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ANNUAL REPORT - EL 24/96
WALFORD PEAK - PASMINGO
K DENWER

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PASMINCO EXPLORATION

WALFORD PEAK EL 24/96

ANNUAL REPORT
FOR THE PERIOD ENDING OCTOBER 1998

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1. SUMMARY

Minimal work has been done by Pasminco during the second year of title.

The proposition that the Selina Conglomerate is similar to the Mount Leyshon vent breccia in Queensland is in the process of being tested. Six rock chip samples of the Selina Conglomerate were not auriferous. Further testing of this prospect is planned in the coming field season.

The access was refurbished into Lake Spicer to enable testing of the Lake Spicer-Dora area. Rock chips were collected from old working and mapping commenced. Unfortunately heavy rainfall washed out a section of the track and blocked access into this area. Additional work is planned for this prospect in the summer months.

2. INTRODUCTION

This report details exploration work undertaken on the Walford Peak EL 24/96 in the second tenement year. The location of the tenement is shown in Figure 1. It contains part of an area of Mt Read Volcanics to the east of the Henty Fault, the volcanic belt stretching from north of the Cambrian Murchison Granite in the north to east of Mt Lyell in the south. To the west of the tenement the volcanic belt is separated from the Henty Fault by a package of Cambro-Ordovician sediments of the Owen Conglomerate.

Only minimal work was completed on the Walford Peak Tenement (EL 24/96) during this reporting year. Access was gained into the Lake Spicer-Lake Dora area by refurbishing the existing track to enable mapping and sampling in this area. This work was commenced but was terminated when the access track was washed out during heavy rain.

The proposition that the Selina Conglomerate is similar to the Mount Leyshon vent breccia in Queensland is in the process of being tested. The track that cuts through exposure of the breccia was rock chip sampled. Further testing of this prospect is planned in the coming field season.

The 1997 annual report by Weber, Murphy and Aliano is a very thorough appraisal of the previous work and potential of this tenement. This work is not repeated in this report or the figure reproduced, instead the reader is referred to relevant section of the 1997 report.

3. REGIONAL GEOLOGY

This section is taken directly from the 1997 annual report. Figures are not reproduced here, the reader is referred back to this 1997 report.

Figure 2 is derived from the published 1:25,000 scale maps. The northern boundary of the tenement contains the southernmost extremities of the Murchison Granite, a Cambrian intrusive complex about 7.5km long by up to 3km wide. Whole rock analyses of unaltered Murchison Granite indicate a dioritic composition, high potassium content and a high Fe_2O_3/FeO ratio. This suggests the Murchison Granite could have been a good source for gold mineralised fluids and a possible source rock for gold and copper/gold deposits in the area. There is significant hydrothermal alteration surrounding the Murchison Granite.

The eastern edge of EL 24/96 comprises pre Cambrian Tyennan basement, a metamorphic terrain described as predominantly phyllites and quartzites. The basement is unconformably overlain by the Cambrian Mt Read Belt comprising the Sticht Range Beds and Tyndall Group. To the west, and overlying them, are the Cambro-Ordovician Owen Conglomerates. The contact between these two units appears to be unconformable in some places, and faulted in others.

The Sticht Range Beds comprise sediments from pebble-cobble conglomerates to siltstones and minor black shales and volcanoclastic units.

The Tyndall Group comprises predominantly volcanoclastics with some tuffs, volcanoclastic conglomerates, porphyritic lavas and massive to flow banded porphyries. The rocks range from andesitic to rhyolitic in composition.

4. REGIONAL GEOPHYSICS

This section on the regional geophysics is taken directly from the 1997 annual report. Figures are not reproduced here, the reader is referred back to this 1997 report.

4.1 Aeromagnetics

The northern boundary of EL 24/96 is close to the southernmost extremity of the Murchison Granite which has a complex signature of magnetic highs and lows (Figure 4 in Weber 1997).

The Cambrian volcanics comprise a south trending ridge with a positive magnetic signature which extends from the south eastern edge of the Murchison Granite for some 17km to the south. Although the geology map of the area suggests the volcanics extend further south than this, the magnetics suggest a northwest trending fault or unconformity pinches out the unit at or around Lake Spicer.

There are a number of stronger aeromagnetic highs along the volcanic belt, and these are proximal to the known areas of alteration and mineralisation.

Two strong magnetic highs underlie the Selina Prospect and they cover an area of about 2 square kms. Between the two highs is a magnetically quiet area about 0.5km wide. The magnetic anomaly underlies a unit of the Mt Read Belt variously described as a conglomerate or a breccia. This unit will be discussed in some detail below.

A small magnetic high underlies known minor base metal mineralisation approximately midway between Lake Selina and Lake Rolleston, which was originally explored as part of the Selina Prospect (LS 1, LS 2 and LS 3 tested this area, which is around the old Lake Selina workings).

A group of three magnetic highs is associated with the old copper workings at Lake Dora, with a further two less strong magnetic highs proximal to the workings at the northern end of the Dora system.

4.2 Gravity

There are a number of subdued gravity highs (Figure 5 in Weber 1997) within the tenement that appear to be associated with the aeromagnetic highs. These gravity highs could be associated with accumulations of sulphides (and associated gold). At the Lake Selina workings (outside EL 24/96) base metal mineralisation is associated with a gravity high and to the immediate north, a small aeromagnetic high. At the Selina Prospect the gravity high underlies the central part of the "Selina Conglomerate", and is juxtaposed between the two aeromagnetic highs. Similarly at the Dora Prospect, the gravity high lies in the central part of the area

covered by the three magnetic highs. There are two further gravity highs in the Lake Rolleston area, one of which is associated with an aeromagnetic high.

5. PREVIOUS EXPLORATION

Previous exploration on the Selina Prospect and the Dora Prospect is briefly summarised below. For additional detail the reader is referred to the comprehensive reference of previous work in the 1997 annual report completed by Weber, Murphy and Aliano.

Previous exploration has also been conducted at North Selina Prospect and in the Lake Rolleston area. No work was completed on this area during the current year. For information on these two prospects the reader is referred to the 1997 annual report.

5.1 Selina Prospect

Modern exploration commenced in the area following the granting of EL 9/66. Exploration around Selina began when the Mt Lyell Mining and Railway Co extended their area of investigation northward from old workings near Lake Selina. Initially, in the early 1970s, their work encompassed the area to the south of Mt Selina (outside EL 24/96). Seven diamond holes were drilled to test geophysical targets, specifically a north-south striking zone of chargeability highs coincident with magnetic highs which became known as the Western Pyrite Zone. Drilling intersected a zone of pyrite with associated minor chalcopyrite, sphalerite and galena. The area of investigation was then extended to the north east, and in 1980-1981 a second zone, the Eastern Pyrite Zone was discovered. A further five diamond holes were drilled by Gold Fields Exploration, three to test the newly discovered Eastern Pyrite Zone (2 within EL 24/96), and two to test the northern extent of the Western Pyrite Zone (1 within EL 24/96). One final hole was drilled in 1985 to test a lead zinc soil geochemical anomaly on the southern extremity of the Eastern Pyrite Zone.

The soil geochemistry, ground magnetics and IP surveys covered the whole Selina area, including that part of it which lies within EL 24/96. However most of the Western Pyrite Zone and a significant part of the Eastern Pyrite Zone areas are outside Pasminco's tenement. Only diamond drill holes LS 8, LS 11 and LS 12 fall within Pasminco's ground.

Gold Fields dropped the northern part of the Selina area, the part now encompassed by EL 24/96, and it was taken up by Aberfoyle Resources as EL 5/85. They did some regional work, concentrating on the North Selina area. The "Selina Conglomerate", in the far south-western square kilometre of the tenement, was not mapped or sampled as part of their work programme. They relinquished the area in 1993.

When Gold Fields dropped the rest of the Selina area, Acacia (Billiton) took it up as EL 103/87. They proposed to look for volcanic-hosted massive sulphide deposits at depths greater than 200m. The Acacia tenement contained the major portion of the Western and Eastern Pyrite Zones. Their exploration, therefore did

not cover the "Selina Conglomerate", as it lay only marginally along the tenement border to the northwest.

The division of the area into two separate tenements may have hampered a proper evaluation of the "Selina Conglomerate", which lies at the centre of a major alteration zone beginning with the Western Pyrite Zone in the south and ending at the northern end of the Eastern Pyrite Zone in the north, and overlying two significant magnetic highs and a gravity high.

Within the central part of the Selina area is an area approximately 1.8km by 0.65km which has been variously described as Jukes Breccia, Jukes Conglomerate, Dora Conglomerate and Selina Conglomerate. Weber et.al noted marked similarities between the Selina Conglomerate and the Mt Leyshon Breccia. These are:

- The Selina area geology, alteration and aeromagnetics have similarities to the Mt Leyshon area in Queensland. Mt Leyshon contains a gold deposit of at least 3 million ounces.
- The "Selina Conglomerate" could be reinterpreted as a vent breccia, similar to the Mt Leyshon Vent Breccia.
- There is some evidence to support a complex history for the Selina area with more than one hydrothermal event, a necessary precursor for a Mt Leyshon style deposit.
- There is scattered low level gold anomalism at Selina identified in the wall rocks of the postulated vent breccia.
- Despite the loss of some of the postulated breccia pipe to erosion, the possible occurrence of alunite could indicate that the upper levels of a deposit might still exist.

5.2 Dora Prospect

Access can be gained to the Dora area via a vehicular track which starts from the Anthony Road to the west of Newton Peak. It is about 16 kms from Anthony Road to the Dora Prospect, but the road passes directly through its centre.

Modern exploration began around the old copper workings in the area in 1969. Mt Lyell Mining and its successor Gold Fields, held the area as part of EL 9/66. As part of a regional exploration effort, the volcanic belt stretching from Lake Dora to the Selina area was grided, mapped, soil and rock chip sampled. Geophysical surveys included pole-dipole IP, SP, fluxgate magnetics and EM. Petrology was carried out on a selection of samples. In 1983, following a data review, Gold Fields conducted some dump sampling. In 1985 they relinquished the area.

CRA took up the area in their tenement EL 5/85. Attracted by the Gold Fields best dump assay of 2.0g/t Au, CRA conducted a stream sediment, rock chip and dump reconnaissance programme aimed at ascertaining the gold potential of the area. They also conducted a UTEM survey to look for massive sulphides which might not have been apparent in the IP results due to the highly variable chargeability response of the area.

Aberfoyle took over management of EL 5/85 in 1988. Their work comprised field checking of the earlier mapping and some further petrology.

It should be noted that the southern part of the Dora Prospect was not part of this modern exploration effort. The Gold Field grid only extended south to the northern part of Lake Dora, and their maps indicate the southernmost part of the old mineral field was held under lease at the time of their exploration. Similarly, EL 5/85 only extended south as far as AMG 5354000N. Old workings extend for 1km to the south from there, and much of the aeromagnetic and gravity anomalies lie in this southernmost area.

The Dora Prospect area comprises similar geological units to the Selina area to the north. The Tyndall Group units of the Mt Read Volcanics in this area have been described as porphyritic lavas, tuffs, volcanoclastics-epiclastics and volcanoclastic conglomerate. Lavas range from rare andesites to more common dacoids and rhyolite. Lavas have been altered to quartz chlorite schists. There is intense shearing throughout the area, with the shears and cleavage trending northwest to north-northwest. Two massive quartz feldspar hornblende porphyry units also occur with the area, one north west of Lake Dora, the other near Michael Tarn. It is unclear whether they are intrusive or extrusive. Aberfoyle describes them as hornblende plagioclase-phyric lavas.

The Dora area lies in a narrow northwest trending block bounded to the east and west by major northwest magnetic lineaments. The southern part of the complex is underlain by a complex of magnetic highs with three main centres. This magnetically responsive area is about 2 km long by 1-2 kms wide. Central to this area is a gravity high. CRA interpreted this magnetically positive area as a single magnetic high with a major northwest trending structure transecting it and creating a central magnetic low which they suggested may have been a result of magnetite destruction (a classic porphyry copper signature). Their magnetic low corresponds to the area of the gravity high. The magnetic and gravity anomalies fall within the area mapped as volcanoclastics, intrusive porphyries and Dora Conglomerate.

The ground geophysical surveys of the area conducted by Mt Lyell Mining/Gold Fields extend only to the northernmost boundary of the aeromagnetic anomalies. Mt Lyell Mining found that there were no well defined chargeability highs over the known workings, similar to those in the Selina and Rolleston areas to the

north. The most northerly of the Dora workings had low level chargeability highs associated with them, but the workings around Lake Dora were noted for their lack of an IP response (by this Mt Lyell Mining meant chargeability highs; in the classic porphyry system the deposit is more resistive than the alteration halo).

Mt Lyell Mining described the alteration around the old workings as quartz chlorite dominated, with magnetite and haematite veins. CRA stated that the alteration was mostly chlorite, with sericite in some places. When Aberfoyle sent samples to Tony Crawford at the University of Tasmania for petrology, he described the alteration as compatible with regional burial metamorphism.

The workings in the northern part of the Dora area cover pyrite, chalcopyrite in quartz and quartz chlorite schists in three narrow shear zones. Minor sphalerite and erythrite (CoAs oxide) are associated with the mineralisation.

The old workings in the area are recorded as containing traces of gold and silver up to about 100g/t Ag, associated with the chalcopyrite ore. Gold Fields did some dump sampling and assaying for gold, obtaining one result of 2g/t Au. When CRA took up the area they followed up this anomalous value with a dump and rock chip sampling programme. Gold assays were in the 0.1g/t range, with a best 0.37g/t Au. Aberfoyle's best dump sample was 0.15g/t Au with 0.42% Cu.

6. WORK COMPLETED

Work was completed during the year on the Dora Prospect and the Selina Prospect.

6.1 Selina Prospect

Field inspections were made to the outcrop of the Selina Conglomerate, to test the proposal that the Selina Conglomerate is a vent breccia with similarities with the Mt Leyshon Vent Breccia. The area of outcrop of the Selina Conglomerate is characterised by a high degree of exposure.

The Selina Conglomerate is a volcanic derived conglomerate correlatable with the Zig-Zag Hill Formation of the Tyndall Group. This has been cross-cut by a latter brecciation stage that is dominated by deposition of hematite. The degree of brecciation is variable and the areal extent of the brecciation is unknown.

Hematite occurs as

- Discrete veins,
- Trails of clasts that are probably broken veins,
- Isolated clasts
- and as a matrix to a volcanic breccia.

This latter brecciation reportedly contains granite clasts and granite has been intersected at 300m depth in a nearby drill hole (LS 12). It is very probable that this breccia is granite related and the breccia may have the form of a breccia pipe or vent breccia. Three samples were collected for petrological work (at the same site as sample numbers 274726, 274727 and 274728) to test this interpretation.

Other possibilities for the formation of this breccia are that the hematite veins are granite related and the veins have been broken and brecciated during tectonism.

Six samples were collected of the Selina Conglomerate. These samples were analysed for a comprehensive range of elements using ICP-MS. The results from these samples are included in appendix 1.

These samples are not gold anomalous. They do have elevated Ba (to 6503 ppm), Mn (from 214ppm to 10.43%), minor Mo (one anomalous sample 21.7 ppm), As (to 329), Sb (to 409ppm) and W (to 112 ppm). These samples downgrade the potential of the Selina Conglomerate to host gold mineralisation.

6.2 Dora Prospect

Access was established into the Lake Dora-Lake Spicer area by re-furbishing the existing track. The old Goldfields grid was relocated and mapping and sampling was commenced. During particularly heavy rainfall the track was washed out and the work programme was delayed.

Mapping was only at an early stage with five days spent on the ground, results from this preliminary work will not be reported herein.

Eleven samples were collected from old workings in the Lake Dora area. Location and assay data for these samples are included in appendix 2.

The mineralisation in these old working occurs as pyritic and sheared volcanic within chlorite altered rocks. The samples have quite wide ranges in all elements detected. Samples have low to moderately elevated; copper (87- 7008 ppm Cu), gold (<0.01to 0.39 g/t Au), Pb (41-1962ppm Pb) and zinc (338-2074ppm) and all have anomalous silver (2-12 ppm).

7. RECOMMENDATIONS

7.1 Selina

There is evidence to support the hypothesis that the brecciation phase within the Selina Conglomerate has many similarities to the breccia vent at Mt Leyshon. On the basis of the analogy with Mt Leyshon, the Selina Prospect is considered to have a high prospectivity for the discovery of a significant gold deposit.

Thin section analysis will assist with identification of the style of brecciation.

- It is recommended that a single grid line be cut that transects the Selina Conglomerate. Geological mapping (with particular reference to alteration) and C horizons soil sampling be completed over this line.
- If justified a full grid be established over the Selina Conglomerate followed by detailed gridding, geological mapping and C horizon soil sampling.

7.2 Dora Area

Geology and geophysics at the Dora Prospect are compatible with the presence of a significant intrusive related copper/gold deposit. The prospectivity at Dora is enhanced by the presence of copper/gold mineralisation in shears in a zone of alteration in a northwest trending belt which transects the centre of the geophysically anomalous area. The Dora Prospect has not been subjected to modern exploration beyond its most northern extremity.

It is recommended that:

- Reconnaissance geological mapping of the area to note the alteration associations per rock units with special reference to the Dora Conglomerate.
- After gridding of the old workings and an orientation survey, a soil survey over the old workings together with geological mapping and detailed rock chip sampling of the old workings
- Follow-up of elevated geochemical areas by IP.

8. ADDITIONAL RECOMMENDATIONS AND WORK PROGRAM

- There are other areas within EL 24/96 which warrant further investigation in any ongoing exploration programme, and a regional stream sediment sampling project for both gold and base metals could be undertaken.
- In reviewing the historical soil geochemical sampling, it appears the soil samples were wide spaced apart from the immediate Mount Dora area. Gold results appear to be a mixture of ppm and ppb results and should be corrected. The geochemical plots in Fig's 11A to D (1997 annual report) have not been statistically appraised and this should be completed.
- The pyrite zone associated with the Sticht Range Beds (see Fig 4, 5 and 6 in the 1997 report) is an interpretation from an I.P. survey conducted by Goldfields Exploration in EL 9/66. A distinctive anomaly occurs on the east end of each I.P. line and this has been interpreted as a pyrite zone. This zone had earlier been outlined in a Turain airborne anomaly in a Mount Lyell Mining and Railway Company survey flown in 1973. It is recommended that the source of this anomaly be explored for and assessed by some soil traversing and rock chip sampling.
- a work program for the coming year has been budgeted at \$140,000 which involves:
 - commissioning an aeromagnetic survey (approx 1300 line km)
 - Dora Prospect Soil Sampling and Mapping
 - Drill test target area (1 hole, 300m)

9. EXPENDITURE

Total expenditure for all work undertaken by Pasminco Exploration within Walford Peak EL 24/96 for the twelve month period to the end of September 1998 was. A detailed expenditure statement is given below.

Personnel	2,026
Travel and Accommodation	0
Consultants & Contractors	4,950
Drilling	702
Stores & Supplies	0
Vehicles Plant & Equipment	264
Land	2,480
Computing	0
Office	1,280
Administration Fee 10%	1,170
Total Tenement Expenditure	\$ 12,872

10. REFERENCES

Weber, G.B., Murphy, F.C., and Aliano, W., 1997. Walford Peak Exploration Licence 24/96. Annual Report for the period ending October 1997. Unpublished report to Pasminco Exploration.

11. KEYWORDS & LOCALITY

KEYWORDS

ZINC, LEAD, COPPER, GOLD, STRUCTURE, AEROMAGNETICS, GRAVITY,
I.P., ALTERATION, MOUNT READ, TYENNAN, OWEN CONGLOMERATE,
SELINA CONGLOMERATE

LOCATION

QUEENSTOWN SK55-5, SELINA, DORA, LAKE ROLLESTON, MURCHISON
GRANITE

APPENDIX 1

Assays for rock chip samples of Selina Conglomerate

Sample_No	Sample_Type	Description
274726	ROCKCHIP	massive hematite vein
274727	ROCKCHIP	sericite altered volcanic breccia cemented by hematite.
274728	ROCKCHIP	Volcanic conglomerate, clasts of hematitic silt to 50cm.
274729	ROCKCHIP	Volcanic conglomerate, clasts to 50cm.
274730	ROCKCHIP	Hematitic and lithic clast to 5cm, quartz crystals and pink lithic fragments to 5mm in a sericitic matrix
274731	ROCKCHIP	Subrounded hematitic silt clasts to 10cm in a quartz crystal lithic matrix, crosscut by irregular hematite breccia zones

Assays are over page.

274726

DataSet	Sample ID	Sample Type	UTM East	UTM North	Prospect	Date Sampled
WALFORDPEAK	274726	ROCKCHIP	385550	5363780	SELINA NTH	29-Jul-98
WALFORDPEAK	274727	ROCKCHIP	385660	5363875	SELINA NTH	29-Jul-98
WALFORDPEAK	274728	ROCKCHIP	385895	5363780	SELINA NTH	29-Jul-98
WALFORDPEAK	274729	ROCKCHIP	385990	5363950	SELINA NTH	29-Jul-98
WALFORDPEAK	274730	ROCKCHIP	386030	5364240	SELINA NTH	29-Jul-98
WALFORDPEAK	274731	ROCKCHIP	385725	5363676	SELINA NTH	29-Jul-98

Sample ID	Ag_ppm	Al_ppm	As_ppm	Au_ppm	Ba_ppm	Bi_ppm	Ca_ppm	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm
274726	0.1	13137	193	0.004	284	1.4	138	0.2	38.58	3	116
274727	0.2	52673	298	0.004	2902	0.8	327	0.7	67	10.6	22
274728	0.25	61857	130.5	0.005	1401	1	306	0.45	104.48	10.75	47
274729	0.4	55685	37	0.004	1518	1	1262	0.5	132.62	6	12
274730	0.2	56477	32	0.009	756	0.7	74	0.4	80.83	11.8	76
274731	0.1	42319	329	0.005	6503	1.3	1245	0.5	111.88	18.4	14

Sample ID	Cu_ppm	Fe_ppm	Hg_ppm	K_ppm	Mg_ppm	Mn_ppm	Mo_ppm	Na_ppm	Ni_ppm	P_ppm	Pb_ppm
274726		457000		9900	1310	5762	2.2	89	4	45	40
274727		39031		33700	4325	37391	0.9	311	12	186	54
274728		43900.5		45200	6982.5	1005	0.3	431	6	303.5	50.5
274729		40386		42100	4270	357.2	0.9	450	2	359	41
274730		28979		38200	5935	213.8	0.9	261	6	76	33
274731		26020		33100	3345	98551	21.7	473	8	385	135

Sample ID	S_ppm	Sb_ppm	Se_ppm	Sn_ppm	Tl_ppm	U_ppm	V_ppm	Zn_ppm
274726		337.9	0.5	2.6	1.7		128	49
274727		271.1	0.5	3.2	4		38	215
274728		23.55	1.5	3.85	4.6		63	279
274729		18.5	0.5	4.5	2.4		46	202
274730		25.4	0.5	4.6	3.3		36	324
274731		408.9	3	2.8	4.2		54	202

APPENDIX 2

Sample_No	UTM_East	UTM_North	Ag_ppm	Au_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Comments
274742	387760	5353950	8	0.08	394	224	100	Dump sample; Massive pyrite; chlorite altered;
274743	387760	5353950	7	0.04	546	155	131	Dump sample volcanic, chlorite and K-Spar altered, pyritic
274744	386860	5356490	5	<0.01	37	1962	489	Dump sample qtz-eye volcanic; sericite; chlorite; pyrite altered
274745	386780	5356420	5	0.01	1008	143	905	Dump; qtz-eye volcanic; sericite; chlorite; pyrite altered
274746	386575	5356620	7	0.01	234	331	405	Dump; qtz-eye volcanic; chlorite; pyrite;
274747	386575	5356620	5	0.01	413	63	260	Dump; semi-massive pyrite/magnetite. qtz-eye volcanic; chlorite; pyrite;
274748	387460	5354710	2	<0.01	87	65	338	Dump; sample of wall rock; qtz-eye vol; chlorite altered, pyritic
274749	387460	5354710	8	0.12	3331	375	2074	Dump; Qtz eye volcanic, chlorite altered. pyritic; cpy/malachite
274750	387510	5354590	7	0.15	5082	309	564	qtz-eye qs sst; chlorite altered cpy
274751	387580	5353500	12	0.39	7008	204	407	Dump sample from trench; chl vol; chlorite; py
274752	387475	5354480	7	0.08	6882	41	412	Dump sample from shaft; chl vol; chlorite; py/cpy

**MEMORANDUM**

30 August 1998

TO FC Murphy

COPY

FROM Paul Basford - Exploration Technical Services

SUBJECT Walford Creek Geophysical Review

Introduction

Geophysical exploration has been carried out over the Walford Peak licence for over 30 years. Surveys were conducted from the air, on the ground and down drill holes. This report outlines the geophysical work history including some comments on data quality/type.

Geophysical Work History

Approximately 17 reports contained in the Melbourne office were viewed, as were maps held within the vertiplan system. Several of the reports were incomplete, many of which contain geophysical data and/or interpretations.

Geophysical exploration first started in 1959 with an aeromagnetic survey flown by RTAE. Follow up work by RTAE consisted of ground magnetics, SP, Turam ground EM and gravity.

Between 1969 and 1973 Mt. Lyell established a grid, lines spaced 800 feet apart, covering a strike length of 9km. In-fill lines were spaced 400 feet apart. The grid was defined into three sections, called Dora (southern section), Rolleston (central area) and Selina (see Figure 1). Electrical soundings using an IP system were performed at several places within the Selina and Rolleston areas, inferring a very resistive basement, the moraine cover to be depth variable and the black shale units to be conductive.

Pole-dipole IP surveys were performed over the Rolleston and Dora areas, as were SP and ground magnetics. The Selina area was surveyed with Turair.

Work continued in the area between 1979 and 1983 with 40 line km of DIGHEM flown over the Selina area, followed up by gradient array IP. Several test lines of dipole-dipole IP were conducted over the Selina and Rolleston grids, as was a single line of Max-min EM, and six lines of GENIE EM.

The Selina grid was extended (Figure 2) to the north and surveyed with gradient array IP and ground magnetics, with the ground magnetics extending south to cover part of the original Selina grid. Simultaneously the Dora grid was extended (Figure 3) to the south and renamed

the Dora-Spicer Grid. An Aberfoyle report indicated that Sirotem and Genie EM surveys were carried out over the grid, however, no data was found.

DHEM and DHIP were surveyed down several drill holes.

After 1984 several companies explored different sections of the licence (Figure 4). CRAE refurbished the Dora Grid and undertook 14 line km of UTEM. Billiton and Aberfoyle conducted ground magnetics, CSAMT, Zerotem and fixed loop EM37 surveys over various parts of the Rolleston area, using newly established AMG lines. Aberfoyle also surveyed the North Selina area with UTEM.

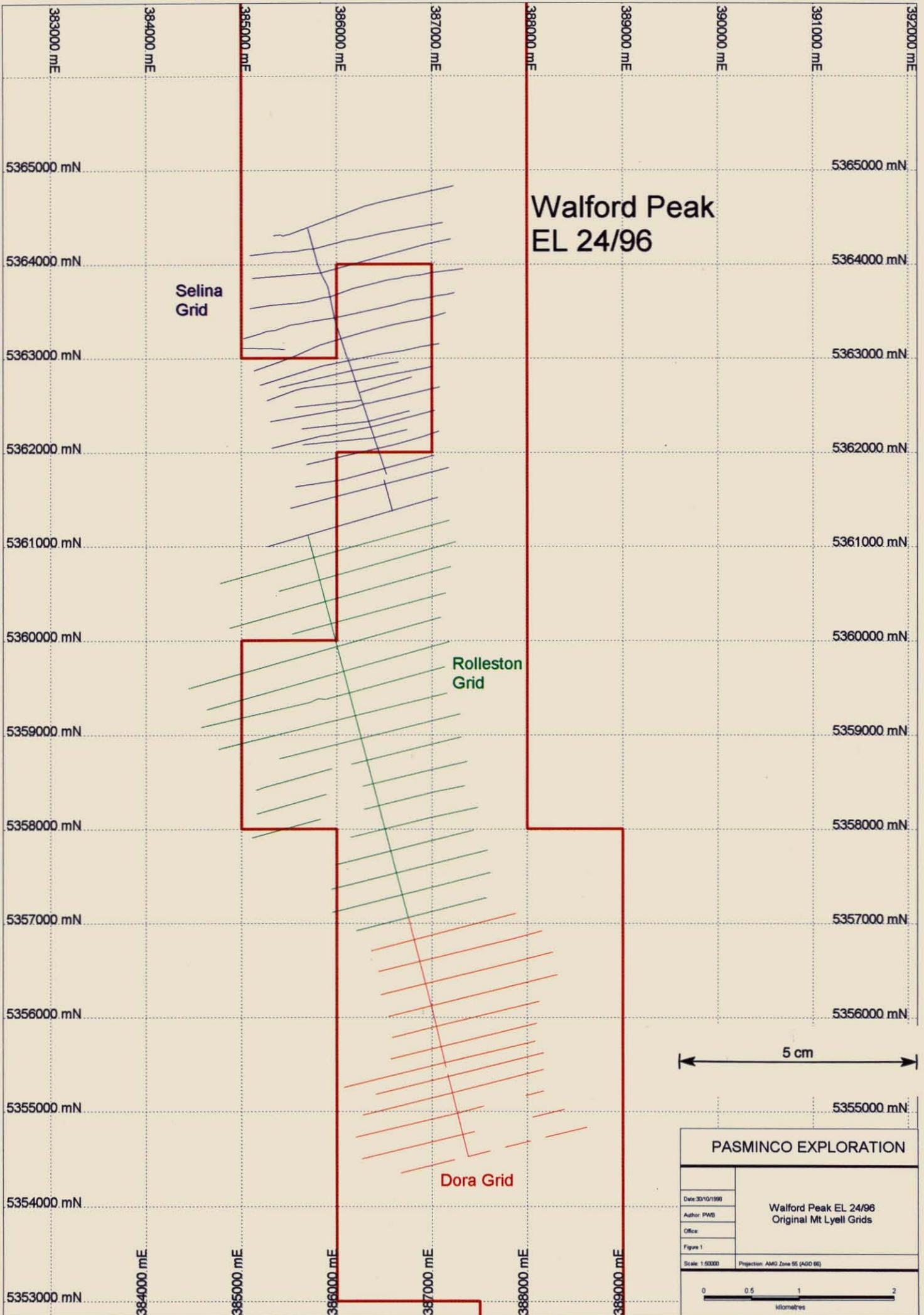
Observations of data

It appears that most of the follow up drilling was based on the early geophysical work. Approximately thirteen drill holes were drilled into the Lake Selina area.

The most notable features within the licence are the two alteration belts, the Eastern Pyrite Zone (EPZ) and the Western Pyrite Zone (WPZ). Both of these systems responded well to a number of geophysical surveys, especially the electrical systems.

In several data sets there is a parallel chargeable / conductive feature east of the EPZ. This has been attributed to a Lower Cambrian Black Shale and investigation of this feature appears limited. At the southern limit of the EPZ is the Mt Selina Anomaly Zone (MSAZ).

Most of the obvious geophysical targets have been tested, with sources often attributed to the alteration systems. No up to date compilation map has been discovered in the reporting system. This should be rectified for future work and may highlight areas for future testing.



**Walford Peak
EL 24/96**

Selina
Grid

Rolleston
Grid

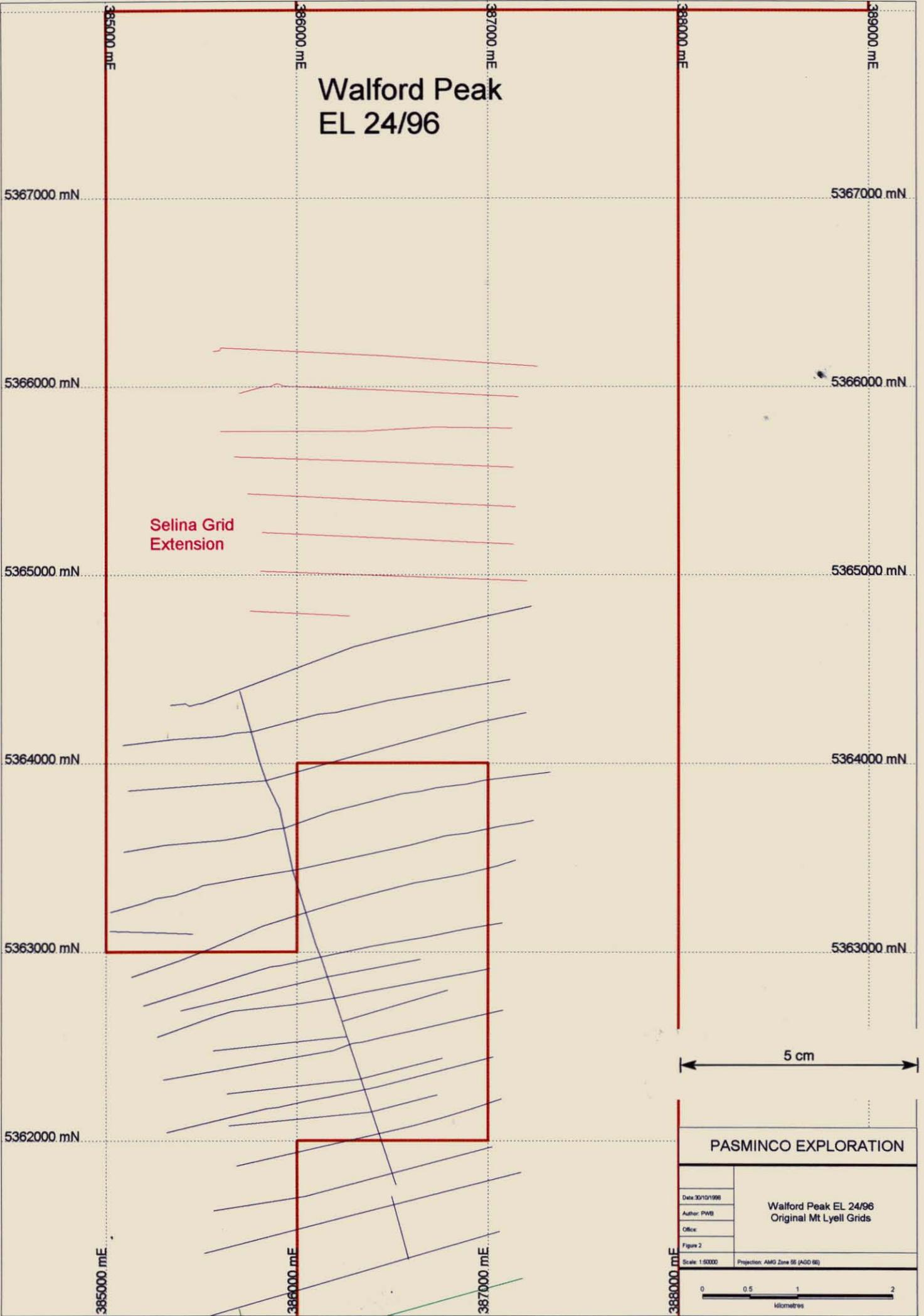
Dora Grid

5 cm

PASMINCO EXPLORATION	
Date: 30/10/1999	Walford Peak EL 24/96 Original Mt Lyell Grids
Author: PWB	
Office:	
Figure 1	
Scale: 1:5000	Projection: AMG Zone 55 (AGD 86)

Walford Peak EL 24/96

Selina Grid
Extension



5 cm

PASMINCO EXPLORATION

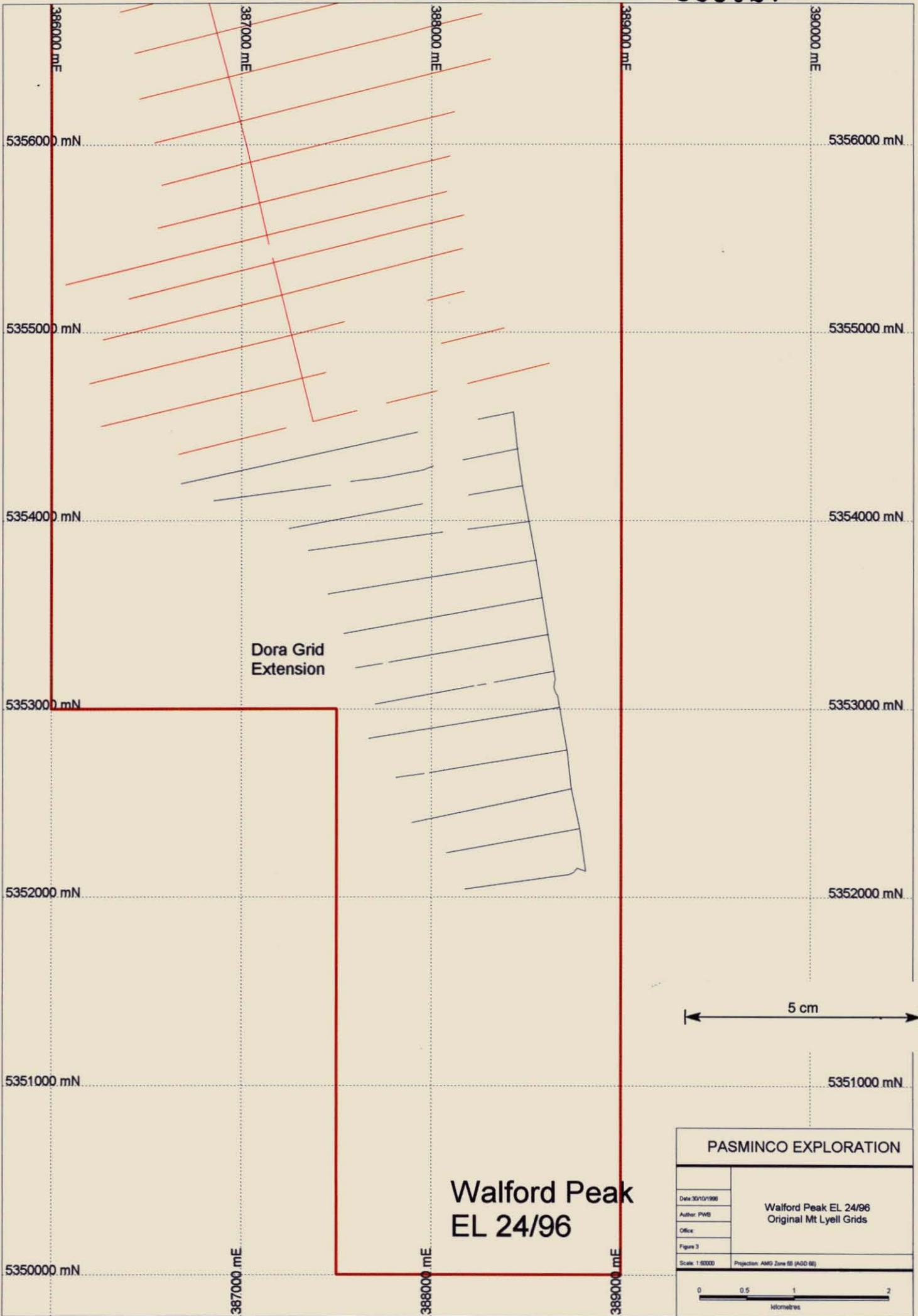
Date: 30/10/1998
 Author: PWB
 Office:
 Figure 2

Walford Peak EL 24/96
Original Mt Lyell Grids

Scale: 1:50000

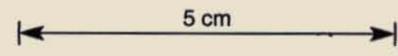
Projection: AMG Zone 56 (AGD 86)



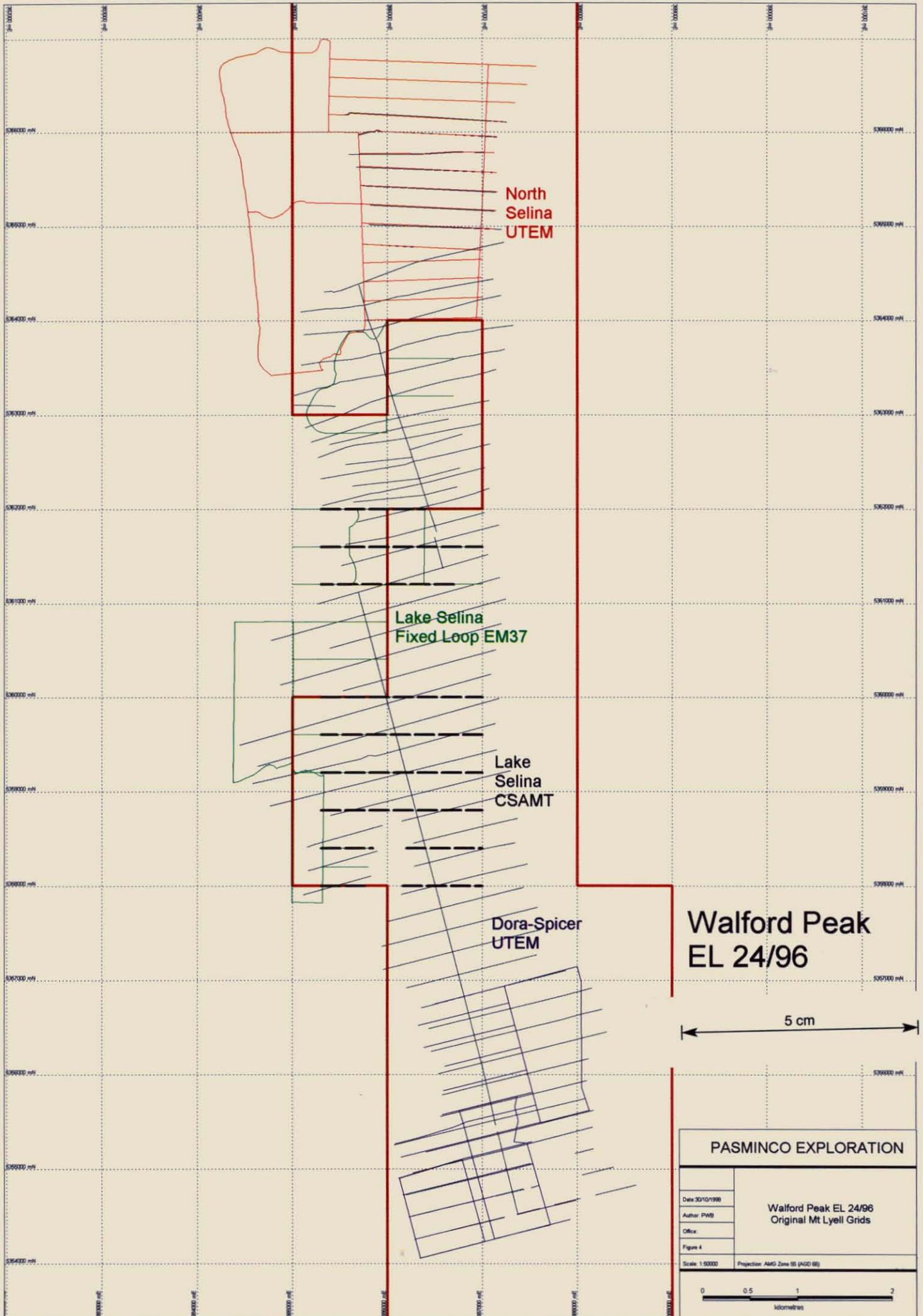


Dora Grid Extension

Walford Peak
EL 24/96



PASMINCO EXPLORATION	
Date: 30/10/1996	Walford Peak EL 24/96 Original Mt Lyell Grids
Author: PWB	
Office:	
Figure 3	
Scale: 1:50000	Projection: AMG Zone 55 (AGD 86)
<p>0 0.5 1 2 Kilometres</p>	



**Walford Peak
EL 24/96**

5 cm

PASMINGO EXPLORATION	
Date: 30/10/1998	Walford Peak EL 24/96 Original Mt Lyell Grids
Author: PWB	
Office:	
Figure 4	
Scale: 1:60000	Projection: AMG Zone 55 (AGD 86)