

MAGNUM GOLD N.L.
GLENCOE PROSPECT

REPORT ON EXPLORATION FOR
THE YEAR TO 19TH NOVEMBER, 1989
VOLUME 1

EARTH RESOURCES AUSTRAL
GROUP



CR 1990 0085

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REPORT ON EXPLORATION FOR
THE YEAR TO 19TH NOVEMBER, 1989
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MINERAL CLAIMS N20-N41-N1303-N1313
EXPLORATION LICENCE 4810
NORTHERN TERRITORY

ERA Report A/297
December, 1989

Prepared by I.M. MILLIGAN

CR90185A

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1.0 SUMMARY

The Glencoe gold prospect is located some 140 kilometres south-east of Darwin and has been subject to major drilling and costeaning exploration programmes. In early 1989 all exploration data was assessed and resource figures determined. A total in-situ geological resource of some 1,500,000 tonnes at a grade of 1.9 g/t (cutoff grade 0.5 g/t) has been defined to a depth of 100 metres.

Applying more stringent grade and thickness restraints to the data a potentially ore grade resource of 730,000 tonnes at 2.30 g/t is determined. Of this some 300,000 tonnes at 2.57 g/t lie within 30 metres of the surface. Further restraints based on mining, treatment and economic considerations must be placed on these figures before a mineable ore reserve can be determined.

Because of the low grades and patchy ore distribution it was considered unlikely that mining could proceed below a depth of 30 metres (which approximates the base of oxidation). This indicated that a "stand alone" operation could not be economically justified and a joint venture partner was sought. In August agreement was reached with the Tanami Joint Venture to mine and process a bulk sample of some 35,000 tonnes from four small pits. Mining was carried out from 25th September to 28th November with ore trucked to the Mt Bonnie CIP plant. Processing is still in progress and hence full details of the exercise are not yet available.

EARTH RESOURCES AUSTRALIA PTY LIMITED

Ian M. Milligan

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December 1989



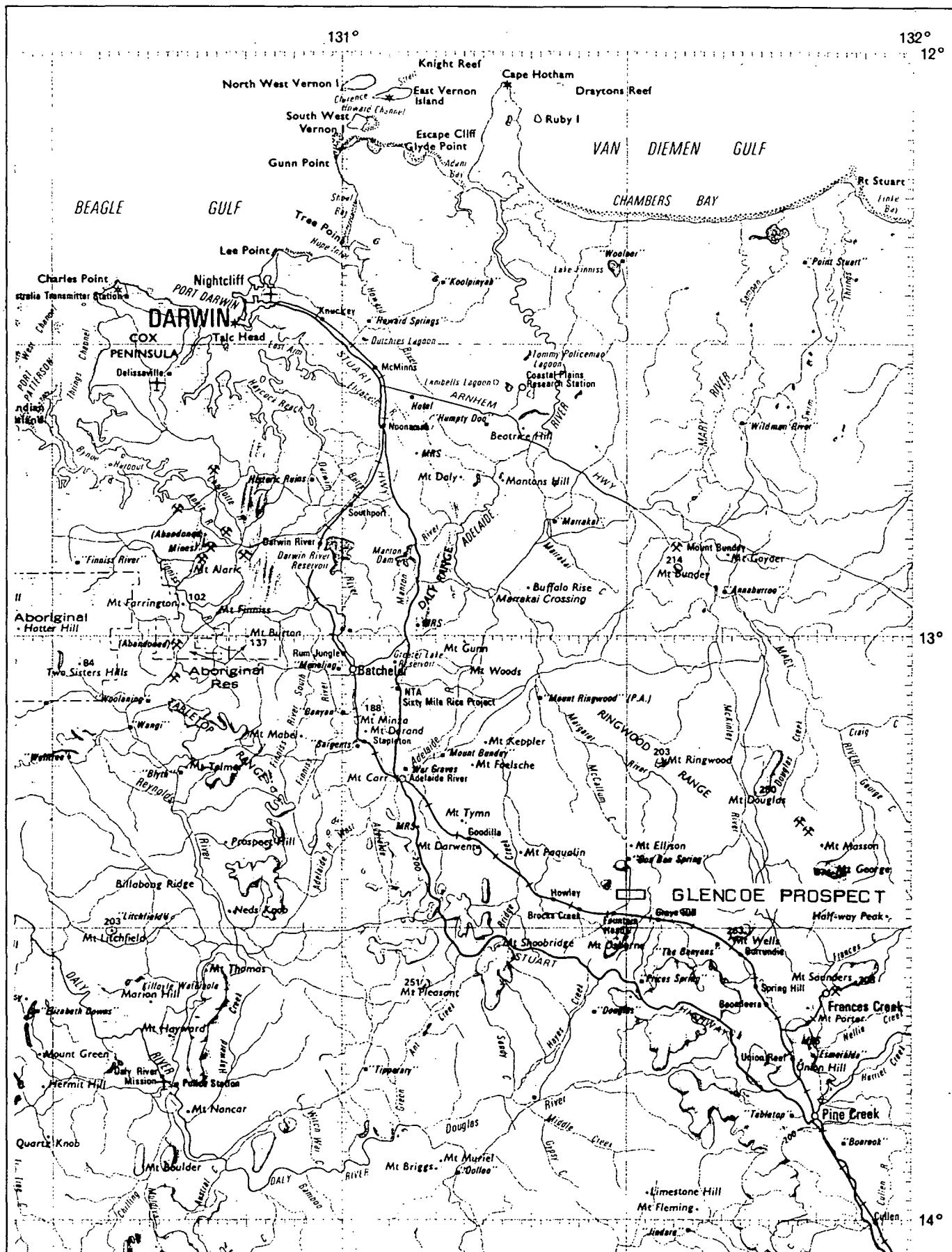


FIGURE 1 LOCATION MAP - GLENCOE PROSPECT

Scale 1:1,000,000



2.0 INTRODUCTION

Exploration Licence 4810 lies 6 kilometres north-west of Grove Hill in the Northern Territory (approximately 140 kilometres south-east of Darwin. See Figure 1). The single block licence was applied for following the discovery of gold mineralization on the adjacent mineral claims (MCN20-N43). This locality has been named the Glencoe Prospect. (Ruins of the homestead for "Glencoe", the first cattle station in the "Top End" are located nearby.) Since granting of the EL on 19th December 1985, exploration has been integrated with that on the mineral claims. A further eleven mineral claims were applied for to cover vacant ground flanking the prospect area. Eight of these (MCN1303-N1310) were granted on 5th October 1987 and the remainder (MCN1311-N1313) granted on 12 May 1989. Exploration Licence 6322, lying immediately to the north of the mineral claims, was granted on 22nd December 1988. Refer to figure 2 for tenement locations.

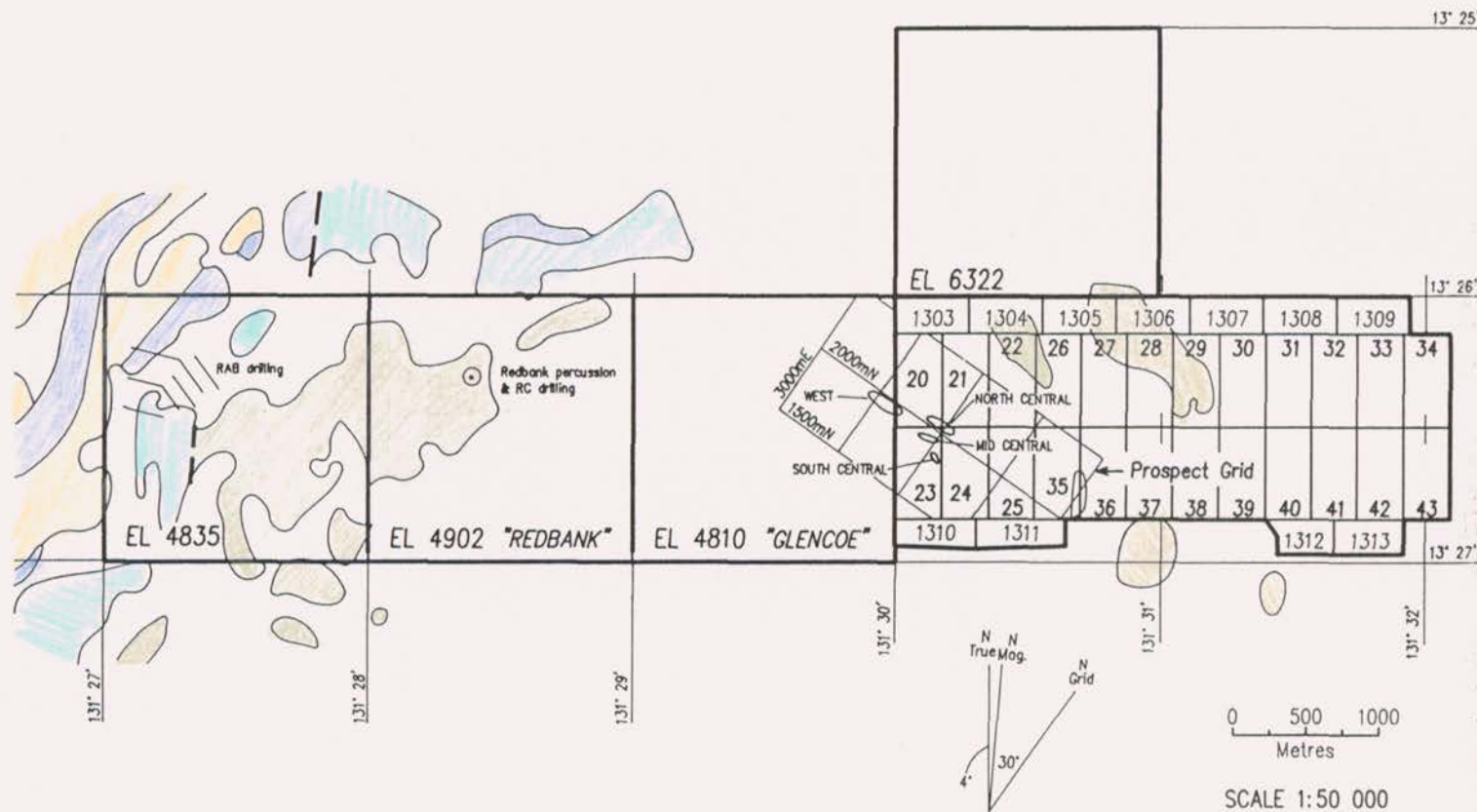
Initial exploration of the Glencoe Prospect in 1985-1986 returned good gold grades from outcrop sampling. Follow up costeaning and diamond drilling indicated patchy high grades within a generally anomalous zone. Major programs of costeaning and diamond, reverse circulation (RC) and rotary air blast (RAB) drilling were carried out in 1987 and 1988. Petrological and metallurgical testwork was carried out on selected drill samples. Previous annual reports have outlined this work and a summary follows as Section 3.0 of this report.

Early in 1989 resource figures for the prospect were determined. These indicated that a "stand alone" operation was not economically feasible and a joint venture partner



was sought. In August 1989 agreement was reached with the Tanami Joint Venture partners to carry out a bulk sampling/trial mining programme of some 35,000 tonnes. Mining of this material has only just been completed and processing is in progress.





REFERENCE

25 Mineral Claim	 Recent & Cainozoic Cover
 Fault	 Zamu Dolerite
 Geological Boundary	 Mount Bonnie Formation (?)
	 Gerowie Tuff
	 Koolpin Formation

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MAGNUM GOLD N.L. GLENCOE PROSPECT TENEMENT MAP

REPORT NO. A/297 FILE NAME: GCTEN
DATE: DECEMBER 1989 AUTHOR: I.M.M.

FIGURE 2

3.0 EXPLORATION SUMMARY

Since the end of the 1988 drilling program only limited on-ground exploration has been carried out on the Glencoe Prospect. Previous reports (see Section 8.0) have described all exploration however a brief summary of major work follows and drilling metreages etc are presented in Table 1. Drillhole and costean locations are indicated on Tables 2, 3 and 4 and Map 2.

3.1 Surface Mapping

The prospect lies in an area of low relief with outcrop limited largely to quartz veins. Initial grid mapping of outcrop and scree was supplemented by mapping onto enlargements of aerial photographs at 1:1000 scale. The resulting map is presented as Map 1.

3.2 Costeaning

In view of the limited data available from outcrop, costeaning was employed to expose continuous sections of bedrock for mapping and sampling. Thirtysix costeans with an aggregate length of 2712 metres were excavated. All have been backfilled to Departmental requirements.

3.3 RAB Drilling and Arsenic Geochemistry

Up to the end of 1988 a total of 600 RAB holes were drilled to provide bedrock lithological and gold pathfinder geochemical information over a strike length of three kilometres. Hole depths were generally about 6 metres however a series of 20 metre holes were drilled to assess areas peripheral to known mineralization. Arsenic analyses were run on bedrock samples from all holes and an arsenic contour map was built up (Map 3). The gold/arsenic association was confirmed at Glencoe by analysis of selected



drill holes and the common occurrence of scorodite and arsenopyrite in auriferous material.

During 1989 the RAB arsenic coverage was extended to the north into Mineral Claims N1303 and 1304 and Exploration Licence 6322. Details of this work will be presented in the first annual report on EL6322 due January 1990.

3.4 Diamond Core Drilling

HQ wireline diamond drilling equipment (core diameter 61.1mm) was employed for the drilling of fifty-nine cored holes. Aggregate metreage was 3706.08 metres of which 2956.58 was core and 749.5 precollar open hole. Problems were encountered with core recovery in the oxide zone and in fractured (and commonly mineralized) ground. Core was split by diamond saw and one half sampled on a lithological basis for assay.

3.5 Reverse Circulation Drilling

Reverse circulation (RC) was the principal drilling technique employed for both assessment of the main mineralized zones and as follow-up of arsenic anomalies.

A total of 310 RC holes were drilled for 11,862 metres.

Of these, seven holes (218m) were for sterilization drilling of the camp area and 22 holes (440m) were drilled on close spaced (2.5m) centres along two sections (3522mE & 3978mE). The latter provided detailed information on structure and grade distribution.

Several different rigs were used for this drilling. Drilling and sampling problems were encountered with the smaller rigs and drilling was generally halted when, or shortly after, water was encountered (about 30 metres). Drilling to downhole depths in excess of 100 metres was possible with the larger specialist RC rigs. Obvious assay "tails" were sometimes evident and were taken into account in resource



assessment. Comparison of adjacent RC and cored holes was difficult due to the highly variable grades typical of this style of mineralization.

All RC holes were sampled at 1 metre intervals and riffle split to provide an assay sample. In the latter part of the program samples of non-mineralized material were at times composited to 5 metre intervals.

3.6 Metallurgy

Samples of ore grade material for metallurgical testing were obtained by aggregating one-metre RC samples (from 12 to 44 samples per composite sample). Oxide and primary zone material was submitted from each of the four main mineralized zones. Bottle roll testing showed good gold recoveries (93 to 97%) and acceptable reagent consumption for oxide zone material (see previous report submitted December 1988).

Similar testing was carried on primary zone ore from the North Central and South Central Zones. Recovery was down slightly (compared to oxide material) in the South Central sample to 89% and substantially reduced for the North Central sample to 66%.

Column leach testing of surface material from the West Zone (head grade 1.1g/t) gave an 81.5% gold recovery with low reagent consumption. (Also previously reported December 1988.) This indicates that auriferous surface material (see Section 4.1) would be amenable to heap leach treatment.



4.0 COMPILATION OF DATA, INTERPRETATION AND RESOURCE CALCULATIONS

During exploration, all costean, drillhole and assay data were progressively entered into a data base. Final compilation and interpretation of this data was undertaken in December 1988 and January 1989. To permit valid statistical integration of various length core assays with one metre RC assays all intersections from the core drilling were composited to one metre intervals. Hard copy of drillhole and costean geological logs and assays are presented in Appendices 3 and 4.

A series of interpreted geology and ore block cross sections were produced and are presented as Appendix 2. Resource figures for the prospect were defined and a Resource Estimation Report was prepared by Earth Resources for Magnum Gold. A copy of this report is appended (Appendix 1) and a summary discussion of resource estimates follows.

4.1 Resource Estimates - Procedures and Parameters

Assessment has been undertaken in accordance with the guidelines set down in the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves*. The guidelines emphasise the distinction between a "resource"- an in-situ mass of mineralization defined in accordance with certain stated parameters, and a "reserve"- an economically mineable proportion of the in-situ mineralization.

Conventional cross sectional techniques have been employed in assessing both "geological" and "potentially ore grade" resources. A third resource estimate has been determined for

* *Australasian Code For Reporting of Identified Mineral Resources and Ore Reserves, a report of the Joint Committee of the Australasian Institute of Mining and Metallurgy and the Australian Mining Council issued in June 1988.*



"surface material" (to 2 metres depth) comprising auriferous regolith overlying and adjacent to zones of in-situ mineralization. A cutoff grade of 0.5 g/t has been used for this estimate with data from the top 2 metres of drillholes (RAB, RC and DDH).

Geological resource figures are based on a 0.5 g/t cutoff and a minimum down-hole intercept of 1 metre.

Potentially ore grade resource figures are based on a cutoff of 1 g/t for set vertical intervals (computed) of 2.5 metres (to simulate what is considered to be a minimum practical extraction bench height). Additional criteria, based on extraction and treatment studies and related to the prevailing gold price, will need to be considered prior to determination of "mineable ore reserves".

All gold assays greater than 20 g/t have been cut to this figure which is somewhat less than the mean of all values greater than 10 g/t. For surface material a relative density of 1.9 g/cc has been used, while for in-situ material (both oxidised and primary mineralization) a density of 2.5 g/cc was employed to convert volumes to tonnages.

Figures are calculated for each of the four main areas of mineralization at Glencoe viz. **West, North Central, Mid Central and South Central** (see Figure 3) and further subdivided on the basis of depth as follows:

1. **RL +70m** (From the surface to a reduced level of 70 metres above sea level.) This equates to approximately 30m depth (+/-5m) and the average base of oxidation i.e. represents oxidised mineralization.
2. **RL 40 to 70m**, primary mineralization from 60 to 30 metres depth.



3. RL 0 to 40m, primary mineralization from 100 to 60 metres depth.

Mineralization extends to below RL 0m but data points are few and it is most unlikely that such material would be economically accessible.

4.2 Resource Estimates

Calculated resource figures based on the above parameters are presented in Tables 5 and 6. (See Appendix 1 for further details.)

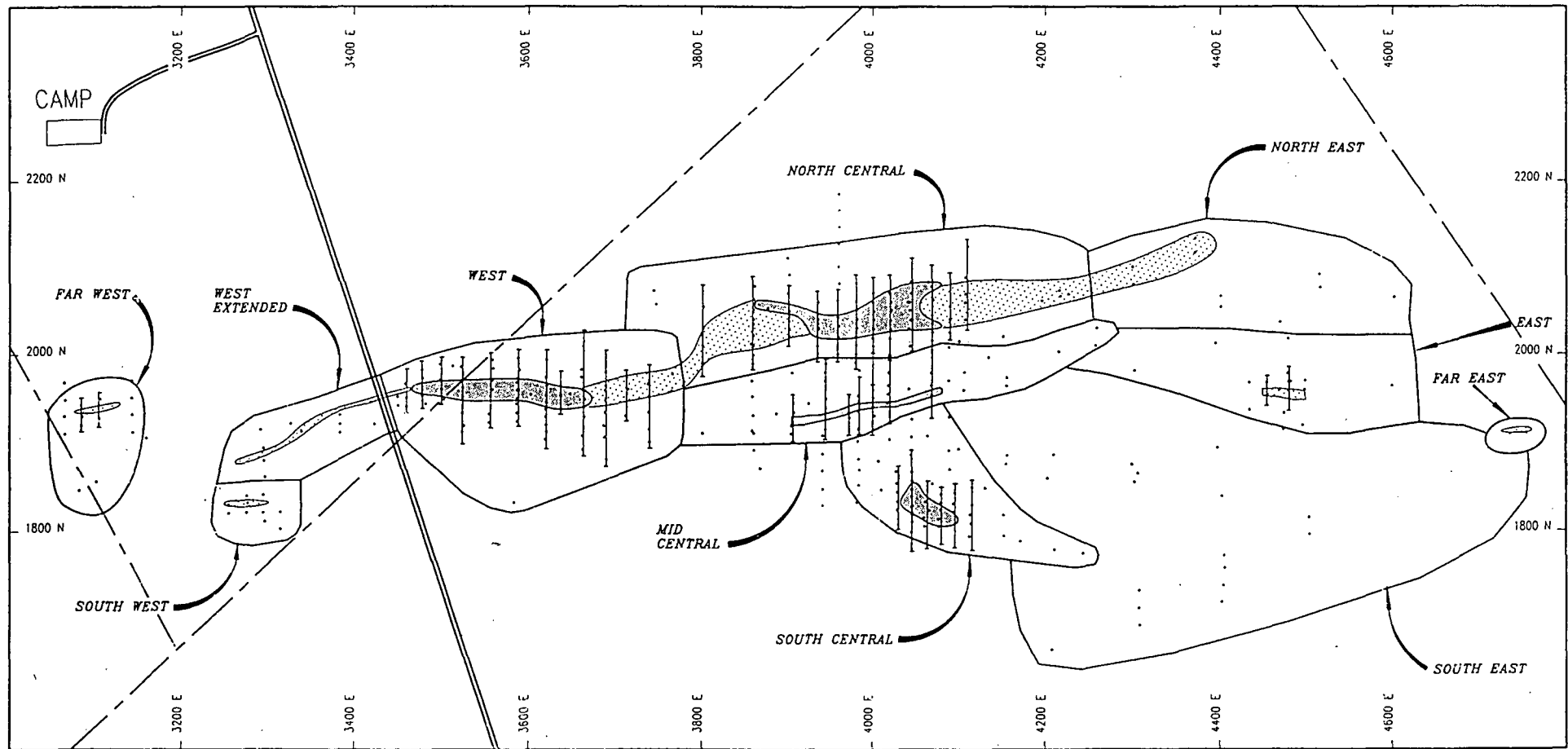
A **total in-situ gold resource**, including the surface resource, from the surface to RL 0m (i.e. about 100 metres depth) is estimated at 1.5 million tonnes at an average grade of 1.9 g/t. This represents contained gold in excess of 2.85 tonnes (90,000 ounces). These figures have no real economic implications but serve to indicate the order of magnitude of the mineralized system.

A **surface resource** of not less than 100,000 tonnes with an average grade of 1.8 g/t is estimated for auriferous regolith to 2 metre depth overlying and adjacent to in-situ mineralization. Preliminary metallurgical testing (Section 3.6) indicates a heap leach recovery of 80% which represents recovered gold of 144 kg (>4,600 ounces).

Applying more stringent parameters to cutoff grade and ore width (see above) an in-situ **potentially ore grade resource** for the top 30 metres of 300,000 tonnes grading 2.57 g/t has been determined. Using the same parameters resource figures have been determined for deeper mineralization (Table 6) but on current economic parameters, potentially extractable material would largely be limited to the top 30 metres. Additional restraints based on mining and economic studies would need to be placed to determine a **mineable reserve**.



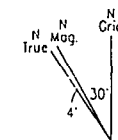
Figure 3
 GLENCOE PROSPECT
 MINERALIZED ZONES



SCALE
 0 100 200
 Metres

LEGEND

- | | | | |
|--|---|--|----------------|
| | Main zones of mineralization | | Roads |
| | Peripheral & lower grade mineralization | | Fences |
| | Drillholes | | Cross sections |



5.0 JOINT VENTURE PARTNER

The resource figures indicate that a "stand alone" operation involving erection of a CIP plant and other substantial surface facilities could not be economically justified. Consequently a joint venture partner was sought to develop the resource. Discussions were held with several companies and in August 1989 agreement was reached in principal with the Tanami Joint Venture (TJV) to carry out a bulk sampling/trial mining exercise.

6.0 BULK SAMPLING TRIAL PITS

The agreement with TJV involved the mining of some 35,000 tonnes of ore from four pits and treatment at the Mt Bonnie carbon-in-pulp plant. Trucking distance to the plant is some 25 kilometres. Following the necessary approvals from the NT Department of Mines and Energy trial mining commenced on 25th September. Mining was completed on the 28th November however ore processing is still proceeding and will extend into January 1990.

Mining and pit geology, including ore definition was under the management of TJV with personnel from Earth Resources present on a monitoring basis for Magnum Gold.

A general plan of the site is included (Map 4), however due to the fact that mining has only just been completed full details of grade-control assays, flitch plans etc are not yet available. A report on the bulk sampling will be compiled once all ore is treated and data processed.



7.0 EXPENDITURE

Work on the Glencoe group of tenements has been carried out as a single integrated programme irrespective of internal tenement boundaries. Consequently expenditure accounting has not allocated separate amounts to individual tenements.

The Glencoe camp is used as a base for work on other tenements in the region. Costs of a general nature (eg provisioning, camp expenses, fuel and vehicle expenses, travel) are apportioned to the various projects, including Glencoe, on the basis of geologist time spent on each area.

Work carried out by the Tanami Joint Venture partners on the bulk sample trial pits exercise has not been costed as details are not available at this stage. No charge has been included for head office administrative costs.

Taking into account the above, a schedule of expenditure for the twelve months to 30th November 1989 is presented below.



GLENCOE PROJECT — SCHEDULE OF EXPENDITURE

TENEMENTS: EL4810, MCN20-43, MCN1303-1313

PERIOD: 30th November 1988 to 30th November 1989

	\$
Geological consulting fees (field work, data processing and interpretation, mining studies, reporting, management)	91,392-
Report preparation	1,598.68
Computer time - data processing	3,135-
Computer time - drafting	8,370-
Earthmoving - site rehabilitation	2,870-
Laboratory assay charges	1,424-
Travel (incl. air fares)	4,160-
Accommodation and meals	2,091-
Food and supplies	1,749-
Camp maintenance	1,049-
Camp equipment	816-
Fuel and oil	1,518-
Vehicle maintenance	2,125-
Phone, fax, telex	592-
Radio communications (rental of base station facilities & equipment charges)	1,150-
Postage, freight & couriers	631-
Maps and publications	20-
Air photos	79-
Photographs	62.80
Photocopying & plan printing	216-
Tenement rents - EL4810	40-
Mineral Claims	2,845-
TOTAL EXPENDITURE	\$127,933.48



8.0 PREVIOUS REPORTS

Previous reports relating to the Glencoe Prospect and submitted to the N.T. Department of Mines and Energy by Earth Resources Australia Pty Limited on behalf of Magnum Gold N.L. and Magnum Resources Limited are listed below:

Date	ERA Report No.	Author
1984	A/169	J.W.Shields
1986	A/180	I.M.Milligan
1987	A/199	I.M.Milligan
1988	A/233	I.M.Milligan
1988	A/236	I.M.Milligan
1988	A/251	I.M.Milligan



TABLE 1

ANNUAL EXPLORATION DETAILS

		1985	1986	1987	1988	TOTAL
COSTEANS						
	No.	7	17	-	12	36
	Metres	1050	1060	-	602	2712
DDH						
	No.	2	12	35	10	59
	m core	290.20	698.44	1544.23	423.71	2956.59
	m precol.	36.00	45.15	483.20	185.15	749.50
	m total	326.20	743.59	2027.43	608.86	3706.08
RC						
	No.	-	-	172 ^{*1}	138 ^{*2}	310
	metres	-	-	5346	6516	11862
RAB						
	No.	-	-	386	214	600
	metres	-	-	2421	2025	4446
PDH						
	No.	-	5	-	-	5
	Metres	-	145	-	-	145
Auger						
	No.	11	-	-	-	11
	Metres	56	-	-	-	56
Water Bores						
	No.	1	-	2	-	3
	Metres	36	-	78	-	114

*1 Includes 7 holes (218 metres) for camp sterilization

*2 Includes 22 holes (440 metres) for close spaced drill sections.

TABLE 2

<u>COSTEAN NO.</u>	<u>COSTEAN PARAMETERS</u>		<u>LENGTH (TO NORTH)</u>
	<u>mE</u>	<u>mN</u>	
1	3698.0	1859.0	257.0
2	3860.0	1952.0	152.0
3	3940.0	2012.0	26.0
4	4019.0	2030.0	52.0
5	4047.0	1800.0	404.0
6	4077.0	2033.4	46.0
7	4132.5	1970.5	33.0
8	3476.5	1942.7	27.0
9	3506.5	1968.4	60.0
10	3546.7	1942.0	48.0
11	3599.5	1892.4	107.5
11E	3599.5	1836.0	56.4
12	3913.0	2041.0	20.0
13	4002.0	1928.5	22.0
14	4113.5	1986.0	11.6
15	4373.0	2088.0	47.0
16	4453.0	2057.5	116.0
17	4498.0	2074.0	46.0
18	3521.9	1898.2	64.2
19	3387.2	1908.0	80.5
20	3649.9	1884.2	135.0
21	3486.8	1954.6	42.0
22	4252.0	2002.0	39.0
23	3071.5	2183.1	53.0
24	4457.0	1945.5	80.0
25	2905.9	1858.3	52.0
26	3090.7	1926.8	45.0
27	3100.7	1859.4	7.50
28	3202.0	1888.0	39.0
29	3302.0	1798.0	145.0
30	3899.8	1908.0	41.0
31	4000.3	1816.5	75.0
32	4149.3	1776.2	62.0
33	4300.0	1841.3	50.0
34	4400.0	1745.6	20.5
35	4454.5	1900.0	48.6
36	4501.3	1800.0	17.1

TABLE 3
DDH PARAMETERS

HOLENAME	COLEAST	COLNORT	COLRED	COLAZ	COL	S1DEP	S1AZ	S1INC	S2DEP	S2AZ	S2INC	S3DEP	S3AZ	S3INC	TOTDEP	PRECOL
GCDDH001	4215.39	2073.29	100.28	258.5	-60	105.0	262.0	-56.5	150.0	265.0	-54.0	190.0	265.0	-53.0	206.50	6.00
GCDDH002	4151.94	2020.44	100.86	353.0	-60	119.0	353.0	-60.0	0.0	0.0	0.0	0.0	0.0	0.0	119.70	30.00
GCDDH003	4069.50	1853.73	99.54	203.0	-60	74.0	202.0	-60.0	0.0	0.0	0.0	0.0	0.0	0.0	76.34	17.35
GCDDH004	3513.07	1987.15	105.64	180.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.40	2.90
GCDDH005	3620.10	1973.55	103.53	180.0	-60	48.0	175.0	-60.0	0.0	0.0	0.0	0.0	0.0	0.0	50.95	2.40
GCDDH006	3559.57	1984.21	104.77	180.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.50	2.50
GCDDH007	3524.40	1952.54	105.97	360.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.50	2.50
GCDDH008	3687.21	1919.84	101.93	360.0	-60	54.0	354.0	-59.0	0.0	0.0	0.0	0.0	0.0	0.0	60.00	2.50
GCDDH009	4064.42	2083.13	102.84	180.0	-60	92.0	186.0	-60.0	0.0	0.0	0.0	0.0	0.0	0.0	94.00	2.50
GCDDH010	3619.70	1937.86	103.62	360.0	-60	73.5	357.0	-58.5	0.0	0.0	0.0	0.0	0.0	0.0	75.50	2.50
GCDDH011	3620.13	1953.63	103.76	360.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.70	2.50
GCDDH012	4069.44	2025.60	102.97	0.5	-60	64.0	358.0	-60.0	0.0	0.0	0.0	0.0	0.0	0.0	66.00	2.50
GCDDH013	3664.53	1949.25	102.57	360.0	-60	56.0	358.0	-61.0	0.0	0.0	0.0	0.0	0.0	0.0	61.00	2.50
GCDDH014	3459.88	1941.55	104.78	360.0	-60	64.0	358.0	-61.0	0.0	0.0	0.0	0.0	0.0	0.0	65.70	2.50
GCDDH015	3586.25	1934.19	104.15	360.0	-60	40.0	354.0	-58.0	78.0	354.0	-58.0	0.0	0.0	0.0	79.20	22.80
GCDDH016	3554.56	1933.07	104.86	360.0	-60	35.0	4.0	-61.5	0.0	0.0	0.0	0.0	0.0	0.0	70.20	23.70
GCDDH017	3524.09	1934.30	105.21	360.0	-60	35.0	360.0	-57.0	68.0	360.0	-56.0	0.0	0.0	0.0	70.20	23.50
GCDDH018	3619.99	1974.29	103.53	360.0	-60	44.0	2.0	-61.0	0.0	0.0	0.0	0.0	0.0	0.0	46.30	3.20
GCDDH019	3620.07	1920.22	103.41	360.0	-60	80.0	359.5	-59.0	0.0	0.0	0.0	0.0	0.0	0.0	82.20	23.70
GCDDH020	3502.90	1948.96	105.86	360.0	-60	48.0	359.0	-60.0	0.0	0.0	0.0	0.0	0.0	0.0	50.00	11.80
GCDDH021	3459.01	1967.05	104.33	180.0	-80	34.0	178.0	-81.5	53.0	176.0	-81.0	0.0	0.0	0.0	55.80	2.50
GCDDH022	3423.12	1921.71	103.08	360.0	-60	38.0	2.0	-61.5	68.0	2.0	-63.0	0.0	0.0	0.0	70.20	6.00
GCDDH023	3383.72	1912.30	102.74	360.0	-60	58.0	359.5	-61.0	0.0	0.0	0.0	0.0	0.0	0.0	60.00	17.65
GCDDH024	4020.57	2029.34	103.57	360.0	-60	34.0	359.0	-61.5	68.0	354.0	-61.0	0.0	0.0	0.0	69.10	2.50
GCDDH025	4107.00	2059.71	102.05	360.0	-60	41.0	2.0	-61.0	0.0	0.0	0.0	0.0	0.0	0.0	43.00	2.90
GCDDH026	4107.54	2040.06	102.09	360.0	-60	34.0	358.0	-59.0	58.0	354.0	-60.0	0.0	0.0	0.0	60.00	11.80
GCDDH027	4156.30	1964.22	100.26	360.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.70	5.70
GCDDH028	4020.40	1999.79	102.90	360.0	-60	42.0	356.0	-58.0	81.0	349.0	-58.0	117.0	356.0	-57.0	119.70	29.70
GCDDH029	4040.65	2060.35	104.00	360.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.70	5.70
GCDDH030	4115.59	1829.70	98.40	180.0	-60	32.0	177.0	-60.0	56.0	179.0	-59.0	0.0	0.0	0.0	58.34	18.00
GCDDH031	3979.94	2020.66	102.78	360.0	-60	37.0	359.0	-60.2	49.0	356.0	-59.4	0.0	0.0	0.0	51.50	18.00
GCDDH032	3934.09	2020.35	102.01	360.0	-60	30.0	3.0	-60.0	48.0	349.0	-61.0	0.0	0.0	0.0	49.20	11.80
GCDDH033	4479.67	1968.60	97.90	360.0	-60	41.0	4.0	-60.5	0.0	0.0	0.0	0.0	0.0	0.0	42.30	5.80
GCDDH034	4045.72	1857.36	100.00	180.0	-60	28.0	181.0	-60.0	53.0	182.0	-61.0	0.0	0.0	0.0	54.80	18.00
GCDDH035	4043.04	2050.75	104.40	360.0	-60	48.0	355.0	-55.0	78.0	2.0	-59.0	0.0	0.0	0.0	79.20	17.64
GCDDH036	4021.74	2051.41	104.25	360.0	-60	17.0	359.0	-60.0	29.0	356.0	-60.0	0.0	0.0	0.0	31.00	5.40
GCDDH037	4046.38	1820.71	99.00	360.0	-60	23.0	353.0	-60.0	47.5	356.0	-61.0	0.0	0.0	0.0	51.00	6.00
GCDDH038	3859.56	2021.77	101.70	360.0	-60	47.0	359.0	-60.0	59.0	356.0	-59.0	0.0	0.0	0.0	61.10	17.50
GCDDH039	3979.96	2010.86	102.70	360.0	-60	29.0	360.0	-61.0	32.0	4.0	-61.0	59.0	3.0	-61.0	62.64	29.70
GCDDH040	3935.35	2029.49	102.10	360.0	-60	17.0	8.0	-61.0	26.0	6.0	-61.5	50.0	5.0	-62.0	52.75	14.70
GCDDH041	4045.88	2039.49	104.30	360.0	-60	17.0	6.0	-59.5	41.0	4.0	-60.0	59.0	359.5	-58.0	61.30	14.70
GCDDH042	3587.88	1960.05	105.10	360.0	-60	13.0	3.0	-60.0	31.0	1.0	-60.0	0.0	0.0	0.0	34.48	5.50
GCDDH043	3619.66	1929.44	103.70	360.0	-60	32.0	360.0	-60.0	56.0	1.0	-56.0	68.0	360.0	-57.0	69.90	29.66
GCDDH044	3602.10	1954.42	104.30	360.0	-60	31.0	2.0	-62.0	0.0	0.0	0.0	0.0	0.0	0.0	31.20	2.10
GCDDH045	4000.96	2040.23	103.70	360.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.30	6.00
GCDDH046	4000.71	2029.27	103.40	360.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.72	18.00
GCDDH047	3959.31	2032.97	102.70	360.0	-60	42.0	2.0	-62.0	52.0	2.0	-62.0	0.0	0.0	0.0	53.90	5.90
GCDDH048	3959.01	2019.99	102.50	360.0	-60	49.0	5.0	-65.0	0.0	0.0	0.0	0.0	0.0	0.0	49.30	14.90
GCDDH049	4019.64	2019.02	103.52	360.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.20	30.75
GCDDH050	4068.98	2005.33	102.80	360.0	-60	33.2	2.0	-61.3	69.3	358.0	-60.0	84.4	355.0	-58.6	91.74	30.00
GCDDH051	3979.57	1990.93	102.40	360.0	-60	38.1	360.0	-64.7	75.7	357.0	-64.7	0.0	0.0	0.0	75.73	30.00
GCDDH052	3934.89	2001.14	101.80	360.0	-60	70.0	346.0	-59.0	91.0	346.0	-58.3	0.0	0.0	0.0	91.33	36.00
GCDDH053	3924.21	1944.73	101.00	180.0	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.13	2.15
GCDDH054	4066.38	1823.49	99.10	179.0	-60	8.5	177.5	-60.0	39.5	178.0	-60.0	0.0	0.0	0.0	40.00	6.00
GCDDH055	3900.84	2043.66	101.90	360.0	-60	36.4	359.0	-61.0	0.0	0.0	0.0	0.0	0.0	0.0	40.00	12.00
GCDDH056	4095.54	1843.23	98.90	180.0	-60	47.5	180.0	-58.0	74.5	182.0	-58.0	0.0	0.0	0.0	75.00	42.00
GCDDH057	4018.41	1965.36	102.30	180.0	-60	33.5	180.0	-60.0	61.5	180.0	-61.0	0.0	0.0	0.0	63.00	12.00
GCDDH058	3589.53	1982.90	104.25	180.0	-60	29.0	179.0	-60.0	54.9	181.0	-60.0	0.0	0.0	0.0	55.41	6.00
GCDDH059	3637.40	1937.90	103.40	360.0	-60	46.0	359.0	-61.8	0.0	0.0	0.0	0.0	0.0	0.0	46.52	9.00

ABBREVIATIONS

COLEAST	Collar easting
COLNORT	Collar northing
COLRED	Collar RL
COLAZ	Collar Azimuth
COL	Collar inclination
S1, S2	Survey 1,2 etc.
DEP	Survey depth
AZ	Survey azimuth
INC	Survey inclination
TOTDEP	Total depth (downhole)
PRECOL	Precollar depth

TABLE 4

GLENCOE REVERSE CIRCULATION HOLE LOCATION DATA

HOLENAME	COLLAR COORDINATES			COLLAR		TOTAL DEPTH
	EAST	NORTH	RL	AZIMUTH	INCL.	
GCRC001	3620.84	1964.50	103.55	360.0	-60.0	42
GCRC002	3620.32	1945.69	103.71	360.0	-60.0	48
GCRC003	3524.63	1976.97	106.41	360.0	-60.0	23
GCRC004	3524.44	1962.45	106.43	360.0	-60.0	42
GCRC005	3459.93	1951.35	104.39	360.0	-60.0	30
GCRC006	3383.67	1921.80	102.91	180.0	-60.0	30
GCRC007	3557.92	1970.76	105.18	180.0	-60.0	30
GCRC008	3556.34	1953.04	105.25	360.0	-60.0	36
GCRC009	3586.75	1959.90	104.54	360.0	-60.0	30
GCRC010	3586.39	1950.37	104.43	360.0	-60.0	42
GCRC011	3688.94	1934.68	102.02	360.0	-60.0	42
GCRC012	3660.34	1974.46	102.73	180.0	-60.0	30
GCRC013	3689.22	1949.44	102.13	360.0	-60.0	30
GCRC014	3688.00	1906.79	101.75	180.0	-60.0	30
GCRC015	4069.01	2045.09	103.60	360.0	-60.0	30
GCRC016	4068.85	2065.85	103.42	180.0	-60.0	30
GCRC017	4020.74	2039.40	103.81	360.0	-60.0	36
GCRC018	4020.59	2049.92	103.99	360.0	-60.0	36
GCRC019	4019.65	2070.33	103.38	180.0	-60.0	44
GCRC020	3935.05	2060.21	102.37	180.0	-60.0	36
GCRC021	3934.74	2040.39	102.18	360.0	-60.0	36
GCRC022	3980.63	2030.67	102.96	360.0	-60.0	36
GCRC023	3981.10	2040.57	103.06	360.0	-60.0	36
GCRC024	3980.04	2061.14	102.89	180.0	-60.0	36
GCRC025	4044.34	2039.57	104.09	360.0	-60.0	36
GCRC026	4042.39	2059.95	104.03	360.0	-60.0	36
GCRC027	4027.08	1868.10	100.15	180.0	-60.0	48
GCRC028	4045.70	1847.30	99.70	180.0	-60.0	42
GCRC029	4079.45	1832.13	98.81	180.0	-60.0	36
GCRC030	4113.47	1818.71	98.14	180.0	-60.0	36
GCRC031	4106.69	1979.77	101.49	360.0	-60.0	36
GCRC032	4105.97	1959.31	101.19	360.0	-60.0	36
GCRC033	4156.54	1973.73	100.35	360.0	-60.0	30
GCRC034	4107.71	2069.43	102.05	360.0	-60.0	24
GCRC035	4257.02	2010.02	99.44	360.0	-60.0	30
GCRC036	4258.25	2030.24	99.62	180.0	-60.0	30
GCRC037	4371.00	2117.03	100.08	360.0	-60.0	30
GCRC038	4371.25	2133.41	100.31	360.0	-60.0	30
GCRC039	4517.15	2076.69	99.05	360.0	-60.0	30
GCRC040	4516.72	2091.86	99.29	180.0	-60.0	30
GCRC041	4454.29	1968.54	98.16	180.0	-60.0	30
GCRC042	4454.37	1953.43	97.70	360.0	-60.0	30
GCRC043	4482.27	1969.05	97.88	180.0	-60.0	29
GCRC044	4480.90	1949.19	97.40	360.0	-60.0	30
GCRC045	3859.25	1999.32	101.31	360.0	-60.0	36
GCRC046	3859.46	2035.33	101.64	360.0	-60.0	36
GCRC047	3860.79	2058.87	101.87	180.0	-60.0	36
GCRC048	3860.96	2078.71	102.09	180.0	-60.0	36
GCRC049	4045.22	2083.69	102.94	180.0	-60.0	42
GCRC050	4108.10	2088.44	101.88	180.0	-60.0	36

GLENCOE REVERSE CIRCULATION HOLE LOCATION DATA

HOLENAME	COLLAR COORDINATES			COLLAR		TOTAL DEPTH
	EAST	NORTH	RL	AZIMUTH	INCL.	
GCRC051	4225.85	2069.15	100.16	360.0	-60.0	19
GCRC052	4020.98	2060.20	103.80	360.0	-60.0	30
GCRC053	3766.46	1977.73	101.33	360.0	-60.0	36
GCRC054	3739.41	1934.52	101.16	360.0	-60.0	36
GCRC055	3739.91	1951.69	101.32	360.0	-60.0	30
GCRC056	3934.67	2030.78	102.16	360.0	-60.0	40
GCRC057	4045.39	1839.38	99.78	180.0	-60.0	36
GCRC058	3500.16	1960.79	106.48	360.0	-60.0	36
GCRC059	3481.84	1944.47	105.40	360.0	-60.0	30
GCRC060	4028.07	1854.76	99.89	180.0	-60.0	28
GCRC061	3984.18	1869.59	99.53	180.0	-60.0	27
GCRC062	3983.75	1882.02	99.86	180.0	-60.0	30
GCRC063	4045.48	1827.61	99.50	360.0	-60.0	25
GCRC064	4076.43	1813.60	98.21	360.0	-60.0	30
GCRC065	4298.46	2100.59	100.12	360.0	-60.0	36
GCRC066	4298.99	2080.51	99.93	360.0	-60.0	36
GCRC067	4300.64	1981.77	98.75	360.0	-60.0	36
GCRC068	4108.06	2088.39	102.05	360.0	-60.0	35
GCRC069	4068.11	2078.21	102.88	360.0	-60.0	36
GCRC070	3903.66	1919.82	100.02	360.0	-60.0	36
GCRC071	3800.96	2030.49	101.64	360.0	-60.0	36
GCRC072	3801.15	1911.07	100.15	360.0	-60.0	36
GCRC073	4210.51	1778.54	96.91	360.0	-60.0	36
GCRC074	4172.57	1788.35	97.15	360.0	-60.0	36
GCRC075	4243.04	1774.66	96.63	360.0	-60.0	36
GCRC076	3858.54	1914.06	100.14	360.0	-60.0	36
GCRC077	4110.75	2124.43	101.59	180.0	-60.0	36
GCRC078	4028.80	1844.71	99.62	180.0	-60.0	30
GCRC079	3900.86	2029.84	101.65	360.0	-60.0	36
GCRC080	3524.72	1979.55	106.30	180.0	-60.0	36
GCRC081	4601.56	2065.41	98.50	360.0	-60.0	36
GCRC082	4599.20	1964.20	97.15	360.0	-60.0	36
GCRC083	3983.58	1852.40	99.20	360.0	-60.0	18
GCRC084	4069.44	2035.42	103.40	360.0	-60.0	18
GCRC085	4044.78	2070.52	103.55	360.0	-60.0	24
GCRC086	4019.05	2071.70	103.55	360.0	-60.0	24
GCRC087	3980.60	2051.63	103.10	360.0	-60.0	24
GCRC088	3859.66	2051.63	101.85	360.0	-60.0	18
GCRC089	3859.55	2040.56	101.65	360.0	-60.0	24
GCRC090	3859.47	2010.40	101.55	360.0	-60.0	18
GCRC091	3558.36	1994.37	104.50	180.0	-60.0	30
GCRC092	3558.11	1960.30	105.40	360.0	-60.0	24
GCRC093	3739.64	1967.47	101.55	360.0	-60.0	30
GCRC094	3477.67	1953.48	106.10	360.0	-60.0	30
GCRC095	3587.29	1973.28	104.40	180.0	-60.0	36
GCRC096	3620.18	1993.97	103.45	180.0	-60.0	30
GCRC097	3660.52	1982.86	102.80	360.0	-60.0	36
GCRC098	3637.11	1953.43	103.55	360.0	-60.0	30
GCRC099	3326.78	1922.52	103.22	360.0	-60.0	36
GCRC100	3383.61	1932.25	103.25	360.0	-60.0	36

GLENCOE REVERSE CIRCULATION HOLE LOCATION DATA

HOLENAME	COLLAR COORDINATES			COLLAR		TOTAL DEPTH
	EAST	NORTH	RL	AZIMUTH	INCL.	
GCRC101	3662.73	1959.54	102.80	360.0	-60.0	24
GCRC102	3689.06	1959.26	102.30	360.0	-60.0	30
GCRC103	3689.65	1979.85	102.30	360.0	-60.0	30
GCRC104	3663.08	2009.77	102.75	360.0	-60.0	24
GCRC105	3900.78	2038.73	102.00	360.0	-60.0	36
GCRC106	4029.19	1833.98	99.35	360.0	-60.0	18
GCRC107	4028.87	1825.00	98.85	360.0	-60.0	30
GCRC108	4112.60	1793.66	97.70	360.0	-60.0	30
GCRC109	3934.42	2035.54	102.15	360.0	-60.0	24
GCRC110	3586.45	1968.69	104.45	360.0	-60.0	24
GCRC111	3523.93	1913.01	104.20	180.0	-60.0	18
GCRC112	3418.77	1946.32	103.30	360.0	-60.0	36
GCRC113	3690.78	1881.59	100.50	360.0	-60.0	30
GCRC114	3662.83	1892.73	101.70	360.0	-60.0	24
GCRC115	3662.29	1908.06	102.55	180.0	-60.0	30
GCRC116	3620.72	1912.55	103.20	180.0	-60.0	30
GCRC117	3647.77	1955.34	103.30	360.0	-60.0	27
GCRC118	3740.07	1915.53	100.90	360.0	-60.0	27
GCRC119	3740.58	1901.04	100.60	360.0	-60.0	30
GCRC120	3904.96	1920.57	100.30	360.0	-60.0	18
GCRC121	4300.70	1855.58	97.45	360.0	-60.0	30
GCRC122	4306.58	1692.70	95.70	360.0	-60.0	30
GCRC123	4401.97	1719.15	95.60	360.0	-60.0	30
GCRC124	4400.58	2054.24	99.30	360.0	-60.0	30
GCRC125	4394.37	2012.70	99.00	360.0	-60.0	30
GCRC126	4404.00	1738.00	95.70	360.0	-60.0	30
GCRC127	4306.01	1732.17	96.00	360.0	-60.0	30
GCRC128	4305.73	1712.18	95.80	360.0	-60.0	30
GCRC129	4298.17	1875.63	97.70	360.0	-60.0	33
GCRC130	4209.93	1886.86	98.35	360.0	-60.0	30
GCRC131	4202.43	1859.84	98.05	360.0	-60.0	30
GCRC132	4207.92	1664.86	96.05	360.0	-60.0	30
GCRC133	4215.03	2003.11	99.80	360.0	-60.0	30
GCRC134	4503.72	1815.35	95.80	360.0	-60.0	26
GCRC135	3296.15	1880.65	102.95	360.0	-60.0	36
GCRC136	3098.75	1856.95	104.95	360.0	-60.0	30
GCRC137	4152.32	1818.04	97.80	360.0	-60.0	27
GCRC138	4153.11	1794.30	97.60	360.0	-60.0	30
GCRC139	4155.79	1876.01	98.60	360.0	-60.0	30
GCRC140	3747.39	2057.68	102.20	360.0	-60.0	30
GCRC141	3029.11	2232.14	109.15	220.0	-60.0	36
GCRC142	3035.00	2247.10	109.15	220.0	-60.0	30
GCRC143	3052.70	2260.05	109.09	220.0	-60.0	30
GCRC144	3066.35	2275.55	108.80	220.0	-60.0	30
GCRC145	2991.23	2262.98	109.50	220.0	-60.0	32
GCRC146	3005.56	2275.55	109.50	220.0	-60.0	30
GCRC147	3020.71	2283.60	109.40	220.0	-60.0	30
GCRC148	3296.86	1862.18	102.65	360.0	-60.0	30
GCRC149	3294.95	1821.97	102.30	360.0	-60.0	24
GCRC150	4400.20	2066.90	99.50	360.0	-60.0	30

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GLENCOE REVERSE CIRCULATION HOLE LOCATION DATA

HOLENAME	COLLAR COORDINATES			COLLAR		TOTAL DEPTH
	EAST	NORTH	RL	AZIMUTH	INCL.	
GCRC151	4402.00	1839.40	96.75	360.0	-60.0	27
GCRC152	4405.35	1758.00	95.97	360.0	-60.0	30
GCRC153	4157.18	1885.89	98.75	360.0	-60.0	18
GCRC154	4100.52	2015.13	102.35	360.0	-60.0	31
GCRC155	3744.55	2073.18	102.30	180.0	-60.0	24
GCRC156	4753.70	1911.10	95.10	360.0	-60.0	30
GCRC157	3449.63	1952.35	104.80	360.0	-60.0	24
GCRC158	3450.32	1942.47	104.95	360.0	-60.0	25
GCRC159	3498.36	1971.21	106.70	180.0	-60.0	24
GCRC160	3295.28	1895.02	103.10	180.0	-60.0	28
GCRC161	3294.88	1842.09	102.45	360.0	-60.0	24
GCRC162	4496.66	1919.74	97.05	360.0	-60.0	30
GCRC163	3619.29	1904.21	102.70	360.0	-60.0	30
GCRC164	3982.87	1953.44	102.10	360.0	-60.0	30
GCRC165	3983.17	1936.18	101.80	360.0	-60.0	30
GCRC166	3983.58	1916.03	101.10	360.0	-60.0	30
GCRC167	3958.45	2042.85	102.70	360.0	-60.0	30
GCRC168	4001.05	2049.99	103.70	360.0	-60.0	30
GCRC169	3900.83	2050.24	102.00	360.0	-60.0	30
GCRC170	3582.76	1832.90	100.60	360.0	-60.0	30
GCRC171	3314.85	1822.53	102.25	360.0	-60.0	30
GCRC172	3275.35	1821.54	102.40	360.0	-60.0	30
GCRC173	3275.36	1840.64	102.60	180.0	-60.0	27
GCRC174	3276.84	1879.32	103.00	360.0	-60.0	30
GCRC175	3315.02	1803.32	102.10	360.0	-60.0	17
GCRC176	3297.05	1811.75	102.20	360.0	-60.0	21
GCRC177	3253.70	1830.38	102.70	360.0	-60.0	24
GCRC178	3079.24	1846.89	104.30	360.0	-60.0	27
GCRC179	3083.21	1930.42	104.90	360.0	-60.0	24
GCRC180	3478.41	1974.02	106.20	180.0	-60.0	18
GCRC181	3522.60	1986.30	105.80	180.0	-60.0	12
GCRC182	3588.10	1996.40	104.10	180.0	-60.0	23
GCRC183	3586.20	1944.30	104.50	-90.0	-90.0	13
GCRC184	4046.40	1810.55	98.20	180.0	-60.0	19
GCRC185	4045.60	1798.80	98.00	180.0	-58.0	30
GCRC186	4709.10	1824.00	98.70	180.0	-60.0	35
GCRC187	3903.78	1910.89	100.10	360.0	-60.0	29
GCRC188	3972.57	1928.55	101.50	360.0	-60.0	36
GCRC189	4100.27	1893.00	100.50	360.0	-60.0	29
GCRC190	4397.03	1894.47	99.40	360.0	-60.0	31
GCRC191	4504.43	1795.95	95.70	360.0	-60.0	30
GCRC192	4734.38	1909.99	95.00	360.0	-60.0	44
GCRC193	3765.39	1958.11	101.20	360.0	-60.0	33
GCRC194	3859.07	1989.72	101.20	360.0	-60.0	40
GCRC195	3715.72	1960.35	101.80	360.0	-60.0	30
GCRC196	3276.34	1832.59	102.50	180.0	-60.0	18
GCRC197	3254.17	1821.10	102.60	360.0	-60.0	36
GCRC198	3082.05	1920.40	104.80	360.0	-60.0	40
GCRC199	3801.14	2054.74	101.50	360.0	-60.0	35
GCRC200	3801.08	2010.24	101.50	360.0	-60.0	40

GLENCOE REVERSE CIRCULATION HOLE LOCATION DATA

HOLENAME	COLLAR COORDINATES			COLLAR		TOTAL DEPTH
	EAST	NORTH	RL	AZIMUTH	INCL.	
GCRC201	3800.85	1990.31	101.30	360.0	-60.0	38
GCRC202	3738.37	1966.02	101.50	360.0	-90.0	36
GCRC203	4045.86	1819.11	98.95	180.0	-60.0	34
GCRC204	4076.84	1805.11	98.20	181.0	-60.0	30
GCRC205	4114.78	1808.39	97.90	178.0	-60.0	40
GCRC206	3983.61	1947.30	102.00	178.5	-60.0	21
GCRC207	4017.90	1955.49	102.35	180.0	-60.0	28
GCRC208	4020.02	1904.33	101.20	360.0	-58.8	30
GCRC209	4216.66	2067.03	100.40	360.0	-60.0	42
GCRC210	4196.14	2061.74	100.60	359.0	-60.0	45
GCRC211	2315.00	1623.00	109.00	360.0	-60.0	30
GCRC212	4000.02	2060.05	103.50	360.0	-60.0	39
GCRC213	4029.17	1824.00	98.80	180.0	-60.0	30
GCRC214	3906.68	1934.76	100.50	180.0	-60.0	25
GCRC215	4007.04	1879.64	100.30	180.0	-60.0	26
GCRC216	4061.47	1833.41	99.40	180.0	-60.0	39
GCRC217	4060.20	1815.50	98.40	180.0	-60.0	27
GCRC218	4060.80	1805.60	98.20	180.0	-60.0	35
GCRC219	3944.70	1949.70	101.30	180.0	-60.0	27
GCRC220	4068.50	1965.10	102.20	180.0	-60.0	42
GCRC221	4044.26	2083.80	102.80	360.0	-60.0	31
GCRC222	4000.26	2070.90	103.10	360.0	-60.0	20
GCRC223	4042.20	1960.80	102.50	180.0	-60.0	40
GCRC224	4000.68	1951.28	102.20	180.0	-60.0	50
GCRC225	4069.10	2015.90	103.00	360.0	-59.0	100
GCRC226	4043.20	2009.50	103.20	360.0	-59.0	100
GCRC227	4000.40	2010.10	102.90	360.0	-59.0	100
GCRC228	3979.80	2000.70	102.50	360.0	-59.0	80
GCRC229	3958.60	2000.60	102.20	360.0	-59.0	90
GCRC230	3934.30	2010.10	101.90	360.0	-60.0	70
GCRC231	4045.70	1867.30	100.40	180.0	-59.0	90
GCRC232	4115.66	1849.57	98.70	180.0	-59.0	90
GCRC233	3526.34	1919.79	104.60	360.0	-59.0	80
GCRC234	3586.30	1924.49	104.00	360.0	-59.0	100
GCRC235	3664.40	1929.40	102.70	360.0	-59.0	90
GCRC236	3554.51	1923.36	104.10	360.0	-59.0	100
GCRC237	4079.52	1841.90	99.20	180.0	-59.0	80
GCRC238	4045.23	1886.53	100.70	180.0	-59.0	100
GCRC239	4089.48	2025.60	102.70	360.0	-59.0	102
GCRC240	3477.60	1983.40	105.80	180.0	-60.0	64
GCRC241	3498.16	1989.00	105.80	180.0	-60.0	64
GCRC242	3556.63	1943.19	105.70	360.0	-60.0	70
GCRC243	3663.70	1940.60	102.80	360.0	-60.0	61
GCRC244	3712.84	1930.37	101.60	360.0	-60.0	74
GCRC245	3856.62	2012.33	101.50	360.0	-60.0	82
GCRC246	3900.90	2021.30	101.70	360.0	-60.0	82
GCRC247	3999.81	2019.15	103.15	360.0	-60.0	80
GCRC248	4042.29	2029.95	103.70	360.0	-60.0	94
GCRC249	4130.97	1848.76	98.45	180.0	-60.0	99
GCRC250	4089.57	2040.51	102.75	360.0	-60.0	84

GLENCOE REVERSE CIRCULATION HOLE LOCATION DATA

HOLENAME	COLLAR COORDINATES			COLLAR		TOTAL DEPTH
	EAST	NORTH	RL	AZIMUTH	INCL.	
GCRC251	3292.10	1915.82	103.30	180.0	-60.0	70
GCRC252	3339.10	1913.70	103.20	180.0	-60.0	64
GCRC253	3102.45	1928.50	104.20	360.0	-60.0	40
GCRC254	4017.37	1945.21	101.20	180.0	-60.0	40
GCRC255	3876.12	2053.44	101.90	360.0	-60.0	32
GCRC256	3980.00	2082.25	102.70	180.0	-60.0	32
GCRC257	4093.95	1831.20	98.75	180.0	-60.0	50
GCRC258	4046.66	1828.61	99.70	180.0	-60.0	34
GCRC259	4064.40	1907.90	101.20	180.0	-60.0	40
GCRC260	3906.58	1945.49	100.70	180.0	-60.0	52
GCRC261	4068.98	2002.84	102.70	180.0	-60.0	40
GCRC262	4070.12	2060.94	103.60	360.0	-60.0	45
GCRC263	4089.74	2055.49	102.80	360.0	-60.0	50
GCRC264	3886.44	1933.40	100.40	180.0	-60.0	42
GCRC265	4000.72	1960.20	102.20	180.0	-60.0	52
GCRC266	3944.04	1970.12	101.70	180.0	-60.0	50
GCRC267	4000.51	1941.27	102.10	180.0	-60.0	40
GCRC268	4068.57	1979.33	102.50	180.0	-60.0	55
GCRC269	4088.31	1970.21	101.90	180.0	-60.0	40
GCRC270	4135.14	1996.90	101.20	180.0	-60.0	40
GCRC271	4304.27	1865.96	97.55	180.0	-60.0	55
GCRC272	4404.96	1771.88	96.00	180.0	-60.0	40
GCRC273	4089.01	2008.34	100.90	180.0	-60.0	40
GCRC274	4009.72	1847.16	99.30	180.0	-60.0	40
GCRC275	4094.48	1821.11	98.50	180.0	-60.0	40
GCRC276	4018.92	1979.94	102.60	180.0	-60.0	45
GCRC277	4019.51	1999.82	103.00	180.0	-60.0	40
GCRC278	3944.55	1939.40	101.30	180.0	-60.0	50
GCRC279	3944.31	1990.00	101.90	180.0	-60.0	40
GCRC280	3943.90	1915.50	100.60	360.0	-60.0	45
GCRC281	4479.90	1958.65	97.80	180.0	-60.0	34
GCRC282	3859.80	2063.80	102.00	360.0	-60.0	40
GCRC283	3103.60	1949.80	105.80	180.0	-60.0	40
GCRC306	3971.10	1933.70	101.50	180.0	-60.0	36
GCRC307	4002.22	1930.79	101.70	180.0	-60.0	34
GCRC308	4069.05	1954.36	101.90	180.0	-60.0	36
GCRC309	4433.67	1968.28	98.20	180.0	-60.0	34
GCRC310	4499.00	1960.00	97.70	180.0	-60.0	36

CLOSE SPACED RC HOLES all vertical

GCRC284 to 294 3978mE 2038 to 2063mN on 2.5m spacings

GCRC285 to 305 3522mE 1955 to 1980mN on 2.5m spacings

TABLE 5
INSITU GEOLOGICAL RESOURCE
(Tonnes @ g/t gold)

(Based on minimum intercept of 1 metre, cutoff grade of 0.5 g/t, SG of 2.5 and with high values cut to 20 g/t)

<u>RL INTERVAL</u>	<u>MEASURED</u>	<u>INDICATED</u>	<u>INFERRED</u>	<u>TOTAL</u>
<u>WEST</u>				
+70mRL	148,000 @ 2.13	-	-	148,000 @ 2.13
40-70mRL	66,000 @ 1.82	19,000 @ 1.50	13,000 @ 1.70	98,000 @ 1.74
0-40mRL	-	11,000 @ 2.00	65,000 @ 1.70	76,000 @ 1.74
<u>NORTH CENTRAL</u>				
+70mRL	216,000 @ 1.86	-	-	216,000 @ 1.86
40-70mRL	100,000 @ 1.77	54,000 @ 1.55	9,000 @ 1.70	163,000 @ 1.70
0-40mRL	-	47,000 @ 1.95	132,000 @ 1.70	179,000 @ 1.77
<u>MID-CENTRAL</u>				
+70mRL	83,000 @ 2.12	-	4,000 @ 2.00	87,000 @ 2.11
40-70mRL	-	26,000 @ 1.43	43,000 @ 1.50	69,000 @ 1.47
0-40mRL	-	-	78,000 @ 1.50	78,000 @ 1.50
<u>SOUTH CENTRAL</u>				
+70mRL	39,000 @ 3.45	3,000 @ 1.92	-	42,000 @ 3.34
40-70mRL	22,000 @ 3.08	1,000 @ 0.80	7,000 @ 1.90	30,000 @ 2.73
0-40mRL	-	6,000 @ 3.11	29,000 @ 2.70	35,000 @ 2.77
<u>SUB-TOTALS</u>				
+70mRL	486,000 @ 2.11	3,000 @ 1.92	4,000 @ 2.00	493,000 @ 2.11
40-70mRL	188,000 @ 1.94	100,000 @ 1.50	72,000 @ 1.60	360,000 @ 1.75
0-40mRL	-	64,000 @ 2.07	304,000 @ 1.70	368,000 @ 1.80
	<u>674,000 @ 2.06</u>	<u>167,000 @ 1.73</u>	<u>380,000 @ 1.70</u>	<u>1,221,000 @ 1.91</u>
<u>FAR WEST</u>				
+70mRL	-	15,000 @ 1.80	-	-
+0mRL	-	-	30,000 @ 1.50	30,000 @ 1.50
<u>EAST</u>				
+70mRL	-	10,000 @ 2.00	-	10,000 @ 2.00
+0mRL	-	-	20,000 @ 2.00	20,000 @ 2.00
<u>SURFACE MINERALIZATION</u>				
0-2m	98,000 @ 1.77	25,000 @ 1.77	25,000 @ 1.77	148,000 @ 1.77
<u>TOTALS</u>	<u>772,000 @ 2.02</u>	<u>217,000 @ 1.75</u>	<u>455,000 @ 1.70</u>	<u>1,444,000 @ 1.88</u>

SAY 1,500,000 @ 1.9 g/t

NOTE:

Surface RL ranges from 98 to 107 metres above sea level, with an average of about 103m over the area containing the defined resources. 70mRL corresponds to an approximate depth of 33 metres, 40mRL corresponds to about 63 metres depth, and 0mRL to some 103m.



TABLE 6
POTENTIAL ORE GRADE RESOURCE

RESOURCE BASED on 2.5 m VERTICAL COMPOSITES at 1 g/t CUTOFF
(Tonnes @ g/t gold)
(With high grades cut to 20 g/t and SG of 2.5)

<u>RL INTERVAL</u>	<u>MEASURED</u>	<u>INDICATED+INFERRED</u>	<u>TOTAL</u>
<u>WEST</u>			
+70mRL	100,000 @ 2.40	-	100,000 @ 2.40
40-70mRL	30,000 @ 2.09	30,000 @ 2.00	60,000 @ 2.05
0-40mRL	-	50,000 @ 2.00	50,000 @ 2.00
<u>NORTH CENTRAL</u>			
+70mRL	115,000 @ 2.45	-	115,000 @ 2.45
40-70mRL	60,000 @ 1.99	30,000 @ 2.00	90,000 @ 1.99
0-40mRL	-	90,000 @ 2.00	90,000 @ 2.00
<u>MID-CENTRAL</u>			
+70mRL	50,000 @ 2.21	-	50,000 @ 2.21
40-70mRL	-	40,000 @ 1.50	40,000 @ 1.50
0-40mRL	-	40,000 @ 1.50	40,000 @ 1.50
<u>SOUTH CENTRAL</u>			
+70mRL	35,000 @ 3.93	-	35,000 @ 3.93
40-70mRL	22,000 @ 2.89	8,000 @ 2.80	30,000 @ 2.87
0-40mRL	-	30,000 @ 2.80	30,000 @ 2.80
<u>TOTALS</u>			
+70mRL	300,000 @ 2.57	-	300,000 @ 2.57
40-70mRL	112,000 @ 2.19	108,000 @ 1.87	220,000 @ 2.03
0-40mRL	-	210,000 @ 2.02	210,000 @ 2.02
	<u>412,000 @ 2.46</u>	<u>318,000 @ 1.97</u>	<u>730,000 @ 2.30</u>

NOTE:

Surface RL ranges from 98 to 107 metres above sea level, with an average of about 103m over the area containing the defined resources. 70mRL corresponds to an approximate depth of 33 metres, 40mRL corresponds to about 63 metres depth, and 0mRL to some 103m.



APPENDIX 1
RESOURCES ESTIMATION REPORT

Earth Resources Australia Pty. Limited
Report A/297 Glencoe Prospect N.T.
December 1989
For Magnum Gold N.L.



MAGNUM GOLD N.L.
GLENCOE GOLD PROJECT, N.T.
RESOURCE ESTIMATION
REPORT

ERA Report A262
January, 1989

Prepared by I.M. Milligan & M.R. Bunny

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MAGNUM GOLD N.L.

GLENCOE GOLD PROJECT, NORTHERN TERRITORY

RESOURCE ESTIMATION REPORT

PREAMBLE

This resource assessment has been prepared in accordance with the guidelines set down in the **AUSTRALASIAN CODE FOR REPORTING OF IDENTIFIED MINERAL RESOURCES AND ORE RESERVES**, a report of the Joint Committee of the Australasian Institute of Mining and Metallurgy and the Australian Mining Industry Council issued in June, 1988. The guidelines emphasise the distinction between a **resource** - an insitu mass of mineralization defined in accordance with certain stated parameters, and a **reserve** - an economically mineable proportion of the insitu mineralization.

The report has been prepared by I.M. Milligan, Senior Geologist and Glencoe Project Manager, and M.R. Bunny, Principal Consulting Geologist, both of whom have been involved with the Glencoe project from its inception.

SOURCES of DATA

The Glencoe prospect was identified by Magnum Resources Limited as a result of "grass-roots" exploration on an initial group of Mineral Claims acquired by the company in 1983, and all data relevant to the area have been generated initially by Magnum Resources, and since March, 1987, by an associated company, Magnum Gold N.L.

1. Surface and Near-Surface Data

Surface and near-surface data have resulted from extensive programmes of outcrop sampling, cross-strike trenching, and grid rotary air blast (RAB) bedrock geochemical sampling. This work defined a broad zone of interest having a strike length approaching two kilometres, as shown in Figure 1, and within which the major exploration effort has concentrated.

2. Exploration Drilling

Reverse circulation (RC) drilling was the principal drilling technique employed for subsurface evaluation of the area. Initial RC holes were largely confined to the interval above the water table (about 30 metres) due to the difficulty of obtaining reliable sample below this interval. Improvement in technology later permitted reliable sampling to down-hole lengths in excess of 100 metres, and this enabled a considerable reduction in the need for more expensive diamond drilling. A total of 288 exploration RC holes were drilled at Glencoe for an aggregate of 10,570 metres.

Diamond drilling using HQ wireline equipment (core diameter of 61.1mm) was employed for the drilling of 59 holes for an aggregate of 3109 metres of which 750 metres was precollar open hole and 2359 metres was core. Diamond core recoveries were generally only average in the oxidized zone (above about 30 metres), but were effectively 100% below this. Highest core losses were generally recorded in areas of mineralization which are characterised by fracturing. Where necessary, the use of adjacent RC and diamond holes was employed to minimise this problem.



The vast majority of the exploration drilling was inclined at 60° from the horizontal, and downhole surveys were conducted for most of the diamond holes. The technique of hole "twinning" (i.e. drilling in opposite directions) was periodically employed in the RC programme.

Because of the complex and irregular distribution of mineralization, regular grid drilling was not practical and hole and line spacings were varied according to specific circumstances. Locations of all exploration drillholes are shown in Figure 1.

3. Close-Spaced RC Drilling

Two lines of close-spaced vertical RC drilling were executed across two of the main zones of mineralization to provide a more detailed understanding of the nature and distribution of the gold mineralization. These holes were spaced at 2.5 metre centres and drilled vertically to a depth of 20 metres. Each line comprised 11 holes to assess a cross-strike width of 25 metres. Information gained from this work aided the interpretation of the more widely spaced exploration drilling, and also provided bulk samples for metallurgical testing.

SURVEY & DATA LOCATION

Using low-level colour aerial photography (1:4000 scale) in conjunction with ground survey control, a series of 12 base map sheets at 1:1000 scale and with contour intervals of 0.5 metres was photogrammetrically compiled for the area. These sheets utilized the Australian Map Grid and the Australian Height Datum, but also employ the company grid which was tied in by ground survey. The company grid north is approximately 34° east of true north, and all data locations employ the company grid.

Drillholes which existed at the time of the survey were flagged and located photogrammetrically, whilst all subsequent data have been located by tape and compass from known points. There is thus a high level of accuracy for the locations of most of the data points at Glencoe.

Three dimensional coordinates of all subsurface data have been computed on the basis of surface location, azimuth and inclination, with integration of down-hole survey data. The top and base of all sampled and logged intervals have been so determined and are stored in a series of computer data-bases.

SAMPLING & ASSAYING

In total, some 16,000 assays contribute to this resource assessment, the bulk of which derive from the exploration drilling.

All gold assays have utilized fire assay techniques, and in addition to routine laboratory repeats, a range of check assays has been determined.

All drillholes were logged in detail on site by competent geologists, who were also responsible for all sampling. RC drillholes and the open-hole precollar intervals of diamond holes were logged and sampled at 1-metre down-hole intervals by riffle-splitting of the entire sample received. Diamond core was lithologically logged in detail, and sampled on the basis of the logging after diamond-sawing of the core. One half of the core was submitted for assay, the other retained in coreboxes at the site core shed.

For the statistically valid comparison of data from cored holes with the RC and openhole data, core assays were computed to one-metre intervals, however fundamental geological interpretation has in all cases been based on the raw data.



METALLURGICAL TESTING

Bulk sample metallurgical assessments have been made to determine the amenability of the surface (0 to 2 metres) material for heap-leach treatment and of both the insitu oxidized and primary mineralization for suitability for carbon-in-pulp (CIP) gold recovery. Specific metallurgical evaluation of the insitu oxidized material for heap-leaching recovery has not been undertaken as yet, and requires a number of large samples from each of the main zones. These would best be taken after removal of the surface material.

An 800 kg bulk sample of surface material from the Western Zone having an average head grade of 1.1 g/t showed an 81.5% gold extraction with low reagent consumption and an adequate flowrate. The metallurgical consultants concluded that the material was amenable to heap leaching.

Bulk samples obtained by aggregating one-metre RC drillhole samples (from 12 to 44 samples per zone) were submitted from each of the four main mineralized zones for assessment of CIP gold recovery treatment of insitu oxidized-zone mineralization. These samples showed good gold recoveries (93 to 97%) and acceptable reagent consumption, and it was concluded that the material should respond well to conventional CIP treatment. Similar testing on primary mineralization from the North Central and South Central areas showed a slight decline in gold recovery (by comparison with the oxidized zone) to 89% for the South Central area, but a significant reduction (to 66%) for the North Central area.

GEOLOGY & GOLD MINERALIZATION

Mineralization at Glencoe occurs in metamorphosed Proterozoic sediments of the Pine Creek Geosyncline (Mount Bonnie-Burrell Creek Formations) and proximal to an anticlinal crest (or crests). The major control appears to be discordant subvertical fracture systems occurring at low angles to the axial plane of the folding. On a large scale, particular lithological intervals are more favoured hosts than others, resulting in broadly stratabound zones following the regional fold plunge, and accounting for the laterally discontinuous (in a horizontal plane) expression of mineralization. More locally, specific lithologies (particularly carbonaceous mudstones which may show pronounced dilation in the axial regions) give rise to stratabound saddle reef mineralization which extends out from the main fracture zones. Other structural controls, including subsidiary fracture systems and cross-trending tensional features, together with minor lamprophyric dykes (which are themselves largely controlled by the major fracture systems), are also related to the mineralization. The overall effect is broadly anastomosing complex and irregular networks of mineralization concentrated in four main zones and a number of smaller peripheral occurrences (Figure 1).

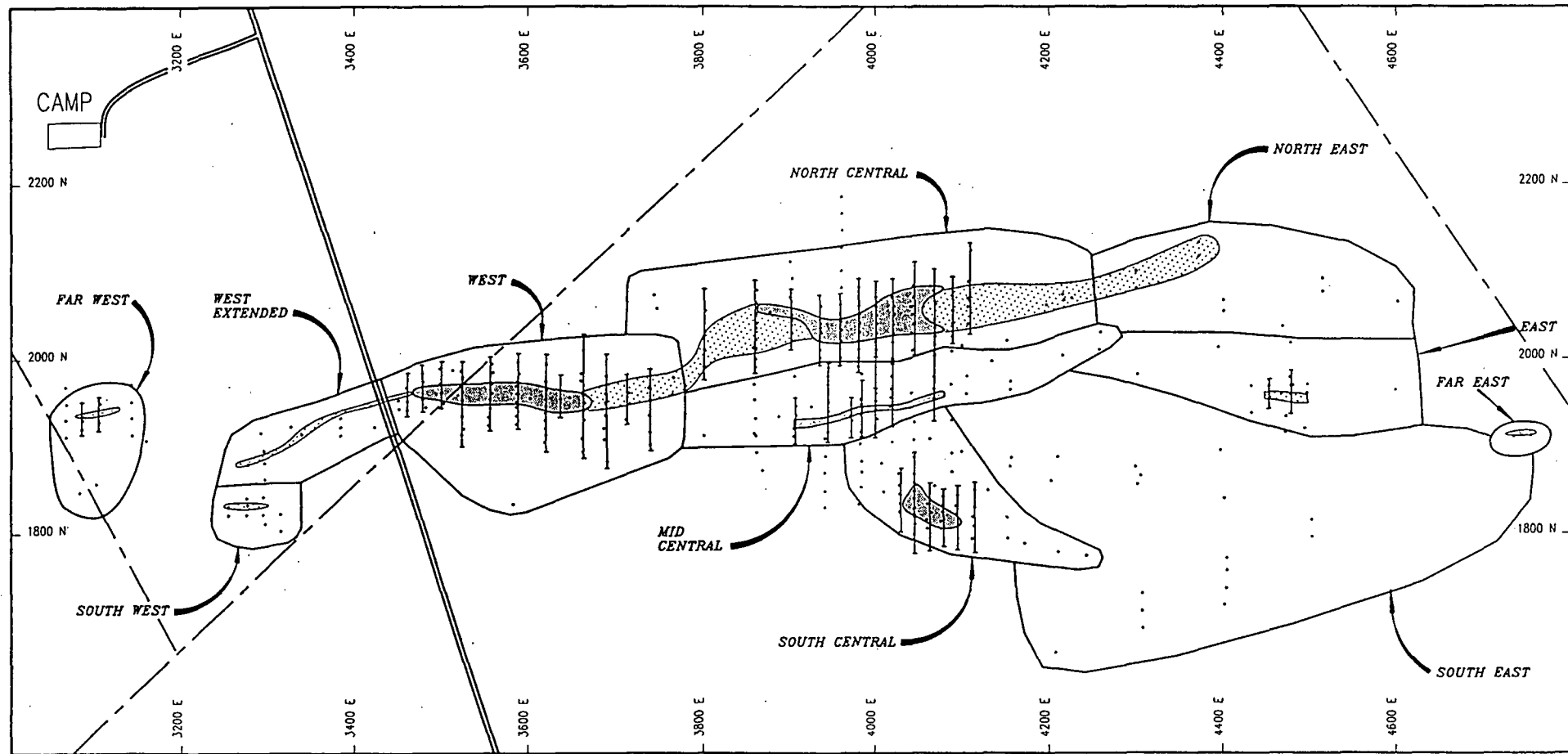
There is a broad geochemical gold anomaly over the length of the Glencoe prospect, with very few samples registering below the detection level of 0.01 ppm gold. Assessment of the Glencoe assay data shows a statistical threshold value for gold at about 0.25 g/t, however for the purpose of defining mineralization in a geological (**not** economic) sense, a more conservative threshold value of 0.5 g/t has been used to define the geological resource (see below).

Mineralization is largely restricted to quartz-veined material with minor contribution from lamprophyric dykes (where these are altered and mineralized), and from brecciated and chloritized country rock. All three styles are fundamentally controlled by the fracture systems described, with quartz also occurring as conformable veins.



Figure 1

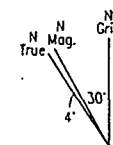
MAGNUM GOLD N.L. GLENCOE PROSPECT



SCALE
0 100 200
Metres

LEGEND

- | | | | |
|--|---|--|----------------|
| | Main zones of mineralization | | Roads |
| | Peripheral & lower grade mineralization | | Fences |
| | Drillholes | | Cross sections |



Within the quartz veining, gold occurs both as silica-locked particles and intergranular to sulphides, principally pyrite, arsenopyrite and chalcopyrite. Higher gold values occur in rocks affected by late-stage chloritic alteration and brecciation, and in these cases the gold is largely particulate and is enclosed by a chloritic matrix as well as intergranular to, and as films on, sulphides. In the oxidized zone, these gold occurrences are modified by oxidation of the sulphides, leaving gold in particulate and film forms.

As indicated in Tables 1 and 2, there is a general (albeit variable) decrease in gold grade from the oxidised to the primary zone (i.e. above and below RL70 metres).

ESTIMATING PROCEDURES

The complex and variable nature of the Glencoe mineralization has precluded the use of three-dimensional geostatistical estimating procedures at this stage, and conventional cross-sectional techniques have been employed. This complexity has also necessitated a greater than normal degree of conservatism in the extrapolation and interpolation of data, and in this context it is considered that the figures derived represent minima for each of the categories and groupings.

The locations of cross-sections utilized in this estimation are shown on Figure 1.

In all cases for estimating, gold grades of greater than 20 g/t have been cut to this figure, which is somewhat less than the mean of all values greater than 10 g/t. For the surface resource estimation, a relative density of 1.9 g/cc has been used, while for insitu material (both oxidized zone and primary mineralization) a density of 2.5 g/cc was employed to convert volumes to tonnages.

Resources have been estimated for:

1. Surface Material

Material from the surface to 2 metres vertical depth and comprising elluvial/colluvial shed from the zones of insitu mineralization together with adjacent material which probably results from surficial chemical scavenging and enrichment phenomena.

2. Insitu Oxidized Mineralization

Generally above 30 metres vertical depth. For the purpose of resource estimation, this has been defined as being from the surface down to a reduced level of 70 metres above sea level (RL 70m) which represents a vertical interval from ground surface of about 25 to 35 metres at Glencoe.

3. Insitu Primary Mineralization

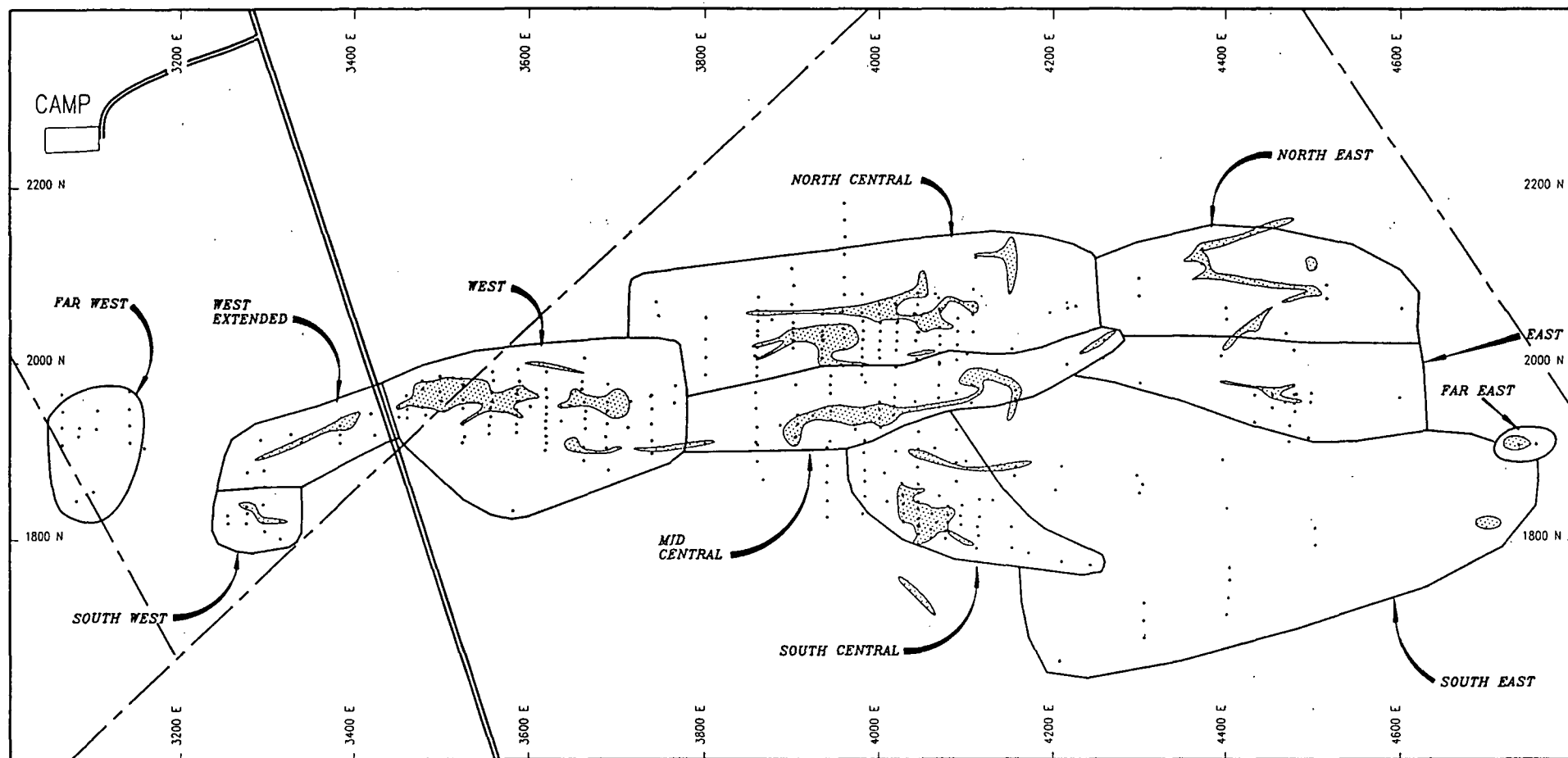
- (a) From RL70m to RL40m, a vertical interval of 30 metres.
- (b) From RL40m to RL0m, a vertical interval of 40 metres.

Mineralization is known to exist below RL0m, however only very few data points exist, and it is most unlikely that such material would be economically accessible. Indicated grades, in the 3-5 g/t range, are too low to sustain underground extraction, whilst waste:ore ratios would be far too high to permit surface mining to such depths.



Figure 2

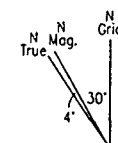
MAGNUM GOLD N.L. GLENCOE PROSPECT SURFACE RESOURCE



SCALE
0 100 200
Metres

LEGEND

- Surface mineralization
- Drillholes
- Roads
- Fences



For the groupings 2 and 3 cited above, two resource estimates have been determined to reflect firstly an insitu geological resource, and secondly a resource composited on more stringent parameters suggested by preliminary feasibility work.

1. Geological Resource

Based on 0.5 g/t cutoff and a minimum down-hole intercept of 1 metre, with high values cut to a maximum of 20 g/t.

2. Insitu "Potentially Oregrade" Resource

Based on a minimum vertical interval (computed) of 2.5 metres (to simulate what is considered to be a minimum practical extraction bench height), a cutoff grade of 1 g/t, and with high grades cut to a maximum of 20 g/t.

It must be emphasized that additional criteria, based on specific and detailed extraction and treatment studies, will need to be considered prior to determination of *mineable ore reserves* (as defined).

In the context of currently depressed gold prices (A\$467/ounce or \$15/gram at 19/01/1989) and published production costs for existing operations, a cutoff grade of around 2 g/t would be required for a stand-alone CIP operation, however the 1 g/t cutoff used in this assessment is considered valid for heap-leach treatment of Glencoe mineralization, and may also be valid for CIP treatment in an existing plant.

Preliminary mining studies suggest that viable extraction would be limited to maximum depths of 30 to 40 metres, since waste ratios become prohibitively high beyond these depths. It is thus anticipated that, subject to more exhaustive metallurgical and mining studies, much of the material falling within this resource group and above RL70 may be extractable for a heap-leach operation at a gold recovery of perhaps 80%.

RESOURCE ESTIMATES

1. GEOLOGICAL RESOURCE - Table 1 and Figure 1

Based on 0.5 g/t cutoff, minimum intercept of 1 metre and with high grades cut to 20 g/t.

A total insitu geological resource (all categories and all areas, and including the SURFACE RESOURCE - see below) from the surface to RL0m (or about 100 metres depth) is conservatively estimated at **1.5 million tonnes at a weighted average grade of 1.9 g/t**, and represents **contained gold of in excess of 90,000 ounces**.

The **insitu geological resource above RL 70m totals 668,000 tonnes at 2.04 g/t**, of which **586,000 tonnes at 2.06 g/t is in the measured category**. These represent contained gold of 43,800 and 38,800 ounces respectively.

Detailed breakdown of the Glencoe geological resource by area, depth interval and resource category is given in Table 1. It should be noted that figures for INFERRED resource, particularly in the interval RL40m to RL0m, are conservative.



2. SURFACE MATERIAL - Table 1 and Figure 1

A measured resource of 98,200 tonnes at a weighted average grade of 1.8 g/t was derived on the basis of a 0.5 g/t cutoff and using a relative density of 1.9 g/cc. Weighted average grade was computed for the vertical interval 0 to 2 metres from all subsurface data sources, and relevant surface sample grades were incorporated. The estimate is based on 250 data points which report at or above 0.5 g/t; and is considered conservative, as minimal extrapolation was used away from data points.

An additional indicated resource of approximately 25,000 tonnes at similar grade is estimated, and this mainly constitutes down-slope shed (principally to the south) from the main measured zones.

A resource of a further 25,000 tonnes is estimated in the inferred category, largely represented as on-strike continuations of the above.

A surface resource of not less than 100,000 tonnes, largely in the measured category, and up to 150,000 tonnes, is thus estimated for Glencoe, at an average grade of 1.8 g/t. On the basis of an 80% heap-leach recovery (81.5% indicated by metallurgical testing), this represents a recoverable gold resource of 4,600 to 6,900 ounces.

3. INSITU "POTENTIALLY OREGRADE" RESOURCE - Table 2 and Figure 1

Resource in this grouping has been determined for two intervals - surface to RL70m and RL70m to RL40m and only for the four main zones of mineralization. On current economic parameters, potentially extractable material from Glencoe would be largely confined to the upper interval for which a measured resource in this grouping of 300,000 tonnes grading 2.57 g/t has been derived.

For the interval RL70m to RL40m, the measured resource is 124,000 tonnes at 2.13 g/t. An additional similar tonnage and grade is estimated in the indicated+inferred categories for this lower interval.

There is only limited potential for additional resource in this grouping above RL70 from the areas of "peripheral" mineralization at Glencoe - perhaps 10,000 to 20,000 tonnes at around 2.5 g/t.

EARTH RESOURCES AUSTRALIA PTY LIMITED

January, 1989

(ERA Report A262)



TABLE 1

INSITU GEOLOGICAL RESOURCE
(Tonnes @ g/t gold)

(Based on minimum intercept of 1 metre, cutoff grade of 0.5 g/t, SG of 2.5 and with high values cut to 20 g/t)

<u>RL INTERVAL</u>	<u>MEASURED</u>	<u>INDICATED</u>	<u>INFERRED</u>	<u>TOTAL</u>
<u>WEST</u>				
+70mRL	148,000 @ 2.13	-	-	148,000 @ 2.13
40-70mRL	66,000 @ 1.82	19,000 @ 1.50	13,000 @ 1.70	98,000 @ 1.74
0-40mRL	-	11,000 @ 2.00	65,000 @ 1.70	76,000 @ 1.74
<u>NORTH CENTRAL</u>				
+70mRL	216,000 @ 1.86	-	-	216,000 @ 1.86
40-70mRL	100,000 @ 1.77	54,000 @ 1.55	9,000 @ 1.70	163,000 @ 1.70
0-40mRL	-	47,000 @ 1.95	132,000 @ 1.70	179,000 @ 1.77
<u>MID-CENTRAL</u>				
+70mRL	83,000 @ 2.12	-	4,000 @ 2.00	87,000 @ 2.11
40-70mRL	-	26,000 @ 1.43	43,000 @ 1.50	69,000 @ 1.47
0-40mRL	-	-	78,000 @ 1.50	78,000 @ 1.50
<u>SOUTH CENTRAL</u>				
+70mRL	39,000 @ 3.45	3,000 @ 1.92	-	42,000 @ 3.34
40-70mRL	22,000 @ 3.08	1,000 @ 0.80	7,000 @ 1.90	30,000 @ 2.73
0-40mRL	-	6,000 @ 3.11	29,000 @ 2.70	35,000 @ 2.77
<u>SUB-TOTALS</u>				
+70mRL	486,000 @ 2.11	3,000 @ 1.92	4,000 @ 2.00	493,000 @ 2.11
40-70mRL	188,000 @ 1.94	100,000 @ 1.50	72,000 @ 1.60	360,000 @ 1.75
0-40mRL	-	64,000 @ 2.07	304,000 @ 1.70	368,000 @ 1.80
	<u>674,000 @ 2.06</u>	<u>167,000 @ 1.73</u>	<u>380,000 @ 1.70</u>	<u>1,221,000 @ 1.91</u>
<u>FAR WEST</u>				
+70mRL	-	15,000 @ 1.80	-	-
+0mRL	-	-	30,000 @ 1.50	30,000 @ 1.50
<u>EAST</u>				
+70mRL	-	10,000 @ 2.00	-	10,000 @ 2.00
+0mRL	-	-	20,000 @ 2.00	20,000 @ 2.00
<u>SURFACE MINERALIZATION</u>				
0-2m	98,000 @ 1.77	25,000 @ 1.77	25,000 @ 1.77	148,000 @ 1.77
<u>TOTALS</u>	<u>772,000 @ 2.02</u>	<u>217,000 @ 1.75</u>	<u>455,000 @ 1.70</u>	<u>1,444,000 @ 1.88</u>

SAY 1,500,000 @ 1.9 g/t

NOTE:

Surface RL ranges from 98 to 107 metres above sea level, with an average of about 103m over the area containing the defined resources. 70mRL corresponds to an approximate depth of 33 metres, 40mRL corresponds to about 63 metres depth, and 0mRL to some 103m.



TABLE 2

RESOURCE BASED on 2.5 m VERTICAL COMPOSITES at 1 g/t CUTOFF
(Tonnes @ g/t gold)

(With high grades cut to 20 g/t and SG of 2.5)

<u>RL INTERVAL</u>	<u>MEASURED</u>	<u>INDICATED+INFERRED</u>	<u>TOTAL</u>
<u>WEST</u>			
+70mRL	100,000 @ 2.40	-	100,000 @ 2.40
40-70mRL	30,000 @ 2.09	30,000 @ 2.00	60,000 @ 2.05
0-40mRL	-	50,000 @ 2.00	50,000 @ 2.00
<u>NORTH CENTRAL</u>			
+70mRL	115,000 @ 2.45	-	115,000 @ 2.45
40-70mRL	60,000 @ 1.99	30,000 @ 2.00	90,000 @ 1.99
0-40mRL	-	90,000 @ 2.00	90,000 @ 2.00
<u>MID-CENTRAL</u>			
+70mRL	50,000 @ 2.21	-	50,000 @ 2.21
40-70mRL	-	40,000 @ 1.50	40,000 @ 1.50
0-40mRL	-	40,000 @ 1.50	40,000 @ 1.50
<u>SOUTH CENTRAL</u>			
+70mRL	35,000 @ 3.93	-	35,000 @ 3.93
40-70mRL	22,000 @ 2.89	8,000 @ 2.80	30,000 @ 2.87
0-40mRL	-	30,000 @ 2.80	30,000 @ 2.80
<u>TOTALS</u>			
+70mRL	300,000 @ 2.57	-	300,000 @ 2.57
40-70mRL	112,000 @ 2.19	108,000 @ 1.87	220,000 @ 2.03
0-40mRL	-	210,000 @ 2.02	210,000 @ 2.02
	<u>412,000 @ 2.46</u>	<u>318,000 @ 1.97</u>	<u>730,000 @ 2.30</u>

NOTE:

Surface RL ranges from 98 to 107 metres above sea level, with an average of about 103m over the area containing the defined resources. 70mRL corresponds to an approximate depth of 33 metres, 40mRL corresponds to about 63 metres depth, and 0mRL to some 103m.



APPENDIX 2

GLENCOE PROSPECT CROSS SECTIONS

1. Interpreted Geology
2. Insitu Resources (2.5m Bench)

Earth Resources Australia Pty. Limited
Report A/297 Glencoe Prospect N.T.
December 1989
For Magnum Gold N.L.



100m RL _____

90m RL _____

80m RL _____

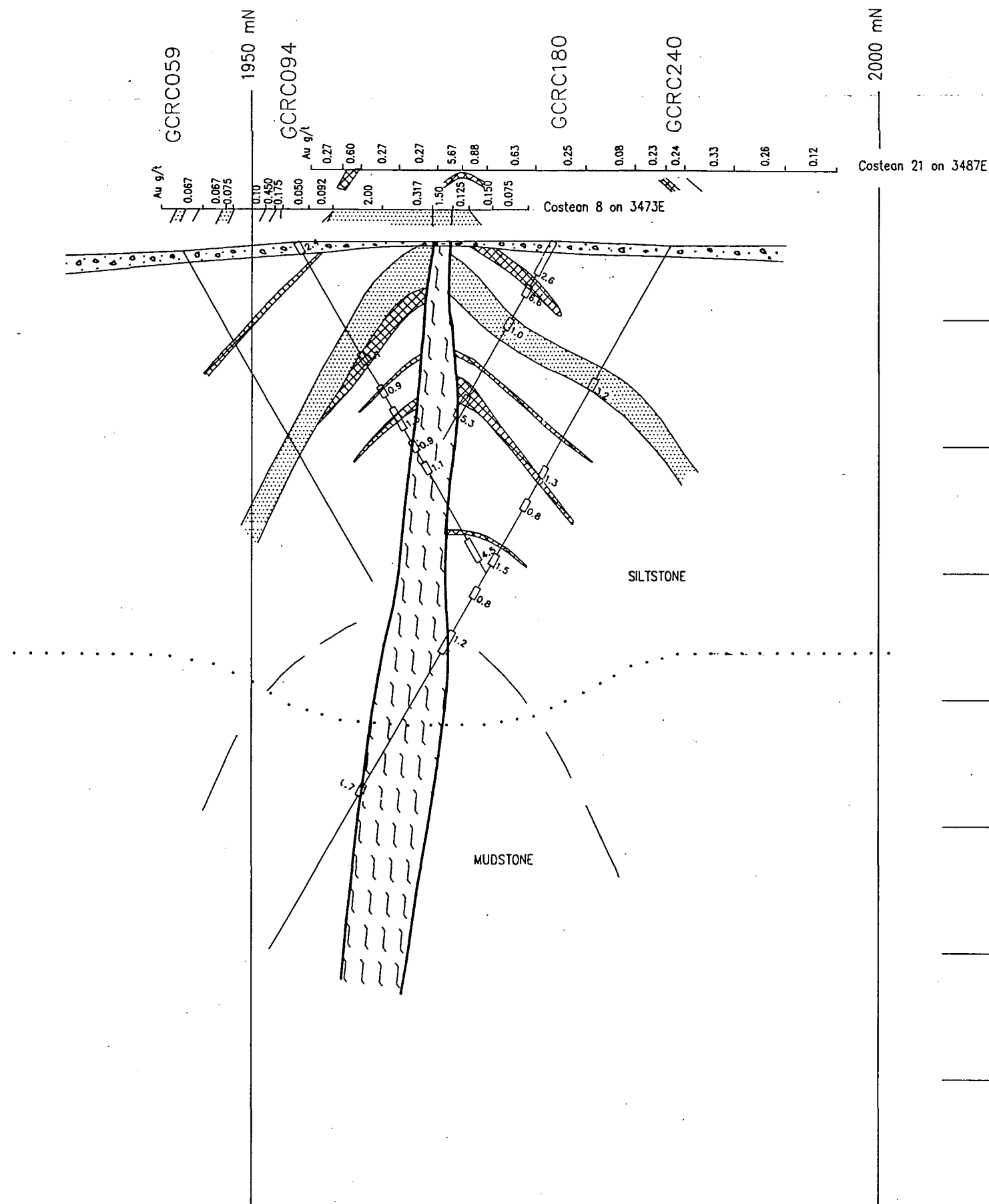
70m RL _____

60m RL _____

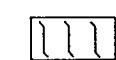
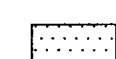
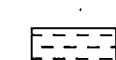
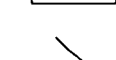
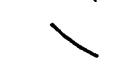
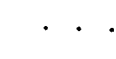
50m RL _____

40m RL _____

30m RL _____



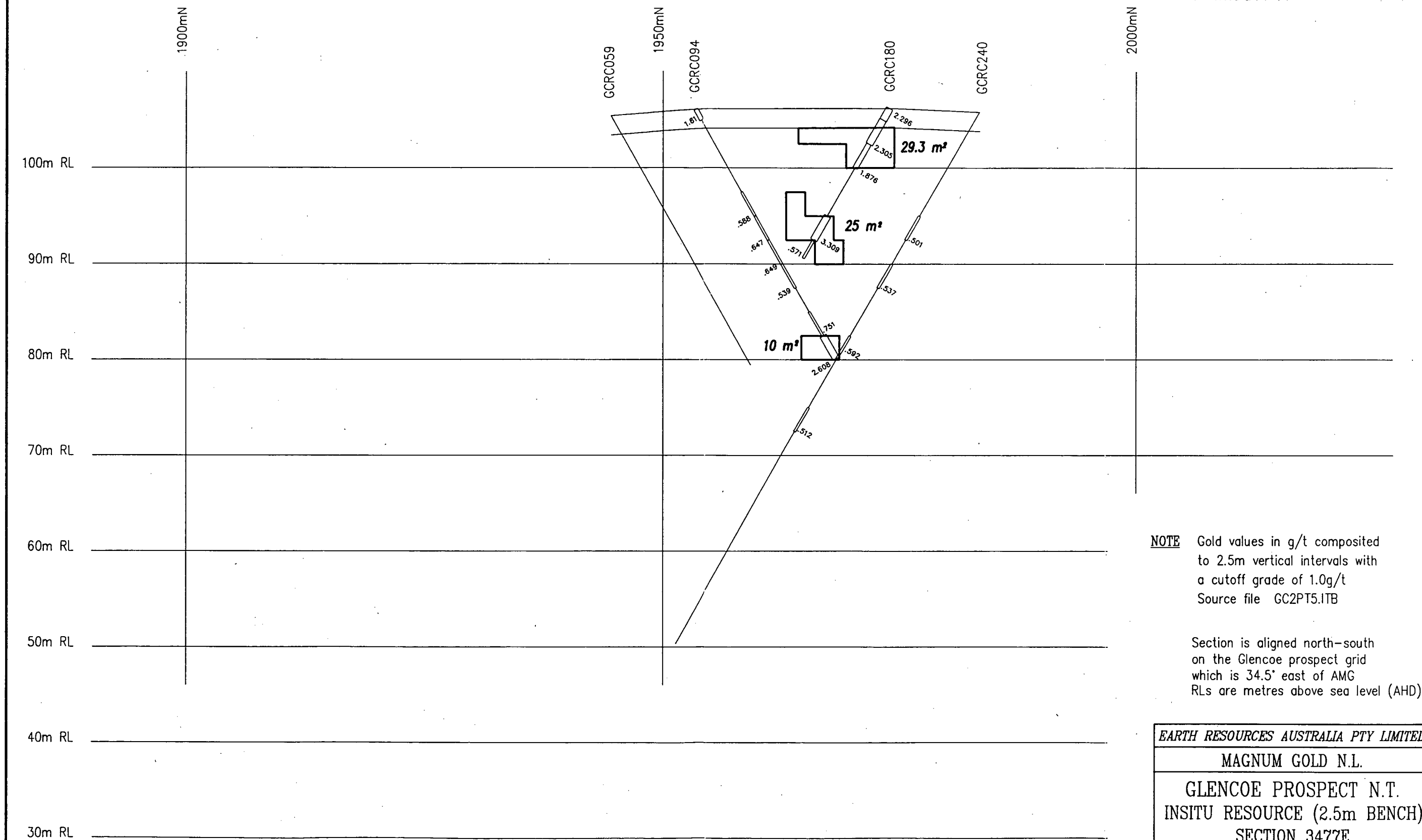
KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 3477E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3477WEG1	FIGURE

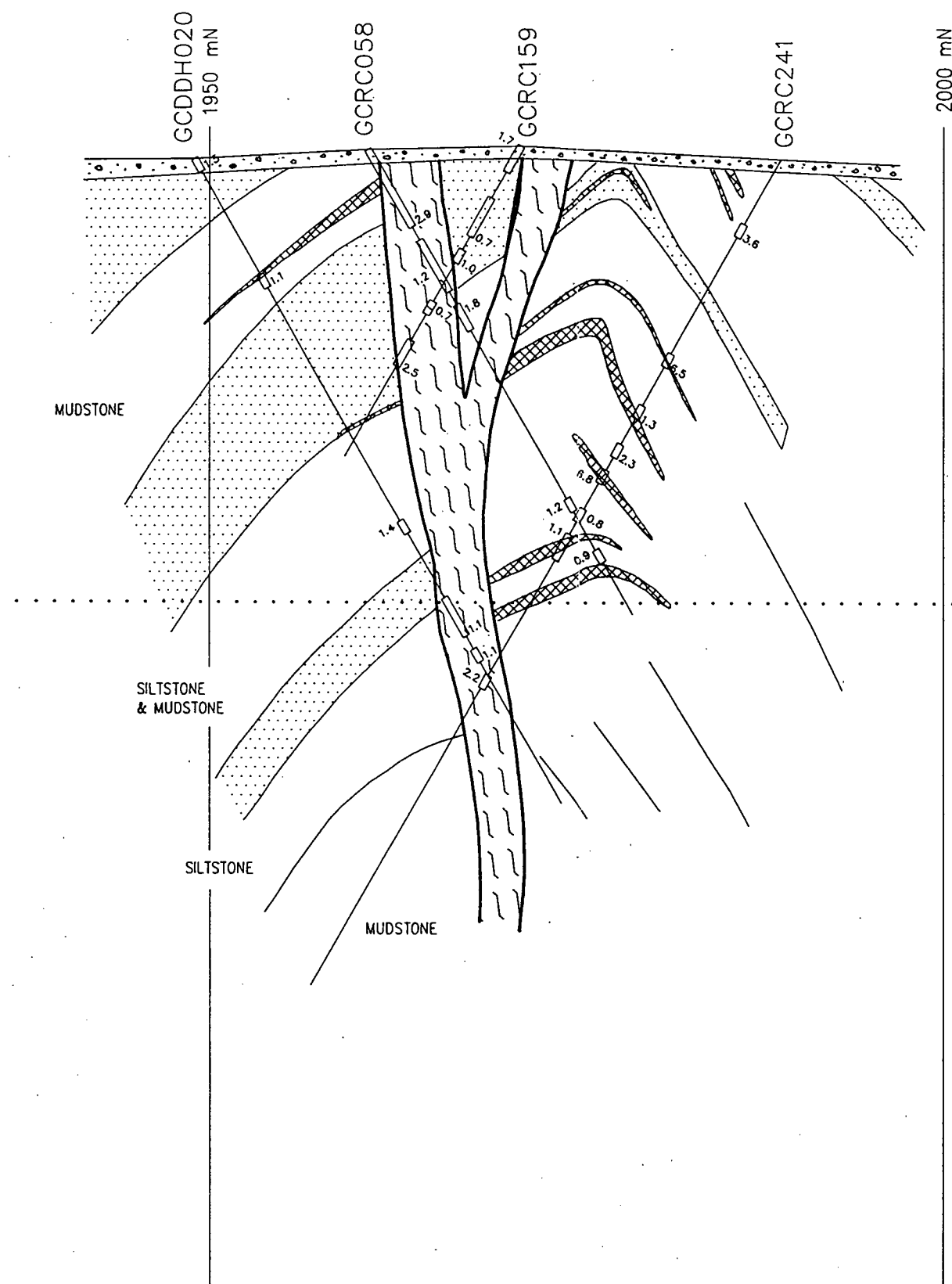


NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.1TB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3477E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3477WEB2	FIGURE

100m RL _____
90m RL _____
80m RL _____
70m RL _____
60m RL _____
50m RL _____
40m RL _____
30m RL _____



KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

GLENCOE PROSPECT N.T.

INTERPRETED GEOLOGY

SECTION 3500E

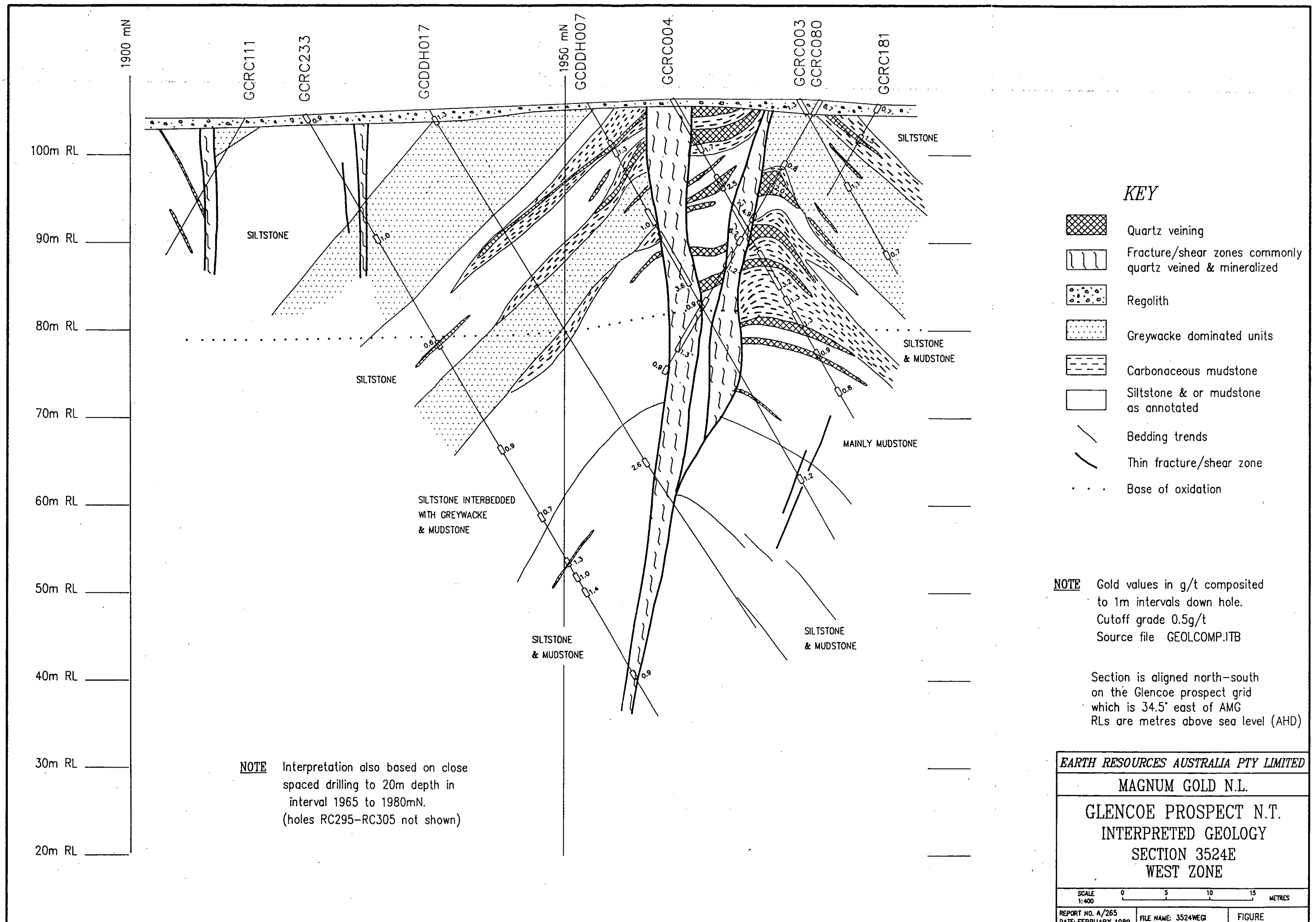
WEST ZONE

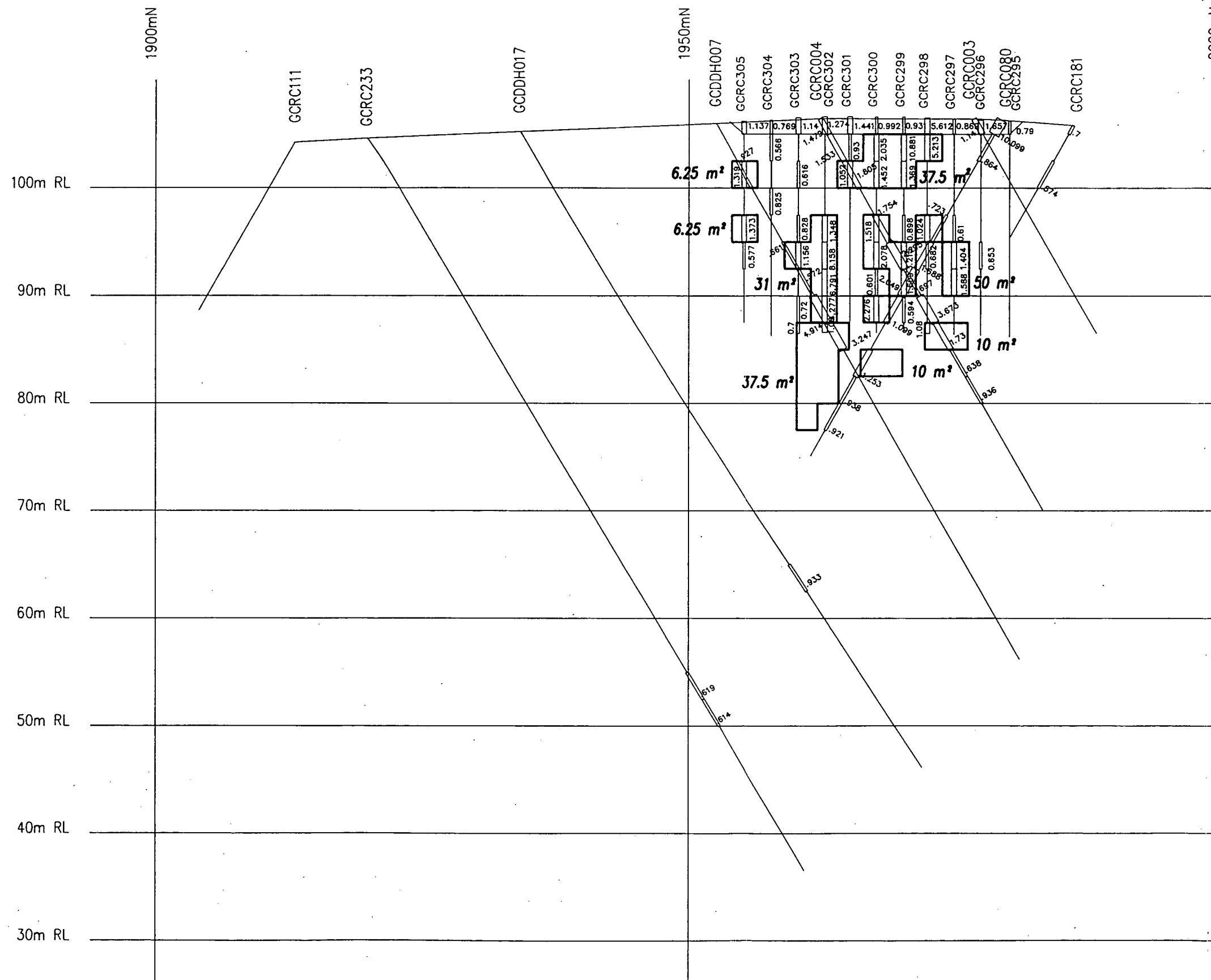
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REPORT NO. A/265
DATE: FEBRUARY 1989

FILE NAME: 3500WEG1

FIGURE

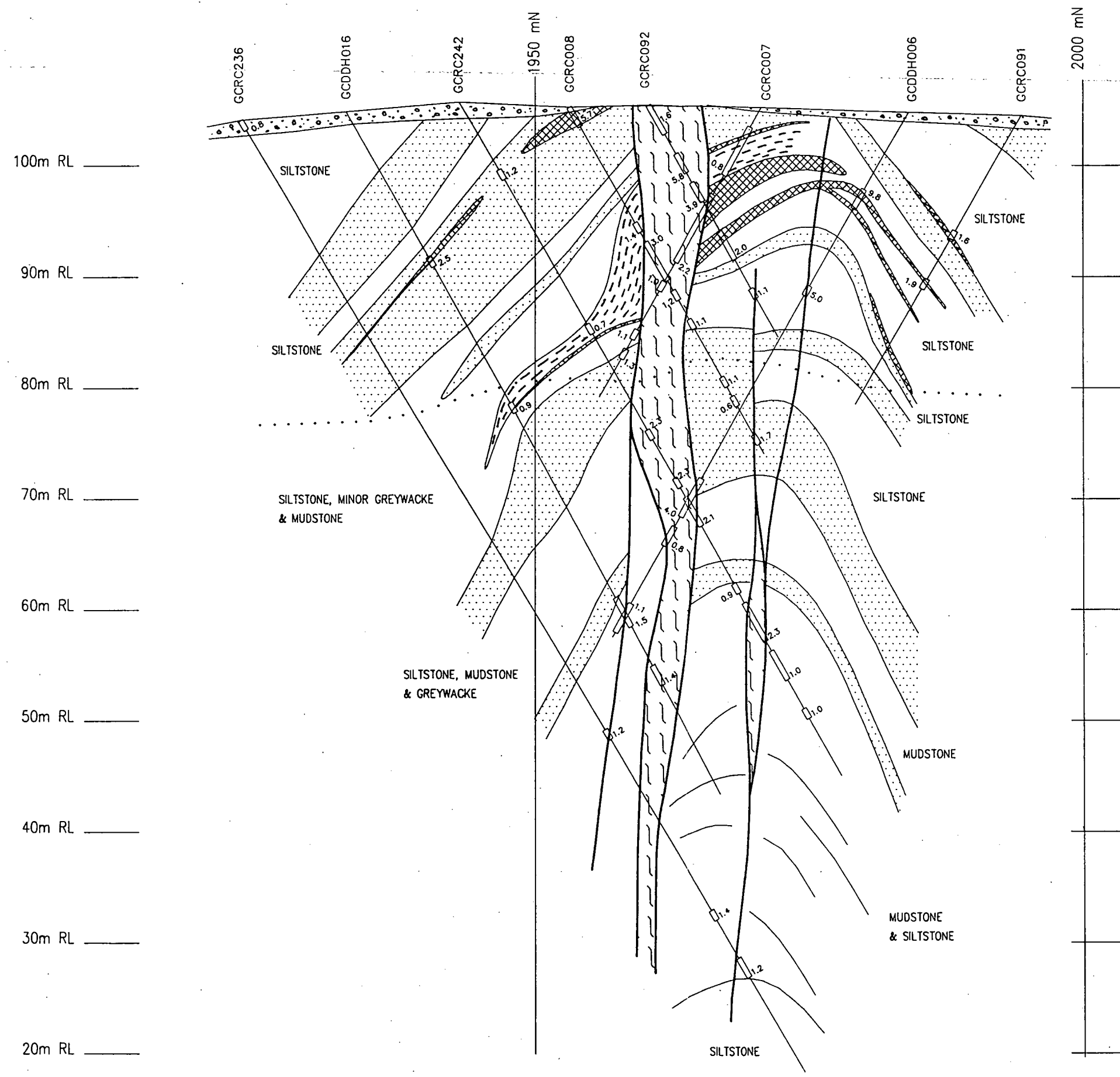




NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3524E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3524WEB2	FIGURE



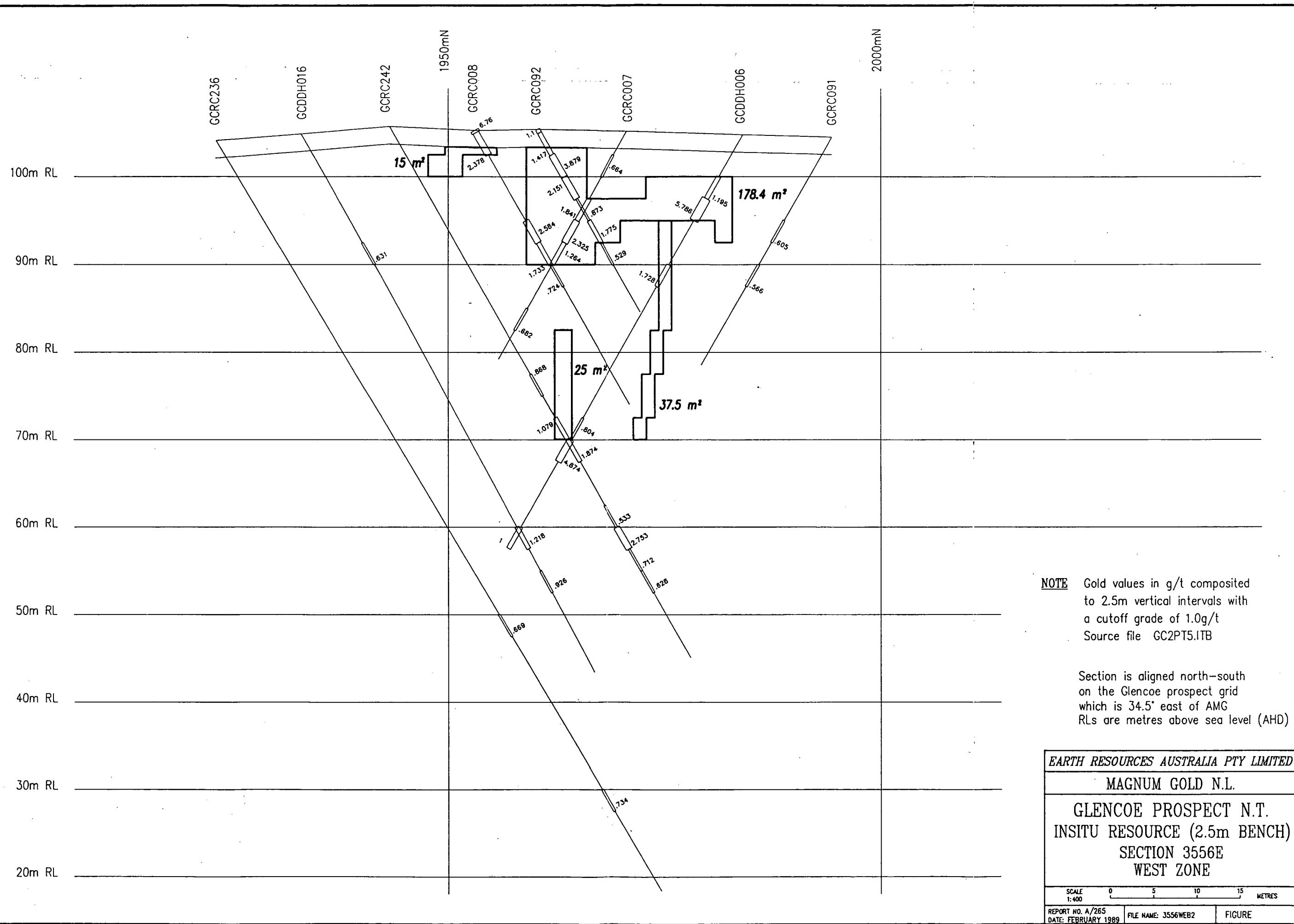
KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

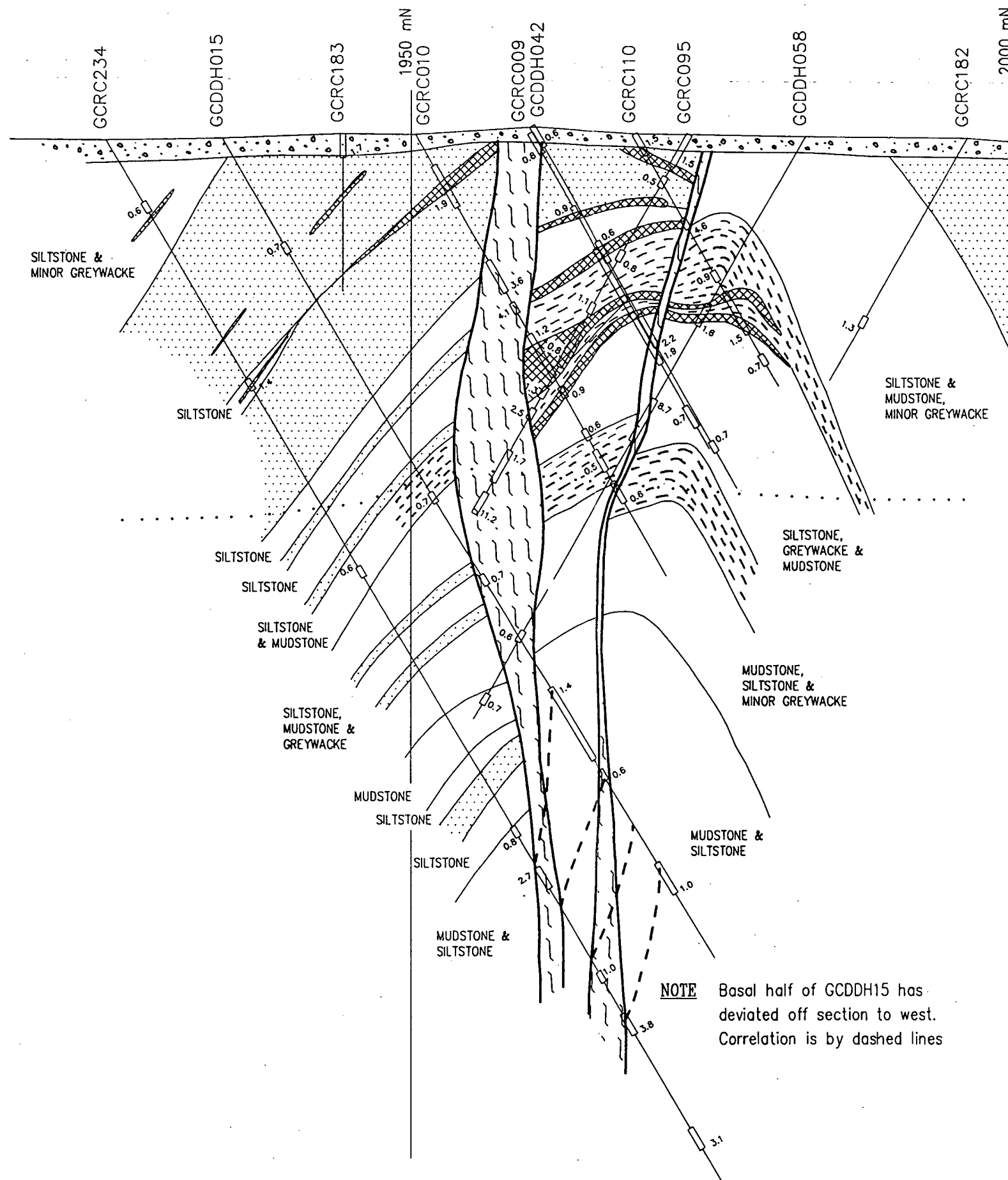
NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 3556E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3556WEGI	FIGURE



100m RL
90m RL
80m RL
70m RL
60m RL
50m RL
40m RL
30m RL
20m RL



GREYWACKE
& SILTSTONE

SILTSTONE &
MUDSTONE,
MINOR GREYWACKE

MUDSTONE,
SILTSTONE &
MINOR GREYWACKE

MUDSTONE &
SILTSTONE

NOTE Basal half of GCDDH15 has
deviated off section to west.
Correlation is by dashed lines

KEY

- Quartz veining
- Fracture/shear zones commonly
quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone
as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited
to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

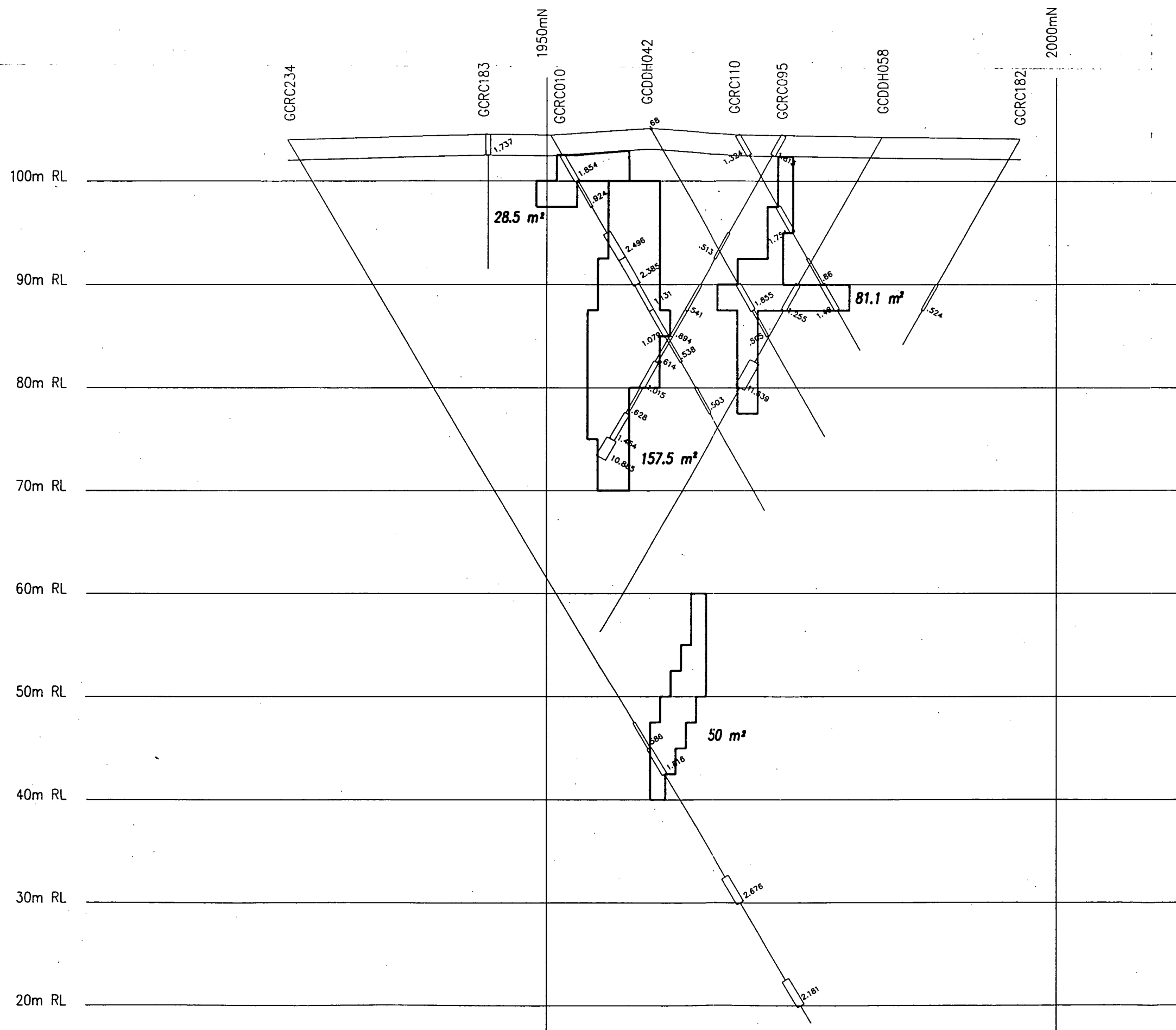
Section is aligned north-south
on the Glencoe prospect grid
which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

GLENCOE PROSPECT N.T.
INTERPRETED GEOLOGY
SECTION 3587E
WEST ZONE

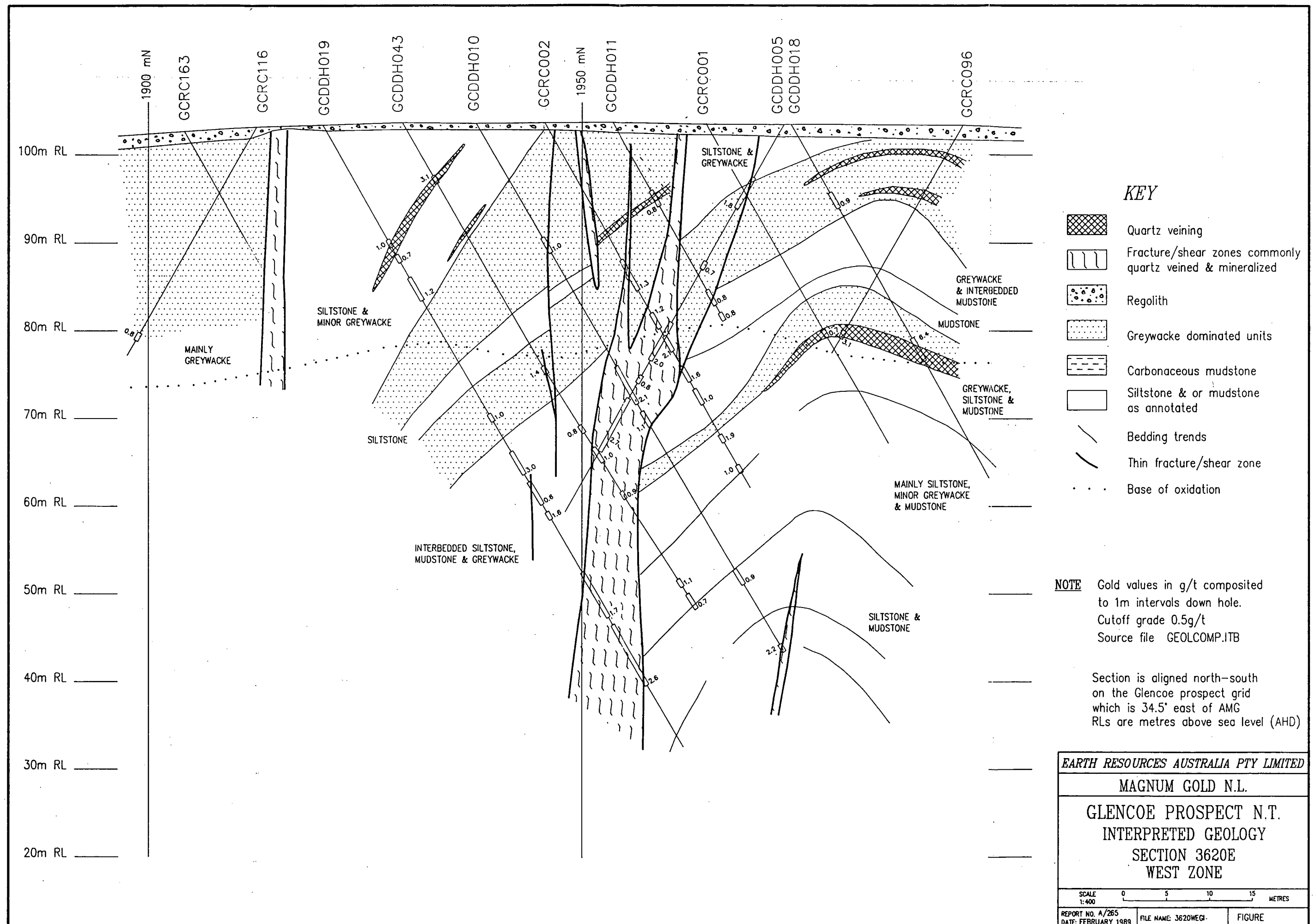
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1:400
REPORT NO. A/265
DATE: FEBRUARY 1989
FILE NAME: 3587WEG
FIGURE

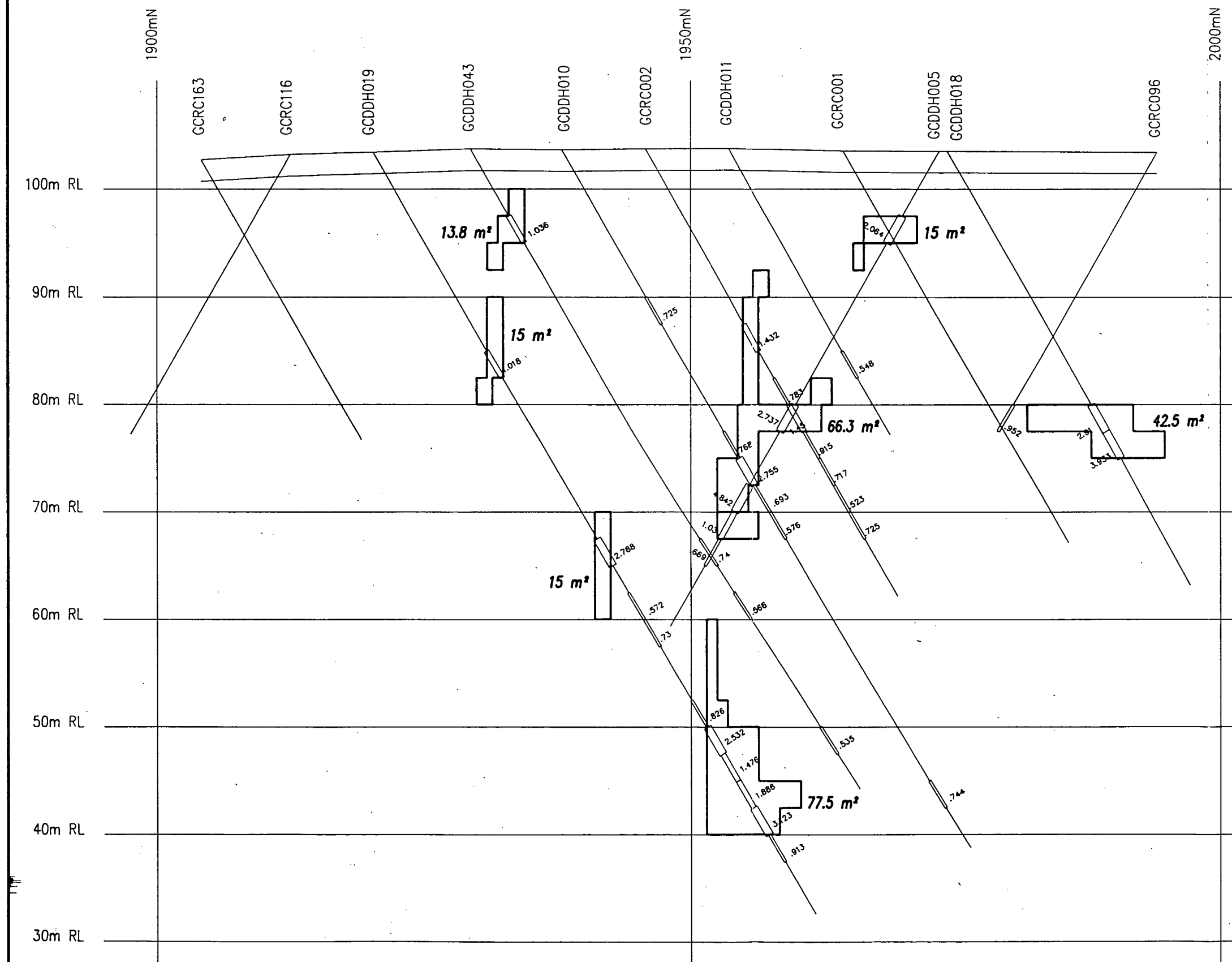


NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3587E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3587WEB2	FIGURE

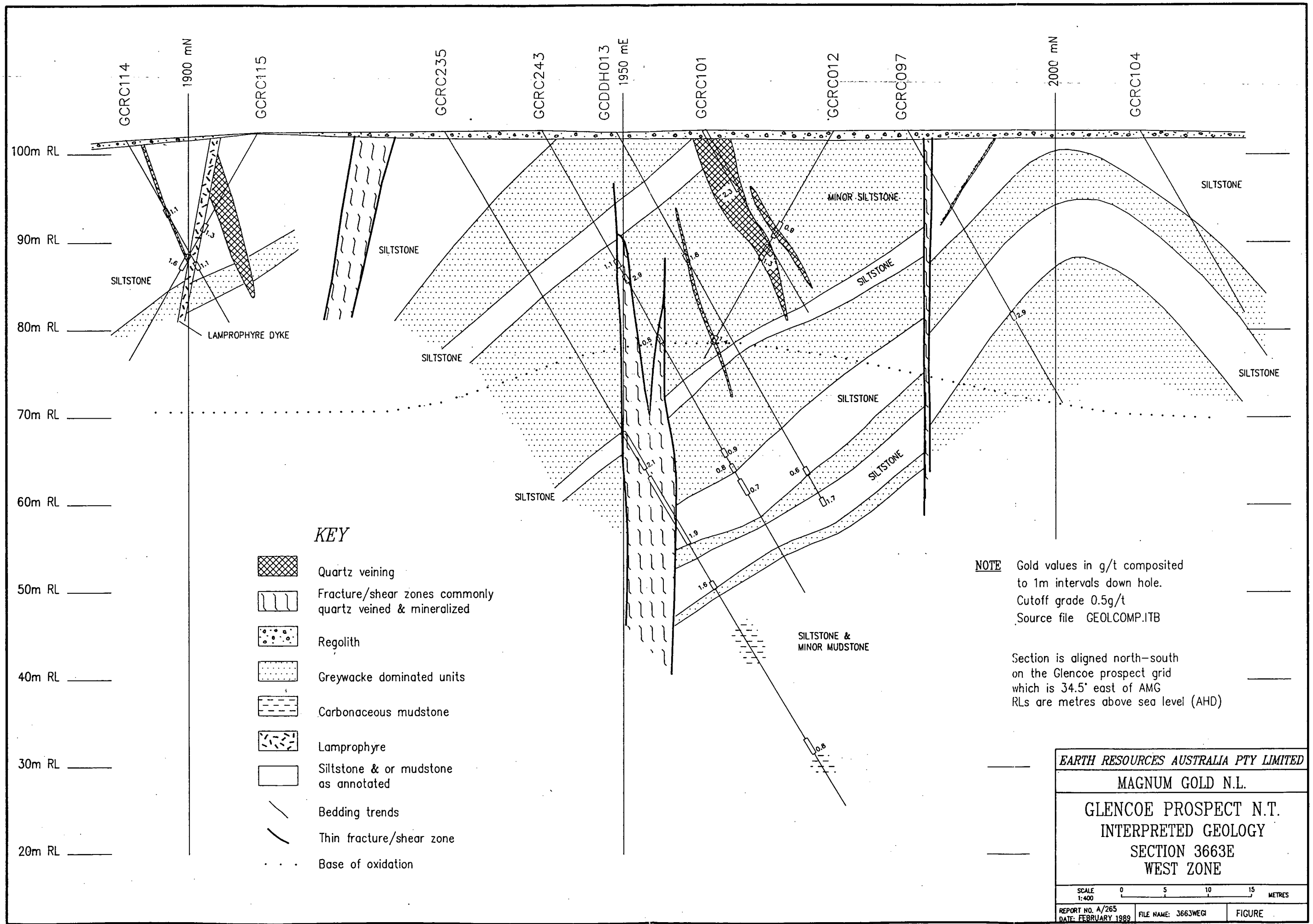




NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3620E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3620WEB2	FIGURE



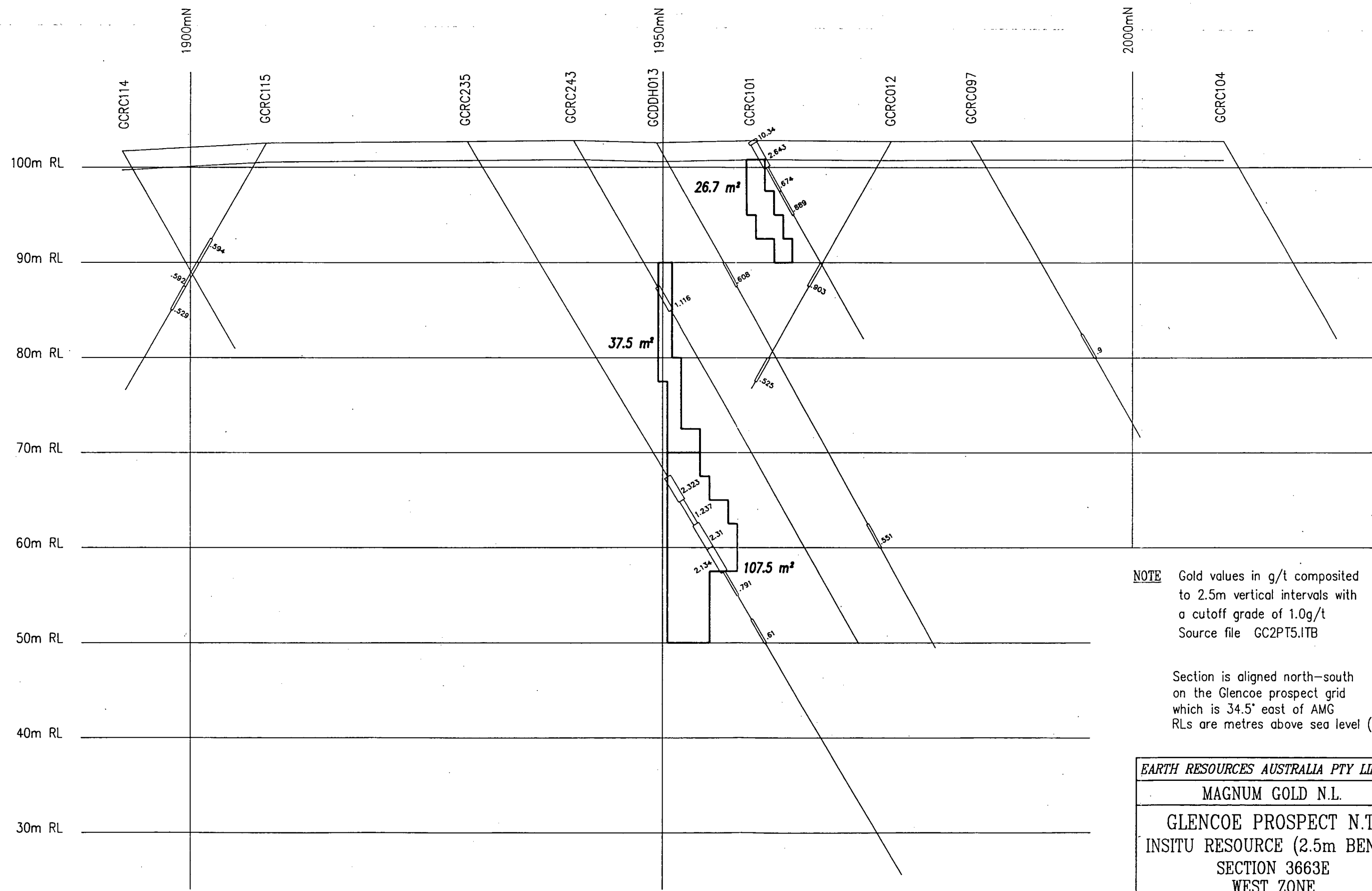
KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Lamprophyre
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

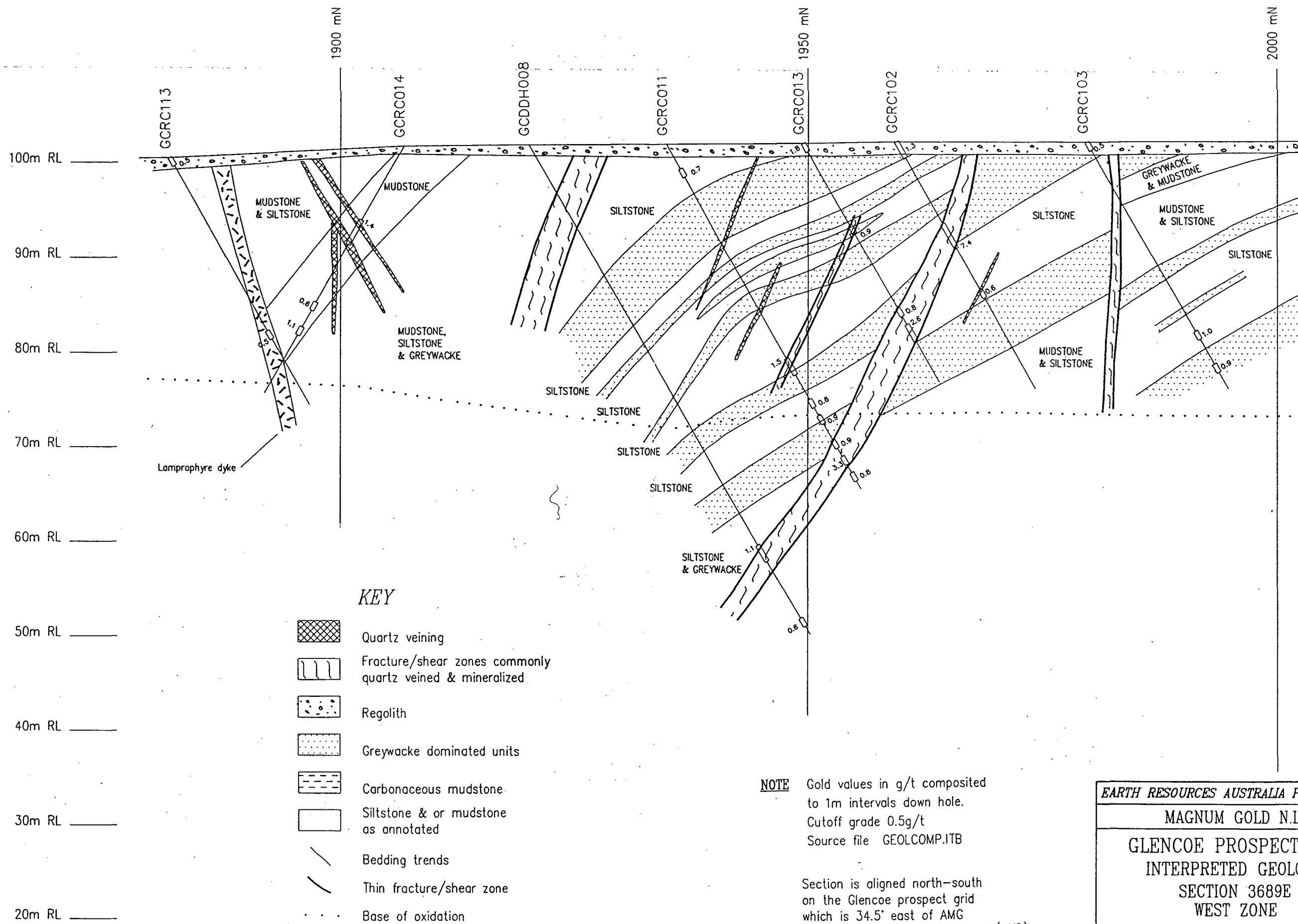
EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 3663E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3663WEG	FIGURE



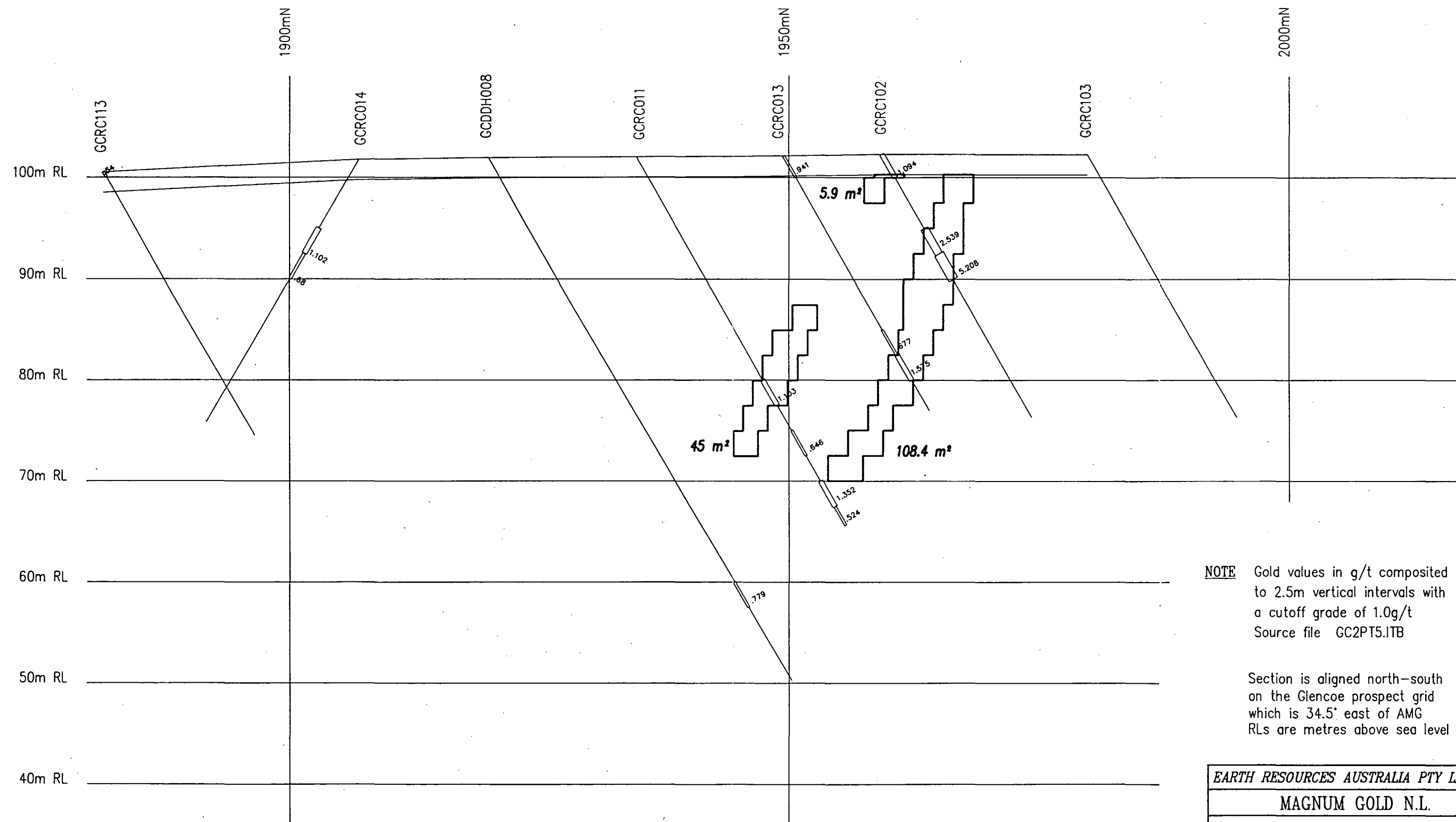
NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
 Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
 RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T. INSITU RESOURCE (2.5m BENCH) SECTION 3663E WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3663WEB2	FIGURE



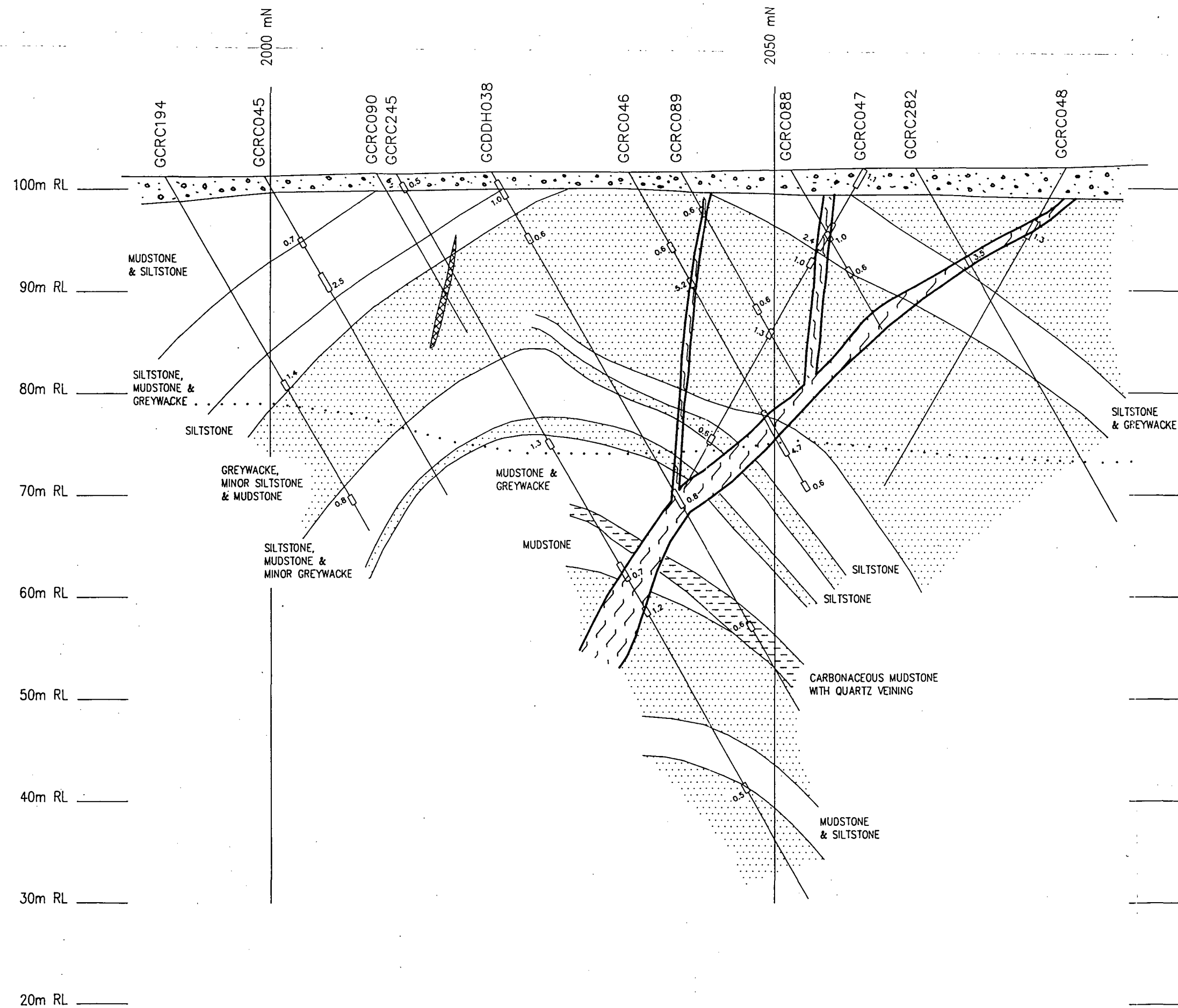
EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 3689E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3689WEG1	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.1TB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3689E		
WEST ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3689WEB2	FIGURE



KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

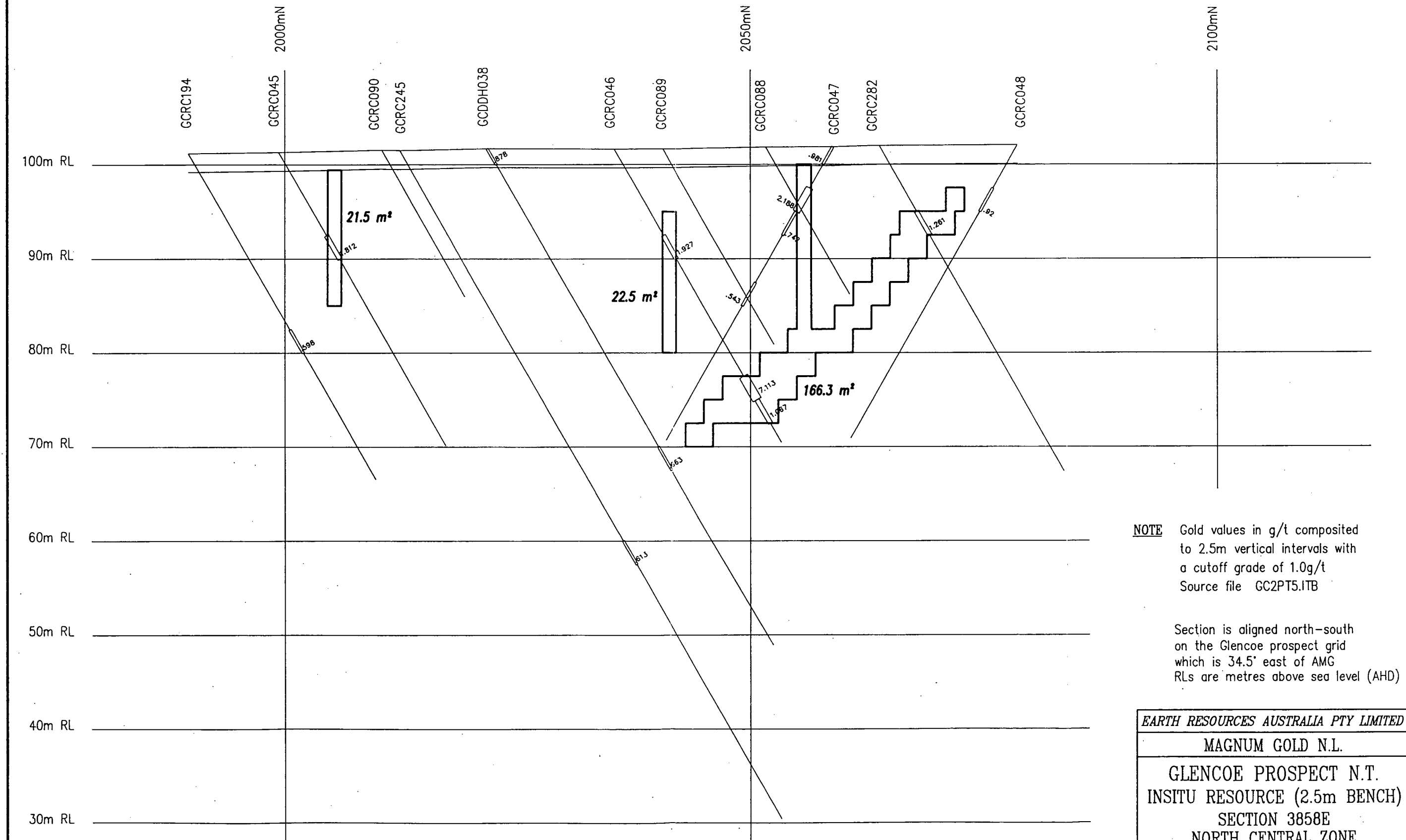
GLENCOE PROSPECT N.T.
INTERPRETED GEOLOGY
SECTION 3858E
NORTH CENTRAL ZONE

SCALE 1:400 0 5 10 15 METRES

REPORT NO. A/265
DATE: FEBRUARY 1989

FILE NAME: 3858NCGI

FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3858E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3858NCB2	FIGURE

100m RL _____

90m RL _____

80m RL _____

70m RL _____

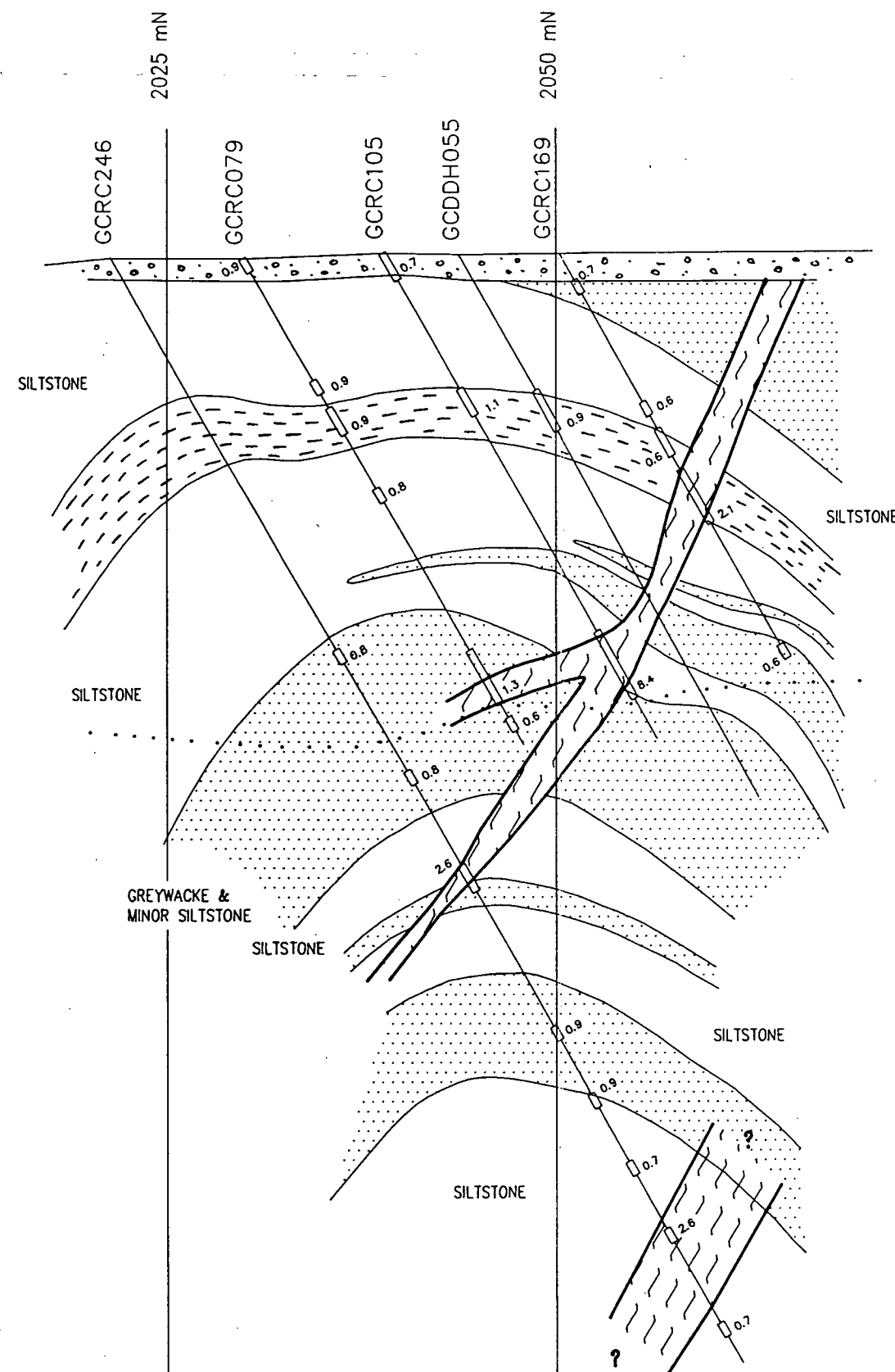
60m RL _____

50m RL _____

40m RL _____

30m RL _____

20m RL _____



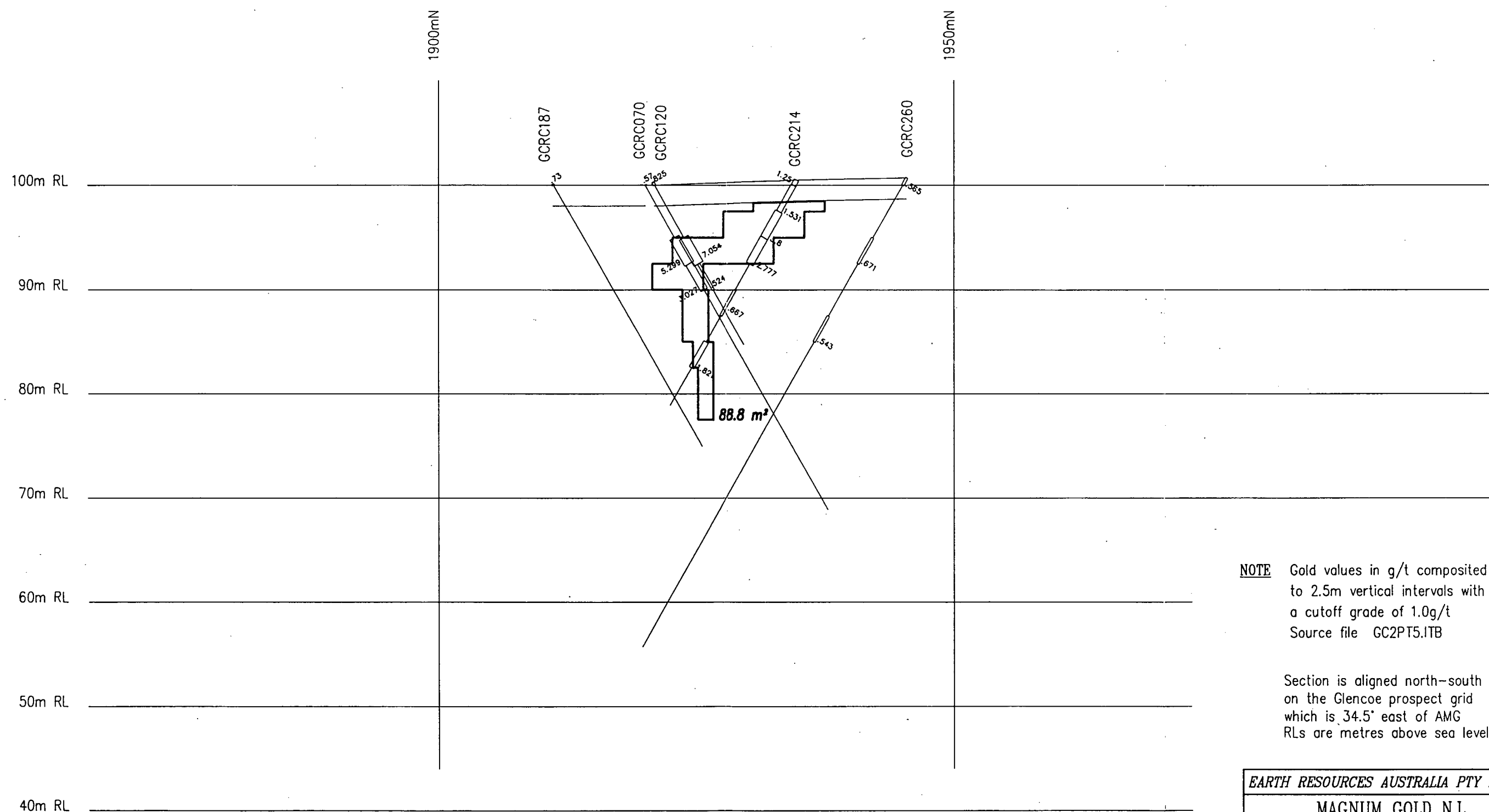
KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 3900E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3900NCGI	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3900E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3900NCB2	FIGURE

100m RL _____

90m RL _____

80m RL _____

70m RL _____

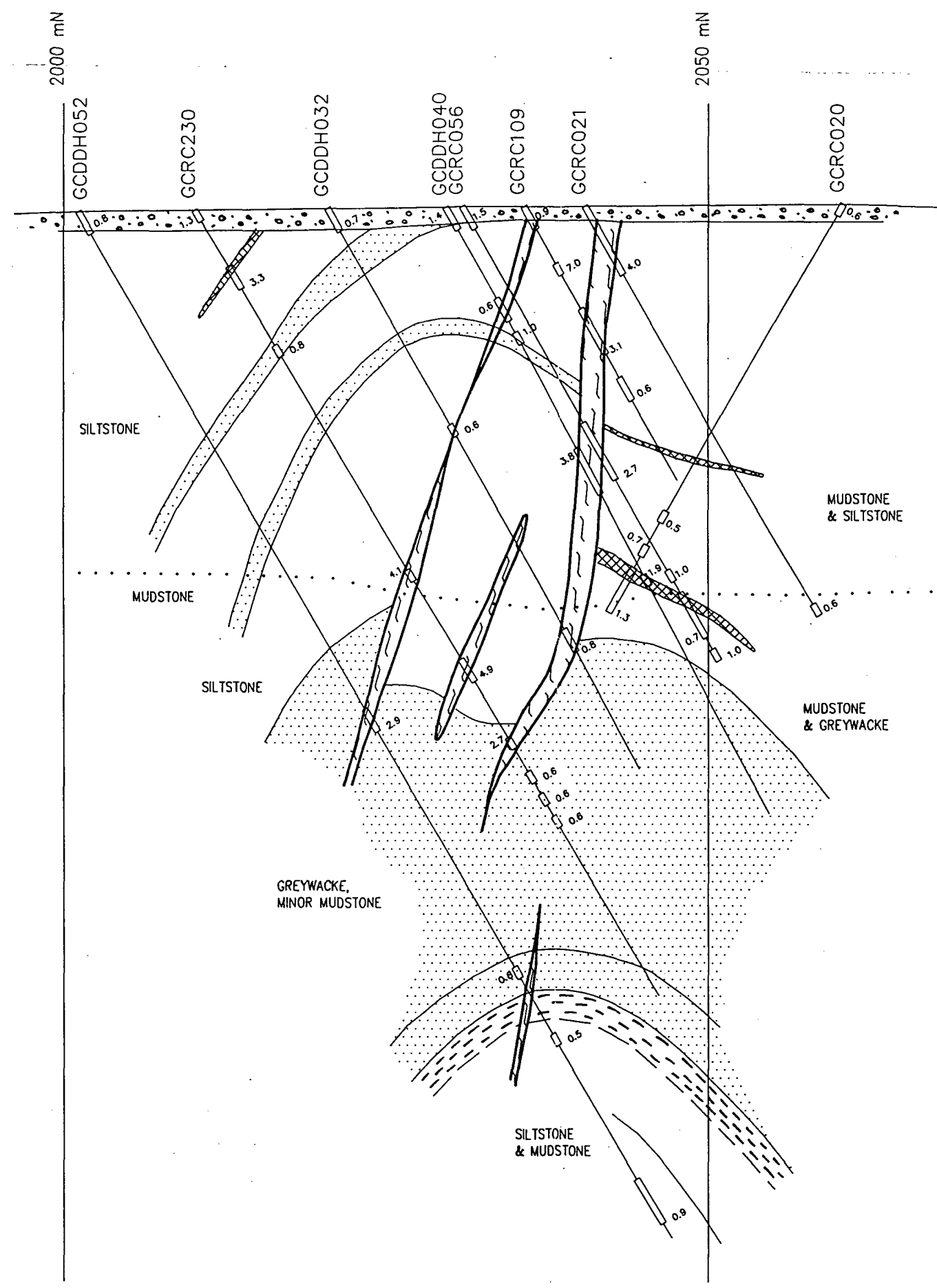
60m RL _____

50m RL _____

40m RL _____

30m RL _____

20m RL _____



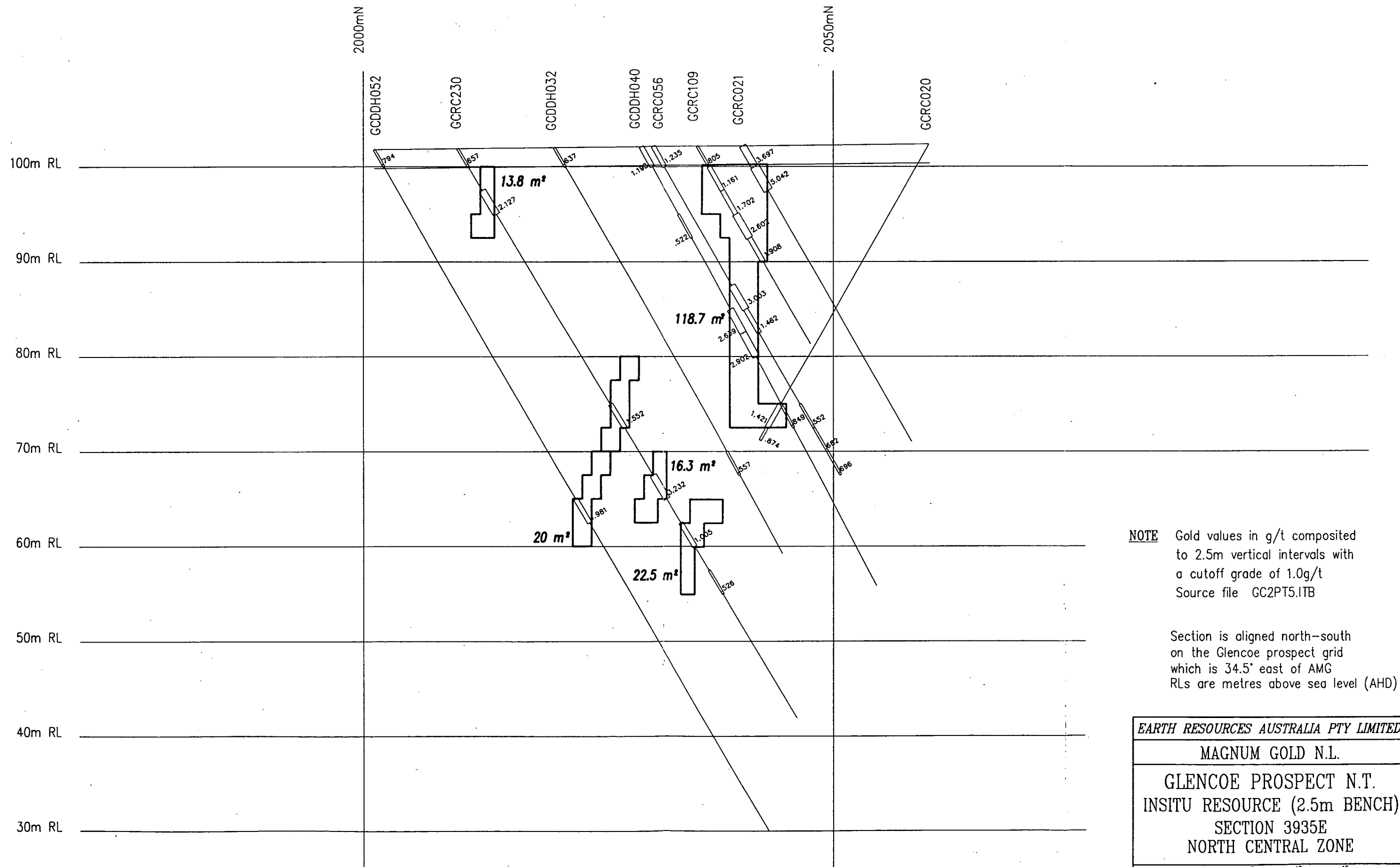
KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T. INTERPRETED GEOLOGY SECTION 3935E NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3935NCGI	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3935E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3935NCB2	FIGURE

100m RL _____

90m RL _____

80m RL _____

70m RL _____

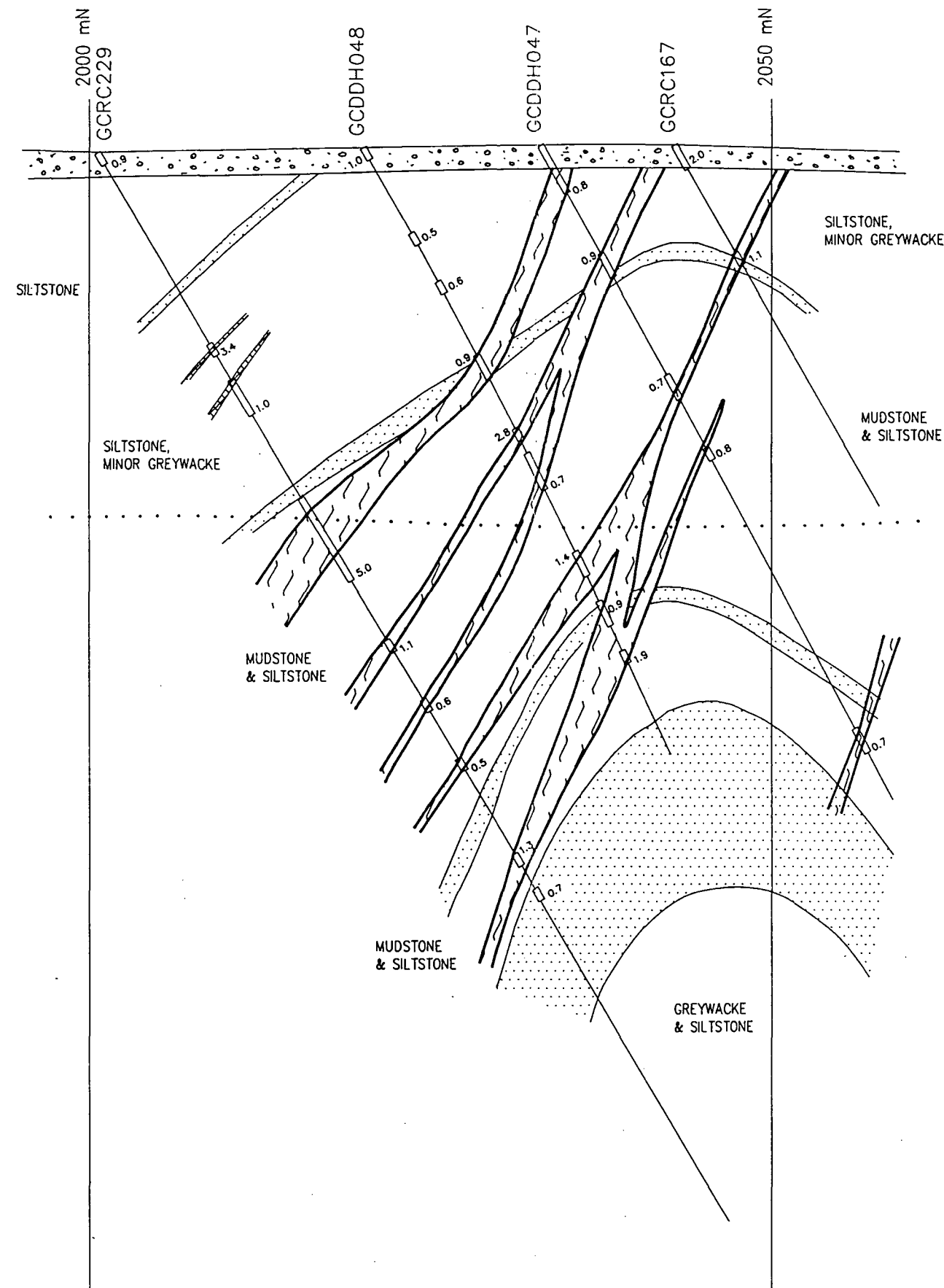
60m RL _____

50m RL _____

40m RL _____

30m RL _____

20m RL _____



KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

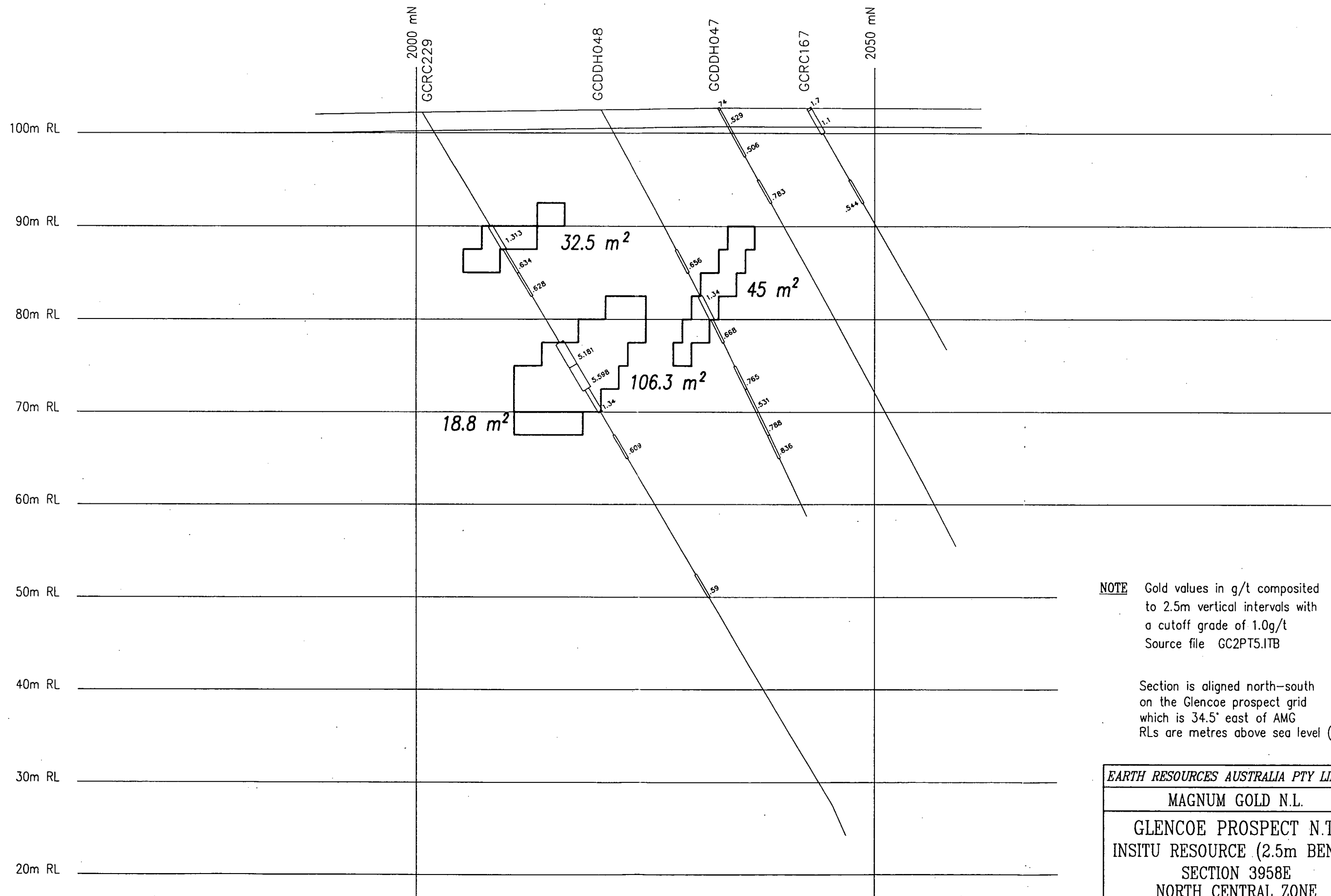
Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

GLENCOE PROSPECT N.T.
INTERPRETED GEOLOGY
SECTION 3958E
NORTH CENTRAL ZONE

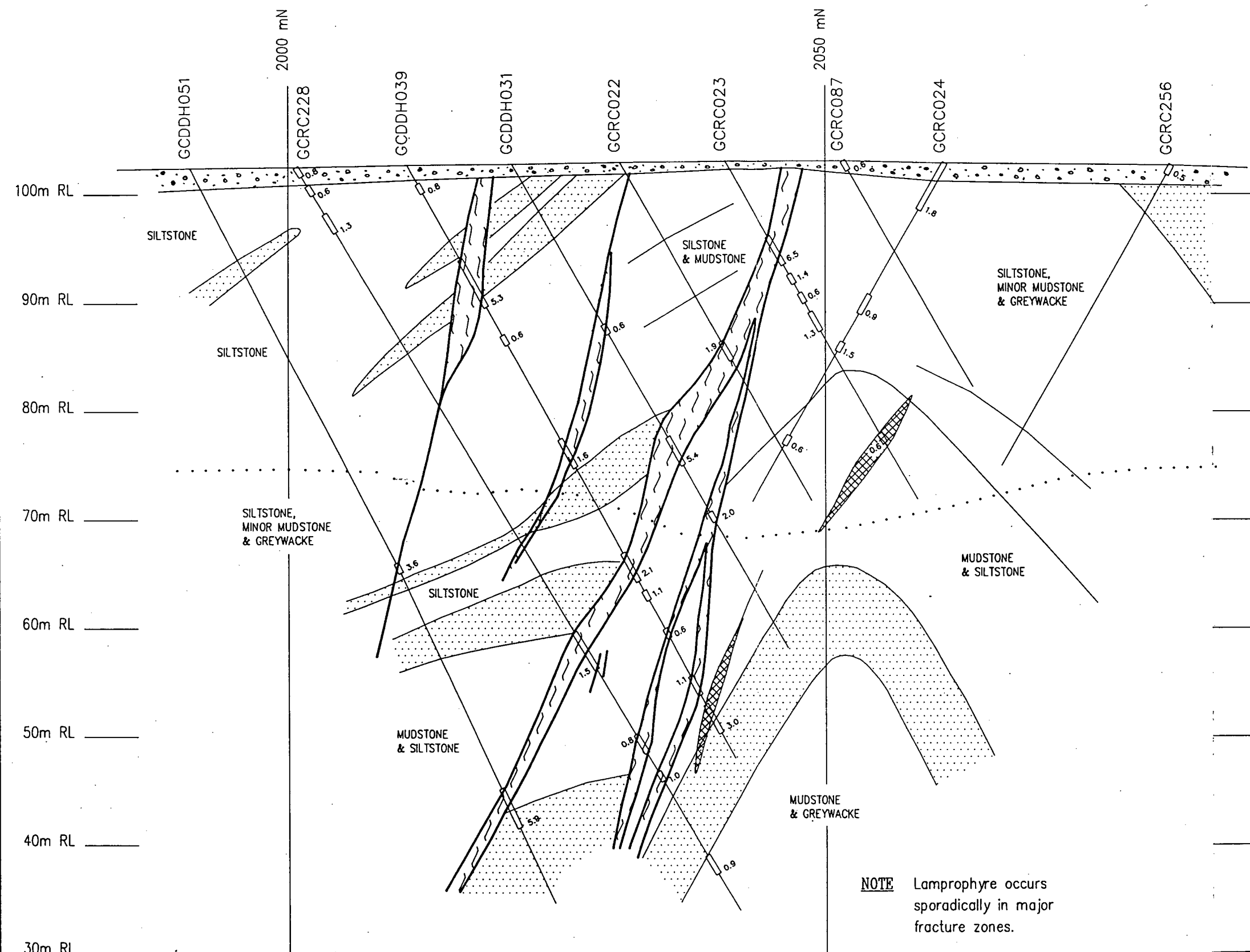
SCALE 1:400 0 5 10 15 METRES
REPORT NO. A/265 DATE: FEBRUARY 1989 FILE NAME: 3958NCGI FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.1TB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3958E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3958NCB2	FIGURE



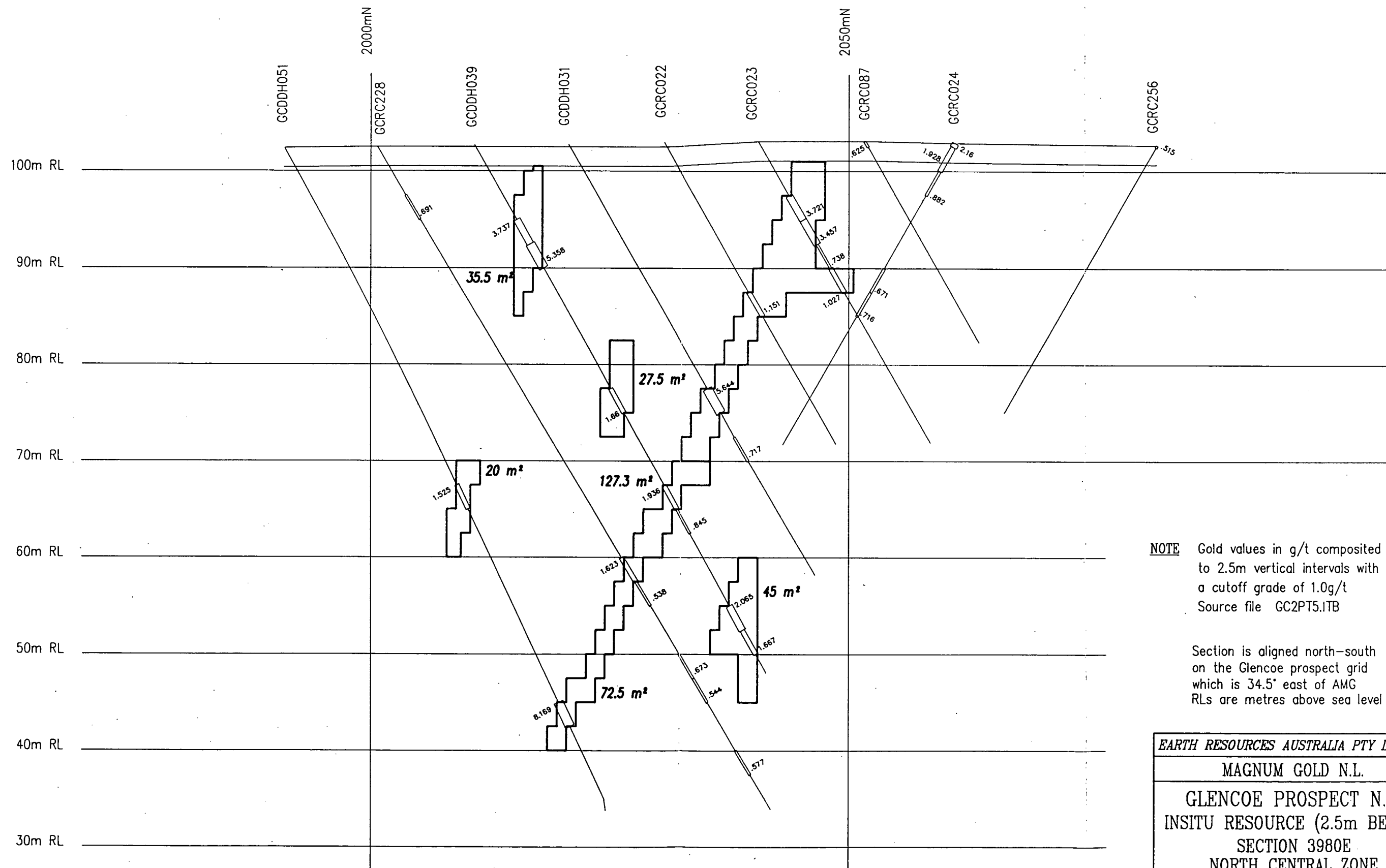
KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 3980E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3980NCGI	FIGURE



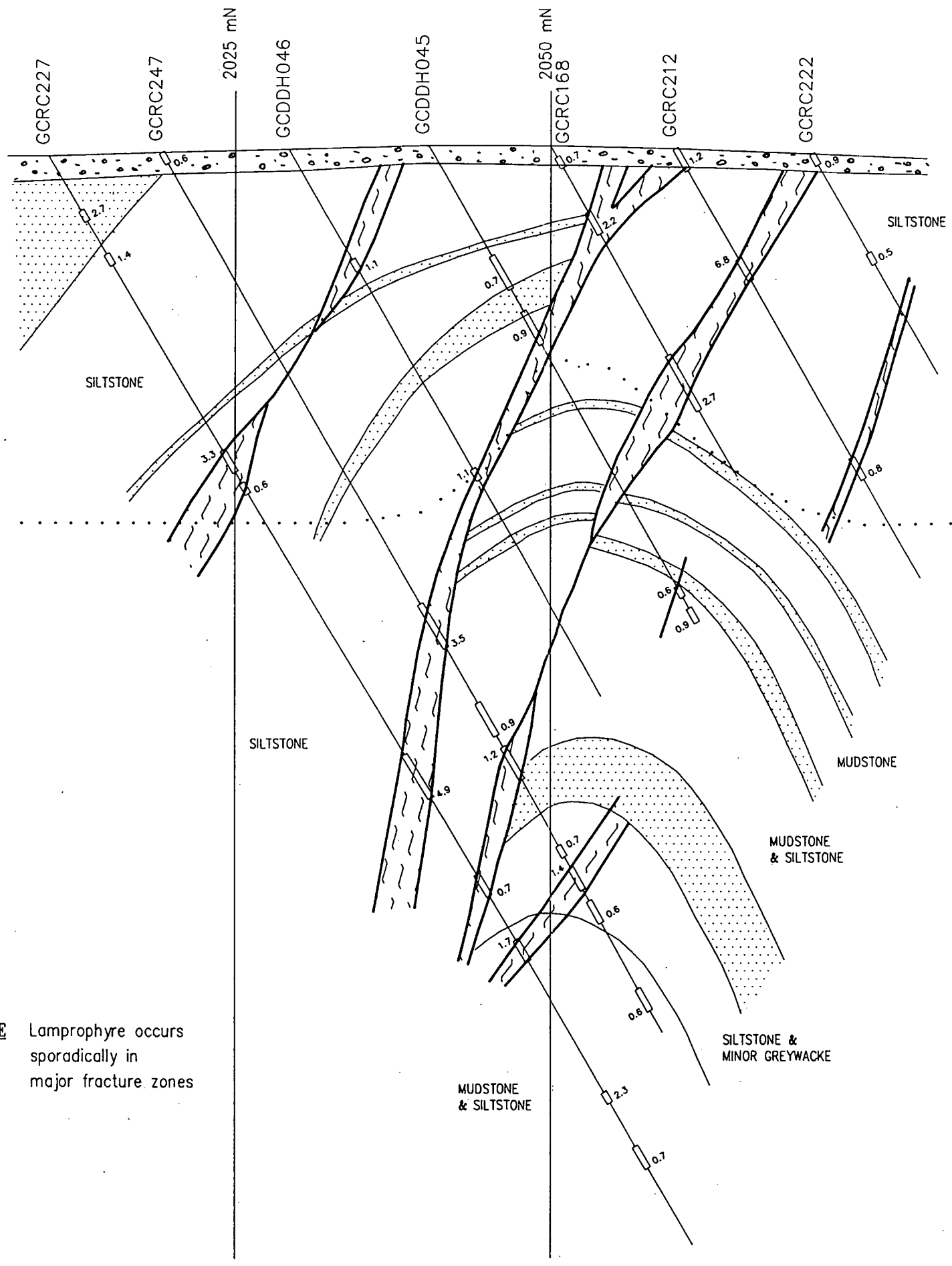
NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3980E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3980NCB2	FIGURE

100m RL
90m RL
80m RL
70m RL
60m RL
50m RL
40m RL
30m RL
20m RL

NOTE Lamprophyre occurs sporadically in major fracture zones



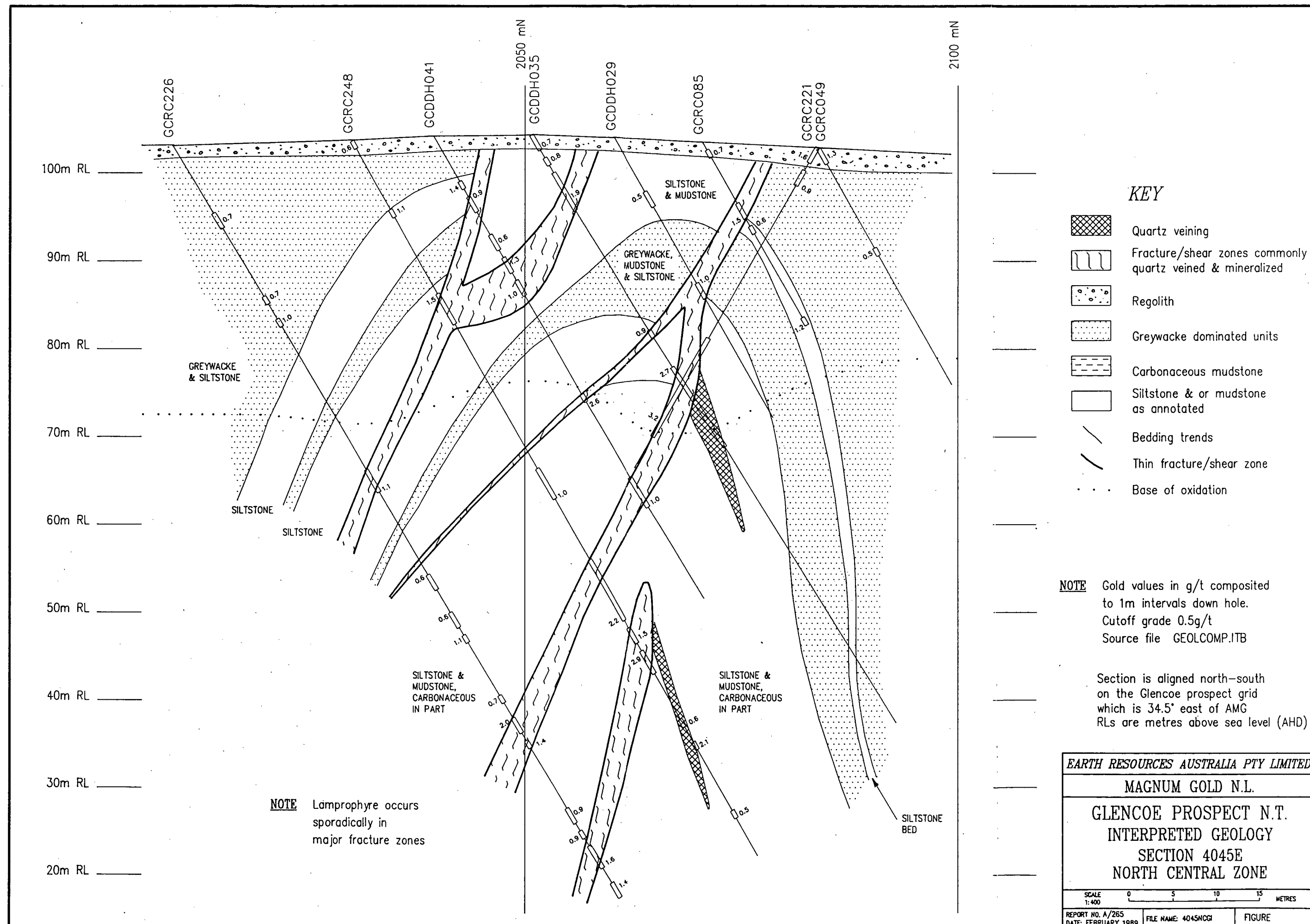
KEY

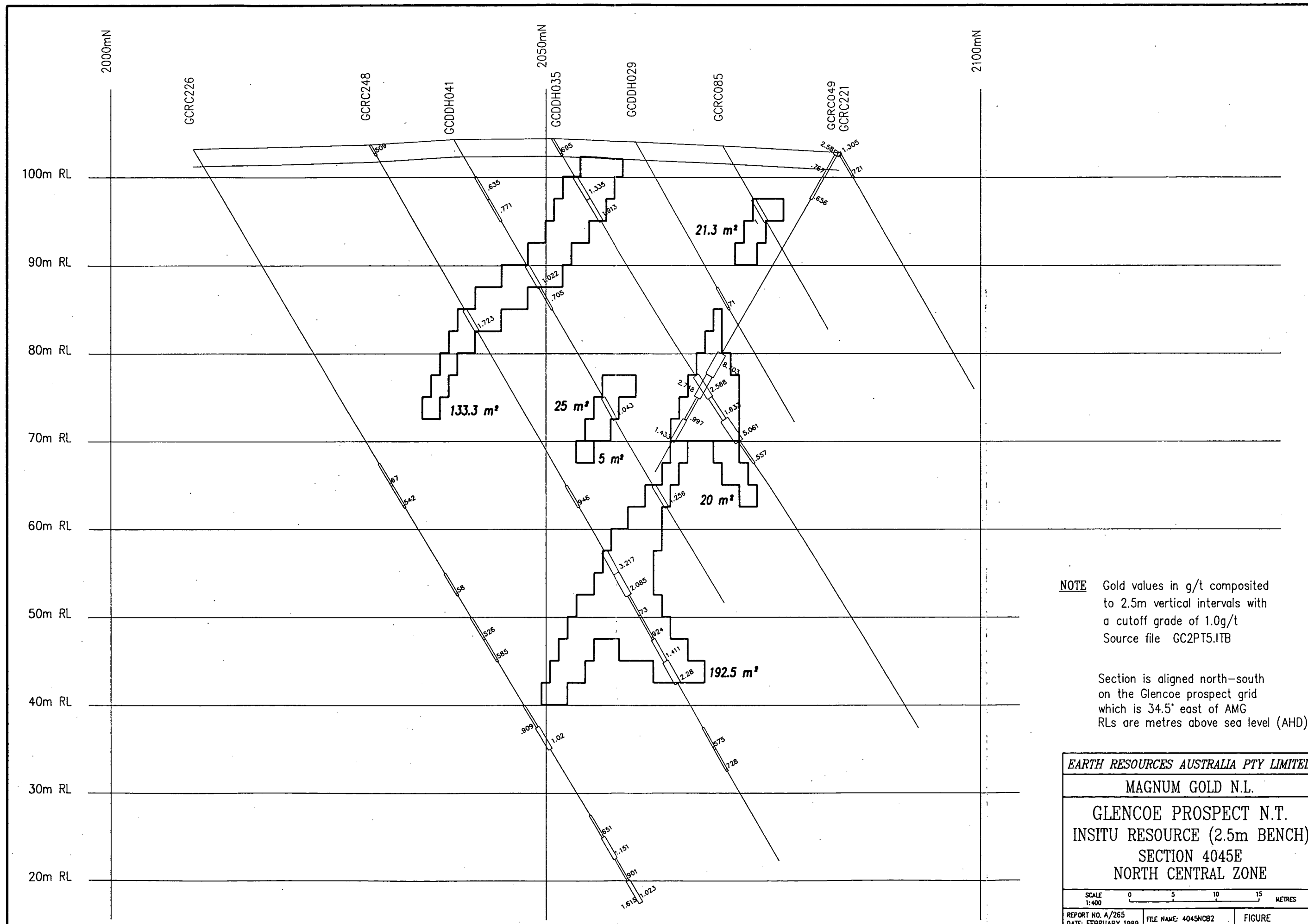
- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

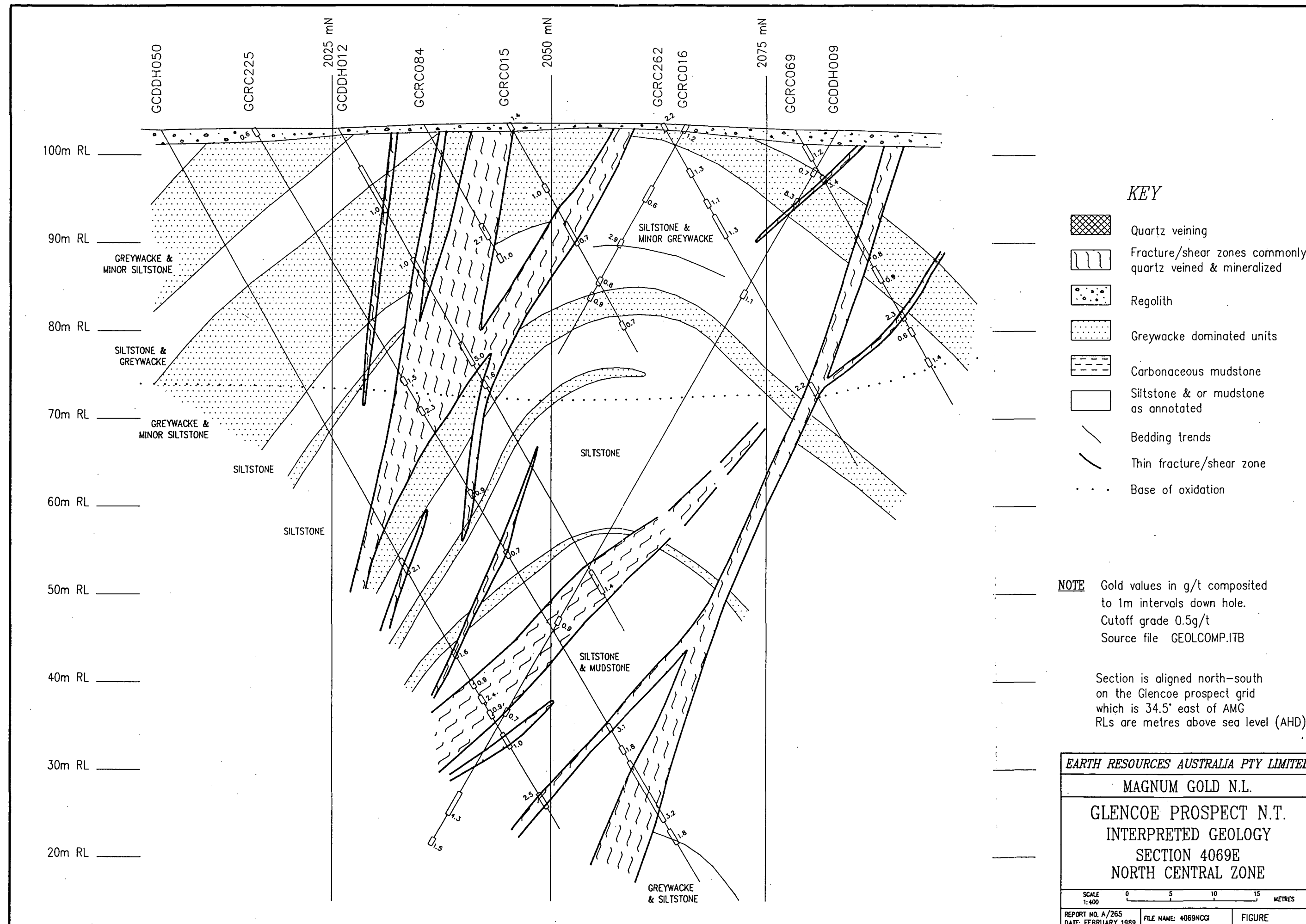
NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

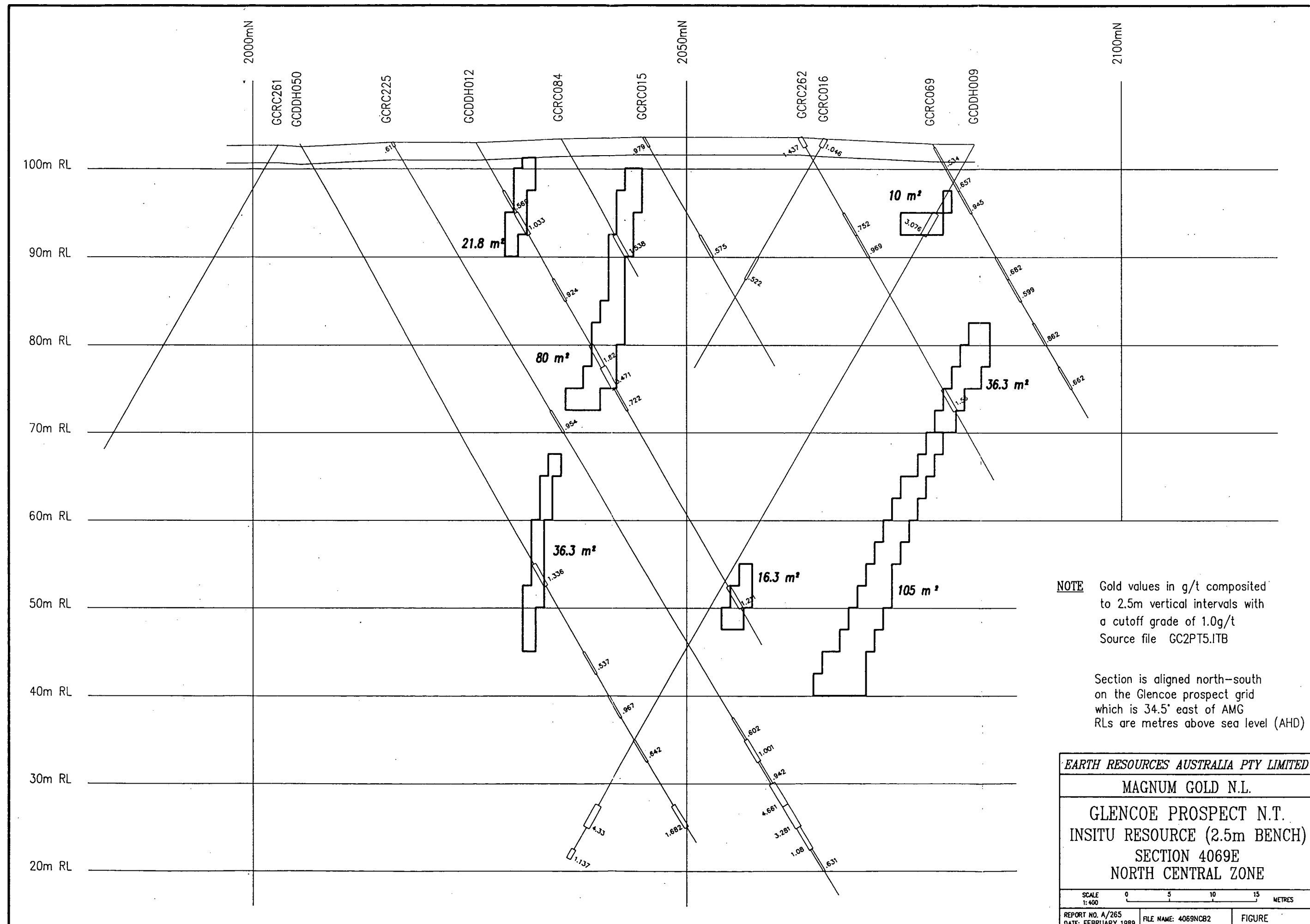
Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 4000E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4000NCGI	FIGURE

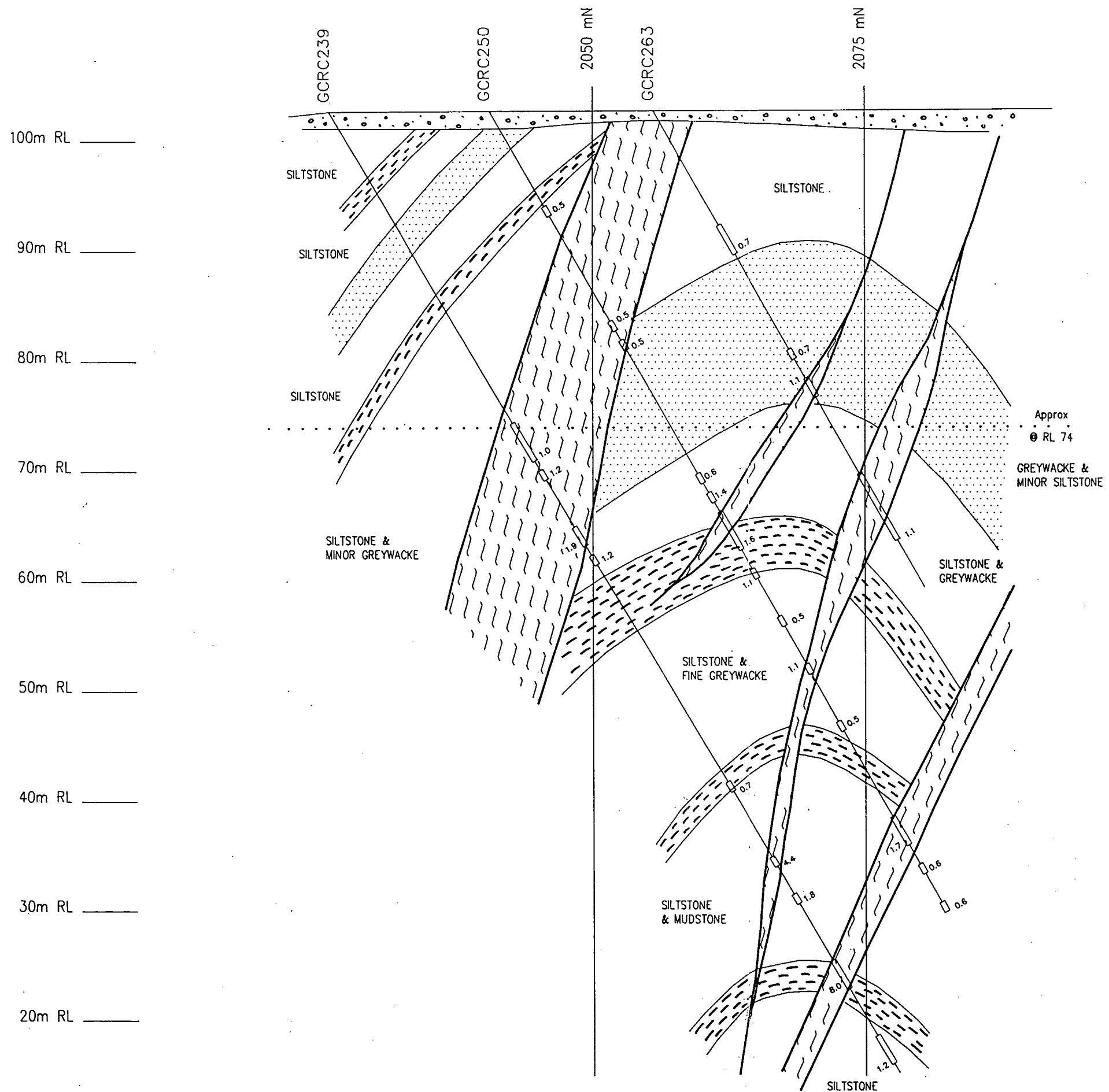








EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 4069E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4069NCB2	FIGURE



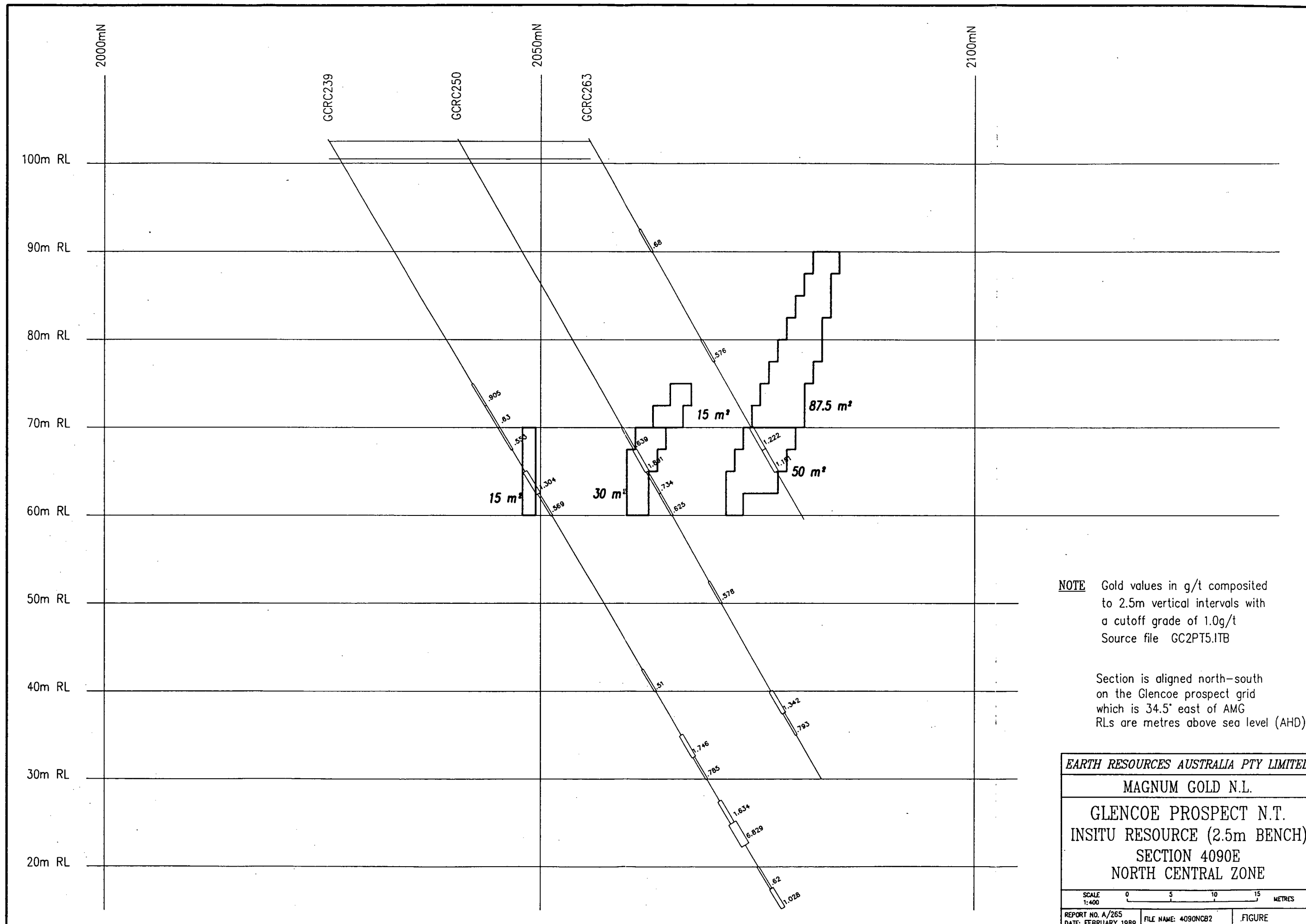
KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltystone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5' east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 4090E		
NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4090NCGI	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.1TB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T. INSITU RESOURCE (2.5m BENCH) SECTION 4090E NORTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4090NCB2	FIGURE

100m RL _____

90m RL _____

80m RL _____

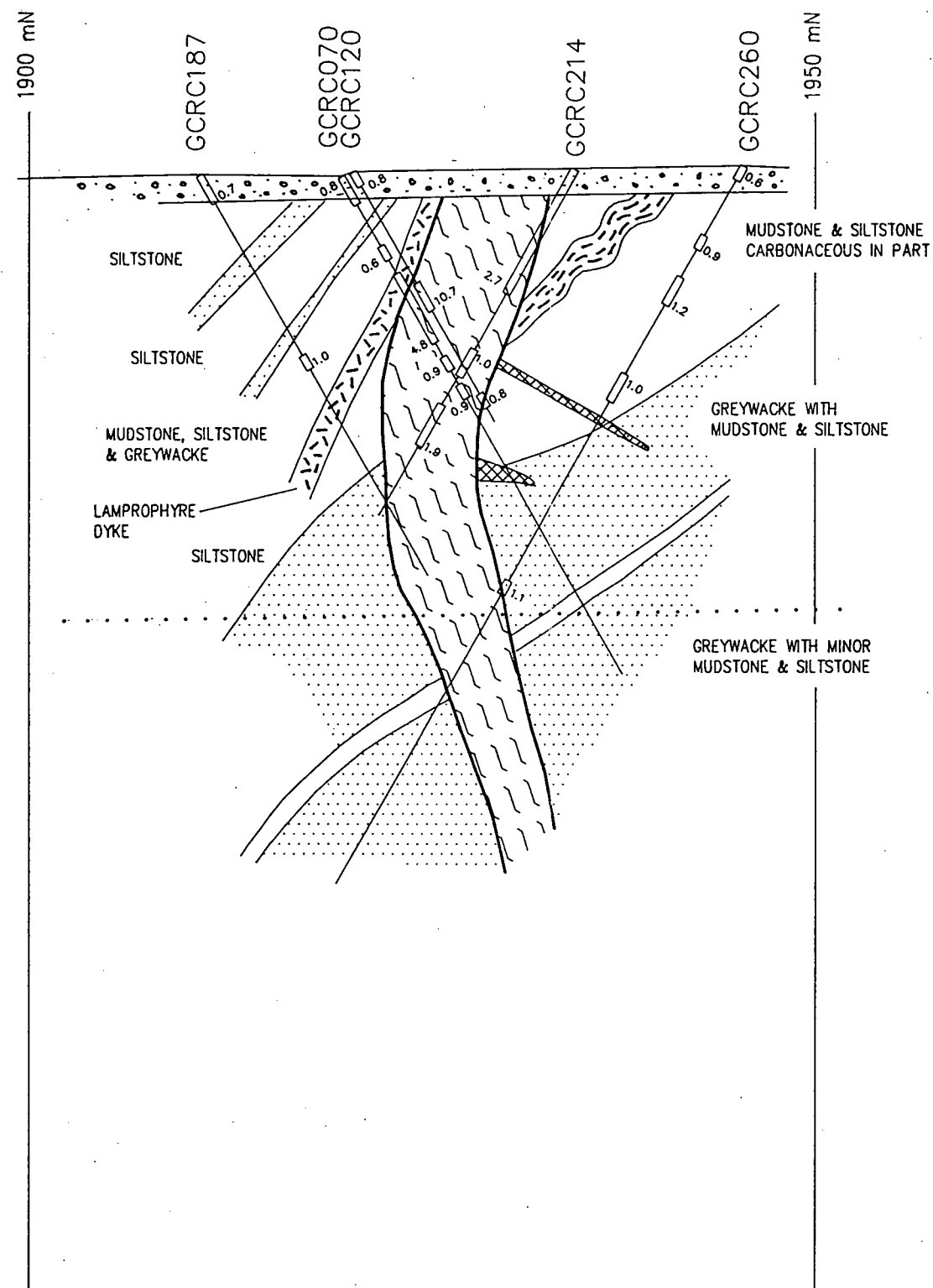
70m RL _____

60m RL _____

50m RL _____

40m RL _____

30m RL _____



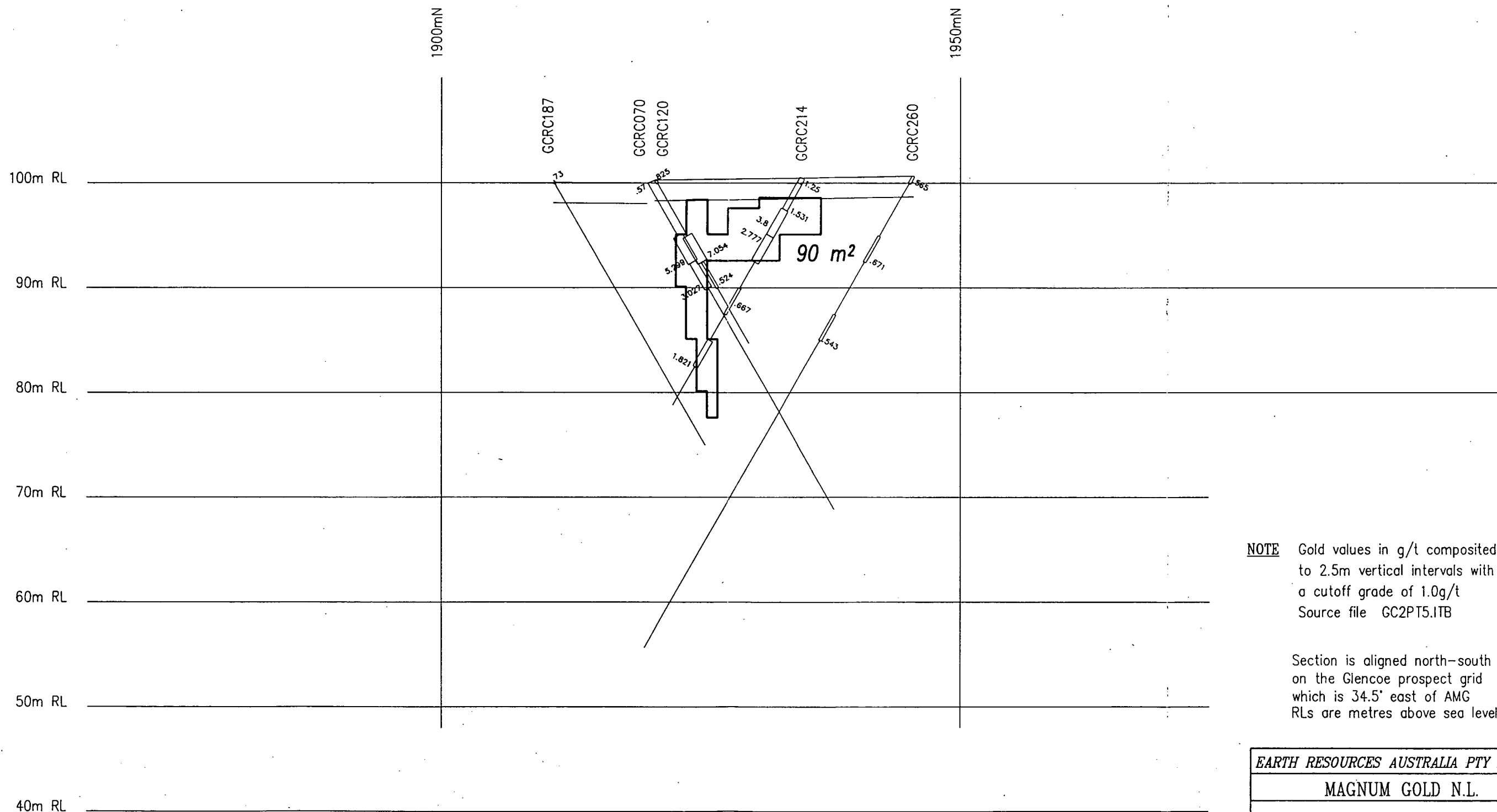
KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Lamprophyre
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

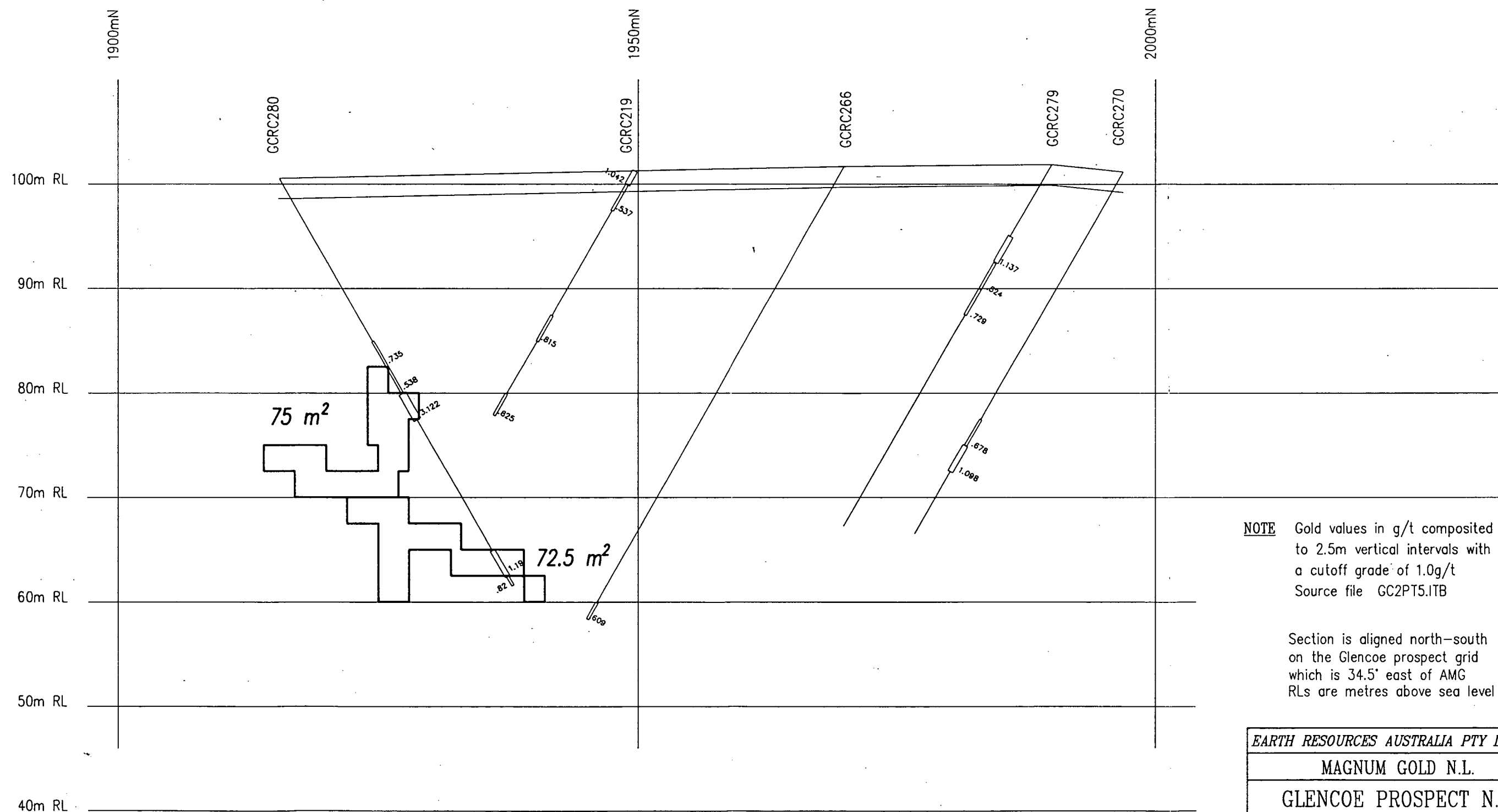
EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T. INTERPRETED GEOLOGY SECTION 3906E MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3906MCGI	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.1TB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3906E		
MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3906MC82	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3944E		
MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3944MCB2	FIGURE

100m RL _____

90m RL _____

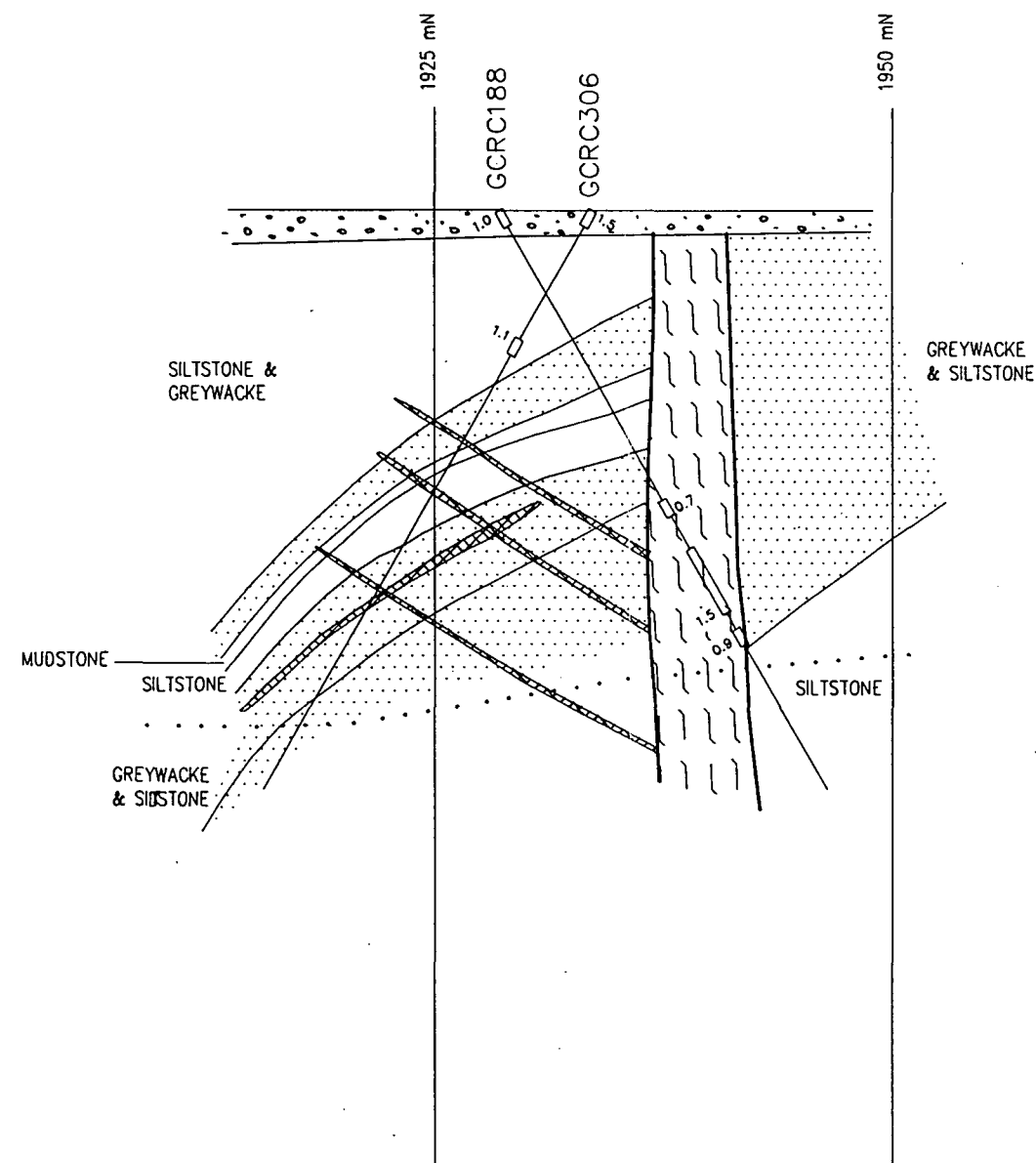
80m RL _____

70m RL _____

60m RL _____

50m RL _____

40m RL _____



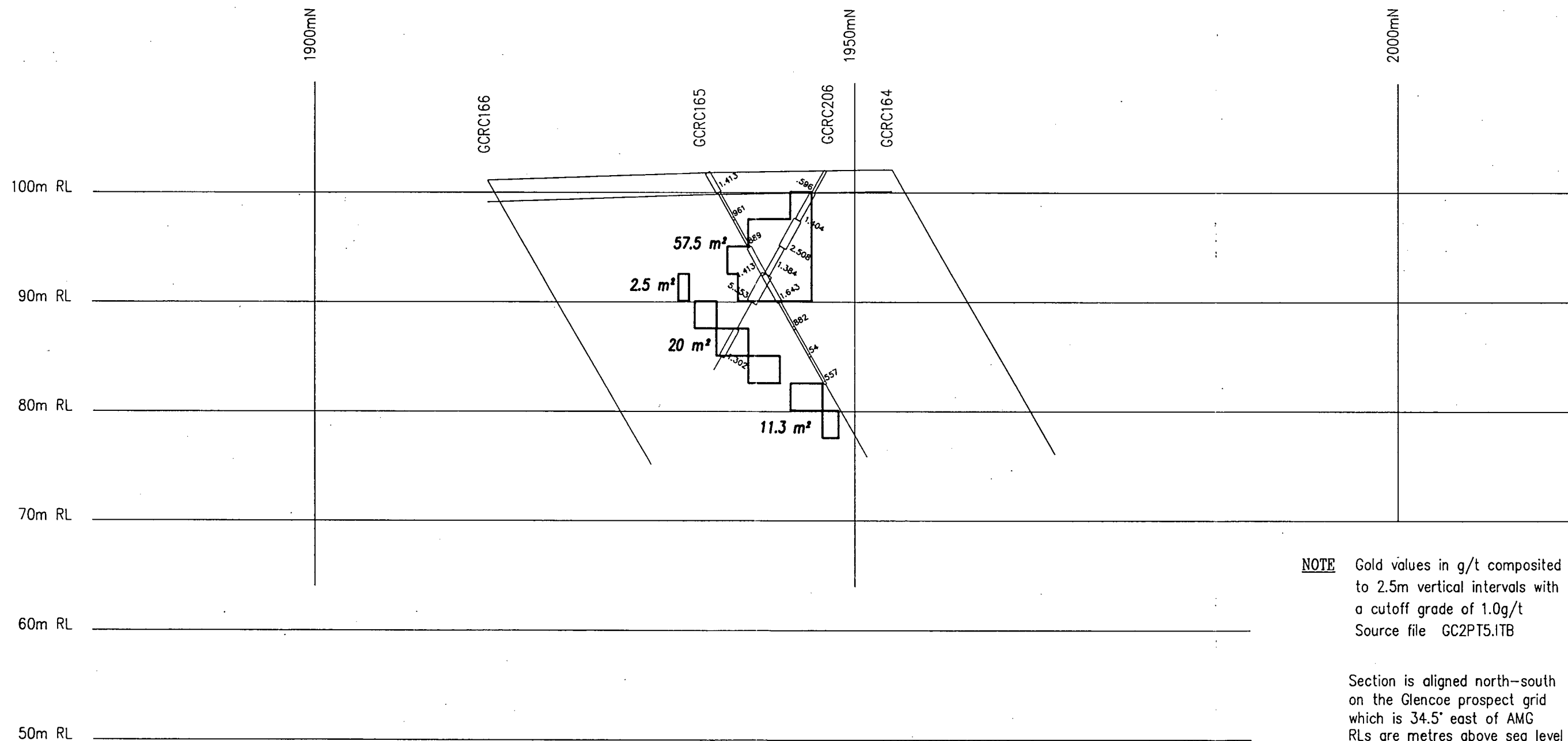
KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

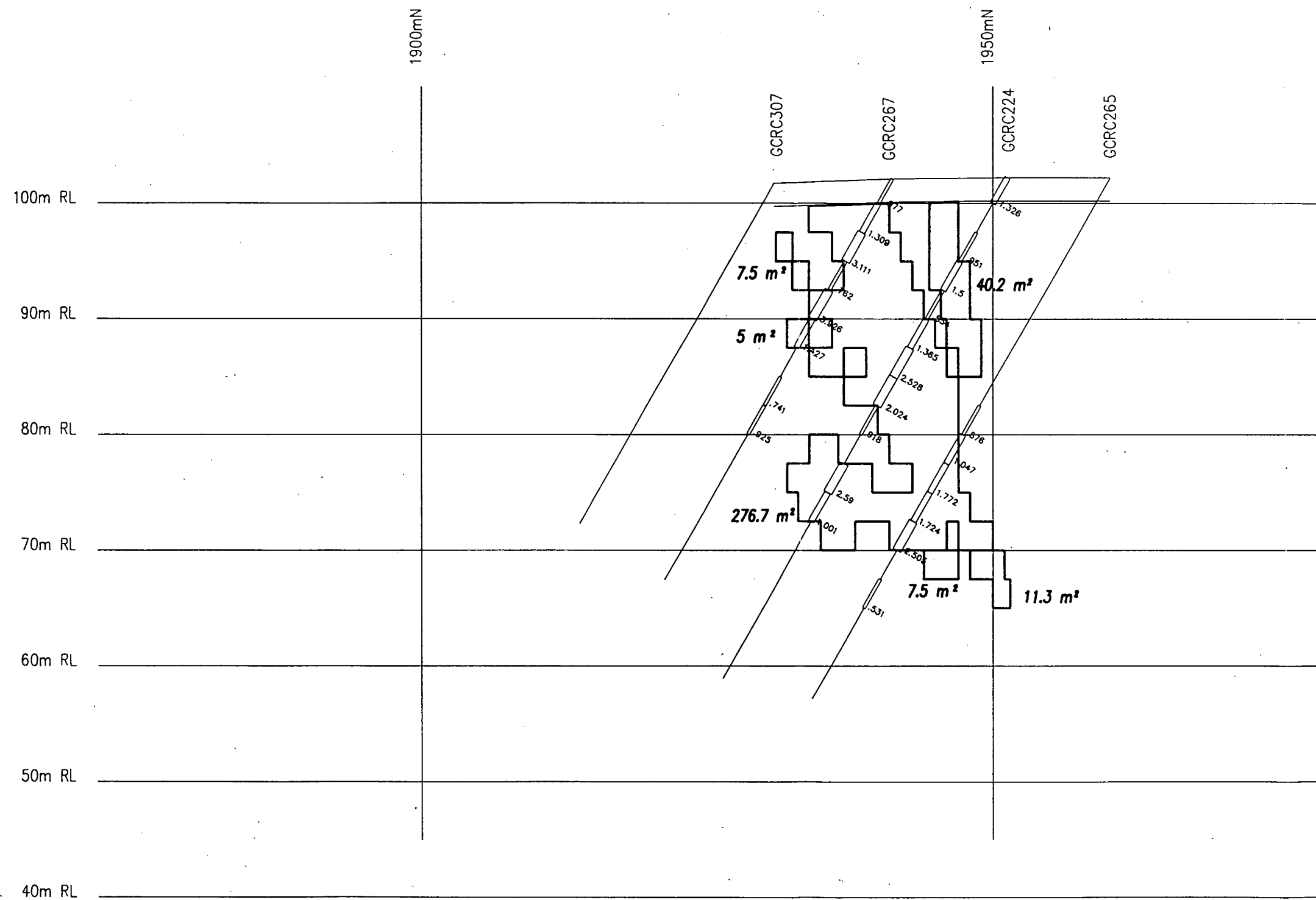
EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 3972E		
MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3972MCGI	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

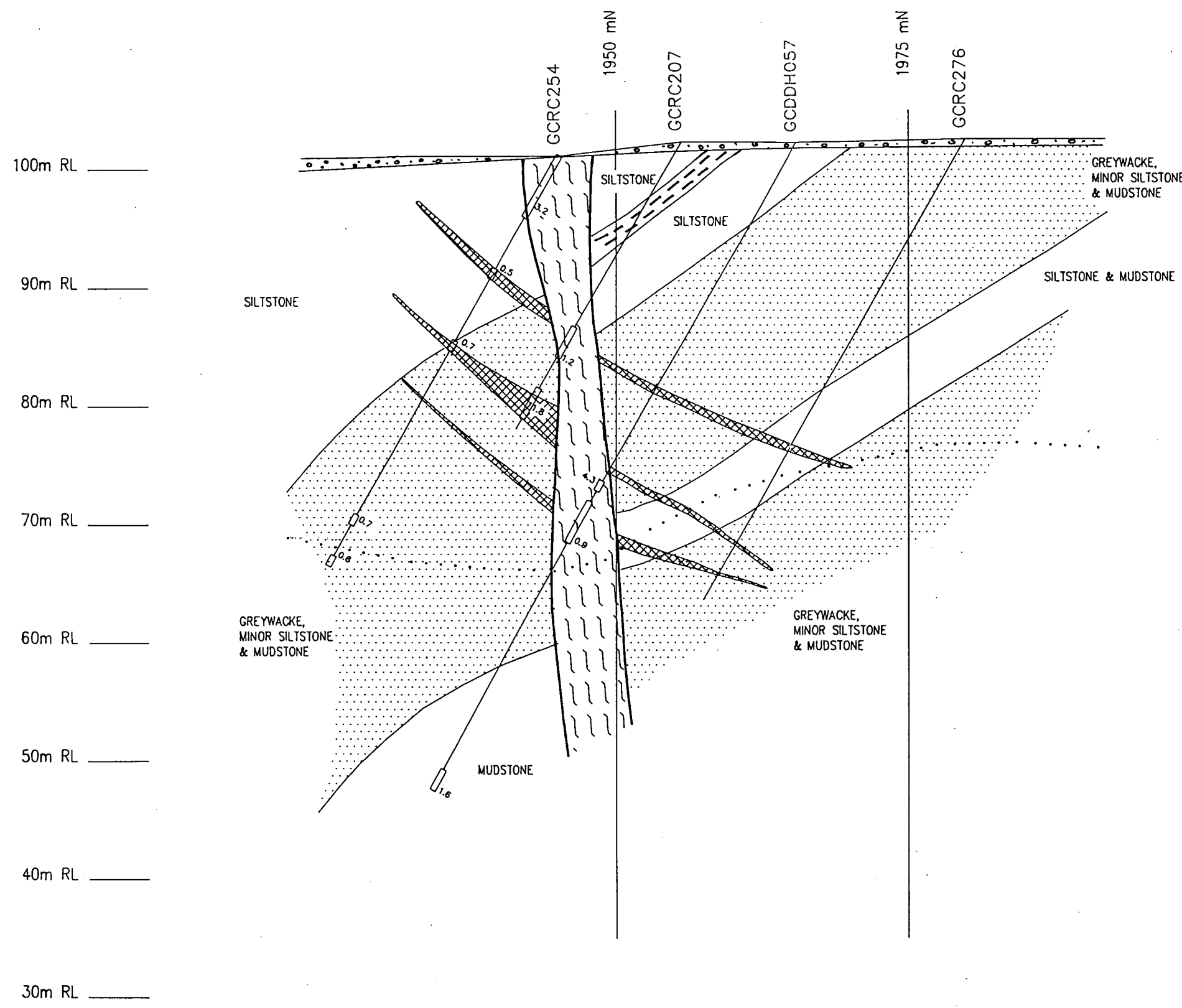
EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 3984E		
MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 3984MGB2	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.1TB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 4000E		
MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4000MCB2	FIGURE



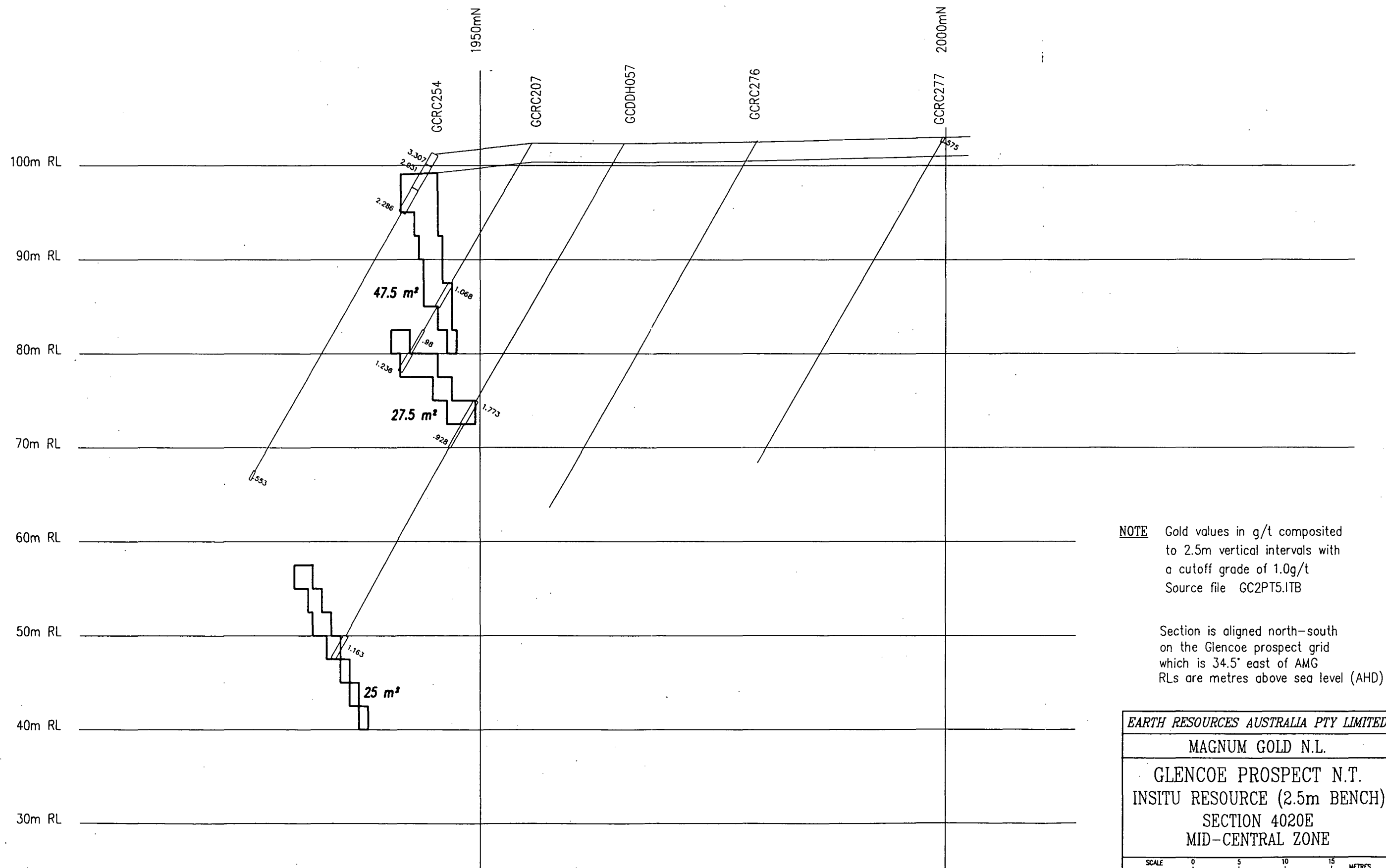
KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T. INTERPRETED GEOLOGY		
SECTION 4020E MID-CENTRAL ZONE		
SCALE 1:400		METRES
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4020MCGI	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.1TB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 4020E		
MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4020MCB2	FIGURE

100m RL _____

90m RL _____

80m RL _____

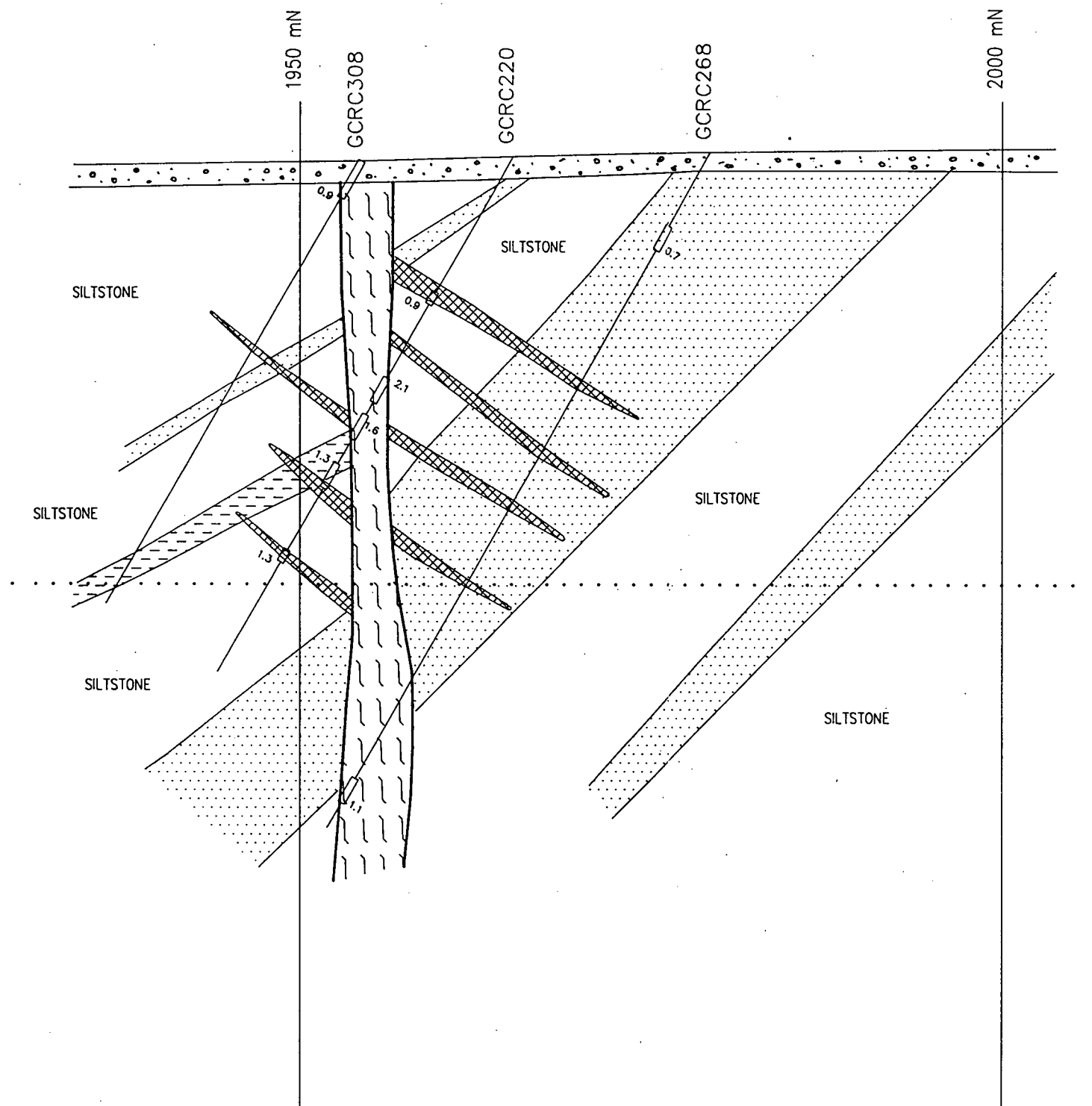
70m RL _____

60m RL _____

50m RL _____

40m RL _____

30m RL _____



KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

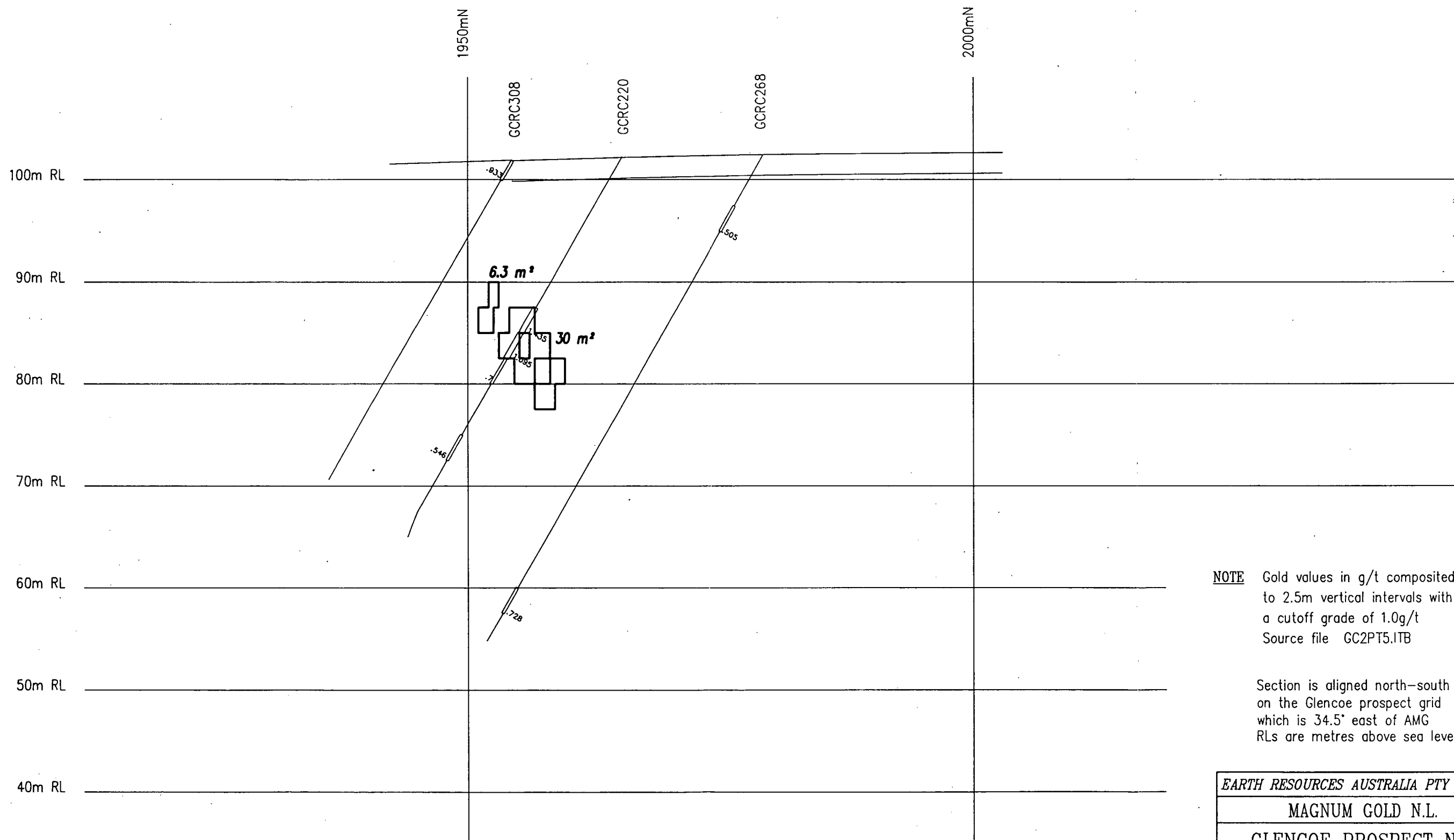
GLENCOE PROSPECT N.T.
INTERPRETED GEOLOGY
SECTION 4069E
MID-CENTRAL ZONE

SCALE 1:400 0 5 10 15 METRES

REPORT NO. A/265
DATE: FEBRUARY 1989

FILE NAME: 4069MCGI

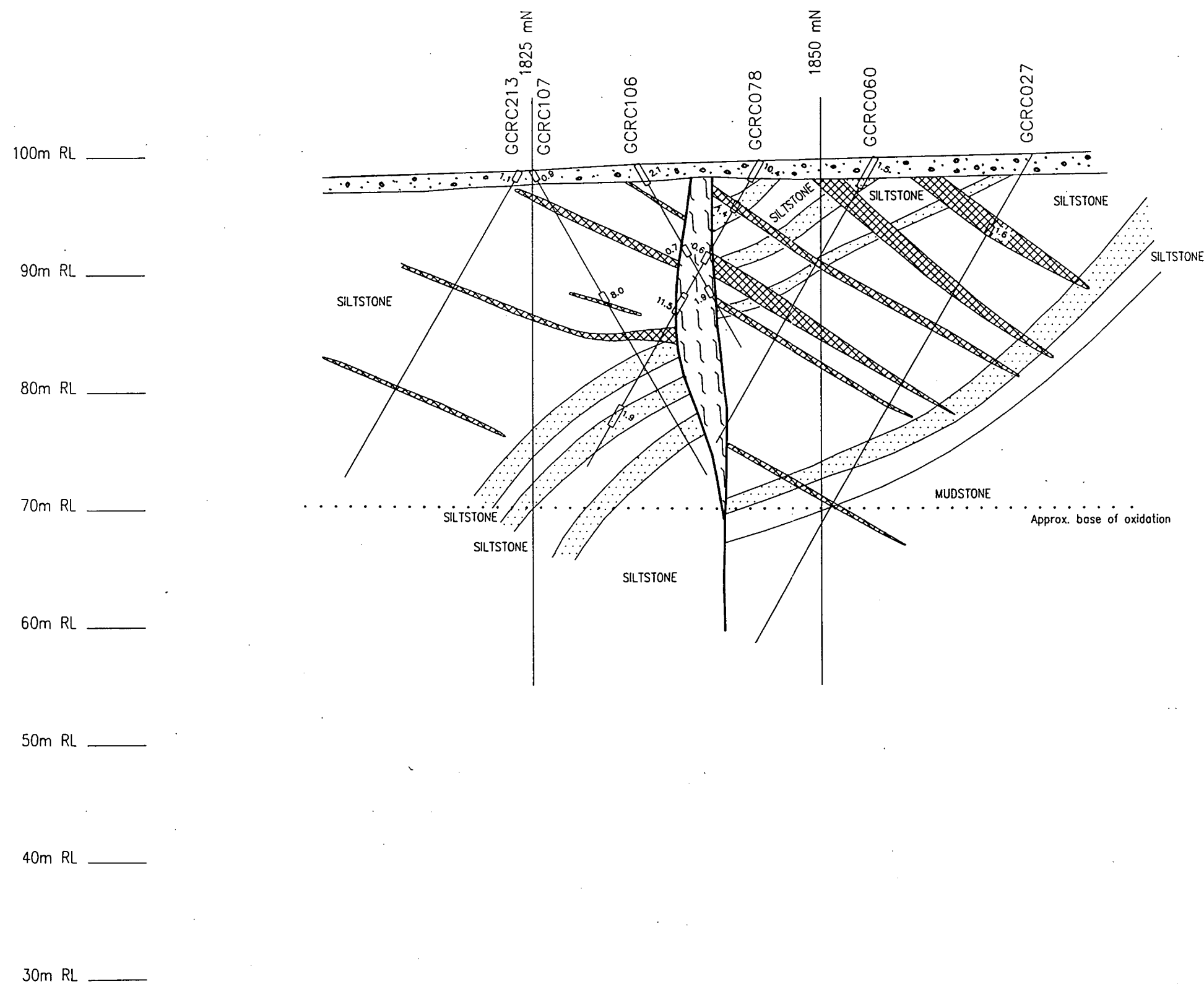
FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T. INSITU RESOURCE (2.5m BENCH) SECTION 4069E MID-CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4069MCB2	FIGURE



KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

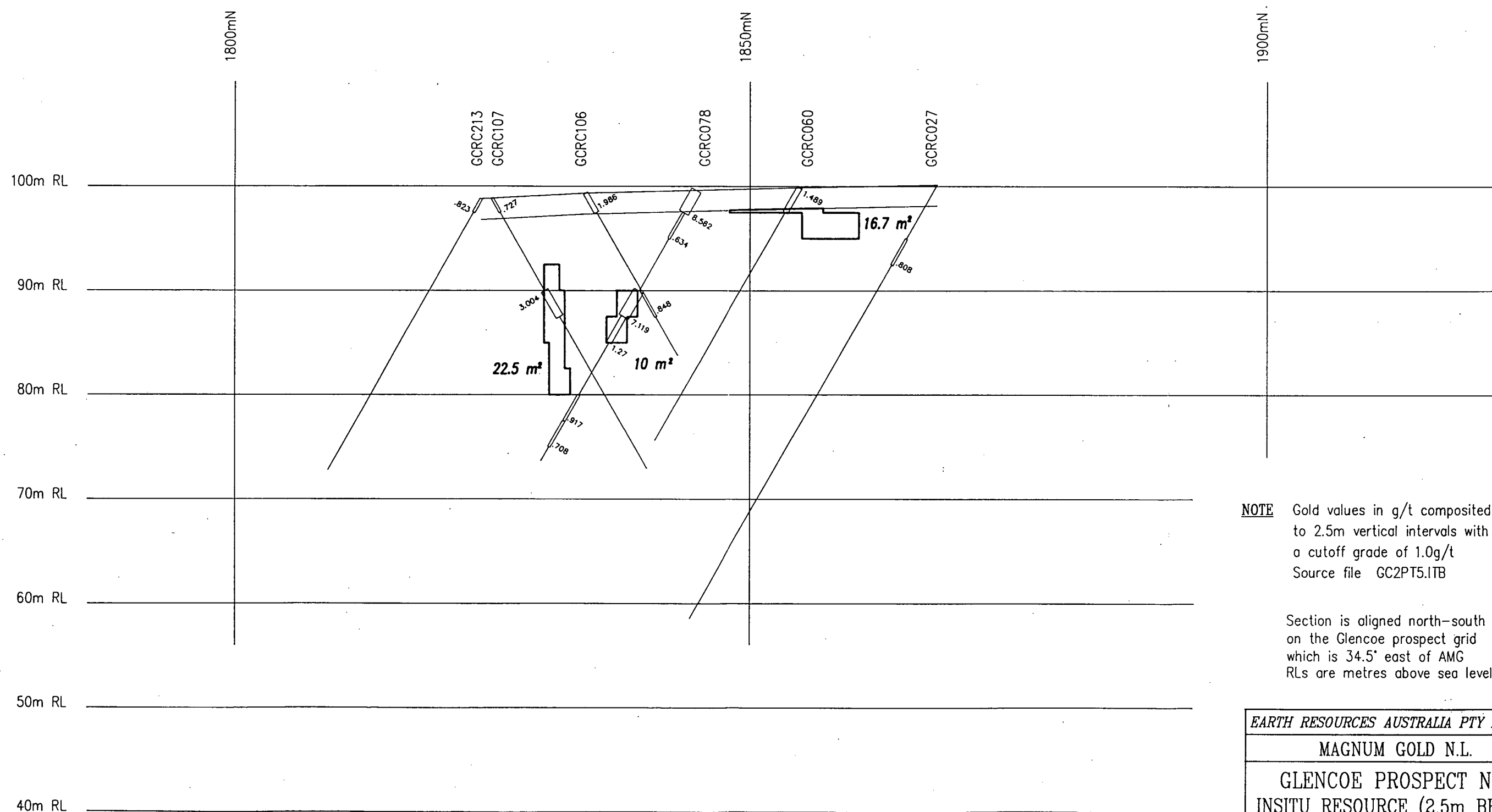
EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

GLENCOE PROSPECT N.T.
INTERPRETED GEOLOGY
SECTION 4029E
SOUTH CENTRAL ZONE

SCALE 1:400 0 5 10 15 METRES

REPORT NO. A/265 DATE: FEBRUARY 1989 FILE NAME: 4029SCGI FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

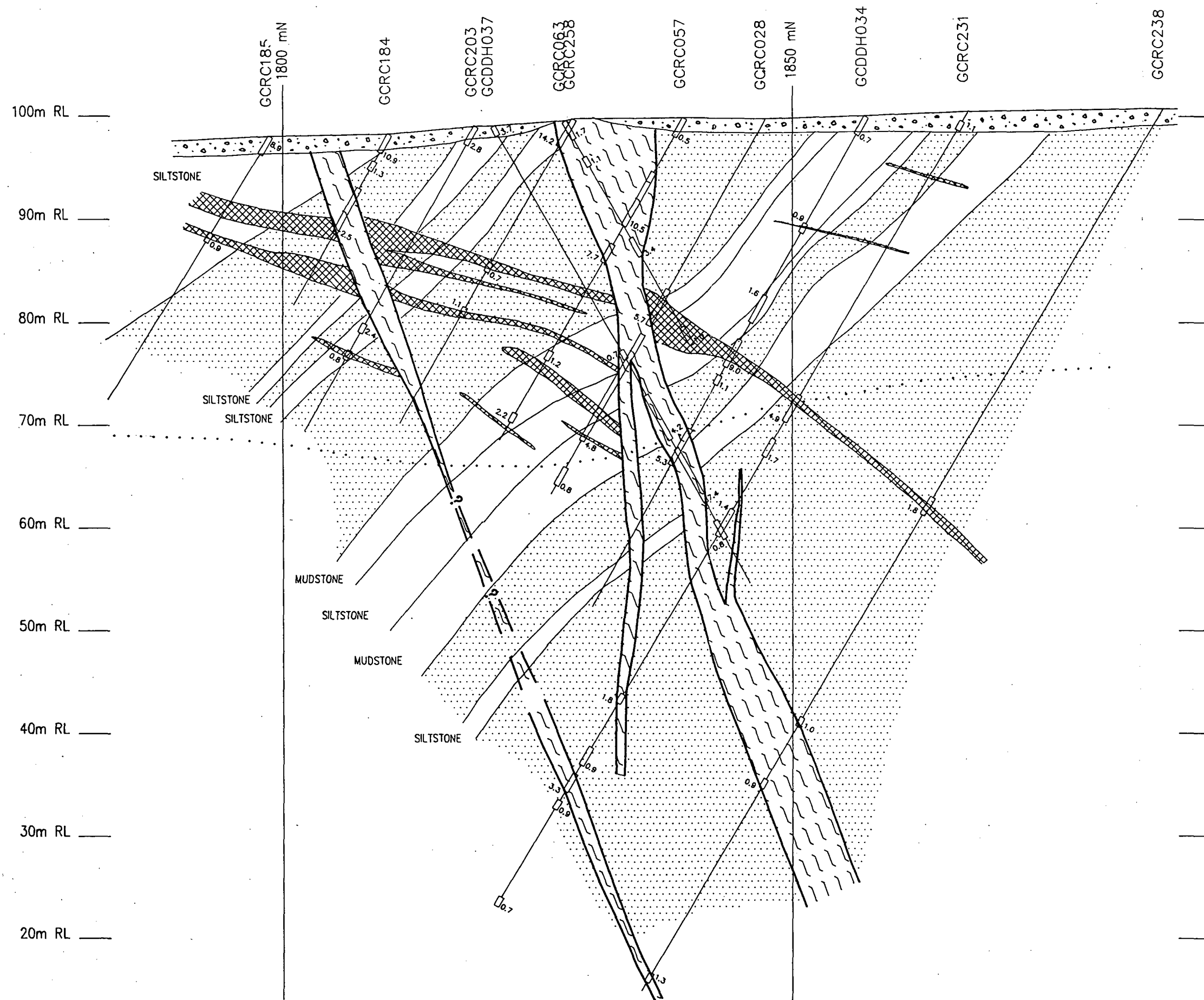
GLENCOE PROSPECT N.T.
INSITU RESOURCE (2.5m BENCH)
SECTION 4029E
SOUTH CENTRAL ZONE

SCALE 1:400 0 5 10 15 METRES

REPORT NO. A/265
DATE: FEBRUARY 1989

FILE NAME: 4029SCB2

FIGURE



KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

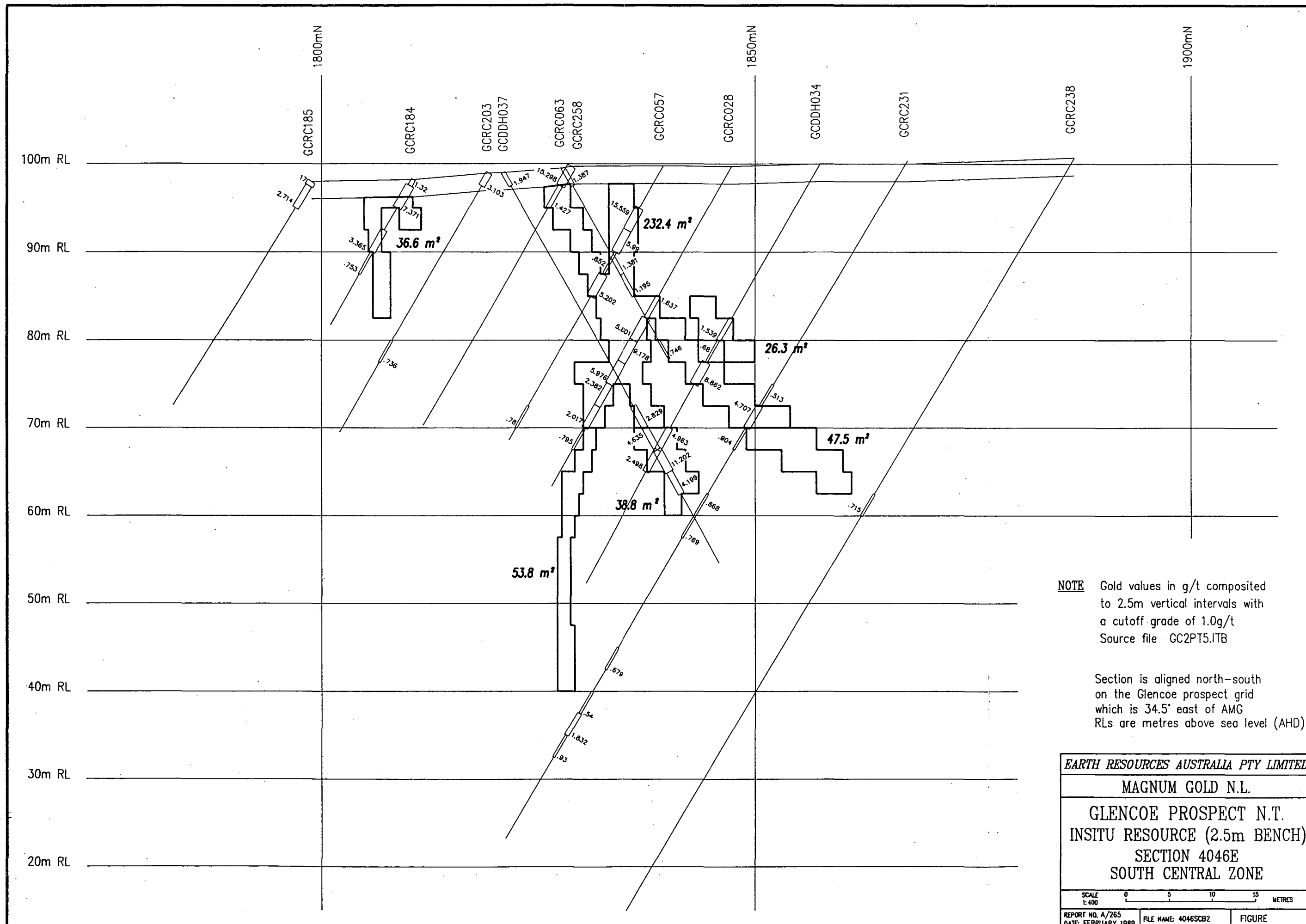
GLENCOE PROSPECT N.T.
INTERPRETED GEOLOGY
SECTION 4046E
SOUTH CENTRAL ZONE

SCALE 1:400 0 5 10 15 METRES

REPORT NO. A/265
DATE: FEBRUARY 1989

FILE NAME: 4046SCG

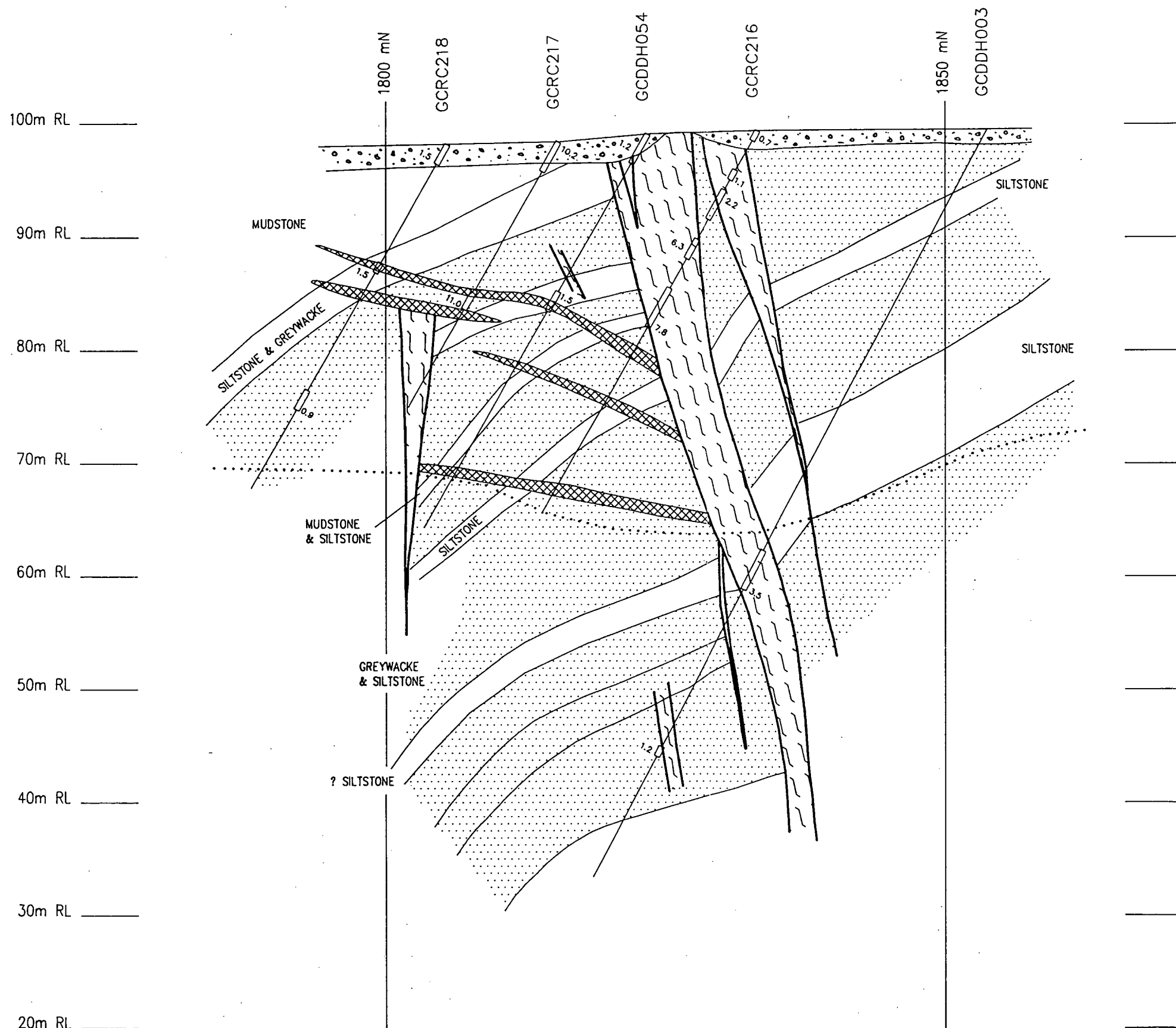
FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 4046E		
SOUTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4046SCB2	FIGURE



KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

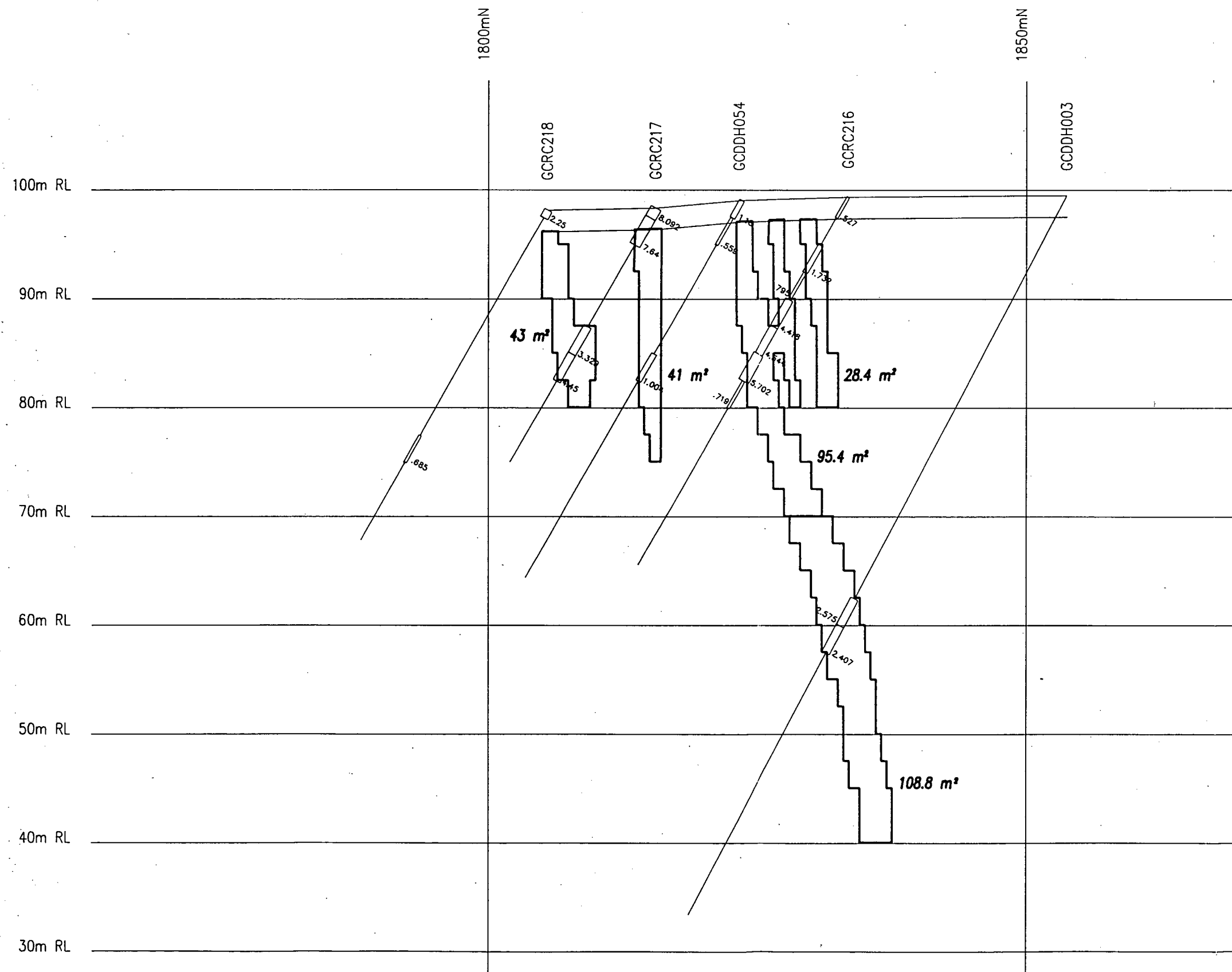
Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.

GLENCOE PROSPECT N.T.
INTERPRETED GEOLOGY
SECTION 4066E
SOUTH CENTRAL ZONE

SCALE 1:400 0 5 10 15 METRES
REPORT NO. A/265 DATE: FEBRUARY 1989 FILE NAME: 4066SCG FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 4066E		
SOUTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4066SCB2	FIGURE

100m RL _____

90m RL _____

80m RL _____

70m RL _____

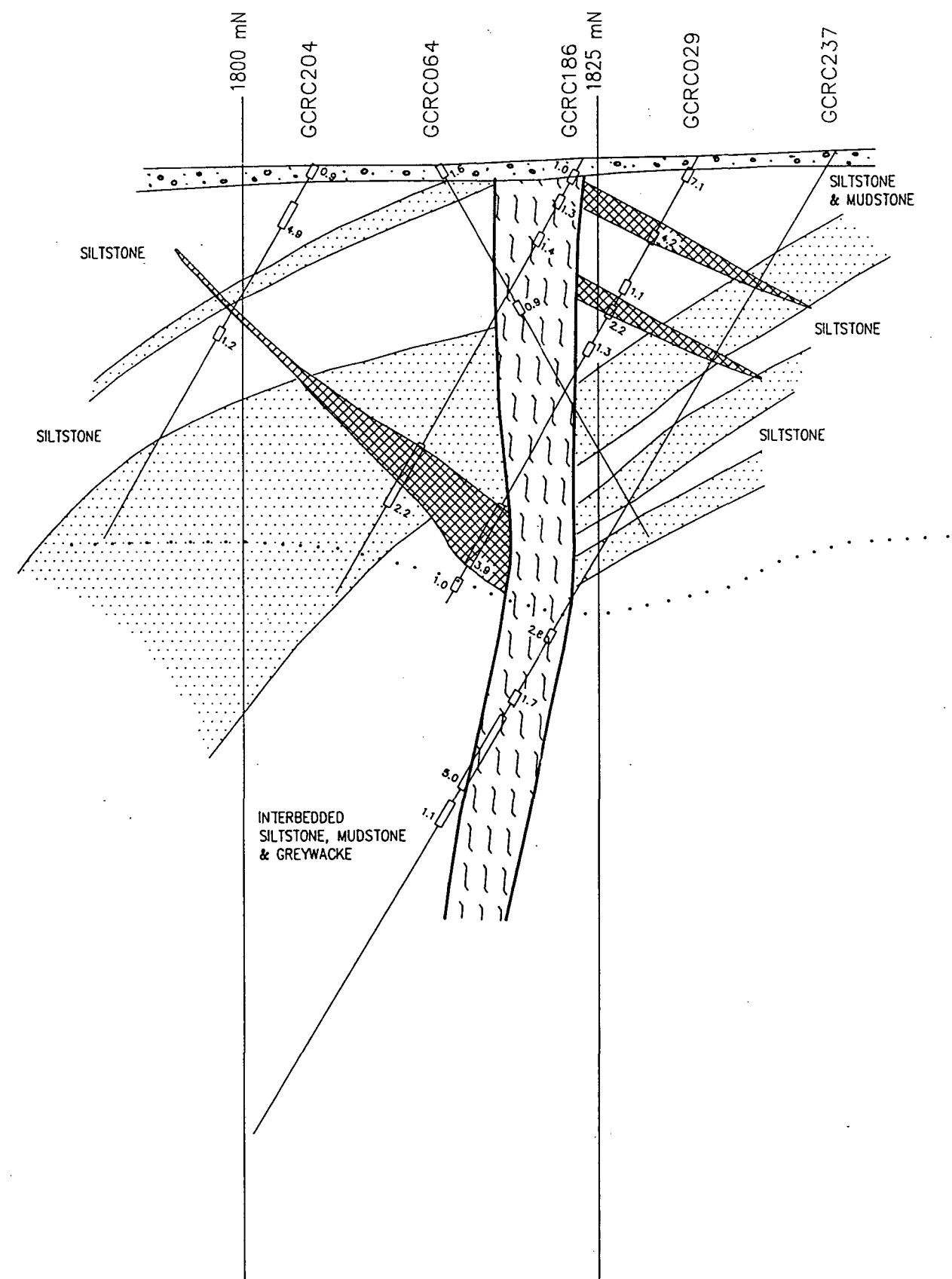
60m RL _____

50m RL _____

40m RL _____

30m RL _____

20m RL _____



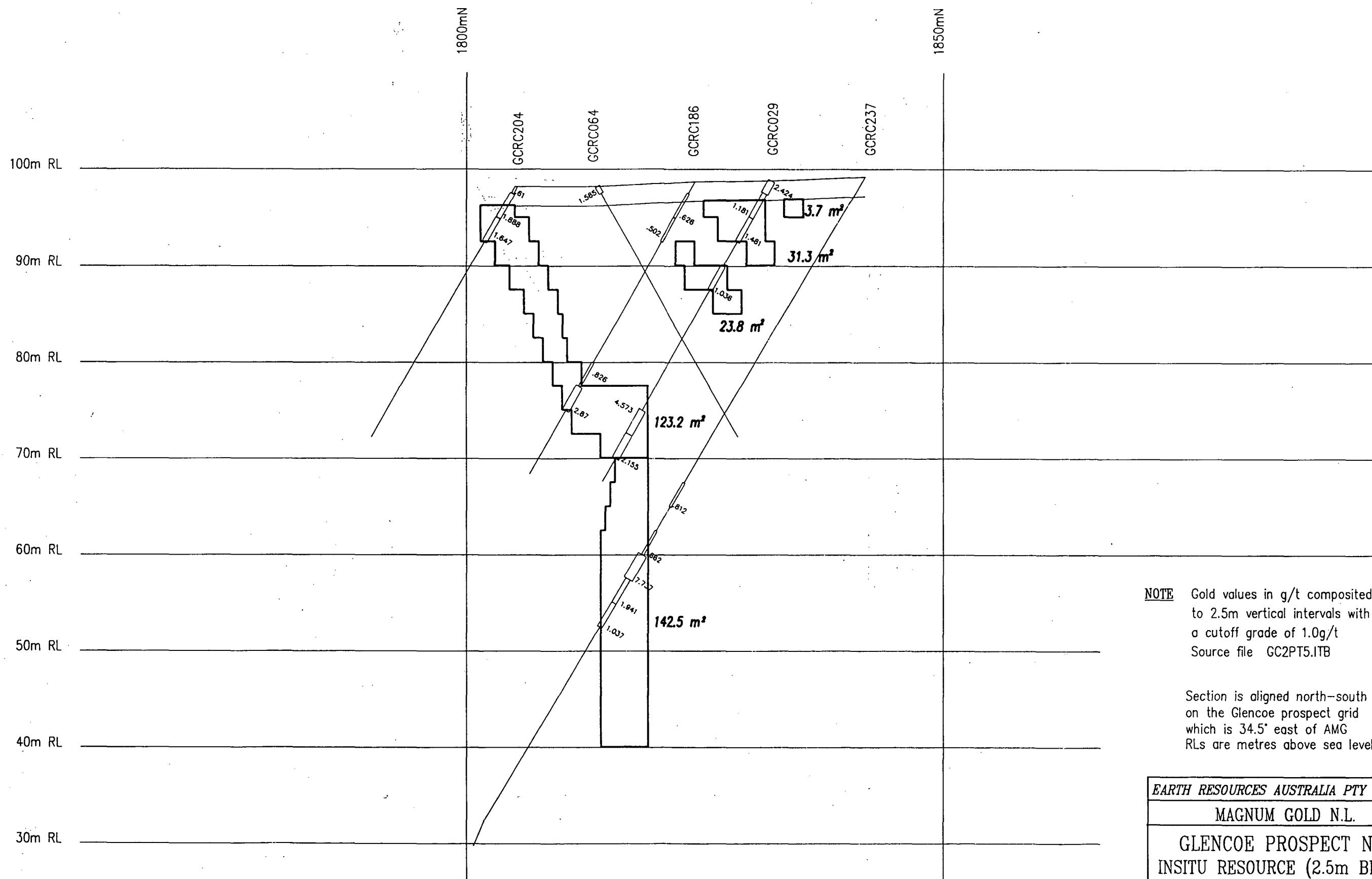
KEY

-  Quartz veining
-  Fracture/shear zones commonly quartz veined & mineralized
-  Regolith
-  Greywacke dominated units
-  Carbonaceous mudstone
-  Siltstone & or mudstone as annotated
-  Bedding trends
-  Thin fracture/shear zone
-  Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

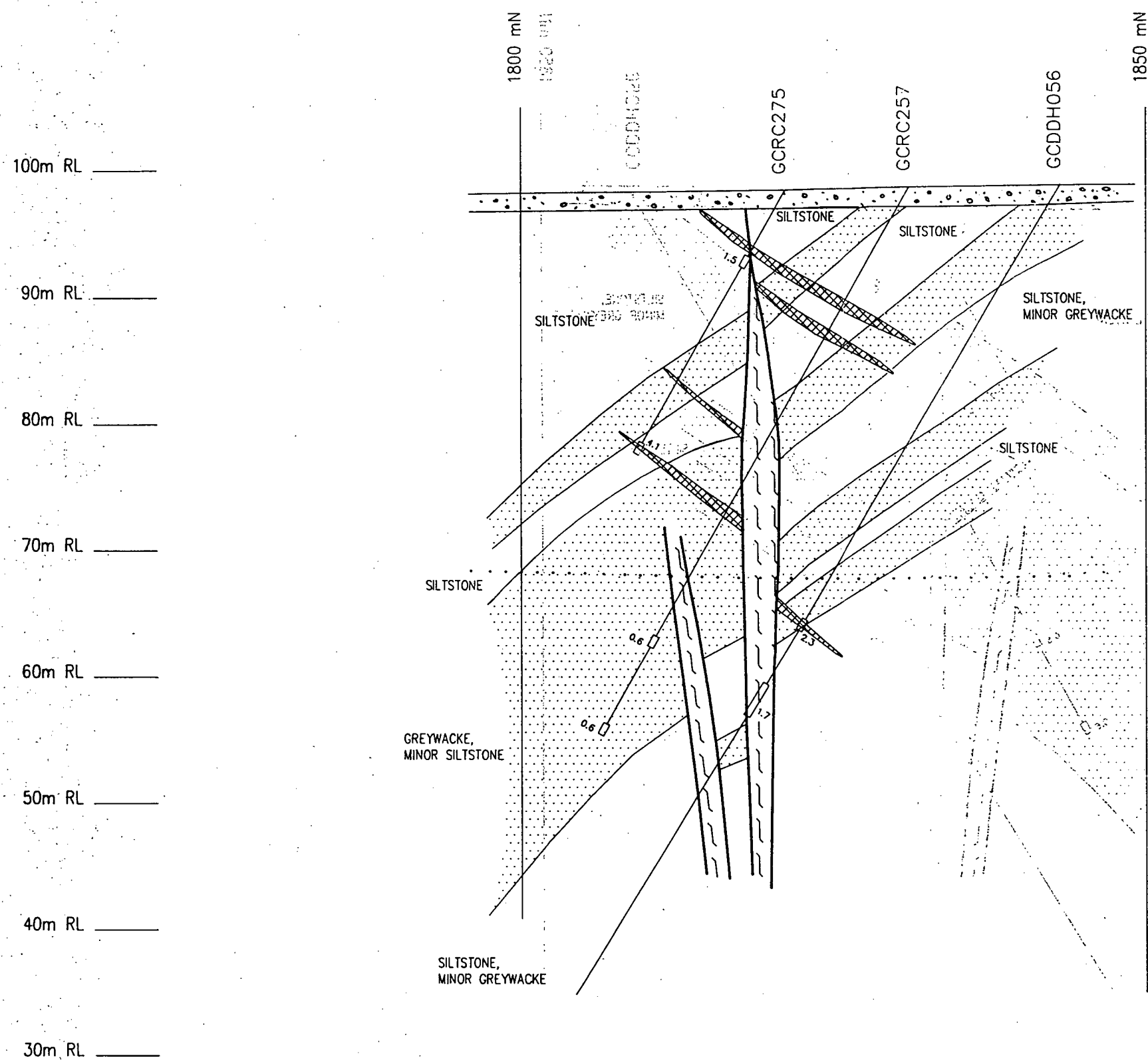
EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INTERPRETED GEOLOGY		
SECTION 4080E		
SOUTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4080SCG	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 4080E		
SOUTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4080SCB2	FIGURE



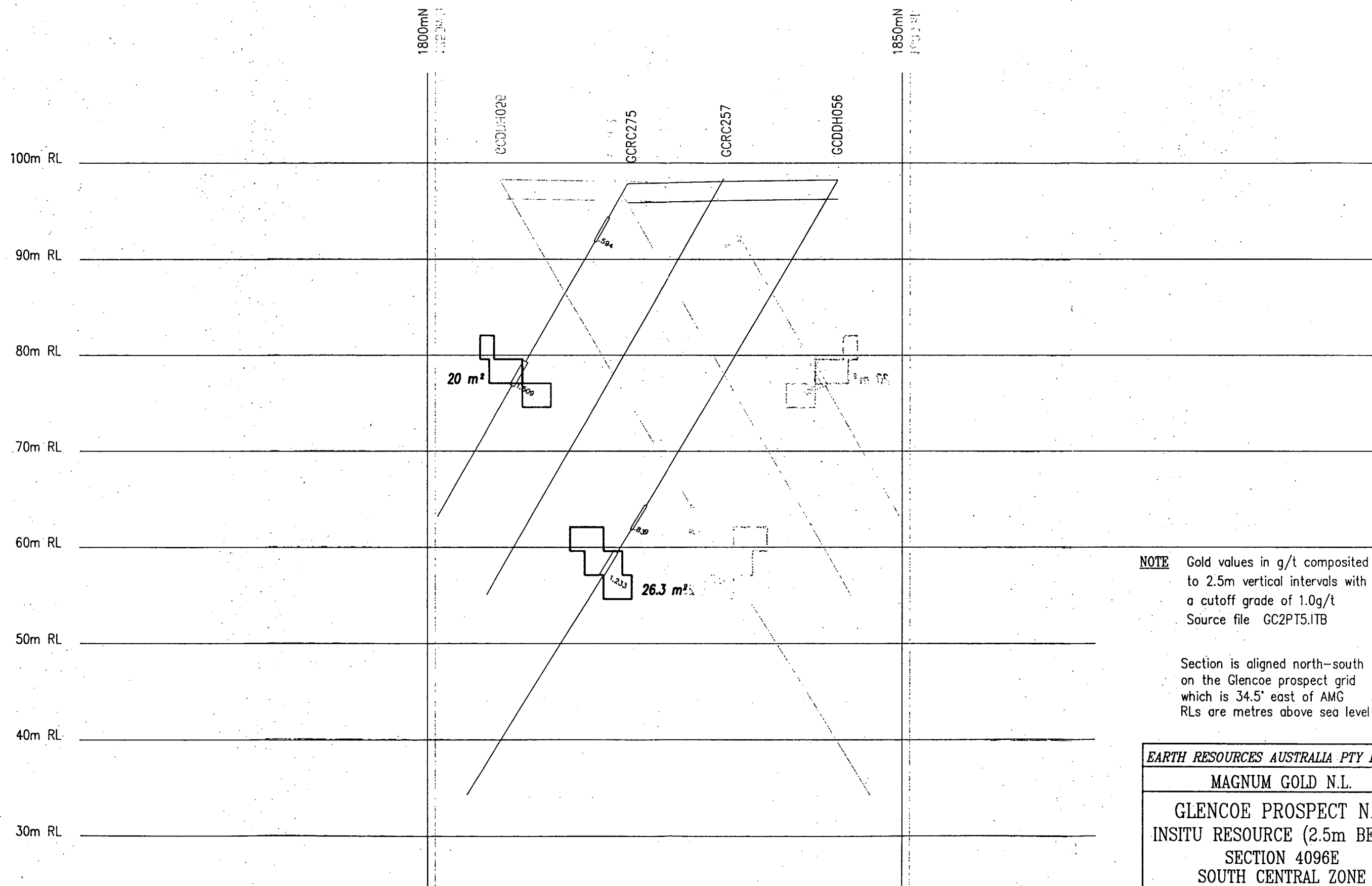
KEY

- Quartz veining
- Fracture/shear zones commonly quartz veined & mineralized
- Regolith
- Greywacke dominated units
- Carbonaceous mudstone
- Siltstone & or mudstone as annotated
- Bedding trends
- Thin fracture/shear zone
- Base of oxidation

NOTE Gold values in g/t composited to 1m intervals down hole.
Cutoff grade 0.5g/t
Source file GEOLCOMP.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T. INTERPRETED GEOLOGY SECTION 4096E SOUTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4096SCGI	FIGURE



NOTE Gold values in g/t composited to 2.5m vertical intervals with a cutoff grade of 1.0g/t
Source file GC2PT5.ITB

Section is aligned north-south on the Glencoe prospect grid which is 34.5° east of AMG
RLs are metres above sea level (AHD)

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT N.T.		
INSITU RESOURCE (2.5m BENCH)		
SECTION 4096E		
SOUTH CENTRAL ZONE		
SCALE 1:400	0 5 10 15 METRES	
REPORT NO. A/265 DATE: FEBRUARY 1989	FILE NAME: 4096SCB2	FIGURE

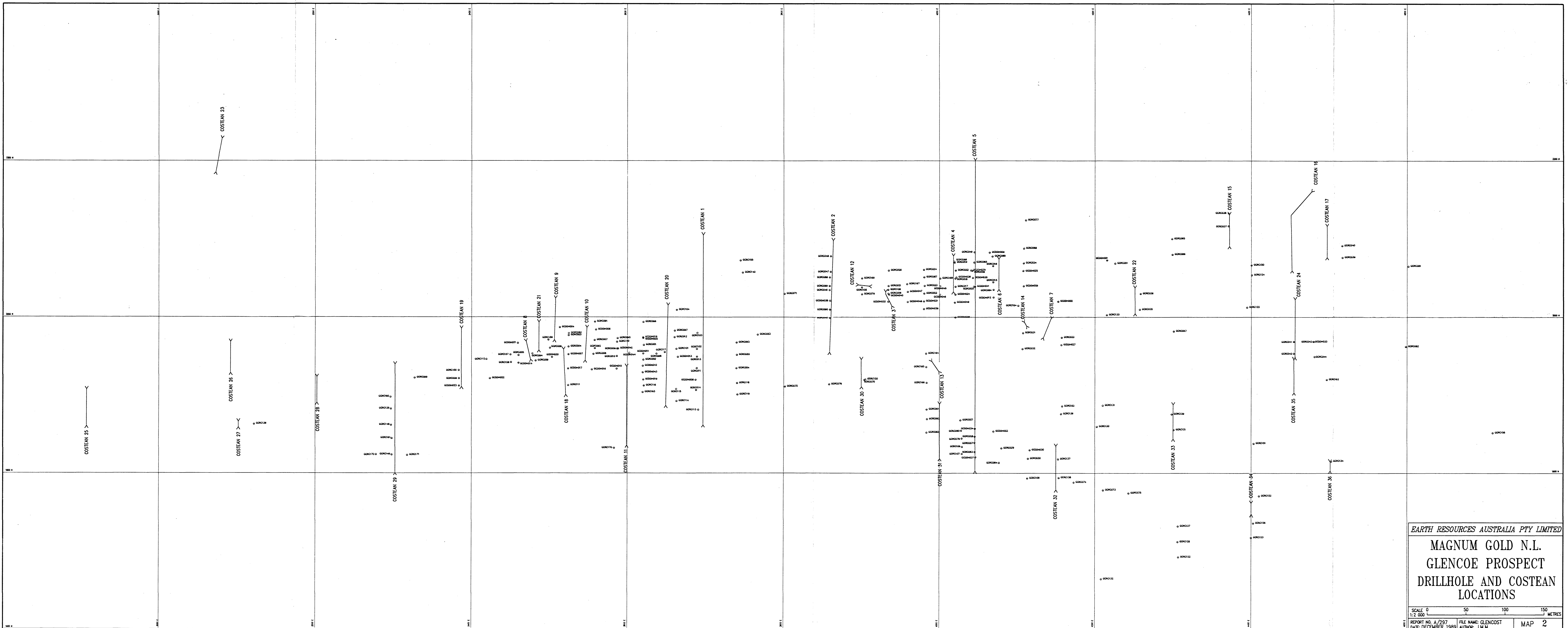


LEGEND

- OUTCROP BOUNDARY
- ◌ QUARTZ OUTCROP
- INTENSE SCREE/RUBBLE BOUNDARY
- - - SCREE BOUNDARY
- ◇ OUTCROP & RUBBLE SAMPLES

EARTH RESOURCES AUSTRALIA PTY LIMITED

GLENCOE PROSPECT
SURFACE MAPPING
(SHEET 1)



EARTH RESOURCES AUSTRALIA PTY LIMITED

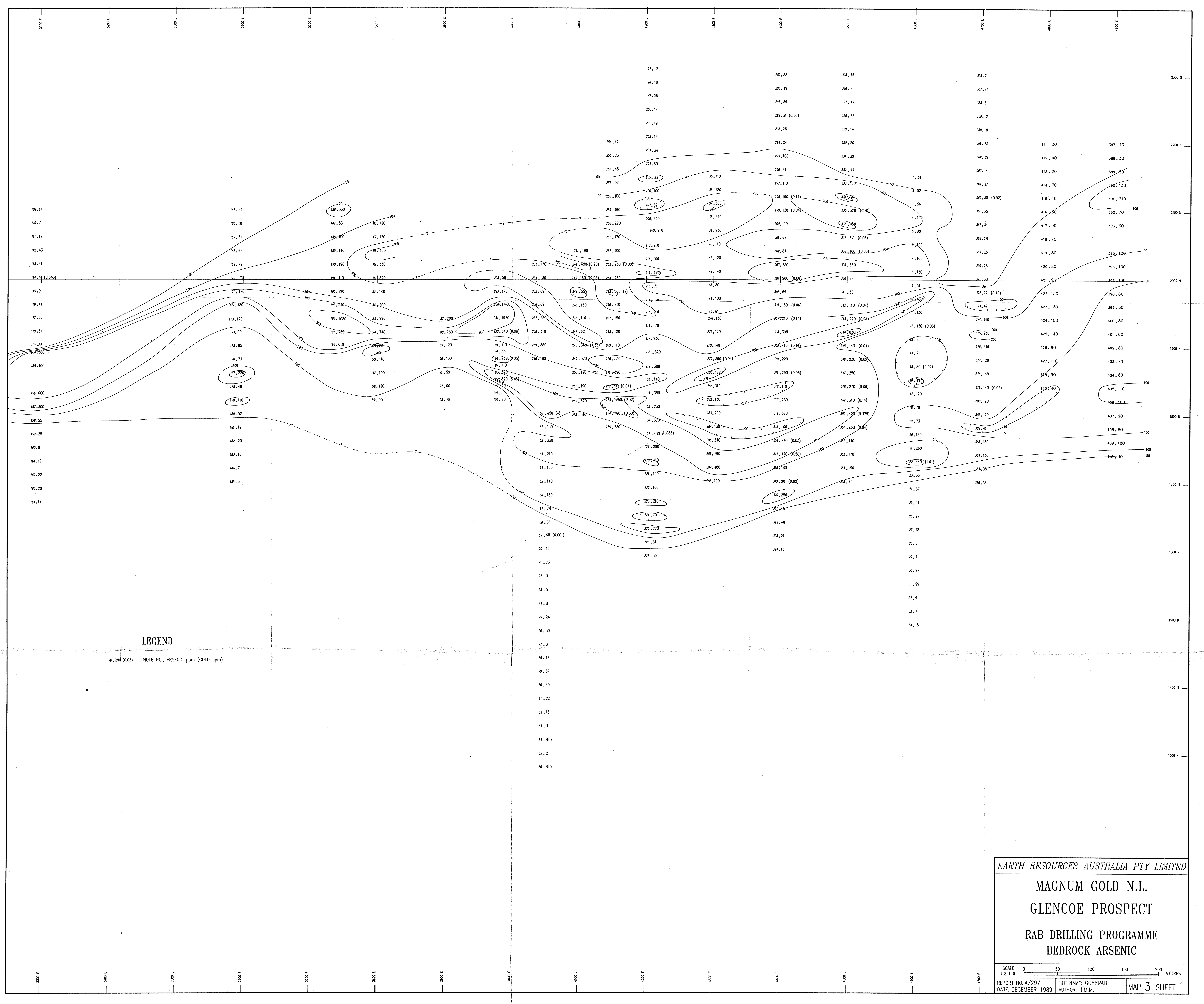
MAGNUM GOLD N.L.
GLENCOE PROSPECT
DRILLHOLE AND COSTEAN
LOCATIONS

SCALE 0 50 100 150
1:2 000 METRES

REPORT NO. A/297
DATE: DECEMBER 1989

FILE NAME: GLENCOST
AUTHOR: I.M.M.

MAP 2



LEGEND

86.280 (0.05) HOLE NO., ARSENIC ppm (GOLD ppm)

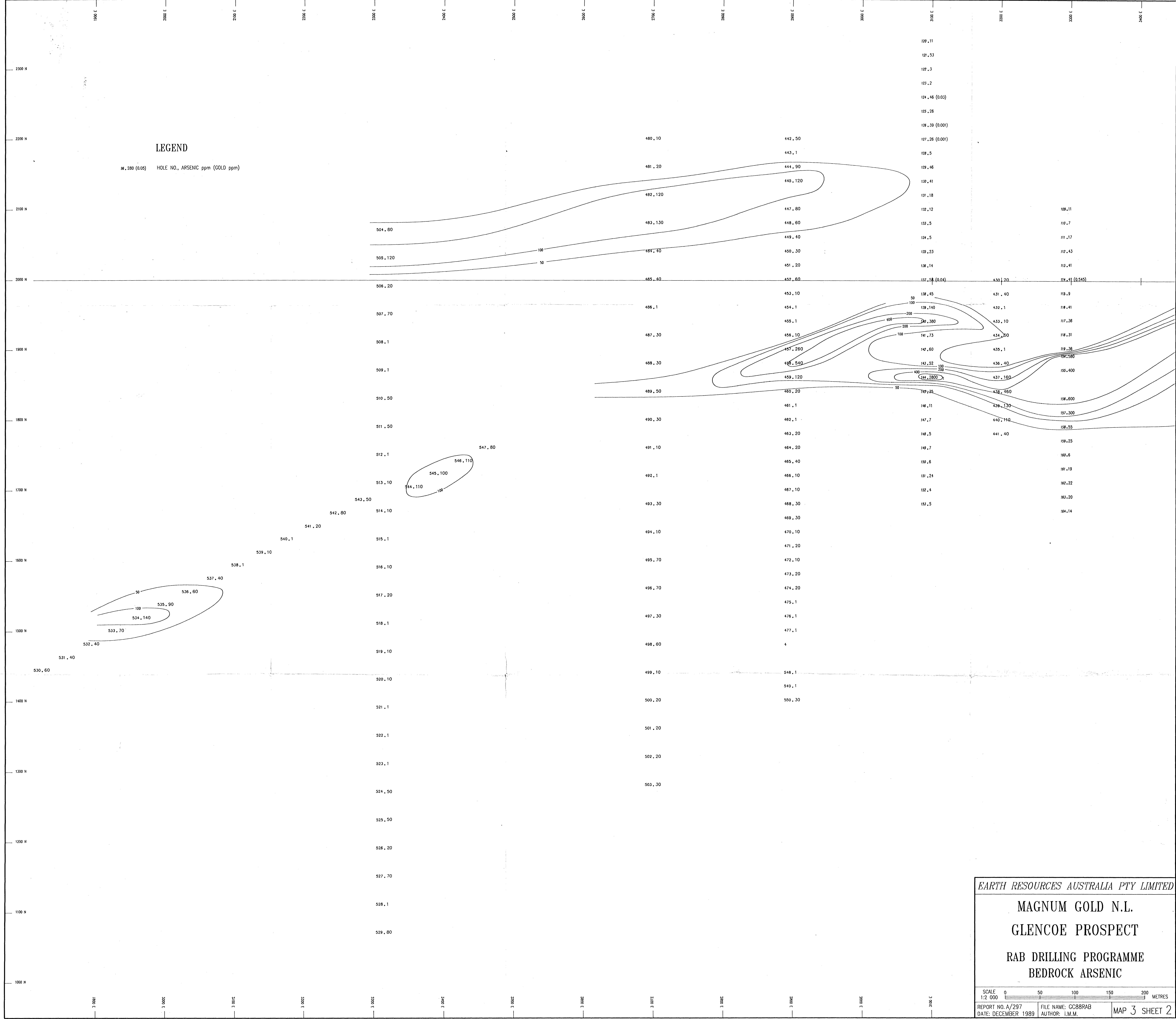
EARTH RESOURCES AUSTRALIA PTY LIMITED

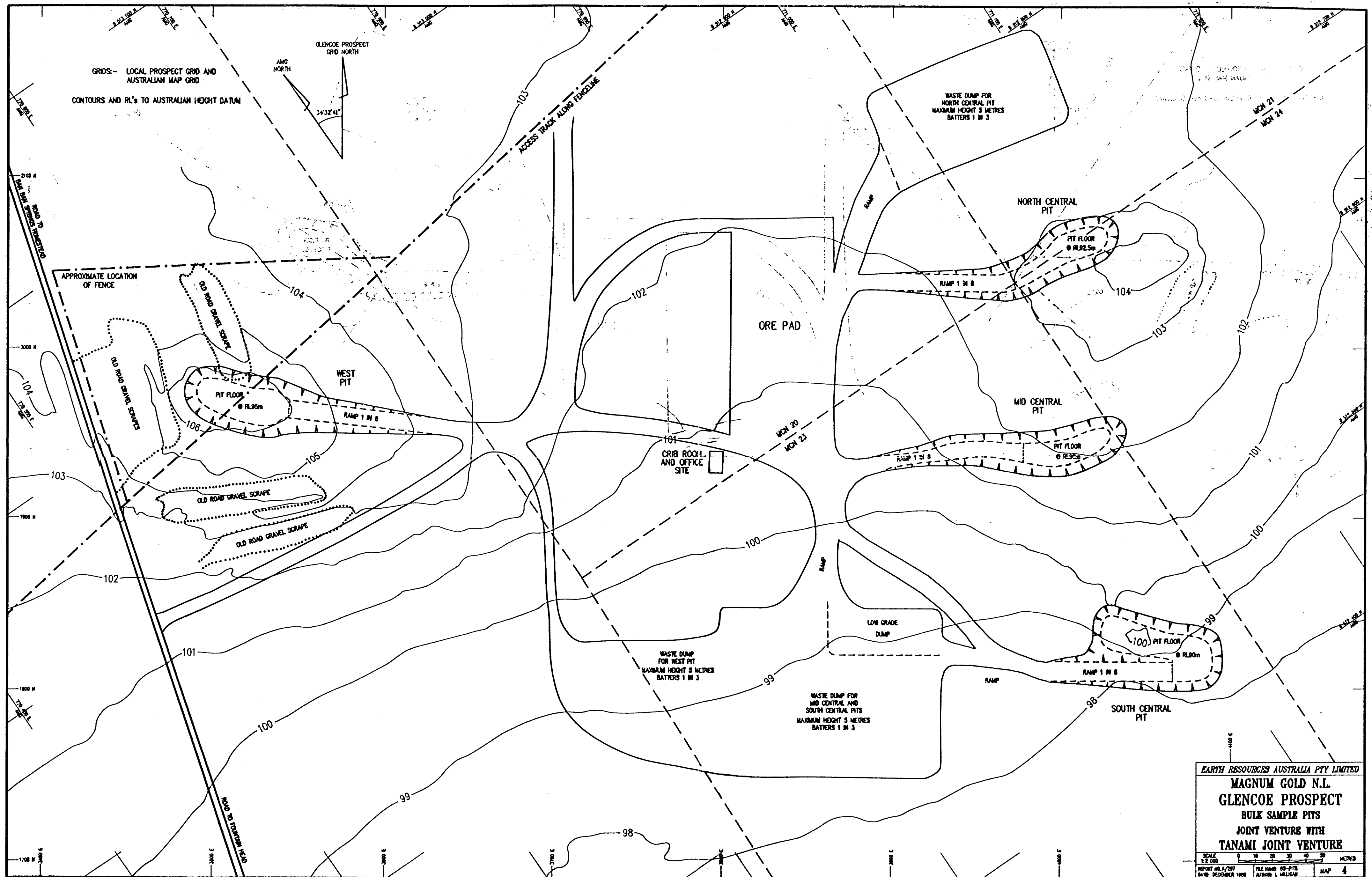
MAGNUM GOLD N.L.
GLENCOE PROSPECT

RAB DRILLING PROGRAMME
BEDROCK ARSENIC

SCALE 0 50 100 150 200 METRES

REPORT NO. A/297 FILE NAME: CC88RAB
DATE: DECEMBER 1989 AUTHOR: I.M.M. MAP 3 SHEET 1





EARTH RESOURCES AUSTRALIA PTY. LIMITED

(INCORPORATED IN NEW SOUTH WALES)

INCORPORATING C. W. MARSHALL & ASSOCIATES (EST. 1958)

621 PACIFIC HIGHWAY, ST. LEONARDS, N.S.W. 2065

P.O. BOX 163, ST. LEONARDS, N.S.W. 2065

TELEPHONE (02) 436 0747

FACSIMILE (02) 437 6294

MCN 20 - MCN 43

26 June 1990

CR90/085

Mr D. Scott
Director of Mines
Mines Division
Department of Mines and Energy
GPO Box 2901
DARWIN NT 0801

CLOSED FILE

DEPT. OF MINES & ENERGY	
FILE NUMBER	861447
COPY FOR	
FILE NO.	1
ACTION OFFICER	
1.	COON
2.	
3.	
4.	
5.	

Dear Sir

RE: GLENCOE PROSPECT - MAGNUM GOLD N.L.

I refer to your letter of 4 June 1990 regarding the bulk sampling program on the Glencoe Prospect. Processing of ore is complete and we attach tabulated results from the sampling program and a plan of the area. and flitch plans.

As you may be aware in January a fire destroyed the Mt Bonnie site office of the Tanami Joint Venture and certain records pertaining to the processing of the Glencoe ore were lost. Estimates were made by the Mt Bonnie staff on ore throughput in the period covered by these records. It was most unfortunate however that details of the source, viz pit and level, for the various parcels of ore, both treated and still in stockpiles, were lost. Consequently although we have reasonably accurate figures for the overall sampling, we have lost much detail. This makes it impossible in some instances to reconcile actual mined tonnage and grade with that predicted by in-pit sampling and exploration.

A further factor affecting the reliability of results relates to the final bullion bar produced (from 3,728 tonnes). This bar had an abnormally high silver content (59% as against 20% Glencoe norm). Both head grade and percentage recovery for this parcel of ore were substantially down on all previous ore (see Table 1). It is evident from these factors that the ore was contaminated with non-Glencoe material, but by how much and of what gold content it is not possible to determine.

It is very disappointing that the above situations have resulted in substantially less data being gained from the bulk sampling exercise than we had hoped for. Reconciliation of total ore figures (Table 2) however shows that actual tonnage mined equates well with tonnage as predicted from pit sampling and is substantially greater than predicted from exploration data. Actual overall grade is higher than predicted from pit sampling but less than indicated from exploration data. Contained gold mined is 9% and 36% higher than predicted by pit sampling and exploration respectively.



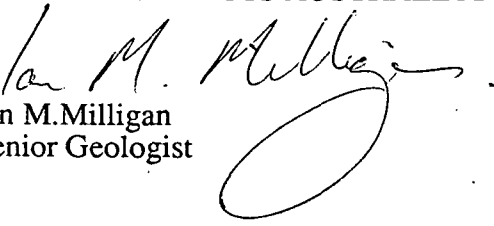
A MEMBER OF THE EARTH RESOURCES AUSTRALIA GROUP - EXPLORATION & MINING CONSULTANTS

99

With regard to the exploration programme for Exploration Licence 4810, the relevant bulk sample was taken in mid-November and early December of last year. As the anniversary of EL4810 falls on 19 November, the sampling period actually fell within the current licence year. Please refer to letters from our office to the Title Registration Branch dated 19 October 1989 and 5 January 1990.

At this stage no further bulk sampling, mining or other disturbances are proposed at the Glencoe site.

Yours faithfully
EARTH RESOURCES AUSTRALIA PTY LIMITED


Ian M. Milligan
Senior Geologist



GLENCOE BULK SAMPLING

TABLE 1 GLENCOE ORE PROCESSING

		PART PERIOD 5 27/10 - 16/11/89 21 Days	PERIOD 6 17/11 - 14/12/89 29 Days	PERIOD 7 15/12/89 - 11/1/90 19 Days (9 no work)	PERIOD 8 12/1/90 - 8/2/90 28 days	PART PERIOD 9 9/2/90 - 15/2/90 7 days	TOTAL
1.	Dry Tonnes Milled	11,807	14,286	est.8,500	10,644	3,728	48,965
2.	Calculated Head Grade (g/t)	6/1 2.063	2.554	2.728	2.645	1.935	2.438
3.	Gold Produced (g)(Ref.)	21,743.8	32,400.6	20,379.8	28,195.9	5,679.8	108,399.9
4.	Recovered Grade (G/t)	7/1 1.759	2.221	2.398	2.366	1.466	2.114
5.	Recovery %	7/6 85.25%	86.96%	87.90%	89.48%	75.75%	86.71%
6.	Gold Input (calc'd) (g)	7+10 24,361.32	36,488.72	23,184.80	28,149.11	7,214.55	119,398.50
7.	Gold Recovered from Ore (g)	3+14 20,768.44	31,731.21	20,379.80	25,186.53	5,464.99	103,530.97
8.	Gold {solid (g)	3,006.87	1,772.83	1,813.12	1,369.11		
9.	in {sol ⁿ (g)	1,750.64	1,032.17	1,149.46	380.45		
10.	Tailings {Total (g)	3,592.88	4,757.51	2,805.00	2,962.58	1,749.56	15,867.53
11.	{Grade (gt)	10/1 0.304	0.333	0.330	0.278	0.469	0.324
12.	Gold in Circuit @ Start (g)	12,657.26	11,681.90	Records lost in	11,012.51	8,003.14	12,657.26
13.	@ End (g)	11,681.90	11,012.51	fire - assume no	8,003.14	7,788.33	7788.33
14.	Change (g)	-975.36	-669.39	change	-3009.37	-214.81	-4,868.93
Running Totals							
	Tonnes	11,807	26,093	34,593	45,237	48,965	
	Av.Head Grade	2.063	2.332	2.429	2.480	2.438	
	Av.Recov.Grade	1.759	2.012	2.107	2.168	2.114	
	Recovery %	85.25%	86.287%	86.73%	87.42%	86.71%	
	Gold Input	24,361.32	60,850.04	84,034.84	112,183.95	119,398.50	
	Gold Produced	21,743.8	54,144.4	74,524.2	102,720.1	108,399.9	
	Δ G.I.C.	-975.36	-1,644.75	-1,644.75	-4,654.12	-4,868.93	
	Gold Recovered	20,768.44	52,499.65	72,879.45	98,065.98	103,530.97	

Notes:

1. Dry Tonnes Milled from weightometer plus correction for moisture content
2. Gold produced is refiner's figure.
3. All values for period 7 based on estimates as figures lost in fire.
4. Silver 33,000 grammes recovered from total 48965 tonnes ore, i.e. 0.67 g/t Ag recovered.

TABLE 2 ORE PARCELS TREATED (Chronological Order)

PIT ¹	RL	TONNES	HEAD GRADE			CONTAINED GOLD
			CV ²	LF ²	ADJ. ²	
SC	98.5 - 95.5	2181	3.23	2.58	2.556	5574.02
NC	101 - 97	4345	1.58	1.66	1.644	7144.81
MC	97 - 95	1103	1.25	1.95	1.932	2130.61
SC	95.5 - 92.5	2847	3.04	2.07	2.051	5837.82
CS	99.5 - 98.5	679	1.65	2.14	2.120	1439.38
WE	106 - 105	652	4.68	3.46	3.427	2234.69
PE ³ 16/11/89		11807			2.063	24361.32
WE	106 - 105	571	2.82	3.31	2.999	1712.73
WE	105 - 102	3835	2.64	2.90	2.628	10078.34
MC	95 - 92	1699	2.30	2.84	2.574	4372.58
MC	92 - 89	2000	1.84	2.87	2.601	5201.61
MC	101 - 97	2045	3.21	3.18	2.882	5893.13
NC	103 - 101	3093	1.33	2.44	2.211	6839.05
MC	102 - 101	1043	1.57	2.53	2.293	2391.28
PE 14/12/89		14286			2.554	36488.72
SC	98.5 - 95.5	1756	1.86	3.17	?	
SC	92.5 - 89.5	1773	1.21	2.81	?	
Remainder of records for this period lost in fire ⁴ . Estimated throughput for full period (15/12/89 to 11/1/90) is 8,500 tonnes @ 2.728 g/t. Apart from the two ore parcels from SC quantified above, all other ore for this period, i.e. 4971 tonnes, was from WE but levels are unknown.						
PE 11/1/90		8500			2.728	23184.80
WE ⁴		10644			2.645	28149.11
PE ³ 8/2/90						
Source not known ⁵		3728			1.935	7214.55
PE 15/2/90						
TOTAL		48965			2.438	119398.50

NOTES:

1. Pit NC North Central
MC Mid Central
SC South Central
WE West
2. Head Grades, three figures given
CV Conveyor to mill
LF Leach feed
ADJ Adjusted for end of period figures on overall head grade
3. PE Period Ending; Gold in circuit inventory taken
4. Pit details of remaining ore also lost in fire.
5. Last ore treated (3728 t) High Ag content and low recovery and head grades indicate contamination by an unknown quantity of non-Glencoe ore.

TABLE 3 ORE RECONCILIATION

PIT	LIFT	RLs	AS MILLED			PREDICTED FROM PIT SAMPLING		
			Tonnes	Grade g/t	Gold g	Tonnes	Grade g/t	Gold g
NC	103	- 101	3093	2.26	6990	3200	1.82	5824
	101	- 97	4345	1.54	6691	3696	1.85	6838
	97	- 94	*			2310	2.36	5452
	94	- 91	*			1355	3.34#	4526
	TOTAL		*			10561	2.14	22640
MC	102	- 101	1043	2.34	2441	1320	1.71	2257
	101	- 97	2045	2.94	6012	2280	2.15	4902
	97	- 95	*1103	1.84	2030	2218	2.10	4658
	95	- 92	1699	2.63	4468	2064	2.54	5243
	92	- 89	2000	2.66	5320	1694	3.36#	5692
	TOTAL		*7890	2.57	20271	9576	2.38	22752
SC	99.5	- 98.5	679	2.00	1358	1080	3.12	3370
	98.5	- 95.5	3937	2.56	10079	5640	2.89	16300
	95.5	- 92.5	2847	1.93	5495	2525	2.22	5606
	92.5	- 89.5	*			2556	1.81#	4626
	TOTAL		*			11801	2.53	29902
WE	106	- 105	1223	3.23	3950	2156	2.79	6015
	105	- 102	*3835	2.69	10316	7200	1.62	11664
	102	- 99	*			3942	2.08	8199
	99	- 96	*			3700	2.09#	7733
	TOTAL		20673			16998	1.98	33611
TOTAL ALL PITs			48965	2.438	119398	48936	2.23	109127

NOTES:

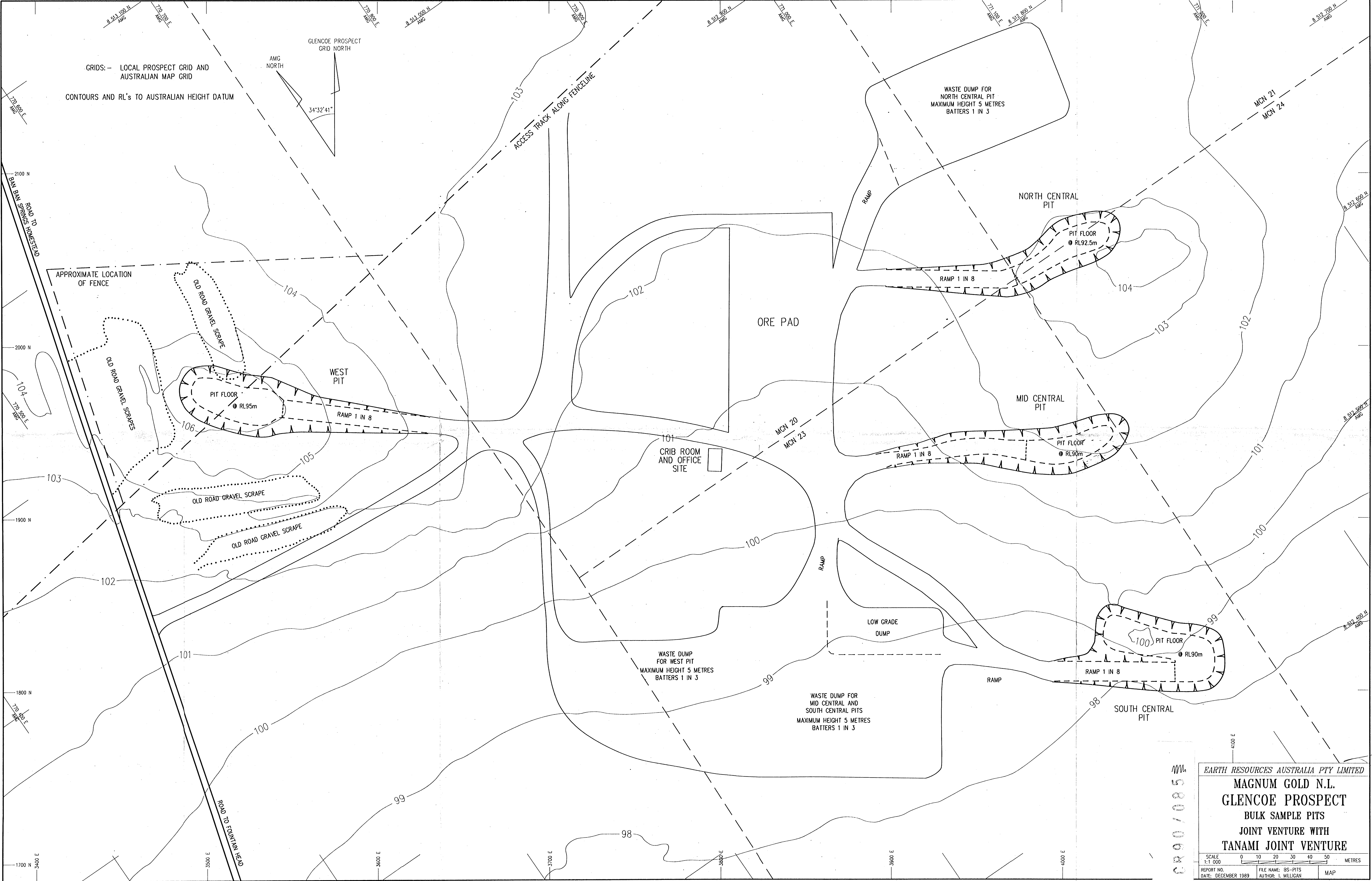
* Figures not available or incomplete - see Note 4, Table 2

No basal rip assays, grade based on top assays only

NC North Central, MC Mid Central, SC South Central, WE west

PIT SAMPLING vrs EXPLORATION DATA

Pit	PIT SAMPLING		EXPLORATION	
	Tonnes	Grade	Tonnes	Grade
NC	10561	2.14	9000	2.30
MC	9576	2.38	6100	2.30
SC	11801	2.53	9200	3.50
WE	16998	1.98	9700	2.10
TOTAL	48936	2.23	34000	2.57



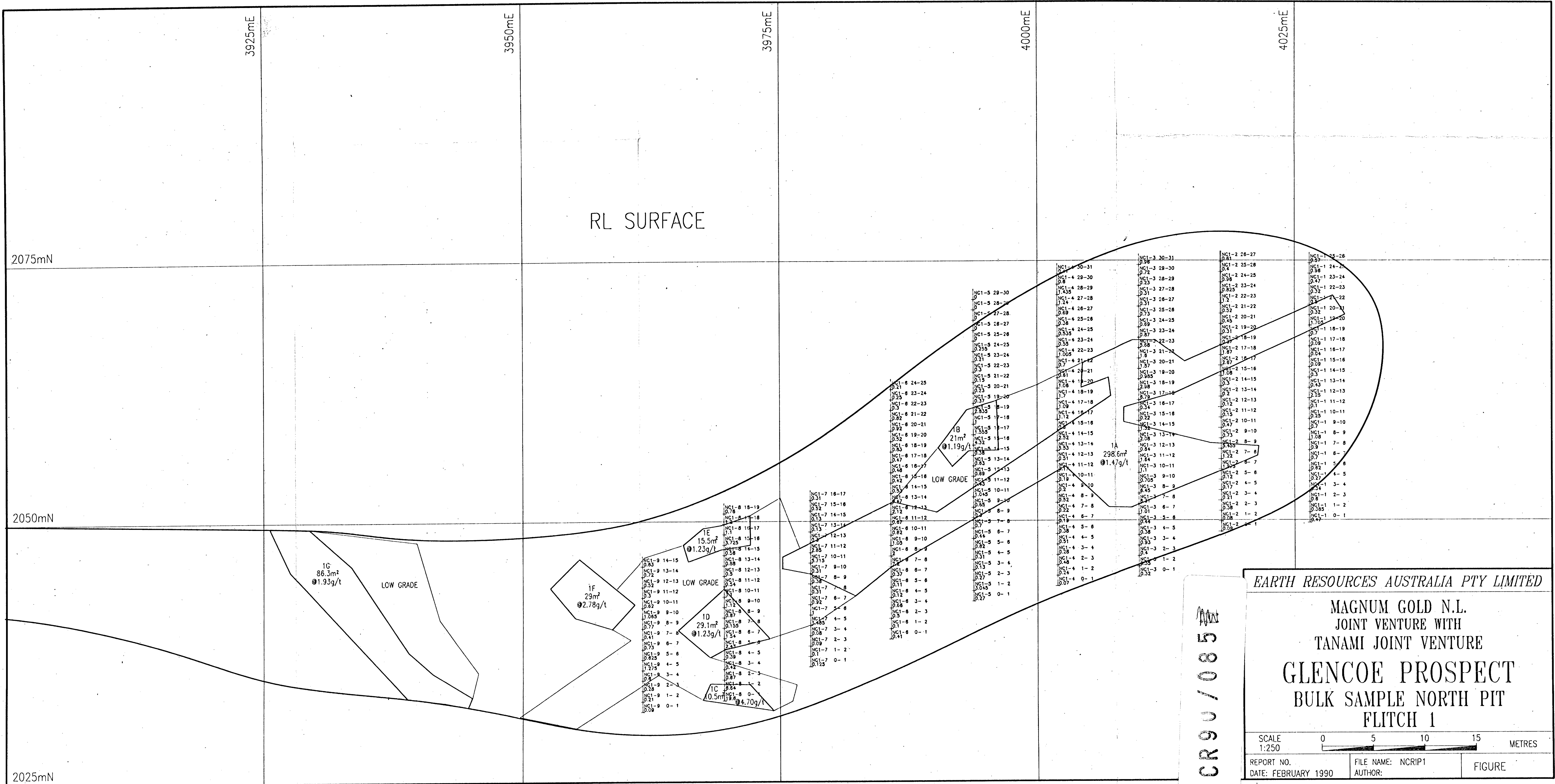
GRIDS: - LOCAL PROSPECT GRID AND
AUSTRALIAN MAP GRID

CONTOURS AND RL's TO AUSTRALIAN HEIGHT DATUM

5801085

42901085

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L.		
GLENCOE PROSPECT		
BULK SAMPLE PITS		
JOINT VENTURE WITH		
TANAMI JOINT VENTURE		
SCALE 1:1 000	0 10 20 30 40 50 METRES	
REPORT NO.	FILE NAME: BS-PITS	MAP
DATE: DECEMBER 1989	AUTHOR: I. MILLIGAN	



CR90/085

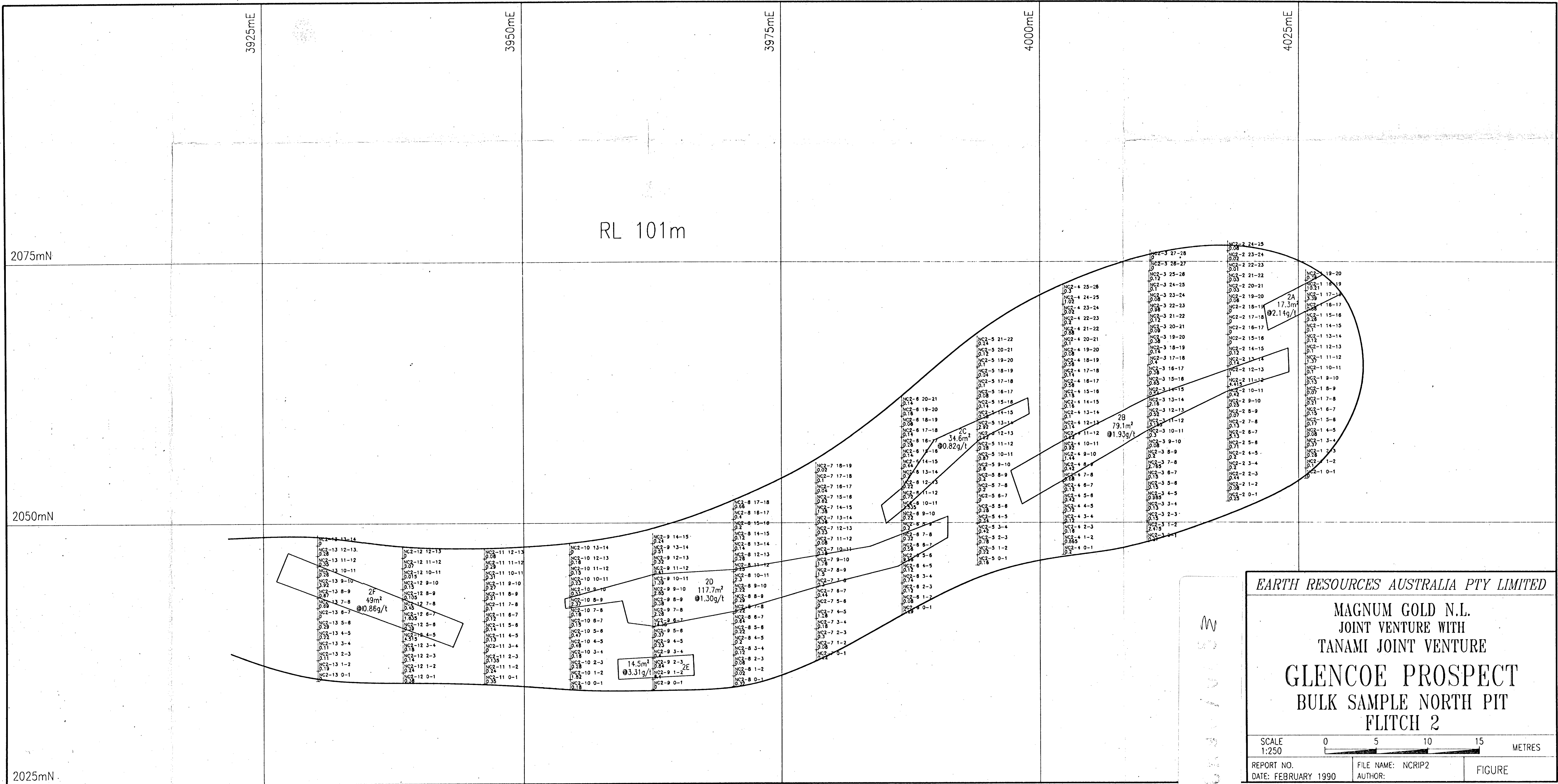
EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

GLENCOE PROSPECT
BULK SAMPLE NORTH PIT
FLITCH 1

SCALE 1:250 0 5 10 15 METRES

REPORT NO. DATE: FEBRUARY 1990 FILE NAME: NCRI1 AUTHOR: FIGURE



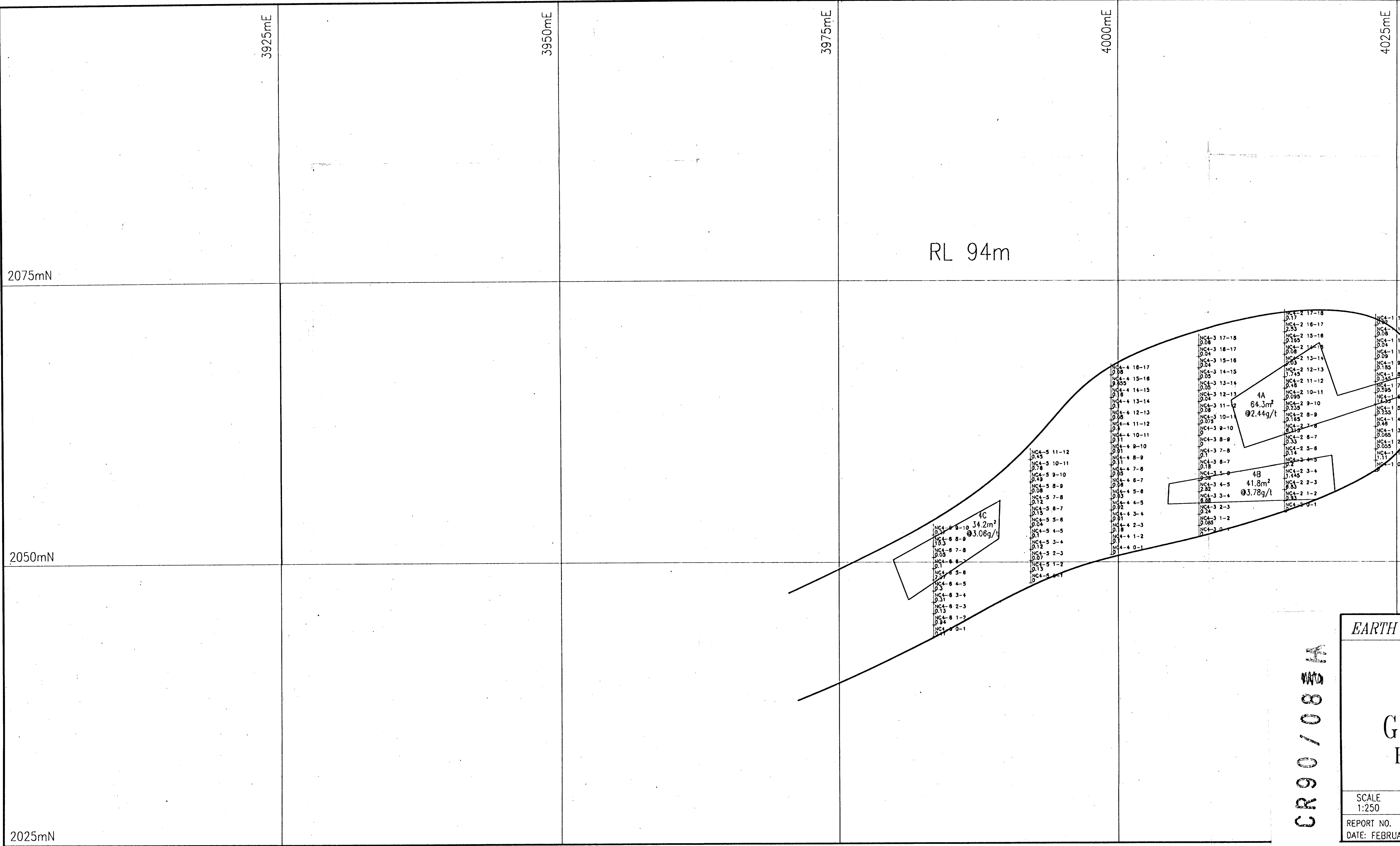
EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

GLENCOE PROSPECT
BULK SAMPLE NORTH PIT
FLITCH 2

SCALE 1:250 0 5 10 15 METRES

REPORT NO. FILE NAME: NCRIP2
DATE: FEBRUARY 1990 AUTHOR: FIGURE



CR 90/08 1A

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

GLENCOE PROSPECT
BULK SAMPLE NORTH PIT
FLITCH 4

SCALE
1:250

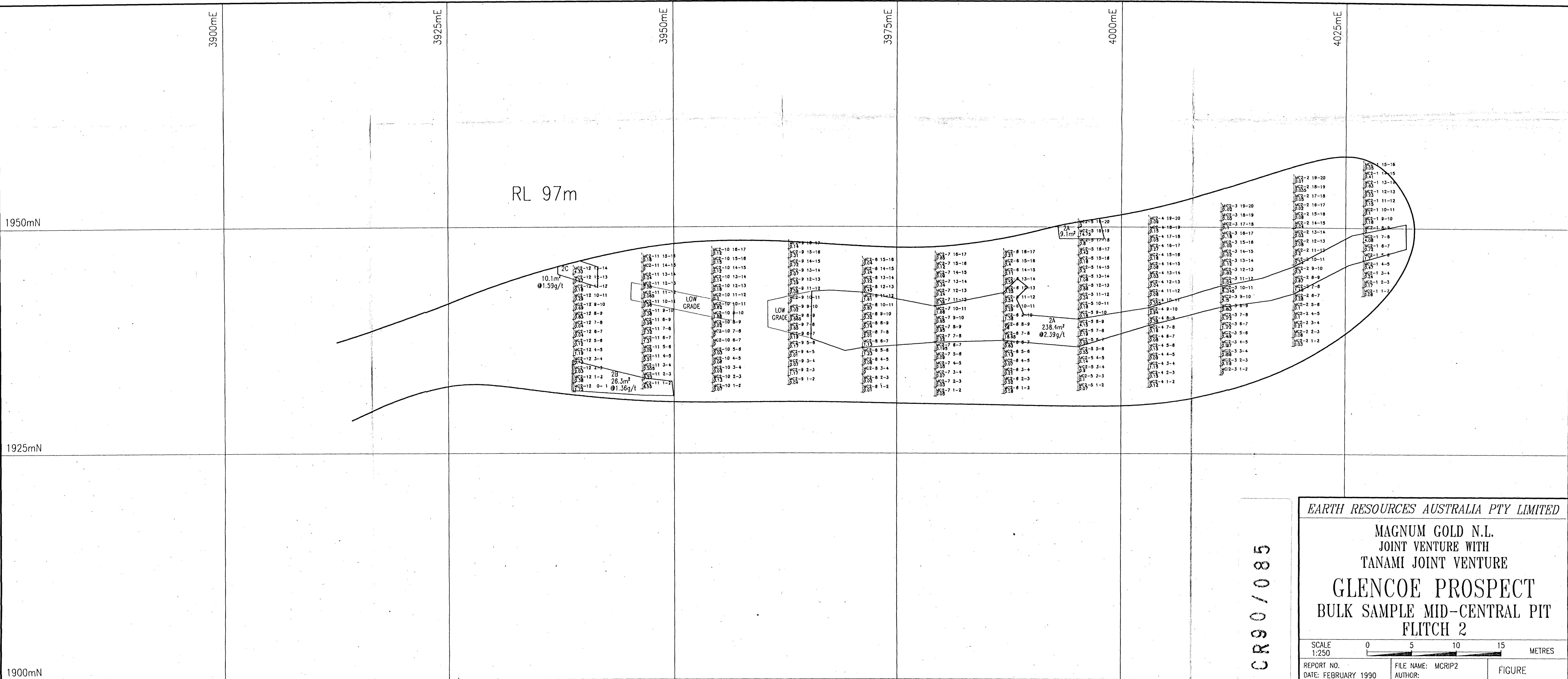
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METRES

REPORT NO.
DATE: FEBRUARY 1990

FILE NAME: NCRI4
AUTHOR:

FIGURE



CR90/085

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

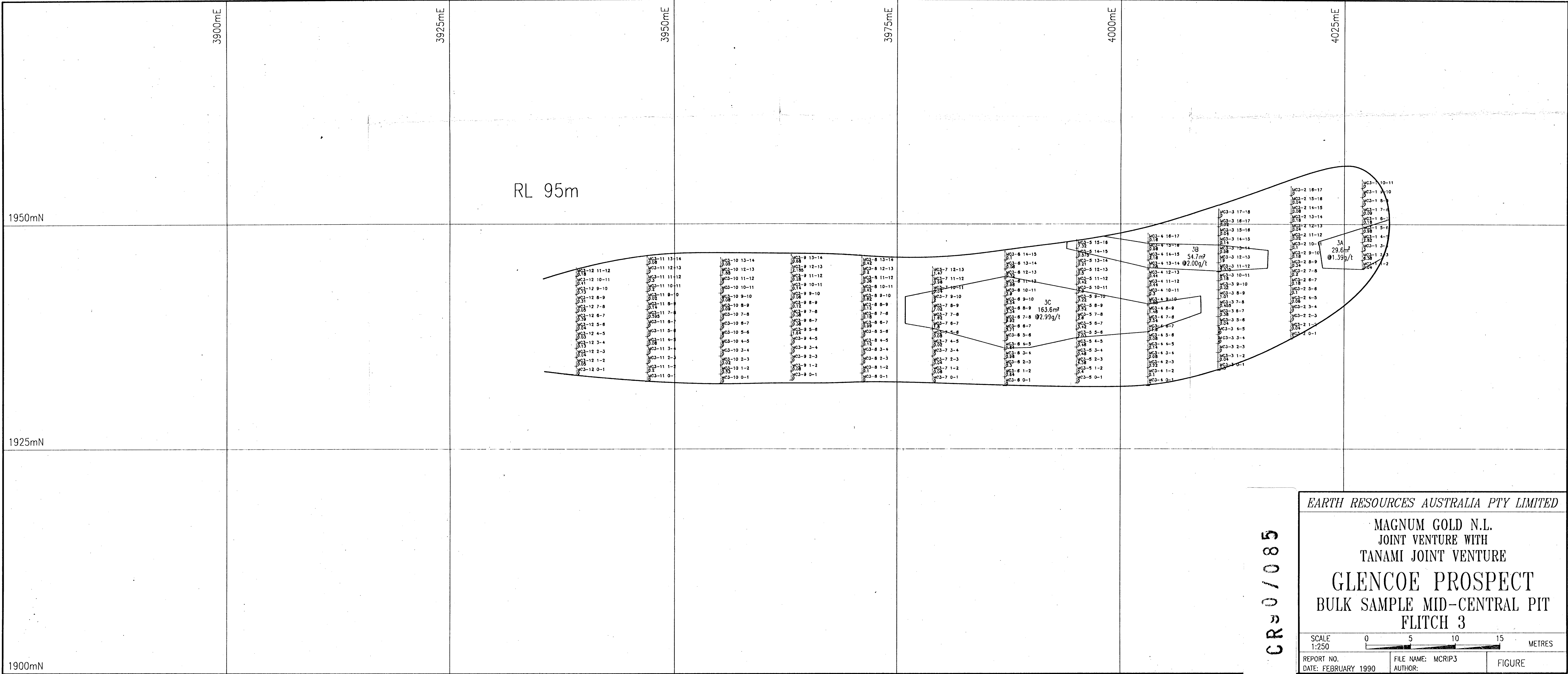
GLENCOE PROSPECT
BULK SAMPLE MID-CENTRAL PIT
FLITCH 2

SCALE 1:250
0 5 10 15 METRES

REPORT NO. DATE: FEBRUARY 1990

FILE NAME: MCRI2
AUTHOR:

FIGURE



CR 01085

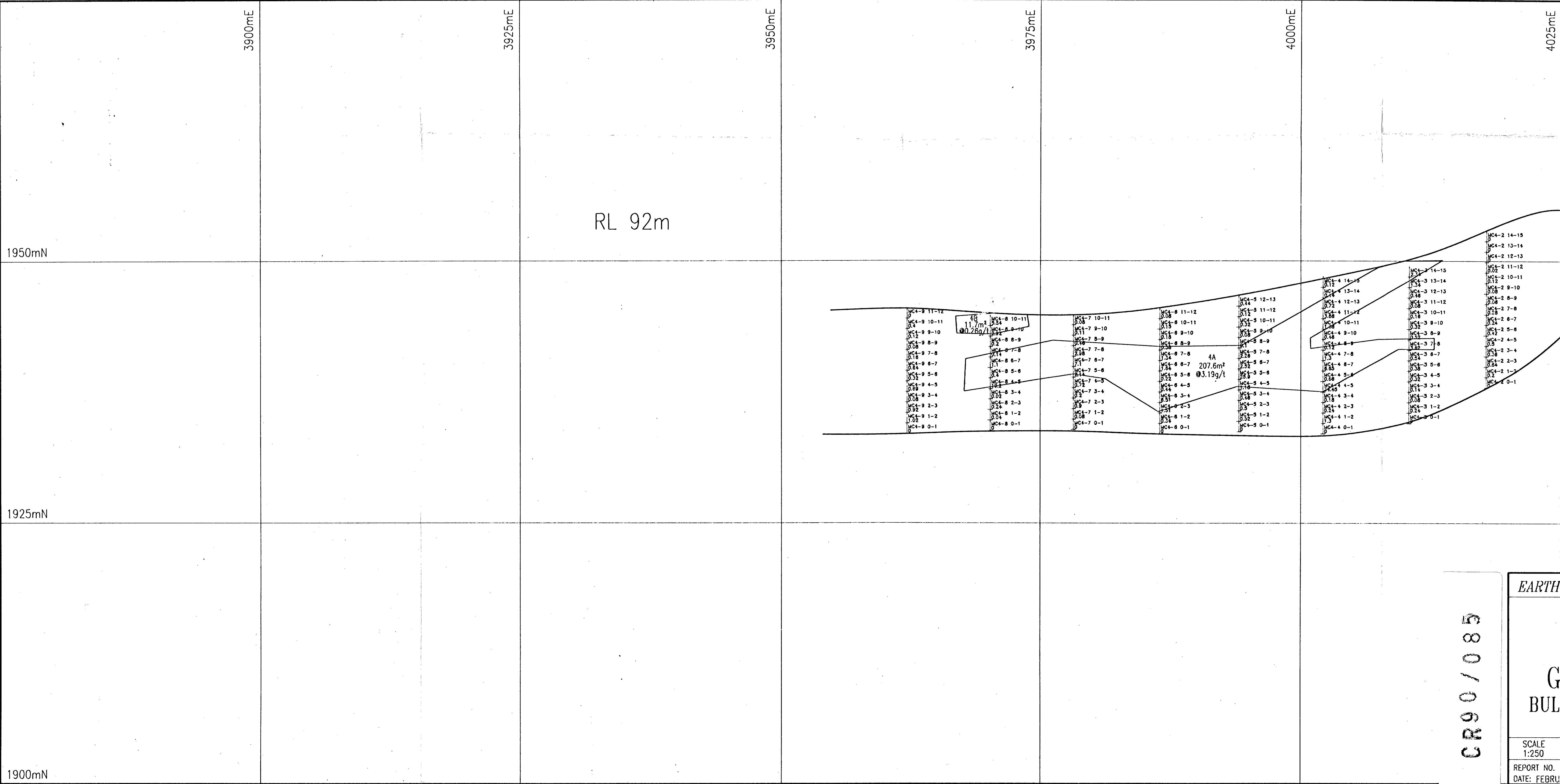
EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

GLENCOE PROSPECT
BULK SAMPLE MID-CENTRAL PIT
FLITCH 3

SCALE 1:250 0 5 10 15 METRES

REPORT NO. FILE NAME: MCRIP3
DATE: FEBRUARY 1990 AUTHOR: FIGURE



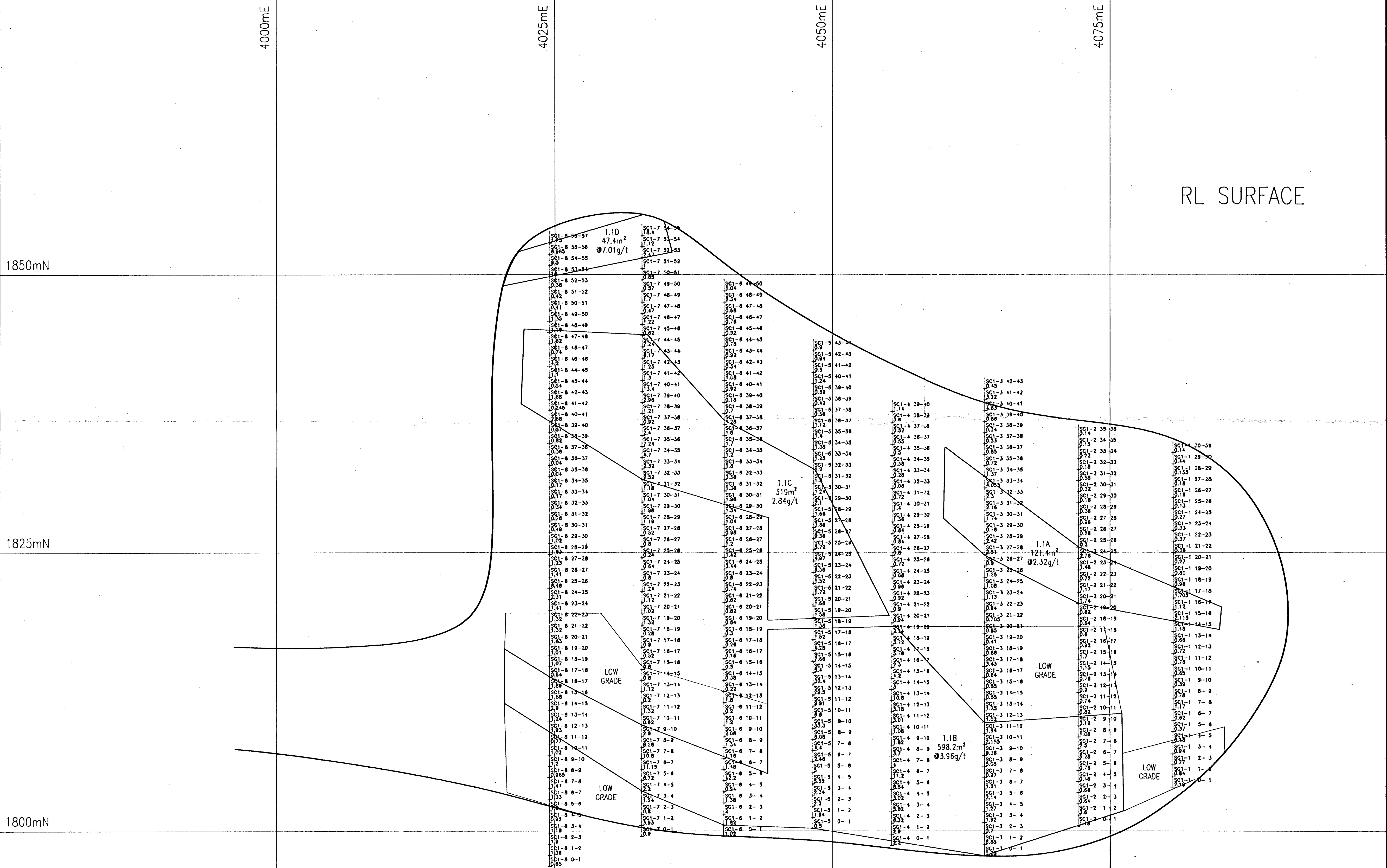
EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE
GLENCOE PROSPECT
BULK SAMPLE MID-CENTRAL PIT
FLITCH 4

SCALE 1:250 0 5 10 15 METRES

REPORT NO. FILE NAME: MCRIP4 AUTHOR: FIGURE
DATE: FEBRUARY 1990

CR90/085



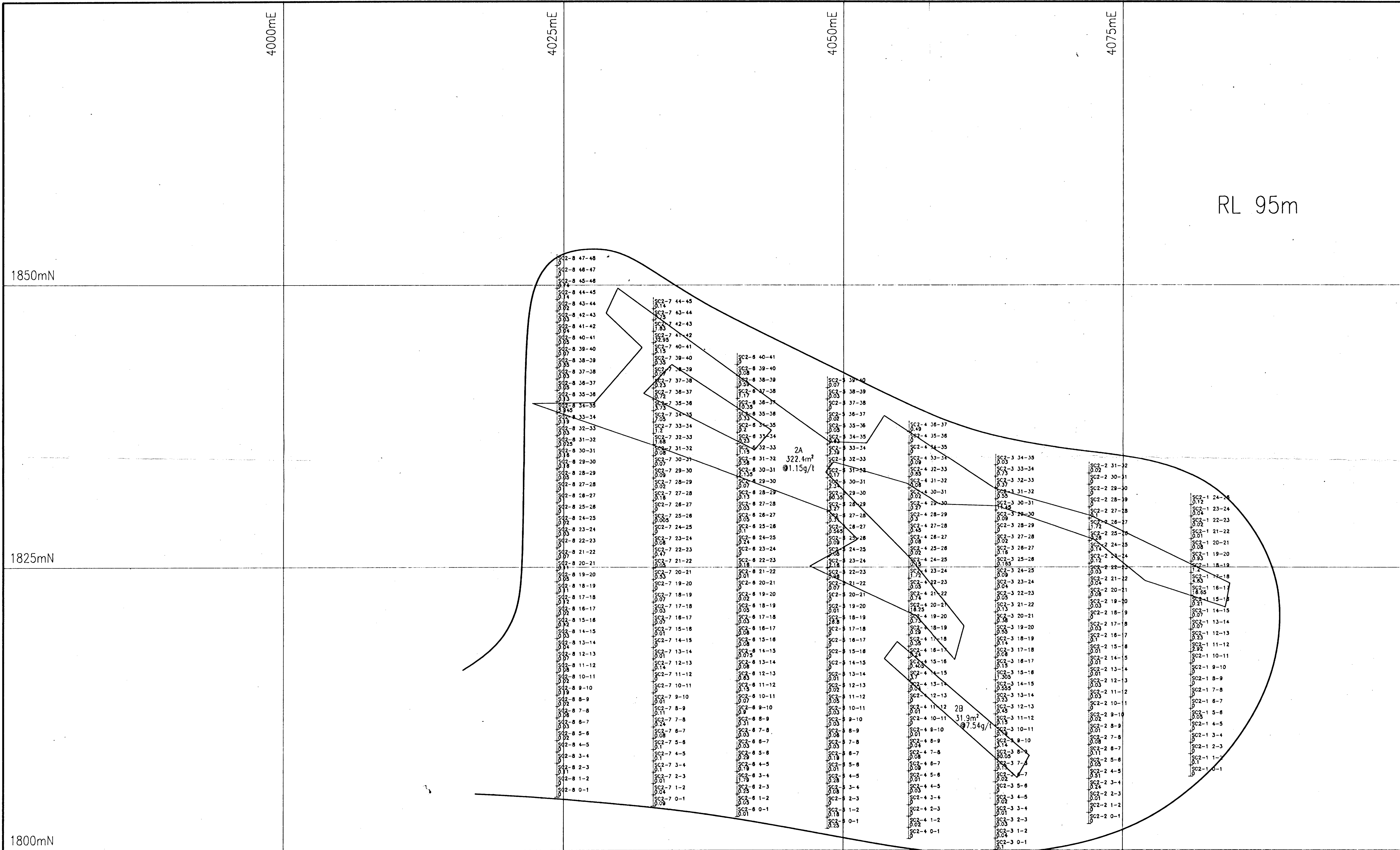
EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

GLENCOE PROSPECT
BULK SAMPLE SOUTH PIT
FLITCH 1

SCALE 1:250 0 5 10 15 METRES

REPORT NO.	FILE NAME: SCRIP1	FIGURE
DATE: FEBRUARY 1990	AUTHOR:	



EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

GLENCOE PROSPECT
BULK SAMPLE SOUTH PIT
FLITCH 2

SCALE
1:250

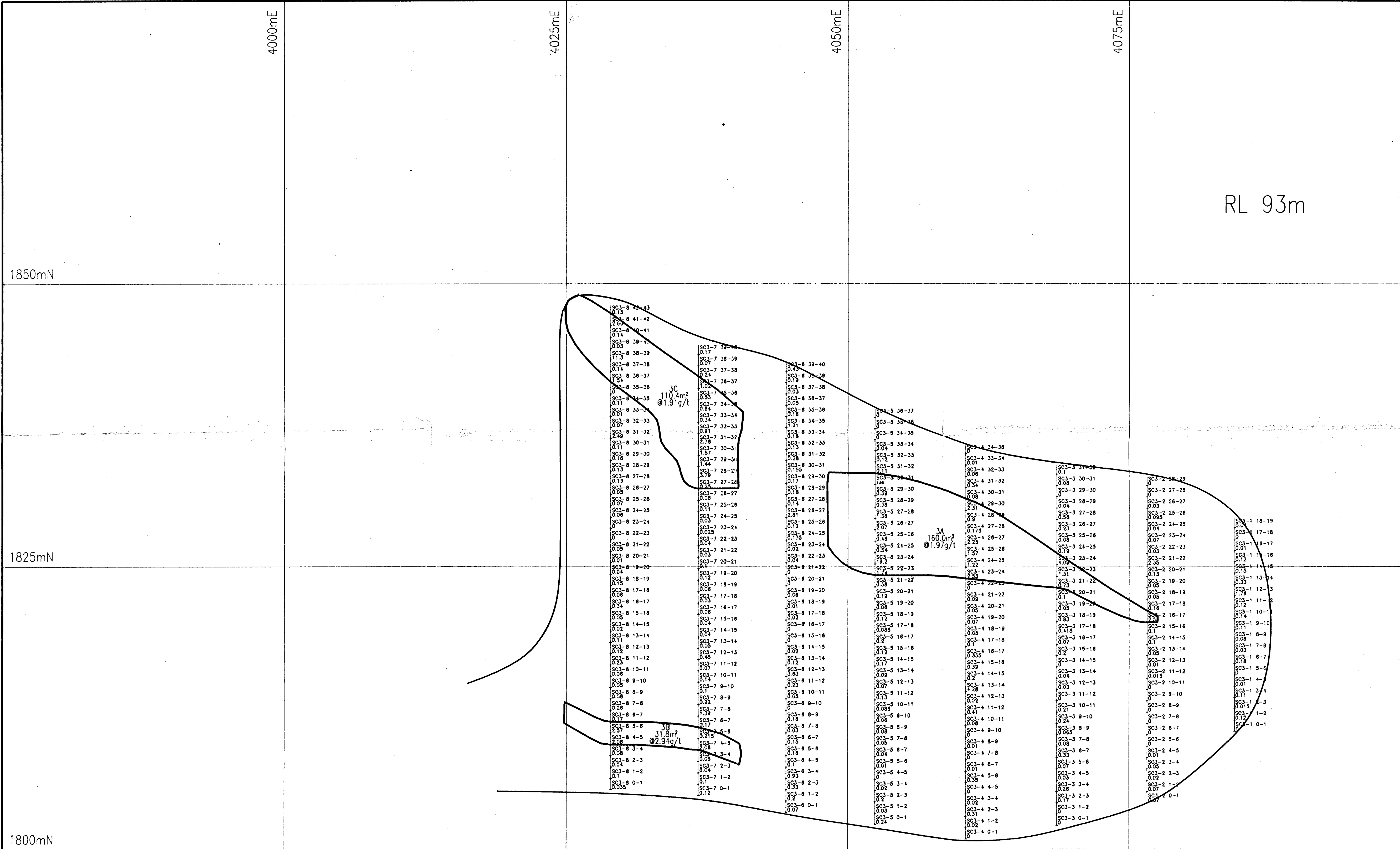
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METRES

REPORT NO.
DATE: FEBRUARY 1990

FILE NAME: SCIP2
AUTHOR:

FIGURE

CR90/095



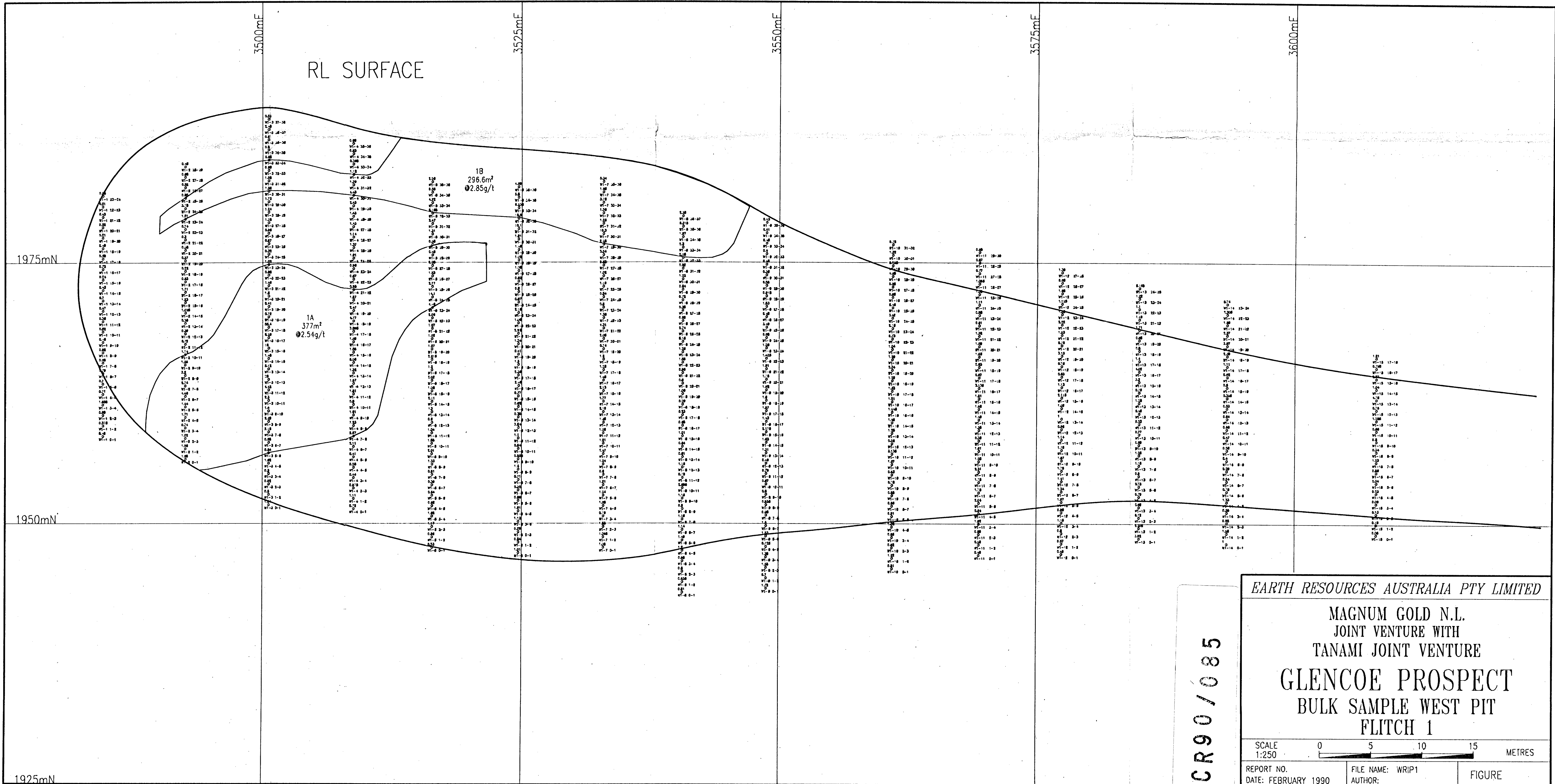
EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE
GLENCOE PROSPECT
BULK SAMPLE SOUTH PIT
FLITCH 3

SCALE 1:250 0 5 10 15 METRES

REPORT NO. DATE: FEBRUARY 1990 FILE NAME: SCIP3 AUTHOR: FIGURE

CR90/085

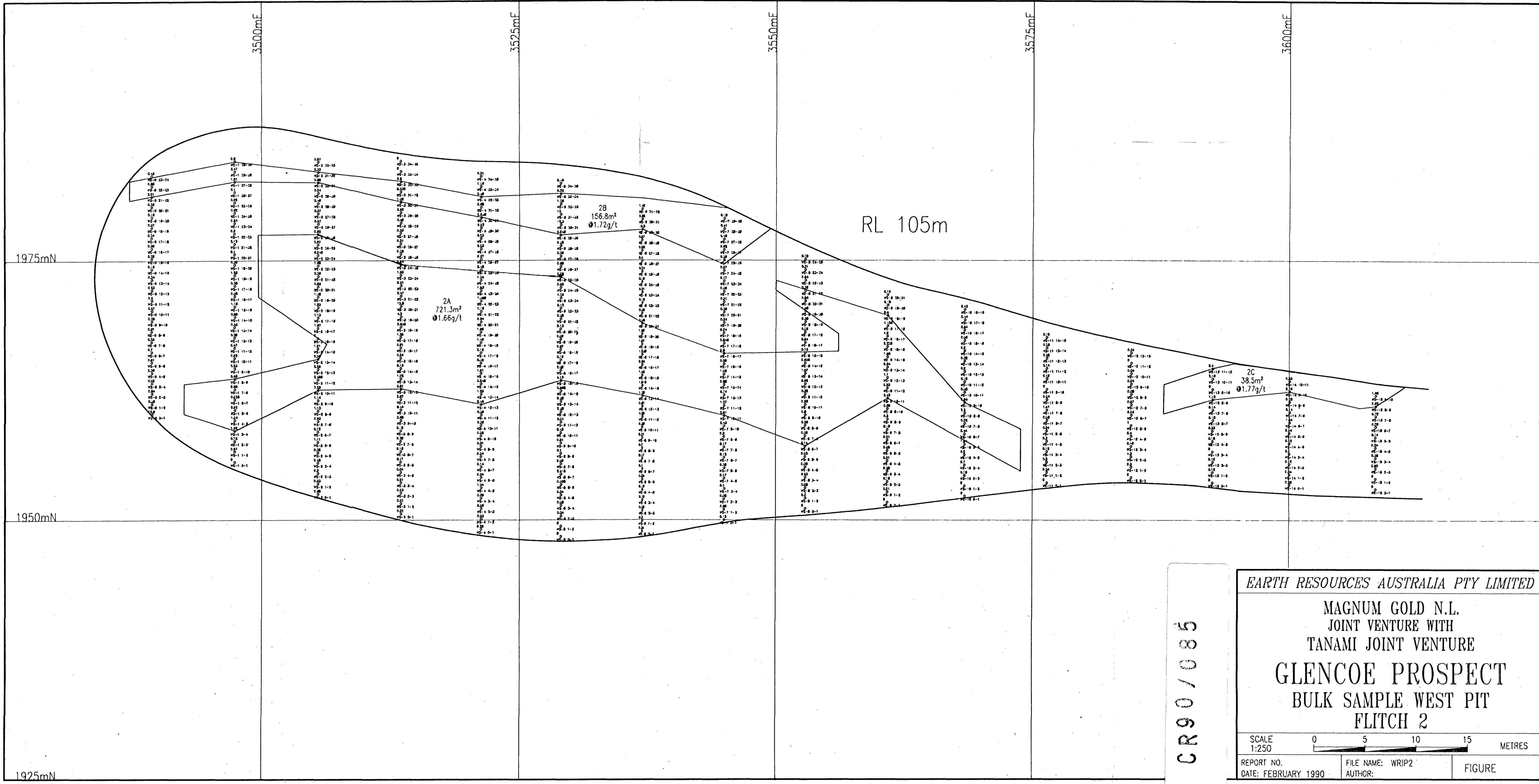


EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE
GLENCOE PROSPECT
BULK SAMPLE WEST PIT
FLITCH 1

SCALE 1:250 0 5 10 15 METRES

REPORT NO. DATE: FEBRUARY 1990 FILE NAME: WRIP1 AUTHOR: FIGURE:



CR90/085

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE

GLENCOE PROSPECT
BULK SAMPLE WEST PIT
FLITCH 2

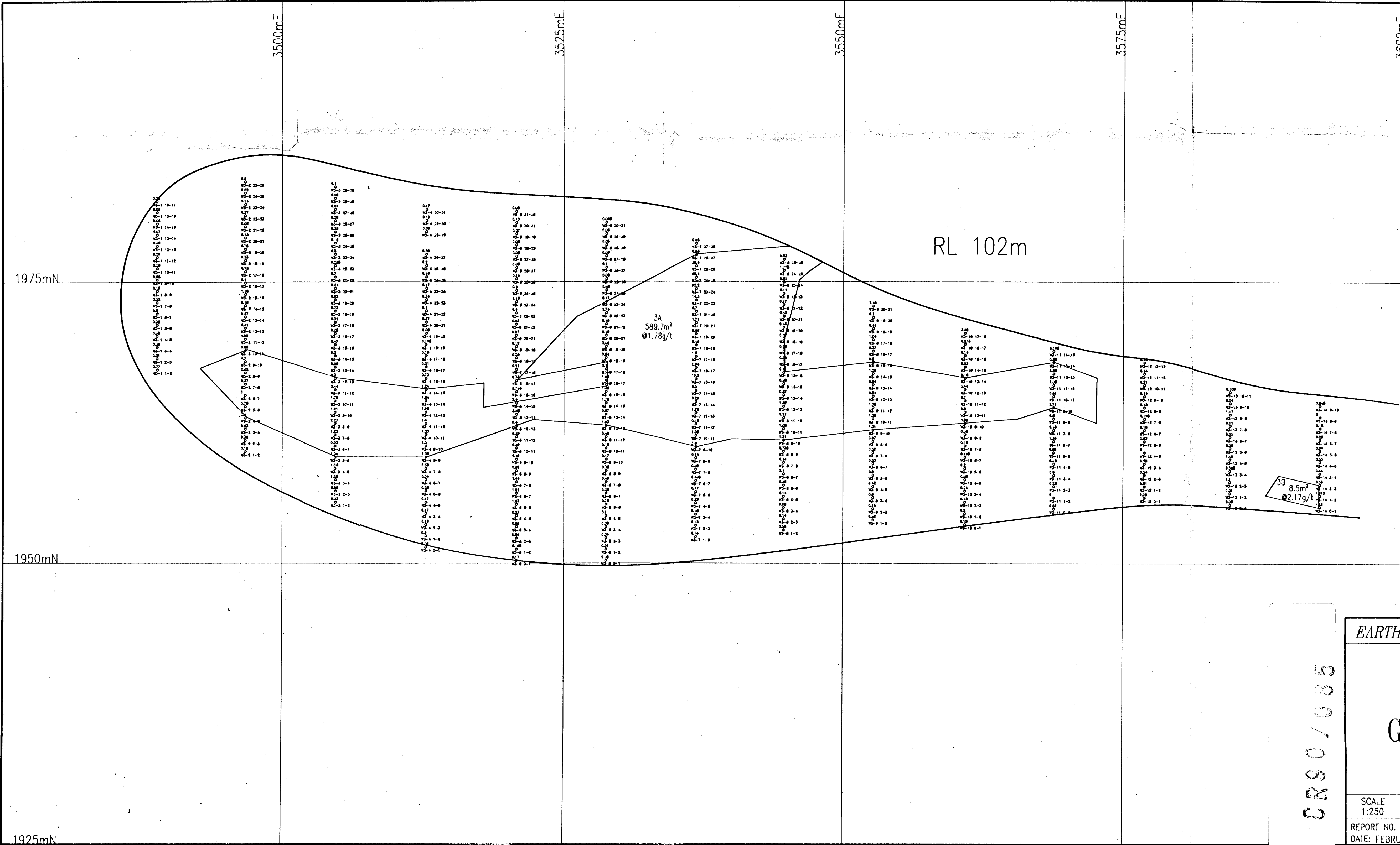
SCALE
1:250

0 5 10 15 METRES

REPORT NO.
DATE: FEBRUARY 1990

FILE NAME: WRIP2
AUTHOR:

FIGURE



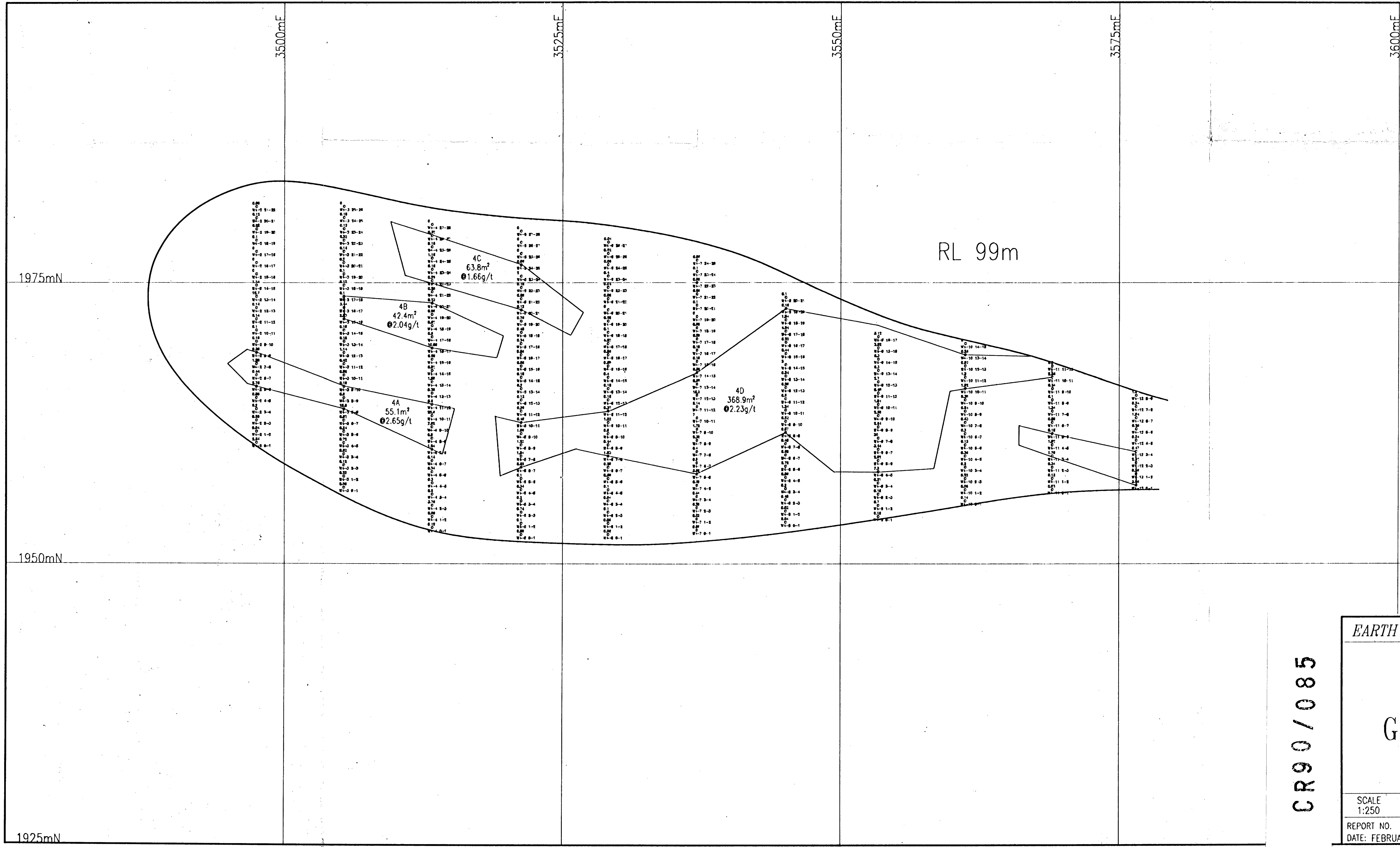
CR90/085

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM GOLD N.L.
JOINT VENTURE WITH
TANAMI JOINT VENTURE
GLENCOE PROSPECT
BULK SAMPLE WEST PIT
FLITCH 3

SCALE 1:250 0 5 10 15 METRES

REPORT NO. FILE NAME: WRIP3
DATE: FEBRUARY 1990 AUTHOR: FIGURE



CR90/085

EARTH RESOURCES AUSTRALIA PTY LIMITED		
MAGNUM GOLD N.L. JOINT VENTURE WITH TANAMI JOINT VENTURE		
GLENCOE PROSPECT BULK SAMPLE WEST PIT FLITCH 4		
SCALE 1:250	0 5 10 15 METRES	
REPORT NO. DATE: FEBRUARY 1990	FILE NAME: WRIP4 AUTHOR:	FIGURE