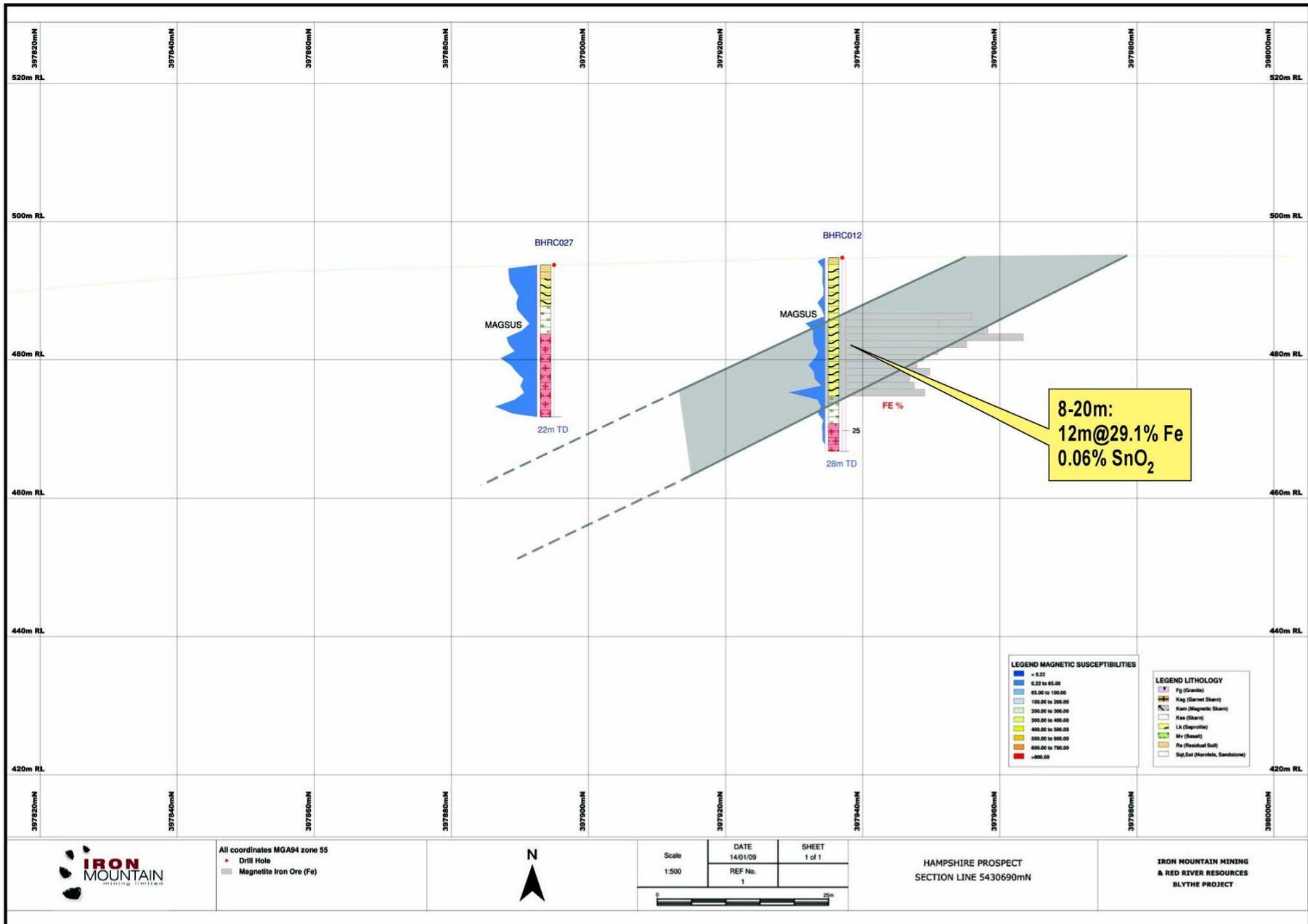


Figure 11 - Hampshire Prospect Cross Section 5 430 690 mN

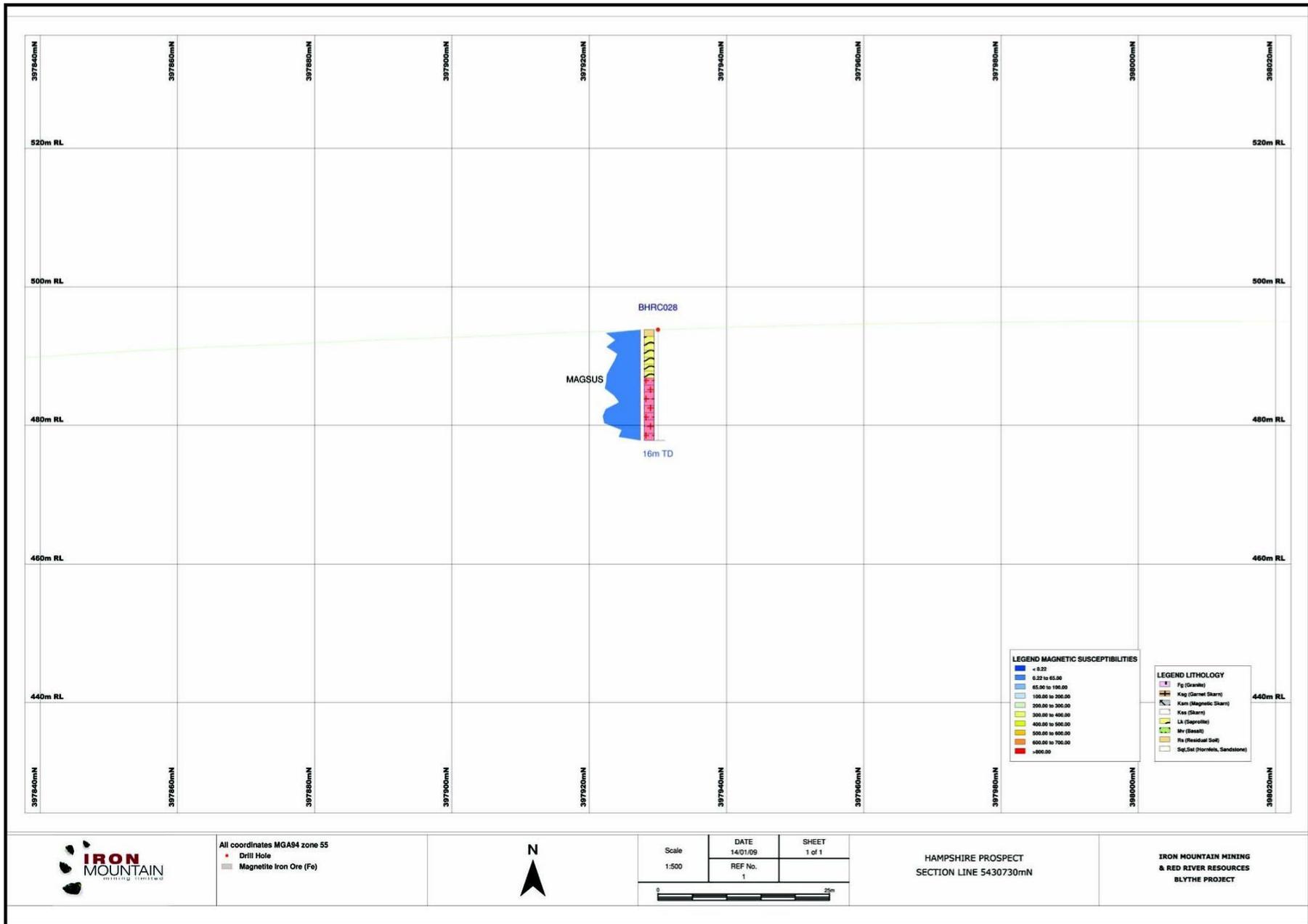


Figure 12 - Hampshire Prospect Cross Section 5 430 730 mN

**Drilling at the Hampshire Prospect has delineated a westerly dipping lens of semi-massive to massive magnetite 270 m long and 5 to 12 m thick, carrying grades of up to 64.8 % Fe.**

## **5.2 Nolan's Hill Prospect**

There were no significant magnetite intersections in the Nolan's Hill Prospect. The main rock types were residual soil, saprolite and basalt. Cross sections are given in **Figures 13 and 14.**

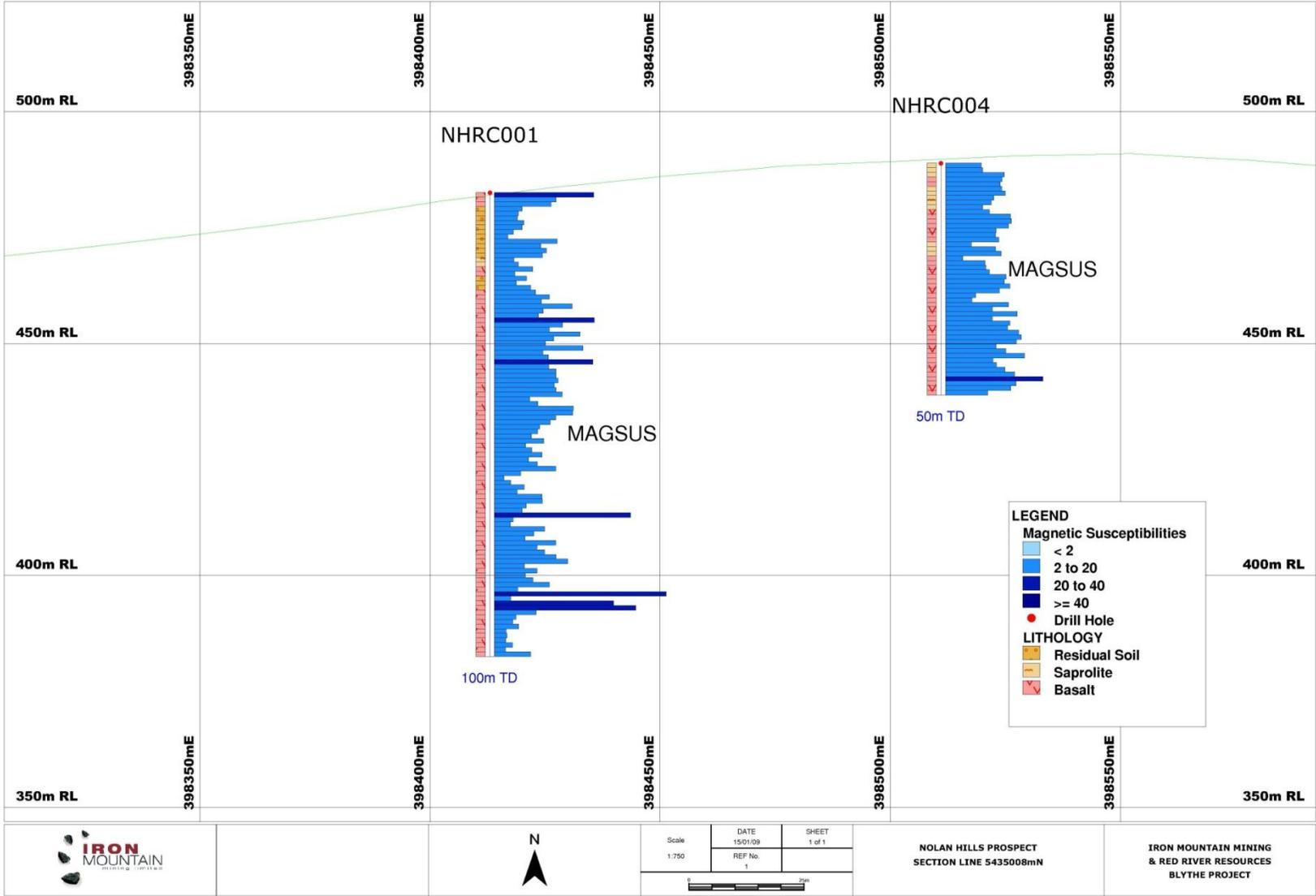


Figure 13 - Nolan's Hill Prospect Cross Section 5 435 008 mN

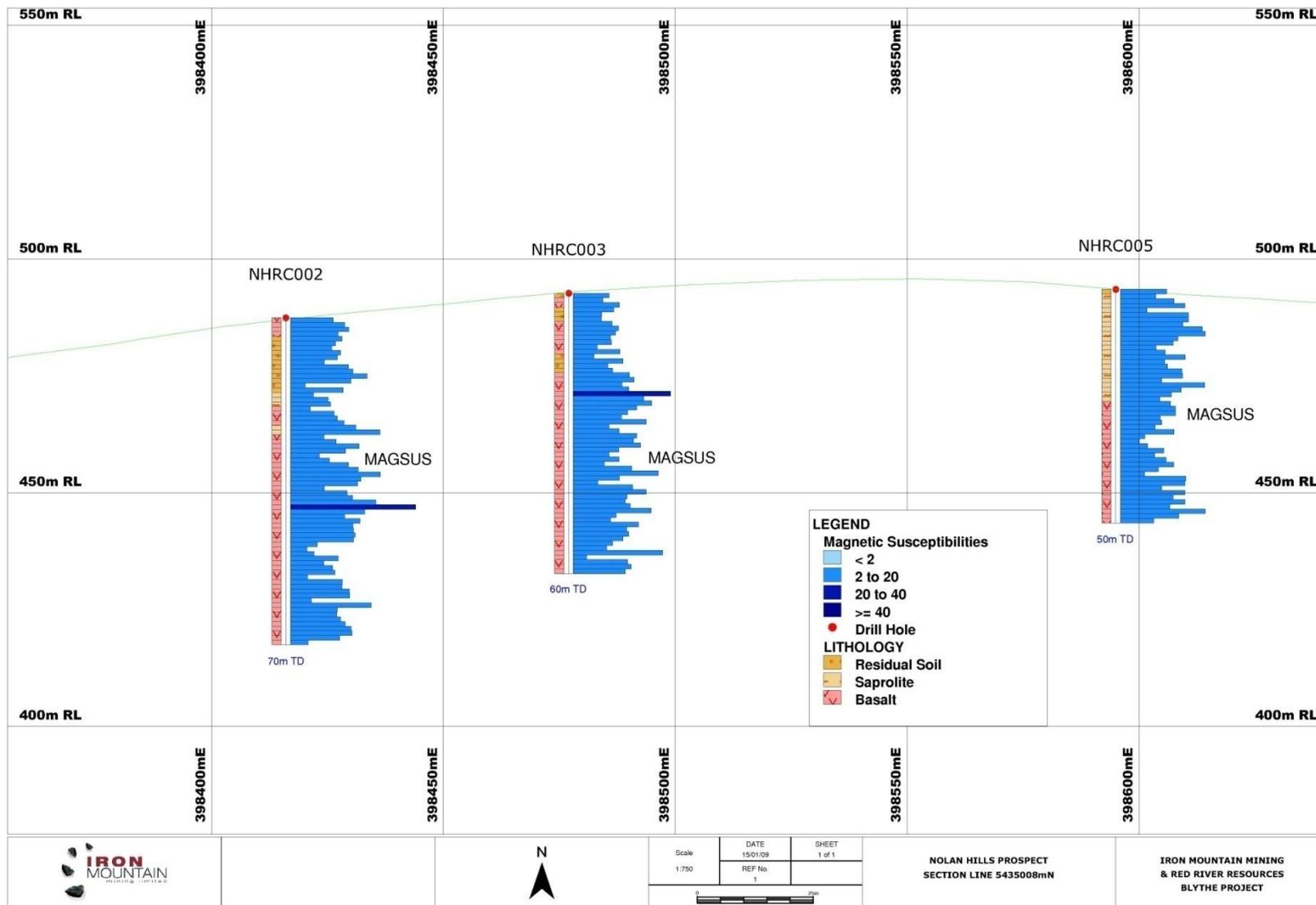


Figure 14 - Nolan's Hill Prospect Cross Section 5 434 925 mN

### **5.3 Sea Slug Prospect**

There were no significant magnetite intersections in the Sea Slug Prospect either. As with the Nolan's Hill Prospect, the main rock types were residual soil, saprolite and basalt. Cross sections are given in **Figures 15 to 17**.

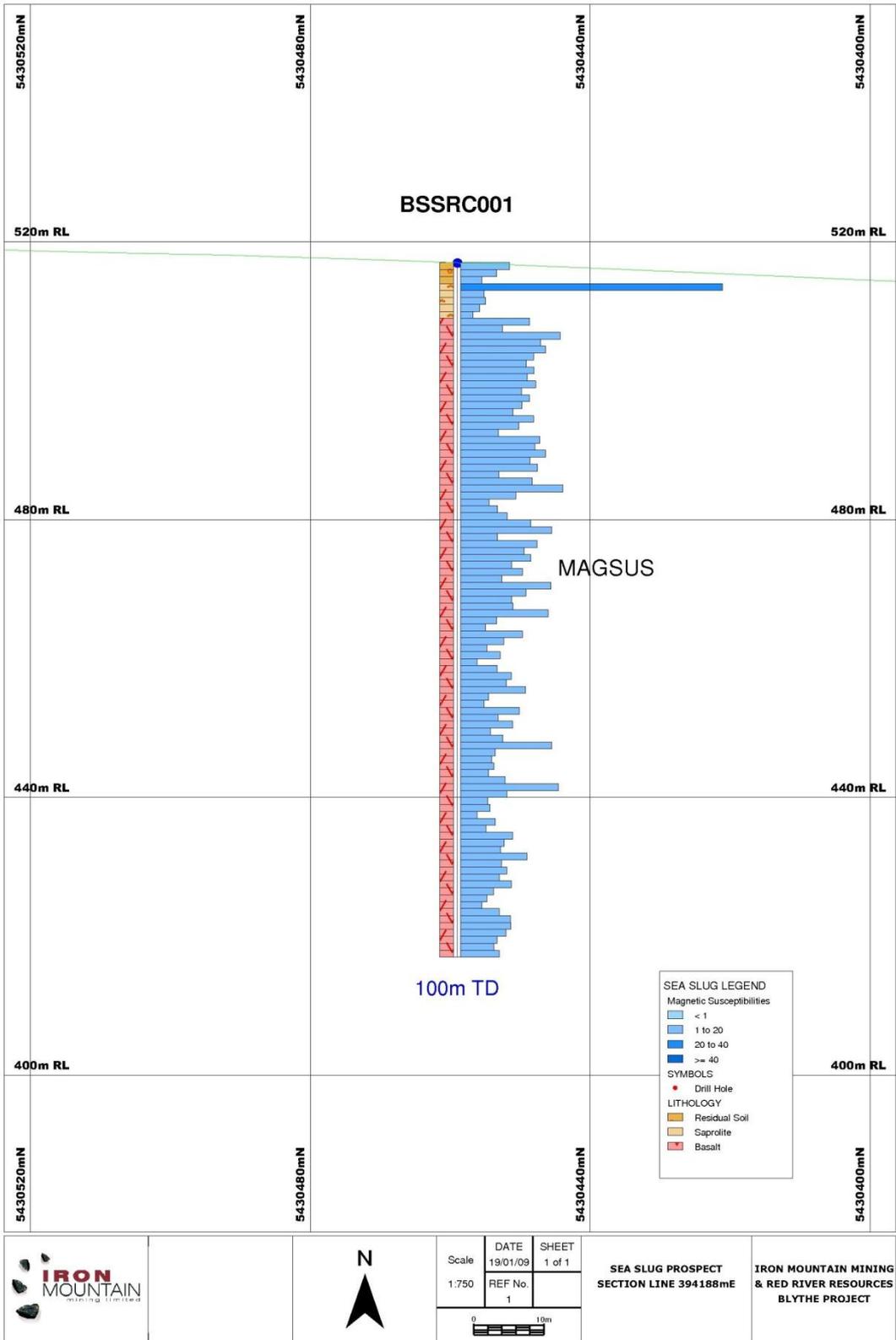


Figure 15 - Sea Slug Prospect Cross Section 394 188 mE

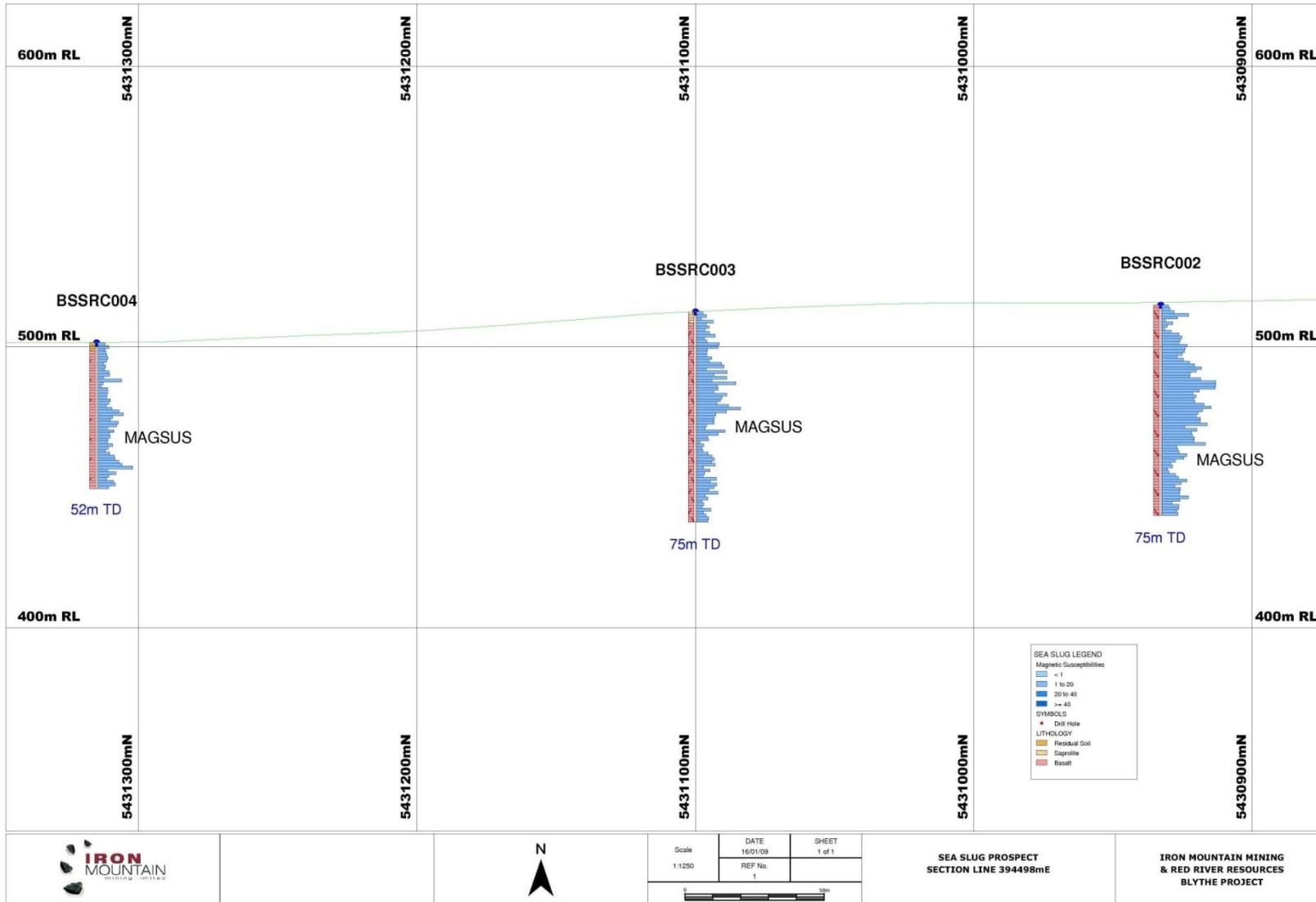
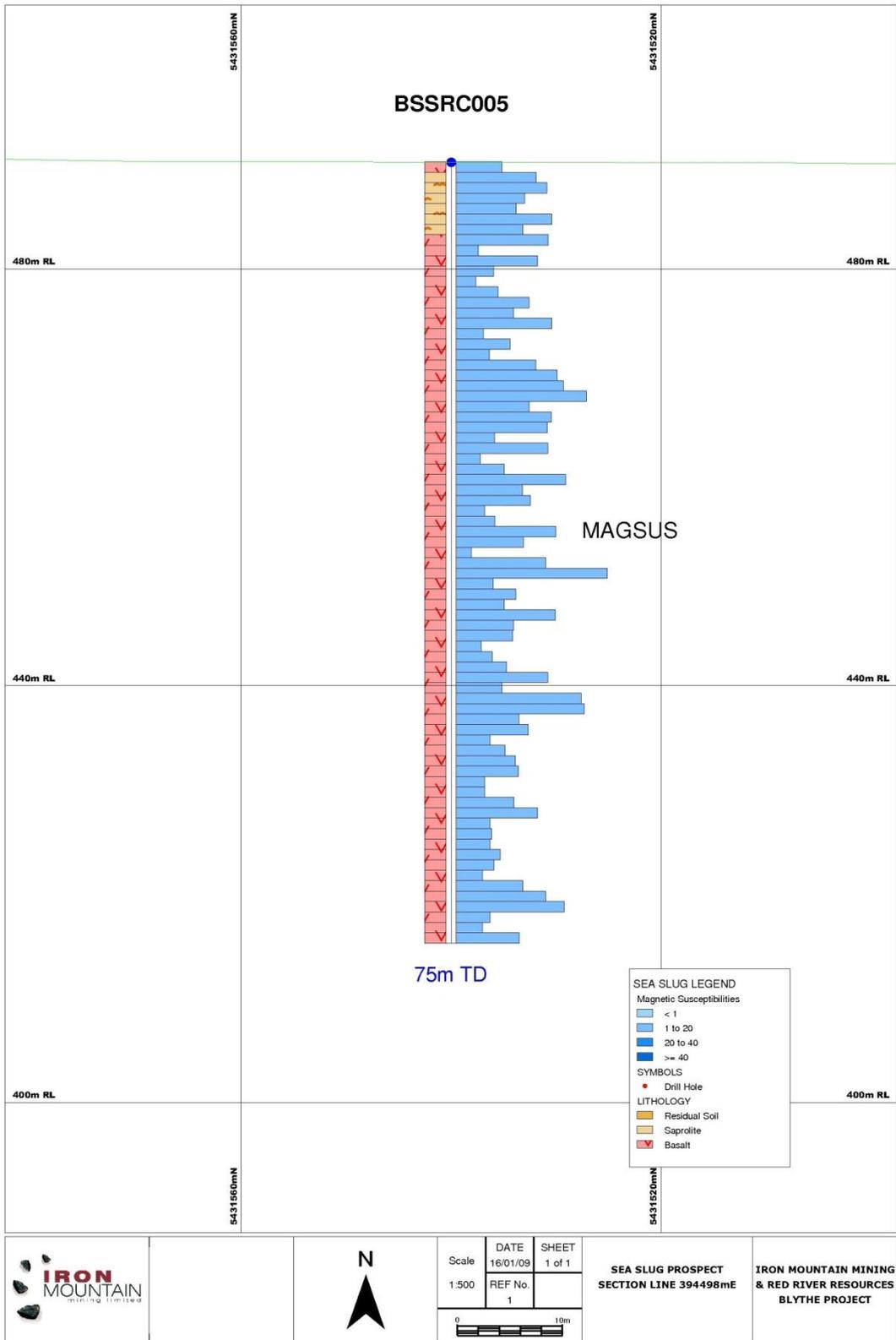


Figure 16 - Sea Slug Prospect Cross Section 394 498 mE



**Figure 17 - Sea Slug Prospect Cross Section 394 994 mE**

## 6.0 Environment

Prior to any investigation, ground disturbance orders were lodged at Hampshire to cover drilling activity. The sites were then cleared and the drill pads prepared. Drilling naturally causes some disruption to the environment, however activity complied with government guidelines so as to minimize disturbance. For example, holes were temporarily plugged immediately after each hole was completed. More permanent rehabilitation involving the removal of casing above ground level, permanent plugging, and replacing top soil, has been completed by the respective land owners now the drilling program has finished: the Nolan's Hill prospect is privately owned by Mr Peter Boland, and the Hampshire and Sea Slug prospects lie on property owned by the forestry company, Gunn's Ltd.

Ground magnetic investigation caused no environmental impact and thus no rehabilitation was required with regards to this area of study.

## 7.0 Expenditure

The expenditure for the second permit year was comprised as follows:

Geology	\$32, 672
Geochemistry	\$0
Geophysics	\$12, 858
Remote Sensing	\$0
Gridding	\$0
Drilling	\$139, 409
Land Access	\$0
Rehabilitation	\$0
Feasibility Study	\$1, 107
Other	\$5, 936
Administration	\$1, 483
<b>Total Expenditure for Report Period</b>	<b>\$193, 465</b>
<b>Total Expenditure to Date</b>	<b>\$199, 336</b>

## **Appendix 1 – Company Reports – Previous Exploration**

<b>Report</b>	90_3199
<b>Date</b>	1/10/1990
<b>Authors(s)</b>	Anon
<b>Title</b>	Parts A and B, Tasmania Mines Limited Retention Licence Application Exploration Licence 17/68
<b>Company(s)</b>	Tasmania Mines Limited, Tasmania Mines NL
<b>Tenement(s)</b>	EL17/1968
<b>Physical Description</b>	1 volumes 19PP, 2APPX, 1 FIG, 10 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80151 Burnie
<b>Geographic</b>	Hampshire, Loudwater Creek, Wollastonite Creek
<b>Activities</b>	Analysis, Auger/Test pits, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Logs, Mine/Deposit, Mineral Process., Misc and Fuels, Ore Reserves, Percussion, Rock-chip, Surface mapping
<b>Minerals</b>	Magnetite, Scheelite, Wollastonite
<b>Deposits</b>	Hampshire, Kara
<b>Keywords</b>	Skarn
<b>Annotation</b>	The report provides a comprehensive account of work on the Hampshire magnetite skarn and on the thermal metamorphic wollastonite deposits at Wollastonite Creek. It also reviews the potential scheelite reserves within the RL application area and gives a commodity review of wollastonite.
<b>Report</b>	82_1828
<b>Date</b>	1/10/1982
<b>Authors(s)</b>	Whitehead, C.H.
<b>Title</b>	Summary Report of Completed Work Programme, E.L. 17/68 and C.L. 105M/77, Twelve Month Period, November 4th 1981-November 3rd 1982.
<b>Company(s)</b>	McIntyre Mines (Australia) Proprietary Limited, Tasminex NL
<b>Tenement(s)</b>	105M/1977, EL17/1968
<b>Physical Description</b>	19 volumes VOL 1 = 10PP, 1 PLAN; VOL 2 = 4PP, 1 PLAN;
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Emu River, Hampshire, Limestone Creek, Old Park River, Valentines Creek
<b>Activities</b>	Analysis, Diamond, Drilling, Environment, Geochemistry, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Mineral Process., Misc and Fuels, Ore Reserves, Petrology, Surface mapping, Water
<b>Minerals</b>	Iron, Magnetite, Scheelite, Tungsten
<b>Deposits</b>	Bobs Bonanza, Hampshire, Kara, Lohreys

<b>Keywords</b>	Felsic Volcanics, Gordon Limestone(S), Housetop Granite(S), Skarn
<b>Annotation</b>	Infill drilling at Kara North 266, Kara No. 1 south and Kara No. 1 main increased geological reserves of fresh and partially weathered ore with open pit mining potential. Exploration drilling over magnetic anomalies for suspected subsurface skarns is successful to date and is continuing. Further geological mapping, geochemistry, geophysics and drilling is recommended.
<b>Report</b>	81_1625
<b>Date</b>	1/11/1981
<b>Authors(s)</b>	Whitehead, C.H.
<b>Title</b>	Summary Report of Completed Work Programme Exploration Licence 17/68 and Consolidated Lease 105M/77 Period May 4th 1981 to November 3rd 1981.
<b>Company(s)</b>	McIntyre Mines (Australia) Proprietary Limited, Tasminex NL
<b>Tenement(s)</b>	105M/1977, EL17/1968
<b>Physical Description</b>	3 volumes 18PP, 2 ATTACHMENTS, 7 APPX, 8 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Hampshire, St Valentines Peak
<b>Activities</b>	Analysis, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Mineral Process., Mineral/Gossan, Mining, Misc and Fuels, Ore Reserves, Petrology, Rock-chip, Soil (A,B,C horiz), Stream sediment, Surface mapping
<b>Minerals</b>	Cassiterite, Fluorine, Fluorite, Iron, Magnetite, Scheelite, Silver, Tin, Tungsten
<b>Deposits</b>	Hampshire, Kara
<b>Keywords</b>	Gordon Limestone(S), Housetop Granite(S), Skarn
<b>Annotation</b>	Exploration for scheelite bearing skarns is continuing in the outlying sections of the E.L.. A pre-development program has commenced, the first phase of which includes extensive infill diamond drilling and metallurgical studies aimed at increasing known reserves of recoverable scheelite at the main Kara tungsten bearing skarn zones.
<b>Report</b>	88_2764
<b>Date</b>	1/11/1987
<b>Authors(s)</b>	Whitehead, C.H.
<b>Title</b>	Exploration Licence 17/68, Annual Report, November 4, 1986 - November 3, 1987
<b>Company(s)</b>	Tasmania Mines Limited, Tasmania Mines NL
<b>Tenement(s)</b>	EL17/1968
<b>Physical Description</b>	1 volumes 12PP, 15 APPX, 1 FIG, 6 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	

**Map (250K)**  
**Map (50/100K)**  
**Geographic Activities**

SK55-3 BURNIE  
80152 Loongana  
Hampshire, Wollastonite Creek  
Analysis, Bed-rock, Diamond, Drilling, Geochemistry, Geology, Geophysics, Indust. Minerals, Metallic minerals, Mine/Deposit, Mineral Process., Misc and Fuels, Petrology, Rock-chip, Surface mapping

**Minerals Deposits**  
**Keywords**  
**Annotation**

Gold, Iron, Magnetite, Scheelite, Tungsten, Wollastonite  
Kara  
Gordon Limestone(S), Replacement Mineralisation, Skarn  
A summary of ongoing exploration for tungsten and recent evaluation of gold potential on the licence. Wollastonite occurrences and beneficiation properties are investigated.

**Report**  
**Date**  
**Authors(s)**  
**Title**

82\_1794  
1/08/1982  
Whitehead, C.H.  
Exploration Licence 17/68 and Consolidated Lease 105M/77, Quarterly Report for the Period May 4th 1982 to August 3rd 1982

**Company(s)**  
**Tenement(s)**  
**Physical Description**

McIntyre Mines (Australia) Proprietary Limited, Tasminex NL  
105M/1977, EL17/1968  
1 volumes 5PP, 1 APPX, 1 PLAN,

**Digital Media**  
**Other Ref.**  
**Map (250K)**  
**Map (50/100K)**  
**Geographic Activities**

SK55-3 BURNIE  
80152 Loongana  
Emu River, Hampshire, Horizontal Creek, Loudwater Creek, St Valentines Peak  
Analysis, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Metallic minerals, Stream sediment, Surface mapping

**Minerals Deposits**  
**Keywords**  
**Annotation**

Iron, Magnetite, Scheelite, Tungsten  
Kara  
Gordon Limestone(S), Housetop Granite(S), Skarn  
Engineering, production, economic and metallurgical studies are being completed. Infill and exploratory drilling to investigate possible mineralisation associated with suspected buried subsurface skarns is continuing. A ground magnetic survey indicated extensions of the Hampshire magnetite skarn in a northerly direction beneath shallow basalt cover.

**Report**  
**Date**  
**Authors(s)**  
**Title**

82\_1878  
1/09/1982  
Lawton, J.J.  
E.L. 4/77 - Highclere. Progress Report on Exploration During the Period March 1980 - August 1982.

<b>Company(s)</b>	Comalco Limited, The Shell Company of Australia Limited
<b>Tenement(s)</b>	EL4/1977
<b>Physical Description</b>	1 volumes 12PP, 2 APPX, 17 FIG, 11 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	08-1069
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80151 Burnie, 80152 Loongana, 80153 Waratah
<b>Geographic</b>	Guide River, Highclere, St Valentines Peak
<b>Activities</b>	Air electromag, Air magnetic, Air radiometric, Analysis, Diamond, Drilling, EIP/MIP, Geochemistry, Geology, Geophysics, Gnd electromag, Gnd magnetic, Logs, Metallic minerals, Misc and Fuels, Percussion, Petrology, Resistivity, Soil (A,B,C horiz), Surface mapping, Well-logging
<b>Minerals</b>	Iron, Magnetite, Pyrrhotite, Tin, Tungsten
<b>Deposits</b>	Buckby, Hampshire Iron
<b>Keywords</b>	Burnie Formation(S), Dundas Group(Sc), Gravity Modelling, Husetop Granite(S), Max-Min-EM, Replacement Mineralisation, Skarn, Tertiary Basalt, Ultramafics
<b>Annotation</b>	A summary of tin-tungsten exploration adjacent to the western margin of the Husetop Granite. It is considered unlikely that magnetite skarn of significant tonnage exists beneath Tertiary basalt cover on the western margin of the granite within the licence. An INPUT survey, aimed at locating conductive massive sulphide mineralisation has delineated ten anomalies which are currently being followed up.
<b>Report</b>	82_1820
<b>Date</b>	1/07/1982
<b>Authors(s)</b>	Ruxton, P.A.
<b>Title</b>	E.L. 8/77 - Riana, Progress Report on Exploration During the Period 1/8/81 to 1/7/82.
<b>Company(s)</b>	Commonwealth Aluminium Corporation Limited, The Shell Company of Australia Limited
<b>Tenement(s)</b>	EL8/1977
<b>Physical Description</b>	2 volumes 11PP, 9 APPX, 10 FIG, 34 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	08-1064
<b>Map (250K)</b>	SK55-5 QUEENSTOWN
<b>Map (50/100K)</b>	80151 Burnie, 80152 Loongana, 81153 Wilmot, 81154 Ulverstone
<b>Geographic</b>	Camena, Cuprona, Laurel Creek, Loyetea, Midgeleys Falls, Natone, Penguin, Preston, Riana, Stotts Road
<b>Activities</b>	Air electromag, Air magnetic, Analysis, Diamond, Drilling, EIP/MIP, Geochemistry, Geology, Geophysics, Gnd electromag, Gnd magnetic, Logs, Metallic minerals, Misc and Fuels, Percussion, Petrology, Resistivity, SP/AP/EP, Soil (A,B,C horiz), Stream sediment, Surface mapping, Well-logging
<b>Minerals</b>	Cassiterite, Pyrite, Pyrrhotite, Tin, Tungsten
<b>Deposits</b>	Blythe R, Copper King, Cranes, Hoopers, Neptune, Rutherford

<b>Keywords</b>	Burnie Formation(S), Dolomite, Duricrust, Ferricrete, Gordon Limestone(S), Greisen, Housetop Granite(S), INPUT-EM, Max-Min-EM, Metasomatism, SIROTEM, Skarn, Ultramafics, VLF-EM
<b>Annotation</b>	Several aeromagnetic and aereoelectromagnetic anomalies will be followed up with ground magnetics and EM, soil geochemistry and IP surveys in the most favourable zones. Exploration will continue at Natone to define targets for Sn and W mineralisation north of the Housetop Granite
<b>Report</b>	69_0553
<b>Date</b>	1/04/1969
<b>Authors(s)</b>	Hughes, T.D.
<b>Title</b>	Natone Area - EL 14/68 and EL 13/68
<b>Company(s)</b>	Hinkley D W, McDonald E H
<b>Tenement(s)</b>	EL13/1968, EL14/1968
<b>Physical Description</b>	1 volumes 4PP, 1 PLAN,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80151 Burnie
<b>Geographic</b>	Blythe River, Burnie, Natone
<b>Activities</b>	Diamond, Drilling
<b>Minerals</b>	Hematite, Iron, Magnetite, Pyrrhotite
<b>Deposits</b>	Natone
<b>Keywords</b>	Fault Mineralisation, Rocky Cape Region(S)
<b>Annotation</b>	Drilling in a geophysically anomalous area has commenced, but is hampered by wet conditions.
<b>Report</b>	84_2085
<b>Date</b>	1/12/1983
<b>Authors(s)</b>	Anon
<b>Title</b>	Exploration Licence 23/79, Wynyard, Tasmania Annual Report for Year Ended 1st December, 1983
<b>Company(s)</b>	Broken Hill Proprietary Company Limited
<b>Tenement(s)</b>	EL23/1979
<b>Physical Description</b>	1 volumes 10PP, 6 APPX, 9 FIG, 2 TABLES,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80153 Waratah, 80154 Yolla, 80163 Wynyard
<b>Geographic</b>	Calder, Cam River, Hellyer River, Wynyard
<b>Activities</b>	Diamond, Drilling, Geochemistry, Geophysics, Logs, Metallic minerals, Misc and Fuels, Petrology, Physical properties, Rock-chip, Stream sediment
<b>Minerals</b>	Tin
<b>Deposits</b>	

<b>Keywords</b>	Arthur Lineament, Burnie Formation(S), Parmeener Supergroup(S), Tertiary Basalt
<b>Annotation</b>	Two targets, located from aeromagnetics, were drilled through the Tertiary sequence into basement but no anomalies were detected.
<b>Report</b>	84_2305
<b>Date</b>	1/12/1984
<b>Authors(s)</b>	Whitehead, C.H.
<b>Title</b>	Exploration Licence 17/68 and C.L. 105M/77 Completed Work Program and Exploration Expenditures Annual Report, Period November 4th 1983 - November 3rd 1984
<b>Company(s)</b>	McIntyre Mines (Australia) Proprietary Limited, Tasminex NL
<b>Tenement(s)</b>	105M/1977, EL17/1968
<b>Physical Description</b>	1 volumes 5PP, 6 APPX, 3 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Hampshire
<b>Activities</b>	Analysis, Diamond, Drilling, Feasibility Study, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Mineral Process., Mining, Misc and Fuels, Ore Reserves, Surface mapping
<b>Minerals</b>	Iron, Magnetite, Scheelite, Tungsten
<b>Deposits</b>	Kara
<b>Keywords</b>	Gordon Limestone(S), Housetop Granite(S), Replacement Mineralisation, Skarn
<b>Annotation</b>	Work during the year consisted of surface exploration and diamond drilling activities in the outside sections of the E.L. and detailed investigations (mine planning, economic, etc) of the main Kara WO3 bearing skarns
<b>Report</b>	90_3199
<b>Date</b>	1/10/1990
<b>Authors(s)</b>	Anon
<b>Title</b>	Parts A and B, Tasmania Mines Limited Retention Licence Application Exploration Licence 17/68
<b>Company(s)</b>	Tasmania Mines Limited, Tasmania Mines NL
<b>Tenement(s)</b>	EL17/1968
<b>Physical Description</b>	1 volumes 19PP, 2APPX, 1 FIG, 10 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80151 Burnie
<b>Geographic</b>	Hampshire, Loudwater Creek, Wollastonite Creek

<b>Activities</b>	Analysis, Auger/Test pits, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Logs, Mine/Deposit, Mineral Process., Misc and Fuels, Ore Reserves, Percussion, Rock-chip, Surface mapping
<b>Minerals</b>	Magnetite, Scheelite, Wollastonite
<b>Deposits</b>	Hampshire, Kara
<b>Keywords</b>	Skarn
<b>Annotation</b>	The report provides a comprehensive account of work on the Hampshire magnetite skarn and on the thermal metamorphic wollastonite deposits at Wollastonite Creek. It also reviews the potential scheelite reserves within the RL application area and gives a commodity review of wollastonite.
<b>Report</b>	84_2305
<b>Date</b>	1/12/1984
<b>Authors(s)</b>	Whitehead, C.H.
<b>Title</b>	Exploration Licence 17/68 and C.L. 105M/77 Completed Work Program and Exploration Expenditures Annual Report, Period November 4th 1983 - November 3rd 1984
<b>Company(s)</b>	McIntyre Mines (Australia) Proprietary Limited, Tasminex NL
<b>Tenement(s)</b>	105M/1977, EL17/1968
<b>Physical Description</b>	1 volumes 5PP, 6 APPX, 3 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Hampshire
<b>Activities</b>	Analysis, Diamond, Drilling, Feasibility Study, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Mineral Process., Mining, Misc and Fuels, Ore Reserves, Surface mapping
<b>Minerals</b>	Iron, Magnetite, Scheelite, Tungsten
<b>Deposits</b>	Kara
<b>Keywords</b>	Gordon Limestone(S), Housetop Granite(S), Replacement Mineralisation, Skarn
<b>Annotation</b>	Work during the year consisted of surface exploration and diamond drilling activities in the outside sections of the E.L. and detailed investigations (mine planning, economic, etc) of the main Kara WO3 bearing skarns.
<b>Report</b>	84_2149
<b>Date</b>	1/06/1984
<b>Authors(s)</b>	Sumpton, J.D.H., Turley, S.D.
<b>Title</b>	1983/84 Annual Report E.L. 24/73, Follow-up of Aeromagnetic Survey of the Dial Range Trough.
<b>Company(s)</b>	Duval Mining (Australia) Limited, Geopeko Limited
<b>Tenement(s)</b>	EL24/1973
<b>Physical Description</b>	1 volumes 20PP, 4 APPX, 4 PLANS,
<b>Digital Media</b>	

<b>Other Ref.</b> <b>Map (250K)</b> <b>Map (50/100K)</b> <b>Geographic</b> <b>Activities</b>	SK55-3 BURNIE 80151 Burnie, 81154 Ulverstone Dial Range, Hardstaff Creek, Leven River Air magnetic, Analysis, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Misc and Fuels, Percussion, Petrology, Soil (A,B,C horiz), Surface mapping, Whole-rock:Major Base Metals, Iron, Magnetite, Tin
<b>Minerals</b> <b>Deposits</b> <b>Keywords</b> <b>Annotation</b>	Dial Range Trough(S), Replacement Mineralisation Follow-up of airborne magnetic anomalies failed to delineate anomalies worthy of further exploration. At Venture 5 high geochemical values indicate a southward extension of the Dial Mine mineralised zone, but these have no genetic relation with the cause of the magnetic anomaly. A review of exploration activity is recommended.
<b>Report</b> <b>Date</b> <b>Authors(s)</b> <b>Title</b> <b>Company(s)</b> <b>Tenement(s)</b> <b>Physical Description</b> <b>Digital Media</b>	83_2040 1/09/1983 Ruxton, P.A. E.L. 8/77 - Riana, Progress Report on Exploration During the Period 2/7/82 to 1/9/83. Commonwealth Aluminium Corporation Limited, The Shell Company of Australia Limited EL8/1977 2 volumes 9PP, 8 APPX, 2 TABLES, 11 FIG, 35 PLANS
<b>Other Ref.</b> <b>Map (250K)</b> <b>Map (50/100K)</b> <b>Geographic</b>  <b>Activities</b>	8.2061 SK55-3 BURNIE 80151 Burnie, 80152 Loongana, 81153 Wilmot, 81154 Ulverstone Castra Rivulet, Cuprona, Gunns Plains, Laurel Creek, Loyetea Peak, Midgley Falls, Natone, Penguin, Riana Air electromag, Air magnetic, Air radiometric, Analysis, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd electromag, Gnd magnetic, Gravity, Logs, Metallic minerals, Misc and Fuels, Percussion, Petrology, Resistivity, Rock-chip, Soil (A,B,C horiz), Surface mapping, Well-logging
<b>Minerals</b> <b>Deposits</b> <b>Keywords</b>  <b>Annotation</b>	Base Metals, Gold, Iron, Magnetite, Pyrrhotite, Tin, Tungsten Natone Downhole IP-Resistivity, Gordon Limestone(S), Housetop Granite(S), INPUT-EM, Max-Min-EM, Oonah Formation(S), Skarn, VLF-EM Ground follow-up of eight aeromagnetic and four INPUT anomalies continued with gridding, ground magnetics and surface EM and IP techniques where warranted. Of particular interest are aeromag, INPUT and gravity anomalies in close proximity to the centre of an Ordovician synclinorium which may contain Gordon Limestone beneath basalt cover. Drilling at Natone intersected skarn with low Sn, WO3 and Au assays.

<b>Report</b>	83_2045
<b>Date</b>	1/09/1983
<b>Authors(s)</b>	Buchhorn, I.J., Lawton, J.J., Oakes, G.F., Wright, R.G.
<b>Title</b>	E.L. 36/79 - Loongana, Progress Report on Exploration for the Period 1st May, 1980-30th June, 1983.
<b>Company(s)</b>	The Shell Company of Australia Limited
<b>Tenement(s)</b>	EL36/1979
<b>Physical Description</b>	3 volumes 19PP, 7 APPX, 22 FIG, 59 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	8.1266
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana, 80153 Waratah
<b>Geographic</b>	Blythe River, Dempster Creek, Guildford, Loongana, Loongana Range, Tulip-Tree Creek
<b>Activities</b>	Air electromag, Air magnetic, Analysis, Diamond, Drilling, EIP/MIP, Geochemistry, Geology, Geophysics, Gnd electromag, Gnd magnetic, Logs, Metallic minerals, Misc and Fuels, Petrology, Resistivity, Rock-chip, Soil (A,B,C horiz), Surface mapping, Well-logging
<b>Minerals</b>	Base Metals, Cassiterite, Iron, Magnetite, Pyrite, Scheelite, Tin, Tungsten
<b>Deposits</b>	Blythe R, Challenger Anomalies, Tulip Ck
<b>Keywords</b>	Felsic Volcanics, Gordon Limestone(S), Housetop Granite(S), INPUT-EM, Max-Min-EM, Replacement Mineralisation, Skarn, VLF-EM
<b>Annotation</b>	Follow-up of aeromagnetic and EM surveys failed to locate zones of economic interest. Further work is required to evaluate the potential of the challenger ii prospect.
<b>Report</b>	87_2660
<b>Date</b>	1/04/1987
<b>Authors(s)</b>	Von Strokirch, T.
<b>Title</b>	EI 7/74 Moina Report on Areas Relinquished on 18 July, 1987.
<b>Company(s)</b>	Billiton Australia, CRA Exploration Proprietary Limited, Comalco Limited, The Shell Company of Australia Limited
<b>Tenement(s)</b>	EL7/1974
<b>Physical Description</b>	2 volumes 29PP, 5 APPX, 32 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	14474,
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Bull Creek, Lorinna, Moina, Mt Jacob, Smiths Plains, Tin Spur
<b>Activities</b>	Air magnetic, Analysis, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd electromag, Gnd magnetic, Metallic minerals, Misc and Fuels, Percussion, Petrology, Soil (A,B,C horiz), Stream sediment, Surface mapping
<b>Minerals</b>	Base Metals, Gold, Tin

<b>Deposits</b>	Tin Spur
<b>Keywords</b>	Gordon Limestone(S), Mt Read Volcanics(Sc), Owen Conglomerate(S), UTEM
<b>Annotation</b>	A number of stream sediment and aeromagnetic anomalies have been followed up in the search of skarn related deposits. No significant resources have been located on the ground and therefore some areas are relinquished
<b>Report</b>	86_2539
<b>Date</b>	1/04/1986
<b>Authors(s)</b>	Caithness, S.J.
<b>Title</b>	Loongana EL 36/79, Report on Exploration for 12 Months to 1st April 1986.
<b>Company(s)</b>	Billiton Australia, CRA Exploration Proprietary Limited, The Shell Company of Australia Limited
<b>Tenement(s)</b>	EL36/1979
<b>Physical Description</b>	1 volumes 9PP, 4 APPX, 10 FIG,
<b>Digital Media</b>	
<b>Other Ref.</b>	13863
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Loongana
<b>Activities</b>	Diamond, Drilling, Geochemistry, Logs, Percussion, Stream sediment
<b>Minerals</b>	Barite, Barium, Base Metals, Gold
<b>Deposits</b>	Challenger Anomalies, Hellyer, Que R, Two Hummocks
<b>Keywords</b>	Denison Group(S), Moina Sandstone(S), Mt Read Volcanics(S), Owen Conglomerate(S), UTEM
<b>Annotation</b>	A regional drainage geochemical survey has been carried out over the EL. The survey was designed to look for fine gold as a primary target and as a path finder for volcanogenic massive sulphides. Two diamond drill holes were drilled on the Two Hummocks prospect in order to test a UTEM anomaly along strike of a barite occurrence. No mineralisation was intersected.
<b>Report</b>	84_2276
<b>Date</b>	1/10/1984
<b>Authors(s)</b>	Oakes, G.F., Wright, R.G.
<b>Title</b>	E.L. 4/77 - Highclere. Final Report on Exploration During the Period September, 1982 - May, 1984
<b>Company(s)</b>	Billiton Australia, Comalco Limited, The Shell Company of Australia Limited
<b>Tenement(s)</b>	EL4/1977
<b>Physical Description</b>	2 volumes VOL 1 = 22PP, 5 APPX, 1 FIG; VOL 2 = 36 PLANS
<b>Digital Media</b>	
<b>Other Ref.</b>	8.2493
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80151 Burnie, 80152 Loongana, 80153 Waratah, 80154 Yolla
<b>Geographic</b>	Hampshire, Highclere, Lake Kara, Ridgley, St Valentines Peak

<b>Activities</b>	Air electromag, Air magnetic, Diamond, Drilling, EIP/MIP, Geochemistry, Geology, Geophysics, Gnd electromag, Gnd magnetic, Logs, Misc and Fuels, Percussion, Petrology, Resistivity, Soil (A,B,C horiz), Surface mapping
<b>Minerals</b>	Iron, Magnetite, Tin, Tungsten
<b>Deposits</b>	Buckby, Cranes, Highclere
<b>Keywords</b>	Burnie Formation(S), Gordon Limestone(S), Greisen, Housetop Granite(S), INPUT-EM, Max-Min-EM, Metasomatism, Replacement Mineralisation, Skarn, VLF-EM
<b>Annotation</b>	Follow-up of 10 INPUT anomalies showed that most are related to conductive layers within or at the base of a thick Tertiary basalt cover. The Highclere magnetite skarn and a carbonaceous shale also produced INPUT anomalies. The greisen tin potential of the Cranes Prospect - Lake Kara area is considered to be very limited. Relinquishment is recommended. Note: appx. 1 is a portion of Geoterrex report 83-548.
<b>Report</b>	77_1213
<b>Date</b>	1/05/1977
<b>Authors(s)</b>	Chapman, J.R., Scott, T.B.
<b>Title</b>	Progress Report to 30 April, 1977 Exploration Licence No. 24/73, Dial Range Project - Tasmania.
<b>Company(s)</b>	Pennzoil of Australia Limited
<b>Tenement(s)</b>	EL24/1973
<b>Physical Description</b>	1 volumes 11PP, 1 FIG, 7 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	81154 Ulverstone
<b>Geographic</b>	Adit Creek, Allison Creek, Dial Range, Hardstaff Creek, Revell Creek, Walloa Creek, Whisky Creek
<b>Activities</b>	Analysis, Diamond, Drilling, EIP/MIP, Geochemistry, Geophysics, Logs, Metallic minerals, Misc and Fuels, Ore Genesis, Resistivity, Soil (A,B,C horiz)
<b>Minerals</b>	Base Metals, Chalcocite, Chalcopyrite, Copper, Pyrite
<b>Deposits</b>	Dial, Russell
<b>Keywords</b>	Dial Range Trough(S), Felsic Volcanics, Gossan, Stratigraphy, Vein Mineralisation, Volcanic Hosted Mineralisation
<b>Annotation</b>	Drilling has shown that the environment on the Dial Mine grid, in which extensive gossanous pyroclastics occur, is a large pyritised volcanoclastic/ sediment sequence probably near a vent but too unstable to allow accumulation of an extensive sulphide body. However, DDH4 indicated the presence of a favourable environment for economic sulphide deposition near the old Dial Mine adit and further work is recommended. Geochemical and geophysical surveys in the Whiskey Ck, Russells Mine and Lings Farm areas failed to produce encouraging results and no further work is recommended.

<b>Report</b>	81_1591
<b>Date</b>	1/05/1981
<b>Authors(s)</b>	Large, R.R.
<b>Title</b>	Progress Report - E.L. 24/73 Dial Range - 1980 Field Season
<b>Company(s)</b>	Duval Mining (Australia) Limited, Geopeko Limited
<b>Tenement(s)</b>	EL24/1973
<b>Physical Description</b>	1 volumes 18PP, 4 APPX, 7 FIG, 9 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	81154 Ulverstone
<b>Geographic</b>	Dial Range, Revell Creek
<b>Activities</b>	Analysis, Diamond, Drilling, Geochemistry, Logs, Metallic minerals, Misc and Fuels, Petrology, Stream sediment
<b>Minerals</b>	Base Metals, Chalcocite, Copper, Pyrite, Tin
<b>Deposits</b>	Dial
<b>Keywords</b>	Dial Range Trough(S), Felsic Volcanics
<b>Annotation</b>	Diamond drilling on the Dial Mine grid intersected a sequence of calcareous and dolomitic sediments and breccias favourable for Sn mineralisation, but only minor Sn grades were encountered. Cu mineralisation was intersected in one drill hole grading 0.68% Cu over 20 m. The form of the Cu mineralisation suggests a sedimentary/diagenetic origin, while the Sn mineralisation in the sedimentary breccias is considered to be of hydrothermal replacement origin, possibly related to emplacement of Devonian granite at depth.
<b>Report</b>	84_2149
<b>Date</b>	1/06/1984
<b>Authors(s)</b>	Sumpton, J.D.H., Turley, S.D.
<b>Title</b>	1983/84 Annual Report E.L. 24/73, Follow-up of Aeromagnetic Survey of the Dial Range Trough.
<b>Company(s)</b>	Duval Mining (Australia) Limited, Geopeko Limited
<b>Tenement(s)</b>	EL24/1973
<b>Physical Description</b>	1 volumes 20PP, 4 APPX, 4 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80151 Burnie, 81154 Ulverstone
<b>Geographic</b>	Dial Range, Hardstaff Creek, Leven River
<b>Activities</b>	Air magnetic, Analysis, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Misc and Fuels, Percussion, Petrology, Soil (A,B,C horiz), Surface mapping, Whole-rock: Major

<b>Minerals Deposits Keywords Annotation</b>	Base Metals, Iron, Magnetite, Tin  Dial Range Trough(S), Replacement Mineralisation Follow-up of airborne magnetic anomalies failed to delineate anomalies worthy of further exploration. At Venture 5 high geochemical values indicate a southward extension of the Dial Mine mineralised zone, but these have no genetic relation with the cause of the magnetic anomaly. A review of exploration activity is recommended
<b>Report Date Author(s) Title Company(s) Tenement(s) Physical Description Digital Media Other Ref. Map (250K) Map (50/100K) Geographic Activities</b>	UR1980_15 4/06/1980 Mathews, W.L. Subsurface Investigations at the Guide River Dam Site.  1 volumes 12PP, 5APPX, 3TABLES, 12FIG  SK55-3 BURNIE 80151 Burnie Guide River Auger, Diamond, Drilling, Engineer. Geol, Geology, Geophysics, Logs, Site investigations, Slope stability Clay
<b>Minerals Deposits Keywords Annotation</b>	Burnie Formation(S), Cretaceous-Quaternary, Dam Site, Foundations, Material Properties, Permeability Subsurface investigations at the proposed Guide River dam site have shown that weathered basalt with some unweathered basalt overlies Precambrian mudstone and sandstone. Substantial leakage problems with pump testing suggest special measures will need to be taken to seal the dam. The rock types in the area show relatively high shear strength and although conditions are less than ideal, a dam could be safely built. A rock fill construction with a clay core would be most practical, however suitability of local materials should be further tested.
<b>Report Date Author(s) Title Company(s) Tenement(s)</b>	89_3025 1/09/1989 Whitehead, C.H. Exploration Licence 17/68, Kara-Hampshire, N.W. Tasmania, Annual Report, 4th November, 1988 to 4th November, 1989 Tasmania Mines Limited, Tasmania Mines NL 1371P/M, EL17/1968

<b>Physical Description</b>	1 volumes 7PP, 3 APPX, 5 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Emu River, Hampshire
<b>Activities</b>	Analysis, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Logs, Metallic minerals, Percussion, Rock-chip, Surface mapping
<b>Minerals</b>	Gold, Iron, Magnetite, Scheelite, Silver, Tungsten, Wollastonite
<b>Deposits</b>	Hampshire Iron, Hampshire Silver, Kara
<b>Keywords</b>	Gordon Limestone(S), Replacement Mineralisation, Skarn
<b>Annotation</b>	A summary of on-going investigations into the magnetite, scheelite, wollastonite, silver and gold potential of the licence. Rock-chip sampling of skarns produced low tenor results for gold (up to 0.12 g/t) and silver (up to 21 g/t).
<b>Report</b>	88_2759
<b>Date</b>	1/11/1986
<b>Authors(s)</b>	Whitehead, C.H.
<b>Title</b>	Exploration Licence 17/68 Annual Report November 4th 1985 - November 3rd 1986
<b>Company(s)</b>	Tasmania Mines Limited, Tasmania Mines NL
<b>Tenement(s)</b>	EL17/1968
<b>Physical Description</b>	2 volumes A23PP, 11 APPX, 18 PLANS,
<b>Digital Media</b>	
<b>Other Ref.</b>	
<b>Map (250K)</b>	SK55-3 BURNIE
<b>Map (50/100K)</b>	80152 Loongana
<b>Geographic</b>	Hampshire
<b>Activities</b>	Analysis, Bed-rock, Diamond, Drilling, Geochemistry, Geology, Geophysics, Gnd magnetic, Indust. Minerals, Logs, Metallic minerals, Mineral Process., Mining, Misc and Fuels, Ore Reserves, Soil (A,B,C horiz), Stream sediment, Surface mapping
<b>Minerals</b>	Iron, Magnetite, Scheelite, Tungsten, Wollastonite
<b>Deposits</b>	Kara
<b>Keywords</b>	Gordon Limestone(S), Replacement Mineralisation, Skarn
<b>Annotation</b>	A summary of on-going exploration. A new area of tungsten mineralisation is identified along the eastern limb of the Kara synform. Open-cuttable scheelite reserves increased in the Kara South-Eastern Ridge areas.

## **Appendix 2 – Metadata for Tabulated Data in Attachment**

## **Metadata for Attachment 1 - Ground Magnetic Survey Data for Hampshire Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: Ground Magnetic Survey

Location of data: Attachment 1, EL352006\_200901\_02\_groundmaghamp.txt

Date: October 2007

Parameters controlling data acquisition: N/A

Contractor producing data: N/A

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Portable Proton Magnetometer Mode G-826

Definition of codes: N/A

## **Metadata for Attachment 2 - Ground Magnetic Survey Data for Nolan's Hill Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: Ground Magnetic Survey

Location of data: Attachment 2, EL352006\_200901\_02\_groundmagnolans.txt

Date: October 2007

Parameters controlling data acquisition: N/A

Contractor producing data: N/A

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Portable Proton Magnetometer Mode G-826

Definition of codes: N/A

### **Metadata for Attachment 3 - Ground Magnetic Survey Data for Sea Slug Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: Ground Magnetic Survey

Location of data: Attachment 3, EL352006\_200901\_02\_groundmageaslug.txt

Date: October 2007

Parameters controlling data acquisition: N/A

Contractor producing data: N/A

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Portable Proton Magnetometer Mode G-826

Definition of codes: N/A

### **Metadata for Attachment 4 - Drill Logs for Hampshire Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: RC drilling program

Location of data: Attachment 4, EL352006\_200901\_05\_drillloghampshire.txt

Date: May – August 2008

Parameters controlling data acquisition: N/A

Contractor producing data: EDrill Pty Ltd

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Drill Rig PRD Multi Star 2000

Definition of codes: See next page

<b>Colour</b>		<b>Lithology</b>	
bk	black	BIF	Banded Iron Formation
bl	blue	Dlr	Dolerite
br	brown	Fg	Granite
cr	cream	Kce	Chlorite Epidote Skarn
gr	green	Kch	Chlorite Hematite/Epidote Skarn
gy	grey	Kcl	Chlorite Skarn
kh	khaki	Khs	Hematite-Sulfide-Amphibole Skarn
mv	mauve	Ksa	Amphibole Skarn
pk	pink	Ksc	Sulphide Chlorite Skarn
pr	purple	Ksd	Andradite Skarn
rd	red	Ksg	Garnet Skarn
wt	white	Ksm	Skarn, magnetite-rich
yl	yellow	Ksn	Skarn (Undifferentiated)
		Kss	Skarn, garnet/diopside-rich
		Kst	Talc Skarn
		Lk	Saprolite
		Mf	Mafic tuff
		Mv	Basalt
		NS	No Sample
		QAQC	QA/QC Sample
		Rs	Residual soil
		Scg	Conglomerate
		Sdl	Dolomite
		Sls	Limestone
		Smb	Hornfel
		Smd	Fine-grained clastics, typically mudstone
		Sqt	Hornfels
<b>Mineralogy Continued</b>		<b>Lithology Continued</b>	

<b>Mineral</b>		<b>Mineral</b>	
AC	Actinolite	PL	Plagioclase
AM	Amphibole	PX	Pyroxene
AN	Andesite	Q	Quartz
AP	Arsenopyrite	RE	Rare Earth mineral
AR	Argillite	SD	Siderite
AT	Apatite	SI	Silica
AZ	Azurite	SM	Smectite
BA	Barite	SP	Serpentine
BI	Biotite	SR	Sericite
CA	Calcite	TA	Talc
CB	Carbonate	TI	Titanite
CE	Clay	TR	Tremolite
CF	Coffinite	U	Uranium mineral
CH	Chert	ZR	Zircon
CL	Chlorite	PY	Pyrite
CN	Chalcedony		
CT	Cuprite	<b>Sample Quality</b>	
CV	Covellite	D	Dry
CX	Clinopyroxene	M	Moist
DL	Dolomite	W	Wet
DP	Diopside		
EP	Epidote		
FD	Feldspar	<b>Texture</b>	
FL	Fluorite	amy	amygdaloidal
GA	Galena	bdd	bedded
GO	Goethite	brx	brecciated
GR	Graphite		
<b>Mineral Continued</b>		<b>Texture Continued</b>	

gnt garnet  
 goe goethite  
 hem hematite  
 lim limonite  
 mag magnetite  
 pyo pyrrhotite  
 pyup pyrope  
 sch scheelite  
 sul sulphide  
 wol wollastonite

Sst Sandstone

**Sample Recovery**

h High Recovery  
 m Moderate Recovery  
 n No Recovery  
 p Low Recovery

**Weathering**

F Fresh  
 M Moderate  
 S Strong  
 T Trace  
 W Weak/Slight

GT Garnet  
 GY Gypsum  
 HB Hornblende  
 HD Hematite - dark grey  
 HE Hematite - red earthy  
 HG Hematite - steely grey  
 HR Hematite - red rock  
 HS Hematite - specular  
 KF K-Feldspar  
 KL Kaolinite  
 LI Limonite  
 MH Maghemite  
 MI Mica  
 MN Manganese  
 MT Magnetite  
 MU Muscovite  
 MY Molybdenite  
 NC Native Copper  
 OL Olivine  
 OP Opal  
 OQ Opaques  
 OX Orthopyroxene  
 PH Phlogopite

ear earthy  
 eqg equigranular  
 fri friable  
 lam laminated  
 mas massive  
 pph porphyritic  
 sch schistose  
 shr sheared  
 sor well sorted  
 tuf tuffaceous  
 uns poorly sorted  
 ves vesicular  
 xln crystalline

## **Metadata for Attachment 5 - Drill Logs for Nolan's Hill Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: RC drilling program

Location of data: Attachment 5, EL352006\_200901\_06\_drilllognolans.txt

Date: May – August 2008

Parameters controlling data acquisition: N/A

Contractor producing data: EDrill Pty Ltd

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Drill Rig PRD Multi Star 2000

Definition of codes: See metadata for attachment 4

## **Metadata for Attachment 6 - Drill Logs for Sea Slug Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: RC drilling program

Location of data: Attachment 6, EL352006\_200901\_07\_drilllogseaslug.txt

Date: May – August 2008

Parameters controlling data acquisition: N/A

Contractor producing data: EDrill Pty Ltd

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Drill Rig PRD Multi Star 2000

Definition of codes: See metadata for attachment 4

## **Metadata for Attachment 7 - Drill Logs with Primary Analyses for Hampshire Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: RC drilling program and XRF analysis

Location of data: Attachment 7, EL352006\_200901\_08\_primaryanalyseshamp.txt

Date: May – August 2008 for drilling, XRF analysis December 2008

Parameters controlling data acquisition: N/A

Contractor producing data: Amdel

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Drill Rig PRD Multi Star 2000 and XRF analysis

Definition of codes: N/A

## **Metadata for Attachment 8 - Drill Logs with Secondary Analyses for Hampshire Prospect**

Tenement Holder: Red River Resources Ltd (Managed by Iron Mountain Mining Ltd)

Tenement Name: Hampshire 1, EL 35/2006

Activity which produced data: RC drilling program and XRF analysis

Location of data: Attachment 8, EL352006\_200901\_09\_secondaryanalyseshamp.txt

Date: May – August 2008 for drilling, XRF analysis December 2008

Parameters controlling data acquisition: N/A

Contractor producing data: Amdel

Translation parameters required for conversion of data: N/A

Equipment used to generate data: Drill Rig PRD Multi Star 2000 and XRF analysis

Definition of codes: N/A