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PASMINCO EXPLORATION

BURNS PEAK EL 44/88
ANNUAL REPORT

FOR THE PERIOD
NOVEMBER 1993 – OCTOBER 1994

Volume 1 of 2

MINES
FILE REF. EL44/88
- 1 DEC 1994
DOC. REF.
OFFICER | FOR ACTION | FOR INFO.
SEE FOLIO 89, 90.
REFERRED TO | DATE

AUTHOR: RA Poltock & MS Saxon

DATE: November 1994

REPORT No.: T94-13

SUBMITTED TO: Regional Exploration Manager – Tasmania

DISTRIBUTION:
Mineral Resources Tasmania –
Department of State Development & Resources – Hobart
Pasminco Exploration – Burnie
– Melbourne
– Rosebery
Noranda Pty Limited – Toronto
Plutonic Operation Limited – Sydney

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ACCEPTED BY:

BURNIE
November 1994

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1 SUMMARY

Work completed within EL44/88 during the 12 months ending October 1994 included:

- drilling BPD80 (469.70m) at the Summit prospect;
- drilling BPD81 (421.60m) at Brown's Tunnel;
- extending drill hole EAF2, this hole was still in progress at the time of reporting;
- gridding, 21.9kms of the old Comstaff EAF grid has been re-cleared between 4700N-6800N;
- geological mapping on the EAF grid and in the Summit -Hollway areas;
- DHEM completed in holes BPD69, BPD78-81;
- Mise-a-la-masse survey in BPD78;
- ground magnetics on EAF grid lines 4700-6800N;
- ore, pathfinder and lithogeochemical suite analysis of drill core;
- trial traverses of MMI soil geochemistry between Brown's Tunnel and Shale Basin;
- digitising Cu and Zn soil geochemical data at Shale Basin.

Results from this work included:

- BPD80, failed to intersect the target horizon due to unforseen structural and stratigraphic complexities in the area, the best intersection 6m @ 0.9% Zn, 0.2% Pb occurs in veining on the margin of a felsic porphyry;
- BPD81 intersected 0.7m @ 2.09% Cu, 19.40% Zn, hosted in pumice breccias underlying a basaltic andesite lava. Siltstones in the lower part of the host sequence assayed 18m @ 0.27% Pb, 1.42% Zn;
- the EAF2 extension has intersected a pyritic stockwork zone hosted in silicified siltstone and broad intervals of sub-economic disseminated and veinlet style sphalerite in pumice breccias and siltstone. Core has not yet been assayed;
- ground magnetics has defined a 10nt low coincident with alteration and mineralisation at Brown's - Thomas' Tunnels. This feature trends north into the

Shale Basin area and will be a target for drilling later in 1994;
- at the Hollway and East Hollway prospects drill targets have been defined, these holes will test strongly altered volcanics with weak Cu–Zn–Au geochemistry and moderate IP and EM anomalism.

Recommendations for further work include:
- drilling the Hollway pyritic alteration zone, one hole for 350m;
- extend CP7 from 200.70m to 300m, to test the complete host sequence and Pinnacles Shear Zone beneath Thomas's Tunnel;
- deeper test of the host sequence beneath EAF16 on section 5100N between Thomas' and Brown's Tunnels;
- deeper test of the copper rich stringer zone and massive sulphide in BPD78, one hole for 750m;
- drill the Brown's Tunnel host sequence at Shale Basin, this is a blind target based on interpreted geology and a magnetic low which is considered to be associated with alteration;
- whole rock geochemistry to define primary volcanic affinities and alteration intensity/style. The primary aim of this work is to refine the geological model at Brown's Tunnel and target the host horizon more precisely;
- drilling two shallow holes near BPD77 to better define the geology at the Summit Prospect before further deep drilling is undertaken.

Expenditure for the year to October 1994 was **$452 832** bringing the total expenditure on EL44/88 since its inception in December 1988 to **$2 630 856.**

2 INTRODUCTION

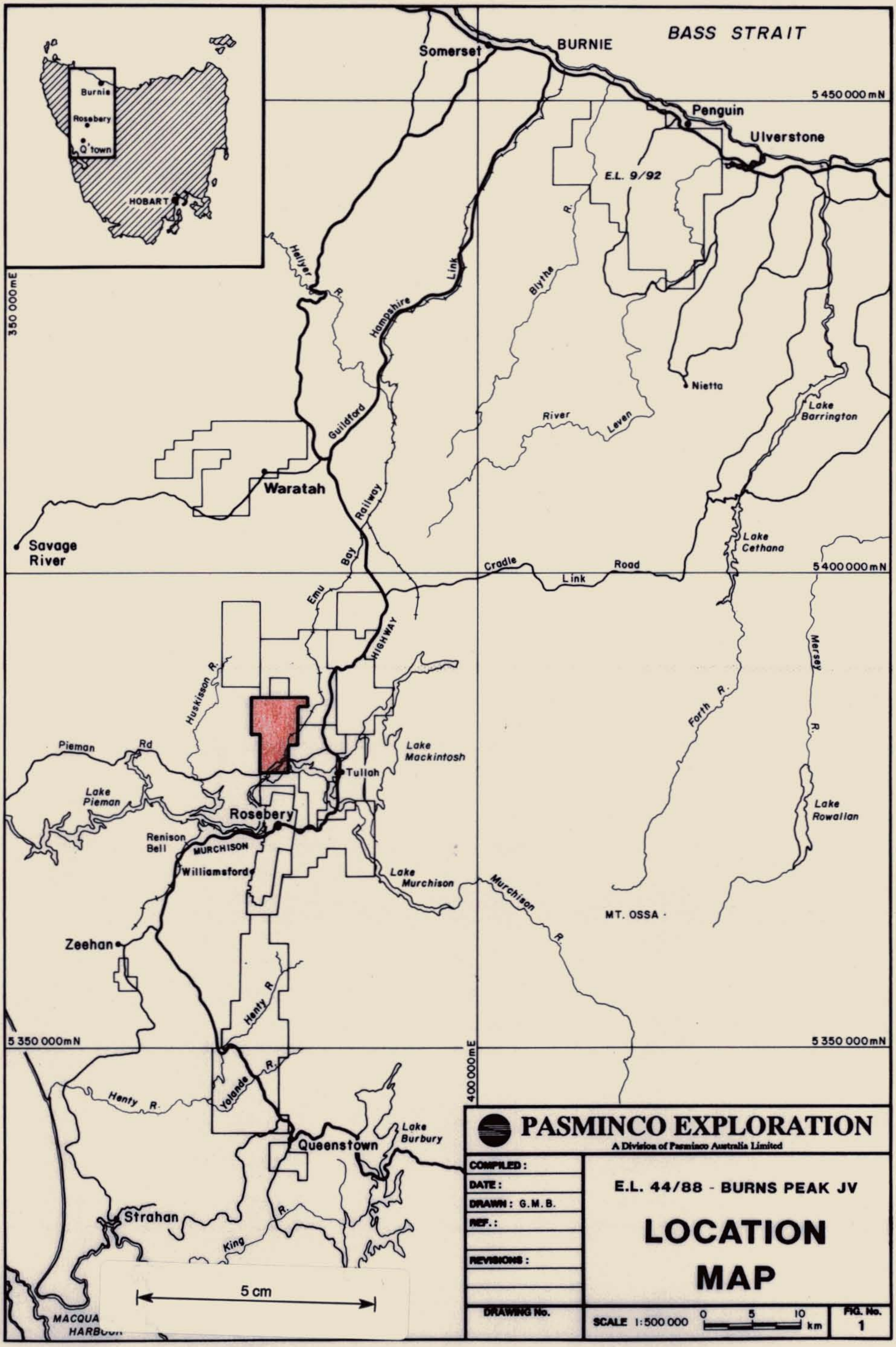
This report documents work undertaken on the Burns Peak EL 44/88, Western Tasmania, covering the period from November 1993 to October 1994. The recommended work program for the period November 1994 to October 1995 is also outlined.

Exploration on the Burns Peak EL is managed and operated by Pasminco Exploration, a division of Pasminco Australia Limited, on behalf of a joint venture between Pasminco, Noranda Proprietary Limited and Plutonic Resources Limited. The EL covers 34km^2 of Cambrian Mt Read Volcanics, and lies immediately west of the Tullah township and north of Lake Rosebery (Figures 1–3). Exploration targets on the EL are principally polymetallic (zinc, lead, copper, silver, gold) sulphide deposits, similar to those at Rosebery and Hellyer.

The EL includes old workings in the Pinnacles and Chester areas, which have been the focus of a significant exploration effort over the past 40 years, leaving a legacy of good access tracks and grid lines.

Work during the 93/94 year on the licence has been by Roger Poltock and Mark Saxon.

During the period covered by this report the main target areas for exploration have been Brown's Tunnel, Shale Basin, Summit, and Hollway (see Figure 4). Work has included: drilling holes BPD80, 81 and extending EAF2; gridding; soil/rock geochemistry; DHEM; Misa–a–la–masse; ground magnetics and mapping.



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A Division of Pasminco Australia Limited

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E.L. 44/88 - BURNS PEAK JV

LOCATION MAP

SCALE 1:500 000 0 5 10 km

FIG. No. 1

3 TENURE

The Burns Peak EL 44/88 was initially granted for a renewable one year term on 9 December 1988 to Noranda Pty Ltd and Pasminco Limited in joint venture following their successful tender. Pioneer Minerals Australia Limited became a third member of the joint venture upon granting of the EL. The formal Burns Peak Joint Venture was finally executed on 6 March 1990, between the three companies, having been effectively in place since granting of the EL. The licence was renewed in December 1989, 1990, 1991, 1992 and 1993 and a further one year renewal is being sought. The licence area was reduced by 50% in accordance with Mines Department regulations at the end of the 5th year of tenure.

Until 1 July 1990, Geopeko, the exploration division of North Broken Hill Peko Ltd administered and operated the EL under contract for Pasminco. Since that time, Pasminco Exploration (a division of Pasminco Australia Ltd) has taken over these responsibilities. All expenses and tenure have been shared equally between the three Burns Peak Joint Venture partners until June 1993, when Noranda elected not to contribute to the July-December 1993 program. Pioneer Minerals Australia has now become Plutonic Resources Limited and "Pasminco Australia Limited" has been substituted on all licence documents in place of "Pasminco Limited".

The EL is subject to a number of land classifications, which were revised in May 1993. The current land tenure includes land vested in the Hydro-Electric Commission in the area immediately surrounding Lake Rosebery and the Transmission Lines, Multiple Use Forest Land and Deferred Forest (Figure 2). Most of the tenement is Unallocated Crown Land designated as Multiple Use Forest.

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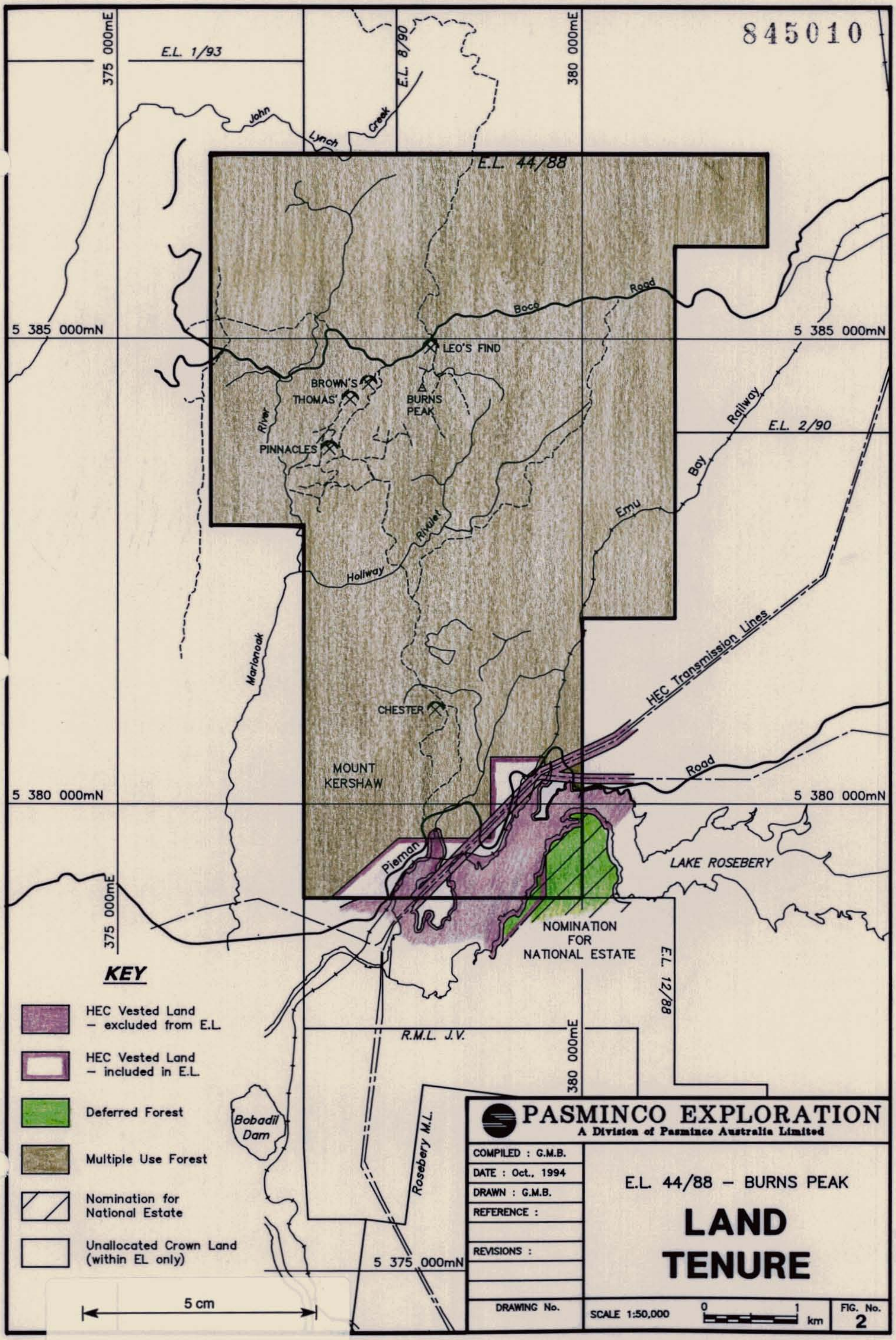

KEY

🟪	HEC Vested Land – excluded from E.L.
▭	HEC Vested Land – included in E.L.
🟩	Deferred Forest
🟫	Multiple Use Forest
▨	Nomination for National Estate
☐	Unallocated Crown Land (within EL only)

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E.L. 44/88 – BURNS PEAK

LAND TENURE

SCALE 1:50,000 0 1 km

FIG. No. 2

4 REGIONAL GEOLOGY

The Burns Peak EL covers a large section of the Cambrian Mt Read Volcanics in Western Tasmania. Most of the units exposed at the surface are included in the Central Volcanic Sequence (CVS) (Corbett and McNeill, 1986; Figure 3) and consist of rhyolitic to dacitic lavas and sills and associated volcaniclastic deposits, andesitic lavas and minor sedimentary units. Intruding the sequence are minor quartz–feldspar porphyries and basalt/dolerite sills and dykes. The EL also incorporates a slice of Dundas Group sediments on the western and northern margins. The major contact in the SW of the EL between the Central Volcanic Sequence and the Dundas Group is the Rosebery Fault, which strikes north–south and dips between 40° and 46° to the east at surface. This structure either shallows or flowers into the Henty Fault at depth and was an active thrust fault for at least part of its history. In the northwest and north of the EL the CVS–Dundas Group contact is conformable, but may be, in part, fault controlled.

The Henty Fault Zone, which forms the eastern boundary of the CVS and trends NNE lies to the east of the Burns Peak EL.

Units generally trend north–south in the southern and western parts of the EL but turn to a NE–SW trend in the area to the east of the Pinnacles workings. A north–south trend is also apparent along the Pinnacles "Axis" (formerly Pinnacles "Anticline") in the far north of the EL. A proposed stratigraphy is outlined in Rosenhain and Mathison (1989) but this is continually under review.

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E.L. 44/88 - BURNS PEAK JV

REGIONAL GEOLOGY

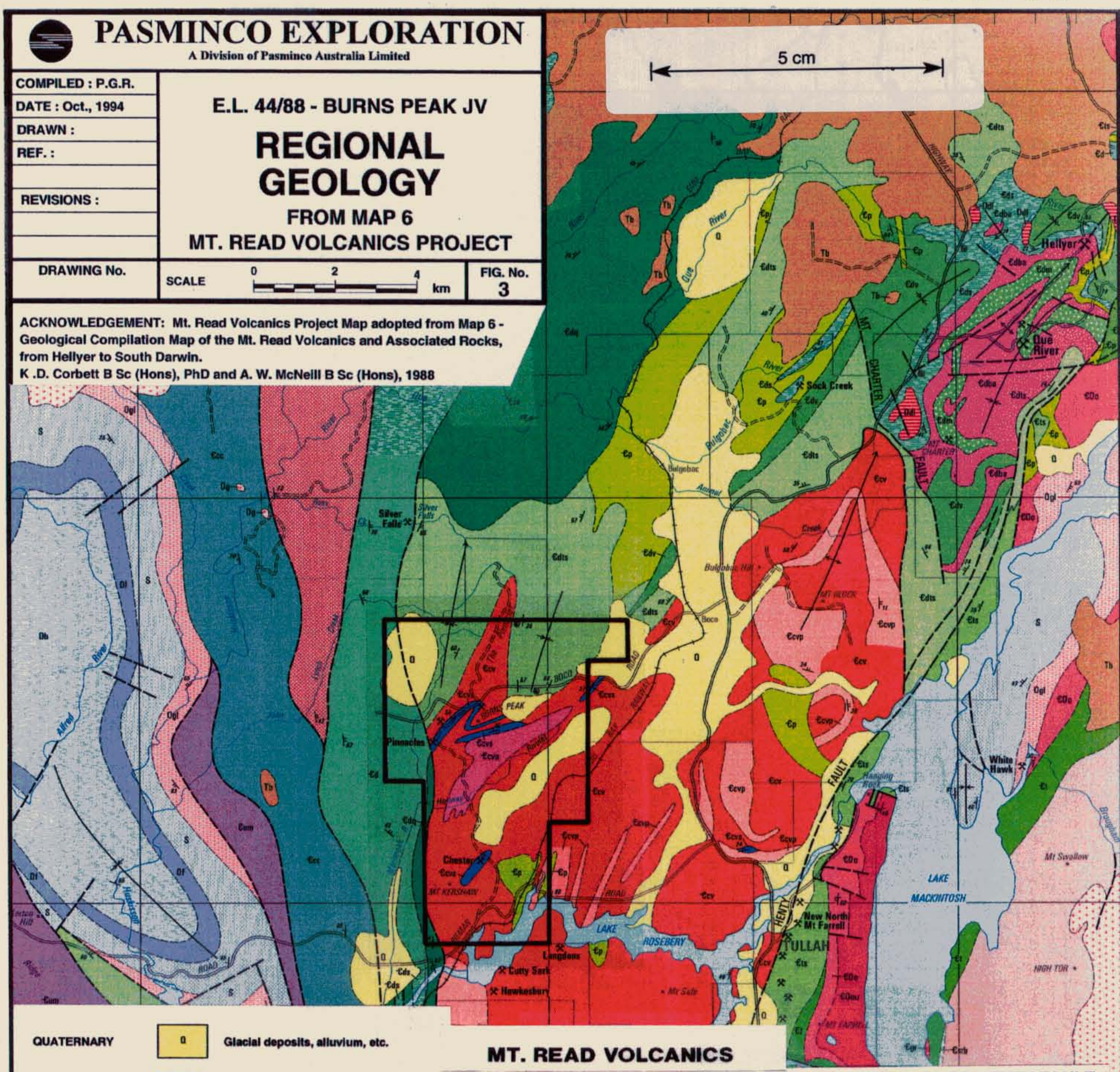
FROM MAP 6

MT. READ VOLCANICS PROJECT

SCALE 0 2 4 km

FIG. No. 3

ACKNOWLEDGEMENT: Mt. Read Volcanics Project Map adopted from Map 6 - Geological Compilation Map of the Mt. Read Volcanics and Associated Rocks, from Hellyer to South Darwin.
K .D. Corbett B Sc (Hons), PhD and A. W. McNeill B Sc (Hons), 1988



QUATERNARY	Q	Glacial deposits, alluvium, etc.
TERTIARY	Tb	Basalt
	Ts	Sediments - gravel, sand,clays
JURASSIC	Jdl	Dolerite
PERMIAN - CARBONIFEROUS	P	Undifferentiated
DEVONIAN	Ddl	Dolerite
	Dg	Granite
DEVONIAN - SILURIAN	S-D Db	Bell Shale
	Df	Florence Sandstone
	S	Silurian
ORDOVICIAN	Ogl	GORDON GROUP limestone
EARLY ORDOVICIAN - LATE CAMBRIAN	€Oou	Upper sandstone sequence including Pioneer Beds (€Oou)
	€Oo	Undifferentiated conglomerate and sandstone (€Oo)
	€Oon	Newton Creek Sandstone (€Oon) - Interbedded sandstone siltstone and conglomerate with marine fossils

MT. READ VOLCANICS

NORTH AND WEST OF HENTY FAULT

DUNDAS GROUP AND CORRELATES

€p	Quartz-feldspar porphyry, mostly intrusive
€ds	Mostly sedimentary rocks - greywacke, siltstone, conglomerate
€dts	Interbedded tuffs and sedimentary rocks
€d €dq	Quartzwacke-slate-siltstone units , e.g. Stitt Quartzite
€dv	Mostly felsic volcanics - mainly tuffs
€dm	Mixed felsic and mafic volcanics and epiclastic breccias, Que-Hellyer area
€dba	Basaltic to andesitic volcanics

CENTRAL VOLCANIC COMPLEX

€cv	Mainly feldspar-phyric volcanics — dacite, rhyolite,minor andesite (€cv)
€p	Felsic porphyry, mainly intrusive
€cvp	Mainly pyroclastic rocks
€cvs	Sedimentary rocks, mainly shale and sandstone
€cva	Andesitic volcanics

SOUTH AND EAST OF HENTY FAULT

TYNDALL GROUP AND CORRELATES

€ts	Mainly sed. rocks, incl Farrell Slates
€t	Mainly quartz-feldspar-phyric volcanic and volcaniclastic rocks (€t)
€tc	Mainly volcaniclastic congl. and sandstone
€srb	Sticht Range Beds - sandstone, siltstone, siliciclastic conglomerate

CAMBRIAN INTRUSIVE ROCKS

€gr	Granite
€p	Felsic porphyry
€g	Gabbro
€um	Ultramafic rocks & serpentinite

PRECAMBRIAN

Po	Quartzite-slate sequences — correlates of Oonah Formation
Pm	Metamorphosed sequences of Tyennan Region Major lithological boundary trends shown

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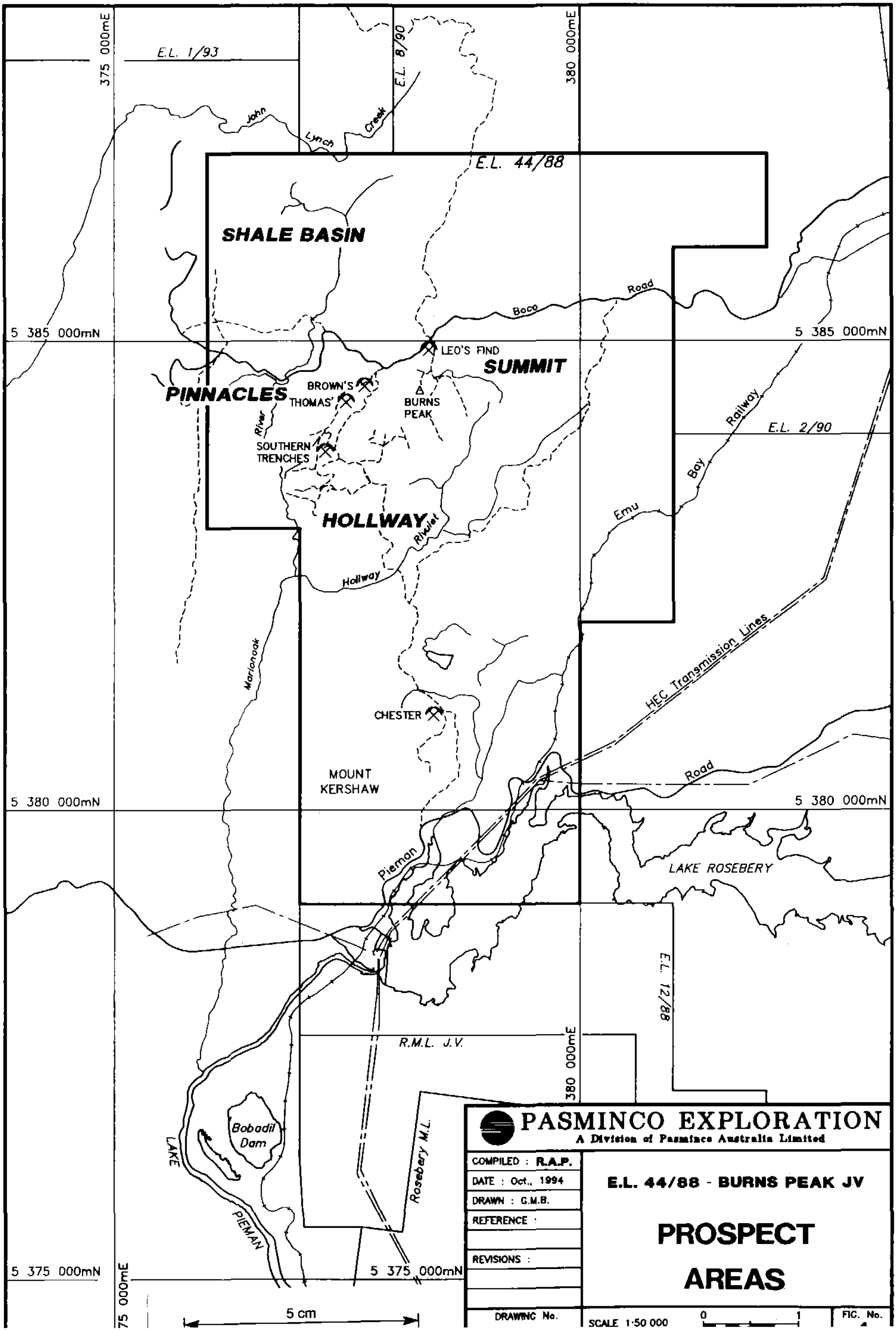

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PROSPECT AREAS

SCALE 1:50 000 0 1

FIG. No.

Numerous sub–economic base metal sulphide deposits occur on the western side of the EL, in a 2km wide belt of mineralised rocks including the Pinnacles, Thomas' Tunnel, Brown's Tunnel and Leo's Find workings. The large Chester massive pyrite deposit occurs in the south of the EL. A number of smaller gold, base metals or pyrite workings are also documented, mainly along the western side of the EL, within the CVS rocks.

During the period covered by this report, exploration has concentrated on the areas of known sulphide mineralisation and significant alteration at Brown's and Thomas' Tunnels, Summit, Hollway and Shale Basin.

5 PREVIOUS EXPLORATION

The extensive history of exploration and mining in the area covered by the current Burns Peak EL 44/88 was summarised by Rosenhain and Mathison (1989) and this has been modified, below, as Table 1. The Burns Peak Joint Venture was initiated on granting of the licence in December 1988, and is currently reaching the end of its sixth year of operation. Details of these activities are documented in the past five annual reports (Rosenhain and Mathison, 1989; Lorrigan, 1990; Kirsner, Lorrigan and Rae, 1991, Kirsner, 1992 and Poltock, Kirsner and Saxon, 1993).

TABLE 1

HISTORY OF EXPLORATION ON EL 44/88

1896	Discovery of alluvial gold in Marionoak River by Tom Strong. (Strong's Alluvial Workings)
1896	Discovery of Pinnacles Lodes by McGuiness Bros.
1899	Discovery of Chester by F Kershaw and H Sanderson. (Kershaw's Iron Blow)
1899	Brown's Tunnel driven (Brown's Workings) est. production 300t @ 2% Zn, 2g/t Au, 44g/t Ag.
1899	Southern Trenches est. production 55t @ +10% Zn, +8% Pb, 8g/t Au, 38g/t Ag.
1899	Thomas' Tunnel driven (Thomas' workings) est. production 50t @ 4% Zn, 7% Pb, 1g/t Au, 240g/t Ag.
1908	Mt Lyell Mining and Railway Co Ltd secured Chester Leases.
1908–1913	Intensive exploration and mining development at Chester. Production 36 000t @ 37% S.
1918–1920	Minor production from Chester by Cuming Smith & Co. Production 700t @ +25% S.

1947–1950	Electrolytic Zinc Company created foot and vehicle access to the Pinnacles area. 14 small diameter diamond drill holes (PP31, 34, 36, 39, 40, 41, 42, 45, 46, 48, 50, 51, 52, 59) completed and workings and topography surveyed. Geophysical test surveys at the Pinnacles (SP, ground magnetics and resistivity).
1959–1960	Geochemical, geological and geophysical surveys over Pinnacles and Chester. Techniques included Sharp vertical loop EM, Turam, ground magnetics (vertical field), gravity. "The significant feature of this coverage is that Pinnacles Mine Mineralisation is non–conducting".
1963	Comstaff acquires EL 5/63 which included the Burns Peak area.
1968–1972	Initial phase of gridding, geochemical sampling, geophysics (IP and EM), mapping and 3DDH at Chester (CH1–3) by Comstaff.
1973–1976	Second phase of gridding, geochemical sampling, etc. 10 DDH drilled (plus CP2 redrilled) at Pinnacles and 13 DDH at Chester (CP1–23). (New metric grid, new soil sampling, new IP). Airborne EM.
1976–1979	Preussag entered into Joint Venture with Comstaff. Detailed mapping and structural synthesis completed. C horizon soil geochemistry, 2 DDH, (PIN1 & 2) trial PEM and IP over Leo's Find.
1980–1983	Exploration of East Chester area. New grid, grid extensions, C horizon soil geochemistry, ground magnetics. IP, DIGHEM. Four DDH (EAB1–4) drilled at East Chester.
1984–1985	New grid at Pinnacles (EAF) mapped, C horizon soil sampling, ground magnetics and UTEM. 19 DDH (ESB1 & EAF 1–18) with the discovery of small lenses of massive sulphides and patchy gold mineralisation. New geological interpretation.
1986–1988	BHP entered Joint Venture. Reinterpretation and compilation of exploration results. "Blanket" UTEM and downhole SIROTEM. New geological interpretation. Petrological studies. Wacker sampling.
1988–1991	Pasminco–Noranda–Plutonic Joint Venture on new EL 44/88. Extensive geological mapping, re–appraisal of previous data, Wacker sampling, geochemistry, petrology, DHEM, CSAMT, DH–SIROTEM, Mise–a–la–

Masse, aeromagnetic survey, regional and local gravity surveys, drilling of 12 DDH (BPD62–73). Rehabilitation of old tracks, costeans and workings.

1991–92 Pasminco –Noranda– Plutonic JV, exploration was managed by Pasminco and included drilling BPD74, 75, 76, geological mapping and relogging drill core at Hollway and Summit, gravity infill and interpretation, ore/pathfinder/whole rock geochemistry, down hole EM in BPD69,71,75 and compilation/computerisation of historic geochemical data.

1992–93 Pasminco–Noranda–Plutonic JV, exploration was managed by Pasminco and included drilling holes BPD77–79, geological mapping, gridding at South Kershaw–Hollway, review and compilation of previous exploration, Dipole–dipole IP at South Kershaw–Hollway, soil geochemistry at South Kershaw and ore/pathfinder/whole rock geochemistry.

Results include:

- intersection of copper rich stringer zone (9m @ 2.47% Cu, 98g/t Ag) and massive sulphide (10.1m @ 1.39% Cu, 2.19% Zn) in BPD78 at Brown's Tunnel.
- intersection of massive sulphide clasts (36% Pb, 16.5% Zn, 300g/t Ag) associated with pyrite sericite alteration in BPD77 at Summit.
- definition of discrete IP responses associated with pyritic alteration at South Kershaw and Hollway.

6 RESULTS OF EXPLORATION PROGRAM

THOMAS'S TUNNEL– BROWN'S TUNNEL– SHALE BASIN

These prospects are located on the western side of Burns Peak and the Pinnacles Ridge (see Fig 4). Regionally the mineralised host occurs on the eastern limb of a north plunging syncline which is bounded to the west and probably at depth by the Rosebery Fault. All base and precious metal production from the Pinnacles area has come from the southern end of this zone at Southern Trenches, Thomas' Tunnel and Brown's Tunnel.

6.1 Drill hole BPD78

Details of the hole were reported in the previous licence year (see Poltock et. al., 1993) but at the time of writing analytical results were only available for the copper rich stringer zone and massive sulfide. Analytical results are included in Appendices 1 and 8. A complete summary of the mineralised intervals in BPD78 are as follows:

- 279.00–285.00m 6m @ 0.12% Pb, 1.53% Zn, disseminated sphalerite in intensely sericitised pumice breccias.
- 286.00–295.00m 9m @ 2.47% Cu, 0.21% Zn, 98g/t Ag, stringer zone (reported in 1993).
- 322.90–333.00m 10.1m @ 1.39% Cu, 2.19% Zn, 53g/t Ag, massive pyrite (reported in 1993).
- 333.00–341.00m 8m @ 0.11% Cu, 0.13% Pb, 0.93%Zn, cherty siltstone and andesitic lava.
- 355.00–359.00m 4m @ 0.2% Pb, 3.11% Zn, pumice breccias with sphalerite blebs and veinlets.
- 400.00–419.20m 19.20m @ 0.51% Zn, dark grey siltstone and mass flows with sphalerite veining.
- 423.90–456.00m 32.1m @ 0.15% Pb,0.88% Zn, dark grey siltstone and mass flows with sphalerite veining.

6.2 Drill hole BPD79

This hole was drilled at the end of the 1992/93 licence year and was designed as a further test of mineralisation intersected in BPD78, the collar was sited 100m along strike to north (see Poltock et. al., 1993 (Appendix 6) for the drill proposal). The hole intersected a similar sequence to that in BPD78 (see Appendix 5) and Figs 10 and 17, the main differences being a thicker porphyry sill in lower part of the host and the reduction in massive pyrite thickness (10.10m in BPD78 to 1.00m in BPD79). This rapid thickening of the sill and thinning of the massive sulphide may be related. Boulter (1993) describes an antithetic relationship between porphyry sills and massive sulfide thickness in the Rio Tinto district in Spain.

A summary log of the hole is as follows:

0–11.80m	**Fluvioglacials.**
11.80–382.25m	**Pinnacles Rhyolite:** lava and lava breccia with fine grained epiclastic lenses and cherty peperite. Variably sericite–carbonate altered with disseminated sulphides in sheared epiclastics.
382.25–435.50m	**Brown's Tunnel host sequence:** pumiceous mass flows. Sericite–silica altered with disseminated, veinlet and minor massive pyrite plus subordinate sphalerite and chalcopyrite.
435.50–438.70m	**Brown's Tunnel host sequence:** fine to medium grained epiclastics.
438.70–452.50m	**Andesite lava:** calcite amygdales and some fuchsite alteration of feldspar phenocrysts. Abundant carbonate, sphalerite and chalcopyrite veins.
452.50–473.00m	**Brown's Tunnel host sequence:** pumiceous mass flows and fine grained epiclastics.

473.00–517.00m	**Quartz feldspar porphyry sill.**
517.00–551.00m	**Brown's Tunnel host sequence:** siltstone, chert and felsic volcanic derived mass debris flows.
551.00–574.50m	**Footwall pumiceous mass flows.**

The best mineralised intervals are as follows:

- 355.00–360.00m 5m @ 2.73% Zn, pumiceous mass flows and siltstones within the base of the Pinnacles Rhyolite.
- 383.00–386.00m 3m @ 0.32% Zn, 20g/t Ag, contact between Pinnacles Rhyolite and host sequence pumice breccias, the interval includes 1m of massive pyrite.
- 438.70–446.00m 7.3m @ 2.1% Zn, carbonate sphalerite pyrite veins in andesite.
- 526.40–532.00m 5.6m @ 1.3% Zn, carbonate sphalerite veinlets in siltstone and crystal sandstone.

The hole confirmed the continuity of the host sequence but the stringer zone and massive sulphide in BPD78 had lensed out nearly completely.

6.3 Drill hole BPD81

This hole was designed as a further test of the stringer zone and massive sulfide intersected in BPD78 (Poltock et. al., 1993), the hole was sited 100m along strike to the south from BPD78 (see drill proposal, Appendix 2). In addition the hole would determine whether the syncline occurred in this area. With whole rock geochemistry from section EAF 5000N it became apparent that lithologies mapped as andesite were actually chloritised Pinnacles Rhyolite, the hanging wall sequence indicating that the full host sequence probably existed and that the EW cross structure juxtaposing sequences may not exist (see Fig 9).

A detailed log is included as Appendix 7 and a summary log of the hole is as follows:

0-128.70m	**Pinnacles Rhyolite:** lava with minor volcaniclastics.
128.70-143.00m	**Pinnacles Rhyolite:** lava mixed with fine grained volcaniclastics of the Brown's Tunnel host sequence.
143.00-211.85m	**Brown's Tunnel host sequence (BTHS):** pumiceous mass flows, siliceous siltstone and massive carbonate chlorite. Sericite carbonate altered with disseminated sphalerite.
211.85-220.00m	**Basaltic andesite:** lava with carbonate amygdales.
220.00-370.90m	**Brown's Tunnel host sequence:** a mixed sequence of peperitic rhyolitic lavas, black siltstone, felsic volcanic derived epiclastics, pumice breccias and minor andesitic-dacitic lava. High grade massive sulphide clasts/lenses occur between the andesite lava and sericite-carbonate altered pumice breccias. Broad zones of sub-economic Zn as sphalerite veining occurs in siltstones in the lower host sequence.
370.90-421.60m	**Pumiceous mass flows.**

Features of note in the hole include:

- hole intersected a similar host sequence to BPD78 and 79 under relatively thin Pinnacles Rhyolite cover (128.7m) (see drill section Fig 12 and 19).
- mineralisation is closely associated with a basaltic andesite lava which has geochemical affinities with the Hollway andesites rather than the Brown's Tunnel andesite (see sample 38061, from 217.3m).
- styles of mineralisation intersected included massive carbonate-chlorite, massive sphalerite with chalcopyrite stringers, veinlet sphalerite in siltstone and minor massive pyrite-sphalerite lenses in siltstone.

- bedding in laminated siltstones in the lower host sequence paralleled the core axis, orientated core defined a moderate east dip indicating folding and possibly drag associated with the Rosebery Fault (Fig 19).✓
- amygdaloidal dacite lava in the host near the foot wall contact is geochemically similar to some Brown's Tunnel andesites and is probably continuous with those in EAF2 (see samples 38062 and 37714 - 37716). On the basis of this geochemistry it was recognised that the full host sequence had not been intersected in EAF2.
- alteration assemblages include sericite, chlorite, pyrite and pink slightly manganiferous carbonate.

The best mineralised intercepts in BPD81 include:

- 203.60 - 209.90m 6.3m @ 0.36% Pb, 1.66% Zn, massive to weakly banded carbonate and chlorite with disseminated and veinlet sphalerite. The carbonate could be the lateral equivalent of a massive sulphide lens.
- 225.30 - 226.00m 0.7m @ 2.09%Cu, 1.42% Pb, 19.40% Zn, 91g/t Ag, 0.10g/t Au, massive sphalerite with chalcopyrite stringers. This clast or disrupted sulphide lens is underlain by very altered and weakly mineralised host rocks indicating that minimal transport has occurred.
- 226.00 - 242.00m 16m @ 0.05% Cu, 0.29% Pb, 0.93% Zn, 14g/t Ag, sericite-carbonate altered pumiceous mass flow with clasts and disseminated sulphides. Clasts include massive sphalerite, massive carbonate-sphalerite and fine grained silica-pyrite.
- 298.00 - 305.00m 7m @ 0.19% Pb, 1.13% Zn, mineralisation occurs as disseminated and semi-massive pyrite lenses plus quartz-carbonate-sphalerite veinlets in cream vitric siltstone and grey siltstone. The maximum gold assay in the hole, 0.13g/t occurs within this interval.
- 340.00 - 358.00m 18m @ 0.27% Pb, 1.42% Zn, quartz-carbonate-sphalerite veinlets and massive pyrite lenses (344.30 - 344.40m) hosted in laminated siltstone and sericitised pumiceous mass flows.

6.4 Drill hole EAF2 extension

Using geological and lithogeochemical data from BPD81 it was recognised that the full host sequence, particularly the upper part which hosts the better mineralisation associated with basaltic-andesite lavas had not been tested by EAF2 (same section).

It was proposed to extend EAF2 from 132.00m to 450m (see drill proposal Appendix 3). The extension would test the following;

- upper more mineralised part of the host sequence.
- syncline interpretation and repetition of the host sequence in the western limb.
- position of the Rosebery Fault Hangingwall (RFHW) structure, the interpreted depth limiting fault to mineralisation at Brown's Tunnel.
- northern continuation of the Southern Trenches Shear Zone (STSZ) and associated high grade sulphide intersected in BPD63 (200m to south) (see Rosenhain and Mathison, 1989).

The hole has just been completed, a summary log to date is as follows:

0–132.00m	See Comstaff log.
132.00–236.60m	**Mixed sequence:** of andesitic–dacitic lavas and the Brown's Tunnel host sequence.
236.60–265.25m	**Mixed sequence:** of Brown's Tunnel host and Pinnacles Rhyolite.
265.25–338.00m	**Pinnacles Rhyolite:** moderately sericitised and carbonatised lavas.
338.00–348.10m	**White Spur Formation?:** quartz crystal sandstone. Contact with Pinnacles Rhyolite is erosional with no evidence of faulting.

348.10–499.50m **White Spur Formation:** black siltstone and felsic derived epiclastics with abundant carbonate and sphalerite veinlets.

Significant results from the hole include:

- high grade sphalerite–chalcopyrite lens or fragment at 137.05m, similar to that in BPD81 (225.30–226.00m).
- intense silicification and sericitisation associated with a pyritic stringer zone occurs between 138.00–152.00m.
- moderate to intense sericitisation of pumice breccias associated with disseminated sphalerite occurs between 152.00–180.00m, abundant carbonate fragment or alteration patches also occur in this interval.
- the basaltic andesite lava in BPD81 was not intersected.
- pumice breccias intersected are typical of the upper part of the BTHS.
- the interpreted syncline on this section does not exist, there was no folded repetition of the host and the contact with the hanging wall Pinnacles Rhyolite is near vertical.
- contact between the Pinnacles Rhyolite and White Spur Formation was in the predicted position but the contact rather than being a major fault zone appears to be erosional. The implications for this are uncertain at present.
- black siltstone and associated carbonate–sphalerite veining within the White Spur Formation is very similar to that in the lower BTHS.

6.5 Lithogeochemistry

Major and trace element analyses have been added to the Burns Peak data base and results are included in Appendices 8 and 9. Analyses are of primary volcanics, intrusives and pumice breccias from holes completed during the year and earlier drilling. The data has been used primarily to aid in rock identification and correlation and to a lesser to define extent and alteration intensity. The data has been presented on P_2O_5 – Ti/Zr and Zr/Ti–Nb/Y plots (see Fig 14).

From the plots it can be seen that the volcanics fall into four fields, from least to most differentiated these are:

- Hollway basalts and andesites, some Brown's Tunnel lavas also plot in this field;
- Brown's Tunnel andesite and dacite;
- Andesite and dacite in the base of the Pinnacles Rhyolite;
- Pinnacles Rhyolite, pumice breccias (host sequence and footwall) and quartz feldspar porphyry intrusives.

6.6 Brown's – Thomas' Tunnels long sections

Drilling data has been presented in two forms: a vertical long section (Fig.15) with intersections plotted and an inclined long section with Cu–Zn histograms (Fig.16). The latter is inclined at 70° to the west in the plane of the host sequence.

Note worthy features from these sections include:

- the maximum accumulations of Cu and Zn are coincident and occur on section 5300N (see drill holes EAF9 and BPD78). This Cu–rich zone represents the high temperature, proximal part of a VHMS system as defined by Large, (1992).

- the metal rich zone on 5300N is coincident with an apparent change in plunge of the Rosebery Fault, this may be real or merely a result of the way the section has been drawn.

- in drill holes EAF7–9 there is an apparent shallow northerly plunge to the mineralisation. Small wave length folds plunging 20° to the NE in the quarry at the Boco Road Brown's Tunnel track junction may be related structures. The potential for shallow plunging ore shoots has been tested by BPD66 with sub–economic results.

6.7 Gridding

Lines 4700N to 6800N, part of Comstaff's EAF grid, has been recut for a total of 21.9 line kms (see Figs 5 and 6). All lines have been surveyed with ground magnetics and the outcropping geology mapped.

6.8 Geological Mapping

EAF grid lines 4700N to 6800N and stream traverses in the headwaters of Marionoak River have been mapped (see Figs 5, 6 and 9). Outcrop in the area is only moderate and is frequently obscured by fluvioglacial cover. The dominant lithologies are the Pinnacles Rhyolite and overlying feldspar quartz crystal sandstone with scattered siltstone lithics. The sandstone is associated with dark grey siltstone and is interpreted as a mass flow on the basis of this association. On a regional basis the sequence is correlated with the White Spur Formation and/ or the Que River Shale/Southwell Subgroup.

A summary of significant results of mapping are as follows:

- the sandstone/siltstone at Shale Basin is similar to that which occurs between the Rosebery Fault splays (see Fig 13) and overlying the Pinnacles Rhyolite in EAF2 (see Fig 12). These siltstones contain broad intervals of sub–economic Zn in drill holes CP14, BPD63 and EAF2 and are associated with Zn soil geochemical anomalies at Shale Basin (see Figs 22 and 23). The Shale Basin Zn anomalies have been extensively costeaned by Comstaff.
- north of section EAF 5000N there is little evidence for the RFHW or STSZ at surface. The Rosebery Fault and associated faults appear to strike more to the NW.
- the Rosebery Fault is completely covered by fluvioglacials at Shale Basin

- bedding trends at Shale Basin are quite variable indicating that the structure is more complex than a simple north plunging syncline.
- one set of faults mapped in the vicinity of Boco Road between 377240E and 378440E (Leo's Find) strike EW (see Figs 5 and 6). This, the Boco Road fault, is interpreted to have a north side up displacement, bringing the BTHS nearer the surface north of the road. This displacement can be seen when drill sections are constructed through BPD69 - 70 and outcrops of the host sequence on Boco Road.

6.9 Soil Geochemistry

Comstaff Cu and Zn soil geochemistry from the Shale Basin area has been digitised and loaded into the Pasminco data base. Data is presented as proportional plots for Cu and Zn (see Figs 20 - 23). The results have not been interpreted at this stage but will be used when targeting the drill hole at Shale Basin.

6.10 Mobile Metal Ion (MMI) Soil Geochemistry

This "B" horizon soil geochemistry has been completed on EAF grid lines 5800N and 6200N at 40m sample spacing.
Preliminary results have just been received and an interpretive report is awaited.

Three anomalies have been defined and are as follows:

- 5800N 5500E, a single point anomaly, the first sample of the survey and adjacent to the Boco Road. It is more than likely due to field sampling contamination.
- 6200N 5200-5400E, Zn anomaly over the Pinnacles Rhyolite, the cause of this anomaly is uncertain but a component may be from drill water

spreading down slope from BPD71. These sample sites will be field checked. Conventional soil sampling in the area (predating BPD71) is not anomalous with maximum values of 34ppmZn.

- 6200N 4450-4600E, Cu anomaly over White Spur Formation siltstones and sandstones, the area has been costeaned by Comstaff in their evaluation of conventional soil geochemical anomalies (maximum values 410ppmCu and 3700ppmZn).

6.11 Ground Magnetics

A ground magnetics survey has been completed on lines 4700 – 6800N. Survey details are given in Appendices 10 and 14. The work was carried out in two stages. The main feature detected in the survey is a 10nt low, which is coincident with altered footwall and host rocks between lines 4700 and 5200N. This low extends north as a subtle trend through the centre of the grid and is interpreted to reflect alteration and associated mineralisation beneath the Pinnacles Rhyolite. It is planned to drill the interpreted alteration and BTHS at Shale Basin later in 1994–95.

6.12 DHEM

Down hole EM surveys have been completed in BPD69,78, 79 and 81. Hole BPD69 was resurveyed to check a possible off-hole response reported in Kirsner et. al., (1991). The resurvey failed to define an anomaly (see Appendix 12).

In BPD78, early time in-hole spikes were recorded at 290m and 330m, correlating with mineralisation in the hole. The responses indicate that mineralisation is strike limited and/or discontinuous (see Appendix 10). This lack of strike continuity of the sulphides is supported by the MALM survey and results from drill holes BPD79 and 81 (drilled to north and south of BPD78).

In BPD79 an early time in-hole spike was detected at 380m (see Appendix 10). This response is probably associated with the massive pyrite lens between 383.60 - 384.60m. No other responses were detected.

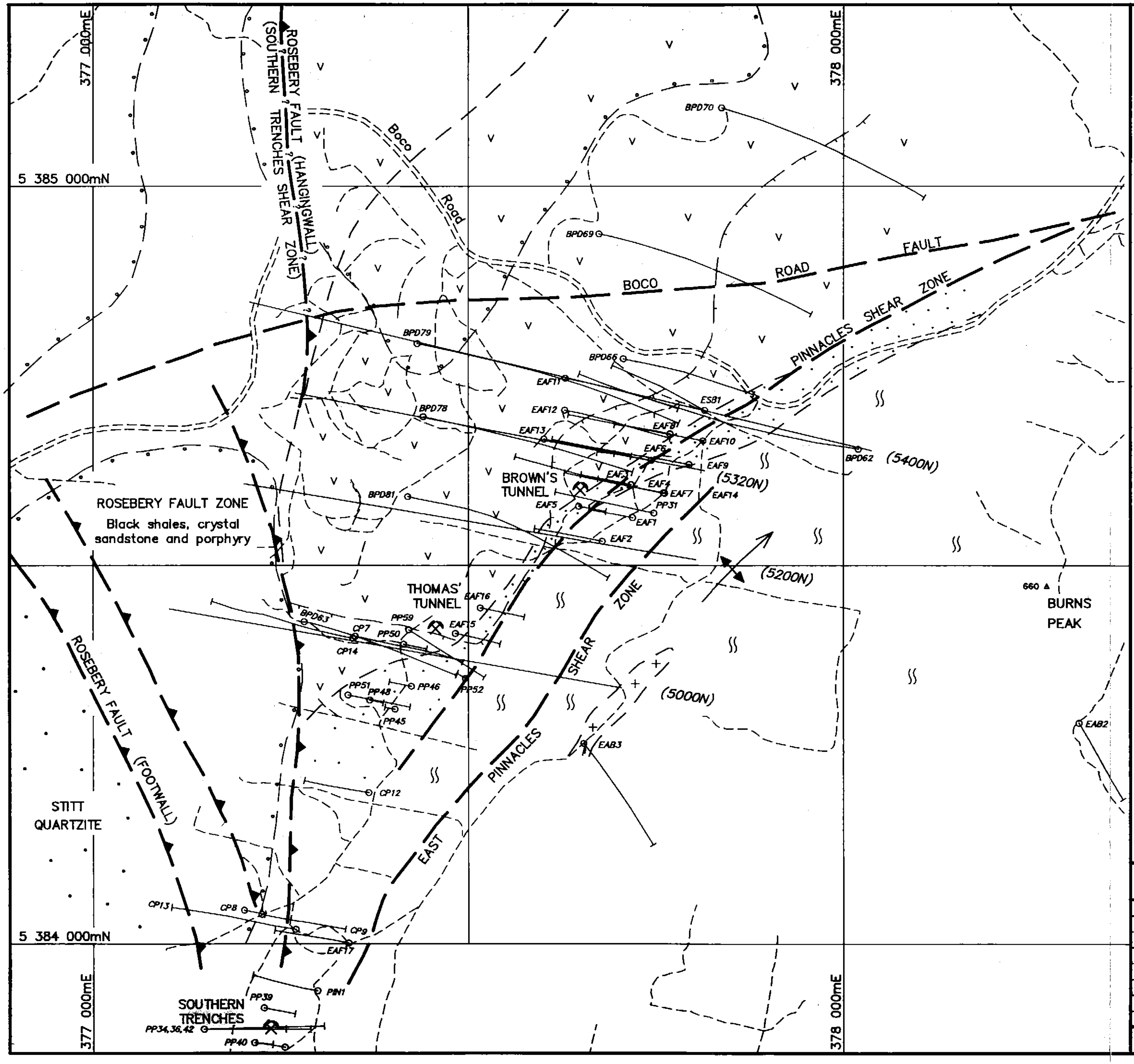
No in-hole or off-hole responses were recorded in BPD81 (see Appendix 13).

6.13 **Mise-a-la-masse** (MALM)

A MALM survey in BPD78 using the copper rich stringer and massive pyrite intervals at 330m as the current injection point has been completed (see Appendix 10). Some preferential current flow to the south occurs, suggesting continuity of the sulfides in this direction. Drill holes BPD81 and EAF2 have tested this southward trend but intersected only minor sulphides.

A prominent circular low voltage pattern around the current injection point occurs (see Fig 23 in Appendix 10). This feature does not appear to be related to the known geology and has not been resolved.

845030



LEGEND

QUATERNARY

Fluvioglacials

CAMBRIAN

▭	White Spur Formation/ Southwell Subgroup
v v	Pinnacles Rhyolite
⁚	Brown's Tunnel Host Horizon
ʃʃ	Pumiceous mass flows
+ +	Quartz feldspar porphyries
⁘	Stitt Quartzite

Geological boundary

Thrust fault

Fault

Syncline – anticline and plunge

Brown's Tunnel Host Horizon area tested/established by drilling. (Projected to surface)

(5000N) Comstaff EAF Grid

5 cm

Interpretive Geology
From Gregory (1987). A.N.L., L.W.K., R.A.P.

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

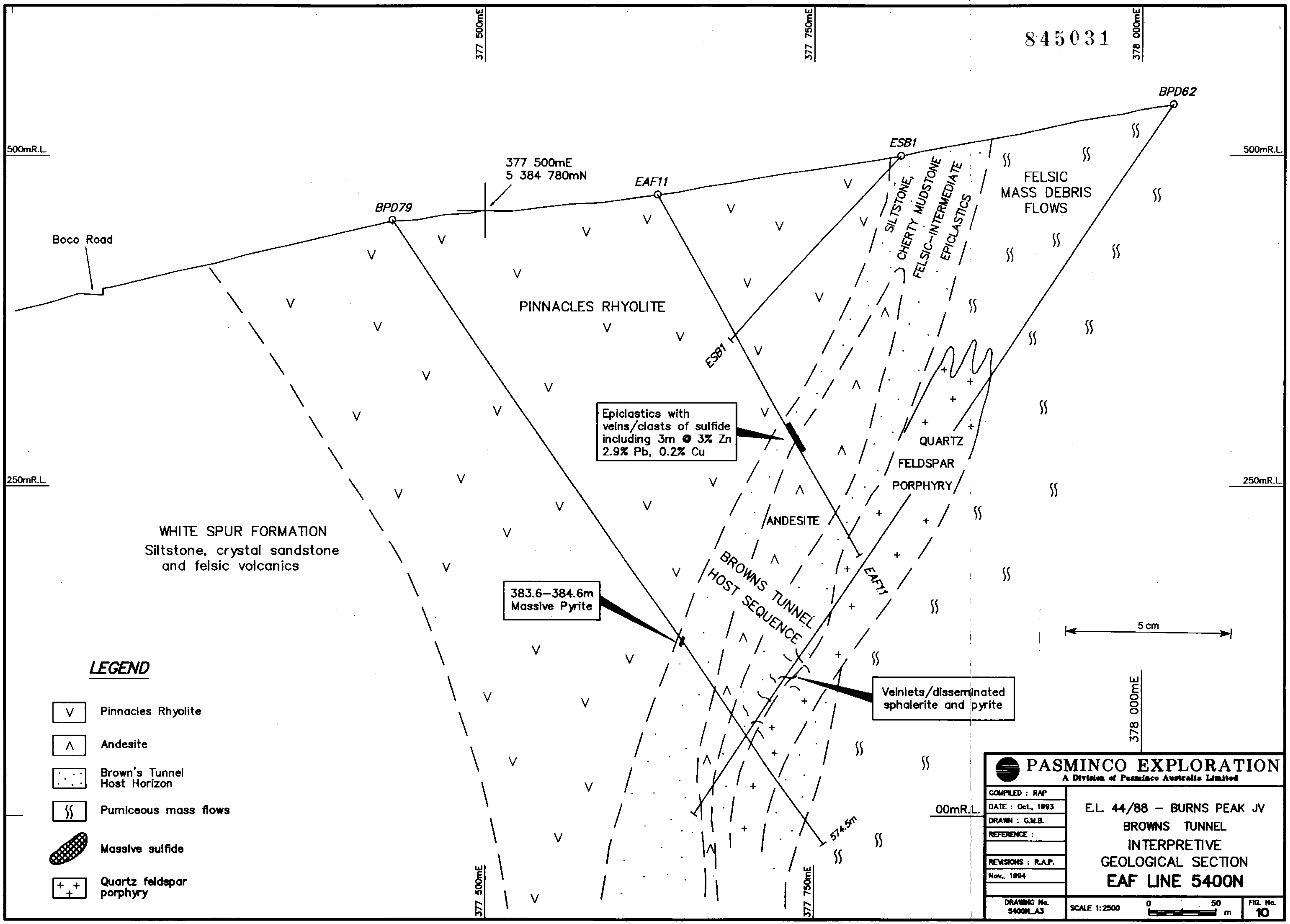
COMPILED : R.A.P.
DATE : Nov., 1993
DRAWN : G.M.B.
REFERENCE :
REVISIONS : R.A.P.
October, 1994

E.L. 44/88 – BURNS PEAK JV
PINNACLES

INTERPRETIVE GEOLOGY

DRAWING No. BTT_GEOL
SCALE 1:5000 0 100 m
FIG. No. 9

845031



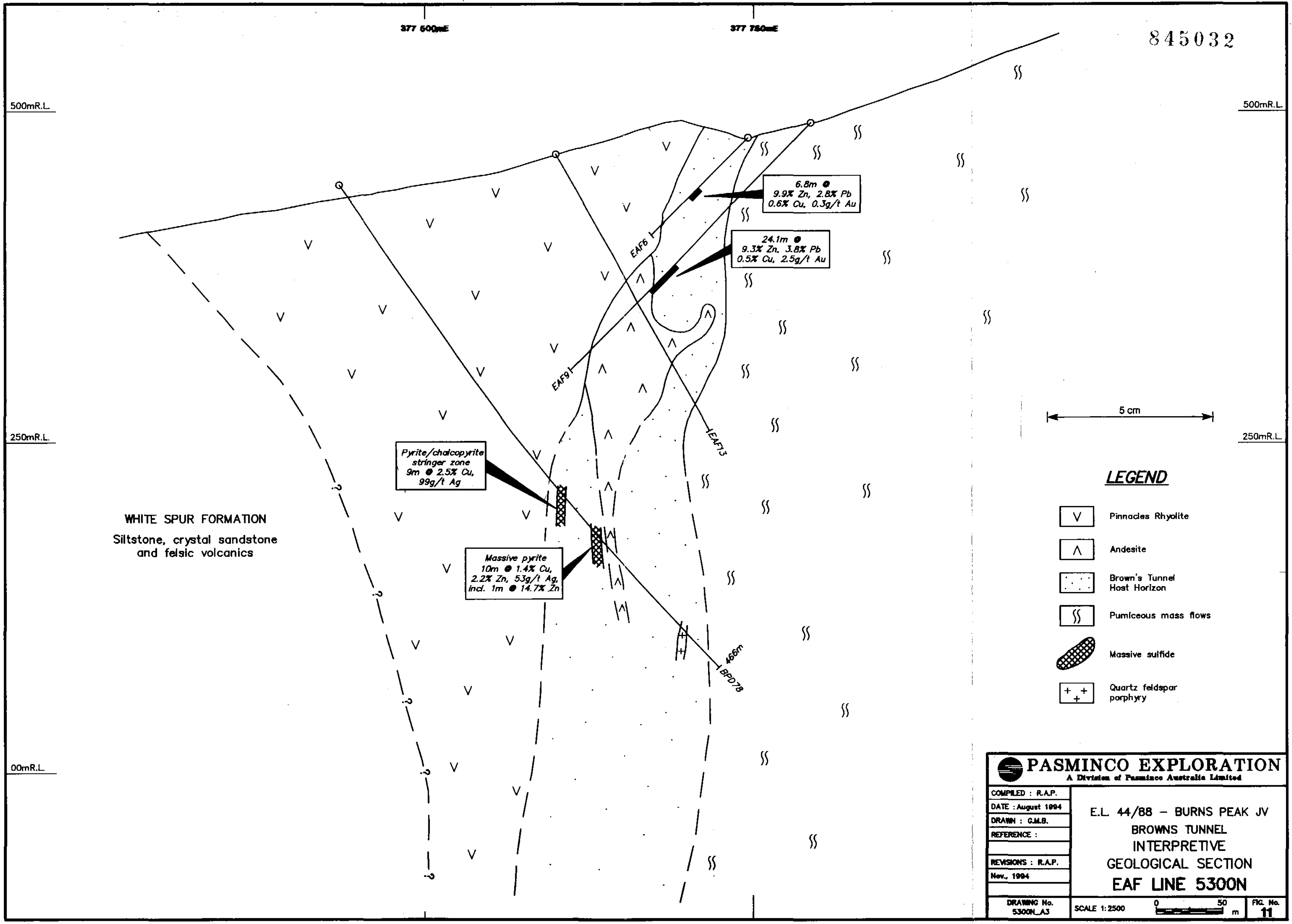
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : RAP
DATE : Oct., 1993
DRAWN : G.M.B.
REFERENCE :
REVISIONS : R.A.P.
Nov., 1994

E.L. 44/88 – BURNS PEAK JV
BROWNS TUNNEL
INTERPRETIVE
GEOLOGICAL SECTION
EAF LINE 5400N

DRAWING No. 5400N_A3
SCALE 1:2500 0 50 m
FIG. No. 10

845032



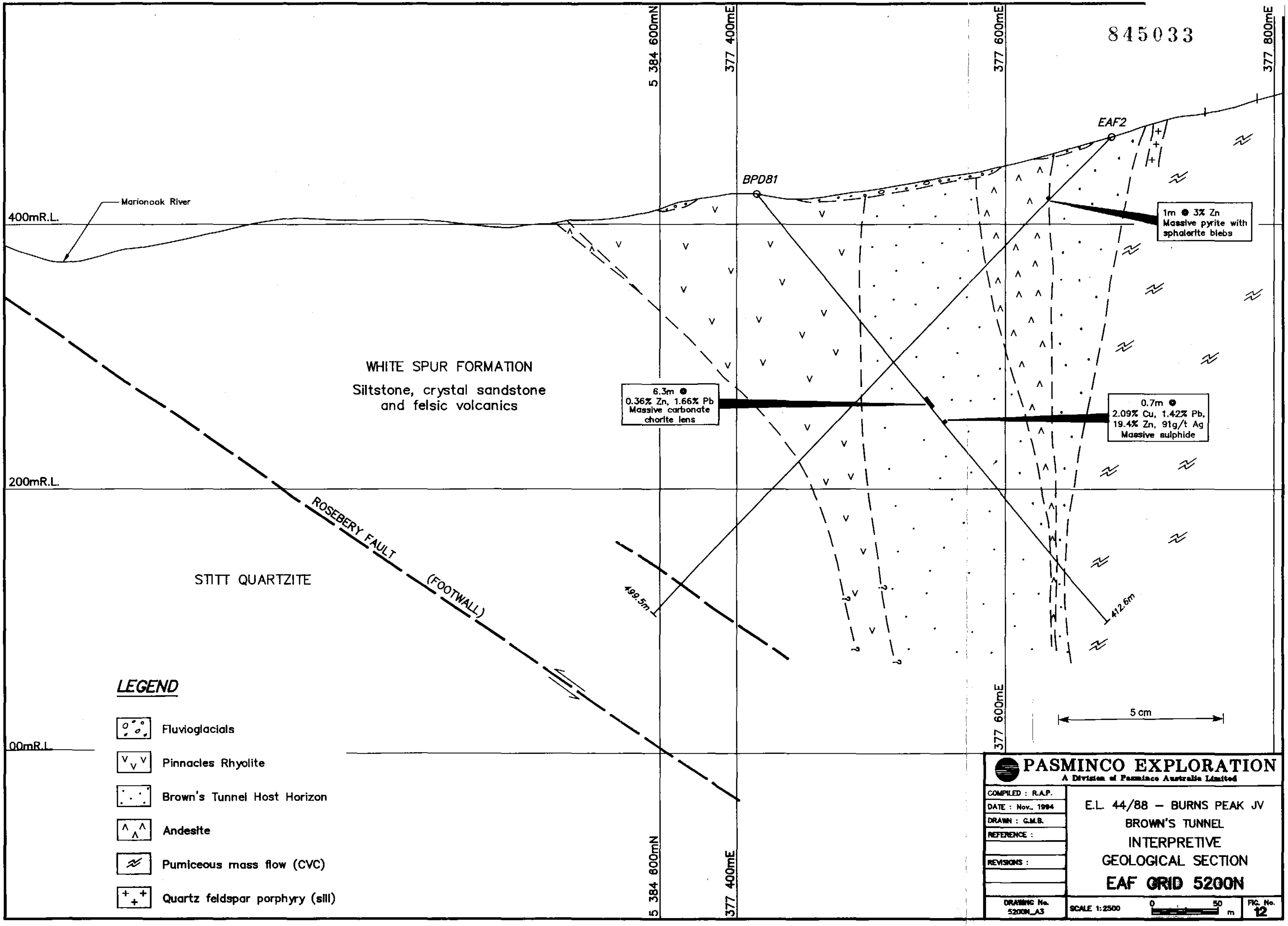
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : R.A.P.
DATE : August 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS : R.A.P.
Nov., 1994
DRAWING No. 5300N_A3

E.L. 44/88 – BURNS PEAK JV
BROWNS TUNNEL
INTERPRETIVE
GEOLOGICAL SECTION
EAF LINE 5300N

SCALE 1:2500 0 50 m
FIG. No. 11

845033



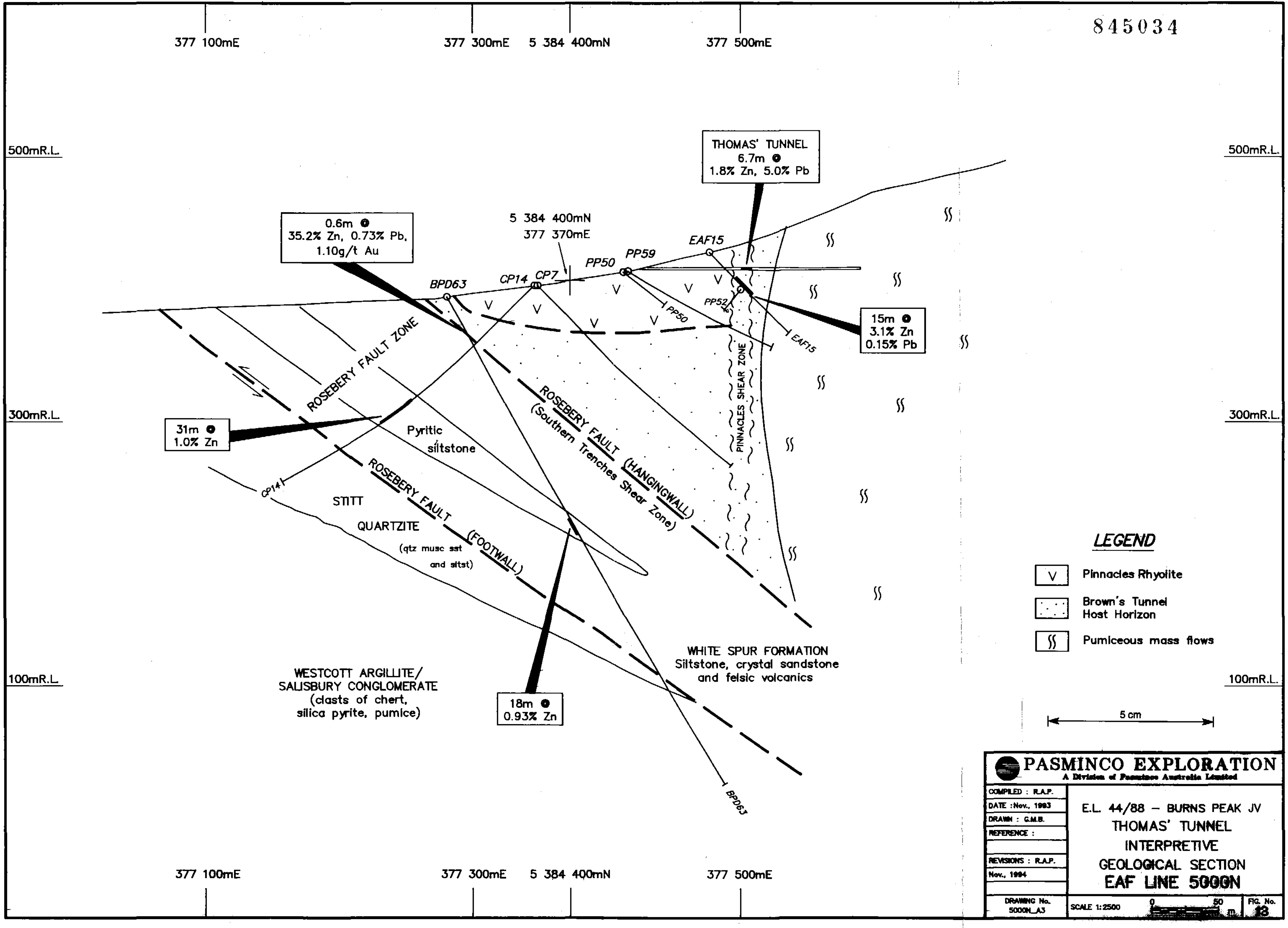
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : R.A.P.
DATE : Nov., 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV
BROWN'S TUNNEL
INTERPRETIVE
GEOLOGICAL SECTION
EAF GRID 5200N

DRAWING No. 5200N_A3
SCALE 1:2500 0 50 m
FIG. No. 12

845034



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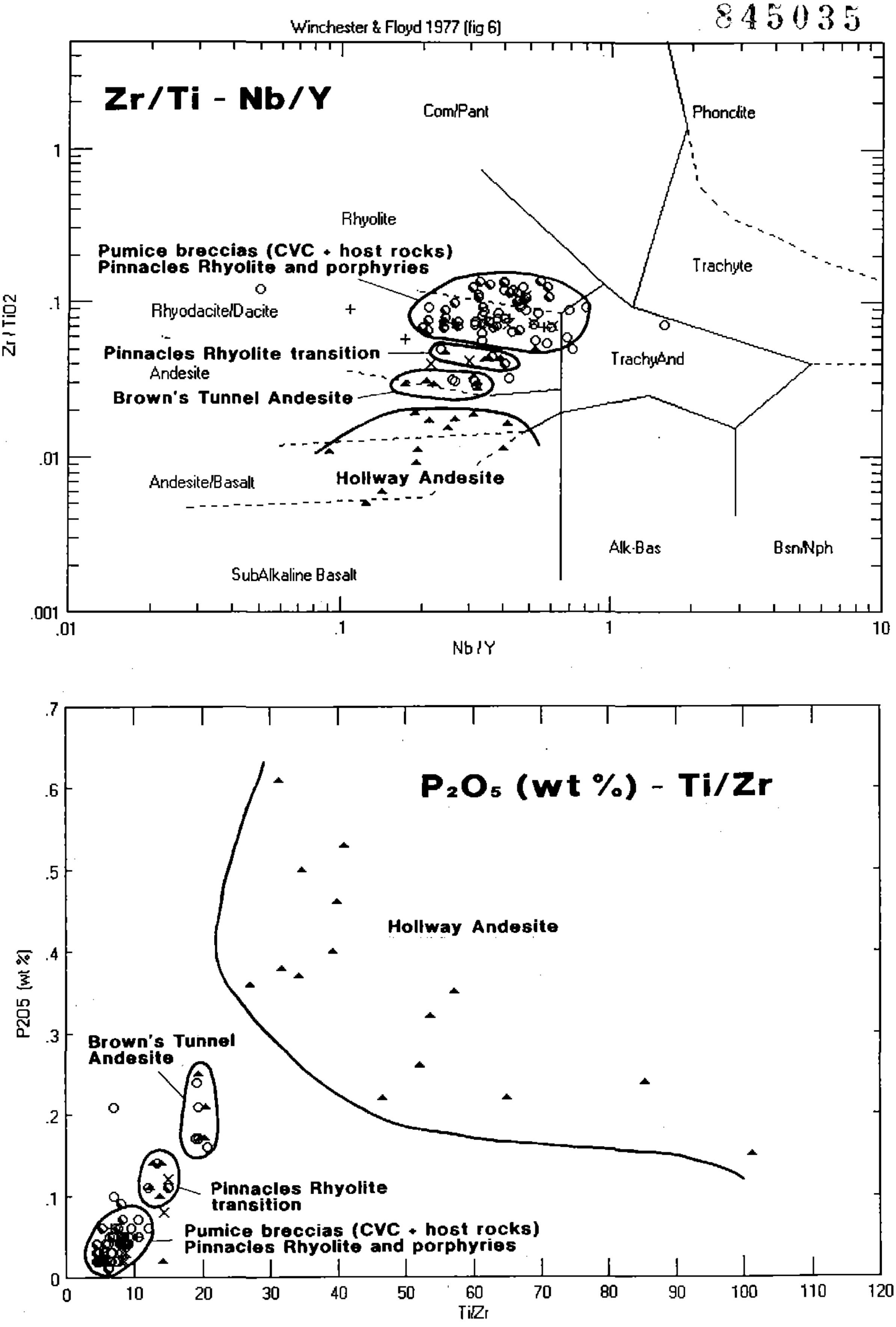
DATE :Nov., 1993
DRAWN : G.M.B.
REFERENCE :
REVISIONS : R.A.P.
Nov., 1994

E.L. 44/88 – BURNS PEAK JV
THOMAS' TUNNEL
INTERPRETIVE
GEOLOGICAL SECTION
EAF LINE 5000N

DRAWING No. 5000N_A3
SCALE 1:2500 0 50 m
FIG. No. 13

845035



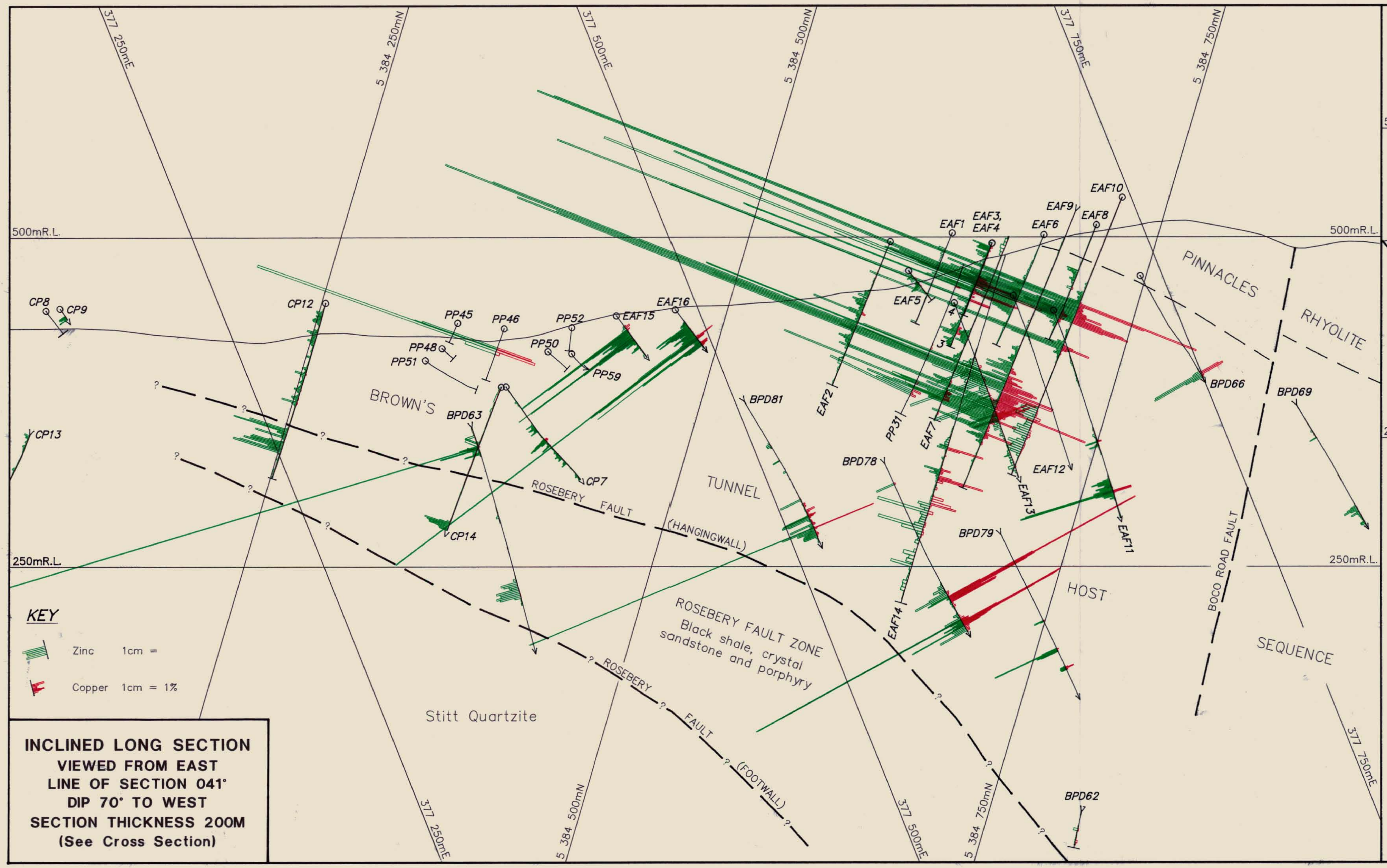
E.L. 44/88 - BURNS PEAK JV

PINNACLES

LITHOGEOCHEMICAL PLOTS

Figure 14

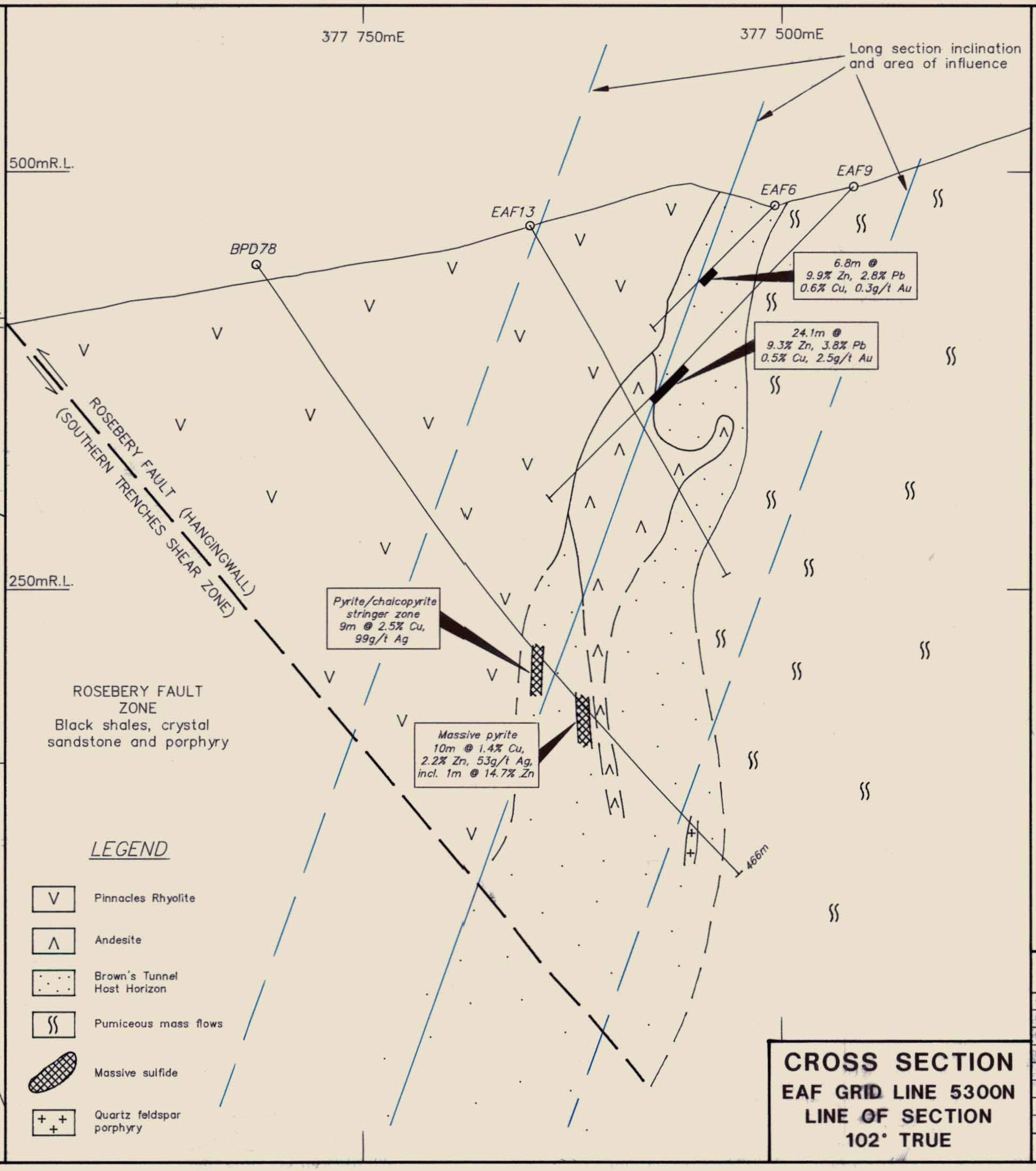
845036



KEY

🟩	Zinc	1cm =
🟥	Copper	1cm = 1%

INCLINED LONG SECTION
VIEWED FROM EAST
LINE OF SECTION 041°
DIP 70° TO WEST
SECTION THICKNESS 200M
(See Cross Section)



6.8m @
9.9% Zn, 2.8% Pb
0.6% Cu, 0.3g/t Au

24.1m @
9.3% Zn, 3.8% Pb
0.5% Cu, 2.5g/t Au

Pyrite/chalcopyrite
stringer zone
9m @ 2.5% Cu,
99g/t Ag

Massive pyrite
10m @ 1.4% Cu,
2.2% Zn, 53g/t Ag,
incl. 1m @ 14.7% Zn

LEGEND

V	Pinnacles Rhyolite
Λ	Andesite
⁚	Brown's Tunnel Host Horizon
ʃʃ	Pumiceous mass flows
▨	Massive sulfide
+ +	Quartz feldspar porphyry

CROSS SECTION
EAF GRID LINE 5300N
LINE OF SECTION
102° TRUE

5 cm

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : R.A.P.
DATE October 1994
DRAWN : G.M.B.
REFERENCE :

E.L. 44/88 – BURNS PEAK JV
BROWN'S TUNNEL
CROSS SECTION AND
INCLINED LONG SECTION

DRAWING No. BT_CSILS
SCALE 1:2500 0 50 m
FIG. No. 16

7 RESULTS OF EXPLORATION PROGRAM -SUMMIT

The Summit prospect is located east of the Pinnacles anticline and the Leo's Find area, and immediately south of Boco Road (see Fig 4). The Burns Peak Shear Zone (BPZS) marks the western extent of the prospect, this structure hindering correlation with the Brown's Tunnel sequence. Exploration during the year was directed at testing the down dip extent and character of a sulphide clast bearing volcaniclastic horizon with associated pyrite–sericite alteration intersected at 103 m in BPD77.

Activity at Summit included: drilling BPD80, DHEM in BPD80, plus ore suite/whole rock geochemistry. BPD80 was proposed by Poltock during the previous licence year (see Poltock et al, 1993), and drilled during February–March 1994.

7.1 Hole BPD80

Diamond drillhole BPD80 was collared on the 18th of February 1994, 300m east of BPD77 and 400m south of Boco Road. The hole targeted the down dip extension of sequence drilled in BPD77. BPD80 intersected a volcaniclastic dominated package comprised of black shale, sandstone and minor conglomerate, intruded by two sills of quartz–feldspar porphyry. Volcaniclastics are variably crystal, vitric and lithic rich, with clasts typically well rounded and moderately sorted. Turbidite beds are common within the hole. The hole terminated within a thick sequence of carbonaceous shale that appears to correlate with the DHEM anomaly located in BPD77. A detailed log of the hole is given in Appendix 7, and on section as Figure 18. Summary log is as follows:

0–65.8m	**Interbedded Shale and Sandstone:** coarse grained feldspar–lithic sandstone, with interbedded grey cleaved shale. Shale dominant above 35.2m.

65.8–137.4m	**Interbedded Sandstone, Conglomerate and Vitric Mudstone:** feldspar–lithic sandstone and conglomerate. Lithic component quartz–feldspar porphyry, shale and pumice. Occasional sericitised vitric mudstone.
137.4–218.0m	**Interbedded Sandstone and Vitric Mudstone:** crystal sandstone, commonly in graded turbidite beds with associated vitric mudstone.
218.0–227.7m	**Quartz–Feldspar Porphyry Peperite:** mixed porphyry and grey shale.
227.7–291.0m	**Interbedded Sandstone and Shale:** contorted beds of lithic sandstone and black shale.
291.0–391.8m	**Quartz–Feldspar Porphyry:** massive to brecciated porphyry with marginal peperite.
391.8–469.7m	**Shale:** black shale with minor interbedded sandstone.

The volcaniclastic sequence is unlike the rhyolitic lava and coarse epiclastic units intersected in BPD77, and no direct lithological correlation is possible. Despite this, core orientation surveys suggest that some overlap of stratigraphy must exist between the drill intersections, implying rapid facies variation for at least part of the sequence. The shale–crystal sandstone–quartz feldspar porphyry association is similar to the Southwell Subgroup in the Sock Creek area, with which the BPD80 sequence is correlated.

The best mineralisation intersected in BPD80 (284–290m, 6m @ 0.9% Zn, 0.2% Pb) is low grade vein–style sphalerite and galena in shale at the margins of a quartz–feldspar porphyry sill.

The failure of this drillhole to intersect a recognisable target horizon has highlighted the structural complexity of the Summit prospect area. Core orientation and DHEM results indicate that BPD80 intersected an upright shallow north or northwest dipping sequence, which must be the continuation at depth of the eastern limb of the Boco Road syncline. No conclusive evidence exists, however it is inferred that BPD77 also intersected this eastern syncline limb at a slightly higher stratigraphic position, and drilled approximately parallel to strike. The western limb of the Boco Road syncline is potentially faulted off by the BPSZ at this northing, as is indicated by IP data which shows the truncation of a conductive unit in the area of BPD76. The mapped overturned western syncline limb on the track to BPD76 can not be a result of the Boco Road syncline, and must be a result of local drag folding by the shear zone, if this model is to be supported.

To the north of the BPD80/77 section, in the Boco Road area, the Boco Road syncline is well mapped and both the eastern and western limbs are present (see Fig 7). To accommodate this geometry with the truncation of the western limb to the south, the syncline hinge must rotate to terminate against the BPSZ in the BPD80 area, or an approximately E–W trending fault to the north of BPD77/80 must dextrally offset the syncline hinge.

8 RESULTS OF EXPLORATION PROGRAM - HOLLWAY

The Hollway prospect area covers the Hollway Pyrite Zone (HPZ), and occurs in the centre of EL 44/88. The prospect includes the south-eastern section of the Hollway Andesite and enclosing stratigraphy. Exploration activity in the Hollway area has involved a review of all data, surface mapping, interpretation of UTEM, IP (appendix 16) and gravity/magnetic data, and proposal of a drillhole. Targets generated by this program will not be tested until next licence year.

The HPZ is a silica-pyrite alteration system that occurs close to the south-western termination of the Hollway Andesite, where the andesite interfingers with dacitic and rhyolitic lavas and epiclastics of the CVC. Review of whole rock lithogeochemistry of the Hollway Andesite, applying P_2O_5/TiO_2 vs SiO_2 and Ti/Zr vs SiO_2 discrimination fields defined by Crawford et al (1992) demonstrates that the Hollway Andesite correlates at least in part to the Hellyer hangingwall basalt. Coincident with the mapped pyrite-silica alteration is an IP anomaly, a magnetic low, and a weak north-south trending UTEM anomaly. Wacker geochemistry is weakly anomalous for Zn-Cu-(Au) in the area of the pyrite zone. Relevant details of the geology of the HPZ are included in the HPZ drill hole proposal (see Appendix 4), as are memorandum applying to geophysical interpretation in the area.

9 RESULTS OF EXPLORATION PROGRAM - EAST HOLLWAY

Exploration at East Hollway has involved a review of data, plus surface mapping and rock chip sampling. Mapping during the year has resulted in modification of 1:5000 outcrop and interpretive geology maps (see Figures 7 and 8).

The East Hollway prospect, approximately 1.5 km along strike to the NE of the HPZ, straddles the southern margin of the Hollway Andesite in the zone between EAB4 and BPD75. The andesite is interpreted to dip and face towards the northwest, the basal contact characterised by interfingering dacite lava and intercalations of a distinctive quartz-mica sandstone, correlated with the Animal Creek Greywacke (ACG). This sequence was intersected in Comstaff drillhole EAB4, and is well exposed in outcrop near this drillhole.

BPD75 was drilled during 1992, targeting the EAB4 sequence along strike, in an area of moderately anomalous soil geochemistry, and a weak UTEM/Sirotem anomaly. The hole did not locate significant mineralisation, and failed to intersect the ACG, leading to the interpretation of an east-west trending growth fault between the two intersections that barred the deposition of quartz-mica sandstone.

Mapping within the Hollway Rivulet to the immediate northeast of the BPD75 costean located the ACG approximately 300m to the southeast of where this horizon had been projected prior to drilling of BPD75, indicating that both the base of the andesite and the target horizon were not tested by this drillhole, and that a growth fault does not exist in the interpreted position. The geometry of the basal contact does remain complex in this area, as the mapped position of andesite to the northeast of the BPD75 costean does not match the andesite mapped within the costean, and may imply either syn-sedimentary or post depositional faulting.

Mapping of the ACG in the Hollway Rivulet also located a previously unmapped zone of pyritic alteration (5383410N, 379117E). Pyrite occurs as nodules in sandstone (to 10%), whilst laminated siltstone show thin bedding parallel pyrite laminations. Base metal values for these samples were low, however Au was significantly anomalous in one sample (0.144ppm). This pyrite occurrence is slightly south of a known IP anomaly. Best mineralisation in EAB4 (9m @ 0.2% Zn) is from a similar fine grained host rock.

Soil and auger geochemistry are available for the East Hollway area. Correlation statistics for Mn and Zn, Cu and Pb indicate a low degree of correlation for auger samples, and therefore a low degree of scavenging by Mn under these soil conditions. The auger geochemistry highlights two areas of Zn–Cu–Pb anomalism, a northern anomaly behind the BPD75 collar, and a southern anomaly at the base of the andesite, and not tested by BPD75. The stratigraphy intersected in BPD75 corresponds to a soil anomaly that is not represented in auger sampling.

The East Hollway area has been covered in part with IP, which has mapped a zone of elevated chargeability to the east of the BPD75 collar, in part correlating with the above southern auger anomaly. This IP anomaly is not closed to the northeast, however may correspond to interflow shaley sediment which has been mapped in this area. The weak mineralisation of BPD75 and EAB4 do not display similar chargeability anomalies.

The southern auger and associated IP anomaly corresponds to a distinct and discrete negative magnetic anomaly. Modelling by Leaman (see Appendix 15) indicates there is no evidence to suggest that the corresponding magnetite destruction zone is not conformable to the Hollway Andesite (ie not a southerly plunging pipe). Aeromagnetic and gravity data define a number of lineaments in a northwest–southeast and east–west orientation trending through this area.

The northern auger anomaly does not display a similar coincidence of anomalism in other data sets, however it is directly up sequence from the magnetite–destructive alteration system, which may be the representation of an associated zone of footwall alteration. An Au anomalous BLEG sample from the vicinity of this northern anomaly has never been followed up with grid based sampling. The stratigraphic position of the northern anomaly has never been tested by drilling along the length of the Hollway Andesite.

The southern anomaly is a valid drilling target, potentially strengthened by further rock chip sampling for Au, and may be tested by a south–easterly trending hole collared at approximately 5383625N, 379000E. The northern anomaly requires testing with Wacker sampling for Au prior to definition of a drill target.

10 ENVIRONMENTAL DISTURBANCE AND REHABILITATION

The BPD77 drill access road has been extended 250m east to BPD80, most of the track being through button grass and tea-tree.

Access to drill sites BPD79, 81 and EAF2 utilised existing exploration and logging tracks.

The rehabilitated track to drill site BPD62 has been re-cleared to allow vehicle access. It had been planned to deepen this hole but PVC pipe could not be removed from the drill hole.

21.9 line kilometres of Comstaff's EAF grid has been recut and re-pegged. The section of the grid that has been refurbished extends from 4700N (Thomas' Tunnel) north to 6800N at Shale Basin. Figures 5 and 6 show the extent of the work.

No rehabilitation has been carried out during the past year.

11 EXPENDITURE

Expenditure for all exploration during the 12 months to 31 October 1994 on EL44/88 is **$452 832.** This brings total expenditure on the licence since its inception in December 1988 to $2 630 856.

A detailed breakdown of the 1993–94 expenditure is given below:

Personnel & Oncosts	96 601
Travel & Accommodation	5 991
Geological Contractors	26 981
Analytical Costs	11 510
Geophysical Consult.& Surveys (DHEM, MALM, magnetics)	40 015
Drilling (including access & core processing/storage)	159 746
Other Contractors/Consultants	10 012
Stores & Supplies	5 026
Vehicles & Equipment	11 919
Computing	4 438
Tenement Costs	1 314
Office Running Costs	13 567
Administration Fee	**38 712**
Total Direct Costs	**387 120**
TOTAL EXPENDITURE	**425 832**

12 CONCLUSIONS AND RECOMMENDATIONS

Understanding of the geology at Brown's and Thomas' Tunnels has increased during the year. Despite this better understanding drill intersections, whilst being interesting, have been sub-economic. With the exception of the host horizon between EAF lines 5050N - 5250N most of the near surface zone has been reasonably well tested. Significant potential exists on 5300N beneath EAF9 and BPD78, this will be tested early in the new licence year.

Additional potential lies to the north of Brown's Tunnel at Shale Basin but the host sequence is overlain by thick Pinnacles Rhyolite and targets are blind with little assistance in target definition being derived from geophysics or geochemistry . Previous drilling in BPD69 - 71 has established that the host sequence exists beneath the Pinnacles Rhyolite on the eastern flank of the area.

Deep tests of the Brown's Tunnel horizon will be complicated and possibly limited by the shallow east dipping Rosebery Fault, however this fault is only constrained on and to the south of section 5000N. Results from extending EAF2 indicate that the fault is located further west giving greater depth potential.

At the Summit Prospect, BPD80 failed to intersect the target horizon (ie the sulfide clasts and alteration in BPD77) due to unforseen structural and stratigraphic complexities, which probably result from the interaction of the Burns Peak Shear Zone and Boco Syncline. The prospect warrants further work and it is recommended that two shallow holes be drilled near BPD77 to better define geology before more deep drilling. Outcrop in the area of interest is obscured by fluvioglacials.

Geological mapping in conjunction with compilation and interpretation of geochemistry and geophysics in the vicinity of the pyritic alteration zones at Hollway and East Hollway has highlighted areas warranting drilling. The alteration is hosted in equivalents of the Que / Hellyer volcanics which further enhances prospectivity in the area, however geochemical anomalies are moderate and generally not coincident with the geophysical anomalies.

13 REFERENCES

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KEY WORDS

COPPER, ZINC, ANDESITE, BASALT, RHYOLITE, VOLCANICS, FAULT, SHEAR ZONE, PYRITE, CHLORITE, SERICITE, CARBONATE, MASSIVE SULPHIDES, ASSAYS GEOCHEM, DRILL DIAMOND, GEOCHEM SOIL, GEOL MAPPING DETAILED, GEOPHYS BOREHOLE, GEOPHYS MAGNETICS, ALTERATION, ORE POTENTIAL.

LOCATION

BURNIE SK5503
MT READ VOLCANICS, BURNS PEAK, SOUTHERN TRENCHES, THOMAS'S TUNNEL, BROWN'S TUNNEL, SHALE BASIN, SUMMIT, HOLLWAY, EAST HOLLWAY.

APPENDICES

APPENDIX 1

Sample Intervals BPD78

BPD78 (sampled intervals)

FROM	TO	SAMPLE
42.00	44.00	37397
44.00	46.00	37398
54.00	56.00	37399
56.00	58.00	37400
58.00	60.00	37501
60.00	62.00	37502
62.00	64.00	37503
64.00	66.00	37504
124.60	126.30	37344
264.60	266.60	37366
266.60	268.60	37367
268.60	270.60	37368
270.60	272.60	37369
272.60	275.00	37370
275.00	277.00	37371
277.00	279.00	37372
279.00	281.00	37373
281.00	283.00	37374
283.00	285.00	37375
285.00	286.00	37345
286.00	287.00	37346
287.00	288.00	37347
288.00	289.00	37348
289.00	290.00	37349
290.00	291.00	37350
291.00	292.00	37351
292.00	293.00	37352
293.00	294.00	37353
294.00	295.00	37354
295.00	296.00	37355
296.00	298.00	37376
298.00	300.00	37377
300.00	302.00	37378
302.00	304.40	37379
304.40	306.00	37380
306.00	308.00	37381
308.00	310.00	37382
310.00	312.00	37383
312.00	314.00	37384
314.00	316.00	37385
316.00	318.00	37386
318.00	320.00	37387
320.00	322.00	37388
322.00	322.90	37389
322.90	323.80	37356
323.80	325.00	37357
325.00	326.00	37358
326.00	327.00	37359
327.00	328.00	37360
328.00	329.00	37361
329.00	330.00	37362
330.00	331.00	37363
331.00	332.00	37364
332.00	333.00	37365
333.00	335.00	37390
335.00	337.00	37391
337.00	339.00	37392
339.00	341.00	37393
341.00	343.00	37394
355.00	357.00	37395
357.00	359.00	37396
400.00	402.00	37505
402.00	404.00	37506
404.00	406.00	37507
406.00	408.00	37508
408.00	410.00	37509
410.00	412.00	37510
412.00	414.00	37511
414.00	416.00	37512
416.00	419.20	37513
419.20	421.20	37514
421.20	423.90	37515
423.90	426.00	37516
426.00	428.00	37517
428.00	430.00	37518
430.00	432.00	37519
432.00	434.00	37520
434.00	436.00	37521
436.00	438.00	37522
438.00	440.00	37523
440.00	442.00	37524
442.00	444.00	37525
444.00	446.00	37526
446.00	448.00	37527
448.00	450.00	37528
450.00	452.00	37529
452.00	454.00	37530
454.00	456.00	37531

APPENDIX 2

Drilling Proposal BPD81

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Mineral Exploration Contractor

16/3/94

BURNS PEAK EL 44/88

DIAMOND DRILL HOLE PROPOSAL BPD81

BROWNS TUNNEL

COLLAR

AMG 377415E 5384585N

EAF Grid 5200N 4660E

Az 100 AMG Dip -50

RL 425 Total depth 400m

SUMMARY

The proposed hole will be a further test of the Cu Zn Ag Au rich stringer and massive sulfide mineralization intersected in EAF9 (24.10m @ 9.3%Zn, 3.8%Pb, 0.5%Cu, 2.5g/tAu) and BPD 78 (9m @ 2.5%Cu, 99g/tAg and 10m @ 1.4%Cu, 2.2%Zn, 53g/tAg). The proposed hole is 100m south of BPD 78 and the section has only been tested by EAF2.

In addition the hole will test;

- the structure south of ECS1 (Enigmatic cross structure), may be either a north plunging syncline or a steep west dipping sequence as on sections to the north see 5300N (Fig 2b) and 5400N.

- the existence of the Pinnacles Shear zone and its interpreted association with massive sulfides (Burns Peak Review April 1993).

BPD81 will be collared in an equivalent of the Pinnacles Rhyolite and will drill the full BTHS (Browns Tunnel Host Sequence), ending in the CVC footwall see Fig 2a.

The host sequence on this section and all others at Browns Tunnel is interpreted to be depth limited by the RFHW (Rosebery Fault Hanging Wall) structure, this east dipping thrust has only been intersected in drilling on section 5000N (200m south).

GEOLOGICAL NOTES RELEVANT TO THE PROPOSAL

Mineralization intersected on section 5300N (100m north of proposed hole) in EAF 9 and BPD78 represents the **maximum Cu Pb Zn accumulations** located to date at the prospect, indicating proximity to a mineralizing feeder zone see BPD 78 proposal and drill log (Poltock et al 1993)

Most **massive sulfide lens's** occur within a pumiceous horizon in the upper part of the BTHS between the andesite and Pinnacles Rhyolite. The lens in BPD63 is an apparent exception but may occur on the western limb of a syncline and in this same stratigraphic position see Fig 1.

An **ECS** has been interpreted on and paralleling 5200N, the interpreted occurence of this feature is based on the;

- apparent change in structural style that occurs north and south of this section ie steep west dips to north and syncline to south

- juxtaposition of the Pinnacles Rhyolite with andesite see Fig 9 1993 Annual report. However the "andesites" south of 5200N are andesitic-rhyolitic and have greater textural and geochemical affinities with the Pinnacles Rhyolite rather than the Browns Tunnel andesites see Fig 4a-c.

The **stratigraphic sequence** at Brown's Tunnel from top to base comprises;

- Pinnacles Rhyolite (PR), lavas, lava breccias, epiclastics and cherty peperites

- Pinnacles Rhyolite/Browns Tunnel andesite transition, lavas/lava breccias occuring in the basal section of PR. The SiO2 range from andesite to rhyolite see Fig 4b, form distinct group on P2O5 - Ti/Zr and Zr/Ti - Nb/Y plots see Figs 4a and 4c. Samples in this suite include 34771, 34772, 34774, 34780, 34973, 34977, 34981 and 34984.

- Browns Tunnel Host

    pumiceous mass flow with disseminated/stringer/massive sulfide, feldspar crystals carbonitized.

    amygdaloidal basaltic andesite - andesite, frequently with stringer sulfides

    volcaniclastic sandstones and polymict granule conglomerates

    laminated black siltstone and vitric siltstone

- Quartz porphyry sills and lavas, occur in the basal part of the BTHS and CVC footwall.

- CVC feldspar phyric pumiceous mass flows, vitric siltstone and minor black siltstone.

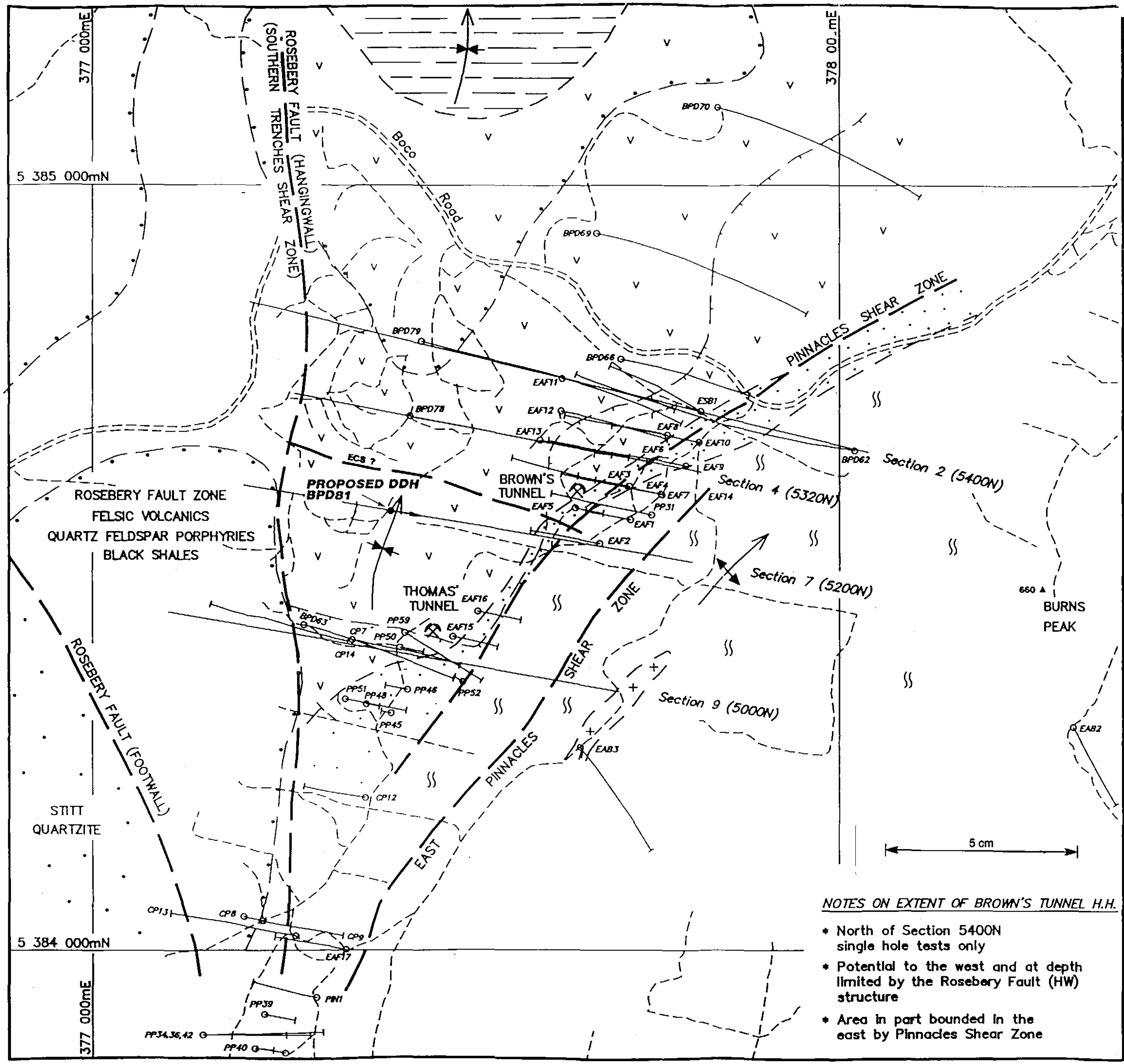
Two **structural interpretations** are possible for the proposed section, a) steep west dipping sequence as in BPD 78 and 79 to north or b) north plunging syncline. The existence of the syncline is based on;

-folds in siltstones (basal BTHS) on sections 4800N and 4900N,

-andesite occuring adjacent to RFHW sections 5100N 5200N

- massive sulfide lens and BTHS? adjacent to the RFHW in BPD63 section 5000N

FIGS



LEGEND

845057

QUATERNARY

Fluvioglacials

CAMBRIAN

White Spur Formation

V V Pinnacles Rhyolite

^ ^ Andesite

Brown's Tunnel Host Horizon

Pumiceous mass flows

+ + + + Quartz feldspar porphyries

Rosebery Fault Zone

Stitt Quartzite

Geological boundary

Thrust fault

Fault

Syncline – anticline and plunge

Brown's Tunnel Host Horizon area tested/established by drilling. (Projected to surface)

1992/93 Burns Peak Review

Section 2 (5320N)

Comstaff EAF Grid

Interpretive Geology
From Gregory (1987), A.N.L., L.W.K., R.A.P.

NOTES ON EXTENT OF BROWN'S TUNNEL H.H.

- North of Section 5400N single hole tests only
- Potential to the west and at depth limited by the Rosebery Fault (HW) structure
- Area in part bounded in the east by Pinnacles Shear Zone

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : R.A.P.
DATE : Nov., 1993
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

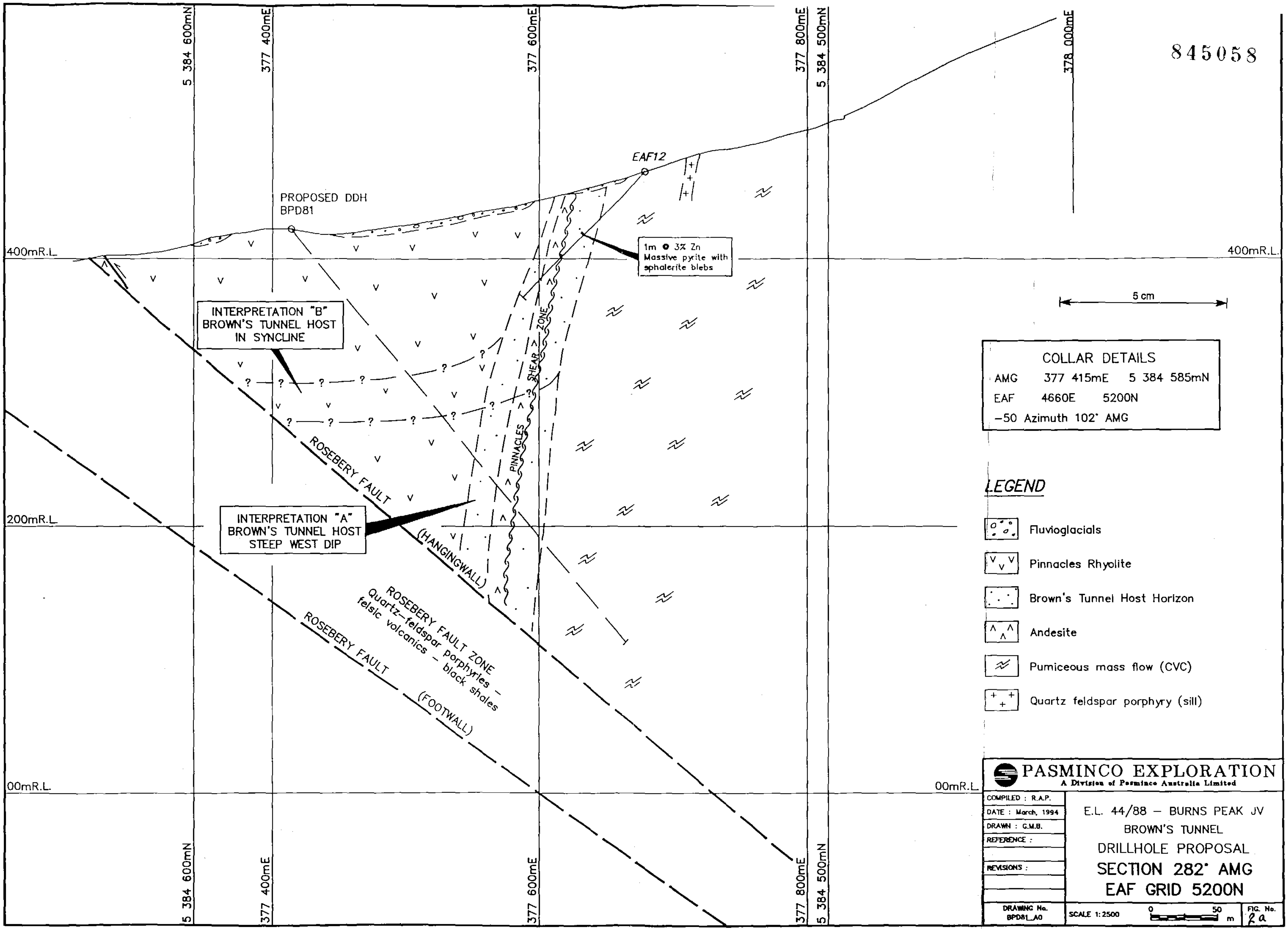
E.L. 44/88 – BURNS PEAK JV

PINNACLES

INTERPRETIVE GEOLOGY

DRAWING No. BTT_GEOL
SCALE 1:5000 0 100 m
FIG. No. 1

845058



COLLAR DETAILS

AMG	377 415mE	5 384 585mN
EAF	4660E	5200N
−50 Azimuth 102° AMG		

LEGEND

° °	Fluvioglacials
V V	Pinnacles Rhyolite
· ·	Brown's Tunnel Host Horizon
^ ^	Andesite
≈	Pumiceous mass flow (CVC)
+ +	Quartz feldspar porphyry (sill)

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

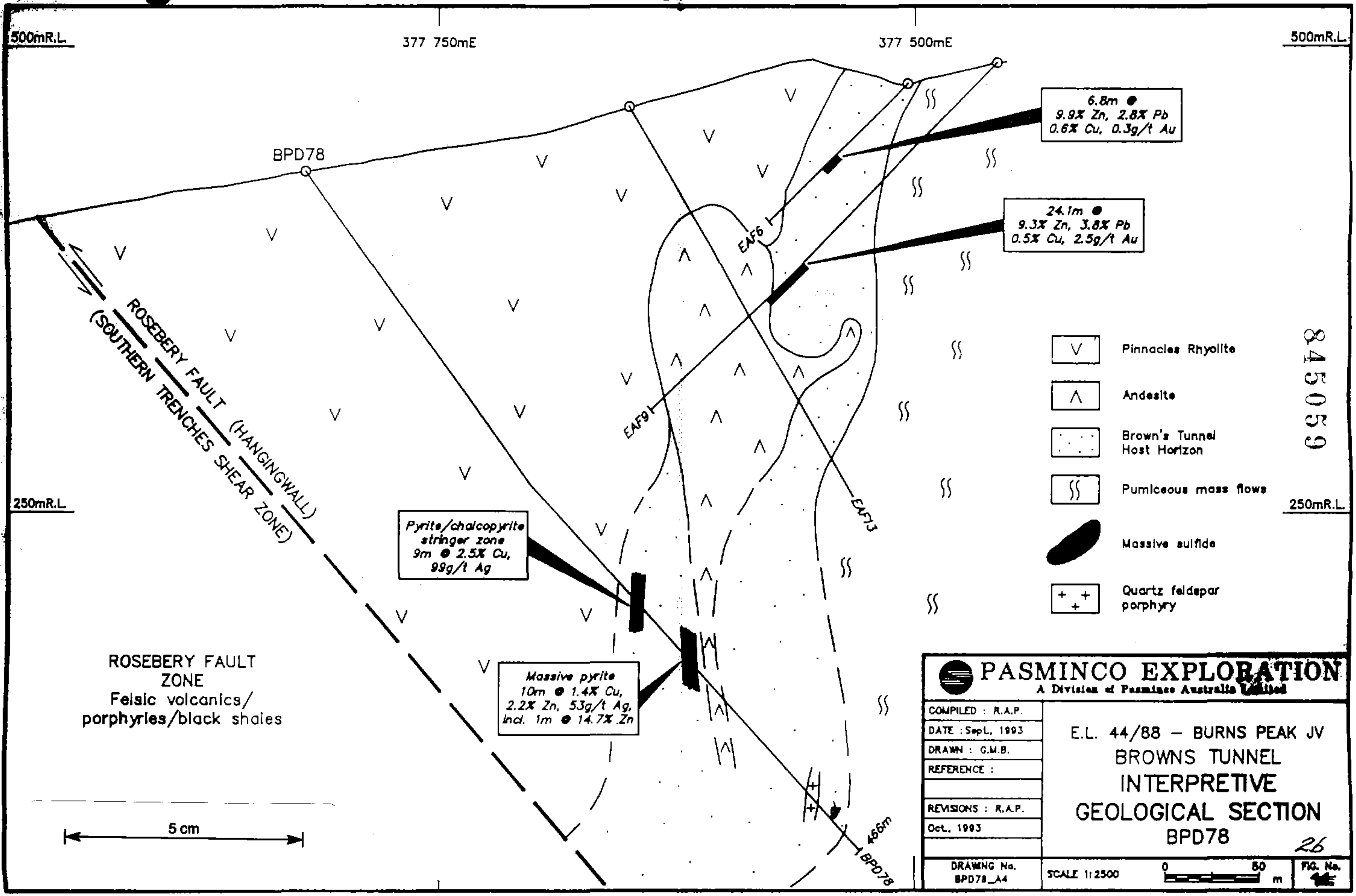
COMPILED : R.A.P.
DATE : March, 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV
BROWN'S TUNNEL
DRILLHOLE PROPOSAL
SECTION 282° AMG
EAF GRID 5200N

DRAWING No.
BPD81_A0

SCALE 1:2500 0 50 m

FIG. No. 2a


500mR.L.
377 750mE
377 500mE
500mR.L.
BPD78
6.8m ● 9.9% Zn, 2.8% Pb 0.6% Cu, 0.3g/t Au
24.1m ● 9.3% Zn, 3.8% Pb 0.5% Cu, 2.5g/t Au
EAF6
EAF9
EAF13
ROSEBERY FAULT (HANGINGWALL)
(SOUTHERN TRENCHES SHEAR ZONE)
250mR.L.
250mR.L.
Pyrite/chalcopyrite stringer zone 9m ● 2.5% Cu, 99g/t Ag
Massive pyrite 10m ● 1.4% Cu, 2.2% Zn, 53g/t Ag, incl. 1m ● 14.7% Zn
466m
BPD78
ROSEBERY FAULT ZONE
Felsic volcanics/ porphyries/black shales
5 cm
V Pinnacles Rhyolite
Λ Andesite
Brown's Tunnel Host Horizon
Pumiceous mass flows
Massive sulfide
+ + Quartz feldspar porphyry
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited
COMPILED : R.A.P.
DATE : Sept. 1993
DRAWN : G.M.B.
REFERENCE :
REVISIONS : R.A.P.
Oct. 1993
E.L. 44/88 – BURNS PEAK JV
BROWNS TUNNEL
INTERPRETIVE
GEOLOGICAL SECTION
BPD78
26
DRAWING No. BPD78_A4
SCALE 1:2500
0
50
m
FIG. No.
~~14~~

845059

APPENDIX 3

Drilling Proposal EAF2 Extension

FILED ...30607.

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19/9/1994

BURNS PEAK EL 44/88

BROWNS TUNNEL AREA

DIAMOND DRILL PROPOSAL EXTEND EAF2 FROM 132.40 - 450.00m

COLLAR: AMG 377680E 5384530N EAF 5200N 4920E
RL 465.53m
EAF SURVEY 0m Az 270° mag, dip -45°
132.40m Az 268.50° mag, dip -46°

TOTAL DEPTH 450m
TOTAL DEPTH TO BE DRILLED 320m

TARGET / HOLE OBJECTIVES

1. The hole will be an up dip test of mineralization associated with a basaltic lava intersected in BPD81 on this section see Fig 1 and 2. Mineralization is interpreted to be on the eastern syncline limb.

BPD81 intersections include;

203.60-209.90m 6.3m @ 0.36%Pb 1.66%Zn, massive carbonate chlorite lens which could be the lateral equivalent of a massive sulfide.

211.85-220.00m basalt.

225.30-226.00m 0.7m @ 2.09%Cu 1.42%Pb 19.40%Zn 91g/tAg, massive sulfide clast or lens.

226.00-242.00m 16m @ 0.29%Pb 0.93%Zn 14g/tAg, sericitized and carbonatized pumiceous mass flow with disseminated and clasts of sulfide.

The mineralized horizon in BPD81 is 180m below surface, the proposed EAF2 intersection will be midway between that in BPD81 and the surface. The surface exposure of the horizon is covered by thin fluvioglacials.

2. Basalt and andesite geochemically similar to those in BPD81 outcrop in the RFHW structure, located 150m west of the BPD81 collar. These basalts are interpreted to be in the western limb of the syncline on this section and may also equate with the Southern Trenches Shear Zone and associated high grade massive sulfide pod in BPD63 (0.6m @ 35.2%Zn 1.1g/tAu) see Burns Peak Review 1993. Extending EAF2 will test this position see Fig 2.

3. The hole will define the position of the Rosebery Fault zone bounding structures ie RFHW and RFFW. The RFHW is interpreted to be the depth limiting structure to the Browns - Thomas Tunnel mineralization see Fig 2. If the zone can be defined on this section then it would not be neccessary to drill the proposed deep hole beneath BPD78 (extend BPD62), see previous drill proposal.
The proposed extension of EAF2 would intersect the RFHW 180m below surface (RL 240m), 100m south of BPD78 and 200m north of BPD63. BPD63 is the northern most hole intersecting this structure

4. Test the syncline interpretation and better constrain the drill target between this section and BPD63.

NOTES ON GEOLOGY

1. Two mineralized horizons are interpreted to occur in the vicinity of Browns Tunnel between lines EAF 5250N - 5350N;

-"lower" (eastern) grey chert / siliceous siltstone, sericite pyrite altered with stringers/blebs/lenses of pyrite sphalerite,
EAF4 2m @ 0.5%Cu 1.68%Pb 3.12%Zn 6.5g/tAu
EAF5 collar/pad 1m @ 0.78%Cu 5.17%Pb 19.4%Zn 2.9g/tAu
Browns Tunnel 8m @ 0.05%Cu 0.44%Pb 0.24%Zn 2.7g/tAu

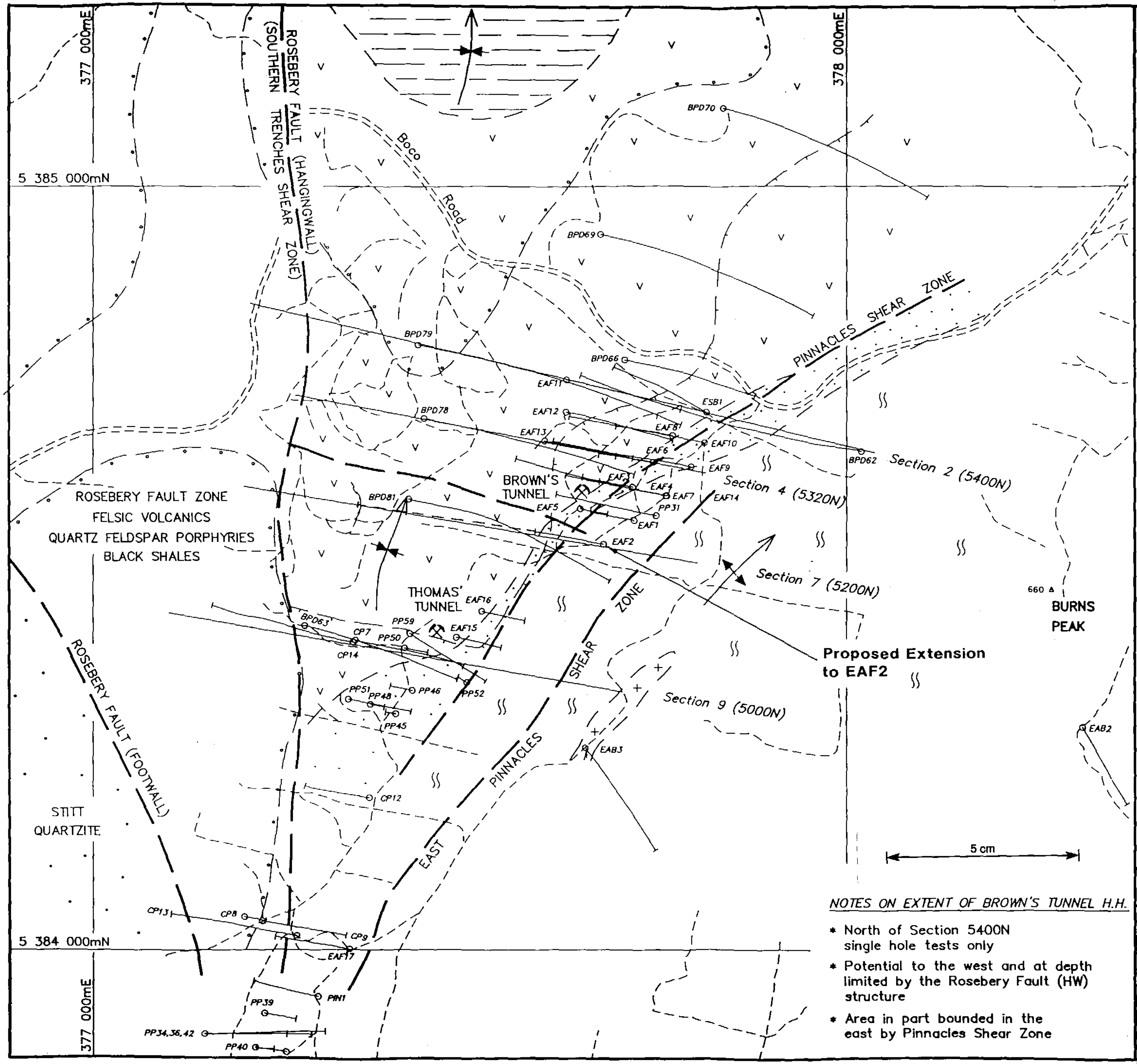
EAF1, 2 and 5 only intersected the lower sequence see Fig 3.

-"upper" (western) sericite carbonate pyrite altered pumice breccia and basaltic andesite
EAF9 24.1m @ 0.5%Cu 3.8%Pb 9.3%Zn 2.5g/tAu
BPD78 9m @ 2.5%Cu 0.2%Zn 98g/tAg
10.1m @ 1.4%Cu 2.2%Zn 53g/tAg

2. Two "andesitic" lava horizons form part of the host horizon on some sections. Geochemicaly the lavas range from basalt to dacite and include both Browns Tunnel and Hollway types.

FIGS

1. Location plan and interpretive geology	1:5000
2. Drill section	1:2500
3. Long section	1:1000



NOTES ON EXTENT OF BROWN'S TUNNEL H.H.

- North of Section 5400N single hole tests only
- Potential to the west and at depth limited by the Rosebery Fault (HW) structure
- Area in part bounded in the east by Pinnacles Shear Zone

LEGEND

845063

QUATERNARY

Fluvioglacials

CAMBRIAN

White Spur Formation

Pinnacles Rhyolite

Andesite

Brown's Tunnel Host Horizon

Pumiceous mass flows

Quartz feldspar porphyries

Rosebery Fault Zone

Stitt Quartzite

Geological boundary

Thrust fault

Fault

Syncline – anticline and plunge

Brown's Tunnel Host Horizon area tested/established by drilling. (Projected to surface)

1992/93 Burns Peak Review

Section 2 (5320N)

Comstaff EAF Grid

Interpretive Geology
From Gregory (1987), A.N.L., L.W.K., R.A.P.

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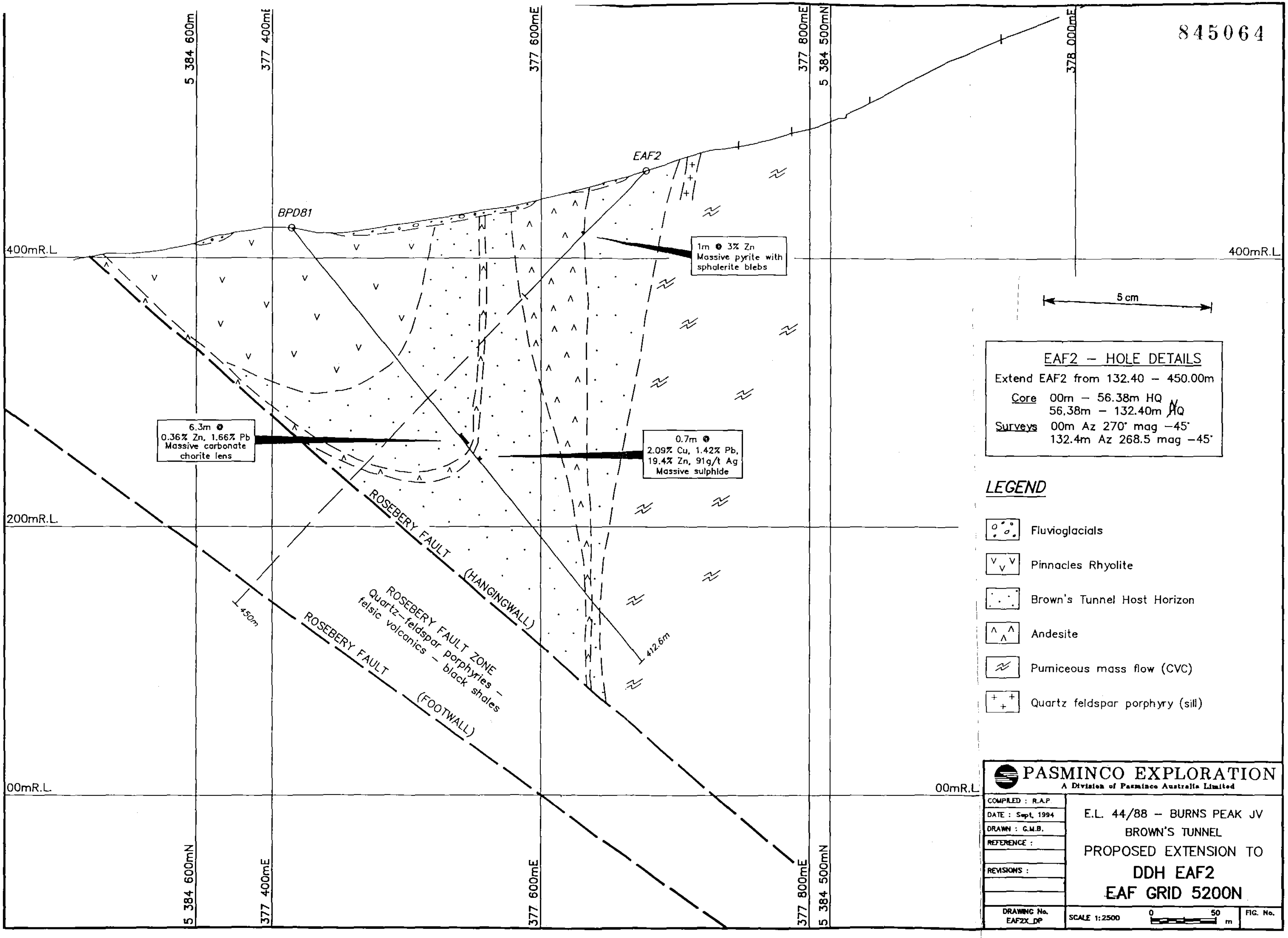
COMPILED : R.A.P.
DATE : Sept.1994
DRAWN : C.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV
PINNACLES

PROPOSED EXTENSION TO DDH EAF2

DRAWING No. BTT_GEOL
SCALE 1:5000
0 100 m
FIG. No.

845064



EAF2 – HOLE DETAILS

Extend EAF2 from 132.40 – 450.00m

Core 00m – 56.38m HQ
56,38m – 132.40m ~~H~~NQ

Surveys 00m Az 270° mag –45°
132.4m Az 268.5 mag –45°

LEGEND

- Fluvioglacials
- Pinnacles Rhyolite
- Brown's Tunnel Host Horizon
- Andesite
- Pumiceous mass flow (CVC)
- Quartz feldspar porphyry (sill)

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REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV
BROWN'S TUNNEL
PROPOSED EXTENSION TO
DDH EAF2
EAF GRID 5200N

DRAWING No. EAF2X_DP
SCALE 1:2500 0 50 m
FIG. No.

APPENDIX 4

Drilling Proposal Hollway Pyrite Zone

PASMINCO EXPLORATION

BURNS PEAK JV - EL44/88

DIAMOND DRILLHOLE PROPOSAL - HOLLWAY PYRITE ZONE

LOCATION (AMG): **5382885N**
377923E

AZIMUTH (AMG): **133°**

DIP: **45°**

APPROXIMATE DEPTH: **380m**

1 SUMMARY

The Hollway Pyrite Zone (HPZ) is a moderate intensity pyrite-sericite-silica alteration system in the central portion of the Burns Peak EL. Alteration influences interfingering andesite and dacite lavas and volcaniclastics. The HPZ is associated with patchy Zn-Cu wacker anomalism, a discrete I.P. anomaly, north-south aligned weak UTEM anomalies, and a zone of magnetite destructive alteration. A number of major structures, including a primary Late Precambrian trough margin are interpreted to trend through the HPZ. The HPZ has not been drill tested to date.

2 GEOLOGY

The HPZ occurs close to the southwestern termination of the Hollway Andesite, approximately 600m along strike from where the andesite lenses out. At this locality, the andesite varies from a massive vesicular lava, to a coarse grained andesite lava breccia. The CVC appears to underlie (to south), complexly interfinger with, and overlie (to north) the Hollway Andesite, and is comprised of dacitic and rhyolitic lavas and volcaniclastics. Primary depositional layering is absent from the immediate area of the HPZ. The nearest location where dip of the sequence can be determined is 1.2km to the northeast at BPD75, where the andesite dips 75° towards the northwest.

Rare earth element analysis and study by Coutts (1990, BP89), indicated that the Hollway Andesite is chemically equivalent to both the Hellyer footwall andesite, and Hellyer hangingwall basalt that respectively underlie and overlie the Hellyer Zn-Pb-Cu orebody. Elevated TiO_2 and depleted MgO, Cr and Ni lead Coutts to suggest the Hollway Andesite is more evolved than the Hellyer andesite. This correlation is consistent with the observed stratigraphic position of the northeastern section of the Hollway Andesite, which is underlain by a micaceous sandstone potentially equivalent to the Animal Creek Greywacke, and overlain by a correlative of the Southwell Subgroup.

Recent review of the whole rock lithogeochemistry of the Hollway Andesite, applying P_2O_5/TiO_2 vs SiO_2 and Ti/Zr vs SiO_2 discrimination fields defined by Crawford et al (1992), demonstrates that the andesite correlates to the Hellyer basalt rather than the footwall andesite. The base of the Hollway andesite is therefore a likely time equivalent to the Que River-Hellyer mineralization, and will be tested by the proposed drillhole.

3 STRUCTURE

Interpretation of the magnetic, gravity and TM data of the Burns Peak licence (see Kirsner et al, 1993) shows the HPZ to be located in a flexure zone of regional significance, where the structural grain rotates from north-south trending (HPZ-Hercules) to northeast-southwest trending (HPZ-Hellyer). This flexure zone is also the site of the intersection of major NW-SE, N-S, and E-W trending lineaments.

Combined gravity/magnetic interpretation of the structural features of the Tasmanian west coast by D. Leaman also shows the HPZ area to have strong mineralization potential. The HPZ sits upon a "Leaman Late Precambrian trough margin" which he interprets to be the fundamental crustal suture that was the most important feature in the focus of mineralising fluid for all major Mt Read Volcanic orebodies. The HPZ area is proximal to where this trough margin bends by 25° (correlating with the flexure zone above), an area of potential dilation that is similar in style to the bend at the Hellyer transform position.

No significant shear related cleavage or faulting has been observed or described from within the HPZ.

4 MINERALIZATION AND ALTERATION

The HPZ is a northeast-southwest elongate pyrite-sericite-silica alteration system that effects both andesite and dacite, and is centred at 5382755N, 378015E. Sporadic carbonate alteration has also been noted from andesite and basalt. The HPZ location is determined by outcrop mapping and study of wacker sample chips. Although pyrite mineralization is dominant, chalcopyrite, sphalerite and galena have been reported from this zone (an important difference to the Chester alteration system), for which a Cambrian sulphur isotope signature has been determined (Coutts, 1990). Alteration indices calculated by Coutts indicate strong alteration (AI to >90) corresponding with the zone of mapped pyrite.

5 GEOCHEMISTRY

Cyanide leach stream sediment sampling by BHP indicated the Hollway Rivulet is Au anomalous in the HPZ area. The large catchment of the rivulet, however, prevents the Au source being determined.

The entire HPZ was wacker sampled by BHP during 1986, samples assayed for Zn, Cu, Pb, Mn and Au. Pearson correlation coefficients for this data indicate that variation of Zn and Pb is independent of Mn, and therefore statistically significant Mn scavenging has not occurred. A weak relationship exists between Cu and Mn, implying minor scavenging. Raw data is used to define geochemical anomalies, including Mn as an indicator to manganiferous carbonate alteration.

Sample density and interfingering of andesite and dacite poses problems for anomaly definition. Metal anomalism is very patchy, however the northern area of wacker coverage is broadly more anomalous. The best defined Zn-Cu anomaly is centred at 5383045N, 378195E, 350m along strike to the northeast of the mapped centre of the HPZ. Zn and Cu values within this zone peak at 930ppm and 250ppm respectively. Although remaining low, Au values are also elevated in this zone.

Rock chip sampling in the HPZ is patchy, however no significantly anomalous samples have been reported.

6 I.P.

The HPZ was covered by pole-dipole I.P. during 1993, revealing a chargeability anomaly that closely correlates with the mapped pyrite alteration. No coincident resistivity anomaly was detected. The I.P. anomaly comes to surface, is elongate north-northeast, and modelling (see attatchment 1) indicates a thick, west dipping(?) chargeable body. The anomaly is potentially terminated to the north and south by east-west trending aeromagnetic lineaments.

A second separate anomaly (centred at 8150E on line 82700N) to the immediate east of the main anomaly was also noted by PWB and inferred to be a contact effect.

7 ELECTROMAGNETICS

UTEM coverage of the HPZ as part of the regional program delineated two 'weak and shallow' and two 'well defined' anomalies as interpreted by Mitre Geophysics. Reinterpretation of these anomalies (see attatchment 1) highlighted three that are aligned north-south, and correspond with the IP chargeability high. The responses indicate a poor to moderate, shallow sourced conductor on all lines.

8 MAGNETICS

Aeromagnetic imagery of the area displays a discrete sub-circular negative magnetic anomaly, assumed to be a magnetite destruction alteration zone associated with the HPZ. The magnetic low is centred at 5382760N, 378250E, overlapping with and to the immediate east of both the mapped HPZ and I.P. anomaly. Modelling of the magnetic low by Leaman indicates that although "it cannot be stated beyond all doubt, it seems unlikely that any non-concordant (with andesite) association is feasible" (see attatchment 2).

9 MINERALIZATION MODEL AND TARGET

The presence of major (crustal?) faults provided an ideal site for dilation and the entry of hydrothermal fluid, as evidenced by known alteration and mineralization in the HPZ. Approximate time equivalence of the HPZ host rock with the Que River-Hellyer orebodies indicates that fluids being generated and mobilised at this stage of basin evolution were fertile. Syndepositional movement along faults potentially produced currently unrecognised local subbasins into which hydrothermal fluid was vented and mineralization was preserved.

The exposed HPZ mineralization is potentially the distal portion of a VHMS, and forms part of the alteration envelope associated with the orebody. The interpreted stratigraphic relationship of the HPZ with the magnetite-destructive alteration zone implies hostrock/hangingwall and footwall alteration respectively. Geochemical anomalism is present along strike from the HPZ, and may be the surface representation of the host position.

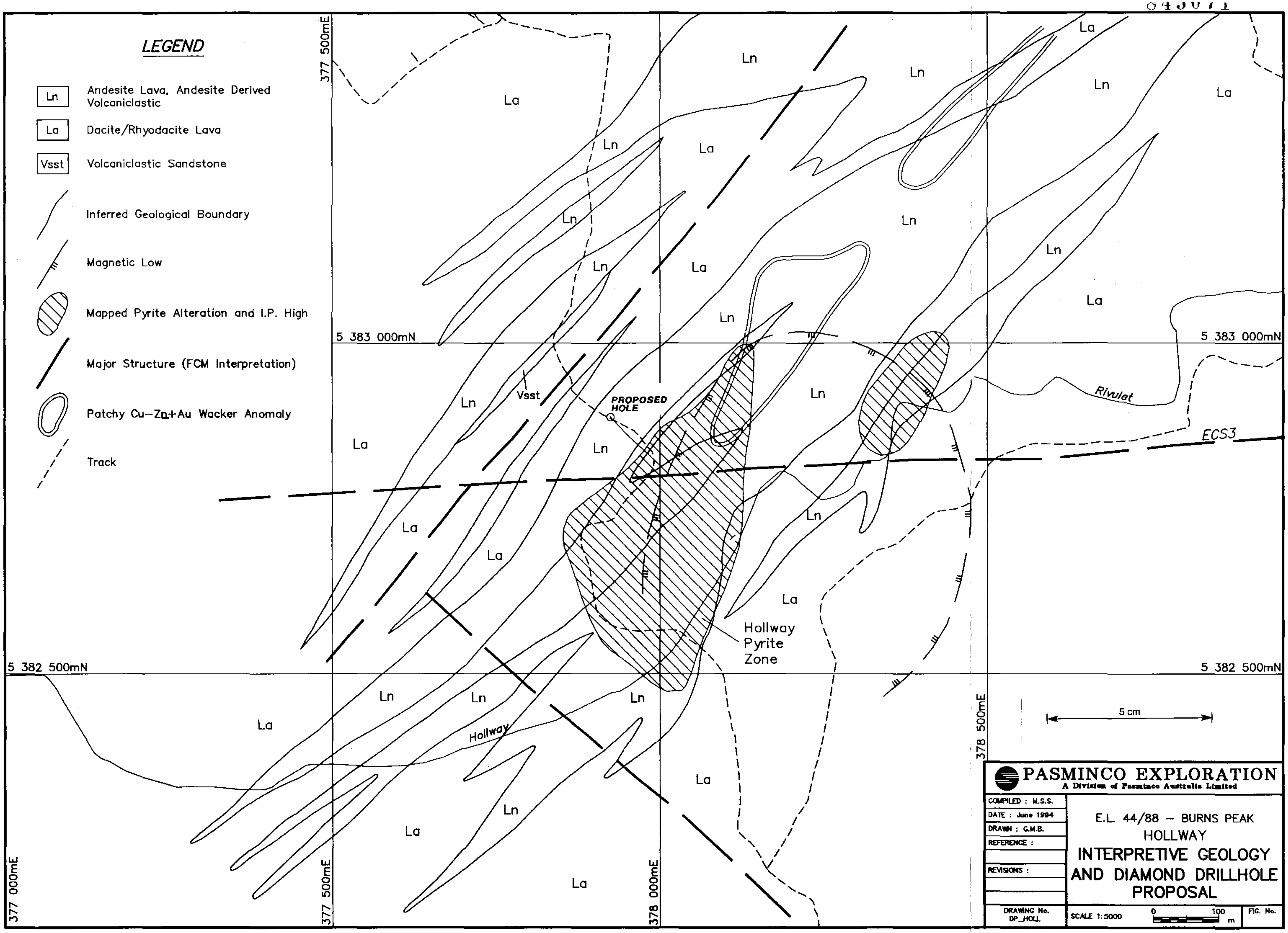
The proposed drillhole will test coincident IP chargeability and UTEM anomalies, the mapped zone of pyrite, the lower contact of the Hollway Andesite, and the upper margin of the magnetite destructive alteration system. The most anomalous wacker geochemistry occurs 150m along strike from the proposed drill section.

10 REFERENCES

Kirsner, L.W., Murphy, F.C., Saxon, M.S and Hughes, N.H., 1993. Project Review, Burns Peak El 44/88. Pasminco Exploration Unpubl. Rept. No. T93-2.

11 ATTATCHMENTS

Attachment 1: P.W. Basford, 1994. Hollway UTEM and IP.
Atattchment 2: D.E. Leaman, 1994. Structure of the Hollway Andesite.



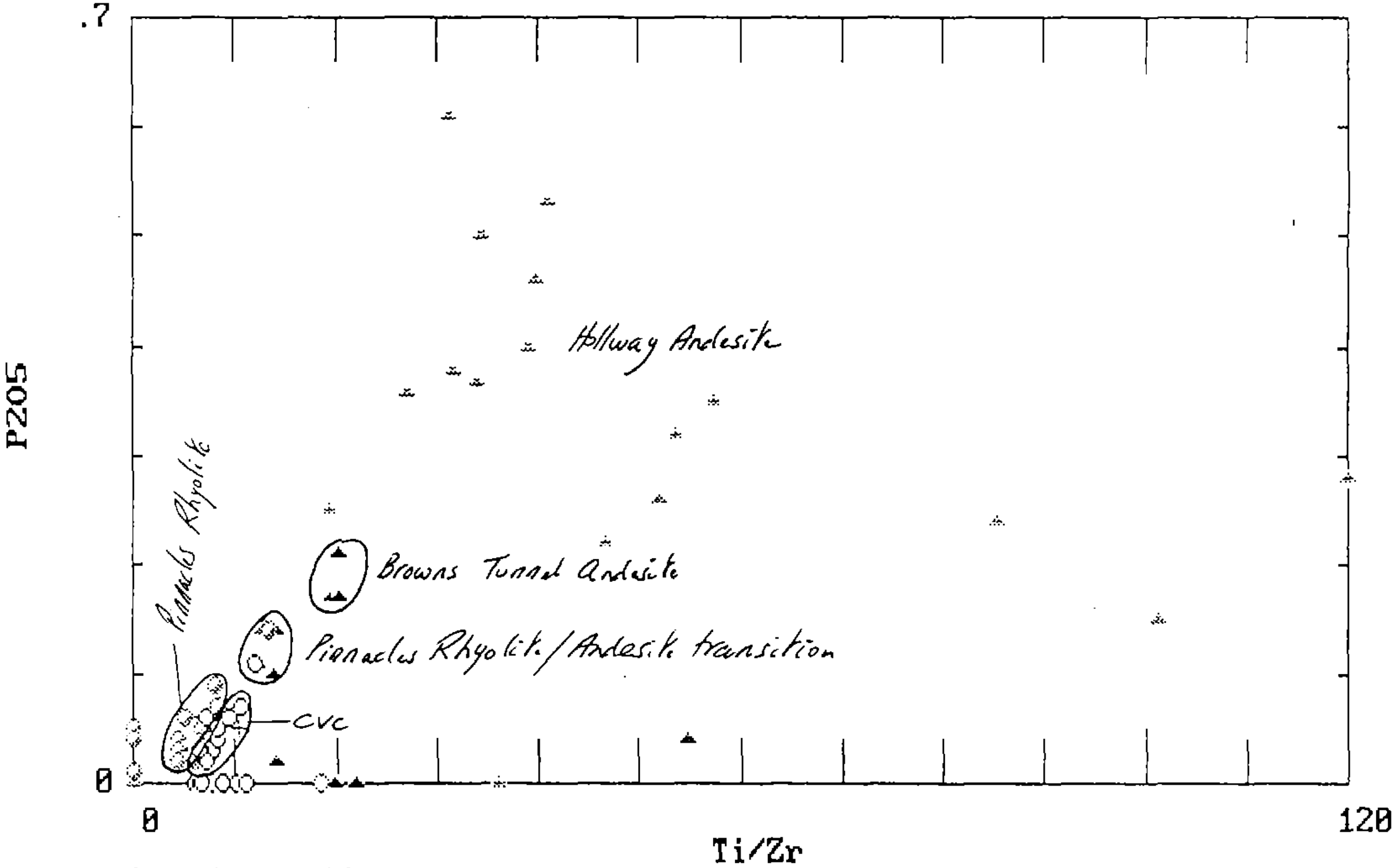
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : M.S.S.
DATE : June 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK
HOLLWAY
INTERPRETIVE GEOLOGY
AND DIAMOND DRILLHOLE
PROPOSAL

DRAWING No. DP_HOLL
SCALE 1:5000 0 100 m
FIG. No.

C:\NEWPET\BURNS.ROC



Press any key to continue

Fig. 4c)
Burns Peak.

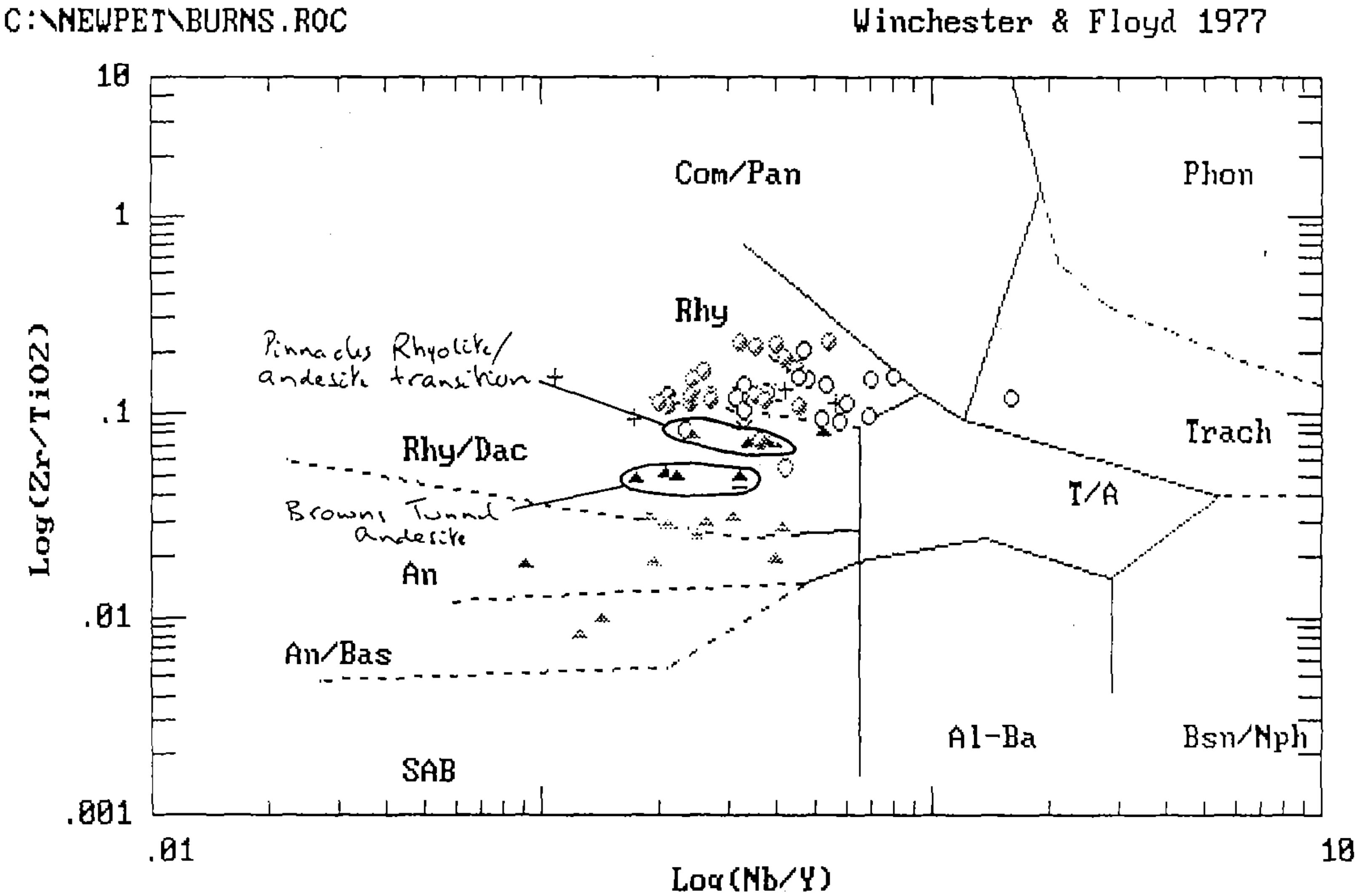


Fig 4 a)
Burns Peak

8450/3

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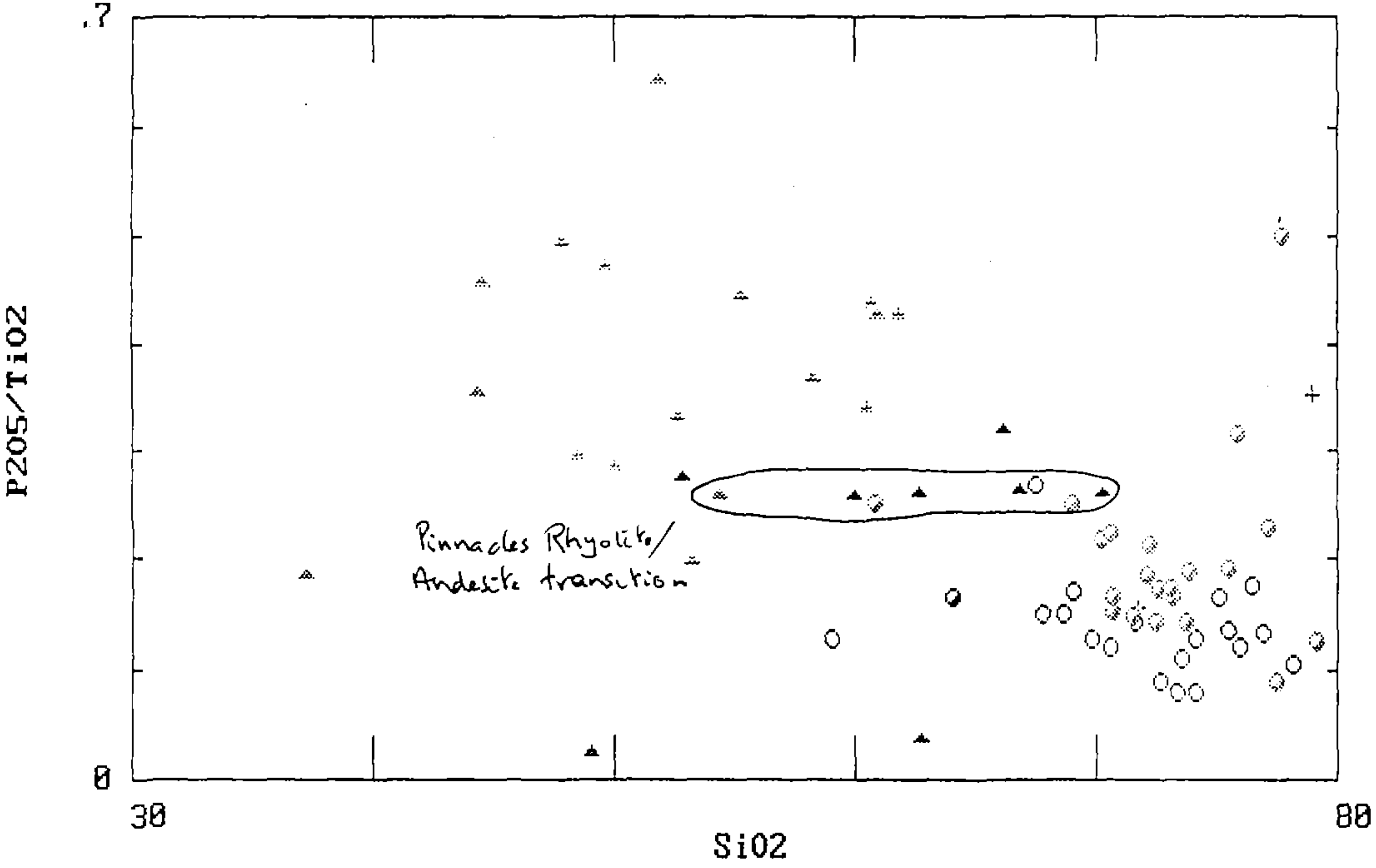


Fig 4 b)
Burns Peak.

845074

845075

APPENDIX 5

BPD79 Drill Log

845076

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD79

DRILLING

Location	EL44/88 BURNS PEAK
Project	BURNS PEAK
Prospect	BROWN'S TUNNEL
Design By	R.A.Poltock
Logged By	R.A.Poltock
Relogged	
Commenced	25th October 1993
Completed	29th November 1993
Drilled By	Contract Diamond Drilling (F.ORTNER)
Drill Rig	Longyear 44 (equivalent)

OBJECTIVE

An along strike (100m north) test of the copper rich stringer zone and massive sulphide intersected in BPD78. BPD79 was collared 100m north of BPD78.

RESULT

The Brown's Tunnel sequence intersected was very similar to that in BPD78 but the mineralized intervals had thinned to a few cms of stringer zone and 1m of massive pyrite.

COLLAR SURVEY (AMG)

AMG mN	5384792.7	Bearing	102.0
AMG mE	377432.2	Dip	-55.0
mN	0.0	Hole Length	574.5
mE	0.0	DH Survey Type	Single shot East
RL	459.3		

DOWNHOLE SURVEY (AMG)

Depth	Bearing	Dip
0.0	-55.00	102.00
52.0	-55.00	102.00
100.0	-53.00	103.00
151.0	-53.00	103.00
199.0	-53.00	104.00
250.0	-52.00	104.00
301.0	-51.00	106.00
352.0	-51.00	107.00
400.0	-50.00	109.00
451.0	-47.00	111.00
499.0	-46.00	112.00
550.0	-43.00	113.00
574.0	-42.00	114.00

SIGNIFICANT CORE LOSS

From	To	Loss

POOR GROUND CONDITION ZONES

From	To	Condition
0	11.8m	Fluvioglacials.

HOLE SIZE

From	To	Size
0	60	HQ
60	574.50	NQ

HOLE CONDITIONS AFTER COMPLETION

Collar	3m of HW plus cap.
Steel Casing	3m of HW
PVC Casing	0 - 574.5m
Ground Water	Nil
Wedge	Nil
Drill Pad	On access track to BPD81, no rehab'.

SIGNIFICANT INTERSECTIONS

From	To	Int	Cu	Pb	Zn	Ag	Au	Comments
355.00	360.00	5.0m			2.73%			Disseminated sulphides in pumice breccias at the base of the Pinnacles Rhyolite.
383.00	386.00	3.0m			0.32%	20g/t		Sericitized pumice breccias, the interval includes 1m of massive pyrite.

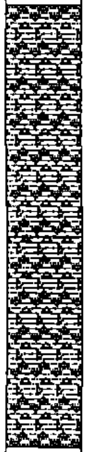
845077

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 1 of 21

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
0.00	11.80	FLUVIOGLACIAL DEPOSITS CONTACT: Conformable abrupt,			0 10			
11.80	14.10	ACID VOLCANICLASTIC Cream, Feldspar phyric, Very weathered. CONTACT: Gradational,						
14.10	19.10	ACID VOLCANICLASTIC Brown, Weathered with limonite on joints. CONTACT: Gradational,						
19.10	46.90	ACID VOLCANICLASTIC Pink, Grey, Medium grained, Massive, Lithic, Feldspar phyric, Groundmass fine grained with feldspar crystals to 3mm and scattered chloritized mafics? set in very fine ganular quartz sericite matrix. Clasts monomict subrounded, <75mm diameter, feldspar phyric, some flow banded, similar to matrix. CONTACT: Gradational,		VEIN, quartz chalcopyrite sphalerite	20			

5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. BPD79

PROJECT: BURNS PEAK

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					30 40			
46.90	72.20	ACID VOLCANICLASTIC Pink, Orange, Medium grained, Massive, Lithic, Feldspar phyric, Monomict similar to unit above but different alteration style. Alteration is pink and may be albite or K feldspar. CONTACT: Gradational, Gradational with shearing on contact.	Slightly Albitised.	VEIN, quartz Quartz limonite veinlets..	50			

5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

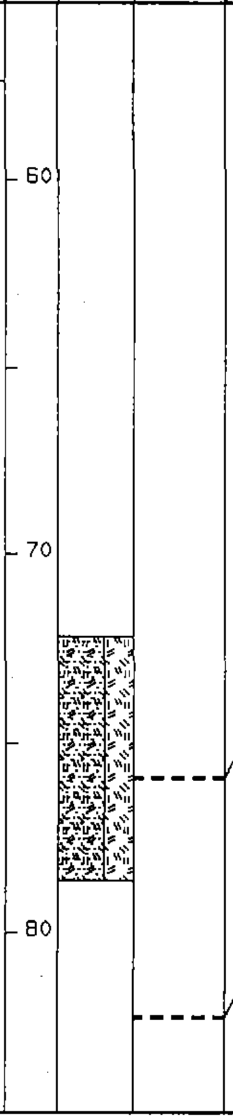
HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 3 of 21

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
				VEIN, quartz Quartz limonite/chlorite veinlets..	
72.20	78.60	ACID LAVA Pink, Green, Fine grained, Peperitic, Feldspar phyric, Quartz phyric, Lava? chilled glassy zones sericitized. Feldspar and quartz phenocrysts <2mm. CONTACT: Gradational, MIXED WITH SILTSTONE Grey, Slightly pyritic.	Slightly Sericitised.		FAULT, A 35, Shear, Sericite.
78.60	174.50	ACID VOLCANICLASTIC Pink, Green, Medium grained, Blocky, Feldspar phyric, Quartz phyric, Lithic, Monomict could be a lava breccia, blocks to 200mm, some flow banded. Sericite alteration is most likely after glass/pumice but could be styolitic. CONTACT: Gradational, Contact defined by alteration change.	Moderately Sericitised.		FAULT, A 15, Quartz, Carbonate.

GRAPHIC



5 cm

845080

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 4 of 21

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					90			
					100			
					110			

5 cm

845081

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 5 of 21

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					120			
					130			
					140			

5 cm

845082

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 6 of 21

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
					140			
					150			
					160			

5 cm

845083

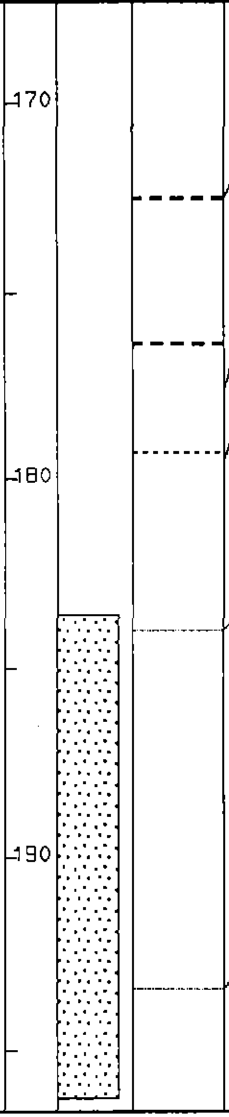
PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 7 of 21

DESCRIPTION / **GRAPHIC**



From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
					FAULT, A 15, Quartz, Carbonate,
174.50	183.60	ACID VOLCANICLASTIC Cream, Yellow, Quartz phyric, Feldspar phyric, Lithic,	Highly Sericitised,		FAULT, A 20, Pug, Crush zone at approximately 20 to LCA. FRACTURE, Annealed, Carbonate, Vein with angular wall rock fragments in carbonate matrix,
183.60	196.30	ACID VOLCANICLASTIC Pale, Pink, Blocky, Monomict CONTACT: Gradational, WITH MINOR SANDSTONE Cream, Bedded, Crystal, Lithic, Sandstone beds between 183.6-184.0, 189.6-190.3 and 193.4-196.3. Graded beds give conflicting facings.	Slightly Sericitised,		BEDDING, A 30, BEDDING, A 30,

5 cm

845084

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

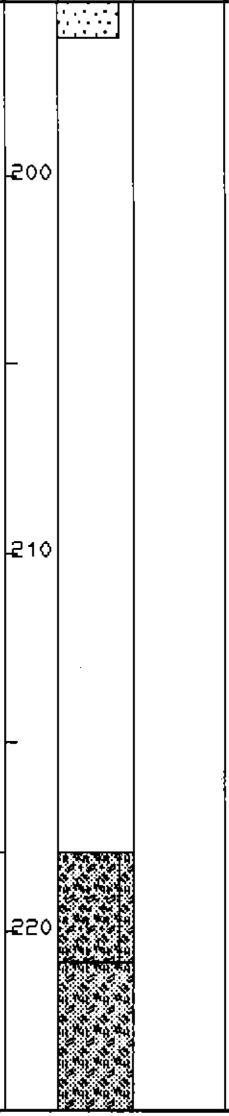
HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 8 of 21

From	To	LITHOLOGY	ALTERATION	MINERALISATION
196.30	217.90	ACID VOLCANICLASTIC Cream, Yellow, Flow brecciated, Quartz phyric, Feldspar phyric, Lava breccia some blocks flow banded, sericitic patches may be after glass or styolites. Silicification occurs between 201.7 - 217.9.	Moderately Sericitised, Slightly Silicified,	
217.90	220.80	ACID LAVA Pink, Cream, Peperitic, Feldspar phyric, Quartz phyric, CONTACT: Faulted, at 35 degrees to LCA.	Carbonatised,	DISSEMINATED, minor pyrite
		MIXED WITH CHERT Grey,		
		MIXED WITH SANDSTONE Cream, Coarse grained, Lithic, Quartz phyric, Feldspar phyric,		
220.80	255.70	ACID LAVA Cream, Yellow, Fine grained, Flow brecciated, Feldspar phyric, Quartz phyric, Lava massive, styolitic (sericite) to blocky. Blocks of massive, flowbanded and strongly chloritized lava. Varies from aphyric to feldspar>quartz phyric, phenocrysts <2mm.	Sericitised, Moderately Silicified,	

GRAPHIC



STRUCTURES

5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

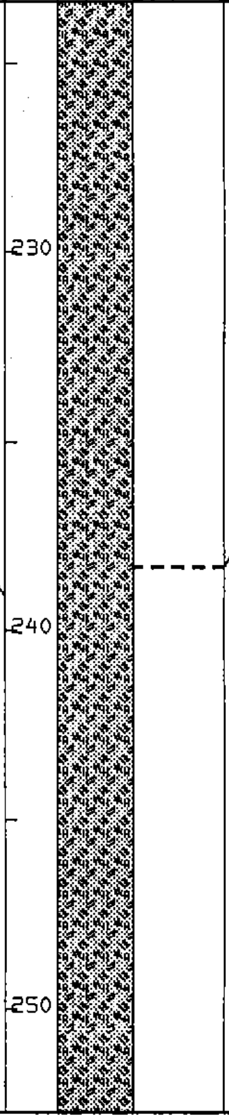
HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 9 of 21

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		strongly chloritized lava. Varies from aphyric to feldspar>quartz phyric, phenocrysts <2mm. CONTACT: Gradational.			
				VEIN, sphalerite Sphalerite associated with a narrow silicified shear..	FAULT. A 15, Quartz. Carbonate.
		MIXED WITH CHERT Grey, Peperitic, Minor cherty mudstone peperite between 244.00 and 251.00m			

GRAPHIC: Depth | Lith | Structures



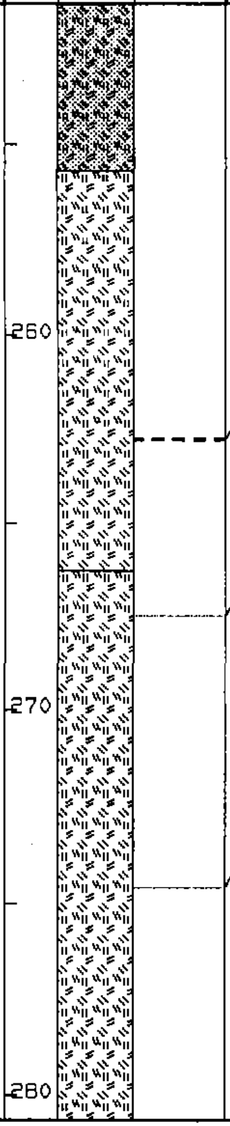
5 cm

845086

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK



DESCRIPTION					STRUCTURES
From	To	LITHOLOGY	ALTERATION	MINERALISATION	
255.70	266.30	ACID LAVA Yellow, Cream, Medium grained, Flow brecciated, Blocky, Feldspar phyric, Abundant feldspar pheno's <3mm. Sericite alteration styolitic or after glass?, silica associated with fine grained pyrite and occuring as a diffuse stockwork. CONTACT: Gradational,	Sericitised, Highly Silicified,		FAULT, A 45, Carbonate, Chlorite,
266.30	300.50	ACID LAVA Cream, Pink, Fine grained, Massive, Flow banded, Feldspar phyric, Sparsely feldspar phyric <2mm, feldspars carbonatised. Flowbanding accentuated by sericitization, localized flow brecciation. Fine grained silica pyrite stockworking between 285.00-300.50m.	Sericitised, Moderately Silicified,		PRIMARY FABRIC, A 80, Flow banding. PRIMARY FABRIC, A 45, Flow banding.

5 cm

845087

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

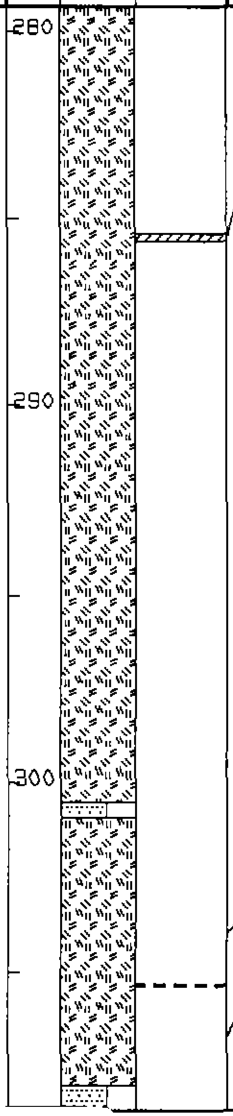
PROJECT: BURNS PEAK

Page 11 of 21

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
					VEIN, A 5, Carbonate, Quartz, Carbonate. Vein 1-2cm wide occuring between 285-286m.
300.50	300.90	SILTSTONE Grey, Peperitic, Contacts with rhyolite may have been peperitic, but now sericitized and sheared. CONTACT: Conformable mixed,			
300.90	308.00	ACID LAVA Pink, Yellow, Fine grained, Flow brecciated, Feldspar phyric, Texturally variable flow breccia. Silica pyrite alteration as breccia matrix infill ie stockwork. CONTACT: Gradational,	Moderately Sericitised, Moderately Silicified,		BROKEN CORE, FAULT, A 10, Brittle, Crush zone,
308.00	312.70	ACID VOLCANICLASTIC Yellow, Green, Core sheared and	Sericitised, Silicified,		

GRAPHIC



5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

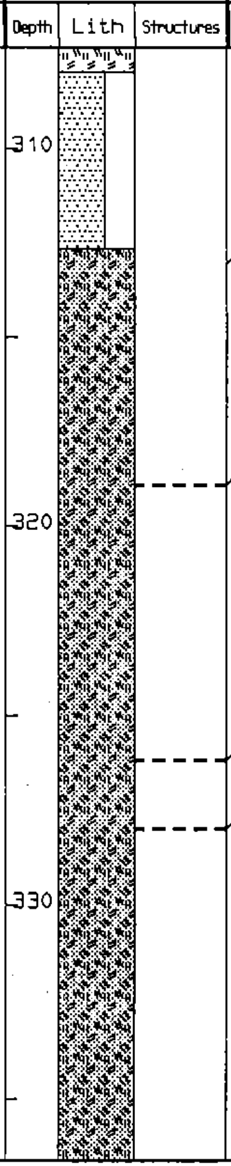
HOLE No. **BPD79**

PROJECT: BURNS PEAK

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
308.00	312.70	ACID VOLCANICLASTIC Yellow, Green, Core sheared and broken making it difficult to define primary textures. Unit could be peperite or hyaloclastite. Silica sericite alteration associated with fine grained pyrite, alteration accentuates textures. MIXED WITH SILTSTONE	Sericitised, Silicified,		
312.70	350.50	ACID LAVA Cream, Brown, Fine grained, Peperitic, Feldspar phyric, Rhyolite sparsely feldspar phyric, feldspar <2mm. Pervasively sericite altered. Blotchy colouring as result of alteration haloes around blocks and silica veinlets. CONTACT: Gradational, MIXED WITH CHERT Grey, Fine grained, Peperitic, Frequently associated with fine pyrite on contacts with lava.	Sericitised, Slightly Silicified,		BROKEN CORE, FAULT, A 10, FAULT, FAULT, A 30,

GRAPHIC



5 cm

845089

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

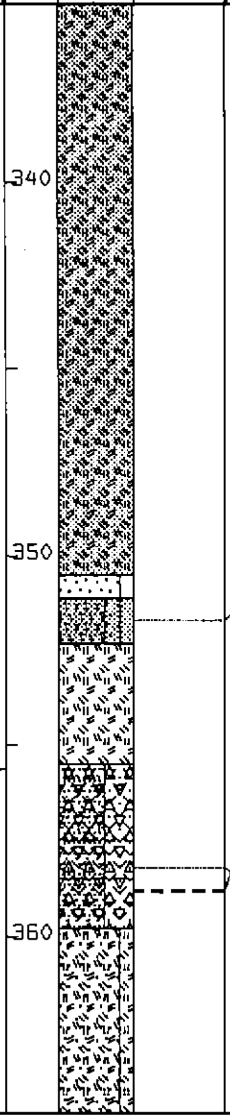
HOLE No. **BPD79**

PROJECT: BURNS PEAK

Page 13 of 21

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
350.50	351.10	ACID VOLCANICLASTIC Hyaloclastitic, MIXED WITH SANDSTONE SANDSTONE Grey, Brown, Coarse grained, Poorly sorted, Polymict, Clasts include fine grained sediment and sericitized glass. Matrix contains abundant fine pyrite.			
351.10	352.30	CONTAINING CLASTS OF SILTSTONE CONTAINING LAMINAE OF Grey, INTERBEDDED WITH CHERT Grey,	Slightly Sericitised.		BEDDING, A 60,
352.30	355.50	ACID LAVA Cream, Pink, Fine grained, Massive, Quartz phyric, Feldspar phyric, Phenocrysts <2mm. Feldspars sericitized. Overall texture massive with fine anastimosing silica alteration /veinlets. Contacts sericitized sheared, sericite after chilled glassy margin. CONTACT: Faulted,			
355.50	359.80	PUMICEOUS MASS FLOW Cream, Yellow, CONTACT: Faulted, INTERBEDDED WITH SILTSTONE MIXED WITH BRECCIA Soft sedimentary siliceous siltstone breccia.	Highly Sericitised, Highly Silicified. Moderately Silicified.	pyrite disseminated, Fine grained massive pyrite + fine silica lenses <50mm wide, associated with blebs/veinlets sphalerite chalcopyrite and pyrite..	FAULT, A 20, PRIMARY FABRIC, A 70,
359.80	369.95	ACID LAVA Cream, Fine grained, Massive, Feldspar phyric, Quartz phyric, Phenocrysts <2mm. CONTACT: Conformable abrupt, Sericitization possibly after chilled glassy margin to flow.	Sericitised, Slightly Silicified.		

GRAPHIC



5 cm

845090

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

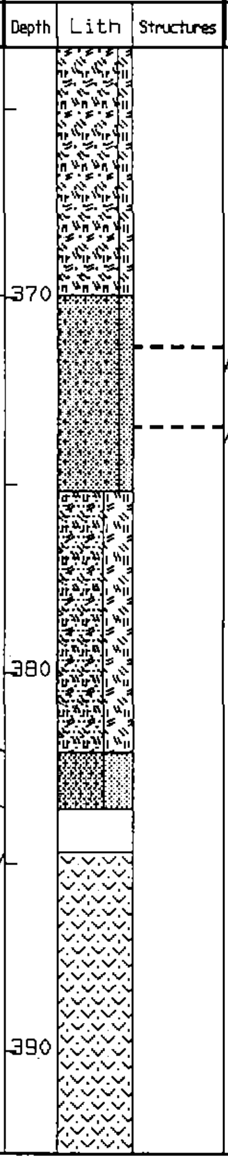
HOLE No. **BPD79**

PROJECT: BURNS PEAK

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		after chilled glassy margin to flow.			
		WITH MINOR SANDSTONE Medium grained, Between 362.7 - 363.1.	Sericitised, Highly Silicified,		
369.95	375.20	SANDSTONE Medium grained,	Sericitised, Highly Silicified.	DISSEMINATED, pyrite With minor semimassive pyrite associated with fine silica. Core cut by sphalerite chalcopyrite veinlets with fine grained silica selveges..	FAULT. A 5. Quartz, Chlorite, Minor sphalerite galena chalcopyrite. FAULT. Quartz. Carbonate, Minor sphalerite galena,
		MIXED WITH CHERT Grey, Two lithologies interlayered by faulting.			
375.20	382.10	ACID LAVA Cream, Fine grained, Massive, Feldspar phyric, Quartz phyric, Minor quartz carbonate veinlets. CONTACT: Conformable abrupt, Contact chilled/glassy, sericitized and foliated.	Slightly Sericitised.		
		WITH MINOR SILTSTONE Siltstone 375.50-375.55.	Slightly Sericitised.		
382.10	383.60	SILTSTONE Grey, Medium grained,	Moderately Sericitised,	DISSEMINATED, pyrite Disseminated to semimassive pyrite in lenses and pods..	
		MIXED WITH CHERT Grey,		MASSIVE, pyrite Pyrite fine to 4mm cubes set in chlorite matrix. Minor sphalerite blebs..	
384.70	397.70	PUMICEOUS MASS FLOW Cream, Medium grained, Very fine speckling indicative of ash. Scattered fine grained sulfidic clasts? Sericite silica alteration pervasive, with carbonate spots possibly after feldspar phenocrysts.	Moderately Sericitised, Moderately Silicified,	DISSEMINATED, abundant pyrite Trace of sphalerite associated with carbonate spotting..	

GRAPHIC



5 cm

845091

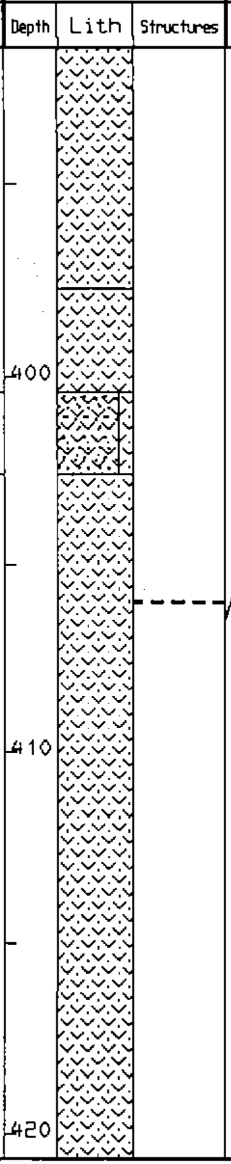
PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
397.70	400.40	PUMICEOUS MASS FLOW Cream, Medium grained,	Moderately Silicified, Moderately Sericitised,		
400.40	402.60	PUMICEOUS MASS FLOW Cream, Medium grained, CONTACT: Conformable mixed, MIXED WITH SANDSTONE Grey, Coarse grained, Polymict, Two main clast types, fine grained siltstone? and feldspar phyric volcanic.	Moderately Sericitised,	DISSEMINATED, pyrite	
402.60	425.00	PUMICEOUS MASS FLOW Cream, Fine grained, Medium grained,	Moderately Sericitised,	VEIN, carbonate Carbonate veinlets with pyrite and trace of sphalerite /galena..	FAULT. A 60. Core broken with crush zones, the margins of zone at 55-65LCA.

GRAPHIC



5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

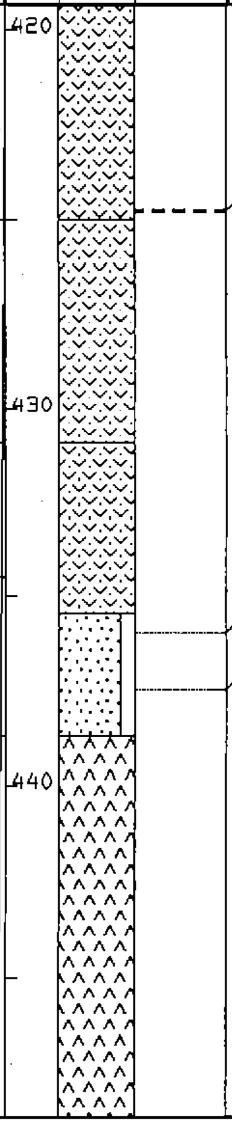
PROJECT: BURNS PEAK

Page 16 of 21

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
					FAULT, A 45,
425.00	430.90	PUMICEOUS MASS FLOW Cream, Fine grained, Medium grained, Intense sericite pyrite altered bands (30-40LCA) occuring between 425.75-425.90m and 427.40-427.50m.	Intensely Silicified, Intensely Sericitised,	DISSEMINATED, pyrite Minor blebs of pale brown sphalerite, rimmed by dark sphalerite..	
430.90	435.50	PUMICEOUS MASS FLOW Due to alteration intensity it is difficult to determine original lithology. Alternating silica and sericite/chlorite alteration, banding 30-35 LCA. CONTACT: Faulted, Faulted contact at 435.50 marks a major change in lithology and alteration style.	Intensely Silicified, Intensely Sericitised,	DISSEMINATED, pyrite Carbonate veinlets.. STRINGER, 1% chalcopyrite Ccp stringers associated with intense chlorite alteration..	
435.50	438.70	SANDSTONE Grey, Brown, Fine grained, Coarse grained, Bedded, Lithic, Lithics to 5mm, primarily fine grained sediment. Matrix crystal and finer lithic fragments. Graded turbiditic beds up to 1m thick, uphole facing. CONTACT: Conformable abrupt,	Slightly Sericitised,		BEDDING, D 89, BEDDING, D 79,
438.70	452.40	ANDESITE Grey, Green, Fine grained, Massive, Fuchsite after feldspar/mafic phenocrysts, localized around a carbonate vein between 450.40-450.60m CONTACT: Conformable abrupt,	Moderately Carbonatised, Moderately Fuchsitic,	VEIN, 1% sphalerite pyrite chalcopyrite carbonate Irregular veins / stockwork, <1cm wide.	

GRAPHIC



5 cm

845093

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

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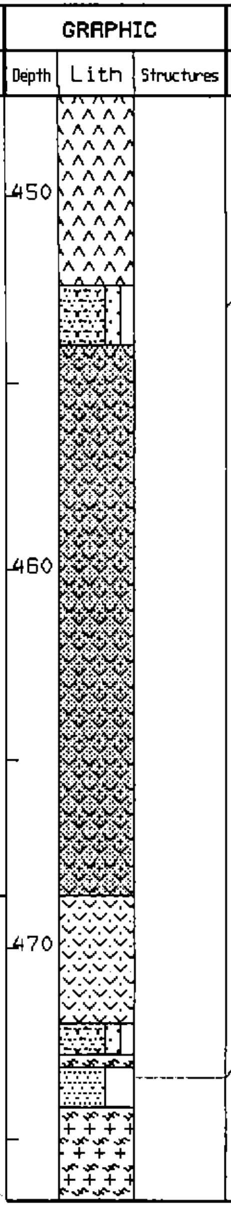
DESCRIPTION					STRUCTURES
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
452.40	454.00	SILTSTONE Cream, Fine grained, Vitric, INTERBEDDED WITH SANDSTONE Cream, Yellow, Medium grained, Lithic, Lithic fragments in sandstone of sericitized glass (alteration styolites?) and fine grained vitric siltstone.	Slightly Sericitised. Moderately Sericitised.		BROKEN CORE.
454.00	468.60	PUMICEOUS MASS FLOW Grey, Cream, Medium grained, Feldspar phyric, Carbonate veinlets and carbonitized feldspar phenocrysts. CONTACT: Gradational, CONTAINING CLASTS OF CHERT Single 15cm last at 461.80m.	Moderately Sericitised. Moderately Silicified.		
468.60	472.00	PUMICEOUS MASS FLOW Grey, Medium grained, Feldspar phyric, CONTACT: Faulted,	Intensely Sericitised. Intensely Silicified.	DISSEMINATED. 2% pyrite	
472.00	472.80	SILTSTONE Grey, Fine grained, CONTACT: Conformable abrupt, Chilled contact at 20 LCA. WITH MINOR SANDSTONE Cream, Medium grained, Lithic, Crystal, Lithics mainly cherty pyritic.	Slightly Silicified.	VEIN. carbonate trace sphalerite Disseminated pyrite and massive pyrite bands <1cm at 519.50. 522.50 and 523.60m..	
472.80 473.15	473.15 474.20	ACID INTRUSIVE Cream, Medium grained, Porphyritic, Feldspar phyric, Quartz phyric, CONTACT: Faulted,	Moderately Silicified.		BEDDING. A 50.
474.20	517.40	SILTSTONE Grey, Fine grained, Bedded, Brecciated, Vitric, Brecciation may be soft sedimentary? CONTACT: Conformable abrupt, Chilled intrusive at 50 LCA.	Moderately Silicified.		



5 cm

845094

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

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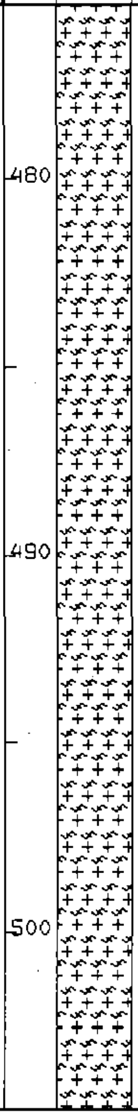
DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
		Brecciation may be soft sedimentary? CONTACT: Conformable abrupt, Chilled intrusive at 50 LCA.						
		ACID INTRUSIVE Cream, Medium grained, Porphyritic, Feldspar phyric, Quartz phyric, CONTACT: Conformable abrupt, Sericitized margin of intrusive reflecting chilled glass.						



5 cm

845095

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

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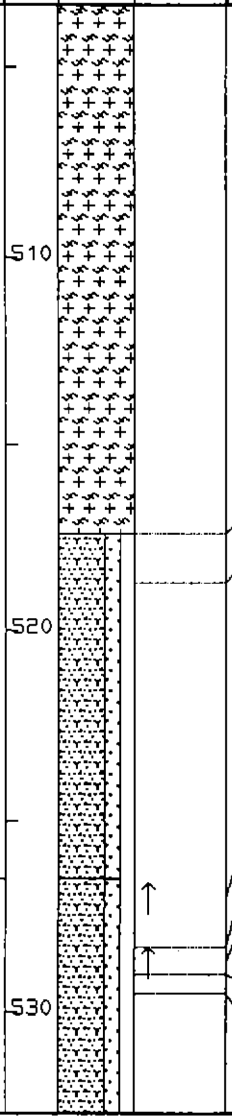
DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
517.40	526.50	SILTSTONE Cream, Grey, Fine grained, Bedded, Vitric, Bedding accentuated by cream spotting, may be devitrification. CONTACT: Gradational, Gradational contact associated with sericitization and shearing. INTERBEDDED WITH SANDSTONE Grey, Yellow, Medium grained, Crystal, Pumiceous,	Slightly Silicified, Moderately Sericitised, Moderately Sericitised, Moderately Sericitised,		BEDDING, A 50, BEDDING, A 60,
526.50	534.45	SILTSTONE Grey, Fine grained, Laminated, Carbonatized between 531.50-534.00m. Sandy lenses with carbonate cement/matrix. WITH MINOR SANDSTONE Medium grained, Crystal, Feldspar crystals carbonitized.	Moderately Sericitised,	VEIN, 1% sphalerite carbonate	Grading uphole. BEDDING, D 59, Facing uphole, Load structures. BEDDING, D 69, BEDDING, D 79,

GRAPHIC



5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

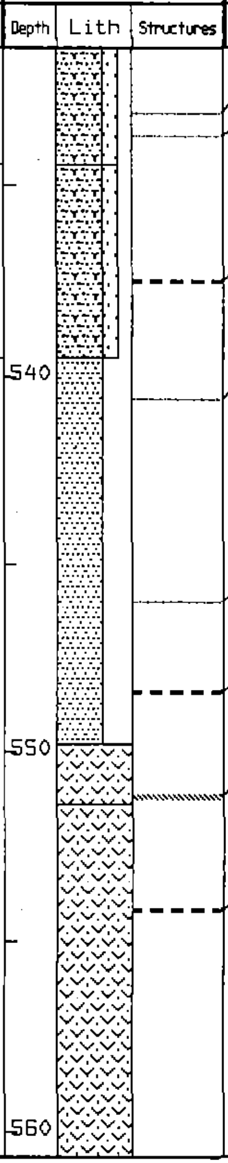
HOLE No. **BPD79**

PROJECT: BURNS PEAK

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
		crystals carbonitized.		
534.45	539.50	SILTSTONE Cream, Grey, Fine grained, Bedded, Vitric, CONTACT: Gradational, INTERBEDDED WITH SANDSTONE Cream, Medium grained, Bedded, Crystal, Lithic, Clasts <20mm, include fine vitric siltstone and felsic lava?		DISSEMINATED, minor pyrite 0.5% in veinlets, sphalerite Sphalerite in irregular carbonate veinlets..
539.50	549.80	MASS FLOW Cream, Pink, Bedded, Crystal, Lithic, MIXED WITH SILTSTONE Grey, Siltstone occasionally cherty occurs as disrupted lenses, rafts and clasts in crystal sandstone matrix.	Moderately Sericitised,	DISSEMINATED, 1% pyrite sphalerite in veinlets, carbonate Fine grained pyrite, disseminated, blebs and stringers..
549.80	551.40	PUMICEOUS MASS FLOW MIXED WITH SILTSTONE Cream, Medium grained, Cleaved, Feldspar phyric, Feldspar crystals slightly carbonitized. CONTACT: Gradational,	Moderately Sericitised,	
551.40	574.50	PUMICEOUS MASS FLOW Grey, Cream, Medium grained, Massive, Feldspar phyric, Mottled appearance due to silica/sericite alteration. Feldspars carbonated, frequently associated with fine grained sulfide spots.	Moderately Silicified, Slightly Sericitised.	

GRAPHIC



STRUCTURES

BEDDING, D 69,
BEDDING, D 69,
FAULT, A 20,
BEDDING, A 45,
BEDDING, A 15,
FAULT, A 10,
FIRST CLEAVAGE, A 60,
FAULT, A 30,

5 cm

845097

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD79**

PROJECT: BURNS PEAK

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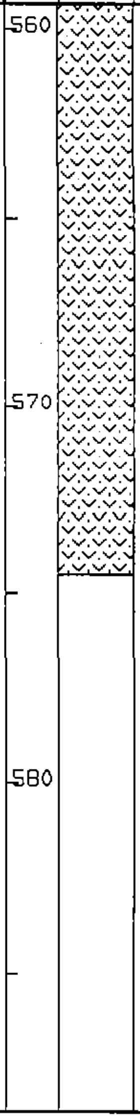
DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES



5 cm

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD79

ASSAY RESULTS

From	To	Samp	Int	Cu	Pb	Zn	Ag	Au	Fe	Ba	As	Mn
313.00	314.00	37549	1.0	384	776	6200	4.0	0.03		3126	130	1318
314.00	315.00	37550	1.0	86	465	2133	2.0	0.01		3712	530	1698
355.00	356.00	37551	1.0	316	218	9800	5.0	0.23		2753	320	902
356.00	357.00	37552	1.0	647	1013	42900	19.0	0.43		1689	430	398
357.00	358.00	37553	1.0	193	380	5400	5.0	0.09		1334	120	484
358.00	359.00	37554	1.0	302	720	14100	7.0	0.12		2356	280	942
359.00	360.00	37555	1.0	52	167	11500	3.0	0.06		2487	100	359
382.00	383.00	37556	1.0	273	511	985	5.0	0.02		2878	25	1764
383.00	384.00	37557	1.0	91	881	3105	18.0	0.10		2144	44	3440
384.00	385.00	37558	1.0	954	1272	2905	28.0	0.09		1143	22	2994
385.00	386.00	37559	1.0	2850	786	3520	15.0	0.03		1375	20	2052
386.00	387.00	37560	1.0	78	237	112	2.0	0.02		1565	8	1870
387.00	388.00	37561	1.0	626	227	3240	5.0	0.01		1206	14	1739
438.70	440.00	37562	1.3	2080	561	40200	15.0	0.02		3011	8	10200
440.00	441.00	37563	1.0	1710	635	46800	13.0	0.02		1933	7	11700
441.00	442.00	37564	1.0	1324	154	1940	5.0	<0.008		1485	6	13400
442.00	443.00	37565	1.0	485	132	7000	3.0	<0.008		983	12	12100
443.00	444.00	37566	1.0	2077	504	12900	13.0	0.01		1070	6	12300
444.00	445.00	37567	1.0	853	410	28600	9.0	0.01		972	4	10100
445.00	446.00	37568	1.0	2790	204	10300	15.0	0.01		636	6	11200
446.00	447.00	37569	1.0	861	16	465	2.0	0.01		891	8	11000
447.00	448.00	37570	1.0	635	9	168	2.0	<0.008		805	8	9600
448.00	449.00	37571	1.0	1064	82	15900	7.0	0.01		782	8	8600
526.40	528.00	37572	1.6	10	772	12400	2.0	0.10		794	30	189
528.00	529.00	37573	1.0	15	909	15500	1.0	0.03		717	31	1287
529.00	530.00	37574	1.0	22	1627	19100	2.0	0.03		693	100	1867
530.00	531.00	37575	1.0	9	535	3700	1.0	0.03		818	30	1743
531.00	532.00	37576	1.0	13	1204	6600	2.0	0.03		1064	70	3038

From	To	Samp	Int	Cu	Pb	Zn	Ag	Au	Fe	Ba	As	Mn

845099

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD79

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
4.90		0.11		FGL	fgl
6.10		0.02		FGL	fgl
7.30		0.00		FGL	fgl
7.70		0.05		FGL	fgl
8.90		0.03		FGL	fgl
9.40		0.05		FGL	fgl
9.60		0.04		FGL	fgl
10.00		0.03		FGL	fgl
12.70		0.07		PR	Va
13.20		0.04		PR	Va
13.60		0.03		PR	Va
14.10		0.08		PR	Va
14.80		0.08		PR	Va
16.30		0.06		PR	Va
19.00		0.05		PR	Va
22.20		0.15		PR	Va
25.40		0.09		PR	Va
28.40		0.05		PR	Va
28.50		0.02		PR	Va
29.20		0.12		PR	Va
31.40		0.07		PR	Va
31.80		0.06		PR	Va
34.20		0.08		PR	Va
35.30		0.05		PR	Va
35.40		0.06		PR	Va
37.40		0.13		PR	Va
40.40		0.07		PR	Va
42.20		0.08		PR	Va
42.40		0.07		PR	Va
45.50		0.07		PR	Va
46.70		0.07		PR	Va
46.90		0.03		PR	Va
47.40		0.04		PR	Va
48.60		0.03		PR	Va
49.40		0.06		PR	Va
50.20		0.02		PR	Va
50.90		0.05		PR	Va
51.60		0.09		PR	Va
52.20		0.04		PR	Va
52.40		0.07		PR	Va
52.60		0.03		PR	Va
55.40		0.04		PR	Va
57.70		0.02		PR	Va
58.20		0.06		PR	Va
59.70		0.07		PR	Va
61.40		0.02		PR	Va
64.40		0.06		PR	Va
64.90			2.46	PR	Va
67.40		0.07		PR	Va
70.40		0.02		PR	Va
72.80		0.04		PR	La
75.90		0.07		PR	La
76.90		0.05		PR	La
78.00		0.04		PR	La
81.10		0.04		PR	Va
82.40		0.05		PR	Va
85.40		0.10		PR	Va
88.40		0.08		PR	Va
91.40		0.08		PR	Va
94.00		0.09		PR	Va
97.00		0.05		PR	Va
100.00		0.07		PR	Va
100.40		0.06		PR	Va
103.40		0.07		PR	Va
106.40		0.06		PR	Va
109.40		0.08		PR	Va
112.40		0.07		PR	Va
115.40		0.09		PR	Va
118.40		0.09		PR	Va
121.40		0.06		PR	Va
124.40		0.11		PR	Va
127.40		0.05		PR	Va
130.40		0.18		PR	Va
133.40		0.06		PR	Va
136.40		0.12		PR	Va
138.30		0.05		PR	Va
138.90			2.56	PR	Va
142.40		0.04		PR	Va
145.40		0.05		PR	Va
148.40		0.06		PR	Va
151.40		0.06		PR	Va
153.90		0.03		PR	Va
155.90		0.12		PR	Va
157.40		0.10		PR	Va

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD79

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
160.40		0.05		PR	Va
163.40		0.06		PR	Va
166.40		0.11		PR	Va
169.40		0.09		PR	Va
170.10		0.08		PR	Va
172.40		0.09		PR	Va
175.40		0.05		PR	Va
176.90		0.07		PR	Va
178.40		0.04		PR	Va
181.40		0.05		PR	Va
184.40		0.06		PR	Va
187.40		0.05		PR	Va
190.10			2.55	PR	Va
190.40		0.09		PR	Va
193.40		0.13		PR	Va
196.40		0.08		PR	Va
199.40		0.09		PR	Va
200.60		0.10		PR	Va
201.60		0.12		PR	Va
204.80		0.09		PR	Va
207.90		0.07		PR	Va
211.00		0.03		PR	Va
211.50		0.05		PR	Va
214.40		0.18		PR	Va
217.40		0.01		PR	Va
220.40		0.22		PR	La
223.40		0.11		PR	La
226.40		0.08		PR	La
229.40		0.12		PR	La
232.40		0.08		PR	La
235.40		0.07		PR	La
238.40		0.08		PR	La
241.40		0.10		PR	La
244.40		0.09		PR	La
247.40		0.08		PR	La
250.40		0.09		PR	La
250.80			2.60	PR	La
253.40		0.09		PR	La
256.40		0.06		PR	La
259.40		0.00		PR	La
260.90		0.06		PR	La
262.40		0.05		PR	La
264.30			2.60	PR	La
265.40		0.06		PR	La
268.40		0.04		PR	La
271.40		0.05		PR	La
274.40		0.08		PR	La
277.40		0.07		PR	La
280.40		0.04		PR	La
283.40		0.04		PR	La
286.40		0.03		PR	La
289.40		0.16		PR	La
292.30			2.50	PR	La
292.40		0.02		PR	La
295.40		0.05		PR	La
298.40		0.07		PR	La
301.40		0.06		PR	La
304.10		0.07		PR	La
304.90		0.08		PR	La
307.30		0.02		PR	La
308.80		0.04		PR	Va
311.40		0.04		PR	Va
312.70		0.03		PR	La
315.80		0.04		PR	La
318.90		0.05		PR	La
322.00		0.05		PR	La
323.40		0.00		PR	La
325.40		0.09		PR	La
328.40		0.05		PR	La
331.40		0.10		PR	La
334.40			2.57	PR	La
334.40		0.06		PR	La
335.40		0.12		PR	La
337.40		0.13		PR	La
340.40		0.90		PR	La
341.50		0.19		PR	La
343.40		0.10		PR	La
346.40		0.16		PR	La
349.40		0.12		PR	La
352.30			2.58	PR	La
352.40		0.06		PR	La
355.40		0.11		PR	La
358.40		0.10		PR	pmf
361.40		0.22		PR	La

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD79

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
364.40		0.03		PR	La
367.40		0.05		PR	La
370.40		0.08		PR	sst
373.40		0.06		PR	sst
376.40		0.03		PR	La
379.40			2.58	PR	La
379.40		0.01		PR	La
382.40		0.05		BTS	slt
385.40		0.01		BTS	pmf
388.40		0.11		BTS	pmf
390.10		0.06		BTS	pmf
391.40		0.05		BTS	pmf
394.40		0.16		BTS	pmf
397.40		0.11		BTS	pmf
400.40		0.06		BTS	pmf
403.40		0.07		BTS	pmf
405.80		0.06		BTS	pmf
406.10		0.05		BTS	pmf
408.90		0.17		BTS	pmf
412.00		0.02		BTS	pmf
415.00		0.14		BTS	pmf
417.80		0.16		BTS	pmf
420.80		0.12		BTS	pmf
423.80		0.16		BTS	pmf
426.80		0.10		BTS	pmf
428.10			2.56	BTS	pmf
430.00		0.08		BTS	pmf
432.80		0.22		BTS	pmf
433.90		0.17		BTS	pmf
436.40		0.19		BTS	sst
439.40		0.27		HA	Ln
442.40		0.37		HA	Ln
445.40		0.43		HA	Ln
446.70			2.64	HA	Ln
448.40		0.40		HA	Ln
451.40		0.29		HA	Ln
452.70		0.15		BTS	slt
454.00		0.14		BTS	pmf
457.10		0.05		BTS	pmf
460.20		0.07		BTS	pmf
463.30		0.15		BTS	pmf
463.50			2.63	BTS	pmf
466.40		0.04		BTS	pmf
469.40		0.07		BTS	pmf
472.10		0.11		BTS	slt
475.20		0.00		BTS	Ia
481.10		0.07		BTS	Ia
481.10		0.05		BTS	Ia
484.30		0.01		BTS	Ia
485.40		0.15		BTS	Ia
485.60			2.51	BTS	Ia
487.40		0.61		BTS	Ia
490.40		0.27		BTS	Ia
493.40		0.49		BTS	Ia
496.40		0.31		BTS	Ia
499.40		0.61		BTS	Ia
502.40		0.21		BTS	Ia
505.40		0.15		BTS	Ia
508.40		0.11		BTS	Ia
509.70		0.21		BTS	Ia
511.40		0.39		BTS	Ia
514.40		0.17		BTS	Ia
517.40		0.19		BTS	slt
520.40		0.23		BTS	slt
523.20		0.40		BTS	slt
526.40		0.26		BTS	slt
529.40		0.19		BTS	slt
532.40		0.11		BTS	slt
535.40		0.07		BTS	slt
538.40		0.02		BTS	slt
541.40		0.10		BTS	mf
544.40		0.12		BTS	mf
547.40		0.24		BTS	mf
550.40		0.31		CVC	pmf
553.40		0.09		CVC	pmf
556.40		0.13		CVC	pmf
559.40		0.05		CVC	pmf
562.40		0.01		CVC	pmf
565.40		0.00		CVC	pmf
568.40		0.11		CVC	pmf
571.40		0.07		CVC	pmf
574.40		0.04		CVC	pmf
574.50		0.06		CVC	pmf

APPENDIX 6

BPD80 Drill Log

845103

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD80

DRILLING

Location	TASMANIA
Project	BURNS PEAK
Prospect	SUMMIT
Design By	R POLTOCK
Logged By	M SAXON
Relogged	
Commenced	17-2-94
Completed	18-3-94
Drilled By	WAYNE HOW
Drill Rig	LONGYEAR 38

OBJECTIVE

To test the down dip extension of the massive sulphide clast bearing horizons in BPD77. The associated pyritic alteration indicates possible proximity to a massive sulphide body from which clasts were shed.

RESULT

The hole intersected a sandstone-shale-minor conglomerate sequence, varying from lithic to vitric rich, and intruded by two quartz-feldspar porphyries with peperitic margins (Southwell Subgroup equivalent). The stratigraphic position equivalent to the sulphide clast host horizon in BPD77 was not intersected. A network of thin sphalerite-galena-calcite veinlets was the highest grade mineralization intersected, located in shale at porphyry margins.

COLLAR SURVEY (AMG)

AMG mN	5384868.7	**Bearing**	283.0
AMG mE	379237.8	**Dip**	-60.0
mN		**Hole Length**	469.7
mE		**DH Survey Type**	EASTMAN CAMERA
RL	484.9		

DOWNHOLE SURVEY (AMG)

Depth	Bearing	Dip
0.0	-60.00	284.00
40.0	-60.70	284.00
80.0	-61.10	284.00
120.0	-60.10	284.00
160.0	-60.00	284.50
200.0	-59.50	285.50
240.0	-58.80	286.00
280.0	-58.10	287.00
320.0	-57.40	287.80
360.0	-56.70	288.00
400.0	-56.30	288.50
440.0	-58.00	287.00
469.7	-56.50	286.00

SIGNIFICANT CORE LOSS

From	To	Loss

POOR GROUND CONDITION ZONES

From	To	Condition

HOLE SIZE

From	To	Size
0	90	HQ
90	469.7	NQ

HOLE CONDITIONS AFTER COMPLETION

Collar	
Steel Casing	
PVC Casing	0-469.7
Ground Water	Nil
Wedge	Nil
Drill Pad	Track extended from site of BPD77. Not rehabilitated.

SIGNIFICANT INTERSECTIONS

From	To	Int	Cu	Pb	Zn	Ag	Au	Comments
284	290	6		0.20	0.88	3		

845104

PASMINCO [illegible]LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. BPD8[illegible]

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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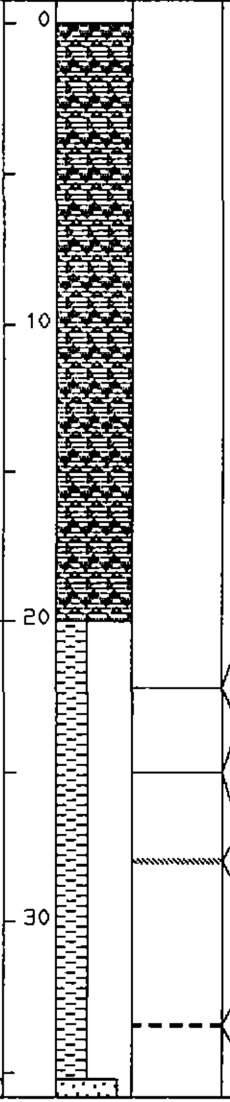
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
0.00	20.00	FLUVIOGLACIAL DEPOSITS Cream, Orange, Fine grained, Very coarse grained, Laminated, Matrix supported, Poor core recovery. CONTACT: Conformable mixed, Shale clasts in glacial mud matrix.	Highly Oxidised,		
20.00	35.20	SHALE WITH MINOR SANDSTONE Dark, Grey, Fine grained, Cleaved, Bedded, Strong cleavage overprint of bedding, minor kinking of cleavage at 24.8 and 34.4m. Weak oxidation 29.6-32.2. Sandstone interbeds comprise 5%, lithic and feldspar rich. CONTACT: Gradational,		Trace to 1% pyrite DISSEMINATED, on FRACTURES, in LAMINATIONS..	BEDDING, A 12, Bedding strongly overprinted by cleavage. BEDDING, A 10, D 53, N. Assuming clvg = 25/85E. S0/S1 45, verg = anticline E. FIRST CLEAVAGE, A 34, Strong, Slatey. FAULT, Pug, Little movement.
35.20	40.50	SANDSTONE WITH MINOR SHALE Grey, Orange, Medium grained	Moderately Oxidised		

GRAPHIC



5 cm

845105

PASMINCO **LORATION**

DIAMOND DRILL CORE LOG

HOLE No. **BPD8**

PROJECT: BURNS PEAK: SUMMIT PROSPECT

Vertical Scale 1 : 250

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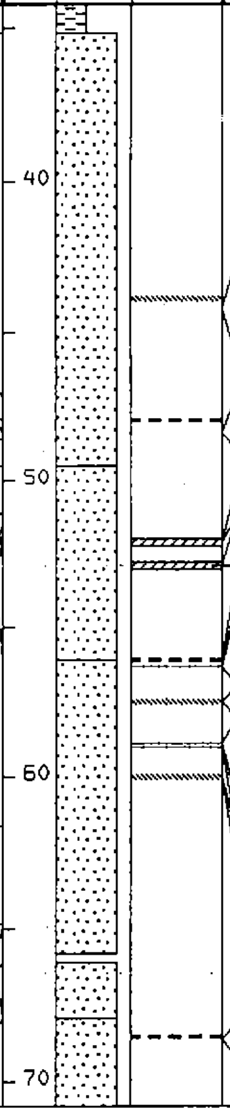
From	To	LITHOLOGY	ALTERATION	MINERALISATION
35.20	49.50	SANDSTONE WITH MINOR SHALE Grey, Orange, Medium grained, Bedded, Common feldspar, occasional quartz crystals. Core commonly broken and puggy due to weathering. Lamination diffuse. Occasional grey shale rip up clasts. Interbedded shale strongly cleaved. CONTACT: Indistinct,	Moderately Oxidised,	DISSEMINATED, trace pyrite 1% galena on fractures,
49.50	56.10	SANDSTONE Pale, Grey, Coarse grained, Massive, Reworked, Feldspar crystal, lithic and glass shard rich. More feldspathic and coarser grained than overlying unit. Feldspar crystals subrounded to euhedral. Common anastomosing chloritized zones. Lithic fragments irregular to rounded, upto 2cm in size, generally shaley, common chloritized glassy shards. CONTACT: Faulted,		1% pyrite DISSEMINATED. on FRACTURES. trace sphal. on FRACTURES, dark brown-black, coarse grained. trace coarse grained galena, sphal., pyrite, chalco. on FRACTURES.
56.10	65.80	SANDSTONE INTERBEDDED WITH SHALE Feldspar rich greeny grey sandstone, moderately laminated, typically medium grained. Occasional lithic clasts. 40% interbedded dark grey shale. Weakly upwards fining sequence. Trace dissem. pyrite in shale; rare gal/sphal in fractures in sandstone. CONTACT: Faulted,		trace coarse grained sphal.,galena. pyrite on FRACTURES, in VEINLETS.
		FAULT ZONE (PUG) Qtz vein and cataclastite zone. Fractured clasts in pug matrix.		VEIN, very minor sphalerite sphal. veinlets crosscut cleavage.
66.70	67.90	SANDSTONE Feldspar rich, dark green, medium grained, matrix supported sandstone. Sericitization of feldspars and matrix related to above fault. Weakly laminated by feldspar content. CONTACT: Indistinct,	Moderately Sericitised.	2% pyrite in VEINLETS. Pyrite is commonly assoc. with qtz grains.
67.90	103.00	SANDSTONE WITH MINOR CONGLOMERATE Pale grey to pale green	Moderately Carbonatised, Slightly Sericitised,	

GRAPHIC



STRUCTURES

FIRST CLEAVAGE, A 40, Strong, Slatey, Spaced. Weak spaced cleavage in sandstone.

FAULT, Pug, Little movement.

VEIN, Quartz, Laminated.

VEIN, Quartz,

FAULT, Pug, Basal contact.

BEDDING, A 35, D 62, N. Assuming clvg = 25/85E, S0/S1 90, hinge zone?

FIRST CLEAVAGE, A 46,

BEDDING, A 40, D 66, NE. Assuming clvg = 25/85E, S0/S1 90, hinge zone?

BEDDING, A 44.

FIRST CLEAVAGE, A 46,

FAULT, Pug, Small

5 cm

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PASMINCO LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. BPD8

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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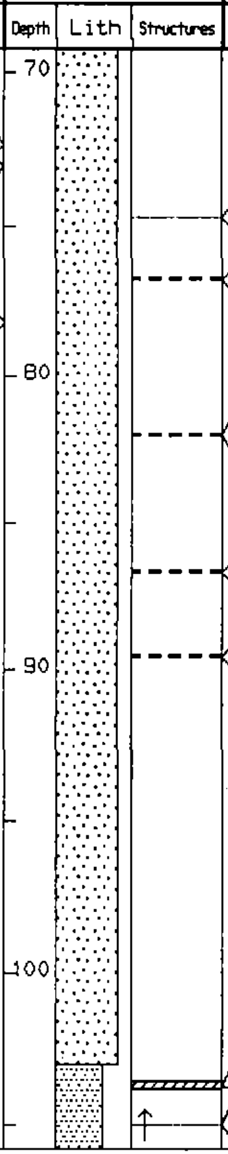
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		CONTACT: Indistinct,	Slightly Sericitised,		
		SANDSTONE WITH MINOR CONGLOMERATE Pale grey to pale green med to coarse grained sst. Abundant 1mm sub-euhedral feldspar xls and qf porphyry, shale, pumice lithic clasts. Occ. glass frags. and qtz grains. Lithic clasts increase in size and frequency dhole. Carb alt >92.6m producing bleaching and clast rim altn. Patchy sericitization of feldspar. Trace pyrite disseminated throughout. CONTACT: Faulted, Marked by vein.		VEIN, sphalerite galena trace galena on FRACTURES. VEIN, trace sphalerite on fractures.	BEDDING, A 25, Pug. FAULT, Pug, Small FAULT, A 15, Brittle, Slickenlines. FAULT, Pug, Small FAULT, Pug,
103.00	109.90	SILTSTONE Blotchy browny green vitric mudstone, fining uphole. Massive to weak slightly undulose lamination. Minor pyrite spotting.	Slightly Carbonatised,		VEIN, Carbonate. BEDDING, A 40, Younging uphole.

GRAPHIC



5 cm

845107

PASMINCO LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. BPD8

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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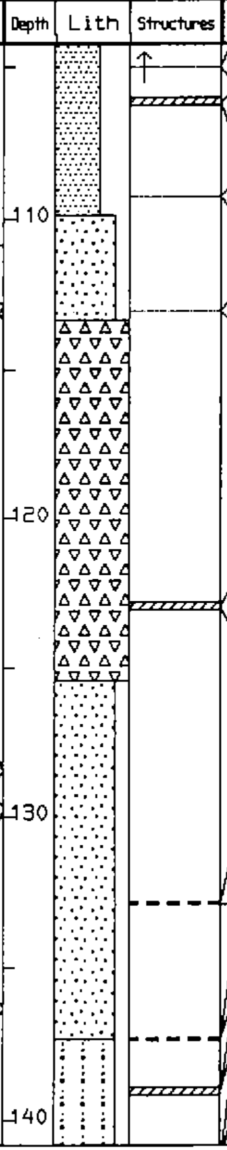
DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		uphole. Massive to weak slightly undulose lamination. Minor pyrite spotting. CONTACT: Gradational, at 40 degrees to Increasing grainsize and feldspar content.			BEDDING, A 40, Younging uphole. VEIN, Quartz, Carbonate, Chlorite. BEDDING, A 42, D 5, M
109.90	113.30	SANDSTONE Richly feldspathic grey green, medium grained sandstone. Lithic rich with abundant irreglar qf porphyry and vitric fragments to 2cm. Feldspar crystals typically grain supported, minor pale grey matrix. Patchy sericitization of feldspar crystals. Occasional glassy chlorite clots. Sericitic 112.1-112.5m. CONTACT: Gradational, at 45 degrees to Increasing grainsize and lithic content.	Slightly Carbonatised, Slightly Sericitised,	trace sphal. trace pyrite DISSEMINATED as blebs. VEIN, carbonate sphalerite	BEDDING, A 45.
113.30	125.40	BRECCIA WITH MINOR SANDSTONE Abundant lithic clasts, typically 3-5cm in size, in mid green feldspar crystal rich sandstone matrix as above. Clasts are fb rhyolite and qf porphyry dominated, plus common sericite replaced clasts and occasional vitric mudstone clasts. Rare quartz grains. Occasional chl pseudoclasts of probable glassy origin. Clasts and matrix locally sericitic. Minor calcite veining throughout. Trace disseminated pyrite and sphalerite throughout. CONTACT: Indistinct, Rapid decrease in lithic clasts. Similar matrix in underlying unit.	Moderately Carbonatised, Slightly Sericitised,		VEIN, Quartz, Carbonate, Chlorite.
125.40	137.30	SANDSTONE WITH MINOR BRECCIA WITH MINOR SILTSTONE Pinky green to dark green lithic and vitric rich sandstone, grading to breccia as above. Clasts are fb rhyolite, qf porphyry, and pumice/glass dominated, plus occasional vitric mudstone. Massive to weakly laminated, poor sorting, little reworking. Patchy sericitization of matrix. Occasional large quartz grains. Trace pyrite blebs throughout. CONTACT: Faulted,		irreg. galena, sphal., calcite VEINLETS, coarse grained. qtz, chl, calc, sphal and galena VEINLETS. calcite, sphalerite VEIN.	FAULT, Pug. Little movement. FAULT, Assoc. ser plus qtz. VEIN, A 80, Carbonate.
137.30	167.70	TURBIDITE Numerous upward fining lithic, vitric, crystal turbidites, typically 0.2-1.0m thick. Mid brown to mid green in colour, well laminated, coarse grained sandstone grades to silt or vitric mudstone. Sand clasts	Slightly Sericitised, Slightly Carbonatised,		Sandstone breccia, quartz-calcite stockwork. VEIN, Quartz, Chlorite,

GRAPHIC



5 cm

PASMINCO [illegible]LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. **BPD8**[illegible]

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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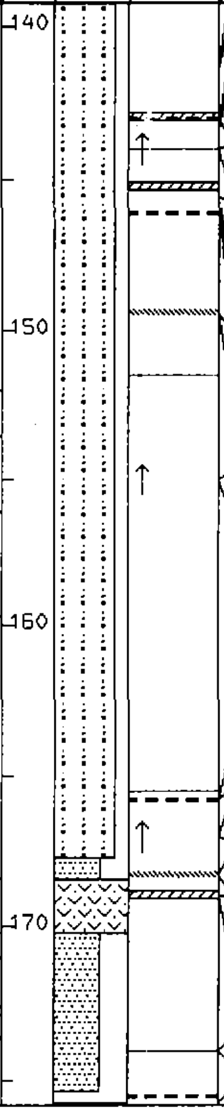
DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
		green in colour, well laminated, coarse grained sandstone grades to silt or vitric mudstone. Sand clasts subrounded and clast supported. Turbidites vary from lithic rich to occasionally glass rich. Occasional quartz grains. Possible pumice. CONTACT: Conformable abrupt, at 70 degrees to Sedimentary contact.		minor qtz-sphal. VEINLETS. minor qtz-calcite-sphal. VEINLETS.
167.70	168.40	SILTSTONE Massive ungraded dark green vitric mudstone, similar to fine grained beds above. Probable pumic clot. CONTACT: Unassigned, at 80 degrees to		
168.40	170.20	PUMICEOUS MASS FLOW Creamy green med to coarse grained pumice and lithic mass flow. Uphole fining, poorly sorted. Numerous chlorite clots. CONTACT: Conformable abrupt, at 80 degrees to	Slightly Bleached,	2% DISSEMINATED pyrite as 1mm clots, amount increasing with grainsize.
170.20	175.30	SILTSTONE WITH MINOR SANDSTONE Pale yellow green, well laminated vitric mudstone. Occasional lithic clasts and feldspar crystals. Carbonaceous grey mudstone 172.9-173.5 with possible limestone lamination. Minor soft sediment deformation. Weak sericitization 175.0-175.3; silicified 171.3-171.6m. Pyrite in 1-2mm nodules and spots		1% pyrite DISSEMINATED and on FRACTURES. DISSEMINATED, trace pyrite minor calcite-sphal. VEINLETS in carbonaceous shale only.

GRAPHIC



STRUCTURES

VEIN. Quartz, Chlorite, Irregular.

FAULT. A 30, Brittle, Cataclastic flt plus ser. alt.

BEDDING. A 65. Younging uphole.

VEIN. Carbonate. Irreg. vns of calc with mnr bx of wallrock.

FAULT. Pug. Little movement.

FIRST CLEAVAGE. A 30. Weak. Spaced.

BEDDING. A 45. Younging uphole.

FAULT. A 40. Pug. Small. down hole slickenlines.

BEDDING. A 65. Younging uphole.

FIRST CLEAVAGE. A 25. Strong. Spaced.

VEIN. A 25. Carbonate. Quartz. Chlorite. Mnr assoc. stockwork vng.

BEDDING. A 76.

5 cm

845109

PASMINCO LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. BPD80

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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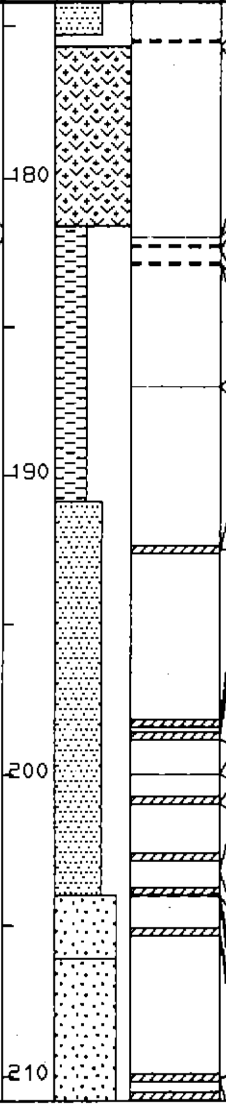
DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
		deformation. Weak sericitization 175.0-175.3; silicified 171.3-171.6m. Pyrite in 1-2mm nodules and spots throughout.		
173.30	175.70	FAULT ZONE (PUG) Brecciated, cataclastic, puggy.		
175.70	181.60	QUARTZ PHYRIC MASS FLOW Pinky to greeny medium grained qf porphyry derived sandstone/breccia. 5-10mm round qtz, chloritic glassy clots, pumice, qf porphyry clasts with sericitized feldspar. CONTACT: Conformable abrupt, at 80 degrees to Erosional.		
181.60	190.90	SHALE GRADING TO SILTSTONE WITH MINOR LIMESTONE Dark brown to black, well laminated carbonaceous and vitric mudstone, becoming more vitric, less carbonaceous with depth. Occasional pale grey limestone interbeds, typically fractured and calcite veined. Mottled appearance. Frequent soft sediment deformation. CONTACT: Gradational,	Moderately Carbonatised.	minor calcite-pyrite VEINLETS, pyrite rims calcite.
190.90	204.00	SILTSTONE WITH MINOR SANDSTONE Pale green to pale pink vitric mudstone that grades downhole to vitric/crystal sandstone. Massive to very weak lamination. Mottled appearance due to variable and fracture controlled alteration. Common matrix supported sericitized vitric fragments in sandstone. Common spiderweb carbonate veinlets and very minor pyrite+sphalerite on fractures throughout. CONTACT: Faulted, Associated veining.	Slightly Carbonatised. Slightly Albitised.	
204.00	206.10	SANDSTONE WITH MINOR SILTSTONE Mid green feldspar plus minor quartz crystal sandstone, with vitric rich matrix as above. Feldspars in part fractured, sericitised. CONTACT: Gradational, Rapid increase in quartz content.	Slightly Carbonatised.	
206.10	214.10	SANDSTONE GRADING WITH QUARTZ PHYRIC MASS FLOW Interbedded mid grn feld plus qtz sst as above, with creamy-grn blotchy qtz and feld rich sst/gravel. Qtz xls 2-6mm, typ. rounded, occ. fract., feld xls irreg-euhedral, 1-3mm, fract, sericitized in part. Little matrix, xl support. Lithics qf porphyry dominated, plus black shale, vitric mudst. Irreg chl+-ser clots replace matrix. CONTACT: Gradational, at 45 degrees to	Moderately Carbonatised. Slightly Sericitised.	
		QUARTZ PHYRIC MASS FLOW Blotchy cream-grn qtz+feld		

GRAPHIC



STRUCTURES

FAULT, Pug, Breccia.
BEDDING, A 65, D 10, W
FAULT, Pug, Carbonate, Hydrothermal brecciation.
FAULT, Pug.
BEDDING, A 70.
VEIN, A 25, Quartz, Carbonate, Chlorite.
VEIN, A 25, Carbonate.
VEIN, A 20, Carbonate, Chlorite, Breccia. Assoc. hydro. bx of wall rock.
BEDDING, A 38,
VEIN, Carbonate, Network.
VEIN, A 5, Carbonate, Chlorite, Breccia. Assoc. hydro. bx of wall rock.
VEIN, A 10, Carbonate, Pyrite, Breccia.
FAULT, Brittle, Pug.
VEIN, Carbonate, Chlorite.
VEIN, A 45, Carbonate

5 cm

PASMINCO LORATION

DIAMOND DRILL CORE LOG

HOLE No. BPD8

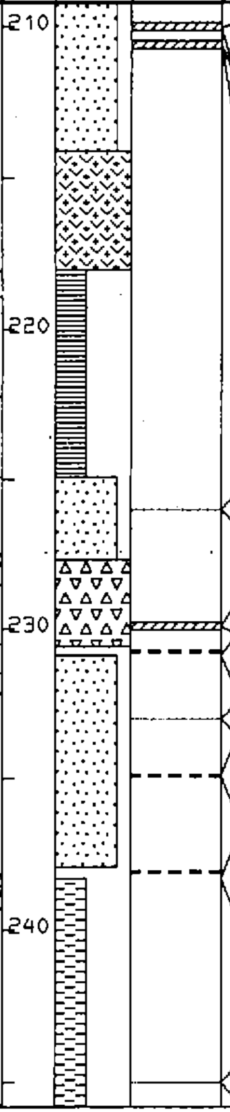
PROJECT: BURNS PEAK: SUMMIT PROSPECT

Vertical Scale 1 : 250

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
		CONTACT: Gradational, at 45 degrees to		
214.10	218.00	QUARTZ PHYRIC MASS FLOW Blotchy cream-grn qtz+feld sst\gravel as interbedded above. Matrix poor, xl supported. Quartz xls 2-6mm typ. rounded, occ. fract., feld xls comprise 60%, crm-grn, irreg-euhedral, 1-3mm typ. Lithics qf porphyry, bl shale dominated plus vitric mudstone. Irreg chl+-ser clots replace matrix. CONTACT: Conformable mixed, at 45 degrees to Introduction of shale.	Moderately Carbonatised, Slightly Sericitised,	
218.00	224.90	BLACK SHALE INTERBEDDED WITH SANDSTONE CONTAINING INCLUSIONS OF ACID LAVA Carbonaceous shale\sandstone disrupted by qf porphry peperite. Bedding contorted, overprinted. Sediment bleached and silicified by lava. 20-30% of unit is lava frags, irreg, lensoidal clumps of ser and\or chl with abund. coarse qtz and feld xls. CONTACT: Conformable abrupt, at 70 degrees to Visible lithic fragments.	Slightly Carbonatised, Moderately Bleached,	DISSEMINATED, trace pyrite 2% pyrite DISSEMINATED and on FRACTURES. Coarse nodules of pyrite clast controlled in part. Uncommon where strong metm. Remob primary?.
224.90	227.70	SANDSTONE GRADING TO CONGLOMERATE CONTAINING INCLUSIONS OF ACID LAVA Sandstone\congl disrupted by qf porphyry peperite. Bedding cortorted, overprinted. Sediment bleached, silicified by lava. 10% lava fragments as above. Rare lava fragments not ser/chl alt but white, silicified, diffuse margins. CONTACT: Indistinct, at 30 degrees to Marked by pyrite lamination.	Slightly Carbonatised, Slightly Bleached,	DISSEMINATED, trace pyrite 2cm wide coarsely crystalline pyrite LAMINATION.
227.70	230.60	BRECCIA WITH MINOR SANDSTONE Khaki to mid green massive qf porphyry derived breccia and sandstone. Poorly sorted unit of qfp clasts in crystal rich matrix. Rare black shale clasts. Patchy silic/ser. CONTACT: Faulted, at 50 degrees to Rapid grain size reduction.	Moderately Silicified, Slightly Sericitised,	trace DISSEMINATED pyrite and sphal..
230.60	230.90	FAULT ZONE (PUG) Brecciated, veined. Early qtz-chl vng crosscut, fractured by calcite vng.		
230.90	237.90	SANDSTONE WITH MINOR SILTSTONE Grey to khaki fine grained massive vitric sandstone. Rare feld xls and lithic clasts. CONTACT: Faulted, at 45 degrees to	Slightly Carbonatised,	trace calcite-qtz-sphal in VEINLETS. 5% sphal in VEINLET network, some assoc. calcite vng.
237.90	238.30	FAULT ZONE (PUG) Brecciated. Small fault zone with assoc. calcite veining. CONTACT: Faulted,		minor calcite-sphal VEINLETS.
238.30	247.20	SHALE INTERBEDDED WITH SANDSTONE Dark grey laminated silty pyritic shale with 20% pale grey sst interbeds. Sst feld and qtz rich, with qf porphyry, bl shale, fb rhy? clasts. Contorted bedding. Occ ser+coarse qtz clots	Highly Carbonatised, Slightly Silicified,	Coarse to fine crystalline pyrite clots REPLACE matrix in sst beds and about fract. Replace feld in ser-feld-qtz clot.

GRAPHIC



STRUCTURES

- VEIN, 9 45, Carbonate, Breccia,
- VEIN, A 40, Carbonate, Chlorite, Pyrite.
- BEDDING, Contorted
- VEIN, A 45, Carbonate.
- FAULT, A 45, Brittle, Annealed, Carbonate.
- BEDDING, A 26,
- FAULT, Brittle, Slickenlines visible. Little movement.
- FAULT, Brittle, Annealed, Carbonate. Little movement.
- BEDDING, A 28, Contorted.

5 cm

PASMINCO [illegible]LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. BPD8[illegible]

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		Sst feld and qtz rich, with qf porphyry, bl shale, fb rhy? clasts. Contorted bedding. Occ ser+coarse qtz clots as per peperite above. Numerous small faults with calcite vng. CONTACT: Gradational, at 25 degrees to General increase in grain size, similar lith.			BEDDING, A 28, Contorted.
247.20	283.80	SHALE INTERBEDDED WITH SANDSTONE WITH MINOR CONGLOMERATE Very contorted and jostled sequence of carbonaceous pyritic shale(70%)/sst/cong, similar to above. Bedding varies from regular to diffuse and mixed. Lithic clasts of shale, qf porphyry with coarse qtz, and fb rhy? with fine qtz. Rare grading in sst/congl interbeds. Occ ser+coarse quart+feld clots with tenuous boundaries. Freq calcite vng., small faults. No cleavage. CONTACT: Gradational, at 20 degrees to	Highly Carbonatised, Slightly Silicified,	VEIN, 10% calcite-pyrite. minor coarse crystalline pyrite REPLACING matrix of sst/silt laminations and assoc. with small fractures. trace sphal. DISSEMINATED in matrix of sst and assoc. with calcite in VEINLETS.	BEDDING, A 5, Contorted, diffuse. BEDDING, A 24, Contorted. BEDDING, A 5.

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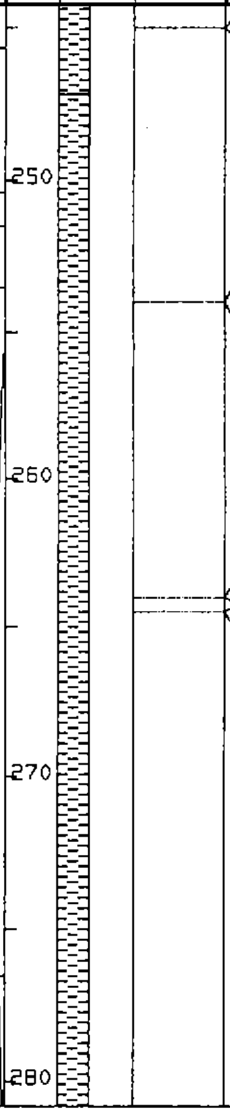

5 cm

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[redacted]

PRSMINCO [redacted]LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. **BPD8[redacted]**

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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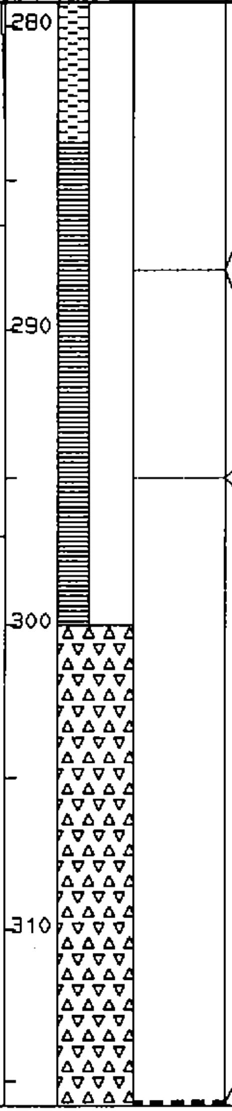
DESCRIPTION					
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
283.80	297.00	BLACK SHALE WITH MINOR SANDSTONE Black carbonaceous pyritic shale and silty shale as above. Bedding and lamination regular and consistent, unlike overlying unit. Minor calcite veining. CONTACT: Gradational, Increasing silicification.	Moderately Carbonatised.	2% pyrite REPLACING laminations in shale. Rarely in or about cross-cutting FRACTURES. Trace associated sphal.	BEDDING, A 30, Orientation more consistent in shale below 280m. BEDDING, A 32, Planer
297.00	300.00	BLACK SHALE CONTAINING INCLUSIONS OF ACID LAVA Black carbonaceous shale disrupted by qf porphyry peperite. Irregular lensoidal clumps of coarse quartz+ser in shale matrix. Sediment bleached and silicified by lava. CONTACT: Gradational,	Highly Silicified, Slightly Carbonatised,		
300.00	339.40	BRECCIA WITH MINOR ACID LAVA Cream to green very coarse grained qf porphry derived hyaloclastic breccia. Coarse angular/jagged blocks set in crystal-glassy-lithic sandstone matrix. Rare jigsaw fit suggests hyaloclastite origin, however most is slightly reworked. Qtz to 5mm, feld to 2mm. Rare fracture fill calcite veining. CONTACT: Gradational,	Slightly Carbonatised, Slightly Silicified,		FAULT, Brittle, Little

GRAPHIC



5 cm

845113

PASMINCO [illegible]PLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. BPDB[illegible]

PROJECT: BURNS PEAK: SUMMIT PROSPECT

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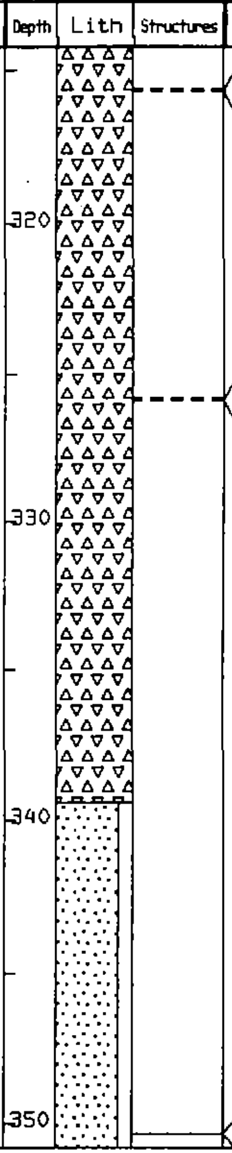
DESCRIPTION				
From	To	LITHOLOGY	ALTERATION	MINERALISATION
339.40	371.80	SANDSTONE GRADING WITH BRECCIA Greeny grey fine grained equivalent of overlying breccia, all qf porphyry derived. More quartz and feldspar crystal sand, less coarse qf porphyry clasts. Common sericitic wisps, probable glassy origin. Common chl clots packed with coarse qtz and feld xls. Sericite alteration patchy, strongest 363.0-365.0m, 367.7-371.8. Occ. carb vng. CONTACT: Faulted, at 30 degrees to	Slightly Silicified. Slightly Sericitised.	

GRAPHIC



STRUCTURES

FAULT, Brittle, Little movement.

FAULT, Brittle, Sericite, Little movement.

BEDDING, A 45,

5 cm

845114

PASMINCO LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

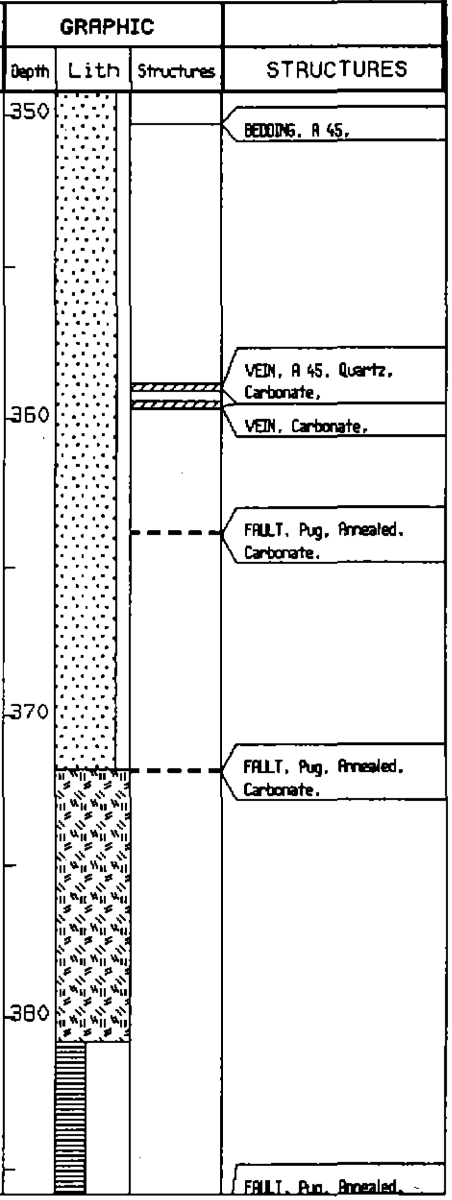
HOLE No. BPD8

PROJECT: BURNS PEAK: SUMMIT PROSPECT

Page 11 of 14

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
371.80	380.80	ACID LAVA WITH MINOR BRECCIA Dark grey to black, coarse grained, evenly porphyritic qf porphry, grading to weak breccia in part. Blotchy silica and chlorite alteration of matrix and feld from 385.7. Perv. weak carb alt. Irreg. quartz-carb vng. CONTACT: Indistinct,	Moderately Silicified, Moderately Chloritised,	
380.80	391.80	BLACK SHALE CONTAINING INCLUSIONS OF ACID INTRUSIVE Mixed black carbonaceous shale and greeny grey very fractured and glassy lava. Basal peperite of qf porphyry intrusion. Fractured qtz xls. Some marginal bleaching. Not as mixed as upper contact. CONTACT: Gradational,	Slightly Silicified, Slightly Bleached,	



5 cm

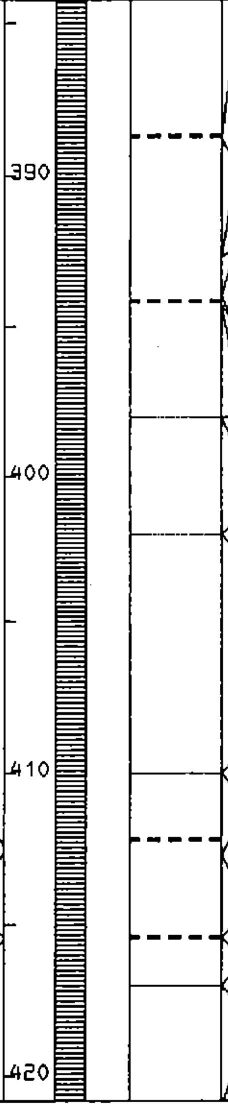
PASMINCO [illegible]LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. **BPD8[illegible]**

PROJECT: BURNS PEAK: SUMMIT PROSPECT

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		as upper contact. CONTACT: Gradational.			FAULT, Pug, Annealed, Carbonate. 20cm of assoc. calc vng and hydro bx. Calcite rims wallrock clasts. Alteration locus. BROKEN CORE, Breccia, Calcite annealed hydro. bx.
391.80	427.40	BLACK SHALE INTERBEDDED WITH SANDSTONE WITH MINOR CONGLOMERATE Pyritic black shale with occasional pale grey medium grained sst and congl. Moderate lamination commonly defined by pyrite, and vary from planer to deformed. Clasts of shale, vitric mudstone, fb rhyolite and feld and qtz xls in conglomerate. Occasional calcite+pyrite veining. Common disseminated pyrite clots. CONTACT: Conformable abrupt, at 45 degrees to LCA.	Moderately Carbonatised.	irreg. calcite-sphal. VEINING, assoc bx of wallrock. pyrite SELVAGE to calcite VEIN.	BROKEN CORE, Breccia, Carbonate, Calcite annealed hydro. bx. FAULT, Brittle, Little movement. BEDDING, A 22, Folded. BEDDING, A 65, Folded. BEDDING, A 45, Folded. FAULT, A 5, Breccia, Annealed, Carbonate. FAULT, Pug. BEDDING, A 15, Folded. BEDDING, A 20, D 31, W.

GRAPHIC



5 cm

PASMINCO [illegible]LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. **BPD8[illegible]**

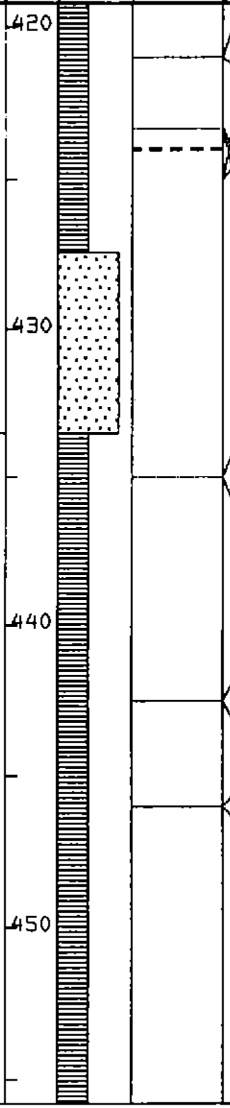
PROJECT: BURNS PEAK: SUMMIT PROSPECT

Page 13 of 14

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
427.40	433.50	SANDSTONE GRADING WITH CONGLOMERATE WITH MINOR BLACK SHALE Creamy grey to dark grey matrix poor sst/congl, with minor intercalated black shale. Clasts siliceous, angular to subrounded, possible single mafic clast.		
433.50	469.70	BLACK SHALE CONTAINING LAMINAE OF SILTSTONE Laminated to massive black shale with rare pale grey siltstone interbeds. Homogeneous to EOH. Occasional fracturing with carbonate veining throughout.		trace pyrite replacing LAMINATIONS and as DISSEMINATED blebs. Rare pyrite-calcite VEINS.

GRAPHIC



STRUCTURES

BEDDING, A 20, D 31, W. Slight bedding defm.

FAULT, A 5, Pug, Annealed, Carbonate.

BEDDING, A 25, D 35, W.

BEDDING, A 65, Orientation more consistent in shale from 434m.

BEDDING, A 47, D 80, N. Accurate reading.

BEDDING, A 65.

5 cm

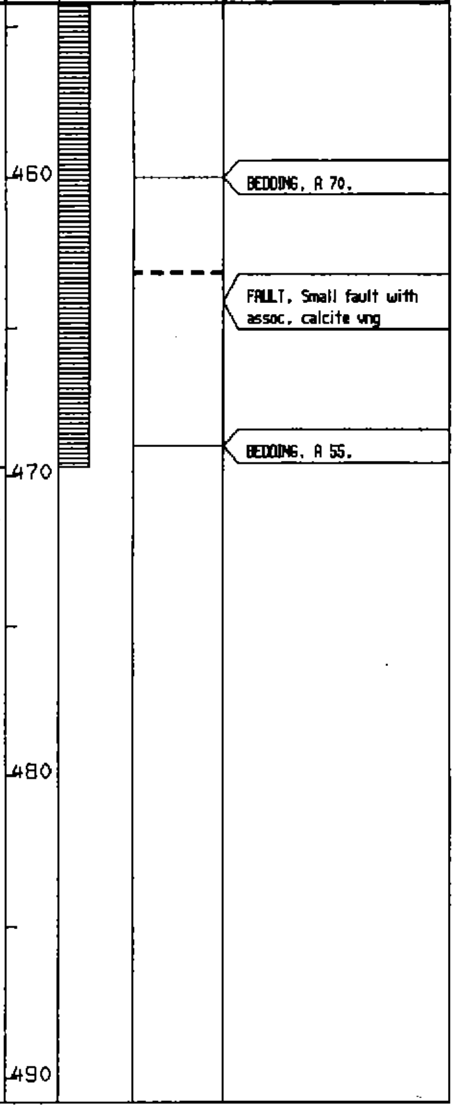
PASMINCO [illegible]LORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 250

HOLE No. **BPD8[illegible]**

PROJECT: BURNS PEAK: SUMMIT PROSPECT

Page 14 of 14

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES



5 cm

845118

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD80

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith	Depth	Rec %	Mag	SG	Formn	Lith	Depth	Rec %	Mag	SG	Formn	Lith
16.70		0.06		SSG	fgl	63.90		0.10		SSG	sst	90.00		0.13		SSG	ss1
21.50		0.05		SSG	sh	65.70		0.09		SSG	sst	91.00		0.05		SSG	ss1
22.70		0.10		SSG	sh	67.30		0.05		SSG	sst	93.80		0.07		SSG	ss1
24.20		0.19		SSG	sh	68.40		0.14		SSG	sst	94.70		0.11		SSG	ss1
25.40			2.26	SSG	sh	70.00		0.19		SSG	sst	97.70		0.09		SSG	ss1
25.70		0.20		SSG	sh	70.30		0.24		SSG	sst	100.70		0.05		SSG	ss1
28.60		0.08		SSG	sh	71.40		0.12		SSG	sst	103.70		0.04		SSG	sl1
29.70		0.07		SSG	sh	72.70		0.18		SSG	sst	105.20			2.72	SSG	sl1
36.20		0.04		SSG	sst	73.40		0.11		SSG	sst	106.70		0.05		SSG	sl1
37.70		0.03		SSG	sst	74.00		0.16		SSG	sst	109.70		0.02		SSG	sl1
39.30		0.02		SSG	sst	75.20		0.12		SSG	sst	112.70		0.04		SSG	ss1
40.70		0.04		SSG	sst	75.90		0.14		SSG	sst	115.70			2.66	SSG	b>
44.80		0.01		SSG	sst	76.90		0.11		SSG	sst	115.70		0.02		SSG	b>
45.80		0.06		SSG	sst	77.80		0.16		SSG	sst	118.70		0.06		SSG	b>
46.70		0.06		SSG	sst	78.60		0.12		SSG	sst	121.70		0.06		SSG	b>
47.20		0.05		SSG	sst	79.20		0.11		SSG	sst	124.70		0.06		SSG	b>
49.70		0.07		SSG	sst	79.70		0.11		SSG	sst	127.70		0.05		SSG	ss1
50.70		0.04		SSG	sst	80.40		0.28		SSG	sst	130.70		0.07		SSG	ss1
51.80		0.20		SSG	sst	81.00		0.33		SSG	sst	133.70		0.06		SSG	ss1
52.00			2.40	SSG	sst	81.50			2.63	SSG	sst	136.40		0.05		SSG	ss1
52.70		0.08		SSG	sst	82.20		0.12		SSG	sst	137.40		0.08		SSG	1
53.40		0.04		SSG	sst	84.30		0.10		SSG	sst	139.70		0.10		SSG	1
54.00		0.06		SSG	sst	85.20		0.12		SSG	sst	142.70		0.09		SSG	1
55.00		0.05		SSG	sst	86.60		0.09		SSG	sst	145.70		0.04		SSG	1
56.10		0.05		SSG	sst	87.40		0.11		SSG	sst	148.70		0.08		SSG	1
58.50		0.10		SSG	sst	88.00		0.10		SSG	sst	151.70		0.10		SSG	1
59.30		0.05		SSG	sst	88.80		0.11		SSG	sst	154.00			2.70	SSG	1
61.80		0.12		SSG	sst	89.50		0.07		SSG	sst	154.70		0.09		SSG	1

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD80

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
157.70		0.07		SSG	t
160.70		0.08		SSG	t
163.40		0.09		SSG	t
166.50		0.03		SSG	t
169.60		0.03		SSG	pmf
170.90		0.08		SSG	slt
172.70		0.08		SSG	slt
175.30		0.24		SSG	fz
178.40		0.07		SSG	fz
181.40		0.05		SSG	fz
184.20		0.11		SSG	sh
187.30		0.10		SSG	sh
190.40		0.10		SSG	sh
193.50		0.17		SSG	slt
196.30		0.09		SSG	slt
196.70		0.11		SSG	slt
199.10			2.67	SSG	slt
199.70		0.05		SSG	slt
202.70		0.08		SSG	slt
205.70		0.11		SSG	sst
208.70		0.09		SSG	sst
209.40			2.71	SSG	sst
211.70		0.10		SSG	sst
214.70		0.15		SSG	qpm
217.70		0.08		SSG	qpm
220.70		0.09		SSG	bsh
223.70		0.10		SSG	bsh
226.70		0.11		SSG	sst
229.70		0.04		SSG	bx
232.70		0.02		SSG	sst
235.70			2.69	SSG	sst
235.70		0.05		SSG	sst
238.70		0.11		SSG	sh
241.70		0.09		SSG	sh
244.70		0.12		SSG	sh
247.70		0.11		SSG	sh
250.70		0.09		SSG	sh
253.70		0.02		SSG	sh
256.70		0.05		SSG	sh
259.70		0.10		SSG	sh
262.70		0.07		SSG	sh
263.00			2.73	SSG	sh
265.70		0.02		SSG	sh
268.70		0.03		SSG	sh
271.70		0.06		SSG	sh
274.70		0.09		SSG	sh
277.70		0.02		SSG	sh
280.70		0.23		SSG	sh
283.70		0.05		SSG	sh
286.70		0.12		SSG	bsh
289.70		0.15		SSG	bsh
292.70			2.79	SSG	bsh
292.70		0.10		SSG	bsh
294.00		0.08		SSG	bsh
295.70		0.09		SSG	bsh
298.70		0.07		SSG	bsh
301.70		0.03		SSG	bx
304.70		0.18		SSG	bx
307.70		0.03		SSG	bx
310.70		0.05		SSG	bx
313.70		0.04		SSG	bx
316.70		0.10		SSG	bx
319.70		0.05		SSG	bx
322.70		0.08		SSG	bx
325.70		0.03		SSG	bx
328.70		0.02		SSG	bx
331.70		0.04		SSG	bx
334.70		0.03		SSG	bx
337.70		0.09		SSG	bx
340.70		0.06		SSG	sst
343.70		0.06		SSG	sst
346.70		0.04		SSG	sst
349.70		0.04		SSG	sst
352.70		0.10		SSG	sst
355.70		0.01		SSG	sst
358.70		0.06		SSG	sst
361.70		0.05		SSG	sst
364.70		0.06		SSG	sst
367.70		0.04		SSG	sst
370.70		0.07		SSG	sst
373.70		0.05		SSG	La
376.70		0.02		SSG	La
379.70		0.02		SSG	La
381.40		0.03		SSG	bsh

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole ID
BPD80

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
382.60			2.64	SSG	bsh
382.70		0.03		SSG	bsh
385.70		0.02		SSG	bsh
388.70		0.05		SSG	bsh
391.70		0.05		SSG	bsh
394.70		0.12		SSG	bsh
397.70		0.11		SSG	bsh
400.70		0.08		SSG	bsh
403.70		0.13		SSG	bsh
406.70		0.07		SSG	bsh
409.70		0.11		SSG	bsh
412.70		0.09		SSG	bsh
415.70		0.13		SSG	bsh
418.70		0.07		SSG	bsh
421.70		0.06		SSG	bsh
424.70		0.07		SSG	bsh
427.70		0.03		SSG	sst
430.70		0.05		SSG	sst
433.70		0.06		SSG	bsh
436.70		0.07		SSG	bsh
439.70		0.04		SSG	bsh
440.20			2.79	SSG	bsh
440.60		0.07		SSG	bsh
442.70		0.10		SSG	bsh
445.70		0.07		SSG	bsh
448.70		0.09		SSG	bsh
451.70		0.11		SSG	bsh
454.70		0.13		SSG	bsh

Depth	Rec %	Mag	SG	Formn	Lith
457.70		0.09		SSG	bsh
460.70		0.10		SSG	bsh
462.70		0.13		SSG	bsh
463.70		0.15		SSG	bsh
466.70		0.08		SSG	bsh
469.70		0.10		SSG	bsh

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole ID
BPD80

ASSAY RESULTS

From	To	Samp	Int	Cu	Pb	Zn	Ag	Au	Fe	Ba	As	Mn
64.00	65.00	35865	1.0	11	542	946	<1					
65.00	66.00	35866	1.0	13	967	2314	<1					
66.00	67.00	35867	1.0	11	639	2903	<1					
67.00	68.00	35868	1.0	15	890	1812	<1					
150.00	151.00	35869	1.0	10	64	204	<1					
151.00	152.00	35870	1.0	10	153	284	<1					
152.00	153.00	35871	1.0	22	258	818	<1					
153.00	154.00	35872	1.0	6	123	292	<1					
154.00	155.00	35873	1.0	6	93	219	<1					
155.00	156.00	35874	1.0	6	163	458	<1					
156.00	157.00	35875	1.0	4	138	418	<1					
157.00	158.00	35876	1.0	6	157	740	<1					
228.00	230.00	35877	2.0	5	166	430	<1					
230.00	232.00	35878	2.0	6	261	1274	<1					
232.00	234.00	35879	2.0	7	284	1216	<1					
234.00	236.00	35880	2.0	10	141	492	<1					
236.00	238.00	35881	2.0	8	135	681	<1					
238.00	240.00	35882	2.0	49	473	4575	<1					
240.00	242.00	35883	2.0	46	23	113	<1					
242.00	244.00	35884	2.0	61	633	1789	<1					
244.00	246.00	35885	2.0	47	136	648	<1					
246.00	248.00	35886	2.0	38	180	888	<1					
248.00	250.00	35887	2.0	31	25	117	<1					
250.00	252.00	35888	2.0	28	179	526	<1					
252.00	254.00	35889	2.0	38	14	90	<1					
254.00	256.00	35890	2.0	30	205	727	<1					
256.00	258.00	35891	2.0	28	235	845	<1					
258.00	260.00	35892	2.0	17	1267	6700	<1					
260.00	262.00	35893	2.0	16	1404	4459	<1					
262.00	264.00	35894	2.0	24	63	273	<1					
264.00	266.00	35895	2.0	38	851	2783	<1					
266.00	268.00	35896	2.0	48	2088	8400	2.0					
268.00	270.00	35897	2.0	26	354	889	<1					
270.00	272.00	35898	2.0	33	169	419	<1					
272.00	274.00	35899	2.0	44	169	464	<1					
274.00	276.00	35900	2.0	50	1169	3172	2.0					
276.00	278.00	37801	2.0	45	442	1225	<1					
278.00	280.00	37802	2.0	45	17	116	<1					
280.00	282.00	37803	2.0	28	594	1958	<1					
282.00	284.00	37804	2.0	27	446	1454	<1					
284.00	286.00	37805	2.0	63	878	6700	2.0					
286.00	288.00	37806	2.0	77	1890	9100	3.0					
288.00	290.00	37807	2.0	105	3151	10700	4.0					
290.00	292.00	37808	2.0	65	792	2864	2.0					
292.00	294.00	37809	2.0	86	200	473	<1					
294.00	296.00	37810	2.0	44	3471	14900	5.0					
296.00	298.00	37811	2.0	28	1648	8600	2.0					
298.00	300.00	37812	2.0	13	824	2672	1.0					
390.00	392.00	37813	2.0	20	110	452	<1					
392.00	394.00	37814	2.0	58	409	1800	<1					
394.00	396.00	37815	2.0	1414	87	442	<1					
396.00	398.00	37816	2.0	59	67	237	<1					
398.00	400.00	37817	2.0	49	35	153	<1					
400.00	402.00	37827	2.0	51	61	255	<1					
402.00	404.00	37818	2.0	57	34	170	<1					
404.00	406.00	37819	2.0	65	33	183	<1					

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole ID
BPD80

ASSAY RESULTS

From	To	Samp	Int	Cu	Pb	Zn	Ag	Au	Fe	Ba	As	Mn
406.00	408.00	37820	2.0	62	37	180	<1					
408.00	410.00	37821	2.0	69	45	184	<1					
410.00	412.00	37822	2.0	46	124	414	<1					
412.00	414.00	37823	2.0	74	340	1585	<1					
414.00	416.00	37824	2.0	66	74	198	<1					
416.00	418.00	37825	2.0	66	114	328	<1					
418.00	420.00	37826	2.0	56	46	130	<1					

APPENDIX 7

BPD81 Drill Log

845124

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD81

DRILLING

Location	EL44/88 BURNS PEAK
Project	BURNS PEAK
Prospect	BROWN'S TUNNEL
Design By	R.A.Poltock
Logged By	R.A.Poltock
Relogged	
Commenced	28/3/1994
Completed	26/4/1994
Drilled By	EAST COAST DRILLING
Drill Rig	LONGYEAR 38

OBJECTIVE

An along strike test (100m to south) of the copper rich stringer and massive pyrite zones intersected in BPD78 (EAF section 5300N). In addition the hole was designed to test the interpreted synclinal structure and the Pinnacles Shear Zone.

RESULT

A thicker than expected Brown's Tunnel host sequence (245m) was intersected under a relatively thin hanging wall Pinnacles Rhyolite (128.7). 0.7m of massive sphalerite chalcopyrite was intersected, this lense is underlain by sericite carbonate altered pumice breccias and sitstones with broad intervals of sub-economic zinc mineralization.

COLLAR SURVEY (AMG)

AMG mN	5384590.9	**Bearing**	102.0
AMG mE	377419.5	**Dip**	-50.0
mN	5200.0	**Hole Length**	421.6
mE	4665.0	**DH Survey Type**	Eastman single
RL	426.6		

DOWNHOLE SURVEY (AMG)

Depth	Bearing	Dip
0.0	-50.00	102.00
50.0	-50.50	101.00
100.0	-49.50	102.00
150.0	-49.00	107.00
200.0	-46.00	113.00
250.0	-45.00	116.00
300.0	-44.00	118.00
350.0	-43.00	119.00
400.0	-41.00	120.00

SIGNIFICANT CORE LOSS

From	To	Loss

POOR GROUND CONDITION ZONES

From	To	Condition
65	67	Broken ground.
249	251	Broken ground.

HOLE SIZE

From	To	Size
0	39	HQ
39	421.6	NQ

HOLE CONDITIONS AFTER COMPLETION

Collar	0-3m HW casing.
Steel Casing	0-3m HW casing.
PVC Casing	0 - 421.60m.
Ground Water	Nil
Wedge	Nil
Drill Pad	On logging track, not rehabilitated.

SIGNIFICANT INTERSECTIONS

From	To	Int	Cu	Pb	Zn	Ag	Au	Comments
203.60	209.90	6.30		0.36	1.66			Massive carbonate chlorite lens.
225.30	226.00	0.70	2.09	1.42	19.40	9	0.1	Massive sphalerite with chalcopyrite stringers.

845125

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
0.00	12.30	ACID VOLCANICLASTIC Cream, Orange, Fine grained, Medium grained, Core very weathered (friable) and broken. Abundant fine grained quartz grains. Due to intensity of weathering it is not possible to determine if it is a volcaniclastic or lava breccia. CONTACT: Gradational,	Moderately Oxidised, Slightly Silicified. Slightly Sericitised. Very weathered.		0 10			
12.30	15.00	ACID VOLCANICLASTIC Grey, Cream, Fine grained, Medium grained, Massive, Core broken. Silicification associated with quartz veining and sericitization. May be a quartzose volcaniclastic or lava breccia. CONTACT: Gradational,	Moderately Oxidised, Moderately Silicified.					
15.00	22.20	ACID VOLCANICLASTIC Cream, Medium grained, Massive, Blocky, Quartz phyric, Matrix sericitized with abundant quartz grains (<2mm). Block outlines are poorly defined due to weathering and alteration, blocks (<50mm) may be pumice or very finely flow banded rhyolite. CONTACT: Gradational,	Slightly Oxidised, Moderately Sericitised.		20			BEDDING. A 45. Could be bedding or flow banding.
22.20	32.10	ACID VOLCANICLASTIC Cream, Yellow, Medium grained, Foliated, Blocky, Quartz phyric, Feldspar phyric, Lithic, Feldspar crystals occasionally replaced by pyrite. Trace of pyrite throughout the interval. CONTACT: Faulted,	Moderately Oxidised. Moderately Sericitised.	DISSEMINATED. trace pyrite Associated with sericitization and replacing feldspar crystals..				

5 cm

S45126

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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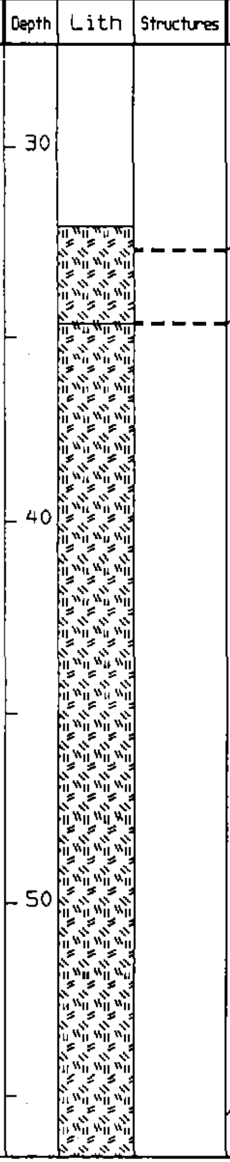
DESCRIPTION					STRUCTURES
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
32.10	34.60	ACID LAVA Cream, Green, Fine grained, Flow brecciated, Quartz phyric, CONTACT: Gradational, Contact faulted.	Slightly Oxidised, Slightly Sericitised.		FAULT, A 30, Pug.
34.60	72.00	ACID LAVA Brown, Pink, Fine grained, Massive, Porphyritic, Quartz phyric, Feldspar phyric, Phenocrysts <2mm, feldspars sericitized. Rhyolite locally stipled, probably feldspar crystals associated with devitrification. From 58.20-72.00m stockwork of fine quartz veinlets. CONTACT: Faulted,	Slightly Oxidised.		FAULT, A 30, Pug. BROKEN CORE.

GRAPHIC



5 cm

845127

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

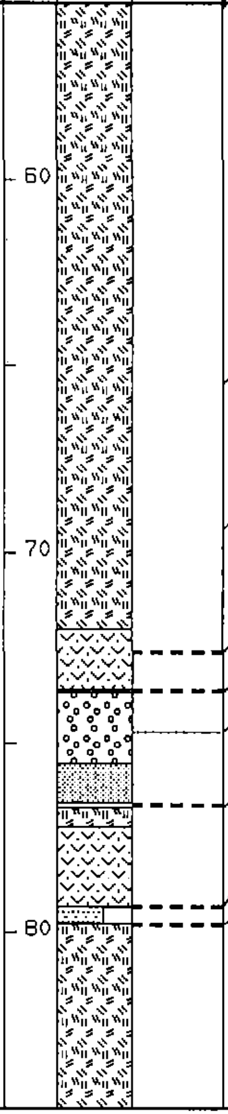
HOLE No. **BPD81**

PROJECT: BURNS PEAK

DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
72.00	73.60	PUMICEOUS MASS FLOW Grey, Pink, Medium grained, Core very broken. Minor quartz veins. CONTACT: Faulted,		
73.89	79.65	FAULT ZONE (PUG)		
		CONGLOMERATE MIXED WITH SILTSTONE MIXED WITH SANDSTONE Grey, Grey, Coarse grained, Fine grained, Bedded, Mass debris flow conglomerate with matrix and interbeds of grey to cream siltstone and crystal sandstone. Clasts in conglomerate to 10cm diameter of slightly fuchsite altered intermediate?, feldspar phyric, amygdaloidal lava? CONTACT: Conformable abrupt,	Moderately Sericitised, Moderately Silicified,	
75.55	76.55	CHERT Grey, Brecciated, May be silicified siltstone. Contains abundant sericite and carbonate veinlets. CONTACT: Faulted,		
76.55 76.70	76.70 77.20	FAULT ZONE (PUG) Crush and pug zone at 10 LCA. CONTACT: Faulted,		
77.20	79.30	ACID LAVA Fine grained, Amygdales, Amygdales quartz filled. CONTACT: Faulted,	Highly Bleached, Kaolinized?	
79.30	79.75	PUMICEOUS MASS FLOW Grey, Pink, Medium grained, Feldspar phyric, Galena and sphalerite replace some feldspar crystals. CONTACT: Faulted,		
79.75	85.55	SILTSTONE White, Fine grained, Bleached and clay altered, adjacent to fault zone.		

GRAPHIC



STRUCTURES

- BROKEN CORE,
- BROKEN CORE,
- BROKEN CORE,
- FAULT, Brittle,
- FAULT, Pug,
- BEDDING, A 30,
- FAULT, A 10, Pug,
- FAULT, Pug,
- FAULT, A 40,

5 cm

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PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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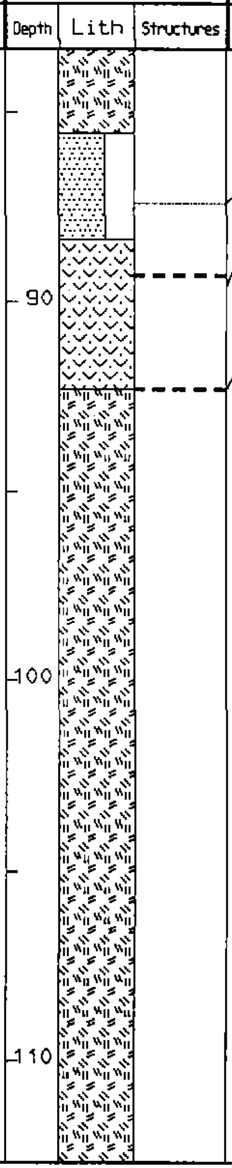
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		SILTSTONE White, Fine grained, Bleached and clay altered, adjacent to fault zone. CONTACT: Faulted,			
		ACID LAVA Brown, Pink, Fine grained, Massive, Brecciated, Quartz phyric, Feldspar phyric, Phenocrysts <3mm. Possible amygdaloidal mafic xenoliths at 81.75, 82.00 and 83.10m. Bleached zone between 79.75 - 80.70m. Crackle / hydrothermal brecciation between 84.00-85.35m. CONTACT: Conformable abrupt,	Slightly Sericitised, Slightly Silicified,		
85.55	88.35	SILTSTONE INTERBEDDED WITH SILTSTONE INTERBEDDED WITH SANDSTONE Grey, Fine grained, Fine grained, Massive, Laminated, Crystal, Siltstone slightly silicified and pyritic. Sandstone sericitized with clasts of carbonitized and fuchsite altered lava at 86.60m. CONTACT: Conformable abrupt,			BEDDING, A 30,
88.35	92.30	PUMICEOUS MASS FLOW Grey, Coarse grained, Massive, Aphyric, Patchy silica sericite alteration with disseminated pyrite and quartz carbonate sphalerite veinlets. CONTACT: Faulted,			FAULT, A 10, Shear, Sericitized shear at 0-20LCA.
92.30	128.70	ACID LAVA Cream, Green, Massive, Flow banded, Feldspar phyric, Quartz phyric, Phenocrysts <3mm. Weak flow banding at 92.80m. Chilled glassy margin between 128.50-128.70m altered to sericite (feldspars carbonatized). CONTACT: Conformable abrupt,			FAULT, A 30, Shear, Sericitized.

GRAPHIC



5 cm

845129

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

5 cm

HOLE No. BPD81

PROJECT: BURNS PEAK

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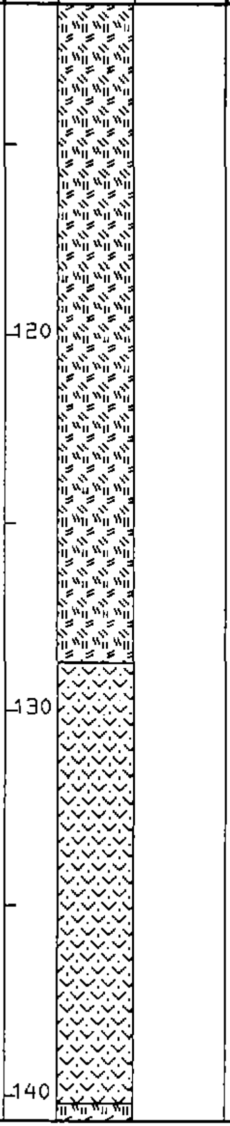
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
128.70	140.20	PUMICEOUS MASS FLOW Cream, Pink, Coarse grained, Foliated, Feldspar phyric, Feldspar crystals carbonatized and in some cases replaced by sulfides. CONTACT: Conformable abrupt,	Moderately Sericitised. Slightly Carbonatised. Feldspar crystals carbonatized.		
140.20	142.00	ACID LAVA Cream, Pink, Fine grained, Massive, Quartz	Moderately Sericitised.		

GRAPHIC



845100

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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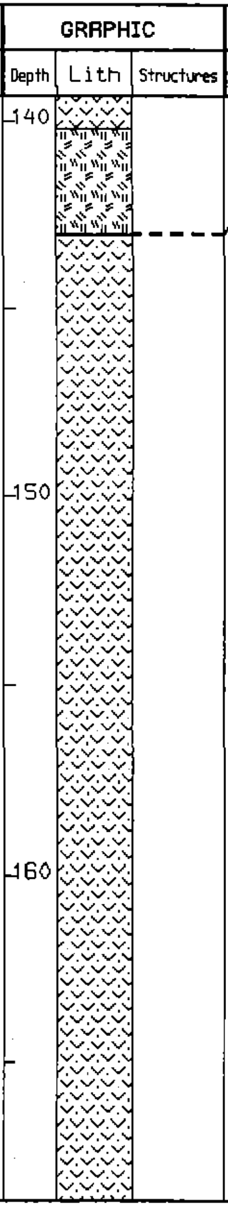
DESCRIPTION					STRUCTURES
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
140.20	143.00	ACID LAVA Cream, Pink, Fine grained, Massive, Quartz phyric, Feldspar phyric, Phenocrysts <3mm. Feldspars carbonaitized. CONTACT: Faulted,	Moderately Sericitised, Moderately Carbonatised. Pervasive pink manganiferous carbonatization plus cream carbonitization of feldspars.		
143.00	199.60	FAULT ZONE (PUG) Sericitized and quartz veined. PUMICEOUS MASS FLOW Pink, Cream, Medium grained, Foliated, Pumiceous, Feldspar phyric, Some sericite patches may be stylolites rather than pumice fragments. Scattered fine grained cream clasts occur between 156 - 170m. A lens or block of fine grained rock occurs between 178.4 - 178.7m. CONTACT: Conformable abrupt,			FAULT. A 20, Sericitized and quartz veined.



5 cm

845131

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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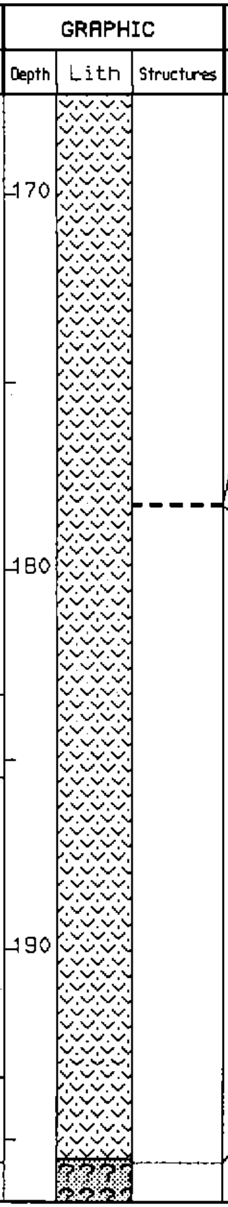
DESCRIPTION					STRUCTURES
From	To	LITHOLOGY	ALTERATION	MINERALISATION	
			Highly Sericitised, Sericitization overprint in shear zone.		
			Moderately Sericitised, Moderately Carbonatised, Pervasive pink manganiferous carbonatization.		BROKEN CORE, Increased sericitization and foliation. FAULT, D 35, Crush zone.
			Intensely Chloritised.	DISSEMINATED, 2% pyrite	
			Slightly Chloritised, Slightly Sericitised, Moderately Silicified,	DISSEMINATED, 5% pyrite	
		5 cm	Intensely Chloritised,	DISSEMINATED, 10% pyrite Pyrite disseminated to semimassive. Cubic..	
195.50	202.60	CHERT Grey, Fine grained, Massive, Massive to weakly bedded. Abundant disseminated and semimassive pyrite	Intensely Sericitised.	DISSEMINATED, 1% pyrite	BEDDING, A 33,



845132

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. BPD81

PROJECT: BURNS PEAK

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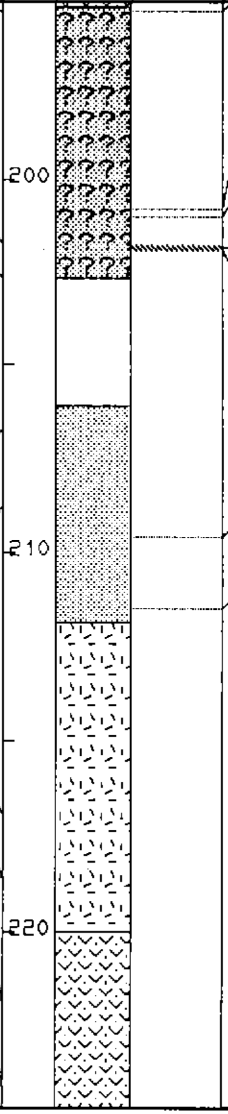
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
195.50	202.60	CHERT Grey, Fine grained, Massive, Massive to weakly bedded. Abundant disseminated and semimassive pyrite (200.9m). CONTACT: Conformable abrupt, MIXED WITH UNASSIGNED Yellow, Green, Fine grained, Feldspar phyric, Intensely sericitized, flecked with fine feldspar crystals? Abundant disseminated pyrite. ALTERATION ZONE Green, Cream, Fine grained, Massive to irregularly banded. Cream to pink carbonate flecked with dark green chlorite. Disseminated fine grained cream sphalerite and veinlet chalcopyrite. CONTACT: Conformable abrupt,	Intensely Sericitised. Slightly Silicified. Slightly Chloritised. Intensely Chloritised.	DISSEMINATED, 1% pyrite DISSEMINATED, 5% pyrite	BEDDING, A 33. BEDDING, D 65, Sericitized. BEDDING, D 67, Sericitized. FIRST CLEAVAGE, D 58.
202.60	206.10	MIXED WITH ALTERATION ZONE Minor but intense sericitization. MASS FLOW Grey, Yellow, Medium grained, Poorly sorted, Lithic, Clasts to 40mm and include massive fine grained carbonate. CONTACT: Conformable abrupt,	Intensely Carbonatised. Moderately Chloritised. Massive carbonate zone.	MASSIVE, carbonate trace chalcopyrite disseminated, trace galena disseminated, trace sphalerite disseminated. Massive to semimassive fine grained carbonate intergrown with fine grained chlorite. Irregular blotchy texture. Could be the lateral equivalent of a massive sulfide lens..	FIRST CLEAVAGE, D 70.
206.10	211.85	INTERBEDDED WITH MASS FLOW Grey, Yellow, Coarse grained, Crystal, Polymict, Clasts include fine grained cherty mudstone, fine grained massive sphalerite (208.75m) and massive silica pyrite (209.75m). WITH MINOR CHERT Grey, Fine grained, Siliceous mudstone.	Intensely Sericitised. Slightly Chloritised. Moderately Sericitised.	DISSEMINATED. 5% sphalerite sphalerite in veinlets, Sphalerite cream to black. 208.74-208.77 massive sphalerite clast?. DISSEMINATED, 2% pyrite	BEDDING, A 40. BEDDING, A 65.
211.85	220.00	INTERMEDIATE LAVA Cream, Green, Fine grained, Massive, Amygdales, Amygdales of carbonate chlorite. CONTACT: Faulted, WITH MINOR ALTERATION ZONE Fine grained carbonate.	Highly Carbonatised. Slightly Fuchsitic. Fuchsite replacing feldspar phenocrysts. Moderately Carbonatised. Slightly Fuchsitic.	STRINGER, trace chalcopyrite VEIN, sphalerite pyrite	
220.00	243.40	PUMICEOUS MASS FLOW Cream, Grey, Medium grained, Massive, Lithic, Feldspar phyric, Interval is intensely altered and pumice fragments are the only discernable texture preserved in the matrix. Clasts include massive pyrite (224.7m), massive carbonate/sphalerite/pyrite (225.1-225.15m), massive sphalerite/chalcopyrite (225.32-225.38m and 225.60-225.97m), pyritic siltstone (223.4m) and fine grained silica/pyrite (223.85m).	Moderately Sericitised. Slightly Silicified. Slightly Carbonatised. Moderately Carbonatised. Slightly Sericitised.	DISSEMINATED; trace sphalerite trace chalcopyrite Disseminated and veinlet.. CLAST, pyrite CLAST, carbonate Clast? with trace pyrite>chalcopyrite>sphalerite.. CLAST, 20% sphalerite massive. 5%	

GRAPHIC



5 cm

845133

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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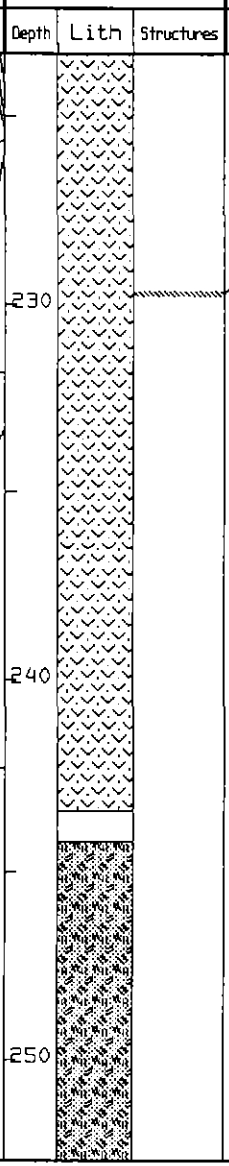
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		(225.1-225.15m), massive sphalerite/chalcopyrite (225.32-225.38m and 225.60-225.97m), pyritic siltstone (232.4m) and fine grained silica/pyrite (233.85m). CONTACT: Conformable abrupt,	Moderately Carbonatised, Slightly Sericitised, Moderately Sericitised, Slightly Silicified, Moderately Carbonatised, Slightly Sericitised, Pink manganiferous carbonate veins. Feldspar phenocrysts carbonatized. Moderately Sericitised, Slightly Silicified, Sulphides replacing feldspar phenocrysts.	CLAST, 20% sphalerite massive, 5% chalcopyrite as stringers, Irregular texture.. CLAST, 20% sphalerite massive, 5% chalcopyrite as stringers, Irregular texture.. DISSEMINATED, 2% sphalerite disseminated, trace chalcopyrite disseminated, trace galena disseminated, STRINGER, 1% sphalerite in veinlets, 1% galena in veinlets, trace chalcopyrite in veinlets, STRINGER, 5% sphalerite as stringers. 1% galena as stringers, Sulfides occur as discontinuous veinlets and replacing feldspar phenocrysts..	FIRST CLEAVAGE, 0 85.
243.40	244.20	MASS FLOW Cream, Yellow, Medium grained, Poorly sorted, Matrix supported, Lithic, Quartz phyric, Clasts mainly fine grained silicified, may be siltstone/chert or lava.		DISSEMINATED, 1% pyrite disseminated, trace sphalerite in veinlets,	
244.20	255.90	ACID LAVA Cream, Grey, Fine grained, Peperitic, Feldspar phyric, MIXED WITH CHERT Grey, Fine grained, CONTACT: Faulted,	Slightly Carbonatised, Slightly Sericitised, Slightly Silicified, Silicified peperite matrix.		

GRAPHIC



5 cm

845134

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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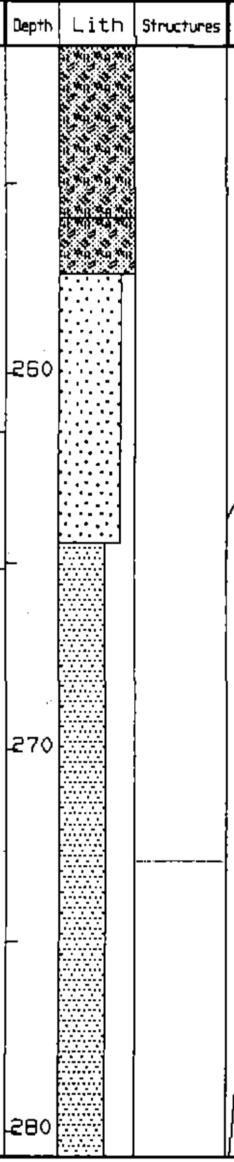
DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
255.90	257.40	ACID LAVA Cream, Fine grained, Peperitic, Quartz phyric, CONTACT: Gradational, MIXED WITH CHERT			
257.40	264.50	SANDSTONE Grey, Brown, Fine grained, Massive, Feldspar phyric, CONTACT: Gradational, MIXED WITH MASS FLOW Grey, Medium grained, Lithic, Feldspar phyric, Sandstone mass debris flow. Clasts of fine grained quartz feldspar phyric felsic volcanic.		VEIN, 2% galena trace chalcopyrite in veins, Fault zone with hydraulic fracturing, breccia matrix quartz carbonate galena veined..	BROKEN CORE, Pug zone 263.50-263.60m
264.50	281.80	MASS FLOW Grey, Cream, Medium grained, Massive, Crystal, Lithic, Crystals feldspar > quartz. Lithics felsic volcanic, sericitized glass? and quartz feldspar porphyry. CONTACT: Conformable abrupt, Erosional CONTAINING CLASTS OF SILTSTONE Grey, Fine grained, Bedded, Rafts of black siltstone and laminated grey fine grained feldspathic sandstone.		STRINGER, trace sphalerite Veinlets best developed in black and vitric siltstone beds. Massive fine grained pyrite lens at 279.95m..	PRIMARY FABRIC, Younging uphole, Mass debris flow unit facing uphole. Base predominantly ripup clasts of siltstone.

GRAPHIC



5 cm

845135

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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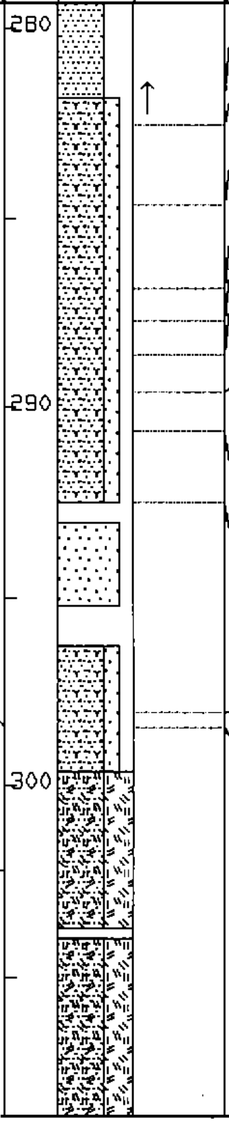
DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION
281.80	292.50	SILTSTONE Grey, Vitric, CONTACT: Faulted, Fault plane 70LCA. INTERBEDDED WITH SANDSTONE Cream, Fine grained, Feldspar phyric, MASS FLOW Cream, Coarse grained, Lithic, Matrix siltstone, clasts sericitized quartz feldspar phyric lava and quartz feldspar porphyry. CONTACT: Faulted,		
292.50	293.00	SANDSTONE Cream, Fine grained, Bedded, Vitric,		
293.00	295.20	MASS FLOW Cream, Coarse grained, Lithic, Matrix sandstone, rip up clasts of siltstone and quartz feldspar porphyry blocks. CONTACT: Faulted,		
295.20	296.30	SILTSTONE Cream, Fine grained, Vitric, This unit and it's relationship with adjacent lithologies is very similar to that between 270 - 278m. This repetition may explained by an anticline, vitric siltstone between 281.8 - 292.5m are in the fold closure. CONTACT: Conformable abrupt,		
296.30	299.65	INTERBEDDED WITH SANDSTONE Cream, Crystal, WITH MINOR SILTSTONE Black,		DISSEMINATED, 1% pyrite 5% sphalerite as stringers, Pyrite disseminated and in semimassive lenses. Sphalerite in quartz carbonate veinlets..
299.65	303.70	ACID LAVA Cream, Fine grained, Peperitic, Feldspar phyric, Quartz phyric, MIXED WITH SILTSTONE Grey, Fine grained, Peperitic, Siltstone in peperite is silicified but thicker lenses are unaltered.	Moderately Sericitised, Slightly Silicified. Slightly Silicified, Slightly Sericitised.	MASSIVE, 5% pyrite 2% sphalerite in veinlets, Narrow pyrite lenses..
303.70	304.00	MINERALISATION ZONE Semimassive pyrite with black siltstone and disseminated sphalerite.	Moderately Silicified, Moderately Sericitised, Silicified peperite matrix, Sericitized clasts.	
304.00	310.60	ACID LAVA Cream, Fine grained, Peperitic, Feldspar phyric, Quartz phyric,		

GRAPHIC



STRUCTURES
predominantly ripup clasts of siltstone.
BEDDING, D 60,
BEDDING, D 60,
BEDDING, D 55,
BEDDING, D 65,
BEDDING, D 55, Vitric siltstone/sandstone, grading may indicate above hole facing/younging. ie bedding at 0 LCA and drill hole in same west dipping plane as bedding.
BEDDING, D 45, Bedded vitric siltstone and sandstone, grading may indicate facing/younging above hole. ie drilling down dip.
BEDDING, D 20, Vitric siltstone.
BEDDING, D 45, Vitric siltstone.
BEDDING, D 30,
BEDDING, D 37,

5 cm

845136

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

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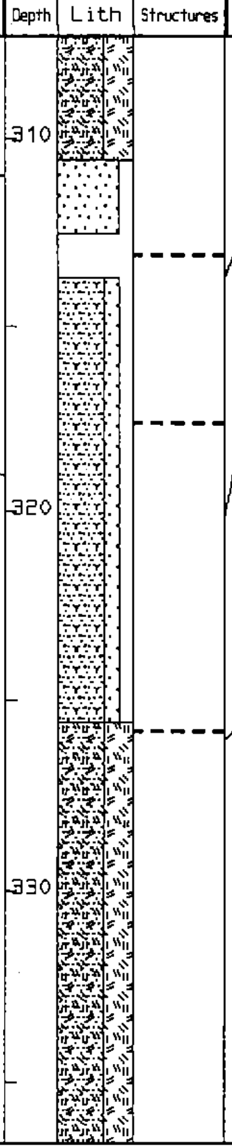
DESCRIPTION

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		phyric, Quartz phyric,			
		MIXED WITH SILTSTONE			
310.60	312.50	SANDSTONE Cream, Fine grained, Vitric, CONTACT: Faulted,		VEIN, 0.5% sphalerite Scattered vein and blebby sphalerite..	
		MIXED WITH SANDSTONE Grey, Green, Medium grained, Abundant fine chloritic fragments, glass or mafics?			
312.50	313.70	FAULT ZONE (PUG) Shear zone in mixed siltstone and sandstone.			FAULT, Shear, Shear in siltstone sandstone. Crush zone at 313m.
313.70	325.60	SILTSTONE Cream, Grey, Laminated, Vitric,			
		WITH MINOR SANDSTONE Coarse grained, Lithic,		VEIN, trace sphalerite Carbonate quartz sphalerite vein 10mm at 0 LCA..	FAULT, Fault zone partially healed with quartz/chlorite/carbonate/sphalerite veining. 319m fault orientation 284.80 (AMG). 319.8m fault orientation 122.85(AMG).
325.60	338.35	ACID LAVA Grey, Pink, Fine grained, Peperitic, Quartz phyric, Feldspar phyric, Porphyry with variable texture, massive with fine grained unaltered groundmas/ wragged fine grained pink fragments/sericitized (after glass). CONTACT: Gradational,			FAULT, A 20.
		MIXED WITH SILTSTONE Grey, Fine grained, Peperitic,			

GRAPHIC



5 cm

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. BPD81

PROJECT: BURNS PEAK

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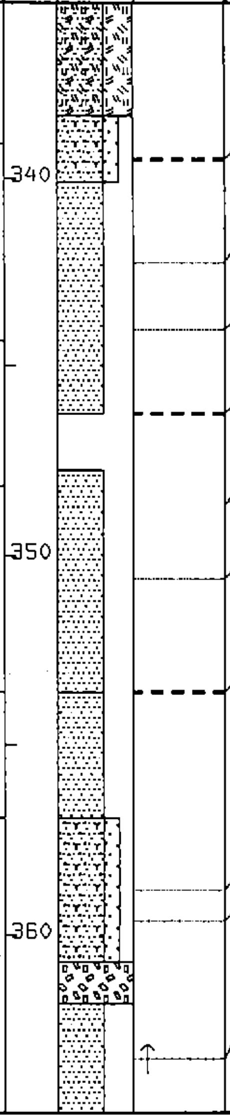
DESCRIPTION					STRUCTURES
From	To	LITHOLOGY	ALTERATION	MINERALISATION	
338.35	340.10	SILTSTONE Cream, Fine grained, Bedded, Vitric, MIXED WITH SANDSTONE Cream, Fine grained,	Moderately Siticified,	STRINGER, 2% sphalerite	FAULT, A 30, Pug,
340.10	346.30	SILTSTONE Grey, Fine grained, Laminated, Abundant quartz carbonate veinlets. Massive pyrite lenses between 344.3-344.4m. CONTACT: Faulted,		DISSEMINATED, 5% pyrite 0.5% sphalerite in veinlets,	BEDDING, D 78, BEDDING, D 75,
346.30	347.80	MASS FLOW Cream, Grey, Coarse grained, Lithic, Clasts of cream fine grained felsic and sericitized pumice. Matrix pyritic.	Moderately Sericitised, Slightly Silicified,		FAULT, A 30,
347.80	353.60	SILTSTONE Grey, Laminated, Abundant veinlets. CONTACT: Faulted,		STRINGER, 2% sphalerite trace galena in veinlets, Carbonate veinlets..	BROKEN CORE, BEDDING, D 75,
353.60	356.90	MASS FLOW Grey, Pervasive alteration (due to porosity?), matrix pyritic. WITH MINOR SILTSTONE Black,	Moderately Silicified, Slightly Sericitised,	DISSEMINATED, trace pyrite 1% sphalerite in veinlets.	FAULT, D 75,
356.90	360.70	SILTSTONE Pale, Grey, Fine grained, Massive, Silicified. CONTACT: Gradational, INTERBEDDED WITH SILTSTONE Grey, Fine grained, Laminated, WITH MINOR SANDSTONE Cream, Medium grained, Vitric,		DISSEMINATED, trace pyrite trace sphalerite	BEDDING, D 85, BEDDING, D 85,
360.70	361.80	DACITE Pale, Green, Fine grained, Perlitic, Amygdales, Feldspar phyric, May be thin flow, sill or clast. Contacts are sharp, with similar siltstone above and below suggesting that it is a sill. Perlitic texture occur at 361.7m. Phenocrysts chloritized. CONTACT: Conformable abrupt, Sharp.	Moderately Silicified. Associated with the margins of a dacite? sill?		PRIMARY FABRIC, Younging uphole, Graded unit.
361.80	370.90	SILTSTONE Pale, Grey, Fine grained, Massive			



5 cm

845138

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

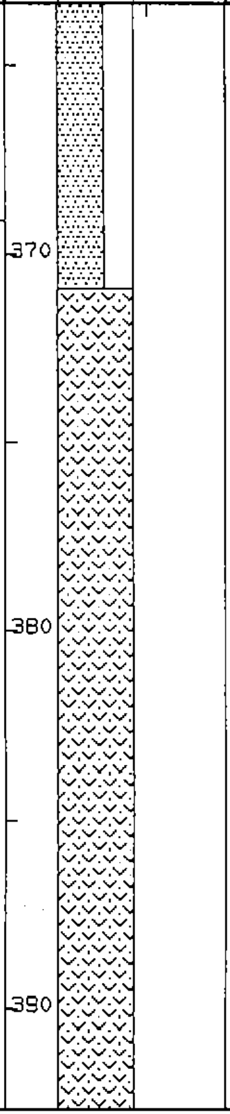
HOLE No. **BPD81**

PROJECT: BURNS PEAK

Page 14 of 16

DESCRIPTION					STRUCTURES
From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
		CONTACT: Conformable abrupt, Sharp. SILTSTONE Pale, Grey, Fine grained, Massive, INTERBEDDED WITH SILTSTONE Grey, Laminated,		DISSEMINATED, pyrite 2% sphalerite in veinlets,	uphole. Graded unit.
370.90	421.60	PUMICEOUS MASS FLOW Cream, Pink, Medium grained, Feldspar phyric,	Moderately Silicified, Moderately Sericitised, Slightly Silicified, Slightly Sericitised. Pink colour may be albite/Kfeldspar/carbonate, check whole rock.		

GRAPHIC



5 cm

845139

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

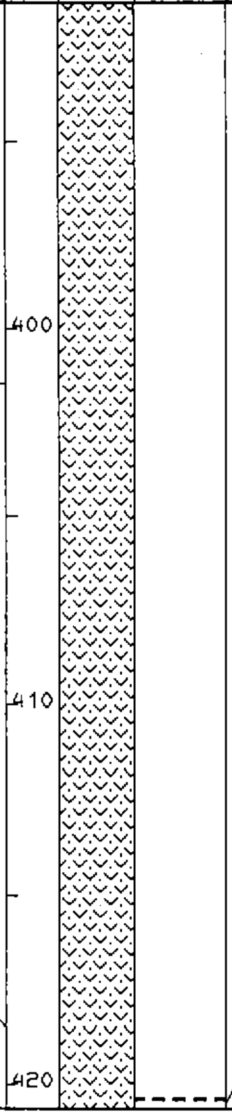
HOLE No. **BPD81**

PROJECT: BURNS PEAK

Page 15 of 16

DESCRIPTION | **GRAPHIC**

From	To	LITHOLOGY	ALTERATION	MINERALISATION	STRUCTURES
			check whole rock.		
			Slightly Sericitised.		
			Slightly Sericitised, Slightly Carbonatised, Feldspars carbonatized.	STRINGER, minor galena Galena quartz carbonate veinlets..	
			Moderately Silicified, Slightly Sericitised.		
			Slightly Sericitised, Slightly Carbonatised, Feldspars carbonatized.	VEIN, galena Galena quartz carbonate vein parallel LCA..	FAULT, A 40, Shear,



5 cm

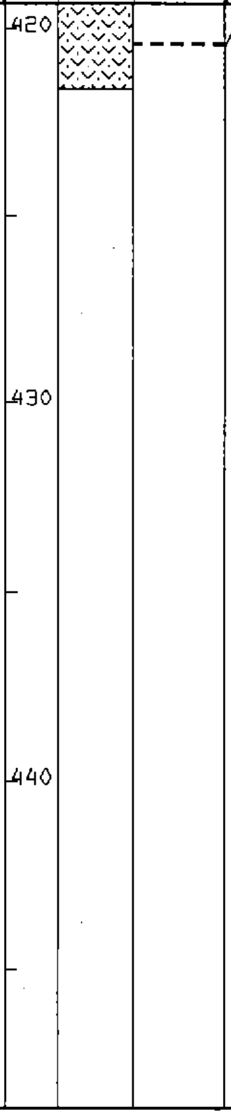
845140

PASMINCO EXPLORATION
DIAMOND DRILL CORE LOG
Vertical Scale 1 : 200

HOLE No. **BPD81**

PROJECT: BURNS PEAK

Page 16 of 16

DESCRIPTION					GRAPHIC			
From	To	LITHOLOGY	ALTERATION	MINERALISATION	Depth	Lith	Structures	STRUCTURES
								FAULT. A 40. Shear. Sericitized.

5 cm

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole ID
BPD81

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
10.60		0.01		PR	Va
12.30		0.07		PR	Va
13.10		0.06		PR	Va
14.30		0.07		PR	Va
15.40		0.01		PR	Va
16.60		0.02		PR	Va
17.30		0.00		PR	Va
18.40		0.05		PR	Va
19.30		0.03		PR	Va
19.60		0.03		PR	Va
20.40		0.01		PR	Va
21.00		0.08		PR	Va
21.50		0.00		PR	Va
22.20		0.02		PR	Va
23.40		0.10		PR	Va
24.20		0.07		PR	Va
25.30		0.04		PR	Va
27.60		0.05		PR	Va
29.70		0.08		PR	Va
30.50		0.05		PR	Va
31.60		0.03		PR	Va
32.40		0.08		PR	La
34.60		0.06		PR	La
36.10		0.08		PR	La
37.10		0.09		PR	La
40.30		0.07		PR	La
41.40		0.07		PR	La
43.60		0.05		PR	La
45.50		0.11		PR	La
46.60		0.06		PR	La
49.60		0.08		PR	La
52.60		0.05		PR	La
54.10		0.06		PR	La
54.90		0.05		PR	La
55.40		0.04		PR	La
56.20		0.08		PR	La
58.20		0.06		PR	La
59.70		0.06		PR	La
61.60		0.12		PR	La
64.60		0.01		PR	La
65.70		0.01		PR	La
67.60		0.12		PR	La
68.50		0.08		PR	La
69.50		0.06		PR	La
70.60		0.11		PR	La
73.60		0.16		PR	fz
77.70		0.01		PR	pmf
79.60		0.14		PR	slt
80.80		0.12		PR	La
82.60		0.12		PR	La
82.60			2.72	PR	La
85.60		0.07		PR	slt
88.60		0.03		PR	pmf
91.60		0.02		PR	pmf
91.60			2.70	PR	pmf
94.60		0.06		PR	La
96.70		0.04		PR	La
97.60		0.13		PR	La
100.60		0.12		PR	La
103.60		0.08		PR	La
105.30		0.07		PR	La
106.60		0.10		PR	La
109.60		0.13		PR	La
112.60		0.12		PR	La
115.60		0.12		PR	La
118.60		0.09		PR	La
121.60		0.10		PR	La
124.60		0.14		PR	La
127.60		0.11		PR	La
130.60		0.05		BTS	pmf
133.60		0.07		BTS	pmf
136.60		0.08		BTS	pmf
136.60			2.77	BTS	pmf
139.60		0.07		BTS	pmf
142.60		0.08		BTS	La
145.60		0.06		BTS	pmf
147.80		0.07		BTS	pmf
149.20		0.09		BTS	pmf
151.60		0.04		BTS	pmf
154.60		0.07		BTS	pmf
156.60			2.76	BTS	pmf
157.60		0.24		BTS	pmf
160.60		0.08		BTS	pmf
163.60		0.07		BTS	pmf

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD81

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
166.60		0.07		BTS	pmf
169.60		0.08		BTS	pmf
172.60		0.07		BTS	pmf
173.60		0.09		BTS	pmf
174.60		0.06		BTS	pmf
175.40		0.07		BTS	pmf
178.10		0.27		BTS	pmf
181.10		0.08		BTS	pmf
184.20		0.38		BTS	pmf
187.30		0.22		BTS	pmf
188.20			2.73	BTS	pmf
190.40		0.06		BTS	pmf
193.50		0.32		BTS	pmf
195.00			3.39	BTS	pmf
196.60		0.21		BTS	cht
198.70		0.04		BTS	cht
201.80		0.31		BTS	cht
203.60			2.78	BTS	a/z
204.90		0.27		BTS	a/z
206.70		0.04		BTS	mf
208.60		0.07		BTS	mf
211.60		0.18		BTS	mf
214.60		0.20		HA	Li
216.40		0.36		HA	Li
216.40			2.76	HA	Li
217.60		0.31		HA	Li
219.70		0.31		HA	Li
220.10		0.19		BTS	pmf
220.60		0.02		BTS	pmf
223.60		0.09		BTS	pmf
226.60		0.01		BTS	pmf
229.60		0.04		BTS	pmf
232.60		0.05		BTS	pmf
235.60		0.02		BTS	pmf
238.60			2.77	BTS	pmf
238.60		0.02		BTS	pmf
241.60		0.05		BTS	pmf
244.60		0.04		BTS	La
245.70		0.16		BTS	La
247.60		0.17		BTS	La
250.60		0.10		BTS	La
253.60		0.10		BTS	La
256.60		0.04		BTS	La
257.00		0.04		BTS	La
259.60		0.07		BTS	sst
261.90		0.07		BTS	sst
263.20		0.00		BTS	sst
263.80		0.06		BTS	sst
265.60		0.08		BTS	mf
268.60		0.01		BTS	mf
269.30		0.08		BTS	mf
271.60		0.02		BTS	mf
274.60		0.03		BTS	mf
277.60		0.04		BTS	mf
280.60		0.06		BTS	mf
283.60		0.09		BTS	slt
286.50			2.69	BTS	slt
286.60		0.07		BTS	slt
289.60		0.03		BTS	slt
292.60		0.11		BTS	mf
295.60		0.09		BTS	mf
298.60		0.08		BTS	slt
301.60		0.23		BTS	La
304.60			2.88	BTS	La
304.60		0.09		BTS	La
307.60		0.10		BTS	La
310.60		0.08		BTS	sst
313.20		0.05		BTS	fz
314.60		0.07		BTS	slt
315.00		0.06		BTS	slt
316.60		0.02		BTS	slt
319.60		0.03		BTS	slt
322.60		0.05		BTS	slt
325.60		0.05		BTS	La
328.60		0.09		BTS	La
331.60		0.12		BTS	La
334.60		0.07		BTS	La
337.60		0.14		BTS	La
340.60		0.05		BTS	slt
341.10			2.80	BTS	slt
343.60		0.11		BTS	slt
346.60		0.04		BTS	mf
347.80		0.05		BTS	slt
348.20		0.17		BTS	slt

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole ID
BPD81

PHYSICAL PROPERTIES / RECOVERIES

Depth	Rec %	Mag	SG	Formn	Lith
349.00		0.06		BTS	slt
349.60		0.07		BTS	slt
350.20		0.08		BTS	slt
352.60		0.10		BTS	slt
355.60		0.04		BTS	mf
358.60		0.09		BTS	slt
361.60		0.11		BTS	Ld
364.60		0.10		BTS	slt
367.60		0.38		BTS	slt
370.60		0.11		BTS	slt
373.60		0.05		FW	pmf
376.60		0.07		FW	pmf
379.60		0.04		FW	pmf
379.60			2.76	FW	pmf
382.60		0.05		FW	pmf
385.60		0.07		FW	pmf
388.60		0.09		FW	pmf
391.60		0.03		FW	pmf
394.60		0.08		FW	pmf
394.60			2.68	FW	pmf
397.60		0.07		FW	pmf
400.60		0.15		FW	pmf
403.60		0.11		FW	pmf
406.60		0.04		FW	pmf
409.60		0.10		FW	pmf
412.60		0.13		FW	pmf
415.60		0.12		FW	pmf
415.60			2.80	FW	pmf

Depth	Rec %	Mag	SG	Formn	Lith
418.60		0.38		FW	pmf
421.60		0.16		FW	pmf

845144

PASMINCO EXPLORATION
DIAMOND DRILL HOLE LOG

Hole ID
BPD81

ASSAY RESULTS

From	To	Samp	Int	Cu	Pb	Zn	Ag	Au	Fe	Ba	As	Mn
85.00	87.00	38232	2.0	24	581	861	2.0	0.02		1133		4410
87.00	89.00	38233	2.0	69	1543	2622	3.0	0.09		831		1424
89.00	91.00	38234	2.0	60	3830	2440	2.0	0.04		896		1221
91.00	93.00	38235	2.0	13	781	689	2.0	0.05		844		1644
112.00	113.00	38236	1.0	120	2987	4700	1.0	0.03		1421		7500
128.50	130.50	38237	2.0	8	70	1752	<1	0.01		895		2166
134.50	136.50	38238	2.0	86	77	157	1.0	0.01		703		3730
140.50	142.50	38239	2.0	5	23	104	<1	0.01		505		2218
150.00	152.00	38240	2.0	42	99	180	1.0	0.05		567		2686
152.00	154.00	38241	2.0	21	46	99	<1	0.01		588		2200
154.00	156.00	38242	2.0	<2	17	86	<1	<0.008		604		2168
162.00	164.00	38243	2.0	3	19	153	<1	0.01		593		3560
168.00	170.00	38244	2.0	<2	10	69	<1	0.01		614		2682
170.00	172.00	38245	2.0	<2	7	72	<1	<0.008		616		3270
172.00	174.00	38246	2.0	4	28	117	<1	0.03		673		1955
174.00	176.00	38247	2.0	169	713	13900	3.0	0.04		755		2147
176.00	178.00	38248	2.0	5	73	511	<1	0.01		686		3640
178.00	180.00	38249	2.0	<2	45	182	<1	0.01		709		3049
180.00	182.00	38250	2.0	3	37	234	<1	0.01		826		3190
182.00	184.00	38251	2.0	792	54	502	3.0	0.01		685		7600
184.00	186.00	38252	2.0	189	12	248	2.0	<0.008		591		5900
186.00	188.00	38253	2.0	807	140	255	3.0	0.03		589		2493
188.00	190.00	38254	2.0	220	179	90	6.0	0.04		903		965
190.00	192.00	38255	2.0	54	175	464	5.0	0.03		989		426
192.00	194.00	38256	2.0	41	92	296	4.0	0.03		1042		2849
194.00	196.00	38257	2.0	3016	111	543	11.0	0.02		846		6600
196.00	198.00	38258	2.0	1123	41	152	7.0	0.04		2299		1793
198.00	200.00	38259	2.0	406	72	143	6.0	0.03		2085		1795
200.00	201.60	38260	1.6	420	86	119	6.0	0.03		1542		1574
201.60	202.60	38261	1.0	86	103	567	3.0	0.01		1334		18100
202.60	203.60	38262	1.0	1234	1226	718	19.0	0.01		282		38200
203.60	204.60	38263	1.0	2587	3243	16300	17.0	0.04		161		68500
204.60	205.90	38264	1.3	1683	5000	17500	16.0	0.03		3077		34000
205.90	207.90	38265	2.0	520	6100	18400	7.0	0.03		4465		7500
207.90	209.90	38266	2.0	62	1014	14400	3.0	0.04		3181		4420
209.90	211.90	38267	2.0	89	645	1767	3.0	0.03		3335		4670
211.90	214.00	38268	2.1	452	259	686	<1	0.01		1331		17500
214.00	216.00	38269	2.0	398	99	224	2.0	0.01		1070		15100
216.00	218.00	38270	2.0	587	22	385	<1	<0.008		899		12400
218.00	220.00	38271	2.0	1066	601	15000	4.0	0.01		1479		16300
220.00	222.00	38272	2.0	180	1292	2053	4.0	0.02		1915		1442
222.00	224.00	38273	2.0	151	2044	1396	8.0	0.01		1195		3870
224.00	225.30	38274	1.3	457	2861	2468	10.0	0.02		1509		4560
225.30	226.00	38275	0.7	20900	14200	194000	91.0	0.11		707		5500
226.00	228.00	38276	2.0	1031	2868	21700	18.0	0.01		992		4270
228.00	230.00	38277	2.0	80	1083	2884	2.0	0.02		968		3175
230.00	232.00	38278	2.0	296	2754	11800	4.0	0.01		989		4040
232.00	234.00	38279	2.0	239	8200	4600	15.0	0.02		1204		3670
234.00	236.00	38280	2.0	625	2345	7500	13.0	0.01		734		870
236.00	238.00	38281	2.0	905	2386	8400	8.0	0.01		1135		1084
238.00	240.00	38282	2.0	375	3027	8900	9.0	0.01		1084		1987
240.00	242.00	38283	2.0	313	683	8700	5.0	0.01		1081		1503
242.00	244.00	38284	2.0	109	4590	1144	8.0	0.04		1480		2341
244.00	246.00	38285	2.0	35	576	643	2.0	0.02		1081		3340
246.00	248.00	38286	2.0	50	1051	334	4.0	0.01		999		3980
248.00	250.00	38287	2.0	27	1344	540	2.0	0.01		1440		2884

PASMINCO EXPLORATION

DIAMOND DRILL HOLE LOG

Hole ID
BPD81

ASSAY RESULTS

From	To	Samp	Int	Cu	Pb	Zn	Ag	Au	Fe	Ba	As	Mn
250.00	252.00	38288	2.0	16	1936	834	3.0	0.03		1339		3910
298.00	299.00	38289	1.0	33	2963	14300	6.0	0.07		2592		3060
299.00	300.00	38290	1.0	57	5900	23400	10.0	0.09		2560		4670
300.00	301.00	38291	1.0	16	892	4798	2.0	0.02		3091		31300
301.00	302.00	38292	1.0	19	445	2467	2.0	0.04		2282		8900
302.00	303.00	38293	1.0	36	514	5700	3.0	0.12		2862		1909
303.00	304.00	38294	1.0	472	2035	18100	14.0	0.12		3175		2416
304.00	305.00	38295	1.0	88	1266	10300	6.0	0.06		2772		2736
305.00	306.00	38296	1.0	16	985	2681	3.0	0.04		2276		2084
306.00	308.00	38297	2.0	7	320	2771	1.0	0.02		2163		1546
308.00	310.00	38298	2.0	6	567	3151	1.0	0.01		1135		2361
310.00	312.00	38299	2.0	8	362	2580	1.0	0.01		1165		2313
340.00	342.00	38300	2.0	21	2172	11800	2.0	0.04		968		1506
342.00	344.00	38039	2.0	73	3440	19000	4.0	0.03		987		1310
344.00	346.00	38040	2.0	31	7300	13800	7.0	0.03		1352		3283
346.00	348.00	38041	2.0	40	1943	15600	3.0	0.03		1074		1433
348.00	350.00	38042	2.0	41	1928	15600	3.0	0.03		1076		1464
350.00	352.00	38043	2.0	51	2562	16300	3.0	0.03		973		1469
352.00	354.00	38044	2.0	21	2284	13300	3.0	0.04		861		1142
354.00	356.00	38045	2.0	11	1501	12900	1.0	0.01		1109		870
356.00	358.00	38046	2.0	12	845	4869	2.0	0.02		1083		1404
367.00	369.00	38047	2.0	2	104	2112	<1	0.01		913		1159
369.00	371.00	38048	2.0	21	3073	22700	3.0	0.02		1639		1101
401.00	403.00	38049	2.0	754	8100	783	67.0	0.01		1011		7000
403.00	405.00	38050	2.0	75	534	288	9.0	0.01		1014		13500
405.00	407.00	38051	2.0	12	4670	161	4.0	<0.008		960		13500
418.00	419.00	38052	1.0	9	10800	346	6.0	0.01		1101		14300

APPENDIX 8

Analytical Reports

ANALABS
[illegible] (Australia) Pty. Ltd.
A.C.N. 004 591 664

BREAK
SUMMIT LGCHEM

Phone (004) 316837	14 Thirkell St. COOEE TAS 7320	Fax (004) 318890

ANALYTICAL REPORT No. 111310.40010045

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
1433	3006

0.148
0.132

DATE RECEIVED	RESULTS REQUIRED
24/02/94	ASAP

0.11

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
3	22/04/94	1	6

0.14

845147

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
36101/106	DC Prep : GP029 ✓COMP.	Cu,Pb,Zn,Cr,Ni/GA140 Rb,Si,V,Nb,Y,Zr/GX401 WHOLE ROCK/OX408

RESULTS TO
Mr M Saxon
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO

RESULTS TO

REMARKS

AUTHORISED OFFICER

Analabs

845148

Analabs Pty. Ltd.
BPGAS A.C.N. 004 591 664
SUMMIT LGCHEM

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10045	22/04/94	1433	1 OF 3

	SAMPLE No.	Cu	Pb	Zn	Cr	Ni	Rb	Sr	V	Nb
METHOD		GA140	GA140	GA140	GA140	GA140	GX401	GX401	GX401	GX401
1	36101	5	91	322	24	<3	73	285	<5	7
2	36102	10	390	861	29	<3	64	154	<5	8
3	36103	4	17	59	30	<3	72	138	5	7
4	36104	4	11	34	19	<3	170	219	<5	13
5	36105	4	16	60	16	<3	99	132	<5	10
6	36106	6	229	704	12	<3	94	103	6	7
7										
8										
9										
10										
11										
12										
13			√COMP							
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24	DETECTION	2	2	2	7	3	5	5	5	5
25	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

Results in ppm unless otherwise specified
-- = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

845140

Analabs Pty. Ltd.
A.C.N. 004 591 664

B PEAK

SUMMIT LOCATION

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10045	22/04/94	1433	2 OF 3

	SAMPLE No.	Y	Zr	Al2O3	SiO2	TiO2	Fe2O3	MnO	CaO	K2O
METHOD		GX401	GX401	OX408	OX408	OX408	OX408	OX408	OX408	OX408
1	36101	26	172	12.88	74.5	0.23	3.04	0.07	0.57	2.85
2	36102	19	143	13.20	74.7	0.21	1.93	0.07	0.68	2.95
3	36103	23	129	12.11	77.2	0.19	2.08	0.05	0.02	3.54
4	36104	28	233	13.22	74.1	0.32	2.48	0.09	0.60	4.27
5	36105	22	142	12.81	74.3	0.20	2.57	0.10	0.15	5.13
6	36106	17	150	11.39	77.4	0.21	2.48	0.07	0.66	2.11
7										
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17										
18										
19										
20										
21										
22										
23										
24	DETECTION	5	5	0.05	0.1	0.01	0.01	0.01	0.01	0.01
25	UNITS	ppm	ppm	%	%	%	%	%	%	%

Results in ppm unless otherwise specified
ND = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

845150

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Analabs Pty. Ltd.
BPC-AK A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10045	22/04/94	1433	3 OF 3

	SAMPLE No.	MgO	Na2O	P2O5	SO3	TOTAL	LOI			
METHOD		OX408	OX408	OX408	OX408	OX408	OM615			
1	36101	0.51	4.01	0.034	0.10	100.02	1.00			
2	36102	0.26	4.67	0.029	0.18	99.97	0.96			
3	36103	0.27	3.90	0.021	0.11	100.24	0.56			
4	36104	0.60	2.79	0.044	0.09	100.40	1.51			
5	36105	0.28	2.82	0.028	0.02	99.52	0.78			
6	36106	0.75	2.27	0.028	0.12	99.65	2.15			
7										
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12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
23										
24	DETECTION	0.01	0.05	0.005	0.01	0.01	0.01			
25	UNITS	%	%	%	%	%	%			

Results in ppm unless otherwise specified
— element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

845151

BPD 80

ANALABS
A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

Phone (004) 316837

14 Thirkell St. COOEE TAS 7320

Fax (004) 318890

ANALYTICAL REPORT No. 111310.60.10189

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
1442	3006

DATE RECEIVED	RESULTS REQUIRED
10/05/94	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
5	25/05/94	1	64

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
35865/900,37801/827 74112	CO Prep : GP029 P5/P1	Cu,Pb,Zn,Ag/GA140 ~~Whole Rock/OX400~~ Rb,Sr,V,Nb,Y,Zr/GX401

RESULTS TO
Mr M Saxon
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

REMARKS

RESULTS TO

RESULTS TO

AUTHORISED OFFICER

845152

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10189	25/05/94	1442	1 OF 5

	SAMPLE No.	Cu	Pb	Zn	Zn	Ag	Rb	Sr	V	Nb
METHOD		GA140	GA140	GA140	GA104	GA140	GX401	GX401	GX401	GX401
1	35865	11	542	946	–	<1	–	–	–	–
2	35866	13	967	2314	–	<1	–	–	–	–
3	35867	11	639	2903	–	<1	–	–	–	–
4	35868	15	890	1812	–	<1	–	–	–	–
5	35869	10	64	204	–	<1	–	–	–	–
6	35870	10	153	284	–	<1	–	–	–	–
7	35871	22	258	818	–	<1	–	–	–	–
8	35872	6	123	292	–	<1	–	–	–	–
9	35873	6	93	219	–	<1	–	–	–	–
10	35874	6	163	458	–	<1	–	–	–	–
11	35875	4	138	418	–	<1	–	–	–	–
12	35876	6	157	740	–	<1	–	–	–	–
13	35877	5	166	430	–	<1	–	–	–	–
14	35878	6	261	1274	–	<1	–	–	–	–
15	35879	7	284	1216	–	<1	–	–	–	–
16	35880	10	141	492	–	<1	–	–	–	–
17	35881	8	135	681	–	<1	–	–	–	–
18	35882	49	473	4575	–	<1	–	–	–	–
19	35883	46	23	113	–	<1	–	–	–	–
20	35884	61	633	1789	–	<1	–	–	–	–
21	35885	47	136	648	–	<1	–	–	–	–
	35886	38	180	888	–	<1	–	–	–	–
23	35887	31	25	117	–	<1	–	–	–	–
24	35888	28	179	526	–	<1	–	–	–	–
25	35889	38	14	90	–	<1	–	–	–	–

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

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Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10189	25/05/94	1442	2 OF 5

	SAMPLE No.	Cu	Pb	Zn	Zn	Ag	Rb	Sr	V	Nb
METHOD		GA140	GA140	GA140	GA104	GA140	GX401	GX401	GX401	GX401
1	35890	30	205	727	–	<1	–	–	–	–
2	35891	28	235	845	–	<1	–	–	–	–
3	35892	17	1267	>5000	0.67	<1	–	–	–	–
4	35893	16	1404	4459	–	<1	–	–	–	–
5	35894	24	63	273	–	<1	–	–	–	–
6	35895	38	851	2783	–	<1	–	–	–	–
7	35896	48	2088	>5000	0.84	2	–	–	–	–
8	35897	26	354	889	–	<1	–	–	–	–
9	35898	33	169	419	–	<1	–	–	–	–
10	35899	44	169	464	–	<1	–	–	–	–
11	35900	50	1169	3172	–	2	–	–	–	–
12	36112	–	–	–	–	–	18	198	9	8
13	37801	45	442	1225	–	<1	–	–	–	–
14	37802	45	17	116	–	<1	–	–	–	–
15	37803	28	594	1958	–	<1	–	–	–	–
16	37804	27	446	1454	–	<1	–	–	–	–
17	37805	63	878	>5000	0.67	2	–	–	–	–
18	37806	77	1890	>5000	0.91	3	–	–	–	–
19	37807	105	3151	>5000	1.07	4	–	–	–	–
20	37808	65	792	2864	–	2	–	–	–	–
21	37809	86	200	473	–	<1	–	–	–	–
	37810	44	3471	>5000	1.49	5	–	–	–	–
23	37811	28	1648	>5000	0.86	2	–	–	–	–
24	37812	13	824	2672	–	1	–	–	–	–
25	37813	20	110	452	–	<1	–	–	–	–

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

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Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10189	25/05/94	1442	3 OF 5

	SAMPLE No.	Cu	Pb	Zn	Zn	Ag	Rb	Sr	V	Nb
METHOD		GA140	GA140	GA140	GA104	GA140	GX401	GX401	GX401	GX401
1	37814	58	409	1800	–	<1	–	–	–	–
2	37815	1414	87	442	–	<1	–	–	–	–
3	37816	59	67	237	–	<1	–	–	–	–
4	37817	49	35	153	–	<1	–	–	–	–
5	37818	57	34	170	–	<1	–	–	–	–
6	37819	65	33	183	–	<1	–	–	–	–
7	37820	62	37	180	–	<1	–	–	–	–
8	37821	69	45	184	–	<1	–	–	–	–
9	37822	46	124	414	–	<1	–	–	–	–
10	37823	74	340	1585	–	<1	–	–	–	–
11	37824	66	74	198	–	<1	–	–	–	–
12	37825	66	114	328	–	<1	–	–	–	–
13	37826	56	46	130	–	<1	–	–	–	–
14	37827	51	61	255	–	<1	–	–	–	–
15										
16										
17										
18										
19										
20										
21										
23										
24	DETECTION	2	3	2	0.01	1	5	5	5	3
25	UNITS	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm

Results in ppm unless otherwise specified
– = element not determined
I.S = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

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Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10189	25/05/94	1442	4 OF 5

	SAMPLE No.	Y	Zr	Al_2O_3	SiO_2	TiO_2	Fe_2O_3	MnO	CaO	K_2O
METHOD		GX401	GX401	OX408	OX408	OX408	OX408	OX408	OX408	OX408
1	36112	27	125	12.08	76.10	0.22	1.32	0.08	1.8	0.49
2										
3										
4										
5										
6										
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[illegible]										
23										
24	DETECTION	5	5	0.05	0.05	0.01	0.01	0.01	0.1	0.01
25	UNITS	ppm	ppm	%	%	%	%	%	%	%

Results in ppm unless otherwise specified
- = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

845156

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Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10189	25/05/94	1442	5 OF 5

	SAMPLE No.	MgO	Na2O	P2O5	SO3	TOTAL	LOI			
METHOD		OX408	OX408	OX408	OX408	OX408	OM615			
1	36112	0.15	5.74	0.033	0.01	99.76	1.75			
2										
3										
4										
5										
6										
7										
8										
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12										
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15										
16										
17										
18										
19										
20										
21										
23										
24	DETECTION	0.01	0.05	0.005	0.01	0.01	0.01			
25	UNITS	%	%	%	%	%	%			

Results in ppm unless otherwise specified
-- = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

845157

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

HUSK/BREAK [illegible]

Phone (004) 316837

14 Thirkell St. COOEE TAS 7320

Fax (004) 318890

ANAL[illegible]

111310.60.10245

THIS REPORT MU[illegible] ACCOMPANYING ANALYTICAL DATA

INVOICE TO:

Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
1445	3017/3006

DATE RECEIVED	RESULTS REQUIRED
09/06/94	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
1	29/06/94	1	12

[illegible]	[illegible]	ELEMENT/METHOD
36113/124	RO Prep : GP029 P4	Cu,Pb,Zn,Ag,Mn/GA140 Au/GG309

RESULTS TO:

Mr M Saxon
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

REMARKS

RESULTS TO:

Analabs Analabs Pty. Ltd.

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10245	29/06/94	1445	1 OF 1

	SAMPLE No.	Cu	Pb	Zn	Ag	Mn	Au			
METHOD		GA140	GA140	GA140	[illegible]	GA140	GG309			
1										
2										
3										
4										
5										
6										
7	36119	43	853	211	1	621	-	↓ BP		
8	36120	45	726	248	1	752	-			
9	36121	13	7	85	<1	542	-			
10	36122	14	30	133	1	785	0.144			
11	36123	3	5	<2	2	10	-			
12	36124	61	117	106	1	921	0.022			
13										
14										
15										
16										
17										
18										
19										
20										
21										
[illegible]										
23										
24	DETECTION	2	3	2	1	3	0.008			
25	UNITS	ppm	ppm	ppm	ppm	ppm	ppm			

AUTHORISED OFFICER

ANALABS
A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

Phone (004) 316837
14 Thirkell St. COOEE TAS 7320
Fax (004) 318890

ANALYTICAL REPORT No. 11310.60.09860

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:

Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
0243	3006

DATE RECEIVED	RESULTS REQUIRED
12/11/93	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
4	10/12/93	1	30

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
037366/395	5C Prep : GP029.P1	Cu,Pb.Zn,Ag,Mn,Bi./GA140 Au,Au(R),Au(S)/GG309 As/HA140 Ba/GX401 Pb.Zn.Mn/GA104

RESULTS TO

Roger Pollock Geological Pty Ltd
Mineral Exploration Contractor
C/- Post Office
WILMOT TAS 7310

RESULTS TO

Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO

REMARKS

AUTHORISED OFFICER

845160

ANALABS

A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09860	13/12/93	0243	1 OF 4

TUBE No.	SAMPLE No.	Cu	Pb	Pb	Zn	Zn	Ag	Mn	Mn	Bi
1	037366	12	283	-	173	-	<1	4124	-	<10
2	037367	15	1517	-	706	-	4	4500	-	<10
3	037368	14	1740	-	3240	-	1	>5000	0.87	<10
4	037369	28	>5000	0.72	-	0.30	4	>5000	0.95	<10
5	037370	23	3330	0.35	>5000	0.74	2	>5000	1.13	<10
6	037371	16	4688	-	3762	-	1	>5000	2.81	<10
7	037372	59	2321	-	860	-	3	>5000	1.19	11
8	037373	950	1471	0.17	>5000	1.21	10	>5000	0.75	15
9	037374	676	923	0.11	>5000	2.24	9	>5000	0.93	13
10	037375	300	781	0.09	>5000	1.14	7	>5000	0.81	10
11	037376	569	56	-	831	-	6	>5000	1.68	46
12	037377	114	45	-	117	-	5	3962	-	<10
13	037378	817	1687	-	748	-	22	>5000	0.88	<10
14	037379	250	136	-	181	-	5	>5000	1.11	<10
15	037380	68	27	-	311	-	2	>5000	0.70	<10
16	037381	20	<3	-	130	-	<1	4296	-	<10
17	037382	15	11	-	87	-	<1	2418	-	<10
18	037383	52	55	-	236	-	3	4574	-	10
19	037384	40	49	-	544	-	3	>5000	0.66	<10
20	037385	138	103	-	3216	-	4	>5000	0.74	<10
21	037386	474	689	-	1388	-	12	2483	-	11
22	037387	111	693	-	612	-	7	903	-	<10
23	037388	1481	1209	0.14	>5000	1.07	20	4106	-	34
	037389	420	125	-	1440	-	3	762	-	<10
25	037390	1593	577	0.07	>5000	0.88	11	3993	-	20

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

845161

ANALABS

[illegible]
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09860	13/12/93	0243	2 OF 4

TUBE No.	SAMPLE No.	Cu	Pb	Pb	Zn	Zn	Ag	Mn	Mn	Bi
1	037391	198	795	–	1561	–	8	4019	–	22
2	037392	1237	2304	0.25	>5000	0.79	13	>5000	0.70	18
3	037393	1156	1599	0.18	>5000	1.88	9	>5000	1.17	<10
4	037394	265	30	–	248	–	<1	>5000	1.02	<10
5	037395	872	2707	0.30	>5000	5.35	16	>5000	0.94	19
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7										
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[illegible]										
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17										
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19										
20										
21										
22										
23	DETECTION	2	3	0.01	2	0.01	1	3	0.01	10
24	UNITS	ppm	ppm	%pm	ppm	%	ppm	ppm	%	ppm
25	METHOD	GA140	GA140	GA104	GA140	GA104	GA140	GA140	GA104	GA140

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

845162

ANALABS

A Division of Inchcape Testing Services (Australia) Pty Ltd
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09860	10/12/93	0243	3 OF 4

TUBE No.	SAMPLE No.	Au	Au(R)	Au(S)	As	Ba				
1	037366	0.043	-	-	5.0	1076				
2	037367	<0.008	-	-	2.0	941				
3	037368	0.012	-	-	3.0	1209				
4	037369	0.020	-	-	3.5	1286				
5	037370	0.064	-	-	6.0	1188				
6	037371	0.036	-	-	3.0	1524				
7	037372	0.021	-	-	6.0	2931				
8	037373	0.030	-	-	6.0	1605				
9	037374	0.045	-	0.040	16.0	1365				
10	037375	0.022	-	-	8.0	1514				
	037376	<0.008	-	-	13.0	452				
12	037377	<0.008	0.014	-	11.0	1839				
13	037378	<0.008	-	-	46.0	1471				
14	037379	<0.008	-	-	26.5	1326				
15	037380	<0.008	-	-	11.0	117				
16	037381	<0.008	-	-	4.0	1212				
17	037382	<0.008	-	-	5.0	1437				
18	037383	0.017	-	-	11.0	1082				
19	037384	0.019	-	-	11.5	737				
20	037385	0.031	-	-	9.0	1954				
21	037386	0.036	-	-	38.0	1448				
22	037387	0.026	0.024	-	38.0	1198				
23	037388	0.036	-	0.028	45.0	1948				
	037389	0.025	-	-	12.0	3135				
25	037390	0.018	-	-	15.0	1995				

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

845163

ANALABS

A Division of Inchcape Testing Services (Australia) Pty Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09860	10/12/93	0243	4 OF 4

TUBE No.	SAMPLE No.	Au	Au(R)	Au(S)	As	Ba				
1	037391	0.031	-	-	24.5	2106				
2	037392	0.020	-	-	15.0	1726				
3	037393	<0.008	-	-	16.0	3956				
4	037394	<0.008	-	-	14.0	1617				
5	037395	0.018	-	-	28.0	1190				
6										
7										
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16										
17										
18										
19										
20										
21										
22										
23	DETECTION	0.008	0.008	0.008	0.5	10				
	UNITS	ppm	ppm	ppm	ppm	ppm				
25	METHOD	GG309	GG309	GG309	HA140	GX401				

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

845164

ANALABS
A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

Phone (004) 316837
14 Thirkell St, COOEE TAS 7320
Fax (004) 312390

ANALYTICAL REPORT No. 111310.40.09886

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
0244	3006

DATE RECEIVED	RESULTS REQUIRED
29/11/93	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
4	22/12/93	1	36

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
037396/400,037501/531	SC Prep : GP029,P1	Cu,Pb,Zn,Ag,Mn,Bi/GA140
037396/400,037501/531	SC Prep :	Au,Au(R),Au(S)/G5309
0[illegible]6/400,037501/531	SC Prep :	As/HA140
037396/400,037501/531	SC Prep :	Ba/GX401

RESULTS TO
Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO
Roger Pollock Geological Pty Ltd
Mineral Exploration Contractor
C/- Post Office
WILMOT TAS 7310

RESULTS TO

REMARKS

AUTHORISED OFFICER

845165

ANALABS

A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
-	111310.60.09886	22/12/93	0244	1 OF 4

TUBE No.	SAMPLE No.	Cu	Pb	Pb	Zn	Zn	Ag	Mn	Bi	Au
1	037396	21	866	949	>5000	0.86	3	4049	<10	0.020
2	037397	5	54	-	169	-	<1	296	<10	<0.008
3	037398	6	93	-	147	-	<1	220	<10	0.015
4	037399	8	77	-	537	-	<1	465	<10	<0.008
5	037400	4	109	-	218	-	<1	1288	<10	0.010
6	037501	3	57	-	89	-	<1	1397	<10	<0.008
7	037502	5	103	-	329	-	<1	1444	11	0.009
8	037503	7	94	-	299	-	<1	2176	<10	<0.008
9	037504	9	132	-	579	-	<1	2333	<10	0.009
10	037505	103	138	-	3268	-	1	976	<10	0.020
	037506	33	118	-	814	-	1	1016	<10	0.019
12	037507	28	178	-	4155	-	1	724	<10	0.035
13	037508	36	498	-	>5000	1.12	1	1027	<10	0.038
14	037509	30	667	699	>5000	0.91	2	607	<10	0.024
15	037510	26	1491	1519	>5000	0.63	3	791	<10	0.020
16	037511	18	1129	-	>5000	0.65	3	1126	<10	0.029
17	037512	6	494	-	568	-	1	1189	<10	0.013
18	037513	15	638	-	3301	-	2	981	<10	0.034
19	037514	7	89	-	461	-	<1	812	<10	<0.008
20	037515	6	251	-	150	-	<1	975	<10	0.015
21	037516	33	1886	1965	>5000	0.89	4	936	<10	0.044
22	037517	70	1583	1633	>5000	0.71	5	788	<10	0.055
23	037518	25	891	971	>5000	0.69	2	957	<10	0.043
	037519	46	224	-	>5000	0.82	2	1188	<10	0.021
25	037520	56	1430	-	4948	-	3	695	<10	0.025

Results in ppm unless otherwise specified
T = element present, but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

845166

ANALABS

A Division of Inchcape Testing Services (Australia) Pty Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09886	23/12/93	0244	2 OF 4

TUBE No.	SAMPLE No.	Cu	Pb	Pb	Zn	Zn	Ag	Mn	Bi	Au
1	037521	18	2049	2111	>5000	1.59	4	1416	<10	0.040
2	037522	27	1768	-	>5000	0.92	3	1026	<10	0.022
3	037523	28	2733	2816	>5000	1.44	4	984	<10	0.027
4	037524	41	2120	-	>5000	1.27	2	627	<10	0.020
5	037525	282	269	-	>5000	0.61	2	555	<10	0.037
6	037526	18	238	-	2764	-	1	739	<10	0.013
7	037527	34	1293	-	>5000	1.31	2	1536	<10	0.023
8	037528	19	2599	2645	>5000	1.22	3	1427	<10	0.028
9	037529	23	455	-	>5000	0.76	1	1067	<10	0.016
10	037530	23	2869	2950	>5000	0.67	3	778	<10	0.014
11	037531	25	968	-	4025	-	2	900	<10	<0.008
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	2	3	25	2	0.01	1	3	10	0.008
24	UNITS	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
25	METHOD	GA140	GA140	GA104	GA140	GA104	GA140	GA140	GA140	GG309

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

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ANALABS

A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
.	111310.60.09886	22/12/93	0244	3 OF 4

TUBE No.	SAMPLE No.	Au(R)	Au(S)	As	As	Ba				
1	037396	-	-	22.5	-	2326				
2	037397	-	-	8.0	-	1156				
3	037398	-	-	19.5	-	675				
4	037399	-	-	12.0	-	705				
5	037400	-	-	22.5	-	585				
6	037501	-	-	11.5	-	583				
7	037502	-	0.016	44.5	-	853				
8	037503	-	-	45.0	-	709				
9	037504	-	-	34.5	-	861				
10	037505	-	-	26.0	-	1292				
11	037506	-	-	52.0	-	923				
12	037507	0.036	-	30.5	-	1143				
13	037508	-	-	>100.0	170	1182				
14	037509	-	-	>100.0	150	1679				
15	037510	-	-	>100.0	120	1511				
16	037511	-	-	47.0	-	1232				
17	037512	-	-	18.5	-	793				
18	037513	-	-	>100.0	120	1168				
19	037514	-	-	1.0	-	525				
20	037515	-	-	10.5	-	468				
21	037516	-	0.042	14.5	-	1145				
22	037517	-	-	>100.0	170	1262				
23	037518	-	-	>100.0	140	1077				
	037519	-	-	90.0	-	1324				
25	037520	-	-	75.0	-	1287				

Results in ppm unless otherwise specified
T = element present, but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

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ANALABS

A Division of Inchcape Testing Services (Australia) Pty Ltd
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09886	22/12/93	0244	4 OF 4

TUBE No.	SAMPLE No.	Au(R)	Au(S)	As	As	Ba				
1	037521	-	-	>100.0	120	896				
2	037522	-	-	61.0	-	576				
3	037523	-	-	49.5	-	823				
4	037524	-	-	65.0	-	804				
5	037525	-	-	38.5	-	935				
6	037526	-	-	>100.0	130	1366				
7	037527	-	-	33.5	-	798				
8	037528	-	-	53.5	-	829				
9	037529	-	-	58.0	-	1019				
10	037530	-	-	32.5	-	1630				
11	037531	-	-	50.0	-	1586				
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	0.008	0.008	0.5	50	10				
	UNITS	ppm	ppm	ppm	ppm	ppm				
25	METHOD	GG309	GG309	HA140	GA140	GX401				

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
– = element not determined

AUTHORISED OFFICER

8PD 79

ANALABS
A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 684

Phone (004) 316837
14 Thirkell St. COOEE TAS 7320
Fax (004) 318890

ANALYTICAL REPORT No. 111310.60.09941

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
0134	3006

DATE RECEIVED	RESULTS REQUIRED
23/12/93	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
3	17/02/94	1	13

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
34775/87	DC Prep : GP033:P5	Whole Rock Analysis/OX408 Rb,Sr,Y,Zr,V,Nb/GX401 Cr,Ni/GA140

RESULTS TO
Roger Pollock Geological Pty Ltd
Mineral Exploration Contractor
C/- Post Office
WILMOT TAS 7310

RESULTS TO
Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO

REMARKS

Amended Report.
Sulphur by method OX408 is not recommended for samples containing significant levels of sulphide. Samples with significant sulphide levels should have sulphur checked by method OM613.

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09941	17/02/94	0134	1 OF 3

	SAMPLE No.	Cr	Ni	Rb	Sr	Y	Zr	V	Nb	A1203
METHOD		GA140	GA140	GX401	GX401	GX401	GX401	GX401	GX401	DX408
1	34775	11	<3	137	78	26	219	6	11	13.82
2	34776	18	<3	65	100	34	170	<5	12	12.01
3	34777	11	<3	186	42	33	178	11	8	12.53
4	34778	12	<3	141	89	37	248	<5	12	14.51
5	34779	13	<3	109	73	24	220	<5	13	12.53
6	34780	14	<3	135	73	33	251	64	12	18.30
7	34781	14	<3	189	31	30	188	<5	12	12.76
8	34782	13	<3	188	27	30	189	<5	12	12.59
9	34783	11	<3	308	23	39	396	11	21	20.30
	34784	16	<3	88	17	18	125	5	6	6.62
11	34785	139	45	125	136	15	84	261	6	16.13
12	34786	12	<3	192	16	25	240	8	12	13.20
13	34787	14	<3	96	125	24	202	8	11	11.28
14										
15										
16										
17										
18										
19										
20										
21										
22										
24	DETECTION	7	3	5	5	5	5	5	3	0.05
25	UNITS	ppm	ppm	ppm	pp	ppm	ppm	ppm	ppm	%

Results in ppm unless otherwise specified
-- = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

840171

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09941	17/02/94	0134	2 OF 3

	SAMPLE No.	SiO2	TiO2	Fe2O3	MnO	CaO	K2O	MgO	P2O5	SO3
METHOD		OX408	OX408	OX408	OX408	OX408	OX408	OX408	OX408	OX408
1	34775	75.9	0.19	1.35	0.04	0.16	3.26	0.6	0.059	0.14
2	34776	70.7	0.13	2.89	0.29	2.27	1.81	0.9	0.020	0.02
3	34777	69.0	0.20	2.43	0.77	3.38	5.00	0.9	0.051	0.08
4	34778	70.6	0.18	1.22	0.20	2.37	3.78	0.6	0.036	0.09
5	34779	73.8	0.16	1.91	0.18	1.45	2.57	0.8	0.029	0.17
6	34780	60.8	0.56	4.44	0.31	0.80	3.36	3.4	0.138	0.11
7	34781	72.5	0.14	2.50	0.22	0.72	6.65	0.9	0.017	0.21
8	34782	73.7	0.14	2.44	0.26	0.63	6.06	0.8	0.016	0.04
9	34783	59.0	0.47	2.80	0.42	1.05	7.36	2.0	0.062	0.62
10	34784	76.9	0.15	6.15	0.55	2.00	2.25	0.5	0.015	6.41
11	34785	44.4	0.73	6.88	1.33	9.15	3.06	4.1	0.255	0.59
12	34786	73.5	0.27	1.57	0.17	1.23	4.68	1.1	0.030	0.23
13	34787	75.5	0.22	2.13	0.12	1.50	1.68	0.7	0.028	0.51
14										
15										
16										
17										
18										
19										
20										
21										
22										
24	DETECTION	0.1	0.01	0.01	0.01	0.01	0.01	0.1	0.005	0.01
25	UNITS	%	%	%	%	%	%	%	%	%

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

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Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09941	17/02/94	0134	3 OF 3

	SAMPLE No.	Na2O	TOTAL	LOI						
METHOD		OX408	OX408	OM615						
1	34775	2.47	100.04	2.13						
2	34776	4.08	99.51	4.37						
3	34777	0.10	99.87	5.30						
4	34778	2.51	99.71	3.62						
5	34779	2.74	99.68	3.36						
6	34780	3.60	99.74	3.86						
7	34781	0.17	99.78	2.65						
8	34782	0.15	100.05	2.79						
9	34783	0.12	99.96	5.54						
	34784	0.05	106.00	4.38						
11	34785	2.08	100.10	11.33						
12	34786	0.10	99.89	3.68						
13	34787	3.29	99.88	2.95						
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24	DETECTION	0.05	0.01	0.01						
25	UNITS	%	%	%						

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

ANALABS
A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

Phone (004) 316837
14 Thirkell St. COOEE TAS 7320
Fax (004) 318890

BPD 79

ANALYTICAL REPORT No. 111310.60.09940

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.: 0133
PROJECT: 3006

DATE RECEIVED: 23/12/93
RESULTS REQUIRED: ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
4	24/01/94	1	29

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
37549/76,34765	DC Prep : GP033;P1	Cu,Pb,Zn,Ag,Mn,Bi,As/GA140, Zn,Mn/GA104 Au,Au(R),Au(S)/GG309 As/HA140 Ba/GX401

RESULTS TO
Roger Pollock Geological Pty Ltd
Mineral Exploration Contractor
C/- Post Office
WILMOT TAS 7310

RESULTS TO
Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO

REMARKS

Zinc result for sample number 34788 is abo
recommended upper detection limit and was
obtained by dilution.

AUTHORISED OFFICER

845174

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09940	24/01/94	0133	1 OF 4

	SAMPLE No.	Cu	Pb	Zn	Zn	Ag	Mn	Mn	Bi	Ba
METHOD		GA140	GA140	GA140	GA104	GA140	GA140	GA104	GA140	GX401
1	34788	2066	1007	>5000	13.10	18	1273	–	37	2942
2	37549	384	776	>5000	0.62	4	1318	–	<10	3126
3	37550	86	465	2133	–	2	1698	–	<10	3712
4	37551	316	218	>5000	0.98	5	902	–	15	2753
5	37552	647	1013	>5000	4.29	19	398	–	33	1689
6	37553	193	380	>5000	0.54	5	484	–	11	1334
7	37554	302	720	>5000	1.41	7	942	–	18	2356
8	37555	52	167	>5000	1.15	3	359	–	<10	2487
9	37556	273	511	985	–	5	1764	–	<10	2876
10	37557	91	881	3105	–	18	3440	–	49	2144
11	37558	954	1272	2905	–	28	2994	–	65	1147
12	37559	2850	786	3520	–	15	2052	–	24	1375
13	37560	78	237	112	–	2	1870	–	<10	1565
14	37561	626	227	3240	–	5	1739	–	<10	1206
15	37562	2080	561	>5000	4.02	15	>5000	1.01	23	3011
16	37563	1710	635	>5000	4.68	13	>5000	1.17	17	1937
17	37564	1324	154	1940	–	5	>5000	1.34	<10	1485
18	37565	485	132	>5000	0.70	3	>5000	1.21	<10	983
19	37566	2077	504	>5000	1.29	13	>5000	1.73	[illegible]	1070
20	37567	853	410	>5000	2.86	9	>5000	1.03	<10	972
21	37568	2790	204	>5000	1.03	15	>5000	1.12	<10	636
22	37569	861	16	465	–	2	>5000	1.10	<10	891
23	37570	635	9	168	–	2	>5000	0.96	<10	805
24	37571	1064	82	>5000	1.59	7	>5000	0.86	<10	782
25	37572	10	772	>5000	1.24	2	189	–	<10	794

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09940	24/01/94	0133	2 OF 4

	SAMPLE No.	Cu	Pb	Zn	Zn	Ag	Mn	Mn	Bi	Ba
METHOD		GA140	GA140	GA140	GA104	GA140	GA140	GA104	GA140	GX401
1	37573	15	909	>5000	1.55	1	1287	-	<10	717
2	37574	22	1627	>5000	1.91	2	1867	-	<10	693
3	37575	9	535	3700	-	1	1743	-	<10	818
4	37576	13	1204	>5000	0.66	2	3038	-	<10	1064
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
24	DETECTION	2	3	2	0.01	1	3	0.01	10	10
25	UNITS	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09940	24/01/94	0133	3 OF 4

	SAMPLE No.	As	As	Au	Au(R)	Au(S)				
METHOD		HA140	GA140	GG309	GG309	GG309				
1	34788	3.0	-	0.101	-	-				
2	37549	>100.0	130	0.026	-	-				
3	37550	>100.0	530	0.014	-	-				
4	37551	>100.0	320	0.230	-	-				
5	37552	>100.0	430	0.430	-	-				
6	37553	>100.0	120	0.087	-	-				
7	37554	>100.0	280	0.115	-	-				
8	37555	>100.0	100	0.055	-	0.052				
9	37556	25.0	-	0.024	-	-				
	37557	43.5	-	0.096	-	-				
11	37558	22.5	-	0.094	-	-				
12	37559	20.5	-	0.029	0.026	-				
13	37560	8.5	-	0.017	-	-				
14	37561	14.5	-	0.015	-	-				
15	37562	7.5	-	0.020	-	-				
16	37563	7.0	-	0.017	-	-				
17	37564	6.5	-	<0.008	-	-				
18	37565	12.0	-	<0.008	-	-				
19	37566	6.0	-	0.011	-	-				
20	37567	4.0	-	0.014	-	-				
21	37568	6.0	-	0.011		-				
22	37569	8.5	-	0.008	<0.008	-				
2	37570	8.5	-	<0.008	-	-				
24	37571	8.5	-	0.010	-	-				
25	37572	30.0	-	0.096	-	-				

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

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A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.09940	24/01/94	0133	4 OF 4

	SAMPLE No.	As	As	Au	Au(R)	Au(S)				
METHOD		HA140	GA140	GG309	GG309	GG309				
1	37573	31.0	-	0.028	-	-				
2	37574	>100.0	100	0.030	-	-				
3	37575	30.5	-	0.026	-	-				
4	37576	70.0	-	0.032	-	-				
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
[illegible]										
24	DETECTION	0.5	50	0.008	0.008	0.008				
25	UNITS	ppm	ppm	ppm	ppm	ppm				

Results in ppm unless otherwise specified
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HRD1
GAB 3
SAF 14
SAF 16

ANALABS
A Division of Inchcape Testing Services (Australia) Pty. Ltd.
A.C.N. 004 591 664

Phone (004) 316837
14 Thirkell St. COOEE TAS 7320
Fax (004) 318890

ANALYTICAL REPORT No. 111310.60.10106

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
0137	3015/3006

DATE RECEIVED	RESULTS REQUIRED
25/03/94	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
3	28/04/94	1	8

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
37701/08	CR Prep : GP033 - P1	Rb,Sr,Y,Zr,V,Nb/GX401 WHOLE ROCK ANALYSIS/OX408

RESULTS TO
Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO
Roger Pollock Geological Pty Ltd
Mineral Exploration Contractor
C/- Post Office
WILMOT TAS 7310

RESULTS TO

REMARKS

AUTHORISED OFFICER

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10106	28/04/94	0137	1 OF 3

	SAMPLE No.	Rb	Sr	Y	Zr	V	Nb	Al2O3	SiO2	TiO2
METHOD		GX401	GX401	GX401	GX401	GX401	GX401	OX408	OX408	OX408
1	37701	84	158	20	146	37	6	12.46	53.0	0.35
2	37702	96	133	26	174	<5	9	11.93	59.5	0.24
3	37703	89	69	30	165	7	10	10.93	72.6	0.22
4	37704	170	41	29	254	10	15	15.82	72.4	0.35
5	37705	196	53	24	150	<5	10	12.82	74.1	0.21
6	37706	210	24	23	187	6	14	12.70	75.5	0.27
7	37707	214	22	29	166	<5	14	13.42	72.8	0.15
8	37708	140	84	37	213	57	8	17.28	65.5	0.53
9										
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14										
15										
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20										
21										
22										
24	DETECTION	5	5	5	5	5	3	0.05	0.1	0.01
25	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10196	28/04/94	0137	2 OF 3

	SAMPLE No.	Fe2O3	MnO	CaO	K2O	MgO	P2O5	SO3	Na2O	TOTAL
METHOD		OX408	OX408	OX408	OX408	OX408	OX408	OX408	OX408	OX408
1	37701	2.45	0.45	11.90	1.91	1.00	0.083	0.11	3.69	99.62
2	37702	1.66	0.37	9.84	2.01	0.77	0.032	0.13	3.37	100.02
3	37703	2.32	0.24	2.57	1.81	0.92	0.023	0.11	3.05	99.58
4	37704	1.07	0.05	0.50	3.55	0.63	0.030	0.15	2.71	99.95
5	37705	0.97	0.10	0.25	8.61	0.28	0.017	0.72	0.31	99.64
6	37706	1.85	0.14	0.25	5.68	0.71	0.033	0.46	0.10	99.97
7	37707	2.03	0.18	1.55	4.36	0.99	0.026	0.39	0.52	100.34
8	37708	4.80	0.19	0.23	3.15	2.01	0.123	0.02	2.32	99.78
9										
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13										
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16										
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18										
19										
20										
21										
22										
23										
24	DETECTION	0.01	0.01	0.01	0.01	0.01	0.005	0.01	0.05	0.01
25	UNITS	%	%	%	%	%	%	%	%	%

Results in ppm unless otherwise specified
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ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10106	28/04/94	0137 .	3 OF 3

	SAMPLE No.	LOI								
METHOD		OM615								
1	37701	12.23								
2	37702	10.13								
3	37703	4.84								
4	37704	2.66								
5	37705	1.23								
6	37706	2.25								
7	37707	3.94								
8	37708	3.62								
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24	DETECTION	0.01								
25	UNITS	%								

Results in ppm unless otherwise specified
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A.C.N. 004 591 684

ID 81

Phone (004) 316837

14 Thirkell St. COOEE TAS 7320

Fax (004) 318890

ANALYTICAL REPORT No. 111310.60.10204

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
0138	3006

DATE RECEIVED	RESULTS REQUIRED
18/05/94	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
3	02/06/94	1	12

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
38053/38064	CD Prep : SP029 P1	WHOLE ROCK/GX407 Rb,Sr,Y,Zr,V,Nb/GX401

RESULTS TO
Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO
Roger Pollock Geological Pty Ltd
Mineral Exploration Contractor
C/- Post Office
WILMOT TAS 7310

RESULTS TO

REMARKS

AUTHORISED OFFICER

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A.C.N. 004 591 664

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10204	02/06/94	0138	1 OF 3

	SAMPLE No.	Al2O3	SiO2	TiO2	Fe2O3	MnO	CaO	K2O	MgO	P2O5
METHOD		OX408	OX408	OX408	OX408	OX408	OX408	OX408	OX408	OX408
1	38053	11.61	77.9	0.15	1.48	0.16	0.05	6.46	0.33	0.018
2	38054	12.05	74.7	0.14	2.55	0.25	0.46	5.70	1.00	0.021
3	38055	15.02	65.4	0.45	2.65	0.21	2.48	2.95	1.73	0.113
4	38056	12.37	73.6	0.14	2.42	0.23	1.27	4.70	0.98	0.019
5	38057	12.15	74.9	0.14	1.71	0.20	1.45	4.40	0.73	0.016
6	38058	14.09	71.4	0.31	1.35	0.20	1.36	4.78	1.51	0.040
7	38059	12.99	68.0	0.29	1.62	0.40	3.20	4.46	2.02	0.037
8	38060	17.50	57.9	0.40	10.10	0.88	0.13	4.28	3.12	0.055
9	38061	13.80	41.9	0.65	9.92	1.39	9.06	1.53	6.14	0.219
10	38062	17.45	63.2	0.72	4.52	0.16	0.37	3.52	3.66	0.159
11	38063	16.87	64.1	0.38	2.76	0.25	1.74	4.07	1.56	0.043
12	38064	15.30	59.6	0.37	3.81	0.93	3.35	4.59	2.43	0.045
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24	DETECTION	0.05	0.1	0.01	0.01	0.01	0.01	0.01	0.01	0.005
25	UNITS	%	%	%	%	%	%	%	%	%

Results in ppm unless otherwise specified
- = element not determined

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10204	02/06/94	0138	2 OF 3

	SAMPLE No.	SO3	Na2O	LOI	TOTAL	Rb	Sr	Y	Zr	V
METHOD		OX408	OX408	OM615	OX408	GX401	GX401	GX401	GX401	GX401
1	38053	0.21	0.15	1.56	100.08	171	27	27	138	<5
2	38054	0.11	0.15	2.99	100.15	176	21	27	161	<5
3	38055	0.37	3.64	4.53	99.52	129	81	27	181	39
4	38056	0.04	0.34	3.49	99.60	184	32	23	152	<5
5	38057	0.10	0.39	3.39	99.59	187	33	24	152	<5
6	38058	0.02	0.09	4.55	99.67	213	13	31	222	8
7	38059	0.06	0.09	6.65	99.77	275	40	35	280	<5
8	38060	0.43	0.11	4.84	99.73	128	5	21	200	7
9	38061	0.24	1.86	12.86	99.55	78	102	21	60	228
0	38062	0.34	1.59	4.18	99.83	142	40	41	208	35
11	38063	0.23	1.74	5.88	99.63	191	61	38	261	11
12	38064	0.03	0.19	9.11	99.73	213	21	35	235	<5
13										
14										
16										
17										
18										
19										
20										
21										
22										
3										
24	DETECTION	0.01	0.05	0.01	0.01	5	5	5	5	5
25	UNITS	%	%	%	%	ppm	ppm	ppm	ppm	ppm

Results in ppm unless otherwise specified
-- = element not determined

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SNR = sample not received

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ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10204	02/06/94	0138	3 OF 3

	SAMPLE No.	Nb								
METHOD		GX401								
1	38053	9								
2	38054	12								
3	38055	11								
4	38056	11								
5	38057	14								
6	38058	16								
7	38059	16								
8	38060	15								
9	38061	4								
10	38062	13								
11	38063	14								
12	38064	15								
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24	DETECTION	3								
25	UNITS	ppm								

Results in ppm unless otherwise specified
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A.C.N. 004 591 664

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Fax (004) 318890

ANALYTICAL REPORT No. 111310.60.10250

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.: 0251
PROJECT: 3006
DATE RECEIVED: 14/06/94
RESULTS REQUIRED: ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
9	13/07/94	1	83

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
038039/052,038232/300	CD Prep : 6P029 P1	Cu,Pb,Zn,Ag,Mn,Bi/GA140 Cu,Pb,Zn,Ag,Mn/GA104 Au,Au(R),Au(S)/GG309 Ba/GX401

RESULTS TO
Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO

RESULTS TO

REMARKS

AUTHORISED OFFICER

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Analabs Pty. Ltd.
A.C.N. 004 591 664

845187

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	13/07/94	0251	1 OF 8

	SAMPLE No.	Cu	Cu	Pb	Pb	Zn	Zn	Ag	Ag	Mn
METHOD		GA140	GA104	GA140	GA104	GA140	GA104	GA140	GA104	GA140
1	038039	73	–	3440	–	–	1.90	4	–	1310
2	038040	31	–	–	0.73	–	1.38	7	–	3283
3	038041	40	–	1943	–	–	1.56	3	–	1433
4	038042	41	–	1928	–	–	1.56	3	–	1464
5	038043	51	–	2562	–	–	1.63	3	–	1469
6	038044	21	–	2284	–	–	1.33	3	–	1142
7	038045	11	–	1501	–	–	1.29	1	–	870
8	038046	12	–	845	–	4869	1.02	2	–	1404
9	038047	2	–	104	–	2112	–	<1	–	1159
[illegible]	038048	21	–	3073	–	–	2.27	3	–	1101
11	038049	754	–	–	0.81	783	–	–	67	–
12	038050	75	–	534	–	288	–	9	–	–
13	038051	12	–	4670	–	161	–	4	–	–
14	038052	9	–	–	1.08	346	–	6	–	–
15	038232	24	–	581	–	861	–	2	–	4410
16	038233	69	–	1543	–	2622	–	3	–	1424
17	038234	60	–	3830	–	2440	–	2	–	1221
18	038235	13	–	781	–	689	–	2	–	1644
19	038236	120	–	2987	–	–	0.47	1	–	–
20	038237	8	–	70	–	1752	–	<1	–	2166
21	038238	86	–	77	–	157	–	1	–	3730
22	038239	5	–	23	–	104	–	<1	–	2218
[illegible]	038240	42	–	99	–	180	–	1	–	2686
24	038241	21	–	46	–	99	–	<1	–	2200
25	038242	<2	–	17	–	86	–	<1	–	2168

Results in ppm unless otherwise specified
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AUTHORISED OFFICER

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Analabs Pty. Ltd.
A.C.N. 004 591 664

845188

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	13/07/94	0251	2 OF 8

	SAMPLE No.	Cu	Cu	Pb	Pb	Zn	Zn	Ag	Ag	Mn
METHOD		GA140	GA104	GA140	GA104	GA140	GA104	GA140	GA104	GA140
1	038243	3	-	19	-	153	-	<1	-	3560
2	038244	<2	-	10	-	69	-	<1	-	2682
3	038245	<2	-	7	-	72	-	<1	-	3270
4	038246	4	-	28	-	117	-	<1	-	1955
5	038247	169	-	713	-	-	1.39	3	-	2147
6	038248	5	-	73	-	511	-	<1	-	3640
7	038249	<2	-	45	-	182	-	<1	-	3049
8	038250	3	-	37	-	234	-	<1	-	3190
9	038251	792	-	54	-	502	-	3	-	-
[illegible]	038252	189	-	12	-	248	-	2	-	-
11	038253	807	-	140	-	255	-	3	-	2493
12	038254	220	-	179	-	90	-	6	-	965
13	038255	54	-	175	-	464	-	5	-	426
14	038256	41	-	92	-	296	-	4	-	2849
15	038257	3016	-	111	-	543	-	11	-	-
16	038258	1123	-	41	-	152	-	7	-	1793
17	038259	406	-	72	-	143	-	6	-	1795
18	038260	420	-	86	-	119	-	6	-	1574
19	038261	86	-	103	-	567	-	3	-	-
20	038262	1234	-	1226	-	718	-	19	-	-
21	038263	2587	-	3243	-	-	1.63	17	-	-
22	038264	1683	-	4310	0.50	-	1.75	16	-	-
[illegible]	038265	520	-	-	0.61	-	1.84	7	-	-
24	038266	62	-	1014	-	-	1.44	3	-	4420
25	038267	89	-	645	-	1767	-	3	-	4670

Results in ppm unless otherwise specified
– = element not determined

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Analabs Pty. Ltd.
A.C.N. 004 591 664

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845189

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	19/07/94	0251	3 OF 8

	SAMPLE No.	Cu	Cu	Pb	Pb	Zn	Zn	Ag	Ag	Mn
METHOD		GA140	GA104	GA140	GA104	GA140	GA104	GA140	GA104	GA140
1	038268	452	–	259	–	686	–	<1	–	–
2	038269	398	–	99	–	224	–	2	–	–
3	038270	587	–	22	–	385	–	<1	–	–
4	038271	1066	–	601	–	–	1.50	4	–	–
5	038272	180	–	1292	–	2053	–	4	–	1442
6	038273	151	–	2044	–	1396	–	8	–	3870
7	038274	457	–	2861	–	2468	–	10	–	4560
8	038275	–	2.09	–	1.42	–	19.40	–	91	–
9	038276	1031	–	2868	–	–	2.17	18	–	4270
[illegible]	038277	80	–	1083	–	2884	–	2	–	3175
11	038278	296	–	2754	–	–	1.18	4	–	4040
12	038279	239	–	–	0.82	2094	0.46	15	–	3670
13	038280	625	–	2345	–	–	0.75	13	–	870
14	038281	905	–	2386	–	–	0.84	8	–	1084
15	038282	375	–	3027	–	–	0.89	9	–	1987
16	038283	313	–	683	–	–	0.87	5	–	1503
17	038284	109	–	4590	–	1144	–	8	–	2341
18	038285	35	–	576	–	643	–	2	–	3340
19	038286	50	–	1051	–	334	–	4	–	3980
20	038287	27	–	1344	–	540	–	2	–	2884
21	038288	16	–	1936	–	834	–	3	–	3910
22	038289	33	–	2963	–	–	1.43	6	–	3060
[illegible]	038290	57	–	–	0.59	–	2.34	10	–	4670
24	038291	16	–	892	–	4798	–	2	–	–
25	038292	19	–	445	–	2467	–	2	–	–

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
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AUTHORISED OFFICER

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Analabs Pty. Ltd.
A.C.N. 004 591 664

845190

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	13/07/94	0251	4 OF 8

	SAMPLE No.	Cu	Cu	Pb	Pb	Zn	Zn	Ag	Ag	Mn
METHOD		GA140	GA104	GA140	GA104	GA140	GA104	GA140	GA104	GA140
1	038293	36	-	514	-	-	0.57	3	-	1909
2	038294	472	-	2035	-	-	1.81	14	-	2416
3	038295	88	-	1266	-	-	1.03	6	-	2736
4	038296	16	-	985	-	2681	-	3	-	2084
5	038297	7	-	320	-	2771	-	1	-	1546
6	038298	6	-	567	-	3151	-	1	-	2361
7	038299	8	-	362	-	2580	-	1	-	2313
8	038300	21	-	2172	-	-	1.18	2	-	1506
9										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
24	DETECTION	2	0.01	3	0.01	2	0.01	1	10	3
25	UNITS	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

845191

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	13/07/94	0251	5 OF 8

	SAMPLE No.	Mn	Bi	Au	Au(R)	Au(S)	Ba			
METHOD		GA104	GA140	GG309	GG309	GG309	GX401			
1	038039	-	<10	0.027	-	-	987			
2	038040	-	<10	0.029	-	-	1352			
3	038041	-	20	0.030	-	-	1074			
4	038042	-	15	0.029	-	0.017	1076			
5	038043	-	14	0.032	-	-	973			
6	038044	-	11	0.038	-	-	861			
7	038045	-	<10	0.013	-	-	1109			
8	038046	-	17	0.021	-	-	1083			
9	038047	-	14	0.010	-	-	913			
[illegible]	038048	-	15	0.019	-	-	1639			
11	038049	0.70	21	0.011	-	-	1011			
12	038050	1.35	14	0.008	<0.008	-	1014			
13	038051	1.35	16	<0.008	-	-	960			
14	038052	1.43	<10	0.008	-	-	1101			
15	038232	-	<10	0.019	-	-	1133			
16	038233	-	<10	0.091	-	-	831			
17	038234	-	<10	0.036	-	-	896			
18	038235	-	<10	0.052	-	-	844			
19	038236	0.75	<10	0.026	-	-	1421			
20	038237	-	<10	0.010	-	-	895			
21	038238	-	<10	0.008	-	-	703			
22	038239	-	<10	0.014	0.016	-	505			
23	038240	-	<10	0.050	-	-	567			
24	038241	-	<10	0.011	-	-	588			
25	038242	-	<10	<0.008	-	<0.008	604			

Results in ppm unless otherwise specified
- = element not determined

IS = insufficient sample
SNR = sample not received

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A.C.N. 004 591 664

845192

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	13/07/94	0251	6 OF 8

	SAMPLE No.	Mn	Bi	Au	Au(R)	Au(S)	Ba			
METHOD		GA104	GA140	GG309	GG309	GG309	GX401			
1	038243	-	<10	0.011	-	-	593			
2	038244	-	<10	0.008	-	-	614			
3	038245	-	<10	<0.008	-	-	616			
4	038246	-	<10	0.032	-	-	673			
5	038247	-	<10	0.037	-	-	755			
6	038248	-	<10	0.009	-	-	686			
7	038249	-	<10	0.012	-	-	709			
8	038250	-	<10	0.009	-	-	826			
9	038251	0.76	13	0.008	-	-	685			
10	038252	0.59	13	<0.008	-	-	591			
11	038253	-	13	0.032	-	-	589			
12	038254	-	20	0.040	0.045	-	903			
13	038255	-	17	0.029	-	-	989			
14	038256	-	23	0.027	-	-	1042			
15	038257	0.66	51	0.017	-	-	846			
16	038258	-	28	0.045	-	-	2299			
17	038259	-	23	0.029	-	-	2085			
18	038260	-	19	0.033	-	-	1542			
19	038261	1.81	<10	0.015	-	-	1334			
20	038262	3.82	35	0.013	-	-	282			
21	038263	6.85	31	0.035	-	-	161			
22	038264	3.40	33	0.025	0.022	-	3077			
[illegible]	038265	0.75	11	0.027	-	-	4465			
24	038266	-	<10	0.035	-	-	3181			
25	038267	-	14	0.032	-	-	3335			

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

845193

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	13/07/94	0251	7 OF 8

	SAMPLE No.	Mn	Bi	Au	Au(R)	Au(S)	Ba			
METHOD		GA104	GA140	GG309	GG309	GG309	GX401			
1	038268	1.75	<10	0.011	-	-	1331			
2	038269	1.51	<10	0.009	-	-	1070			
3	038270	1.24	<10	<0.008	-	-	899			
4	038271	1.63	10	0.010	-	-	1479			
5	038272	-	<10	0.020	-	<0.008	1915			
6	038273	-	10	0.010	-	-	1195			
7	038274	-	<10	0.021	-	-	1509			
8	038275	0.55	131	0.112	-	-	707			
9	038276	-	12	0.015	-	-	992			
10	038277	-	<10	0.016	-	-	968			
11	038278	-	<10	0.012	-	-	989			
12	038279	-	<10	0.021	0.022	-	1204			
13	038280	-	<10	0.009	-	-	734			
14	038281	-	<10	0.014	-	-	1135			
15	038282	-	<10	0.012	-	-	1084			
16	038283	-	<10	0.013	-	-	1081			
17	038284	-	<10	0.043	-	-	1480			
18	038285	-	<10	0.016	-	-	1081			
19	038286	-	<10	0.009	-	-	999			
20	038287	-	<10	0.010	-	-	1440			
21	038288	-	<10	0.028	-	-	1339			
22	038289	-	<10	0.070	0.069	0.058	2592			
[illegible]	038290	-	<10	0.090	-	-	2560			
24	038291	3.13	<10	0.021	-	-	3091			
25	038292	0.89	<10	0.037	-	-	2282			

Results in ppm unless otherwise specified
- = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

845194

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10250	13/07/94	0251	8 OF 8

	SAMPLE No.	Mn	Bi	Au	Au(R)	Au(S)	Ba			
METHOD		GA104	GA140	GG309	GG309	GG309	GX401			
1	038293	-	<10	0.119	-	-	2862			
2	038294	-	<10	0.125	-	-	3175			
3	038295	-	<10	0.056	-	-	2772			
4	038296	-	<10	0.038	-	-	2276			
5	038297	-	<10	0.017	-	-	2163			
6	038298	-	<10	0.012	-	<0.008	1135			
7	038299	-	<10	0.011	-	-	1165			
8	038300	-	<10	0.039	-	-	968			
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
24	DETECTION	0.01	10	0.008	0.008	0.008	10			
25	UNITS	%	ppm	ppm	ppm	ppm	ppm			

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

Phone (004) 316837

14 Thirkell St. COOEE TAS 7320

Fax (004) 318890

845195

ANALYTICAL REPORT No. 11310.60.10369

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

INVOICE TO:
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

ORDER No.	PROJECT
0139	3006

DATE RECEIVED	RESULTS REQUIRED
18/08/94	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
2	06/09/94	1	8

SAMPLE NUMBERS	SAMPLE DESCRIPTION	ELEMENT/METHOD
37709/37716	CO Prep ; GP029 P5	Rb,Sr,Y,Zr,Nb/GX401 WHOLE ROCK/GX408

RESULTS TO
Mr F Fitzgerald
Pasminco Exploration
P.O. Box 886
BURNIE TAS 7320

RESULTS TO
Roger Pollock Geological Pty Ltd
Mineral Exploration Contractor
C/- Post Office
WILMOT TAS 7310

RESULTS TO

REMARKS

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

845196

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10369	06/09/94	0139	1 OF 2

	SAMPLE No.	Rb	Sr	Y	Zr	Nb	Al2O3	SiO2	TiO2	Fe2O3
METHOD		GX401	GX401	GX401	GX401	GX401	OX408	OX408	OX408	OX408
1	37709	45	140	43	187	9	12.44	68.7	0.20	1.62
2	37710	320	32	56	399	19	24.98	51.6	0.46	2.81
3	37711	77	79	28	181	12	13.25	70.0	0.15	3.76
4	37712	39	97	30	185	<3	12.10	69.8	0.15	3.82
5	37713	246	25	45	231	12	18.57	62.9	0.75	2.31
6	37714	225	77	58	279	15	21.92	53.1	0.89	3.84
7	37715	189	29	32	177	10	13.79	69.9	0.57	2.15
8	37716	165	37	29	168	9	12.70	70.0	0.53	1.91
9										
[illegible]										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
[illegible]										
24	DETECTION	5	5	5	5	3	0.05	0.1	0.01	0.01
25	UNITS	ppm	ppm	ppm	ppm	ppm	%	%	%	%

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

Analabs

Analabs Pty. Ltd.
A.C.N. 004 591 664

845197

ANALYTICAL DATA

SAMPLE PREFIX	REPORT No.	REPORT DATE	CLIENT ORDER No.	PAGE
	111310.60.10369	06/09/94	0139	2 OF 2

	SAMPLE No.	MnO	CaO	K2O	MgO	P2O5	SO3	Na2O	LOI	TOTAL
METHOD		OX408	OX408	OX408	OX408	OX408	OX408	OX408	OM615	OX408
1	37709	0.25	3.00	0.66	1.54	0.045	0.56	5.58	5.16	99.85
2	37710	0.19	0.73	8.46	2.80	0.105	0.32	0.52	6.70	99.67
3	37711	0.16	0.42	1.87	3.58	0.023	0.29	2.69	3.34	99.63
4	37712	0.29	0.29	2.05	5.11	0.026	0.03	2.81	3.29	99.76
5	37713	0.24	0.37	8.64	1.21	0.205	0.71	0.21	3.26	99.52
6	37714	0.42	2.25	6.16	2.20	0.243	1.51	2.00	5.83	100.43
7	37715	0.25	1.89	5.07	1.28	0.170	0.31	0.16	4.00	99.55
8	37716	0.38	2.99	4.39	1.26	0.174	0.28	0.19	4.79	99.66
9										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
24	DETECTION	0.01	0.01	0.01	0.01	0.005	0.01	0.05	0.01	0.01
25	UNITS	%	%	%	%	%	%	%	%	%

Results in ppm unless otherwise specified
– = element not determined

IS = insufficient sample
SNR = sample not received

AUTHORISED OFFICER

APPENDIX 9

Sample Record & Analytical Data Sheets
(all samples other than from BPD79-81)

ROGER POLTOCK GEOLOGICAL PTY. LTD.

CLIENT PASMINCO EXPLORATION

PROJECT EL 44/88 BURNS PEAK

PROSPECT

SAMPLE RECORD AND ANALYTICAL DATA SHEET

LABORATORY ANALABS

SAMPLE TYPE ~~Rock~~ - CORE

COLLECTED BY: RP

DATE DISPATCHED:

DATE RECEIVED:

A 2830

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							
34775	BPD 79	64.9m	Whole rock	Job	N°	09941					
34776	"	128.0m	" "			"					
34777	"	241.0 m	" "			"					
34778	"	268.4 m	" "			"					
34779	"	350.0m	" "			"					
34780	"	356m	" "			"					
34781	"	361.4m	" "			"					
34782	"	378.4m	" "			"					
34783	"	391.4 m	" "			"					
34784	"	426.8m	" "			"					
34785	"	446.9m	" "			"					
34786	"	457.1m	" "			"					
34787	"	568.4m	" "			"					
37705	EAB 3	131.0m	Whole rock	Job	N°	10106					
37706	" "	212.8m	" "			"					
37707	EAF 14	332.0m	" "			"					
37708	EAF 16	16.5 m	" "			"					

845199

845200

PASMINCO EXPLORATION
GEOCHEMICAL ANALYSES RECORD

Sample Type ____________

PROSPECT SUMMIT / HOLLWAY
PROJECT BURNS PEAK
MARK SAXON

Sample No.	Sample Type	Location	METAL CONTENT (ppm unless specified)		COMMENTS
36101	CORE	BPD 76 169·8 m	WHOLE ROCK	Rhyolite lava	JOB NO. 10045
36102	CORE	BPD 77 306·0m	"	Qtz - Feld porph	"
36103	CORE	EAB1 44·9m	"	Qtz - Feld porph	"
36104	CORE	EAB2 111·5 m	"	Dacite lava	"
36105	CORE	BPD65 48·1 m	"	Qtz - feld porph	"
36106	CORE	BPD 77 152·8m	"	Rhyolite lava	"
36112	CORE	BPD80 381·8 m	"	Qtz - feld porph	JOB NO. 10189
36119	RCHIP	5383630 379110	METALS	Non micaceous shale in andesite	JOB NO. 10245
36120	RCHIP	5383544 379085	"	"	"
36121	RCHIP	5383465 379102	"	Andesite lava	"
36122	RCHIP	5383410 379 117	"	Pyritic Vsst, coarse pyrite nodules, 10% py	"
36123	RCHIP	5383294 379099	"	Qtz ± mica sst, ACG equiv.	"
36124	RCHIP	5383410 379 117	"	Siliceous dk gry - black shale, pyritic lams to 2%.	"

845201

ROGER POLTOCK GEOLOGICAL PTY. LTD.

CLIENT PASMINCO EXPLORATION

PROJECT EL 44/88 BURNS PEAK

PROSPECT

SAMPLE RECORD AND ANALYTICAL DATA SHEET

LABORATORY ANALABS

SAMPLE TYPE CORE - [illegible]

COLLECTED BY: RP

DATE DISPATCHED:

DATE RECEIVED:

A 28305

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
37709	BPD 81	253.1 - 253.2m	Whole rock	Job	No	10369						
37710	" "	307.0 - 307.1m	" "			"						
37711	" "	331.1 - 331.3m	" "			"						
37712	EAF 15	79.65 - 79.75	" "			"						
37713	EAF 2	83.4 - 83.5m	" "			"						
37714	" "	105.3 - 105.4m	" "			"						
37715	" "	125.7 - 125.8m	" "			"						
37716	" "	128.8 - 128.9m	" "			"						
38053	BPD 81	40.0 - 40.1m	" "	Job	No	10204						
38054	" "	67.1 - 67.3m	" "			"						
38055	" "	81.6 - 81.8m	" "			"						
38056	" "	103.6 - 103.8m	" "			"						
38057	" "	121.6 - 121.8m	" "			"						
38058	" "	146.4 - 146.6m	" "			"						
38059	" "	167.4 - 167.5m	" "			"						
38060	" "	184.0 - 184.2m	" "			"						
38061	" "	217.3 - 217.35m	" "			"						
38062	" "	360.7 - 360.8m	" "			"						
38063	" "	391.2 - 391.4m	" "			"						
38064	" "	412.6 - 412.8m	" "			"						

APPENDIX 10

DHEM, MALM & Ground Magnetics Surveys
Burns Peak - the period December 1993-January 1994

MEMORANDUM

PASMINCO
EXPLORATION

A Division of Pasminco Australia Limited,
A.C.N. 004 074 962

Level 7
380 St Kilda Road
Melbourne, Australia 3004
G.P.O. Box 1291K
Melbourne, Australia 3001

TO: R Poltock

FROM: NA Hughes

DATE: 20 March 1994

FILE: EP/002/3006

SUBJECT: **DHEM, MALM and Ground Magnetic Surveys on Burns Peak EL during the Period December, 93/ January, 94.**

DHEM

Drill-holes BPD78 and BPD79 were surveyed with the Crone DHEM system by Outer Rim Exploration from two 400mx400m transmitter loops (Figure 19) from December 6 to 8, 1994.

For all surveys a 10ms time base and 0.5ms ramp was employed. Seventeen channels of data were recorded between 0.076 - 6.646 ms. The average loop current for all surveys was 6 amps.

X and Y component data was collected only for the collar loop of drill-hole BPD78.

The data was extremely noisy for all surveys which neccistated averaging several readings at each station. This method appears to give smoother data profiles and decays than increased stacking time. The axial data for BPD78, east loop, is presented without averaging the repeats to show the variation of results at each station.

Data is presented as linear profiles of the PP and secondary magnetic fields at a scale of 1:2500 (Figures 1 to 18).

BPD78

Early time in-hole spikes were recorded at 290m and 330m for the axial data and correlate with mineralisation interesected in the drill-hole. Both responses indicate mineralisation is strike limited and /or discontinuous. A broad "off hole" in the axial data is suggested at 330m in channels 8 and 9 from the collar loop, however this is not seen from the east loop or in the X or Y data sets, and may be due to the strong sympathetic response of the secondary field to the inducing primary field near the top of the hole , either due to "self" or "system" response or attributable to overburden.

It is difficult to make sense of the X and Y data, especially the early channels. The later channels for the X component appear to be consistant with the axial data. The Y component negative to positive cross over is attributed to the drill-hole to smoke ring geometry.

Telephone (03) 288 0333 Facsimile (03) 288 0211

BPD79

Early time in-hole spike evident at 380m. No other anomalies detected.

MALM

In December 1993 Geoterrex was commisioned to undertake MALM surveys on the Burns Peak grid on behalf of Pasminco. The objective of the survey was to determine whether the mineralization intersected in BPD78 at 330m had any lateral extent, even though not indicated by DHEM. Equipment used included a Zonge GDP16 IP receiver and a Huntec 7.5 kW IP transmitter.

The current injection point for these surveys was the mineralisation intersected in BPD78 at 330m. The remote current source was placed about 1 km outside of the grid to the northwest, and the remote potential was placed outside the grid area to the south. Nominal station spacing was 40m, 20m for detail. Unfortunately the motor generator blew a piston and the survey was stopped because the motor generator could not be repaired before Christmas. Lines completed to this time were L5800N to L5000N.

Processing of the data involved normalising the measured voltages by the transmitter current.

Figures 21 and 22 show the results of the survey in contour and profile plan format. The results indicate that there is no current flow to the north, but possibly to the south. Of some interest is the increased voltages recorded to the northwest and circular low voltage pattern about the current injection point. These features may relate to the geometry of the remote current and potential electrodes although it is unclear how.

To determine whether the response was closed to the south a further line (L4900N) of MALM was read by Pasminco personnel in February 1994 using a Huntec Mk4 IP receiver and Huntec 7.5 kW IP transmitter. The remote current electrode was the same as for the Geoterrex survey however the remote potential was placed outside the grid area to the west.

The combined results of the two surveys are shown as a contour plan map in Figure 23. It appears that a majority of the signal recorded can be attributed to a point source, however there does appear to be some preferential current flow to the south.

GROUND MAGNETICS

A ground magnetics survey was undertaken over the Burns Peak grid by Pasminco personnel during January 1994 using a pair of Geometrics G856 magnetometers. Nominal sample interval was 10m and line separation was 100m.

Data processing involved diurnal correction of the field data by the base station and then assigning an easting and northing to each reading as this is not possible to do in the field with the G856. The supplied software MAGLOC was also unable to assign the correct X and Y to each reading because the manner in which the data was collected was not compatable with that expected by the program.

The data is presented as a profile plan map of the diurnally corrected magnetics (Figure 24). The most obvious features are the numerous high amplitude, high frequency spikes and dipoles. Most of these response have been attributed to drill casing. By removing the spikes the along line variation is generally less than 20 nT (Figure 25).

The generally low magnetic variation across the grid and noisy nature of the data indicate the ground magnetics using this sampling style is ineffective at mapping variations in litholgy and structure. It is not recommended at this time that the survey be repeated.

Neil

NAH_33.SAM/SR

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD-78
Grid	: Burns Peak	Tx Loop	: Collar
Date	: 7th Dec. 1993	File name	: BPD78ZC.AVG

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 2000

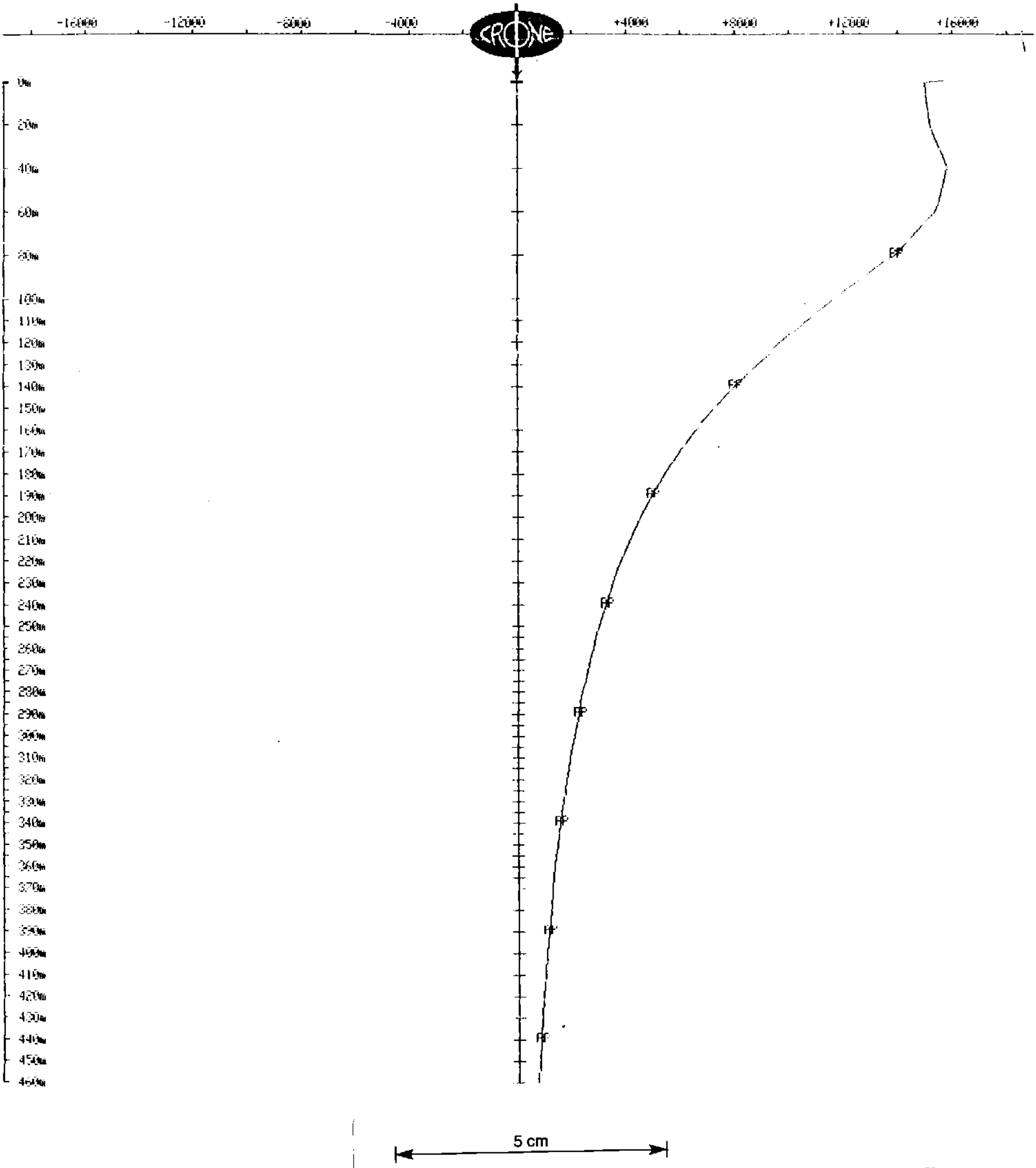


Fig 1

845207

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : 7th Dec. 1993

Hole : BPD-78
Tx Loop : Collar
File name : BPD78ZC.AVG

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 50

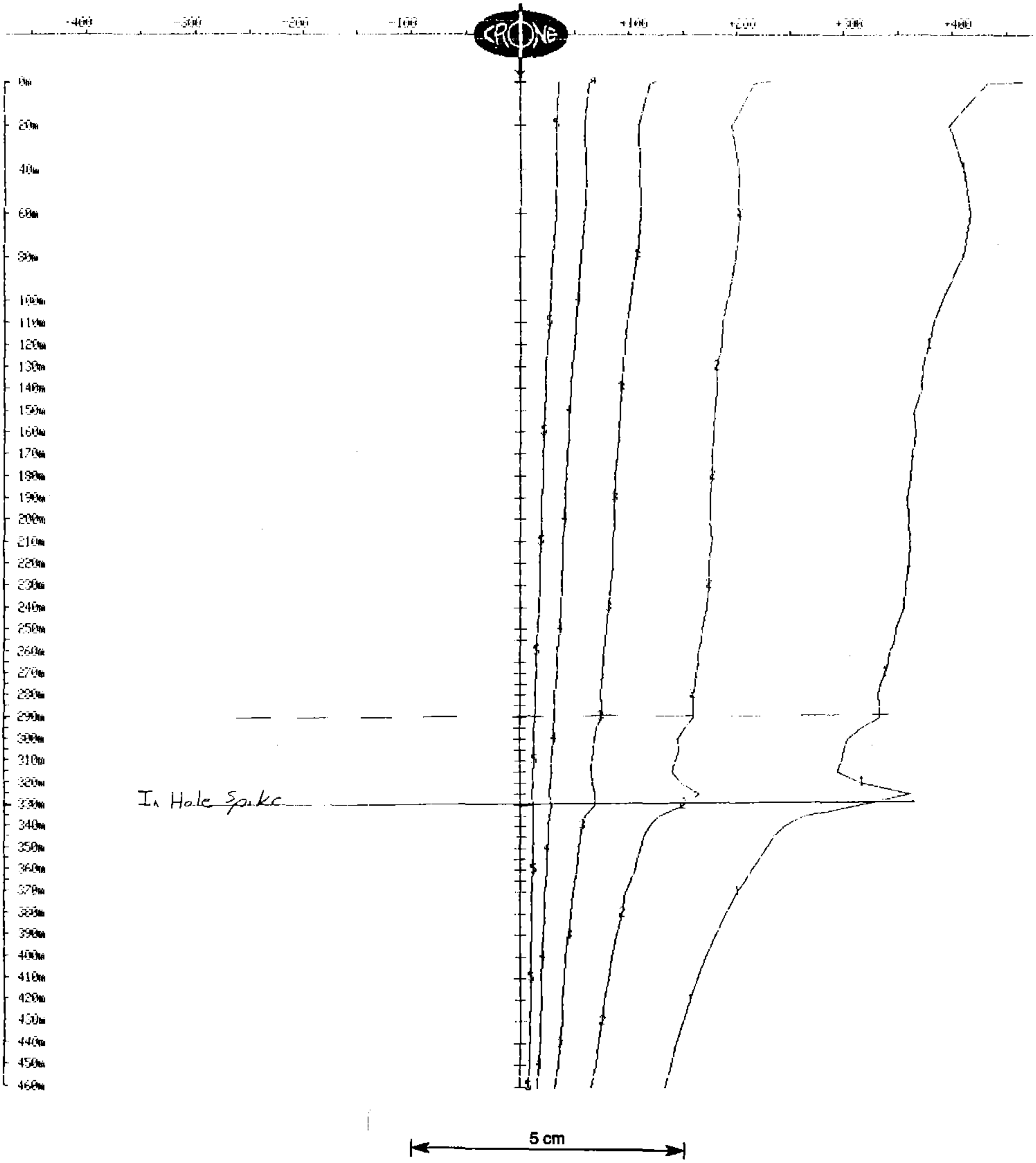


Fig 2

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD-78
Grid	: Burns Peak	Tx Loop	: Collar
Date	: 7th Dec. 1993	File name	: BPD78ZC.AVG

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 2

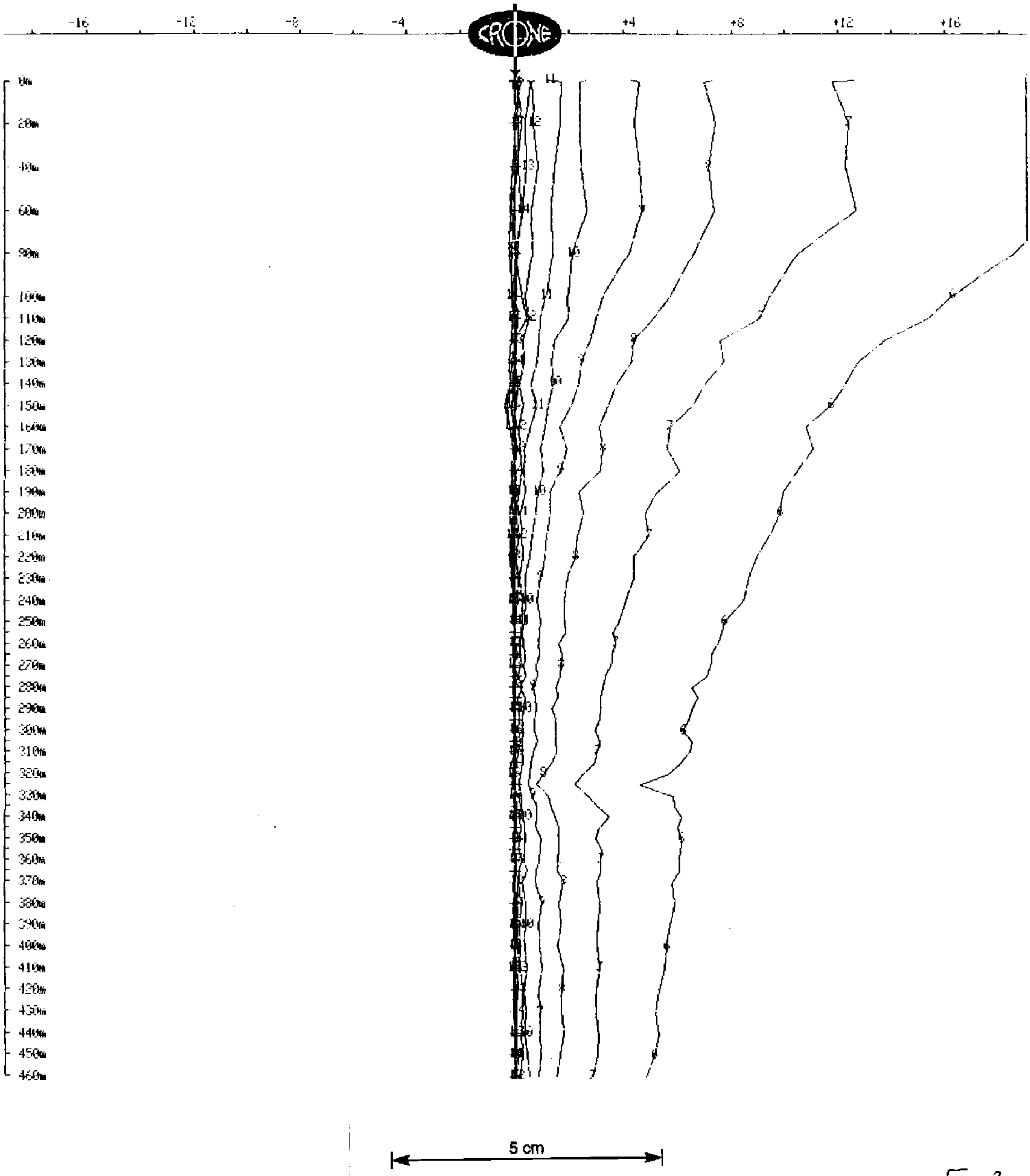


Fig 3

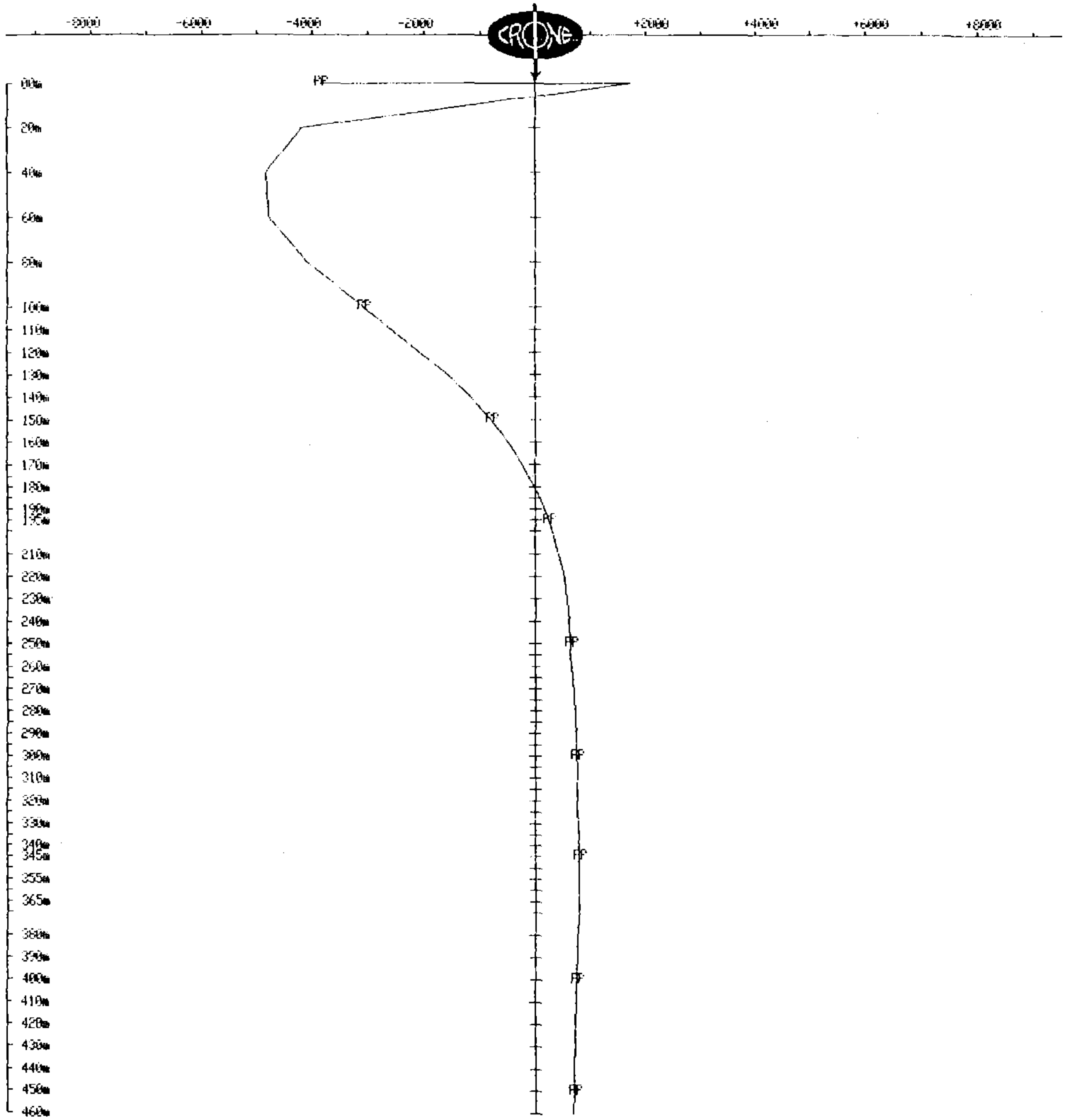
845209

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD78
Grid	: Burns Peak	Tx Loop	: East
Date	: 8th Dec. 1993	File name	: BPD78ZE.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m^2 - 17 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 1000



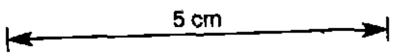


Fig 4

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : 8th Dec. 1993
Hole : BPD78
Tx Loop : East
File name : BPD78ZE.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500
Unit Scale: 1cm = 50

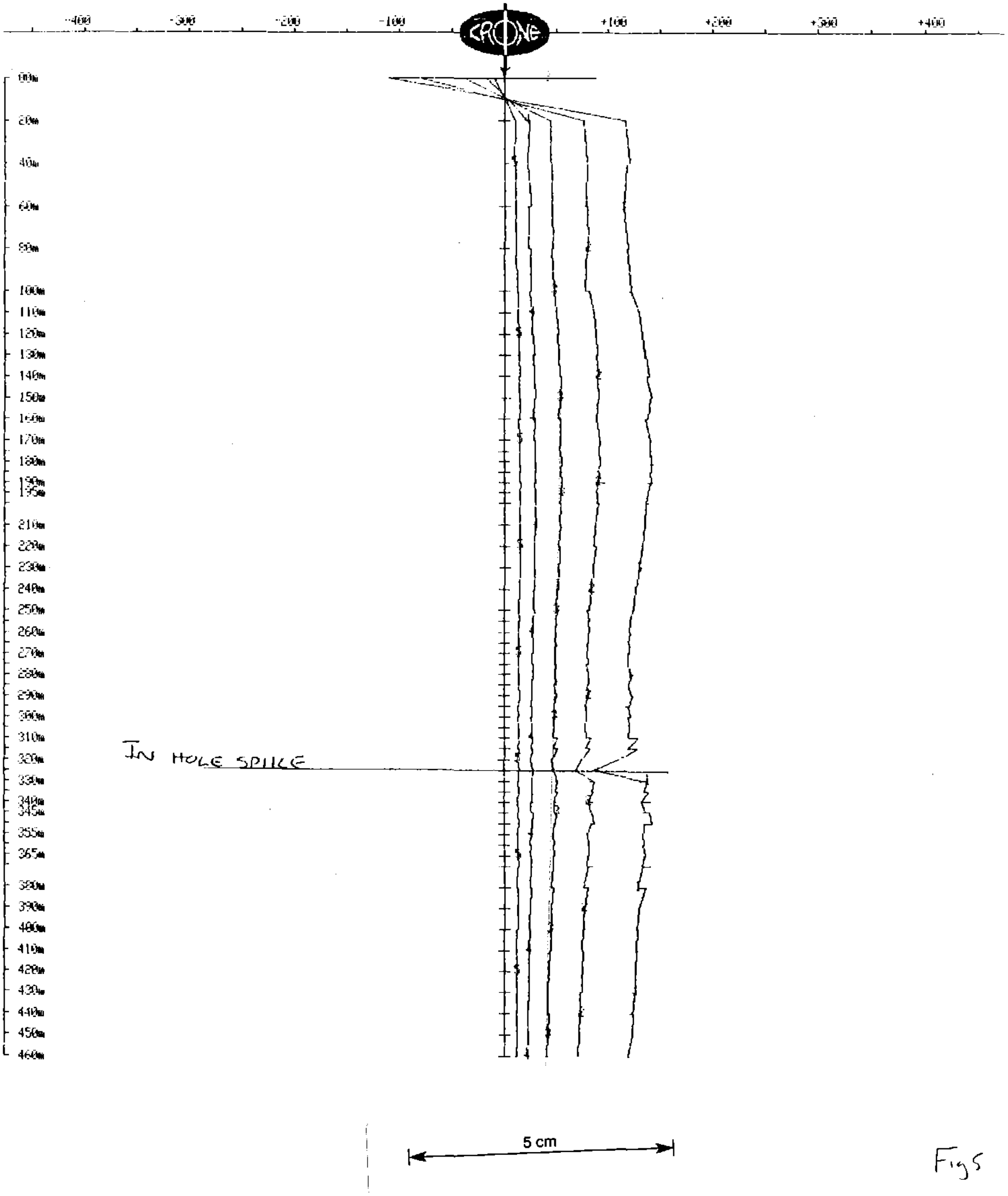


Fig 5

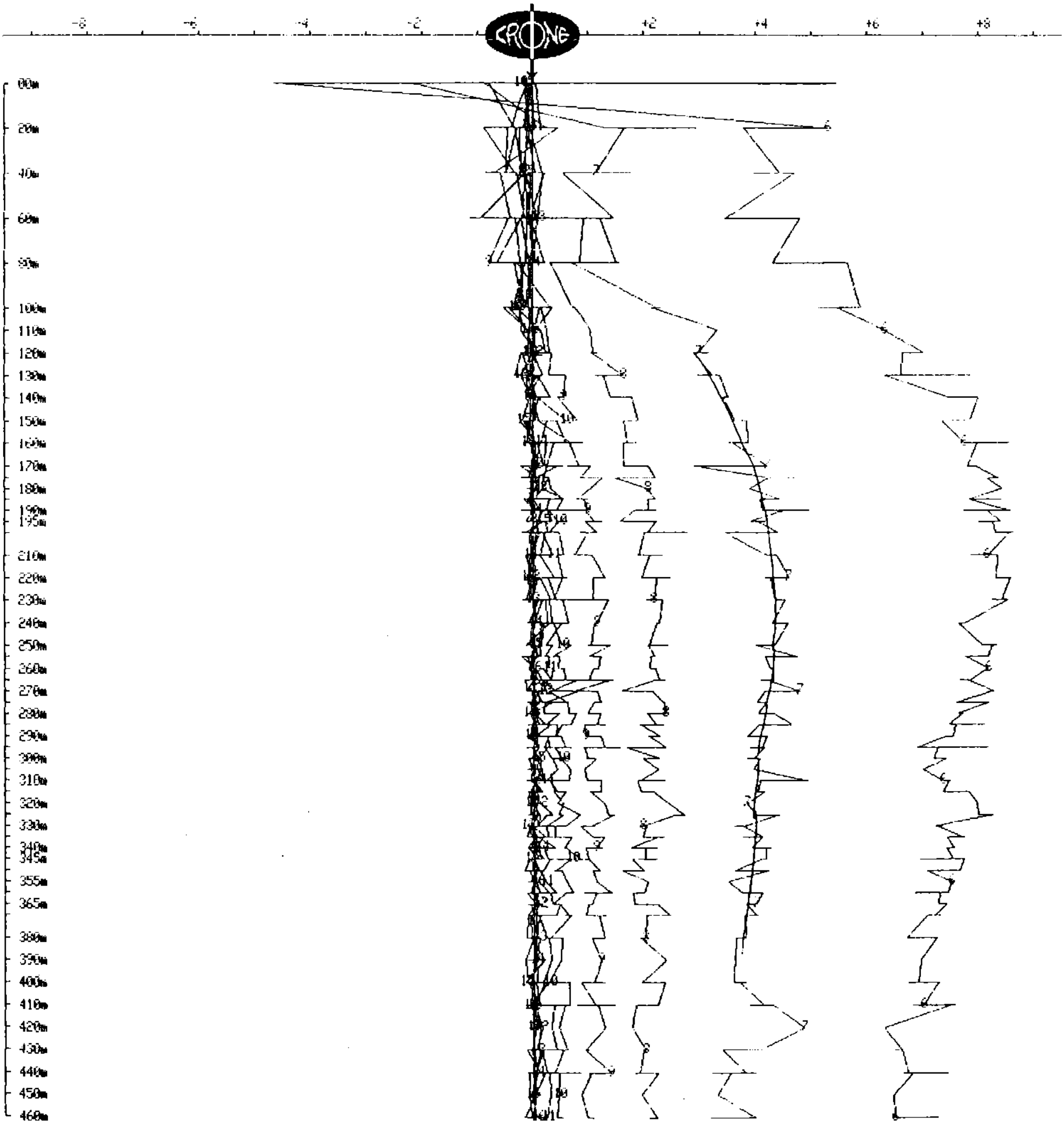
040211

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD78
Grid	: Burns Peak	Tx Loop	: East
Date	: 8th Dec. 1993	File name	: BPD78ZE.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 1



5 cm

Fig 6

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD78
Grid	:	Burns Peak	Tx Loop	:	Collar
Date	:	7-8th Dec. 1993	File name	:	BPD78XYC.AM2

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoVolt/Amp-m² - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 1000

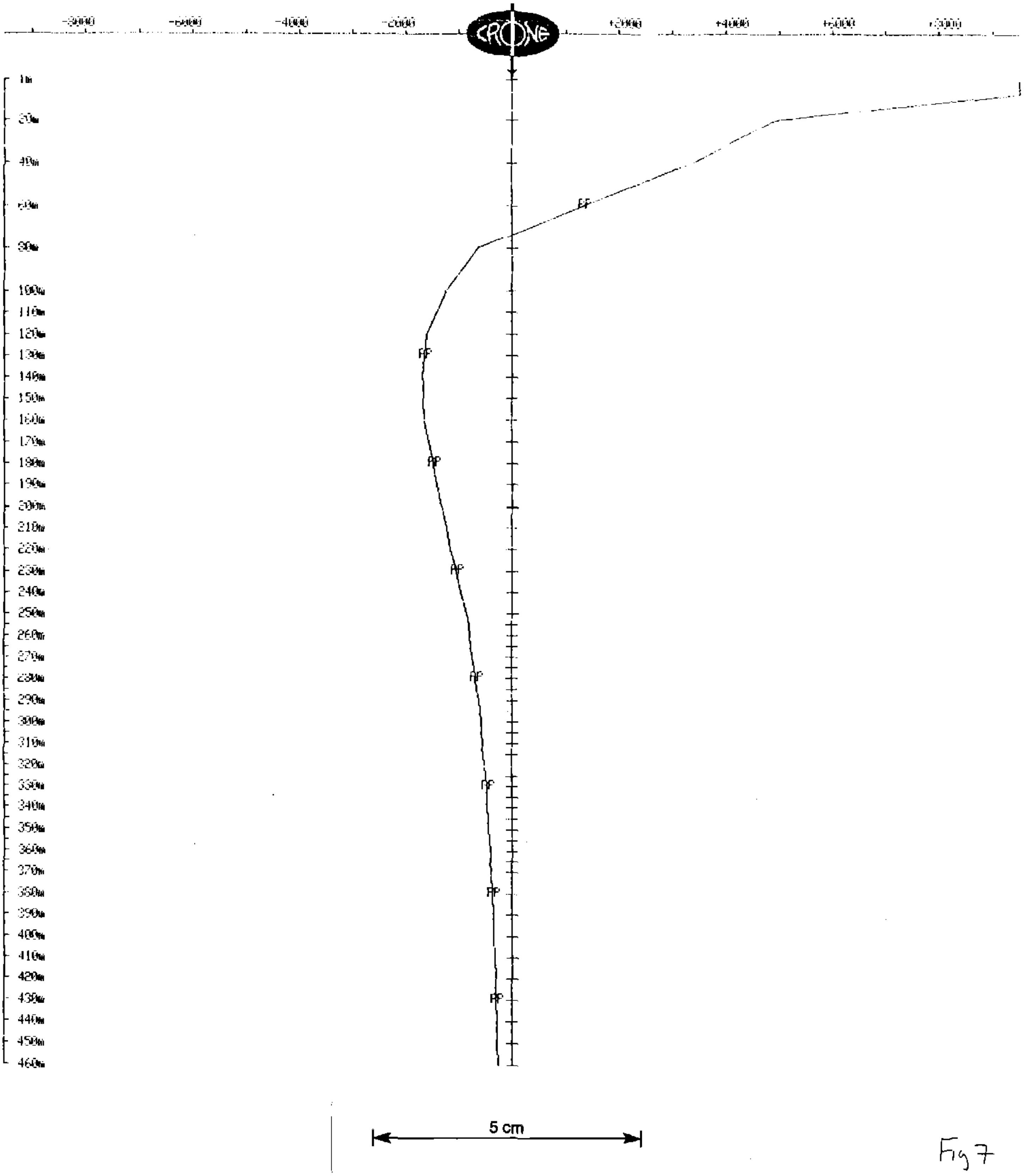


Fig 7

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : 7-8th Dec. 1993
Hole : BPD78
Tx Loop : Collar
File name : BPD78XYC.AM2

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoVolt/Amp-m² - 17 channels and PP
Scale: 1:2500 Unit Scale: 1cm = 1000

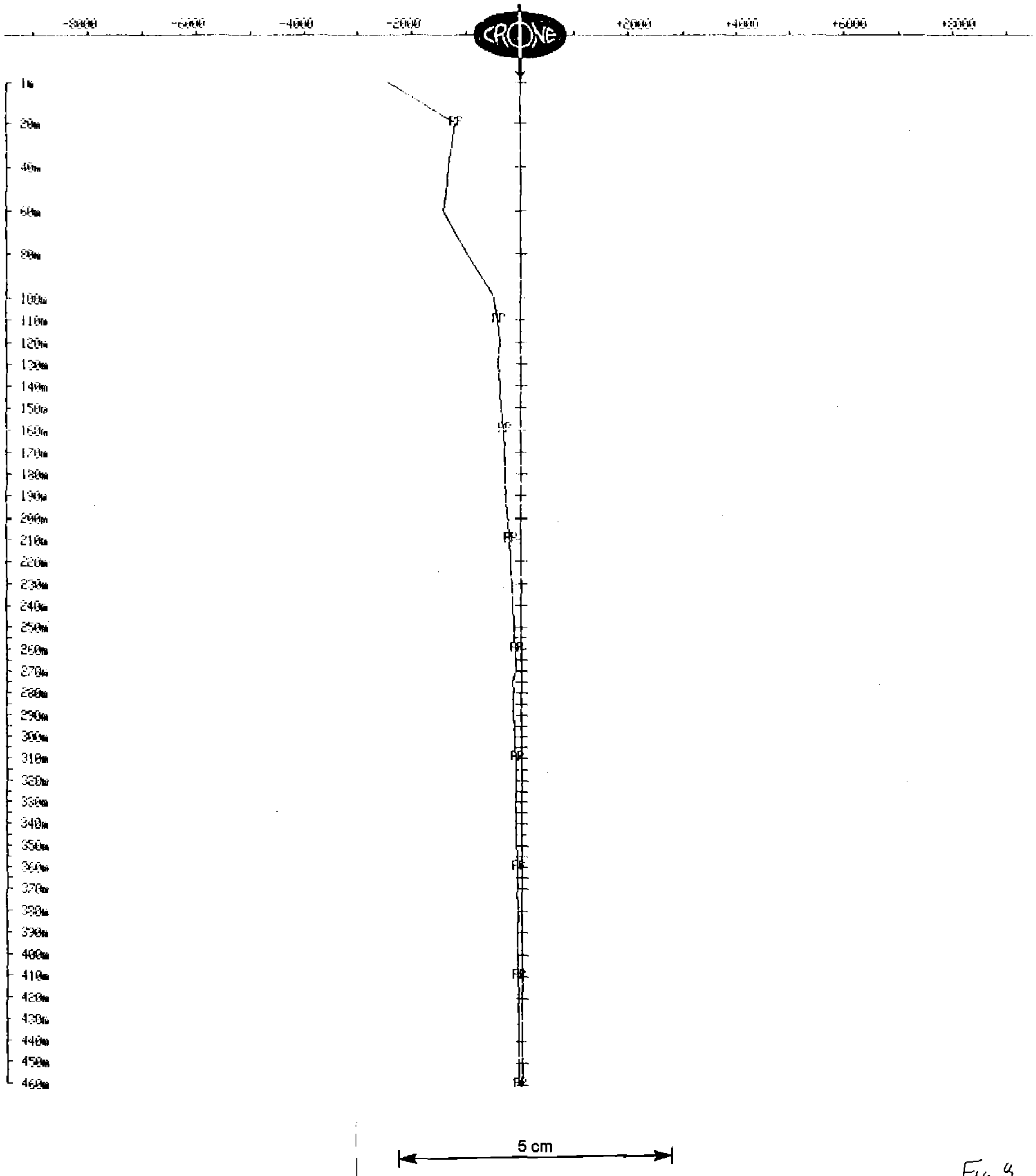


Fig 8

845214

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD78
Grid	: Burns Peak	Tx Loop	: Collar
Date	: 7-8th Dec. 1993	File name	: BPD78XYC.AM2

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 20

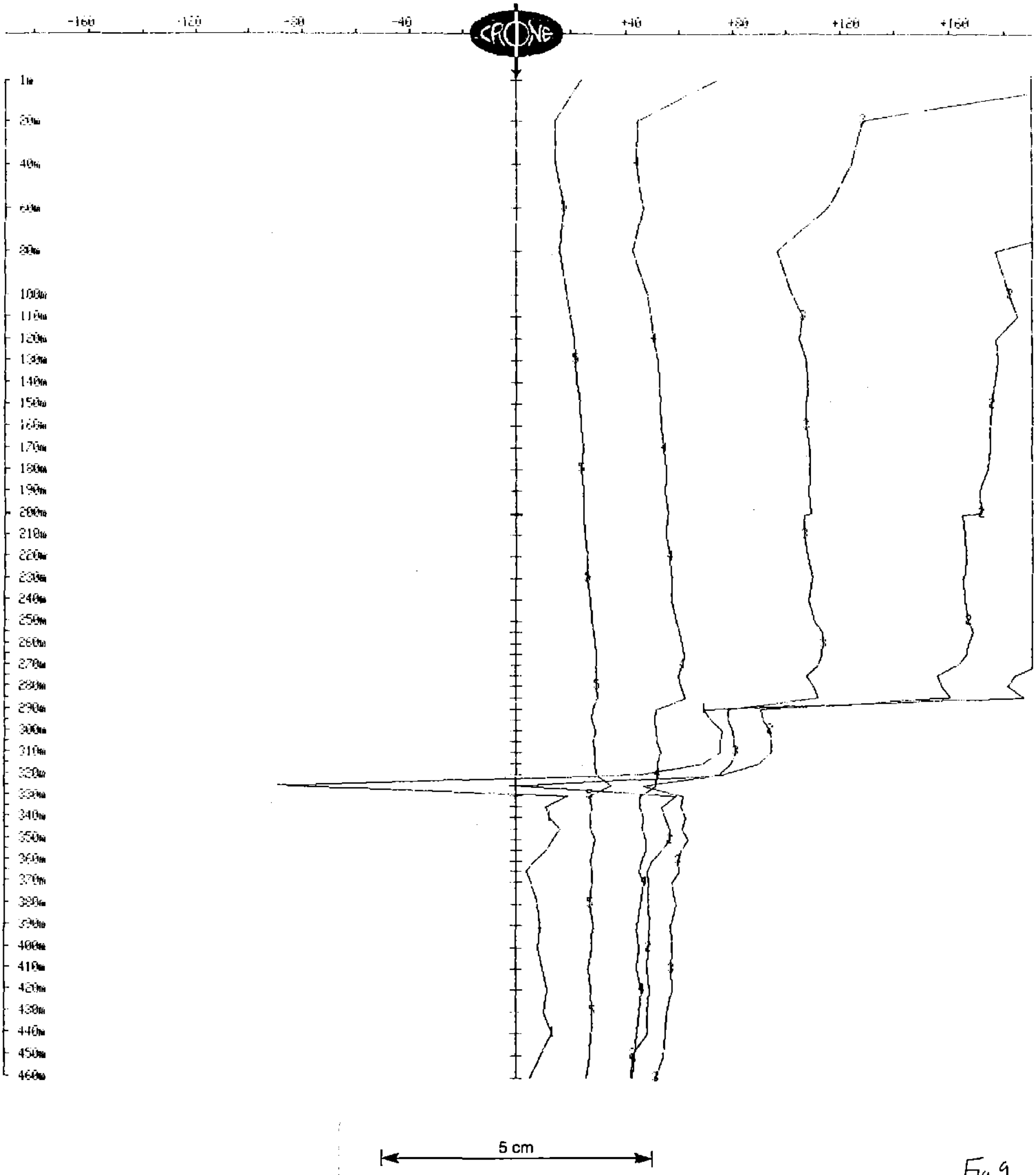


Fig 9

045210

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

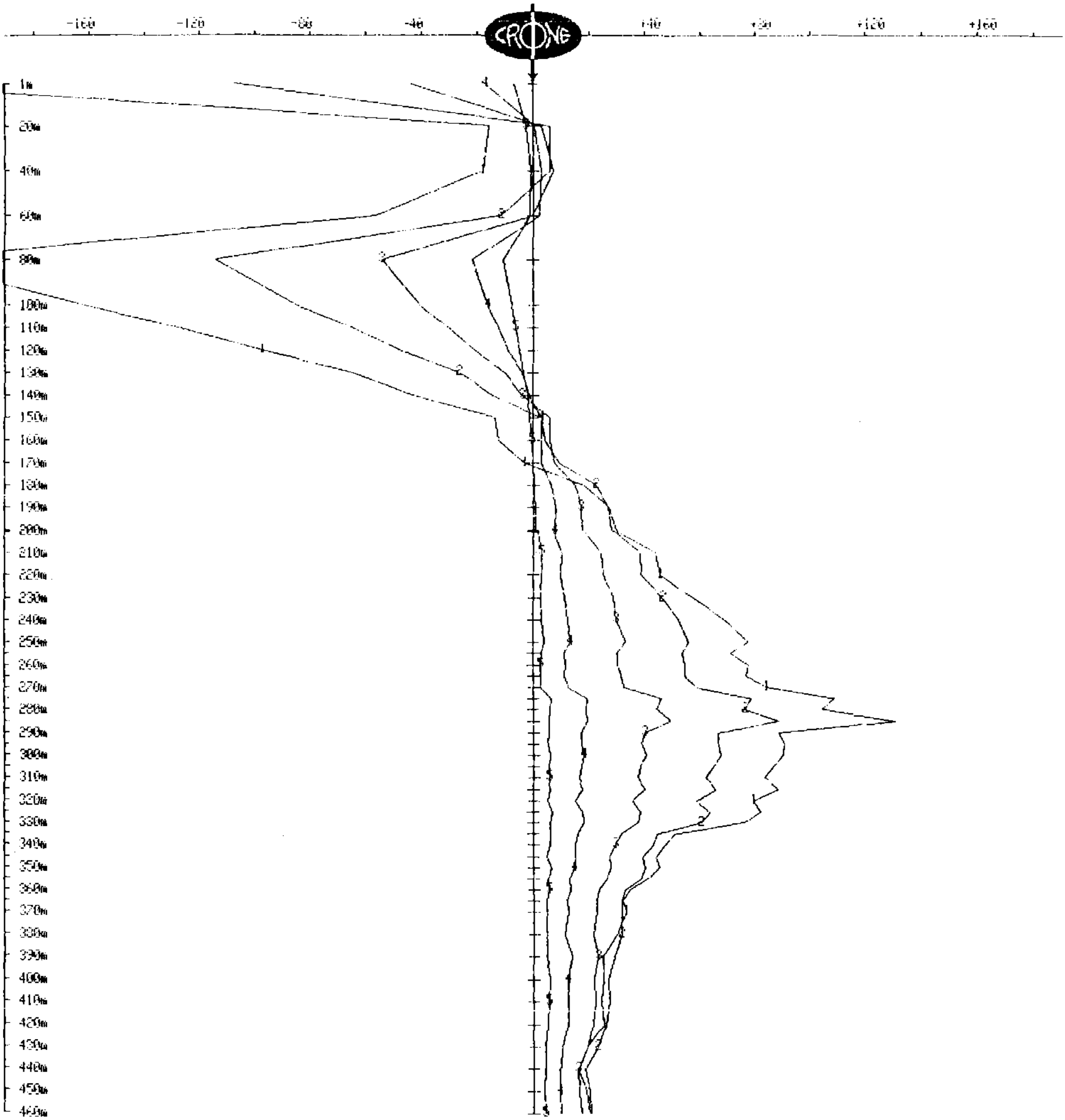
Client : Pasminco Exploration
Grid : Burns Peak
Date : 7-8th Dec. 1993

Hole : BPD78
Tx Loop : Collar
File name : BPD78XYC.AM2

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 20



5 cm

Fig 10

845216

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration		Hole	:	BPD78
Grid	: Burns Peak		Tx Loop	:	Collar
Date	: 7-8th Dec. 1993		File name	:	BPD78XYC.AM2

Data Corrected for Probe Rotation using Cleaned PP

X COMPONENT dBx/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 1

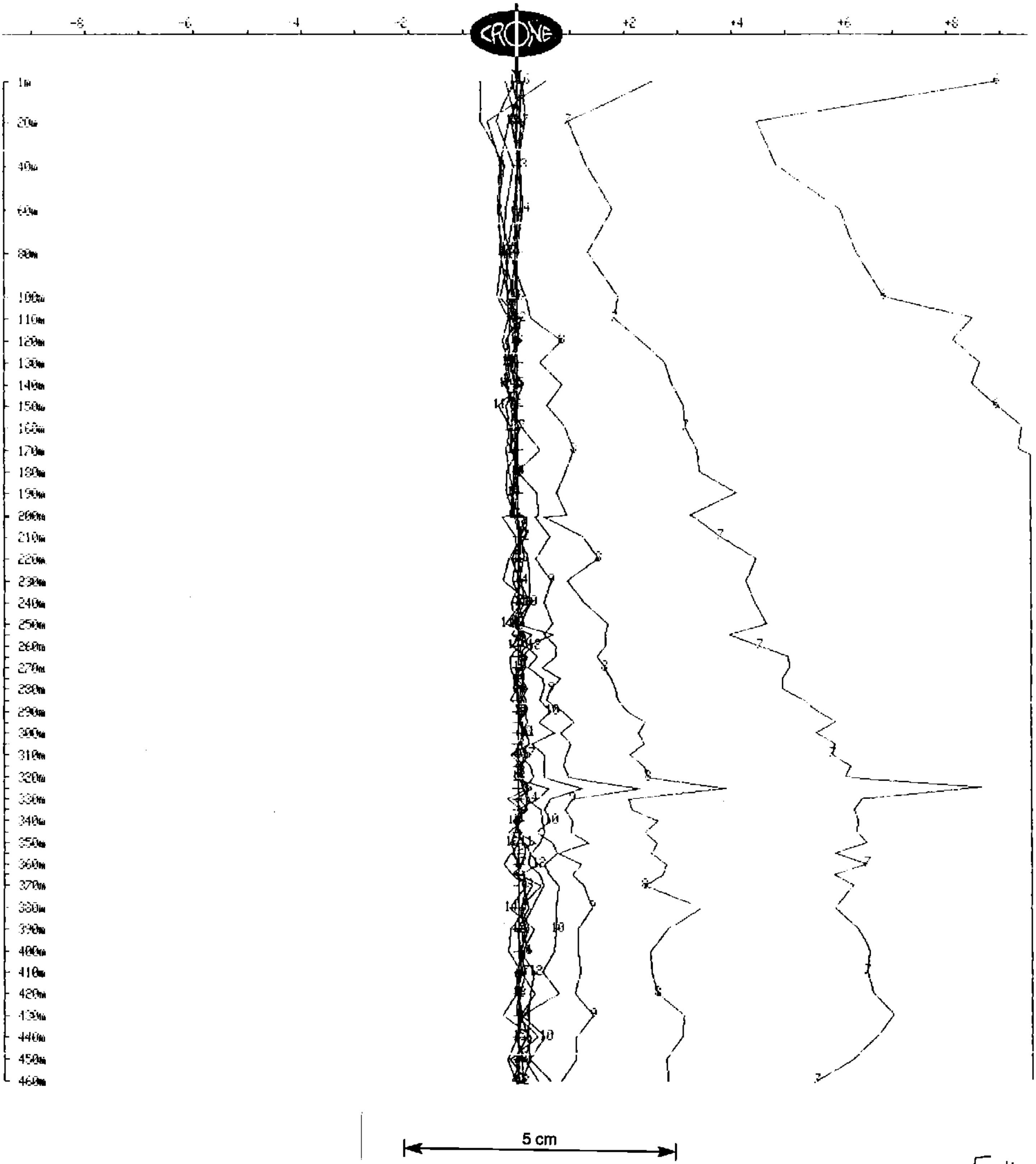


Fig 11

84021

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD78
Grid	: Burns Peak	Tx Loop	: Collar
Date	: 7-8th Dec. 1993	File name	: BPD78XYC.AM2

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1

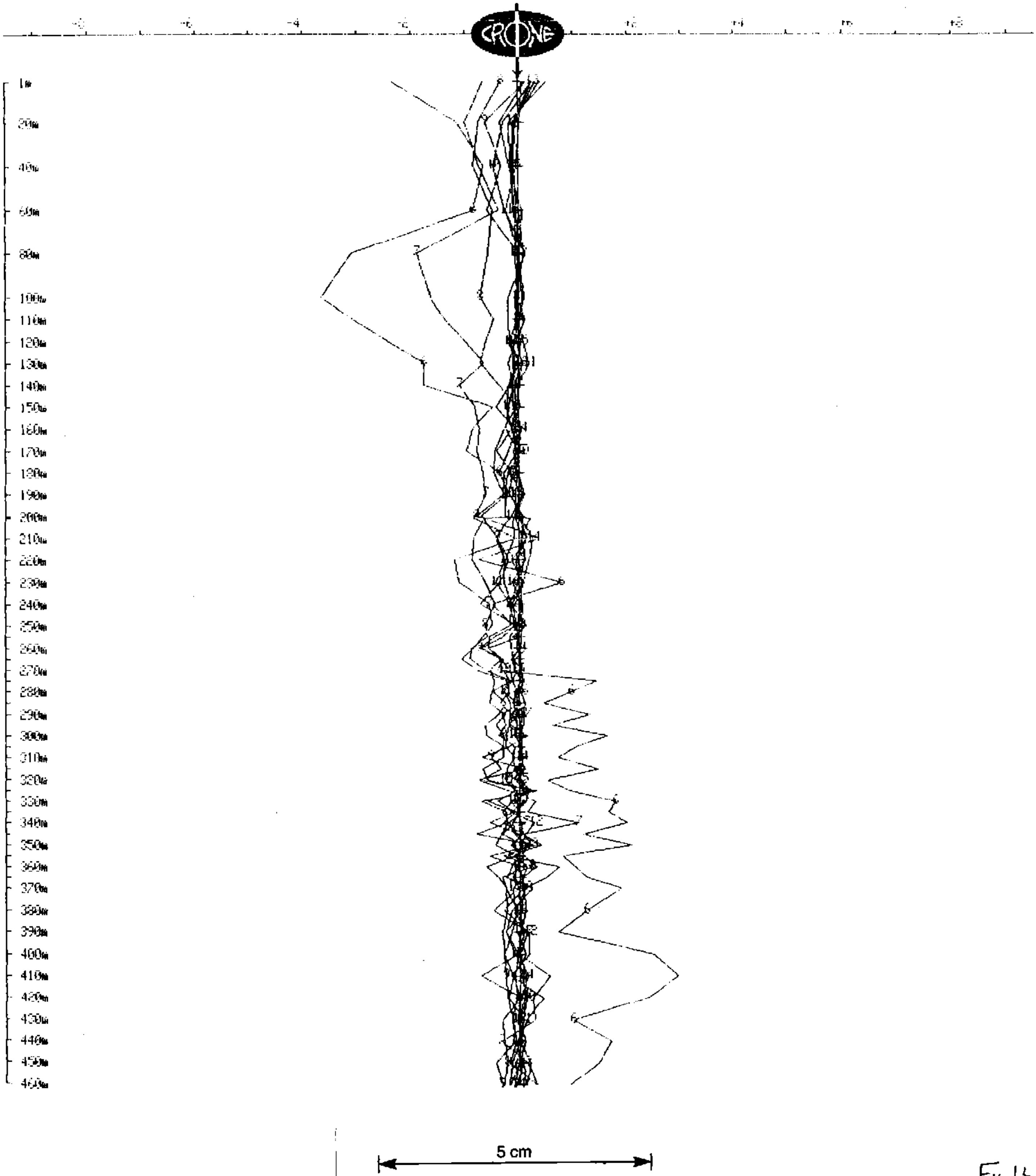


Fig 12

845218

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD79
Grid	: Burns Peak	Tx Loop	: Collar
Date	: 6th Dec. 1993	File name	: BPD79ZC.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 2000

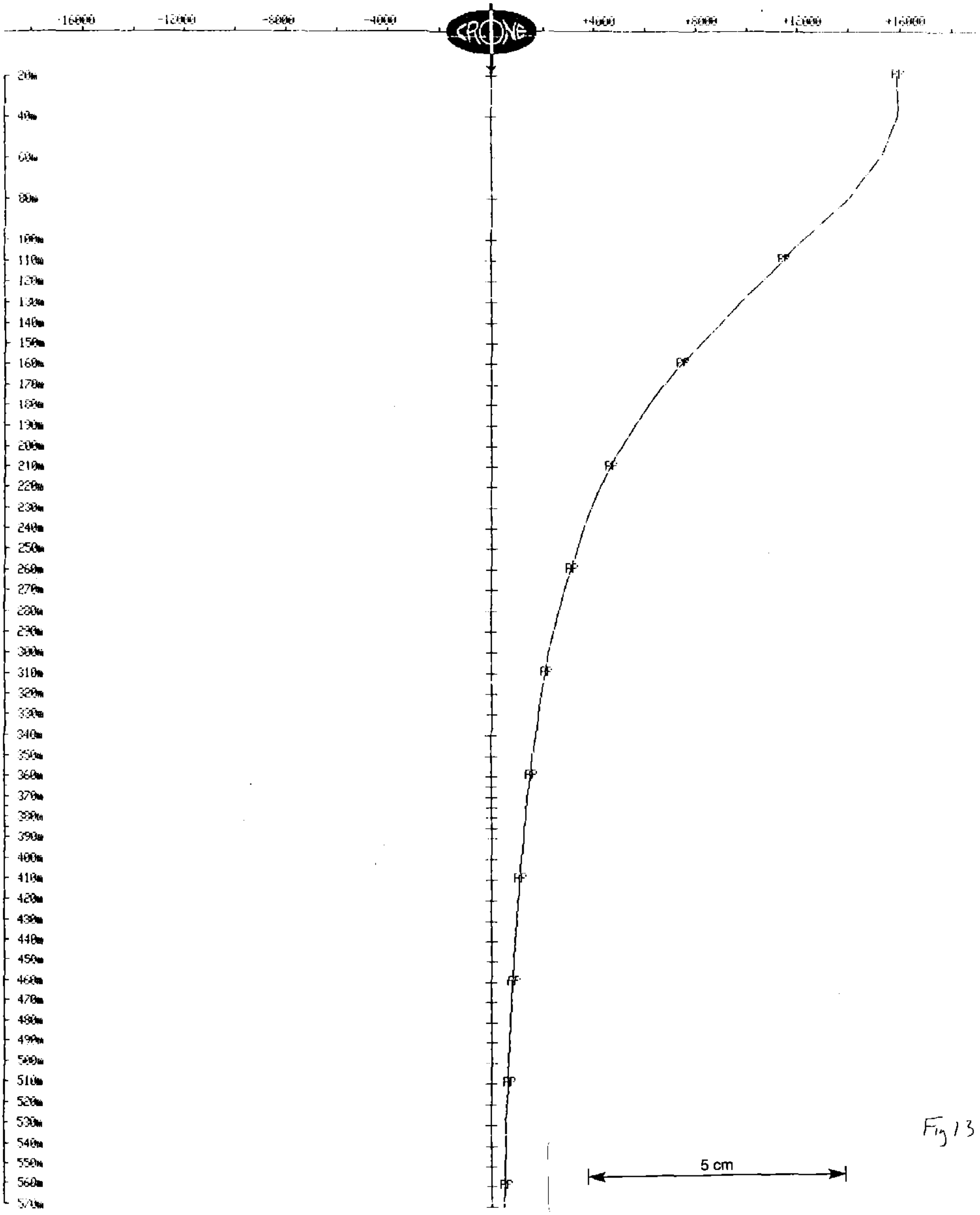


Fig 13

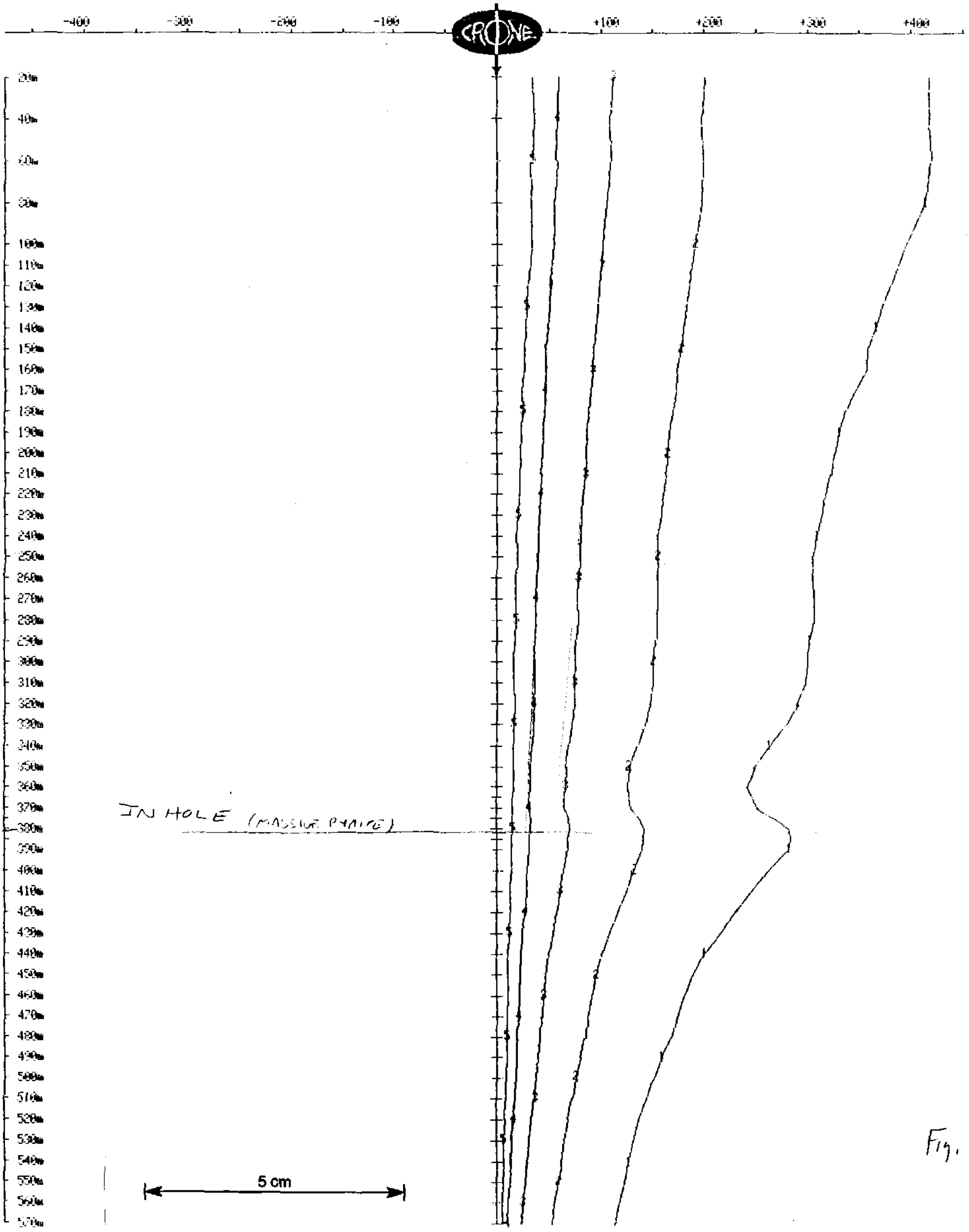
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD79
Grid	: Burns Peak	Tx Loop	: Collar
Date	: 6th Dec. 1993	File name	: BPD79ZC.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 50



IN HOLE (MASSIVE PYRITE)

Fig.

845220

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD79
Grid	: Burns Peak	Tx Loop	: Collar
Date	: 6th Dec. 1993	File name	: BPD79ZC.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 2

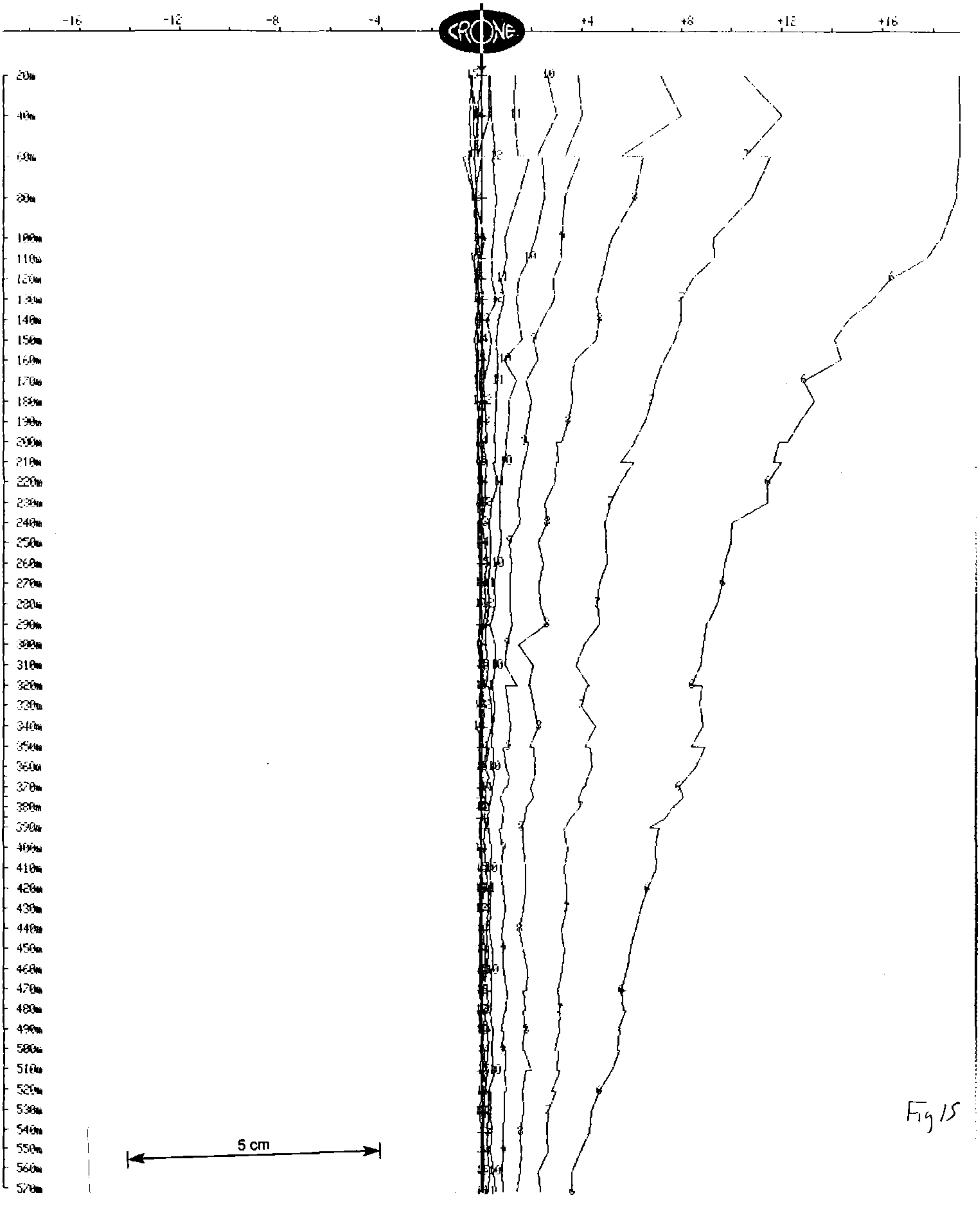


Fig 15

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD79
Grid	: Burns Peak	Tx Loop	: East
Date	: 6-7th Dec. 1993	File name	: BPD79ZE.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 500

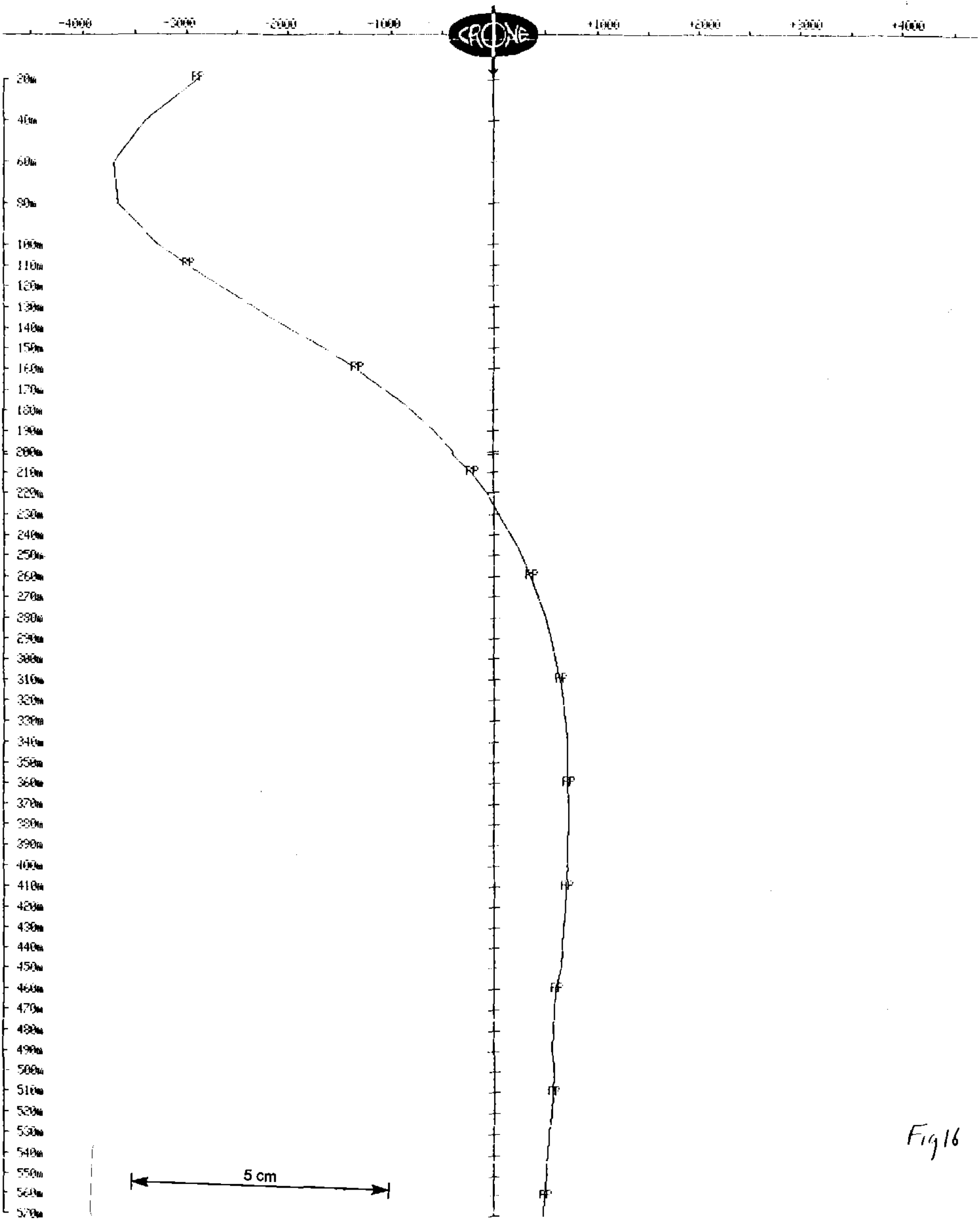


Fig 16

845222

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : 6-7th Dec. 1993

Hole : BPD79
Tx Loop : East
File name : BPD79ZE.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 20

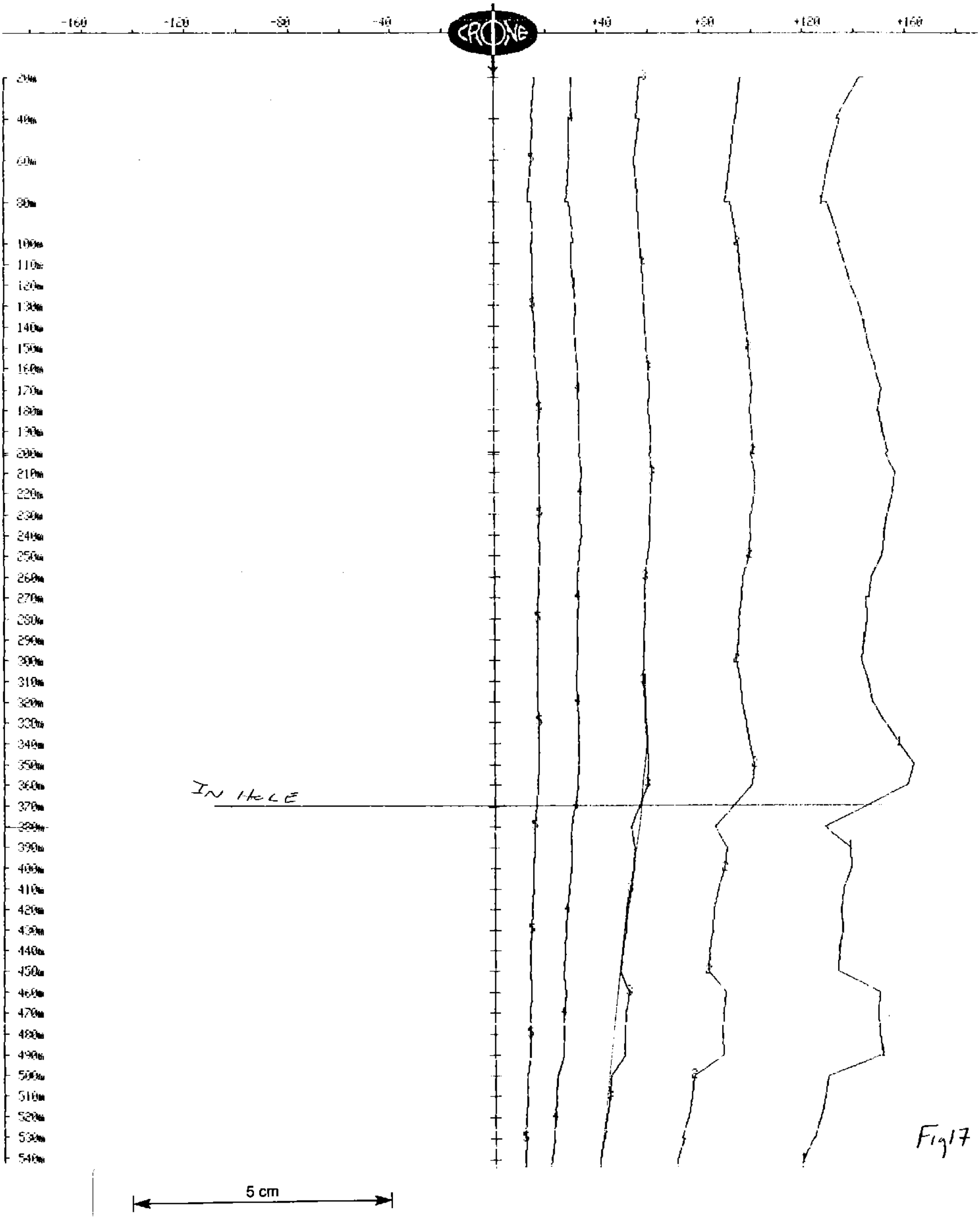


Fig17

840223

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD79
Grid	: Burns Peak	Tx Loop	: East
Date	: 6-7th Dec. 1993	File name	: BPD79ZE.AM2

Z COMPONENT dBz/dt nanoVolt/Amp-m² - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1

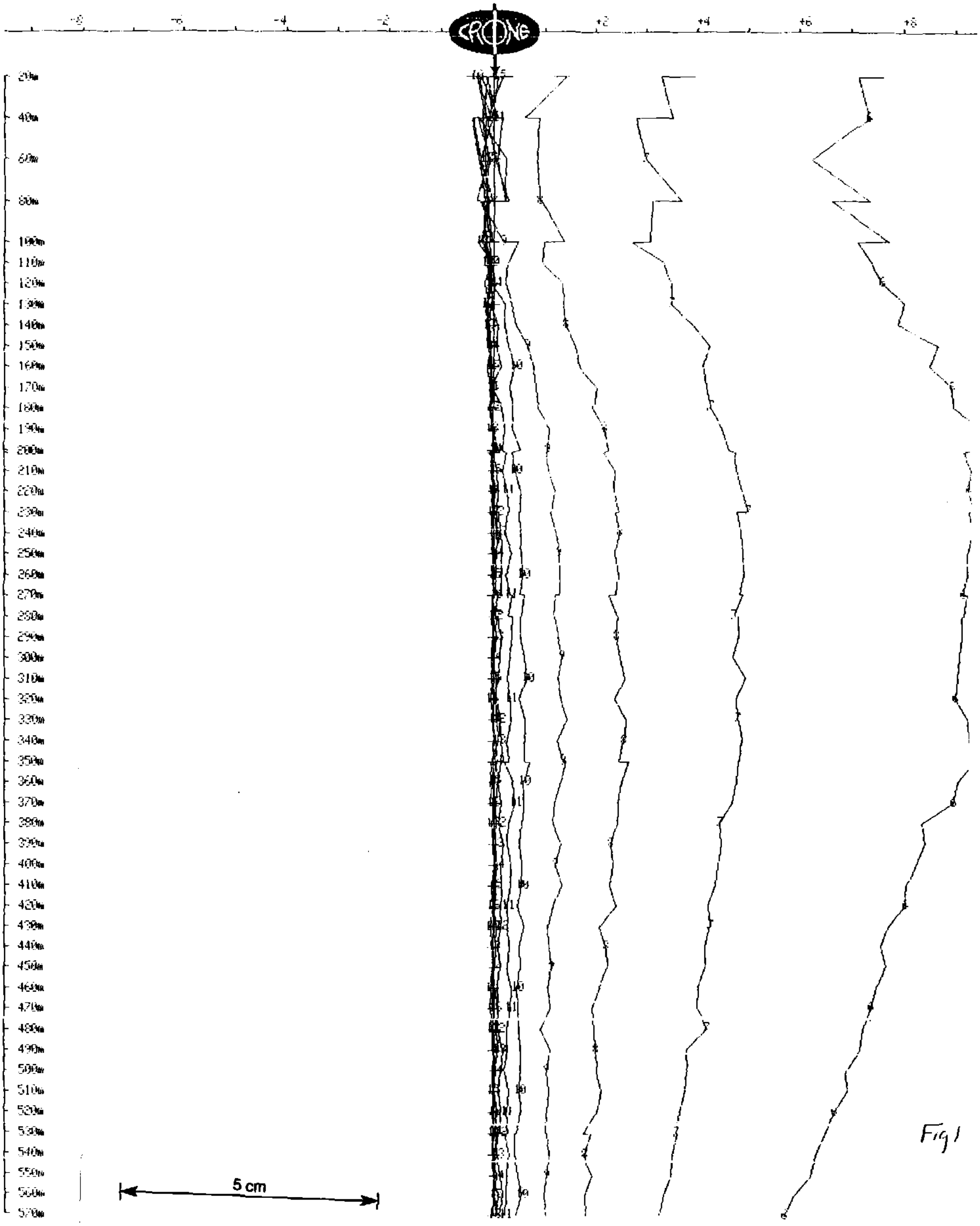
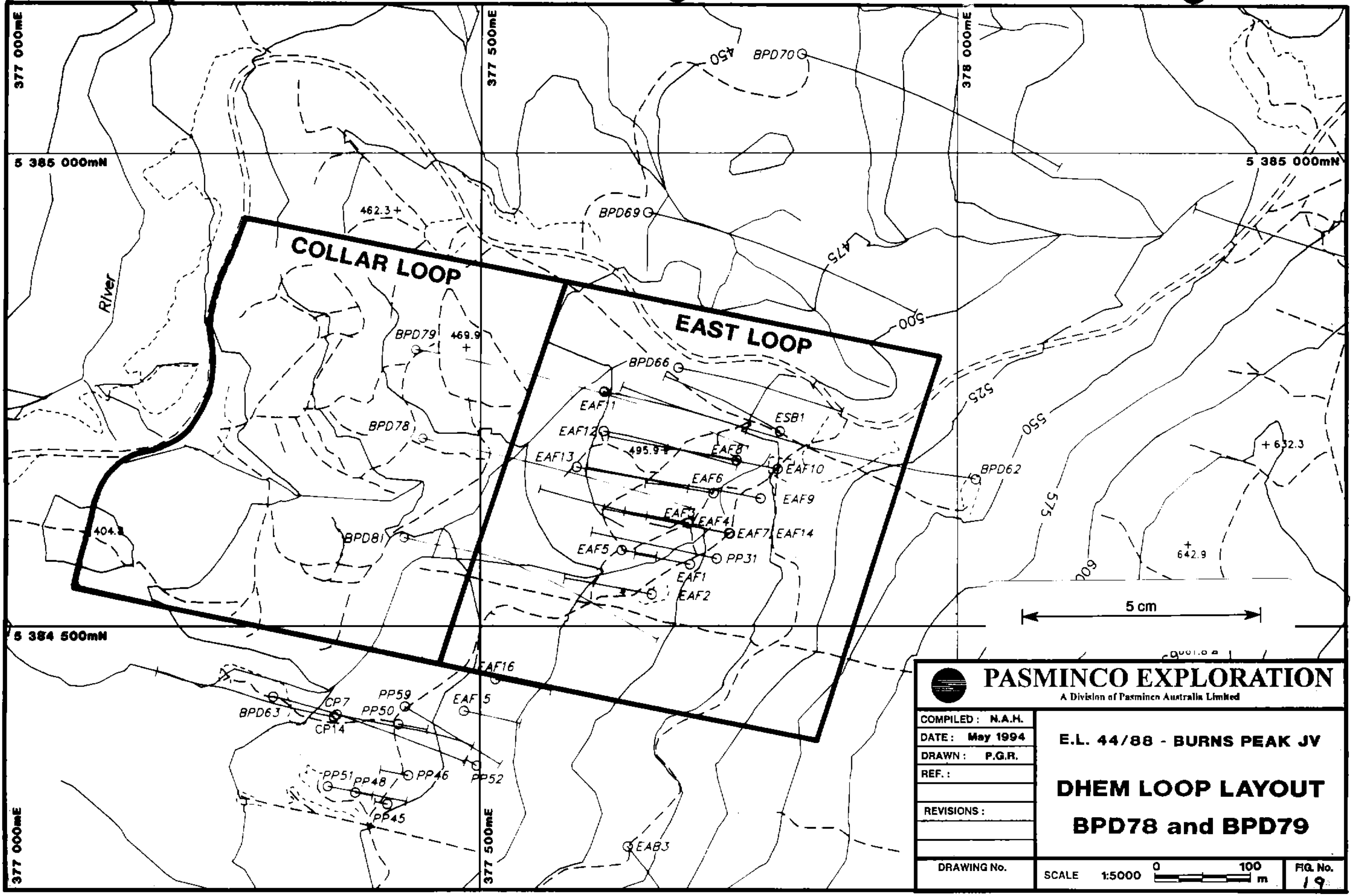


Fig 1

845224



PASMINCO EXPLORATION

A Division of Pasminco Australia Limited

COMPILED :	N.A.H.
DATE :	May 1994
DRAWN :	P.G.R.
REF. :	
REVISIONS :	
DRAWING No.	

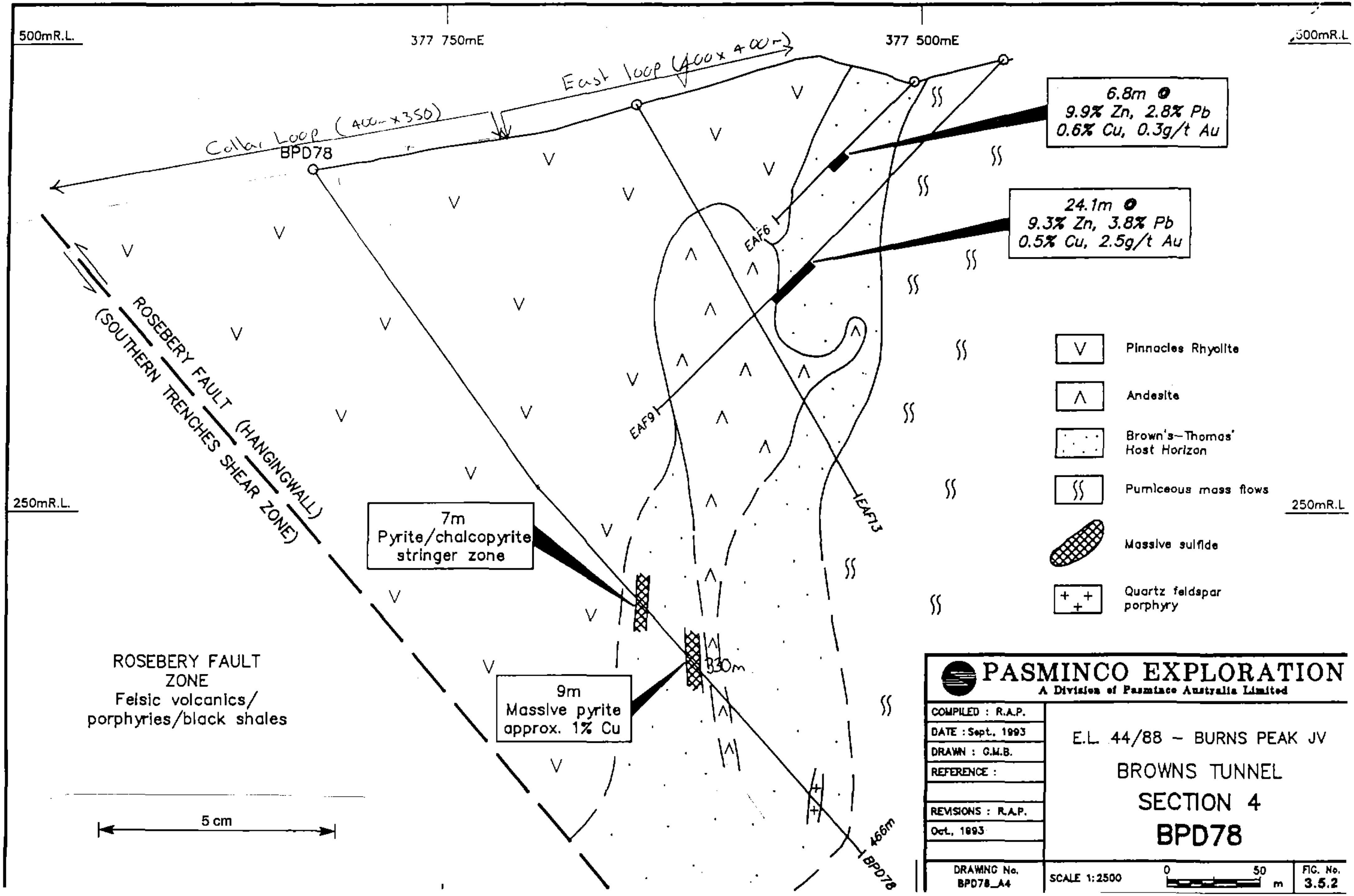
E.L. 44/88 - BURNS PEAK JV

DHEM LOOP LAYOUT BPD78 and BPD79

SCALE 1:5000 0 100 m

FIG. No. 19

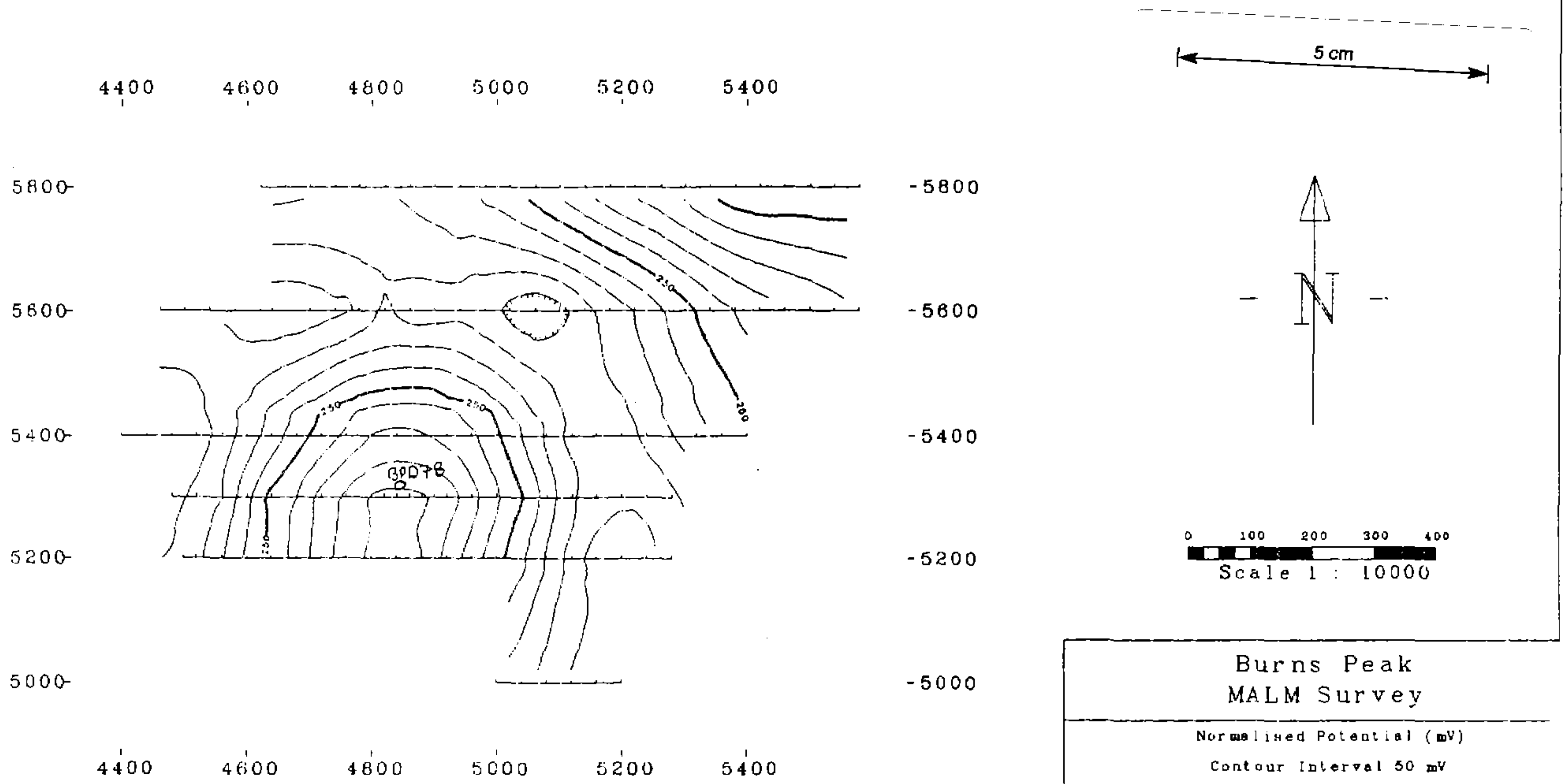
845225



PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : R.A.P.	E.L. 44/88 – BURNS PEAK JV
DATE : Sept., 1993	BROWNS TUNNEL
DRAWN : G.M.B.	SECTION 4
REFERENCE :	BPD78
REVISIONS : R.A.P.	
Oct., 1993	

DRAWING No. BPD78_A4
SCALE 1:2500
FIG. No. 3.5.2

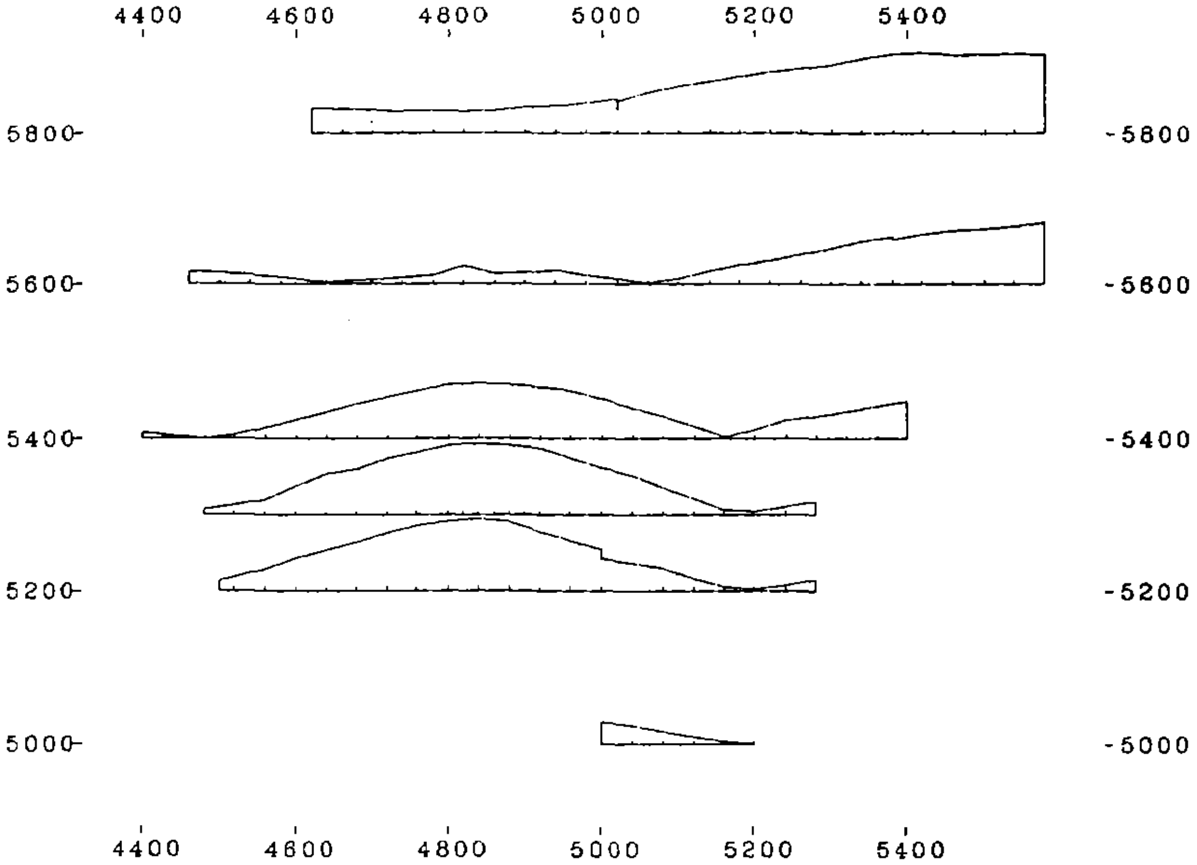


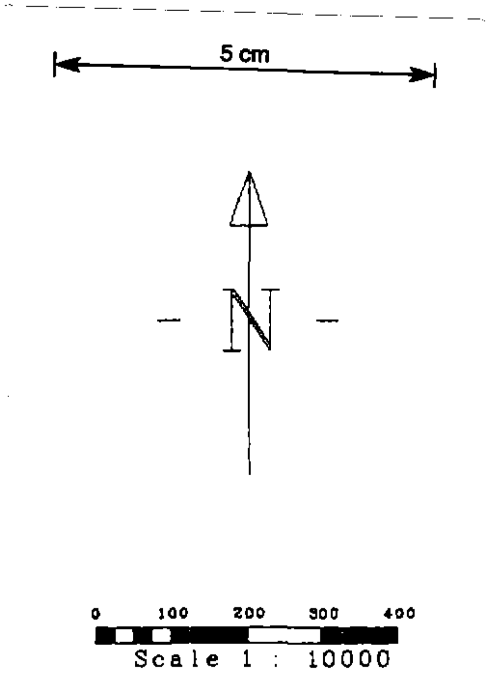
Burns Peak
MALM Survey

Normalised Potential (mV)
Contour Interval 50 mV
Current (330m in BPD78)
Survey by Geoterrex

Pasminco Exploration

845227





Burns Peak
MALM Survey

Normalised Potential (mV)

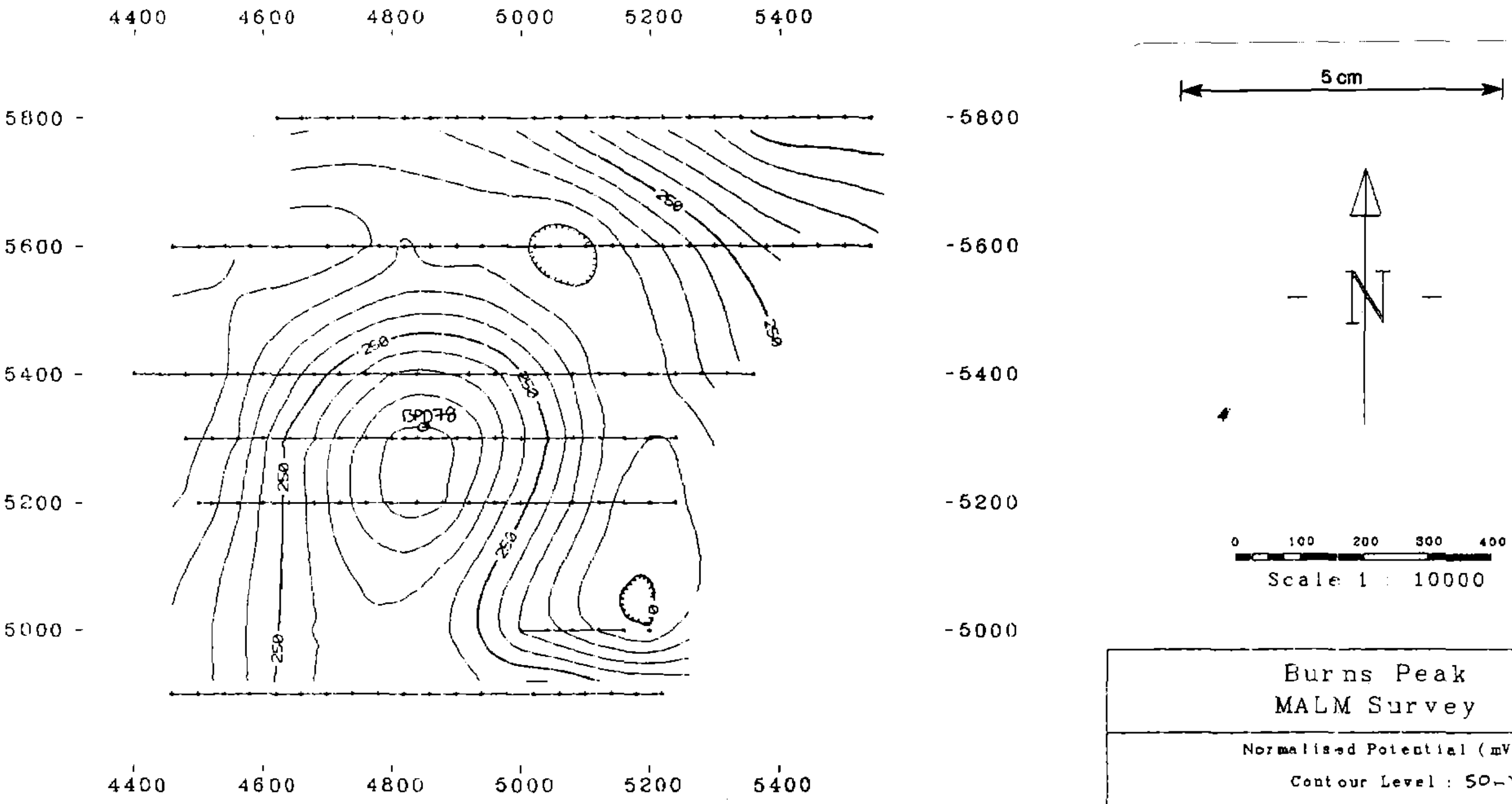
Base : 0 mV. Scale 500 mV/cm

Current (330m in BPD78)

Survey by Geoterrex

Pasminco Exploration

845228



Burns Peak
MALM Survey

Normalised Potential (mV)

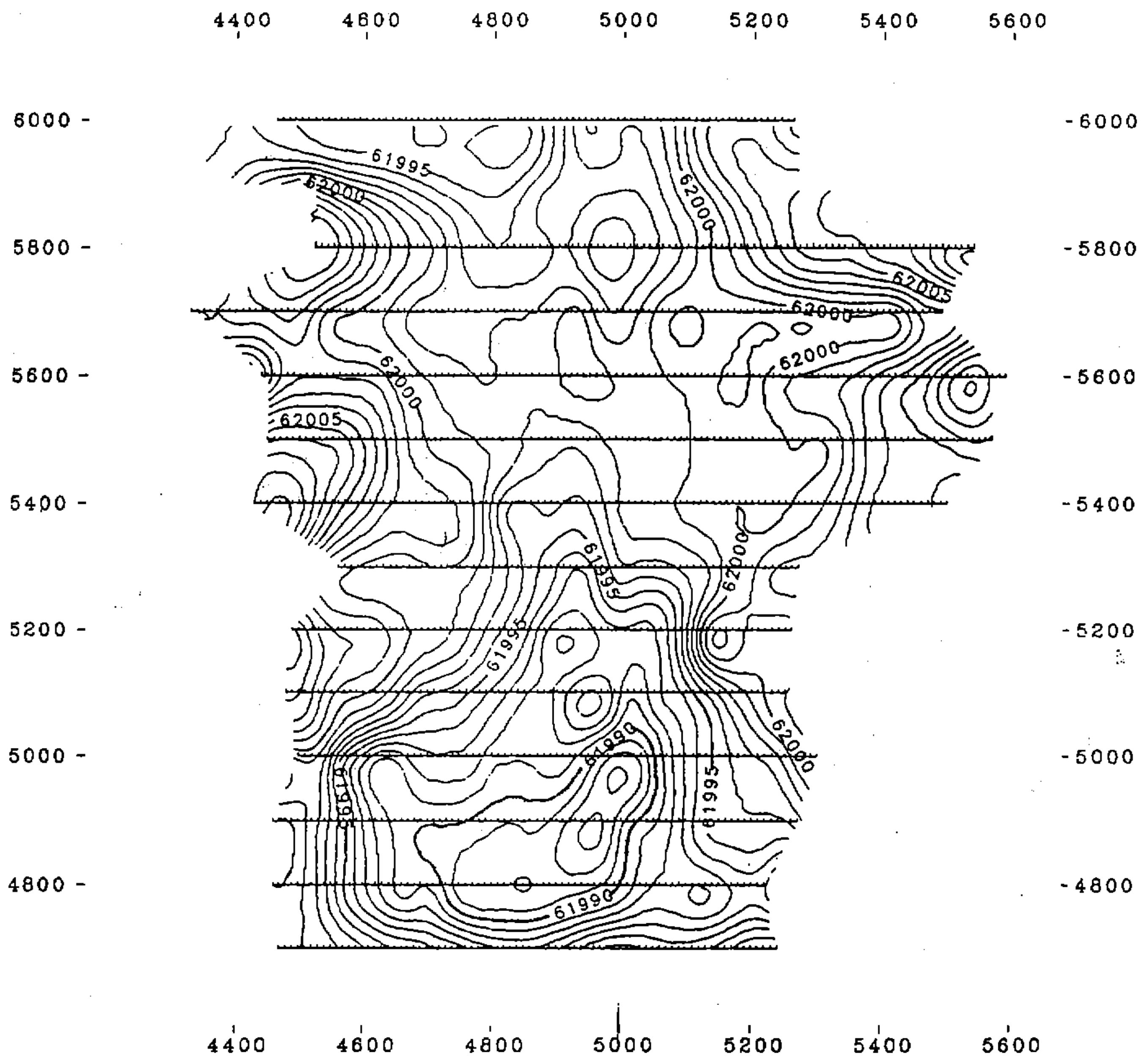
Contour Level : 50mV

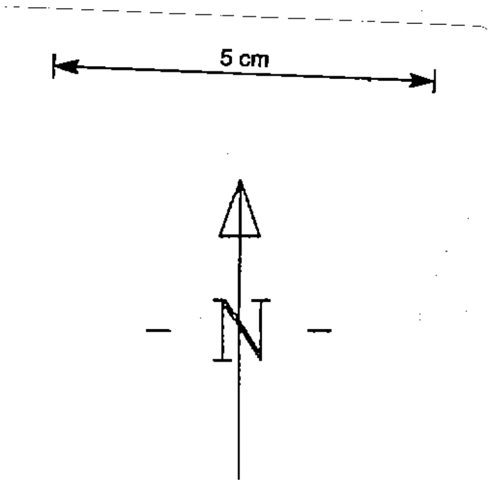
Current (330m in BPD78)

Survey by Geoterrex, Pasminco

Pasminco Exploratio

845229





Scale 1 : 10000

Burns Peak
Ground Magnetics

Processing :

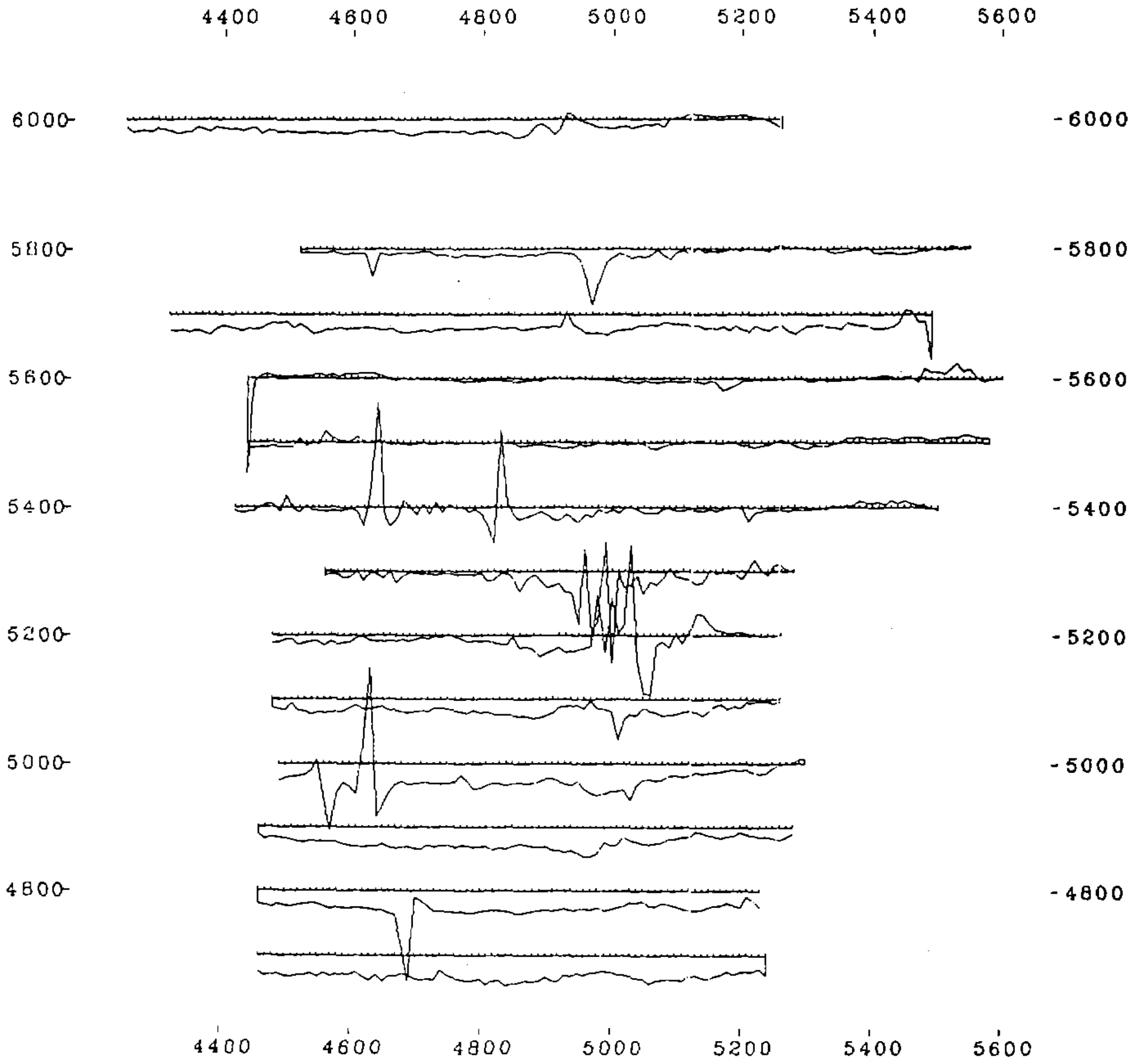
Upward continued : 25m

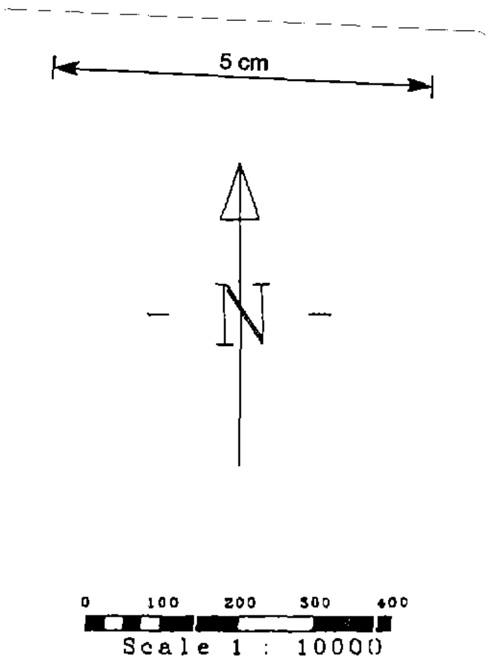
Microleveled

Contour Interval : 1 nT

Pasminco Exploration

845230





Burns Peak
Ground Magnetics

Base Value : 58000 nT, Scale : 50 nT/cm

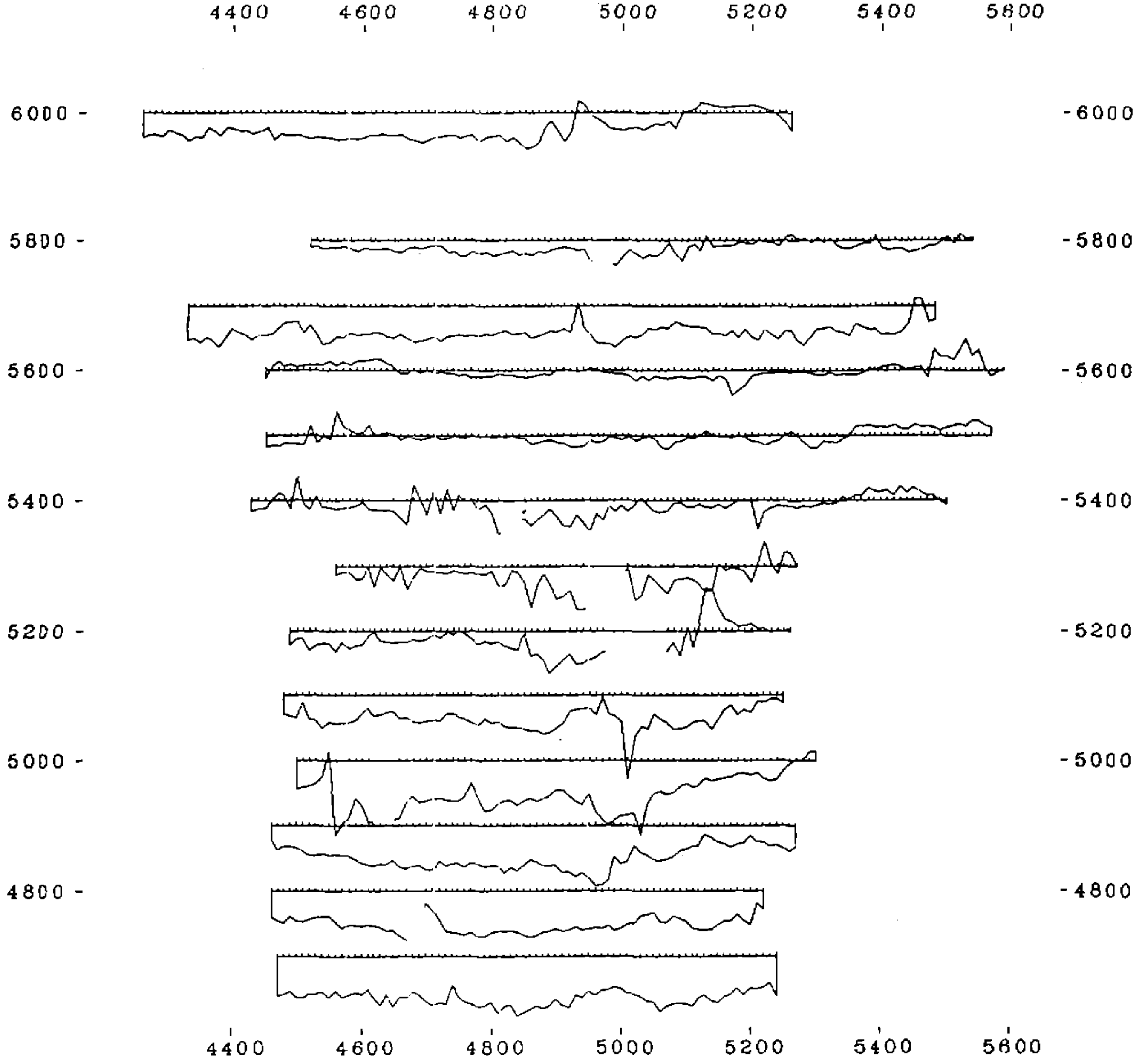
Magnetometer : G856 & Base Station

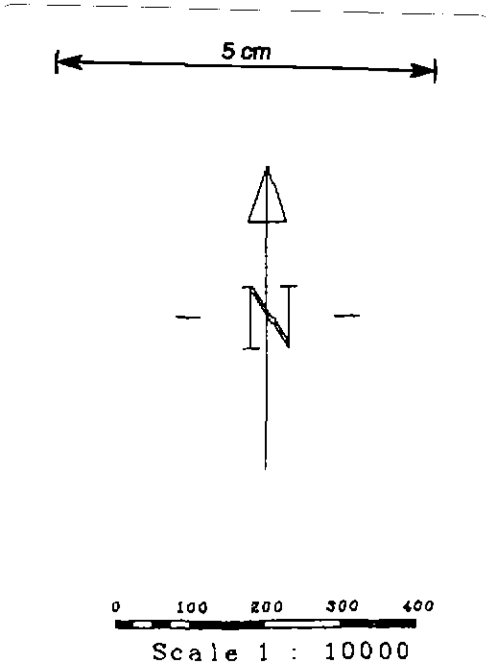
Survey Period : January 1994

Operators : SW

Pasminco Exploration

845231





Scale 1 : 10000

Burns Peak
Ground Magnetics

Base Value : 62000 nT, Scale : 25 nT/cm

Filtering : Major spikes removed

Magnetometer : G856 & Base Station

Survey by : Pasminco Exp., Jan., 1994.

Pasminco Exploration

845232

APPENDIX 11

DHEM Surveys in BPD80 - Burns Peak

845233

PASMINCO
EXPLORATION

A Division of Pasminco Australia Limited,
A.C.N. 004 074 962

Old Burnie Railway Station
Burnie, Tasmania 7320
G.P.O. Box 886
Burnie, Tasmania 7320

MEMORANDUM

TO: MS Saxon
FROM: NA Hughes
DATE: 24 August, 1994
SUBJECT: **DHEM SURVEYS IN BPD80, BURNS PEAK**

From May 23rd to 26th, 1994 drill-hole BPD80 was surveyed with the Crone DHEM system from three transmitter loops by Outer Rim Exploration Services of Townsville. For two of the transmitter loops, collar and south, three component data was collected. For the west loop only axial component data was collected. The data is presented as profiles in PAS1107 to PAS1109. Also presented is the DHEM data collected in BPD77 in February 1993 by Crone Geophysics in PAS1086 and PAS1087. Survey specification may be found with the data profiles. The geographic position of transmitter loops and drill holes is shown in PAS1110. Note that the collar loop for BPD80 is the east loop for BPD77.

The objective of the current survey was to aid structural interpretation in the local area as well as detecting isolated conductors.

RESULTS

The unit being mapped with the DHEM is a black pyritic shale near the closure of an inclined asymmetric synclinal structure. DHEM in BPD76 mapped the shale unit with the steeper (overturned) limb of the syncline to the west. DHEM in BPD77 did not show the expected in hole type response at the shale position, rather a complicated off hole response below the shale position was record. DHEM in BPD80 showed an in hole response for the shale unit intersected at the bottom of the drill hole.

For a complicated structure such as a syncline the DHEM data can be confusing, especially when trying to compare results from different loops. This is because the induced response is generally dependant on the position of the transmitter loop. Also the form of the response will be due to an amalgamation of induced eddy currents from each limb and possibly the keel and nose. To aid interpretation the three component data has been converted to vector/amplitude plots. The benefit of viewing the vectors is that it is easier to visualise the circulation patterns required to cause the response and also it is easier to compare response from drill holes in the same section, PAS1119 to PAS1121. For drill holes BPD77 and BPD80 and XZ section is parallel to the drill section and likewise for the XY section EW is parallel to the drill section. Time window 8 was used for BPD80 and time window 4 for BPD77.

Interpretation has consisted of some modelling with MULTILOOP but mostly qualitative matching of circulation patterns with different geometries for the shale unit in the syncline. The resultant model is shown in PAS1118. It appears as though the west limb does have some local effect on the EM responses in BPD77 for the earliest channels. The lack of an in hole response a the shale position in BPD77 is presumably because the west limb is partially sheared out by the Burns Peak Shear Zone (BPSZ). The main response appears to be due to the east limb. Using this model it appears the QFP overlying the shale is conformable, else presumably the east limb would not be seen as an in hole type response. The Y component data, especially for BPD77, indicates a majority of the EM response is from conductive material south of the drill section. This may reflect the northerly plunge of the syncline of the fact that material is more conductive to the south or a thickening of the shale, or a structural control such as the dip on the BPSZ getting shallower to the north.

RECOMMENDATIONS

It may be worthwhile determining the surface EM expression of the conductive shale package as an aid to structural interpretation, This data may already be available from past UTEM or IP/Resistivity surveys. If not it is recommended that during the next DHEM campaign in Tasmania the contractors do a northwest – southeast surface traverse using the east loop.

als:nah:94007

845235

Title	DHEM PROFILES : BPD80 : EAST LOOP
Plan No.	PAS1107 a – o
Scale	1:2500
Author	NAH
Month	August
Year	1994
Report	Memo to Mark Saxson
State	Tasmania
Tenement	3006
Area	Burns Peak

Title	DHEM Profiles : BPD90 : South Loop
Plan No.	PAS1108 a – o
Scale	1:2500
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

Title	DHEM Profiles : BPD90 : West Loop
Plan No.	PAS1109 a – e
Scale	1:2500
Author	NAH
Month	August
Year	1994
Report	Memo to M Saxson
State	TAS
Tenement	3006
Area	Burns Peak

845230

Title	DHEM Profiles : BPD77: East loop
Plan No.	PAS1066 a-f
Scale	1:2500
Author	NAH
Month	August
Year	1994
Report	Memo to M Saxon
State	Tas
Tenement	3006
Area	Burns Peak

Title	DHEM Profiles : BPD77 : West Loop
Plan No.	PAS1087 a-f
Scale	1:2500
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

Title	DHEM Loop Location : BPD80 + BPD77
Plan No.	PAS1110
Scale	1:10000
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

845237

Title	INTERPRETED CROSS SECTION: BPD 80 + BPD77
Plan No.	PAS1118
Scale	1:5000
Author	NATH
Month	August
Year	1994
Report	Memo to M Sorsen.
State	Tas
Tenement	3006
Area	Burns Peak.

Title	DHEM VECTOR PLOTS: BPD77 + BPD80 EAST LOOP
Plan No.	PAS1119 a + b
Scale	1:2500
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

Title	DHEM Vector Plot BPD80 South Loop
Plan No.	PAS1120
Scale	1:2500
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

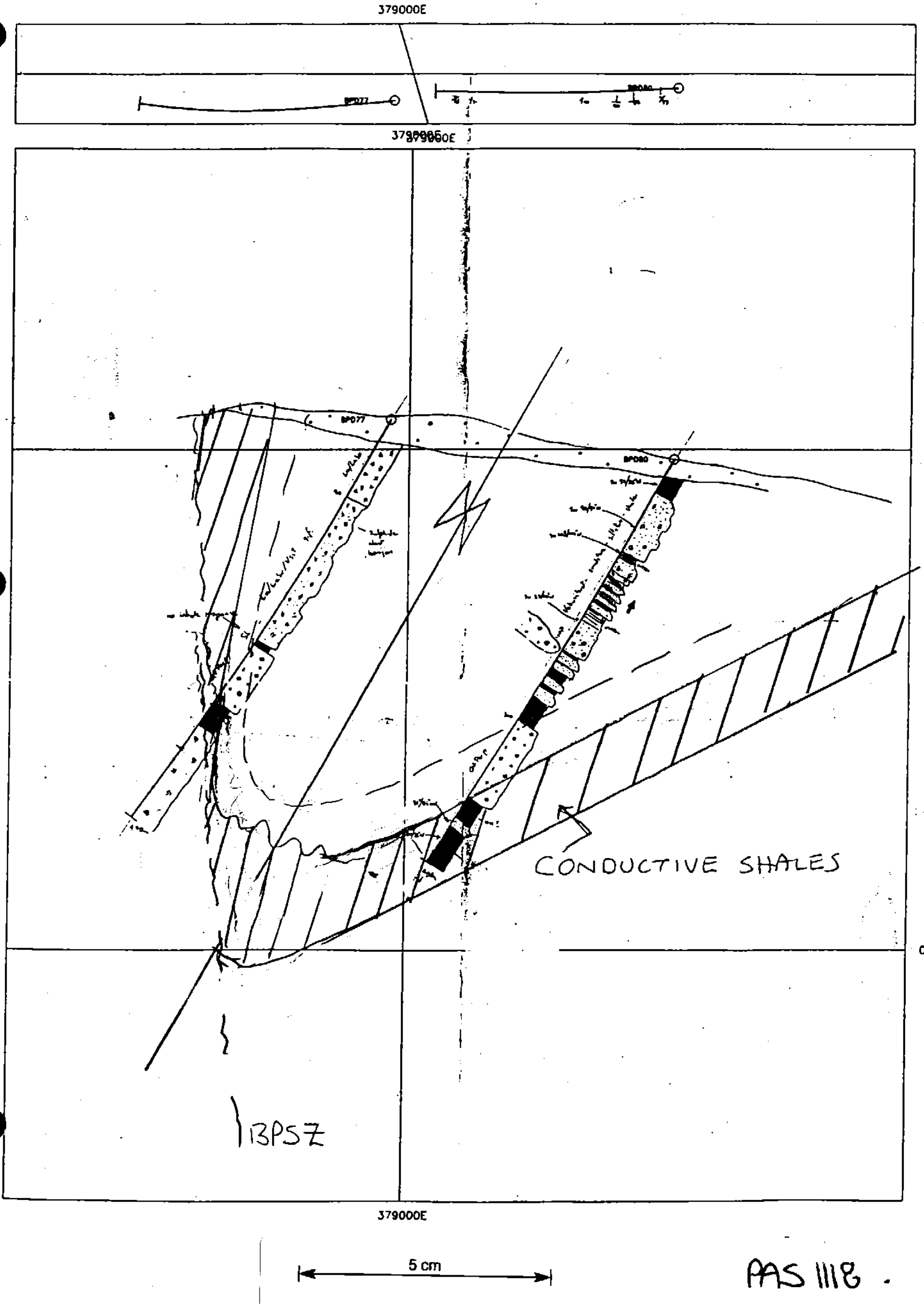
845238

Title	DHEM Vector Plot : BPD77 : West loop
Plan No.	PAS1121
Scale	1:2500
Author	NAH
Month	August
Year	1997
Report	Memo to M Saxon
State	Tas
Tenement	3006
Area	Burns Peak

Title	
Plan No.	
Scale	
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

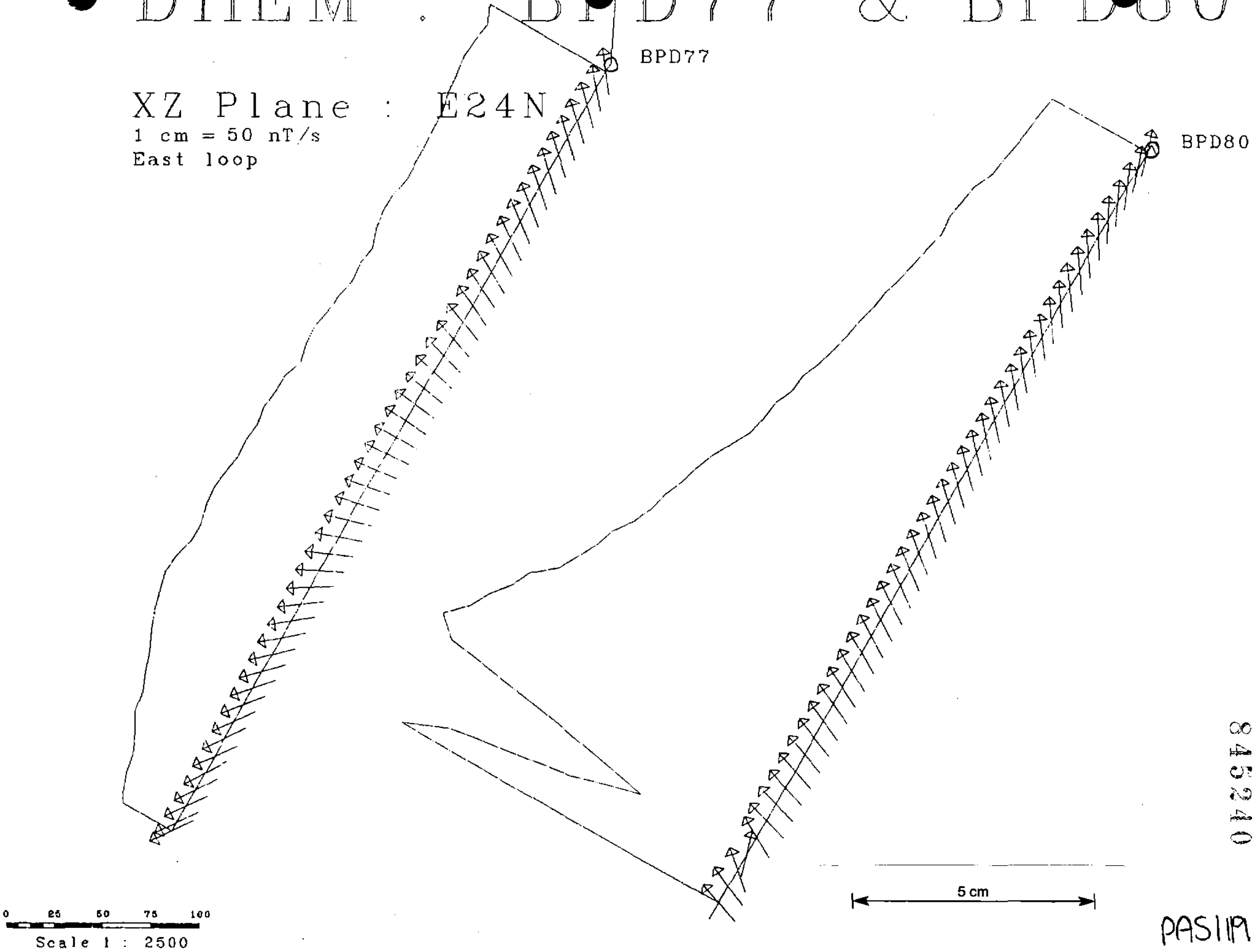
Title	
Plan No.	
Scale	
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

845239



PAS 1118.

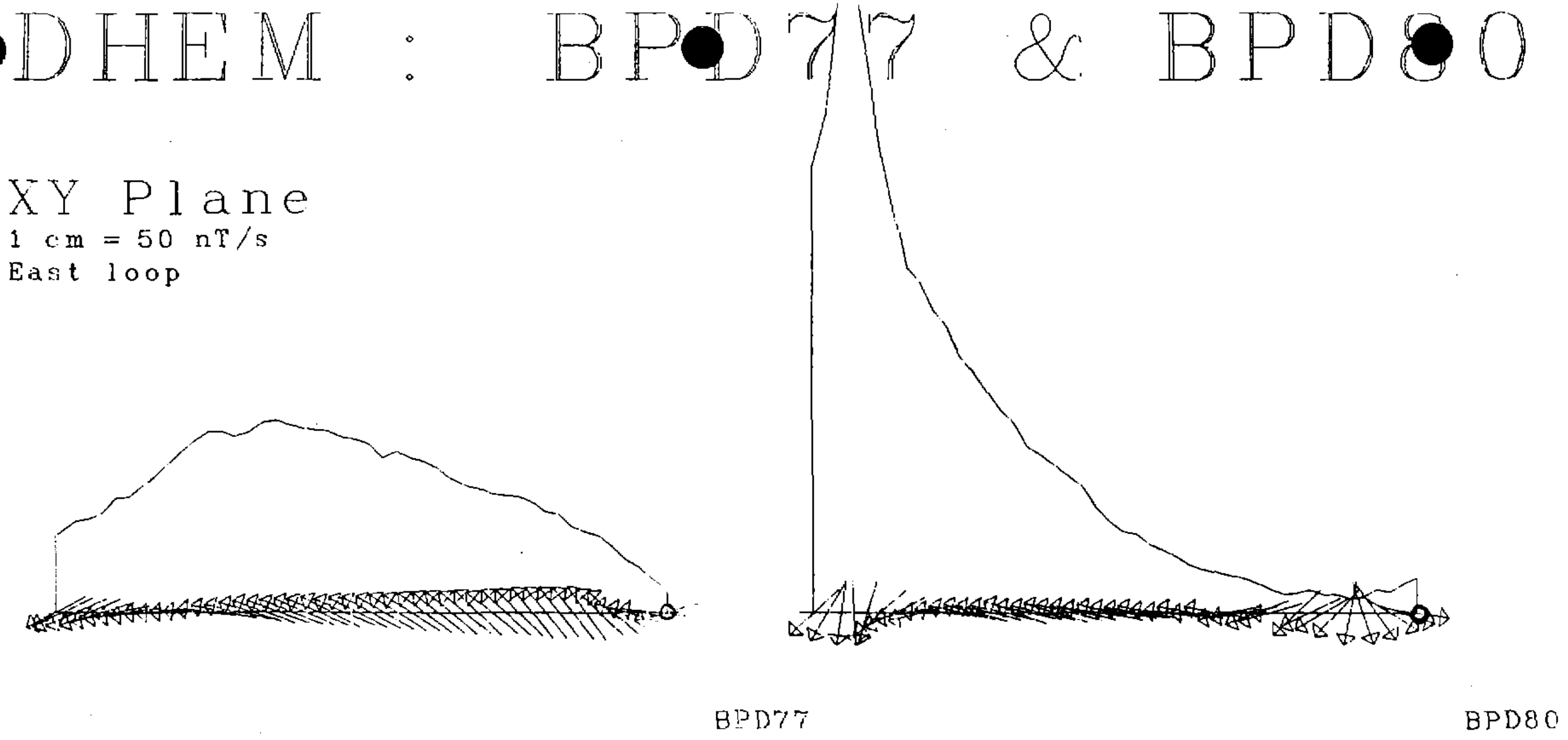
DHEM : BPD77 & BPD80



845240

PASIIPa

DHEM : BPD77 & BPD80



5 cm

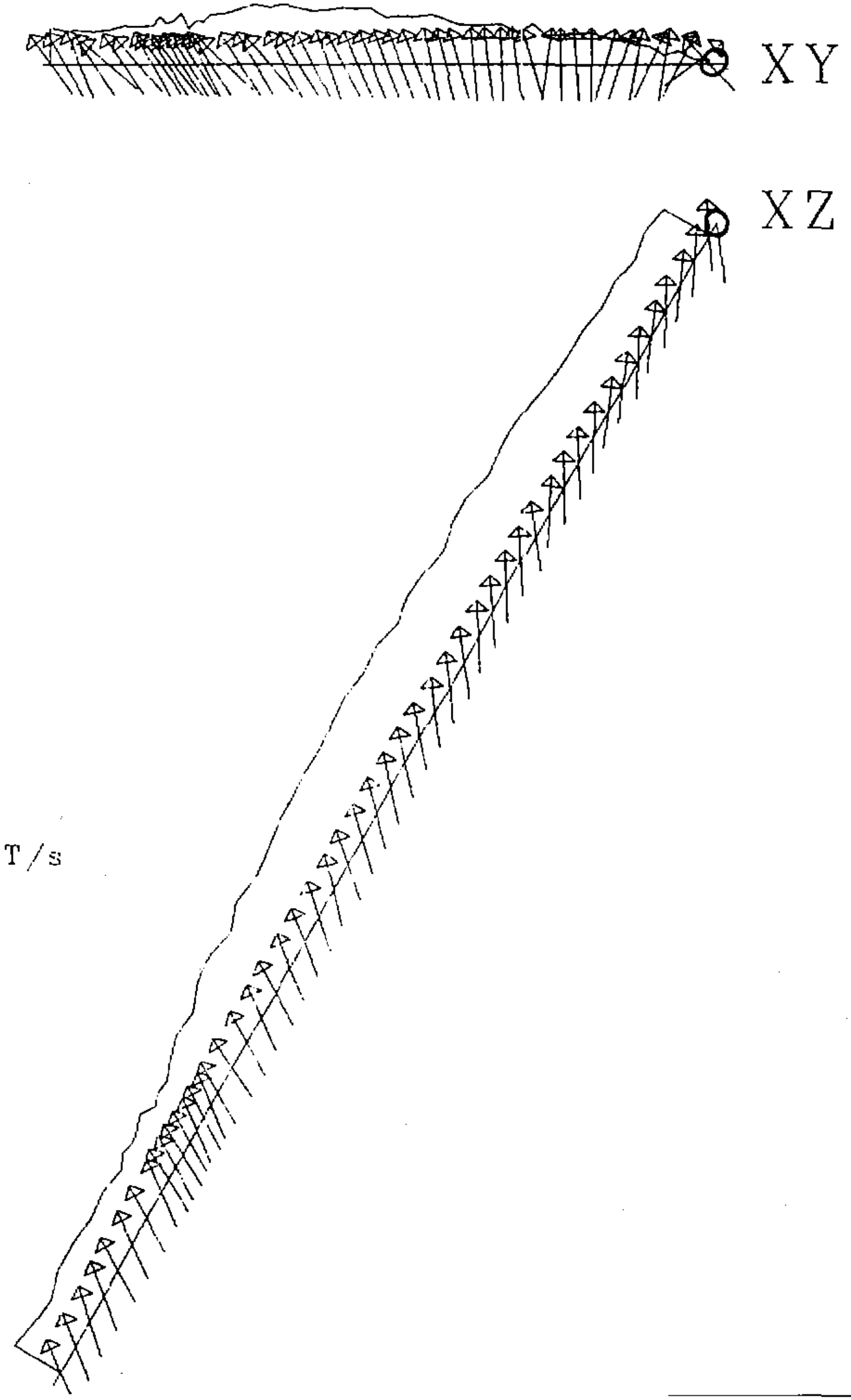
0 25 50 75 100

Scale 1 : 2500

845241

PAS119 b

DHEM : BPD77



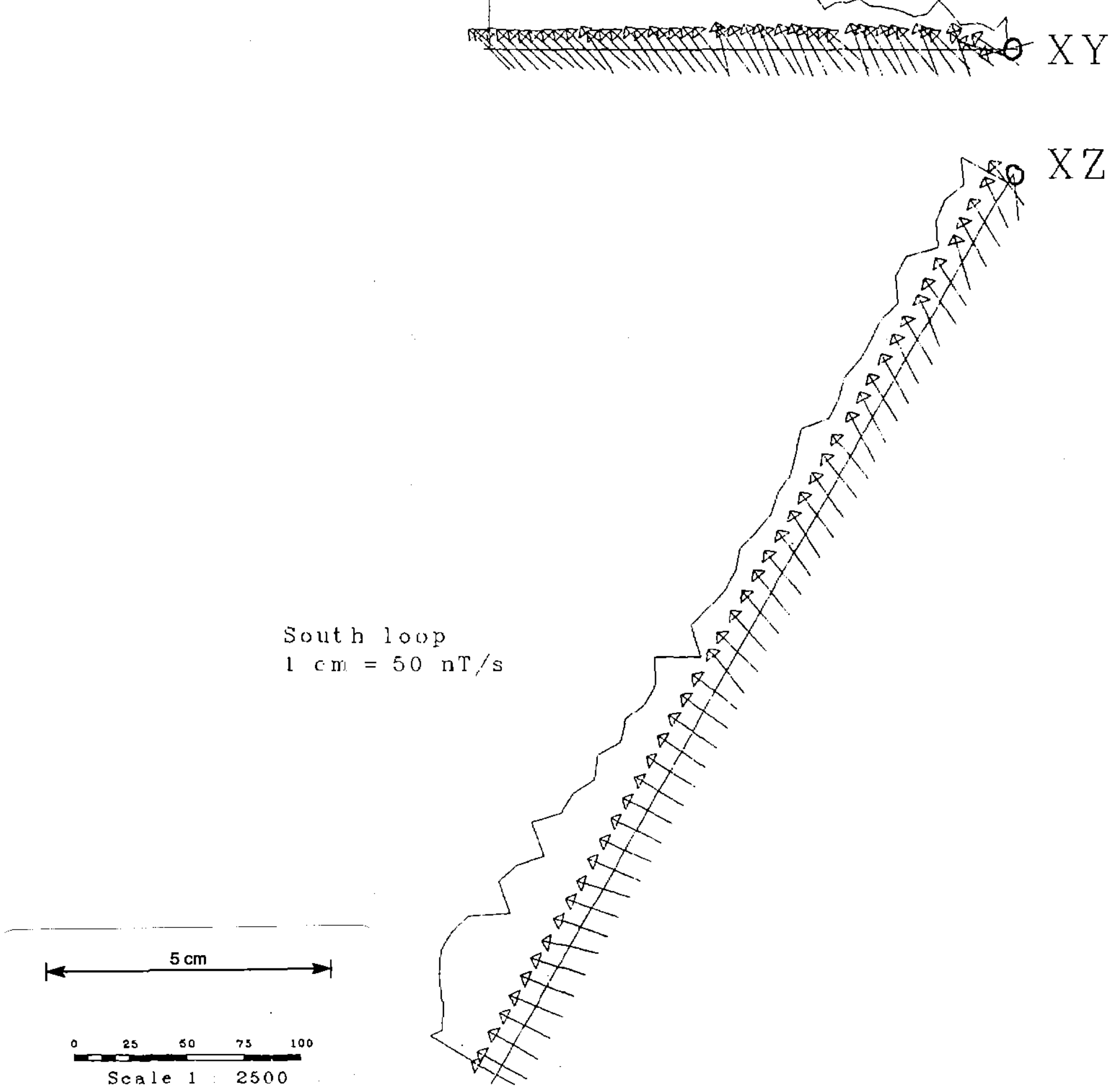
West loop
1 cm = 50 nT/s

5 cm

0 25 50 75 100
Scale 1 : 2500

PA81170

DHEM : BPD80



PAS1121

845244

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

```
Client     : Pasminco Exploration             Hole        : BPD80
Grid       : Burns Peak                       Tx Loop     : Collar
Date       : May 26, 1994                     File name : BPD80CXY.PEM
Time Base : 10.00 ms                          # Readings: 92
Ramp Time : 0.50 ms                           Stn Units : Metric
# Channels: 17                                Coil Area : 2800 sq m
Sync Type : Cable                             Polarity    : -
Loop Size : 600m  X  600m                     Receiver    : Digital #106
Current    : 4 Amps                           Operator    : Geoffrey Dunn

Loop Coordinates (X,Y,Z)
  1. 379030m, 5.38455e+06m, 0m          2. 379560m, 5.38482e+06m, 0m
  3. 379300m, 5.38523e+06m, 0m          4. 378750m, 5.38515e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
  1. 379250m, 5.38482e+06m, 0m          2. 284deg, 60deg. 20m
  3. 284deg, 60.7deg, 40m               4. 284deg, 61.1deg, 40m
  5. 284deg, 60.1deg, 40m               6. 284.5deg, 60deg, 40m
  7. 284.5deg, 59.5deg, 40m             8. 286deg, 58.8deg, 40m
  9. 287deg, 58.1deg, 40m               10. 287.8deg, 57.4deg, 40m
  11. 288deg, 56.7deg, 40m              12. 288.5deg, 56.3deg, 40m
  13. 287, 58, 35m                     14. 286deg, 56.5deg, 15m

Channel Times (usec)
Ch Start   End Center   Ch Start   End Center   Ch Start   End Center
PP  -198   -99   -149    1    76    104     90    2   104    131   117
 3   131   171    151    4   171    225    198    5   225    292   259
 6   292   378    335    7   378    490    434    8   490    639   565
 9   639   828    733   10   828   1075    952   11  1075   1395  1235
12  1395  1809   1602   13  1809   2348   2078   14  2348   3046  2697
15  3046  3951   3498   16  3951   5121   4536   17  5121   6646  5884
```

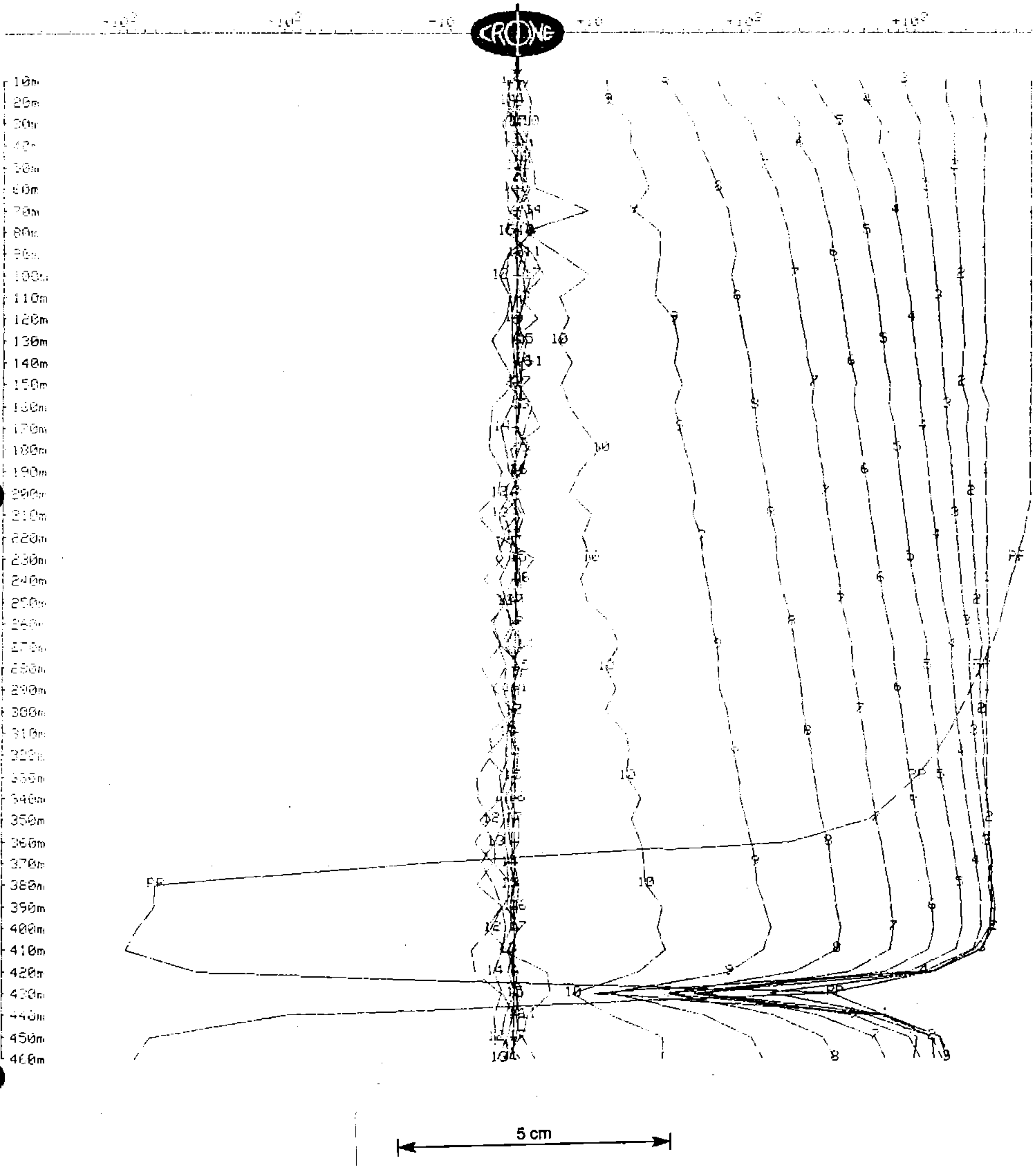
845245

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: Collar
Date	: May 26, 1994	File name	: BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500



PAS11079

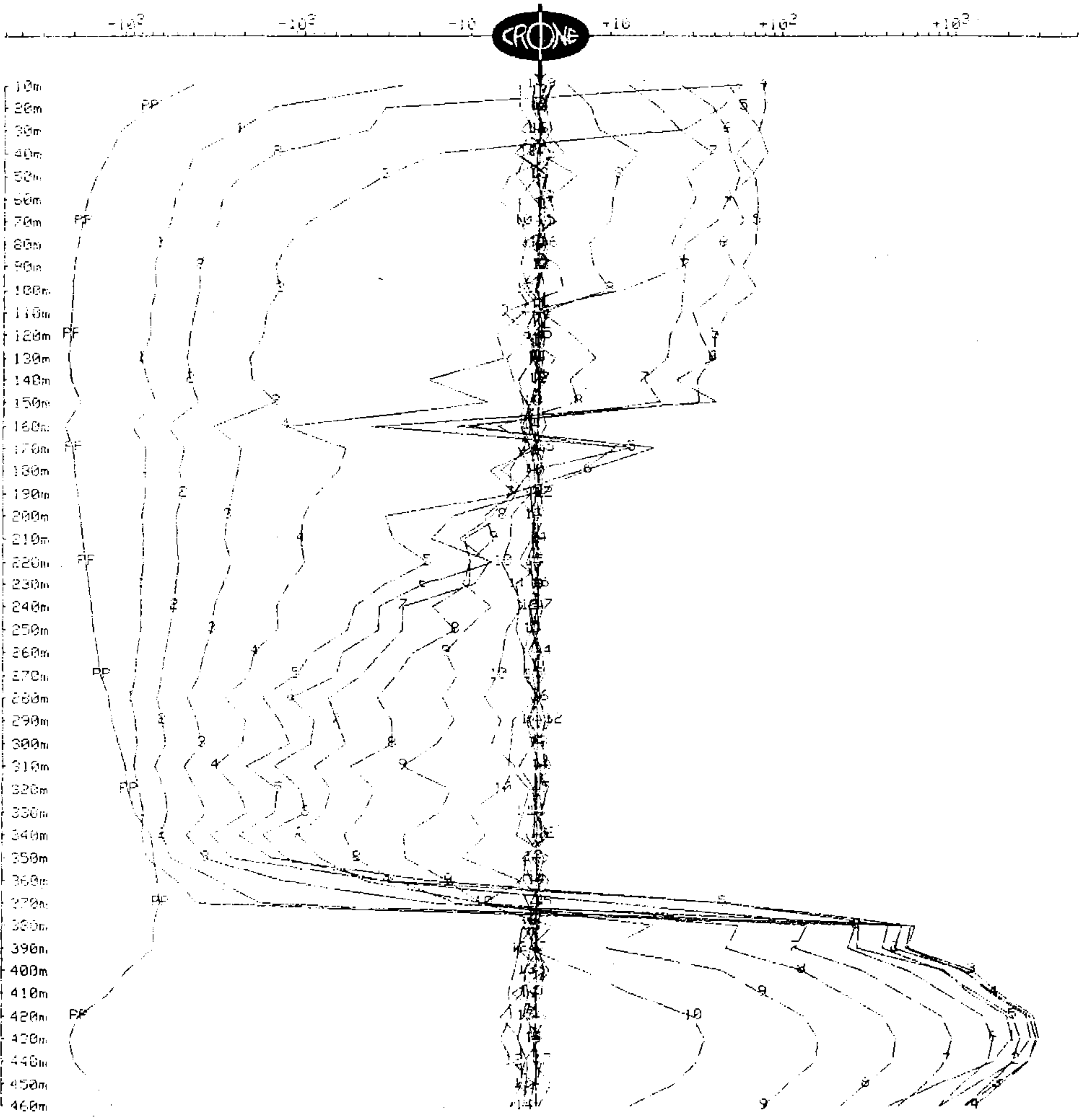
845246

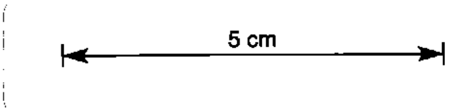
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: Collar
Date	: May 26, 1994	File name	: BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500





PAS11076

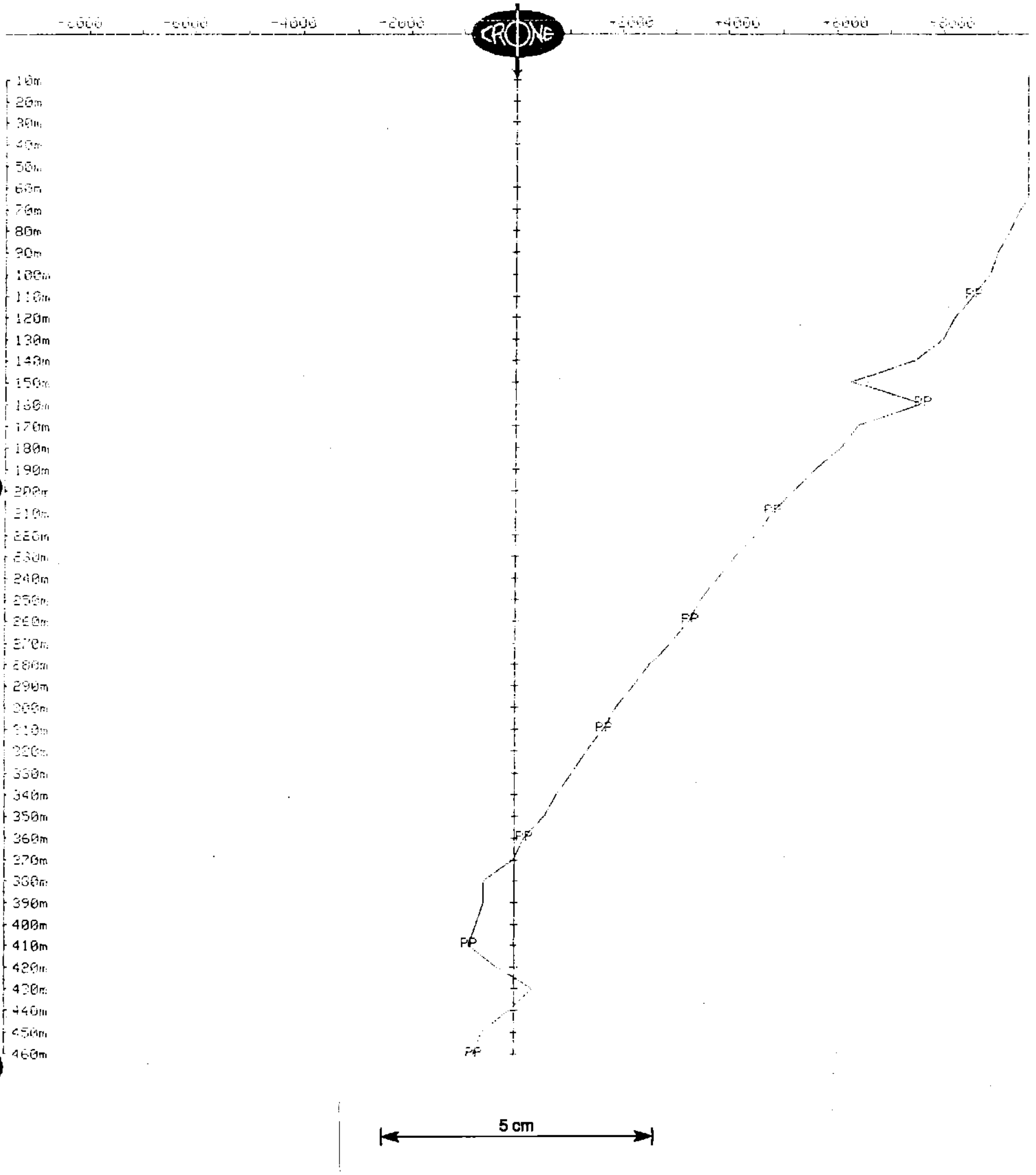
845247

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD80
Grid	:	Burns Peak	Tx Loop	:	Collar
Date	:	May 26, 1994	File name	:	BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 1000 nT/s



PAS1107c

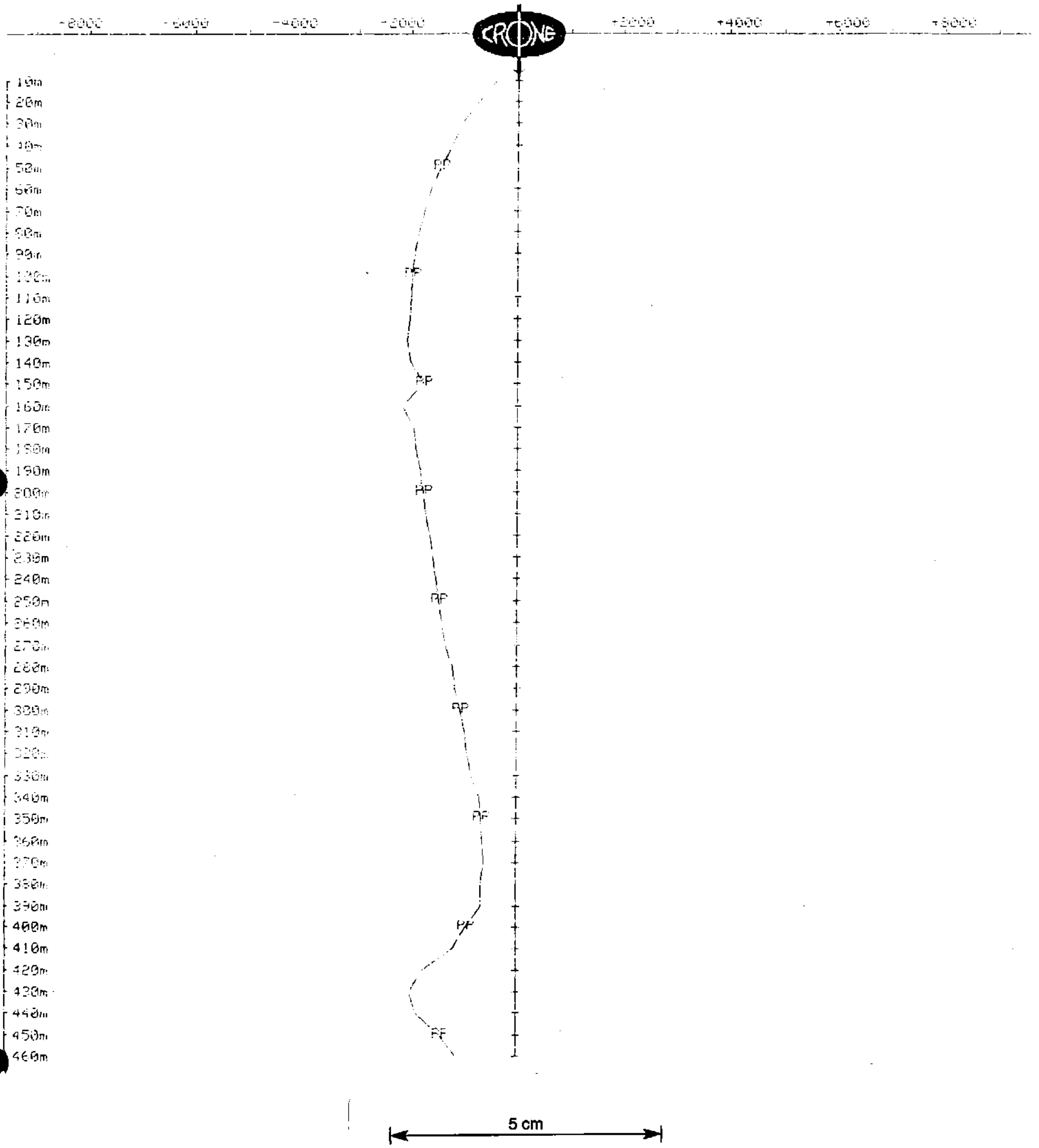
845248

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 26, 1994
Hole : BPD80
Tx Loop : Collar
File name : BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500
Unit Scale: 1cm = 1000 nT/s



PAS1107 d

845249

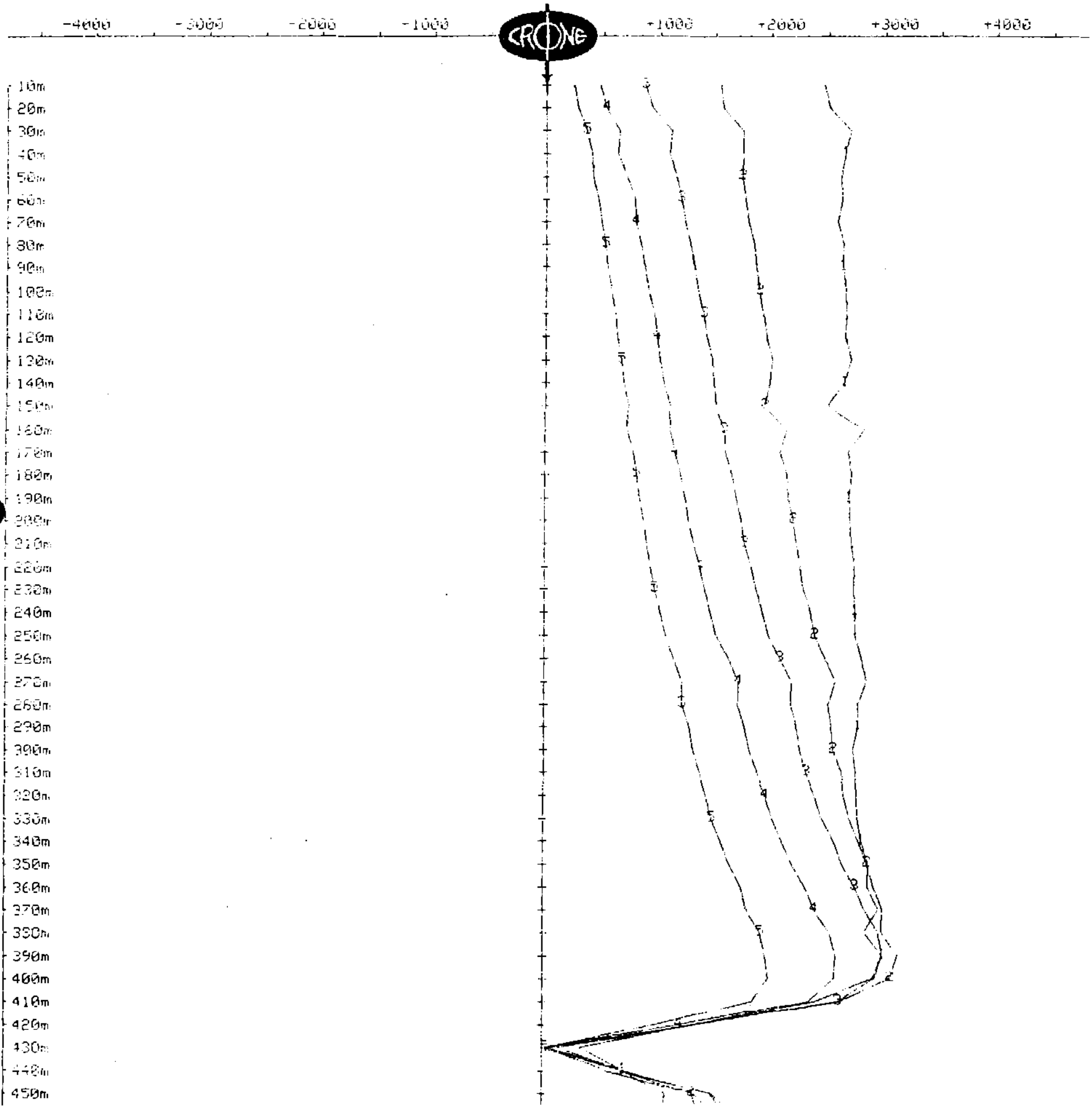
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

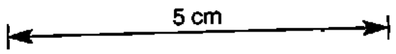
Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: Collar
Date	: May 26, 1994	File name	: BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 500 nT/s





PA31107e

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

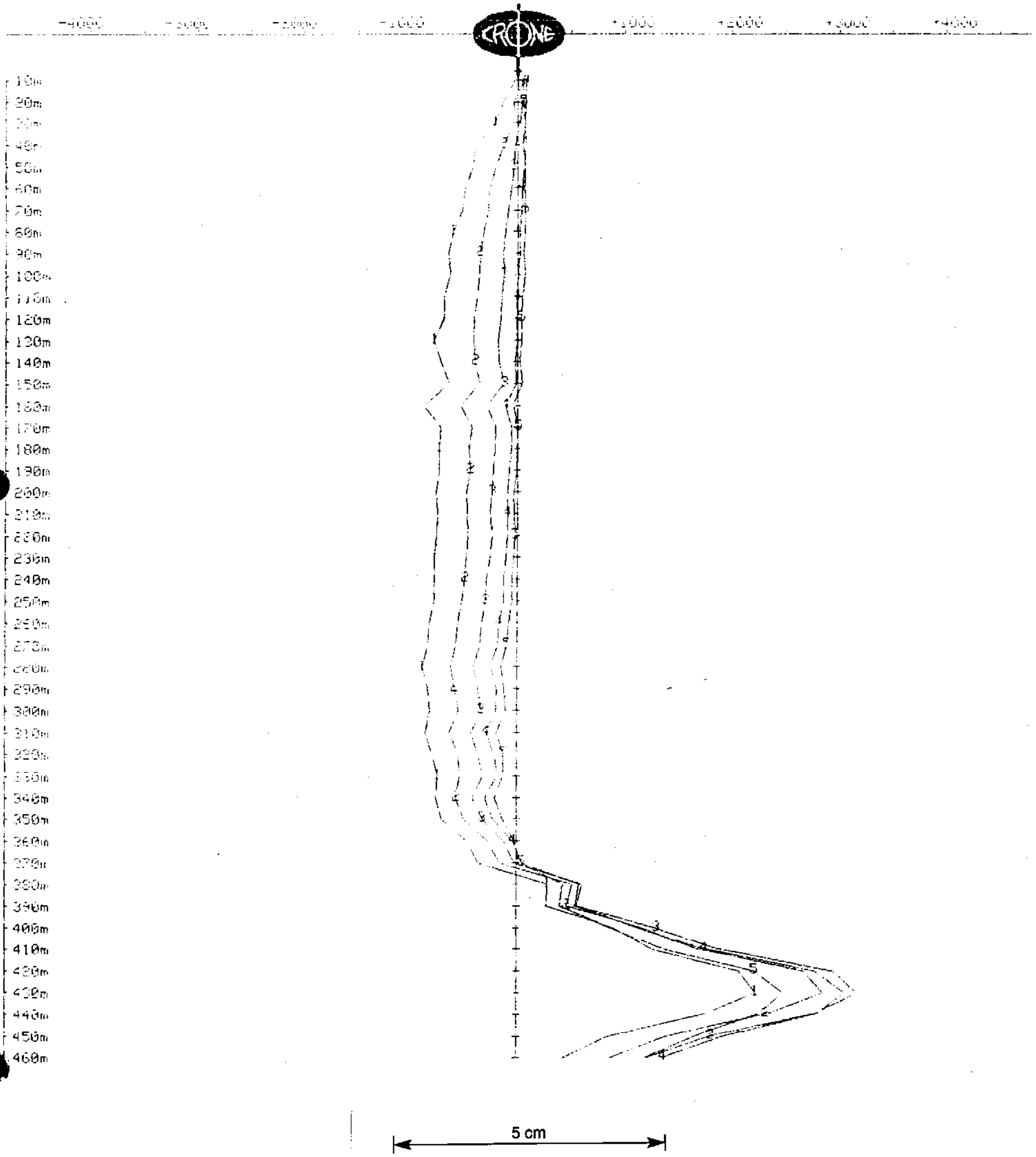
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 26, 1994

Hole : BPD80
Tx Loop : Collar
File name : BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 500 nT/s



PAS1107f

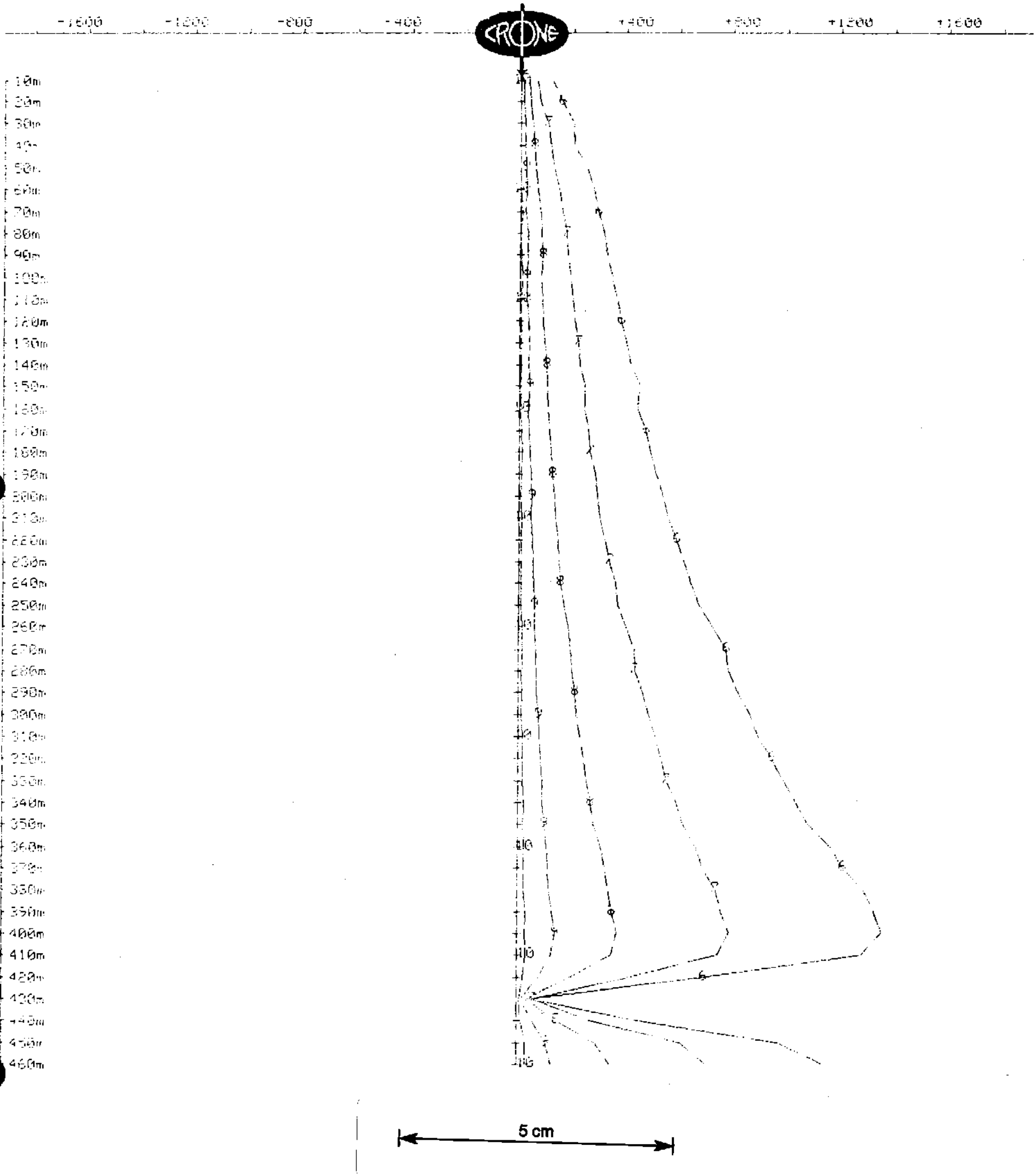
845251

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration		Hole	:	BPD80
Grid	: Burns Peak		Tx Loop	:	Collar
Date	: May 26, 1994		File name	:	BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 200 nT/s



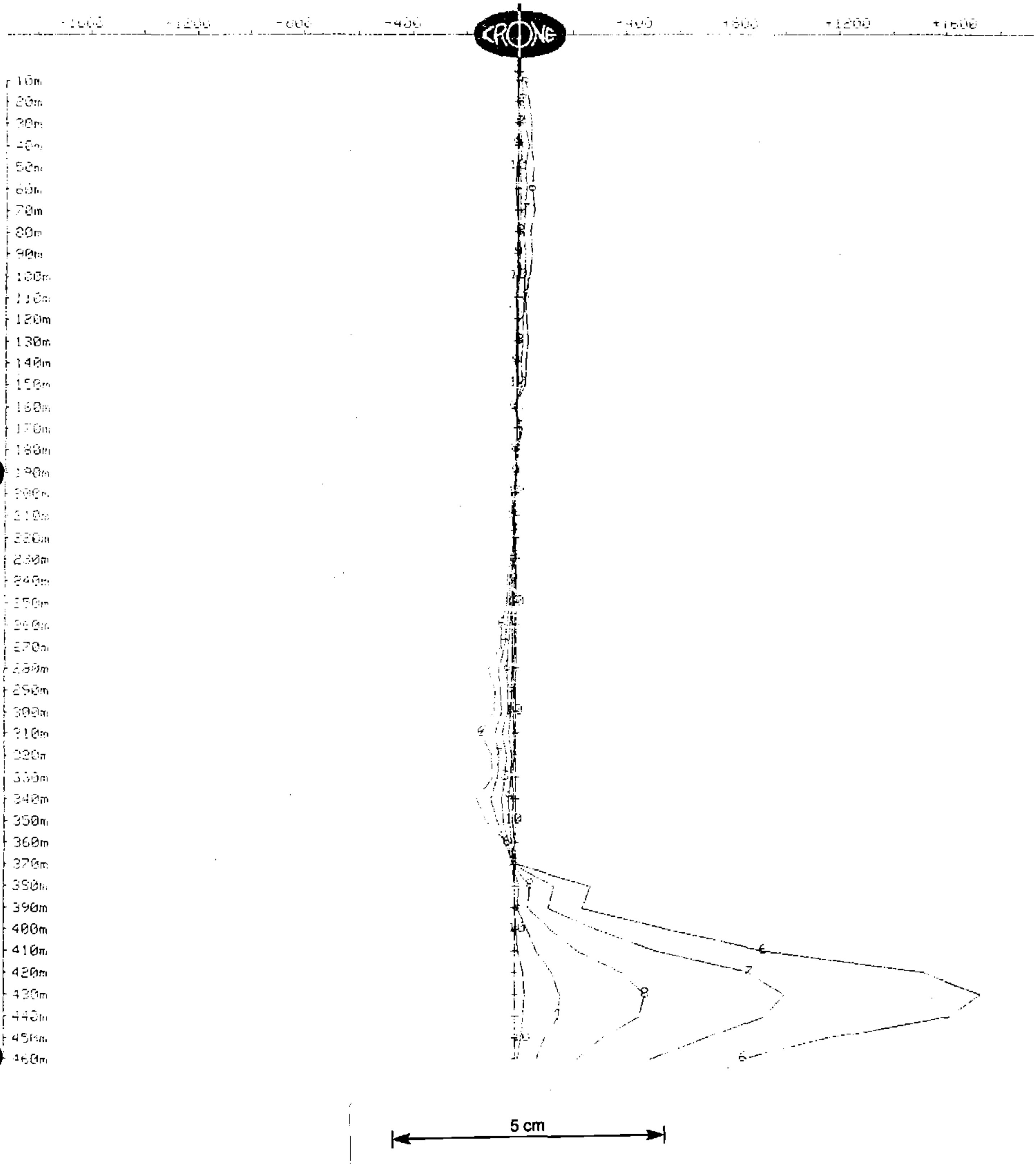
PAS1107 g

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 26, 1994
Hole : BPD80
Tx Loop : Collar
File name : BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500
Unit Scale: 1cm - 200 nT/s



PAB1107h

845253

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

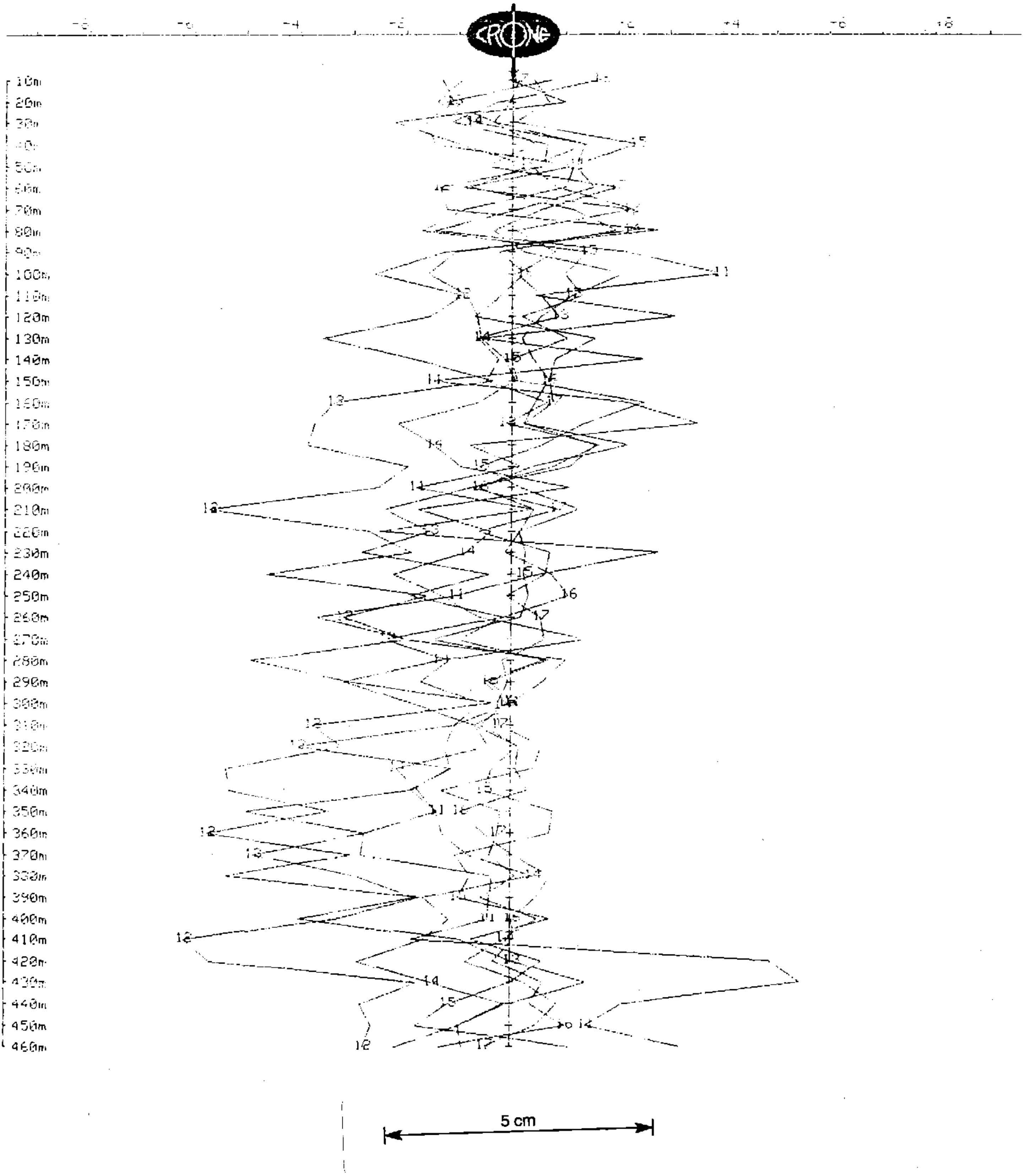
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 26, 1994

Hole : BPD80
Tx Loop : Collar
File name : BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1 nT/s



PAS1107 i

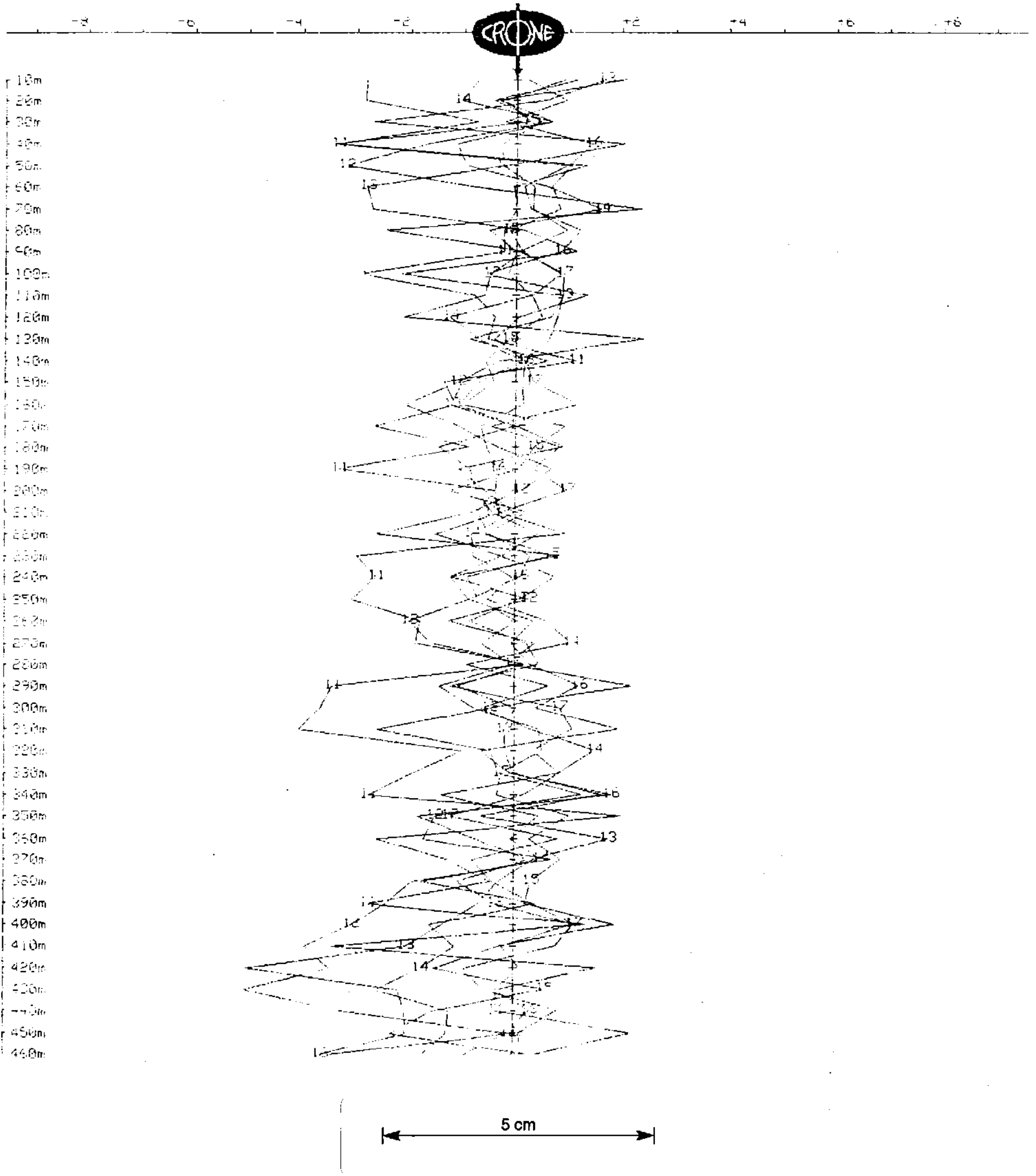
845254

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD80
Grid	:	Burns Peak	Tx Loop	:	Collar
Date	:	May 26, 1994	File name	:	BPD80CXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 1 nT/s



PA81107;

845255

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : **Pasminco Exploration**
Grid : **Burns Peak**
Date : May 24, 1994
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 17
Sync Type : Cable
Loop Size : 300m X 400m
Current : 5 Amps

Hole : **BPD80**
Tx Loop : **Collar**
File name : BPD80CZ.PEM
Readings: 47
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : -
Receiver : Digital #106
Operator : Geoffrey Dunn

Loop Coordinates (X,Y,Z)
1. 2100m, 900m, 0m   2. 2100m, 250m, 0m
3. 1500m, 250m, 0m   4. 1500m, 900m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 400m, 1900m, 0m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	104	90	2	104	131	117
3	131	171	151	4	171	225	198	5	225	292	259
6	292	378	335	7	378	490	434	8	490	639	565
9	639	828	733	10	828	1075	952	11	1075	1395	1235
12	1395	1809	1602	13	1809	2348	2078	14	2348	3046	2697
15	3046	3951	3498	16	3951	5121	4536	17	5121	6646	5884

845256

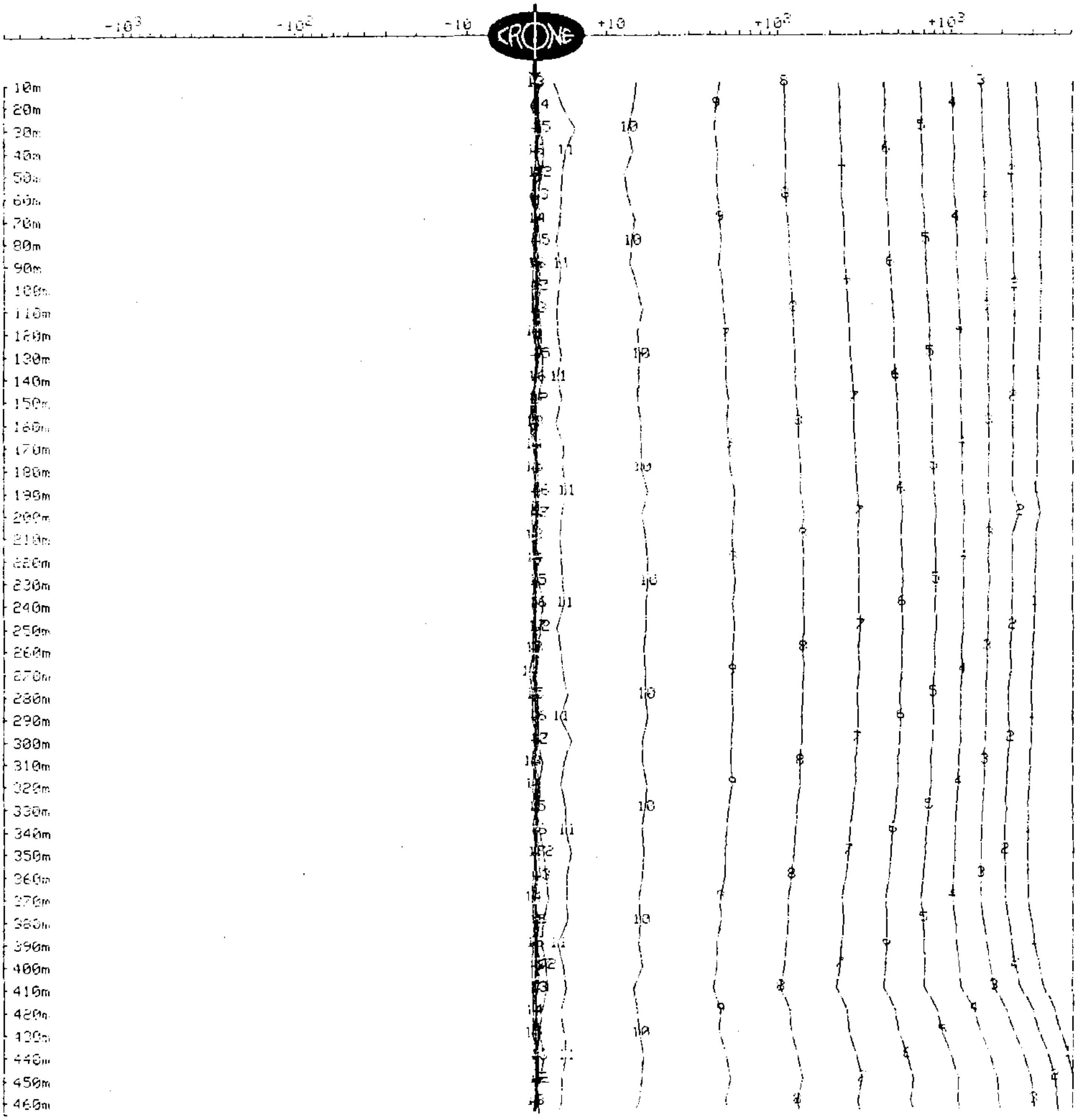
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

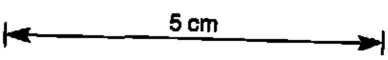
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 24, 1994

Hole : BPD80
Tx Loop : Collar
File name : BPD80CZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500





PA51107 k

845257

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

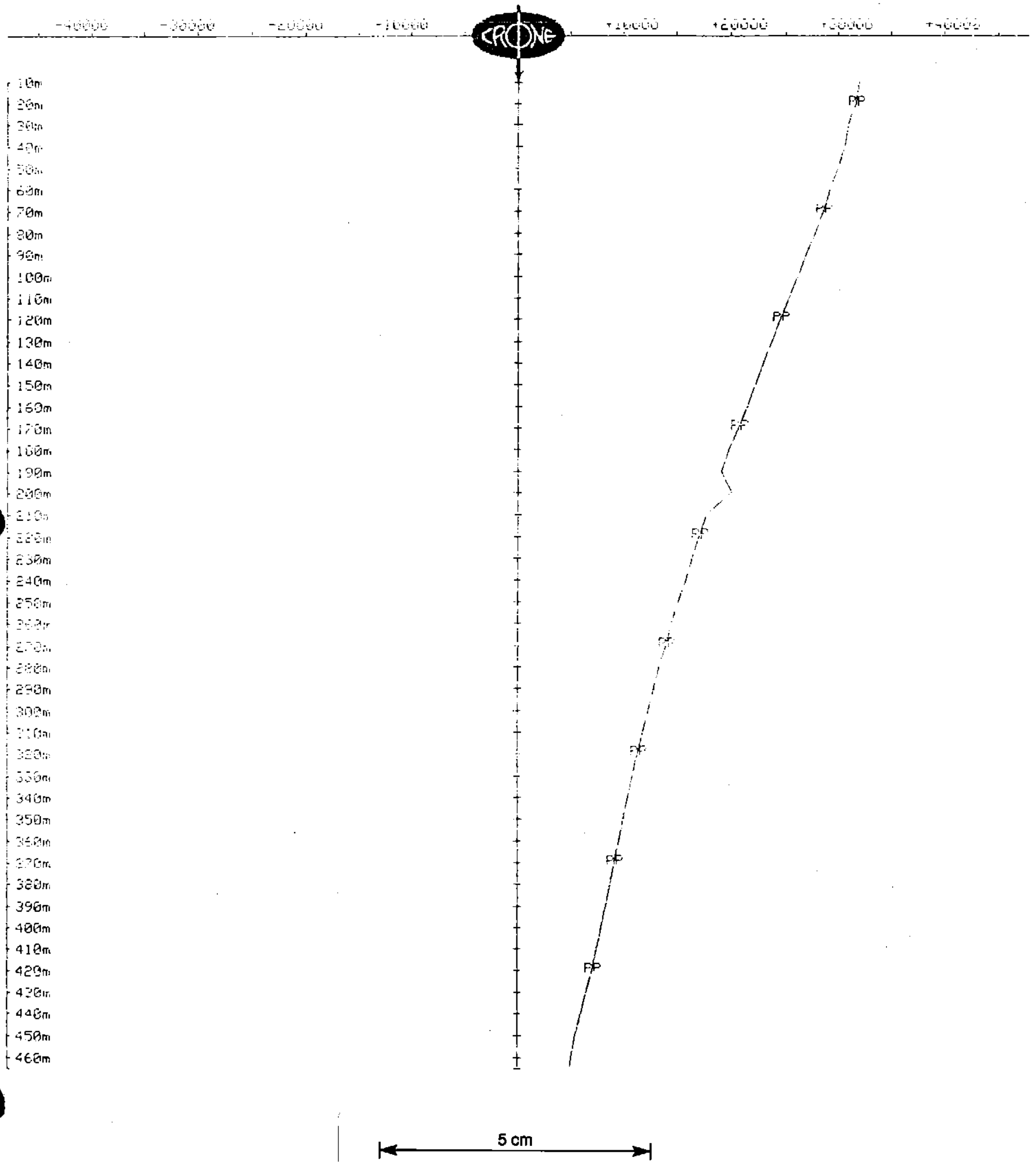
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 24, 1994

Hole : BPD80
Tx Loop : Collar
File name : BPD80CZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 5000 nT/s



PA51107 l

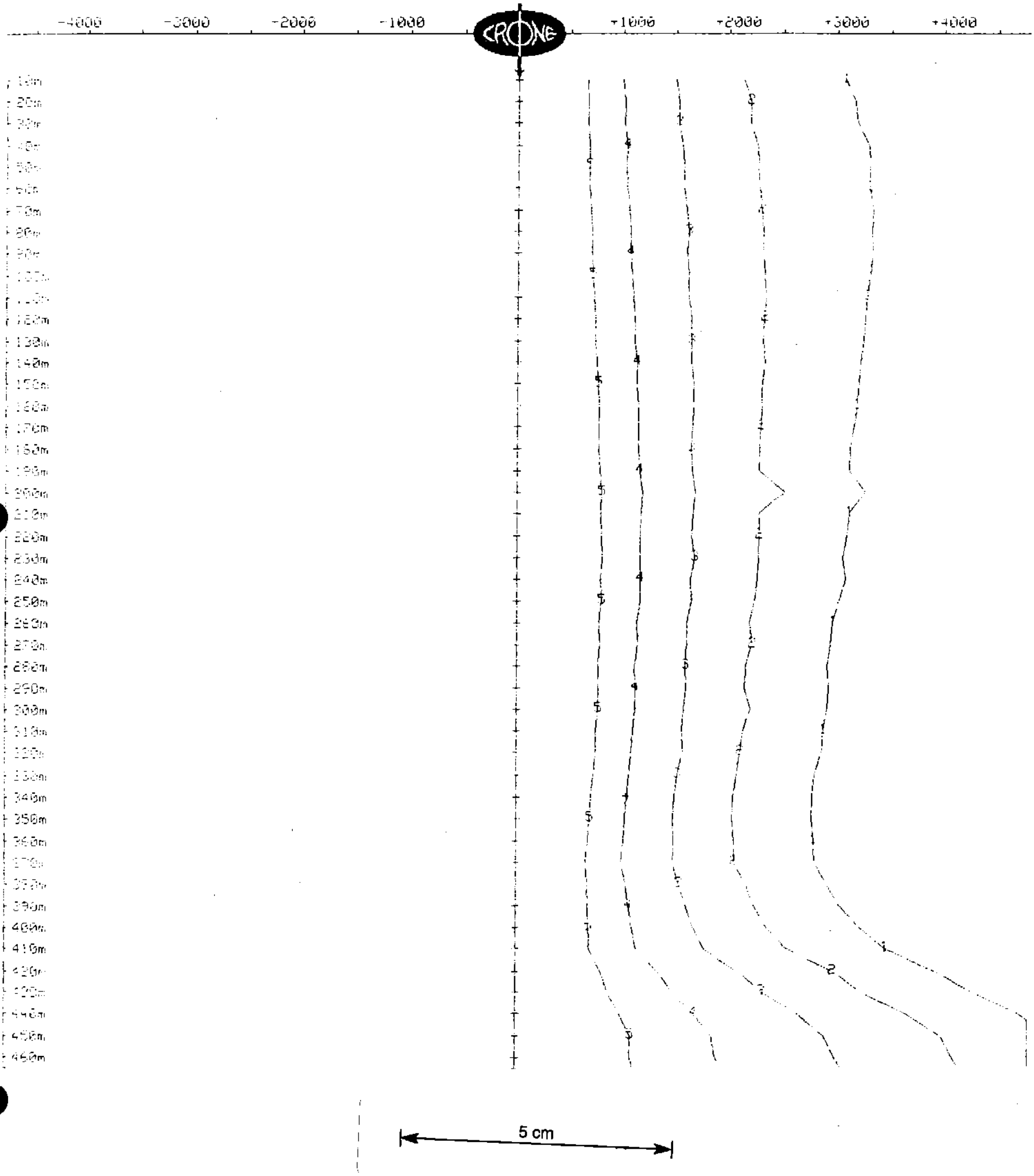
845258

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 24, 1994
Hole : BPD80
Tx Loop : Collar
File name : BPD80CZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500
Unit Scale: 1cm = 500 nT/s



DPS1107m

845259

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

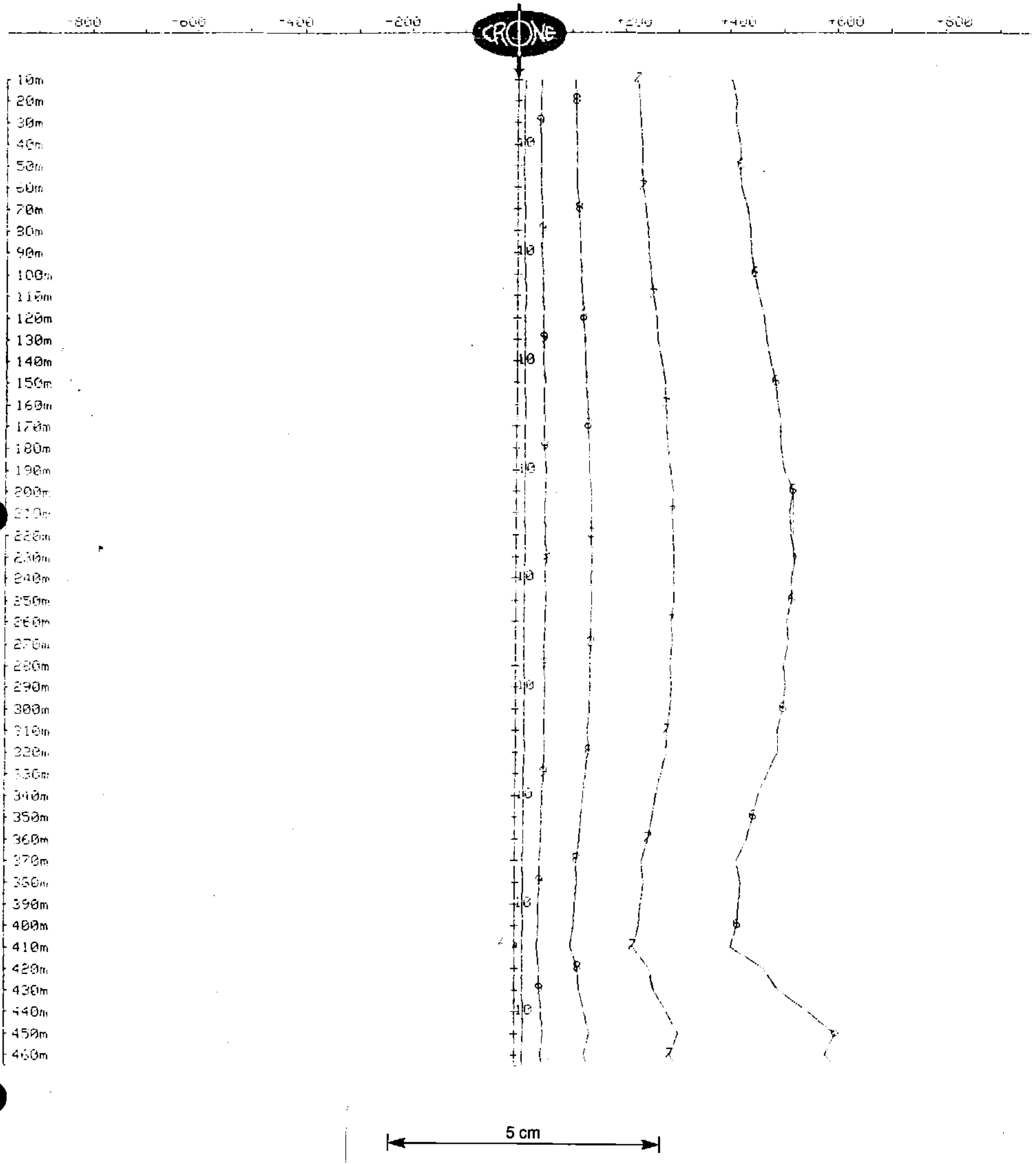
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 24, 1994

Hole : BPD80
Tx Loop : Collar
File name : BPD80CZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 100 nT/s



AAS107W

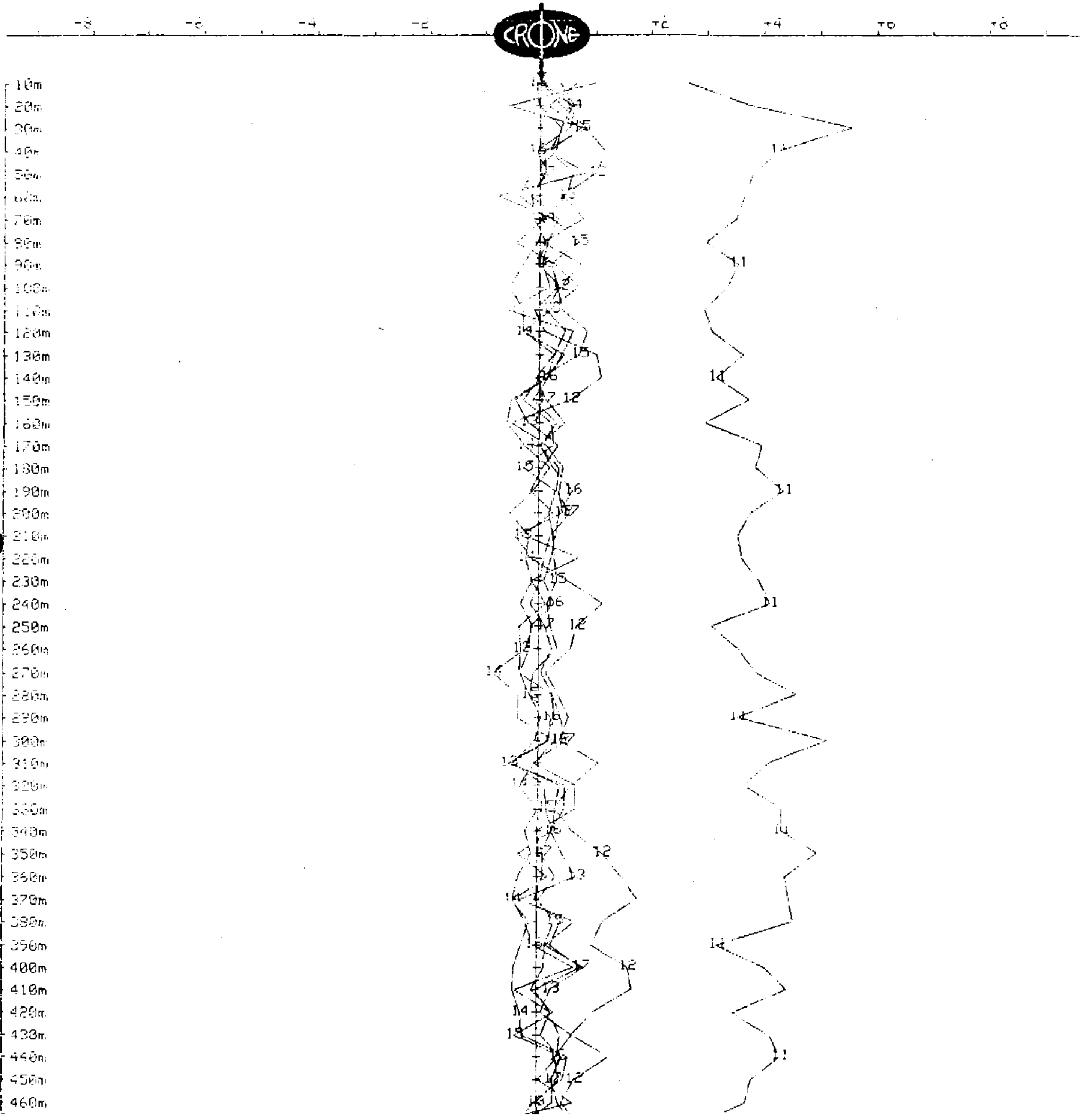
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD80
Grid	:	Burns Peak	Tx Loop	:	Collar
Date	:	May 24, 1994	File name	:	BPD80CZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1 nT/s



5cm

PA81070

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : **Pasminco Exploration**
Grid : **Burns Peak**
Date : May 25, 1994
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 17
Sync Type : Cable
Loop Size : 600m X 600m
Current : 4 Amps

Hole : **BPD80**
Tx Loop : **South**
File name : BPD80SXY.PEM
Readings: 94
Stn Units : Metric
Coil Area : 2800 sq m
Polarity : -
Receiver : Digital #106
Operator : Geoffrey Dunn

Loop Coordinates (X,Y,Z)
1. 379030m, 5.38455e+06m, 0m
2. 379370m, 5.38395e+06m, 0m
3. 380000m, 5.38418e+06m, 0m
4. 379560m, 5.38482e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 379250m, 5.38482e+06m, 0m
2. 284deg, 60deg, 20m
3. 284deg, 60.7deg, 40m
4. 284deg, 61.1deg, 40m
5. 284deg, 60.1deg, 40m
6. 284.5deg, 60deg, 40m
7. 284.5deg, 59.5deg, 40m
8. 286deg, 58.8deg, 40m
9. 287deg, 58.1deg, 40m
10. 287.8deg, 57.4deg, 40m
11. 288deg, 56.7deg, 40m
12. 288.5deg, 56.3deg, 40m
13. 287, 58, 35m
14. 286deg, 56.5deg, 15m

Channel Times (usec)

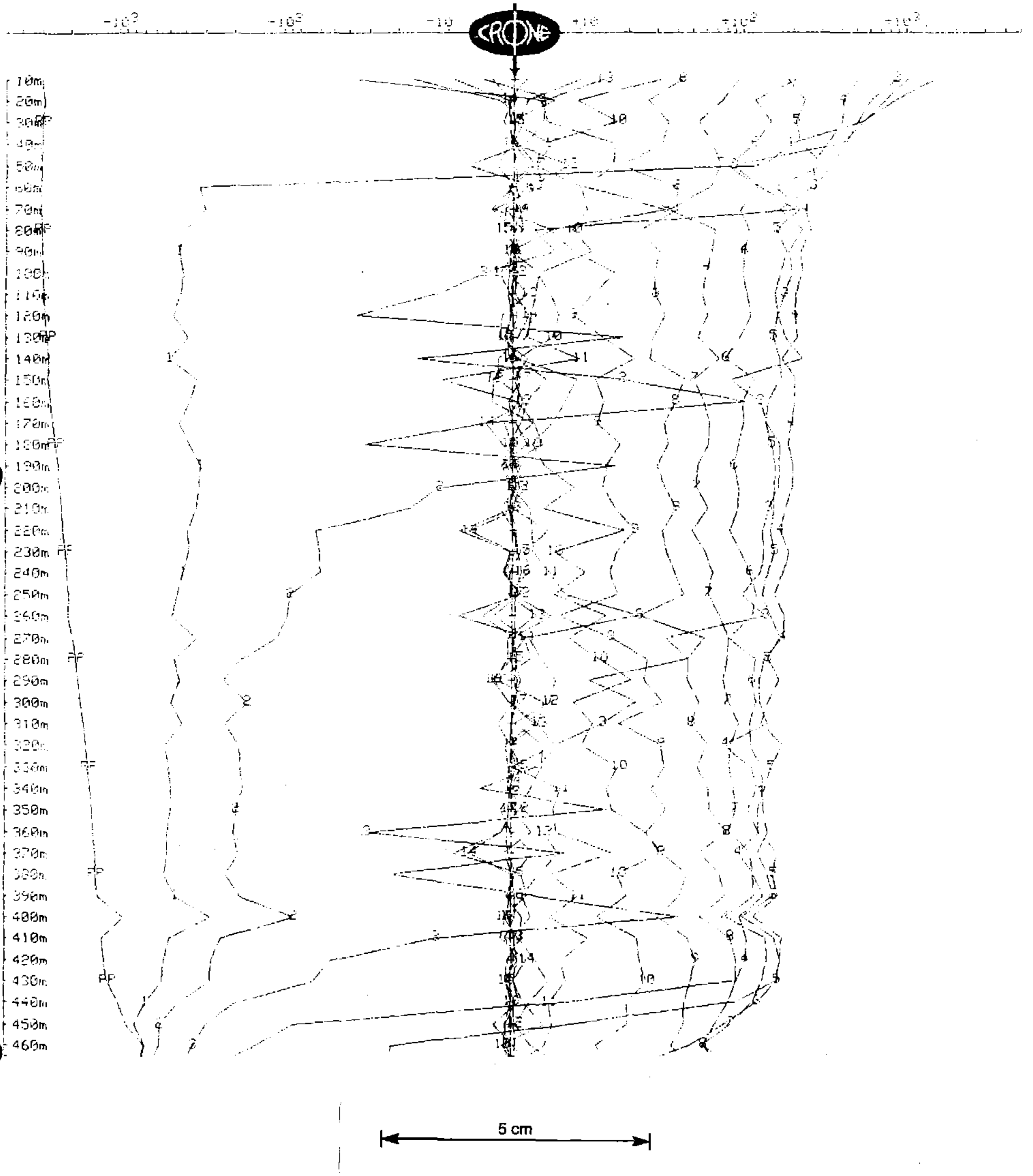
Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	104	90	2	104	131	117
3	131	171	151	4	171	225	198	5	225	292	259
6	292	378	335	7	378	490	434	8	490	639	565
9	639	828	733	10	828	1075	952	11	1075	1395	1235
12	1395	1809	1602	13	1809	2348	2078	14	2348	3046	2697
15	3046	3951	3498	16	3951	5121	4536	17	5121	6646	5884

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 25, 1994

Hole : BPD80
Tx Loop : South
File name : BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels and PP
Scale: 1:2500



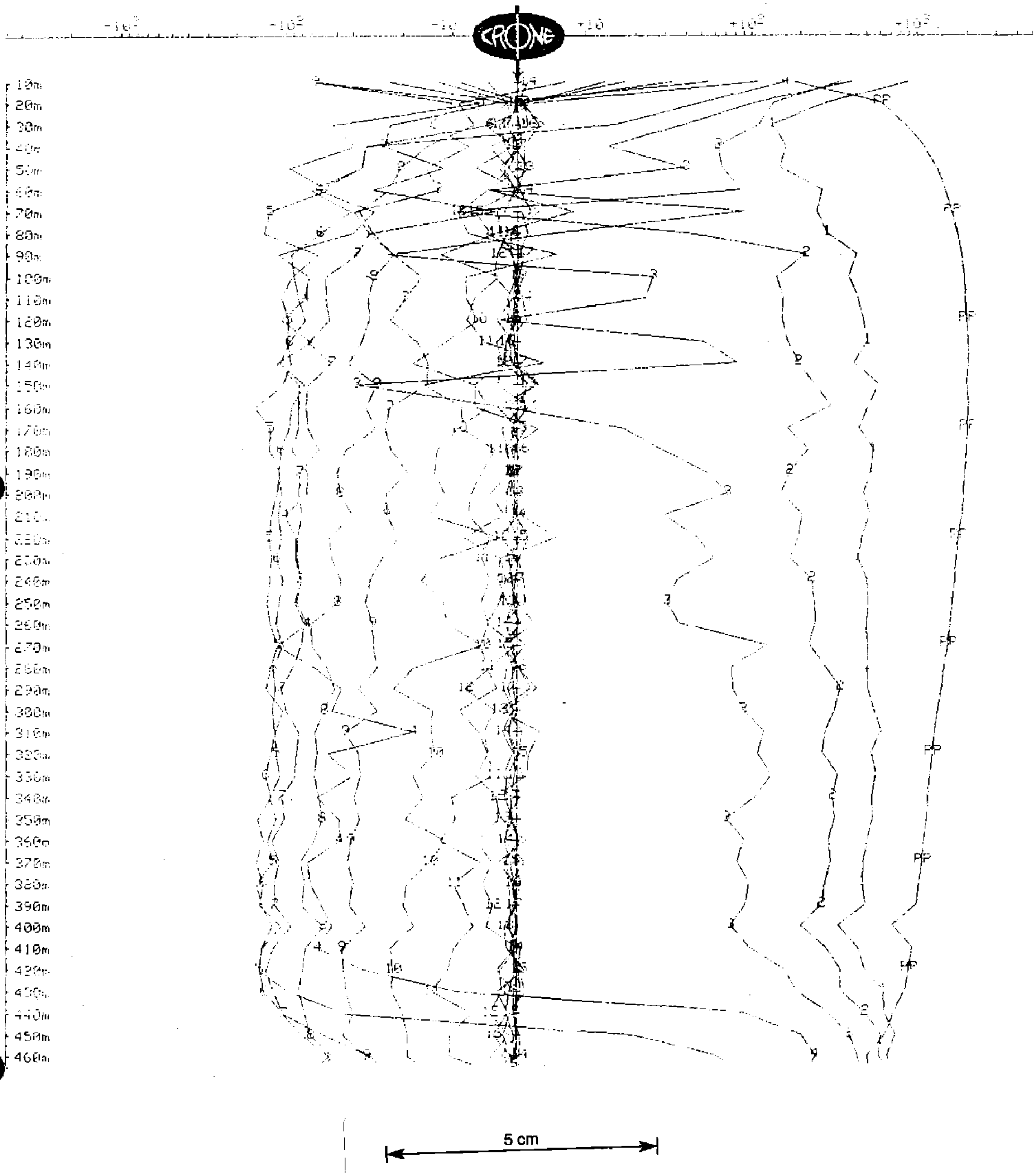
845263

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500



PAS1108 b

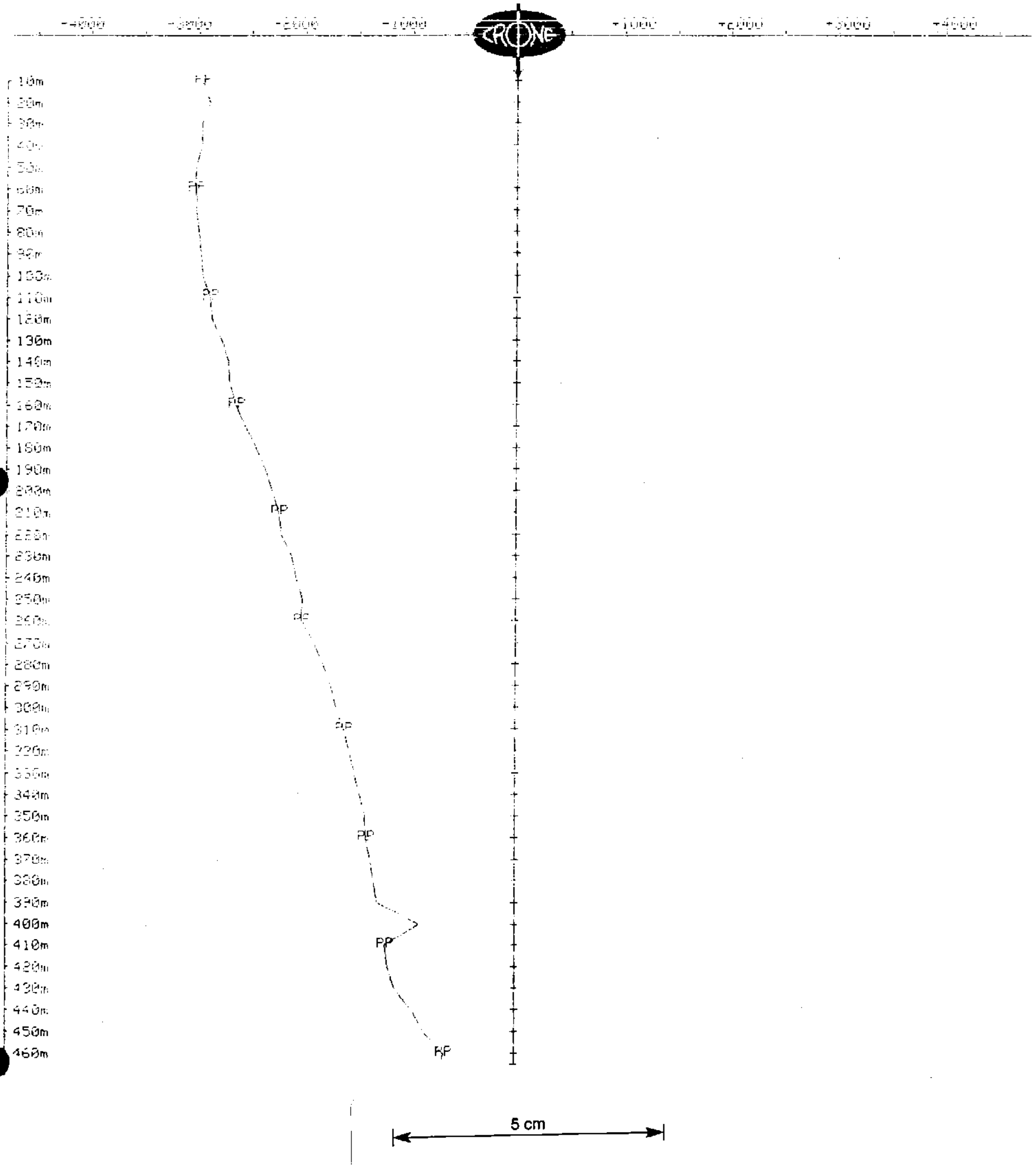
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	**BPD80**
Grid	:	Burns Peak	Tx Loop	:	South
Date	:	May 25, 1994	File name	:	BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 500 nT/s



PAB1108 c

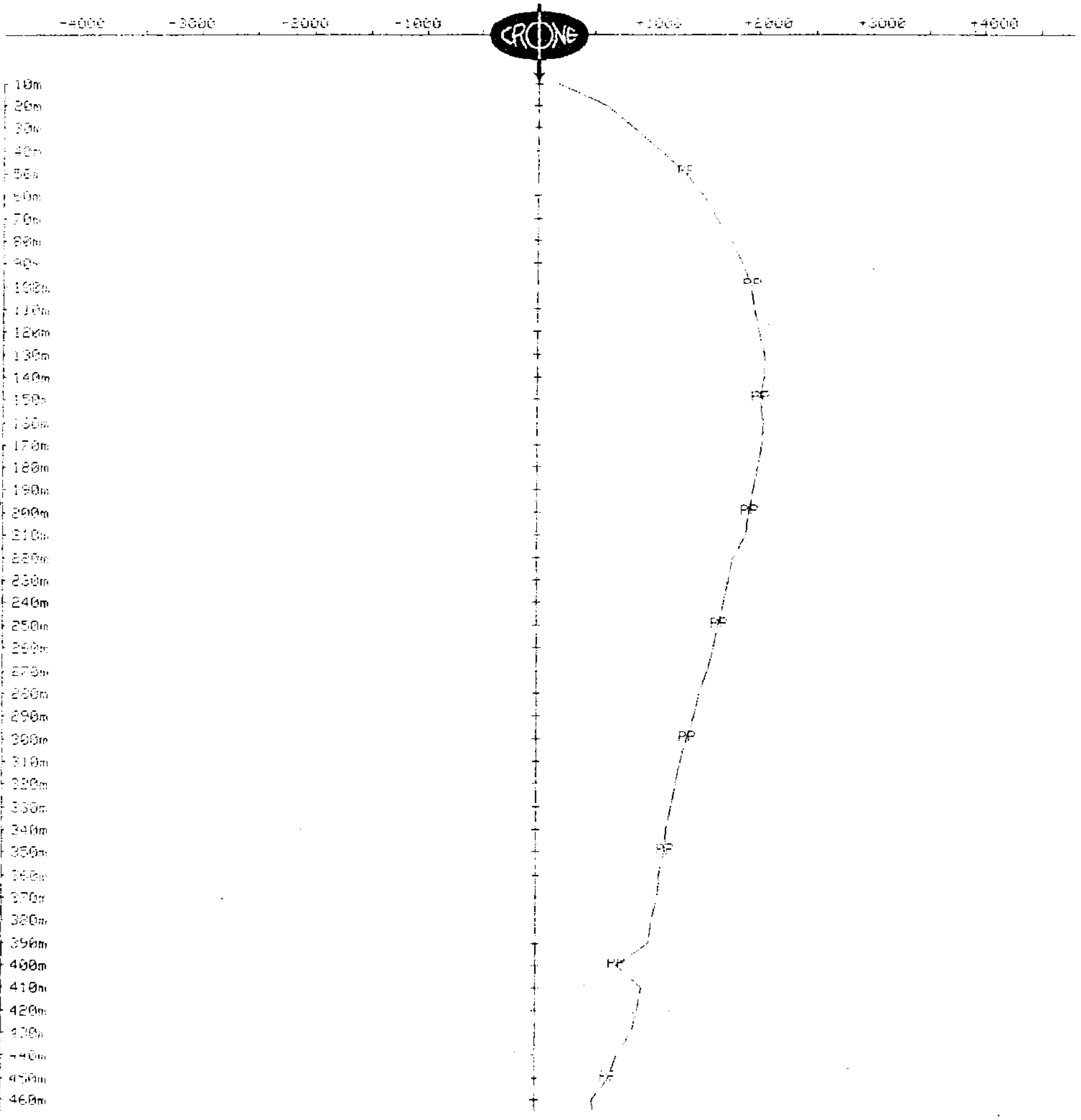
845265

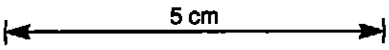
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 500 nT/s





PAS1108 d

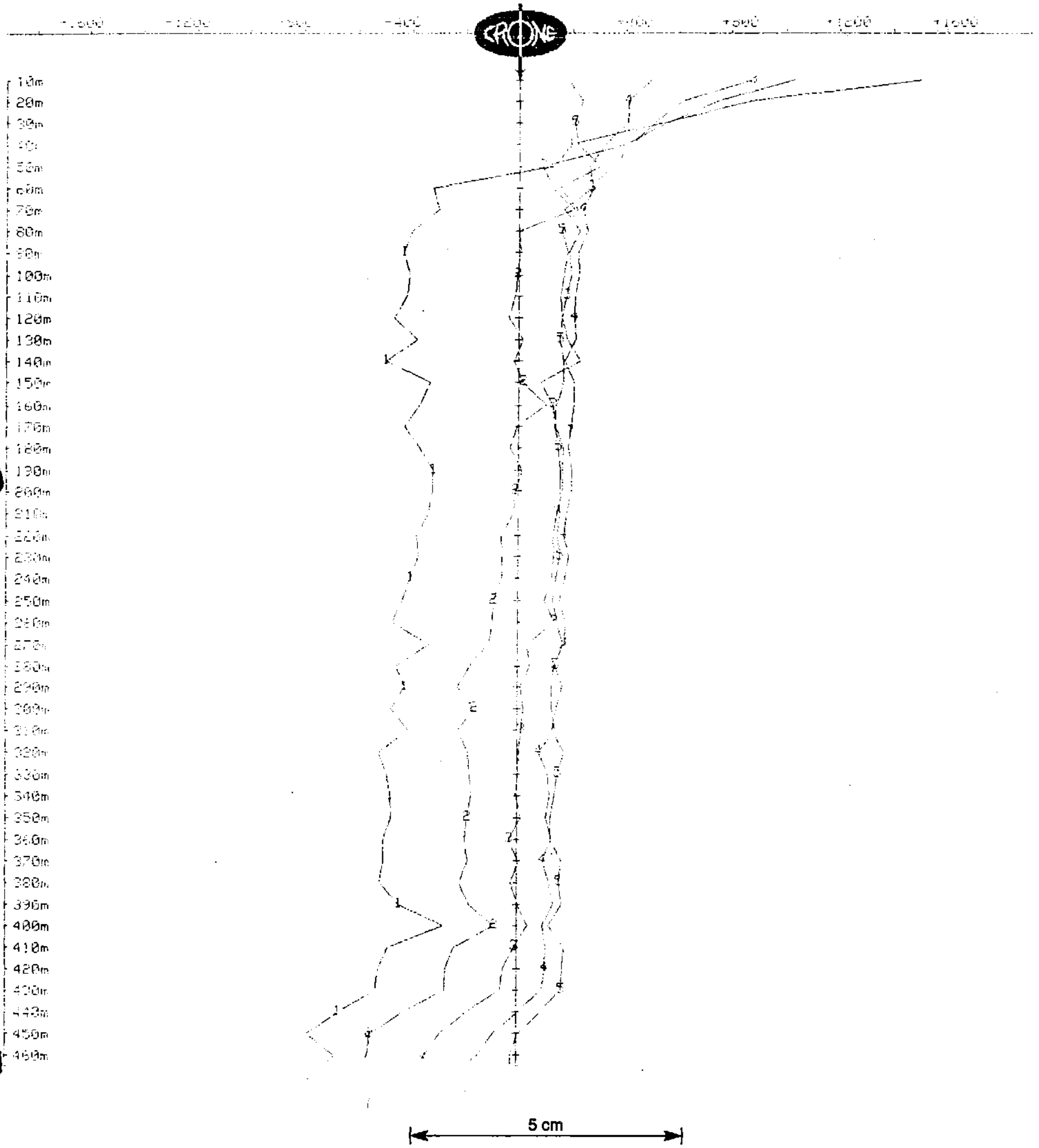
845266

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration		Hole	:	BPD80
Grid	: Burns Peak		Tx Loop	:	South
Date	: May 25, 1994		File name	:	BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 200 nT/s



PAS1108e

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

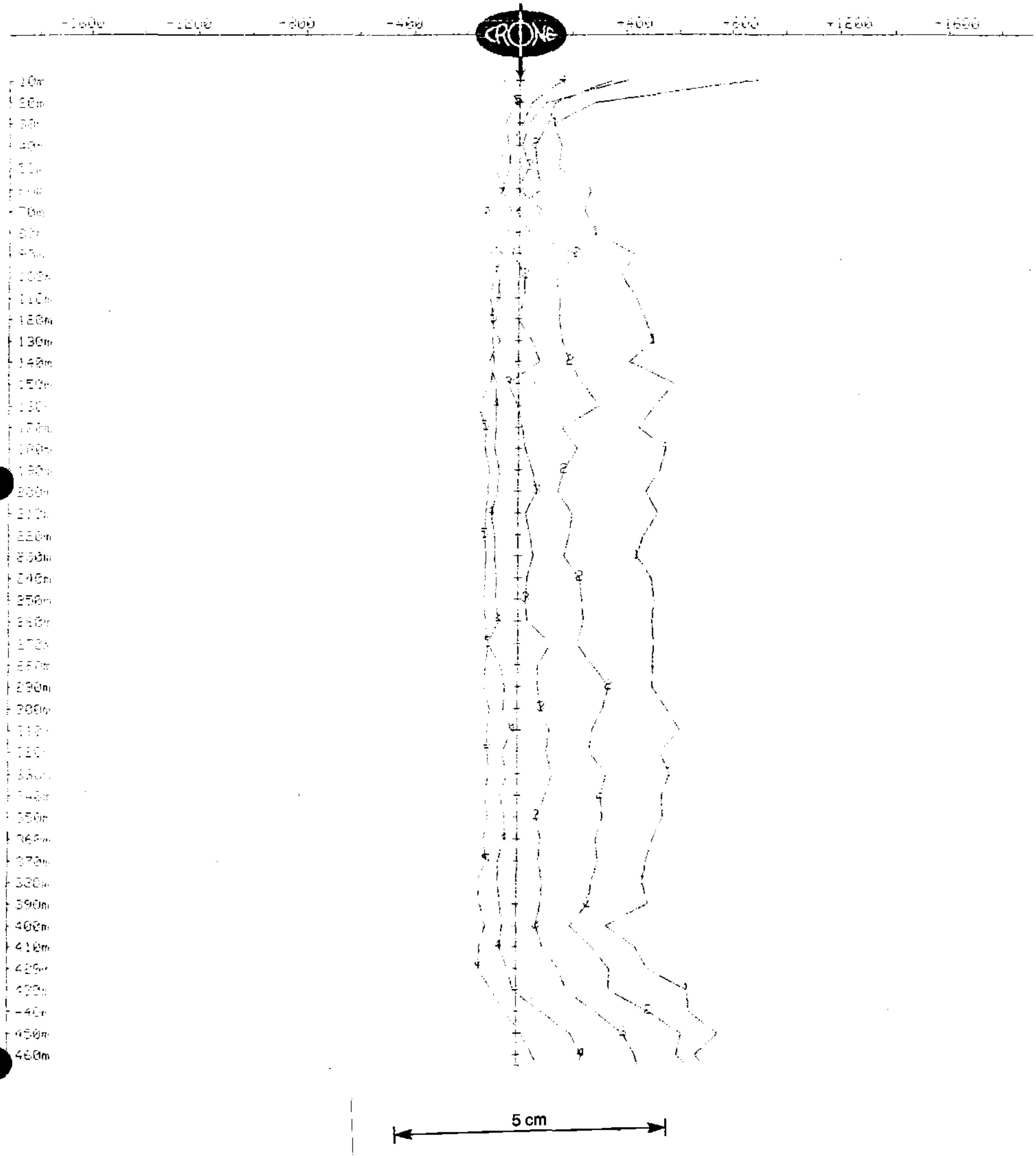
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 25, 1994

Hole : BPD80
Tx Loop : South
File name : BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 200 nT/s



PAS1108 f

048263

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

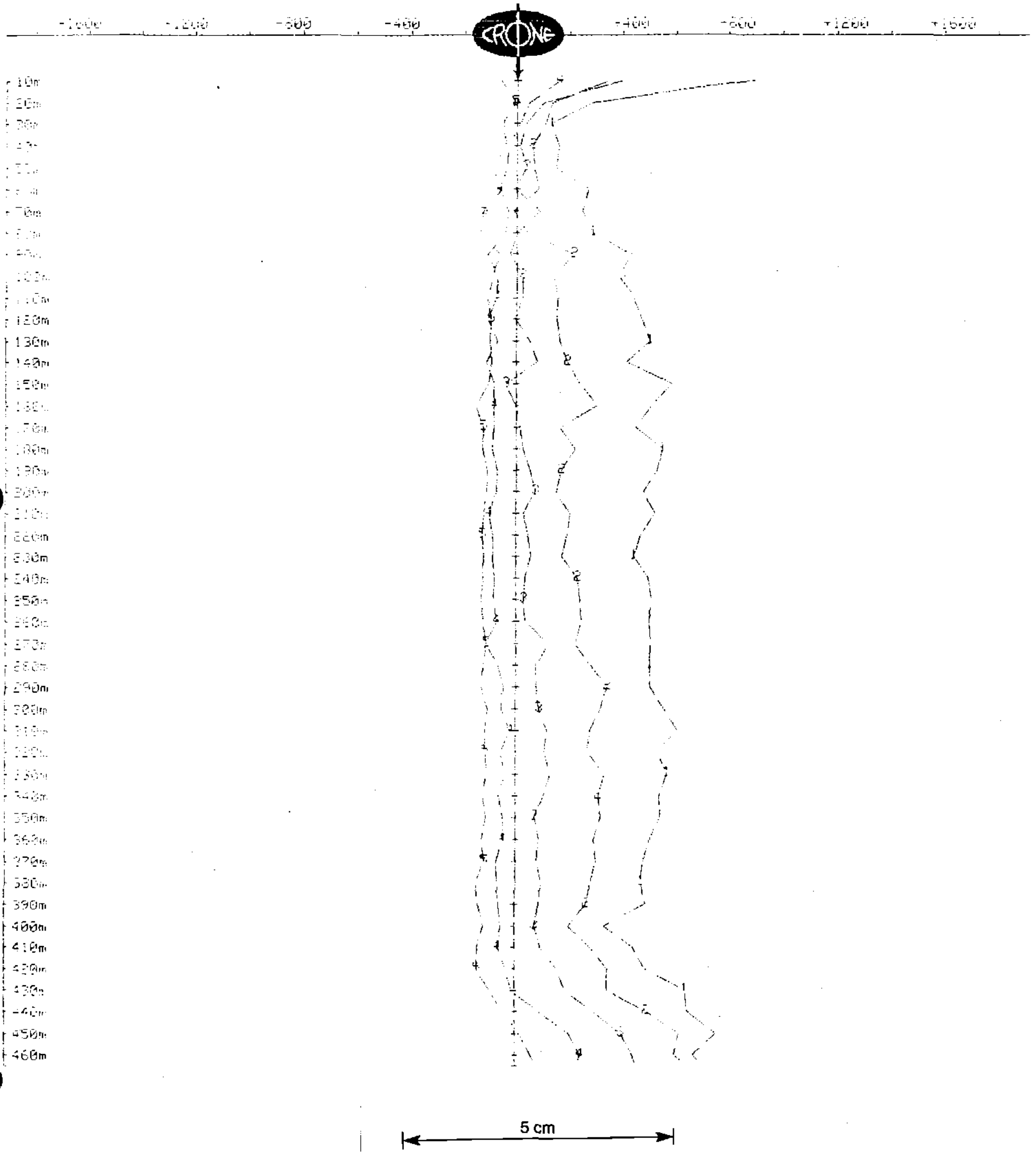
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 25, 1994

Hole : BPD80
Tx Loop : South
File name : BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 200 nT/s



PAS1108 f

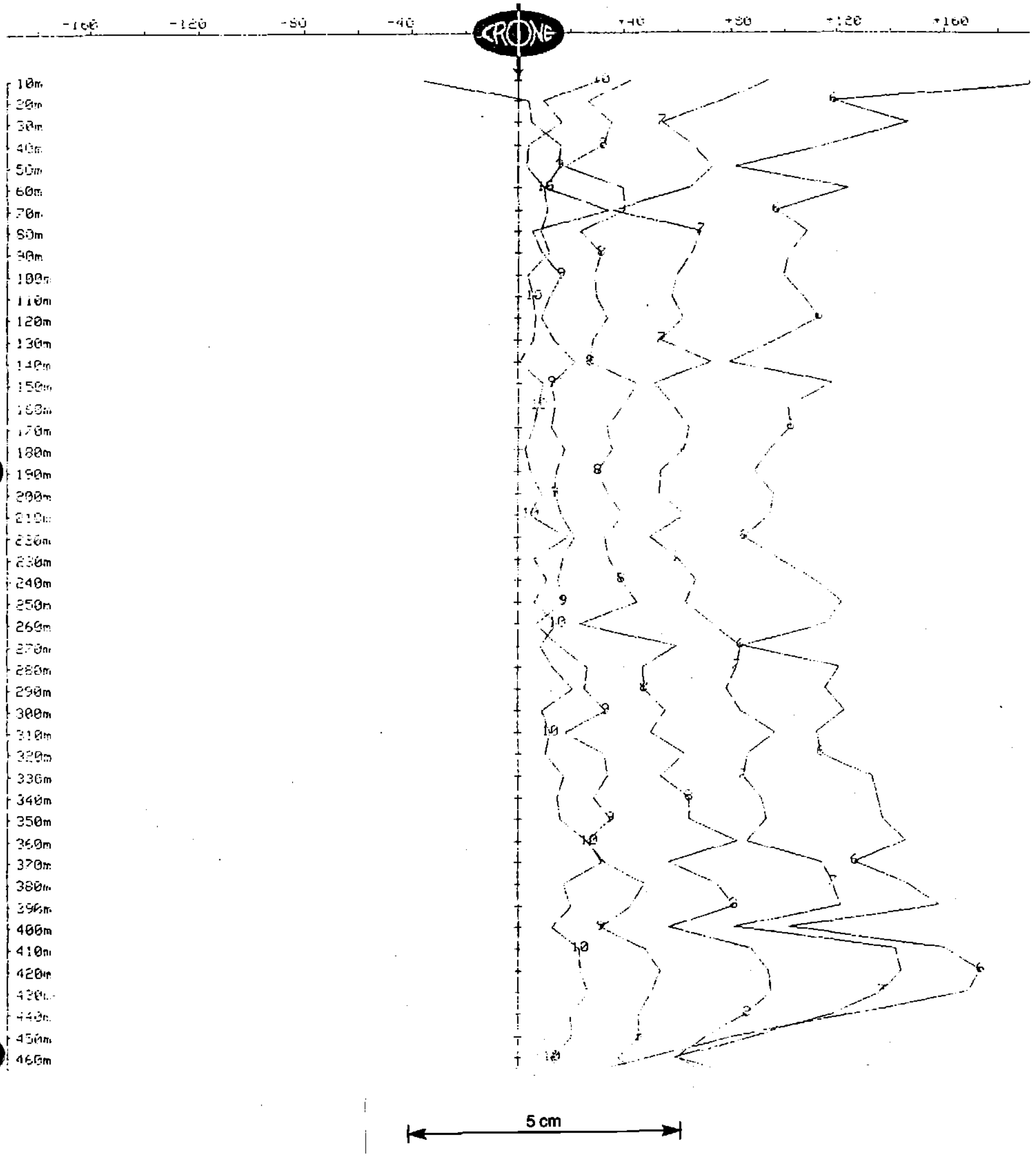
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 20 nT/s



845270

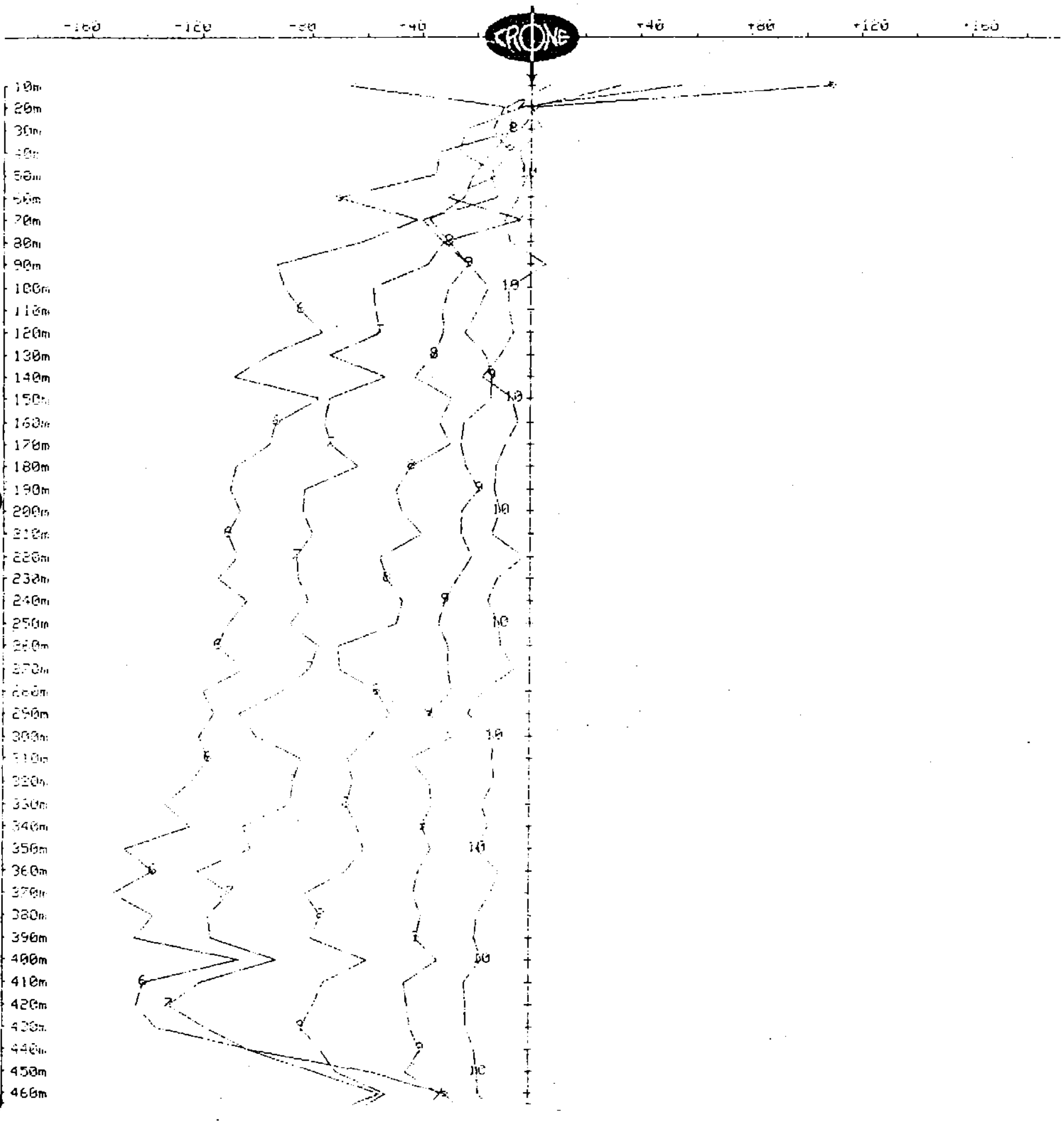
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

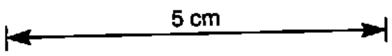
Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 20 nT/s





PA81108 h

845271

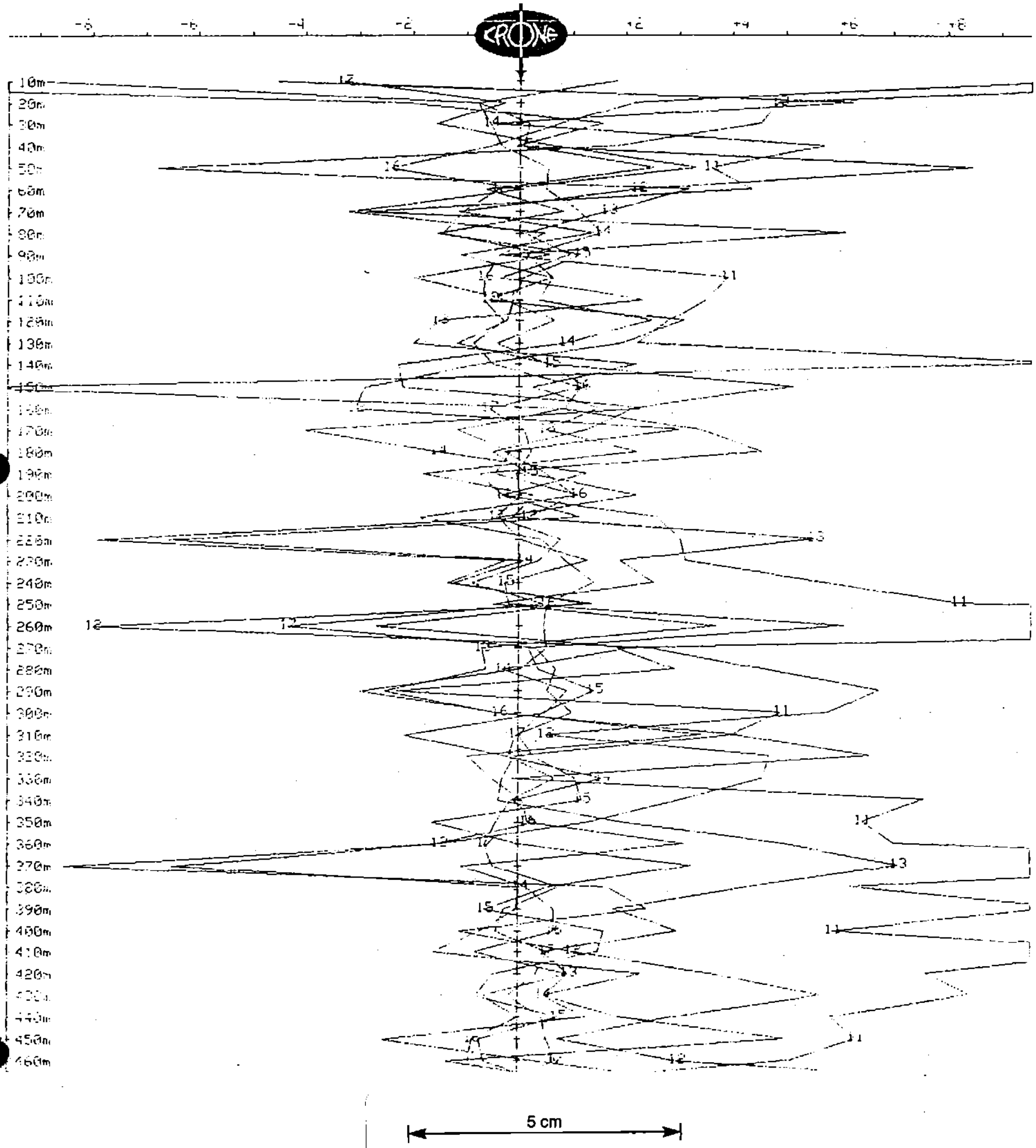
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP

X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 1 nT/s



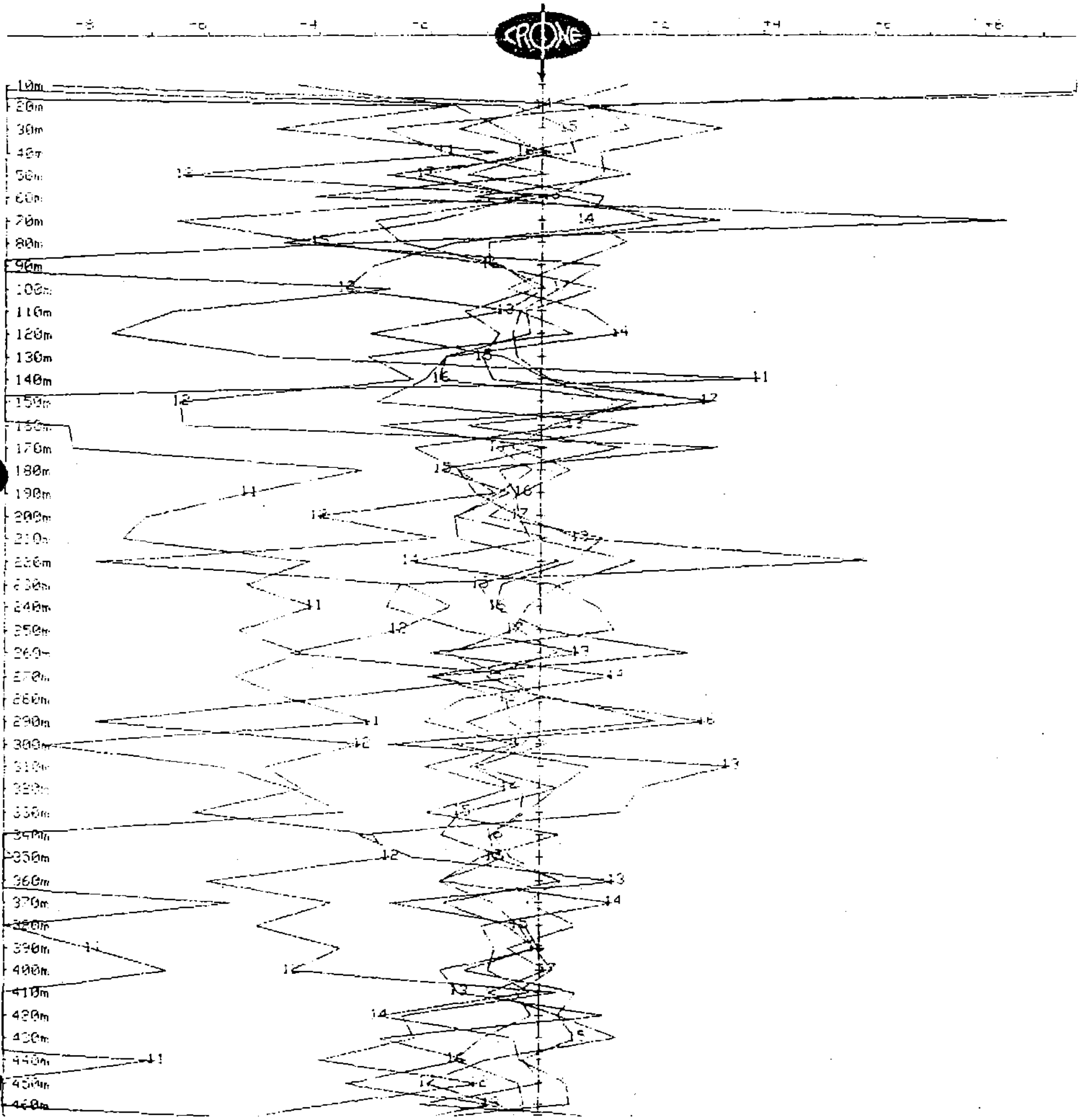
845272

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 1 nT/s



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 25, 1994
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 17
Sync Type : Cable
Loop Size : 500m X 650m
Current : 4 Amps

Hole : BPD80
Tx Loop : South
File name : BPD80SZ.PEM
Readings: 47
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : -
Receiver : Digital #106
Operator : Geoffrey Dunn

Loop Coordinates (X,Y,Z)
1. 2100m, 250m, 0m
2. 2100m, -400m, 0m
3. 1500m, -400m, 0m
4. 1500m, 250m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 400m, 1900m, 0m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	104	90	2	104	131	117
3	131	171	151	4	171	225	198	5	225	292	259
6	292	378	335	7	378	490	434	8	490	639	565
9	639	828	733	10	828	1075	952	11	1075	1395	1235
12	1395	1809	1602	13	1809	2348	2078	14	2348	3046	2697
15	3046	3951	3498	16	3951	5121	4536	17	5121	6646	5884

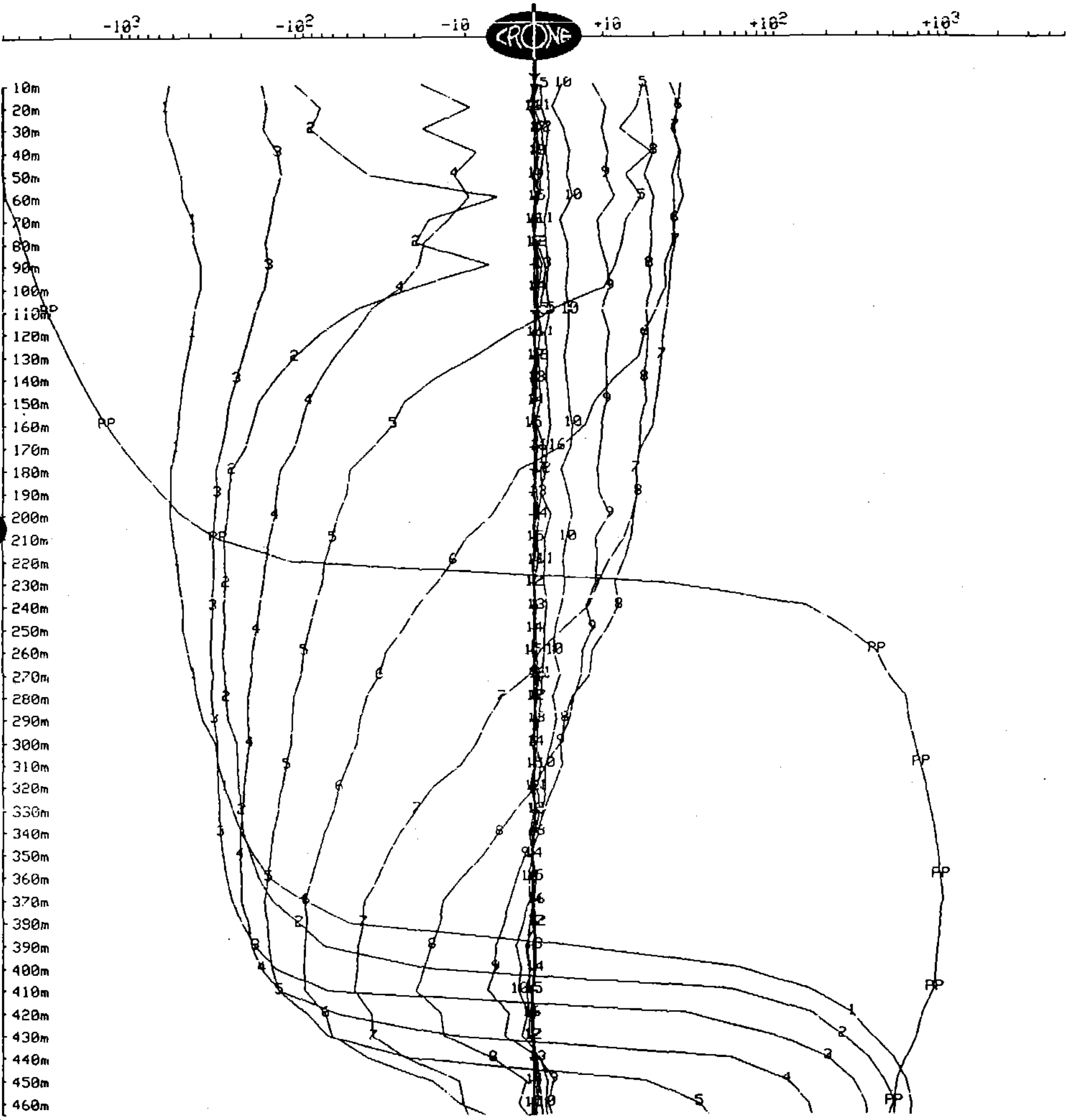
845274

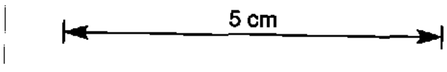
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500





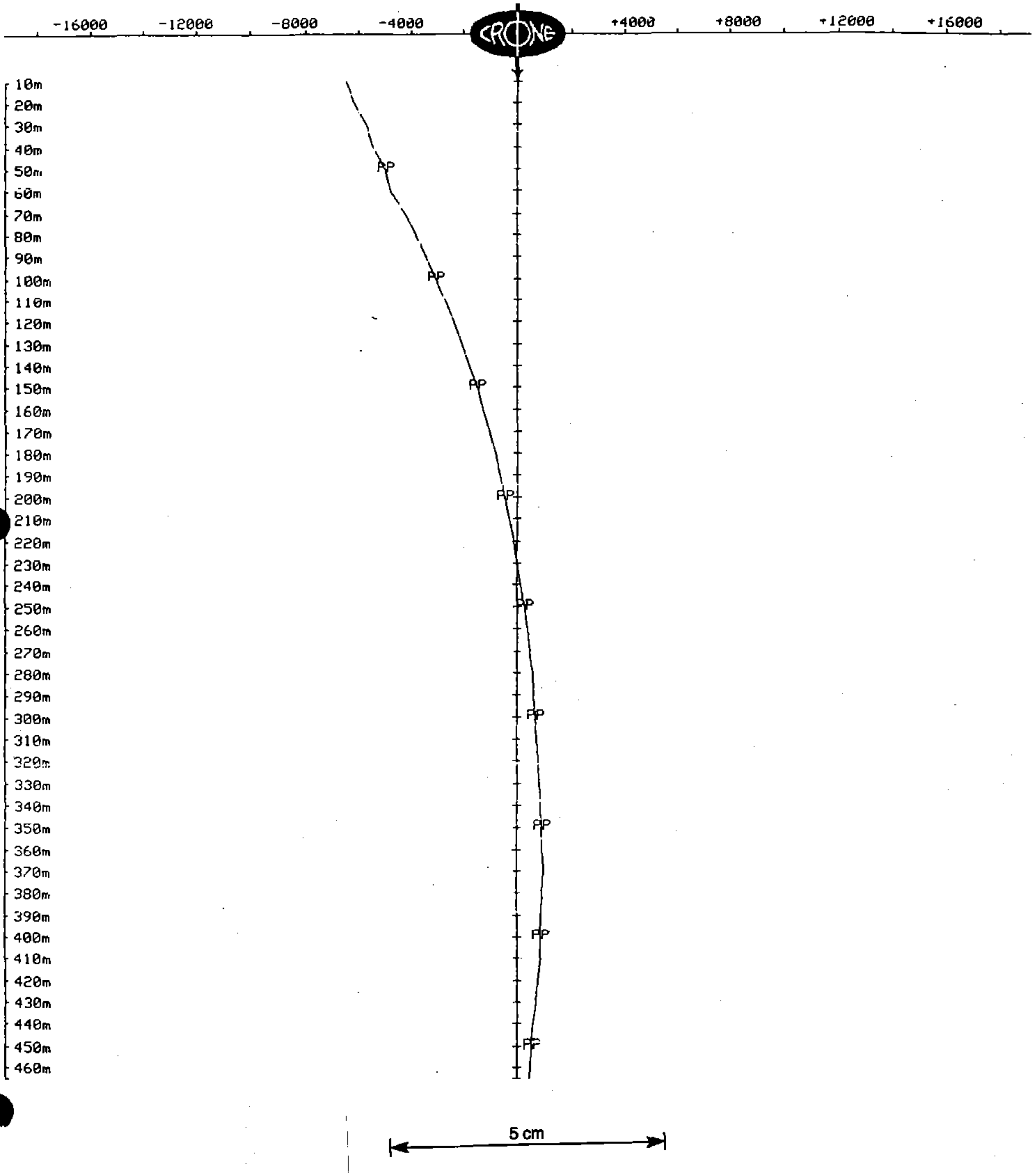
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 2000 nT/s



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

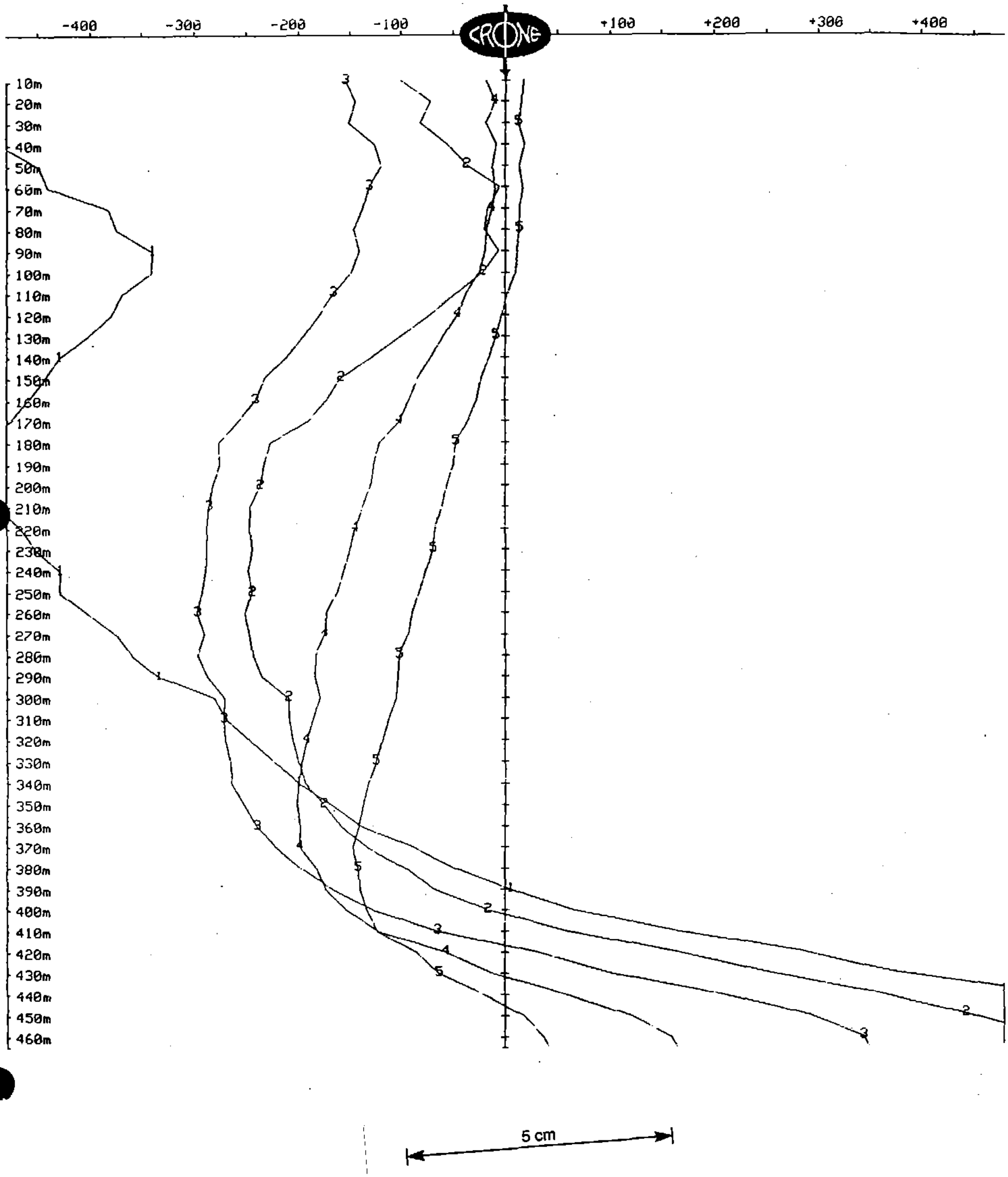
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 25, 1994

Hole : BPD80
Tx Loop : South
File name : BPD80SZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 50 nT/s



DAR1105

845277

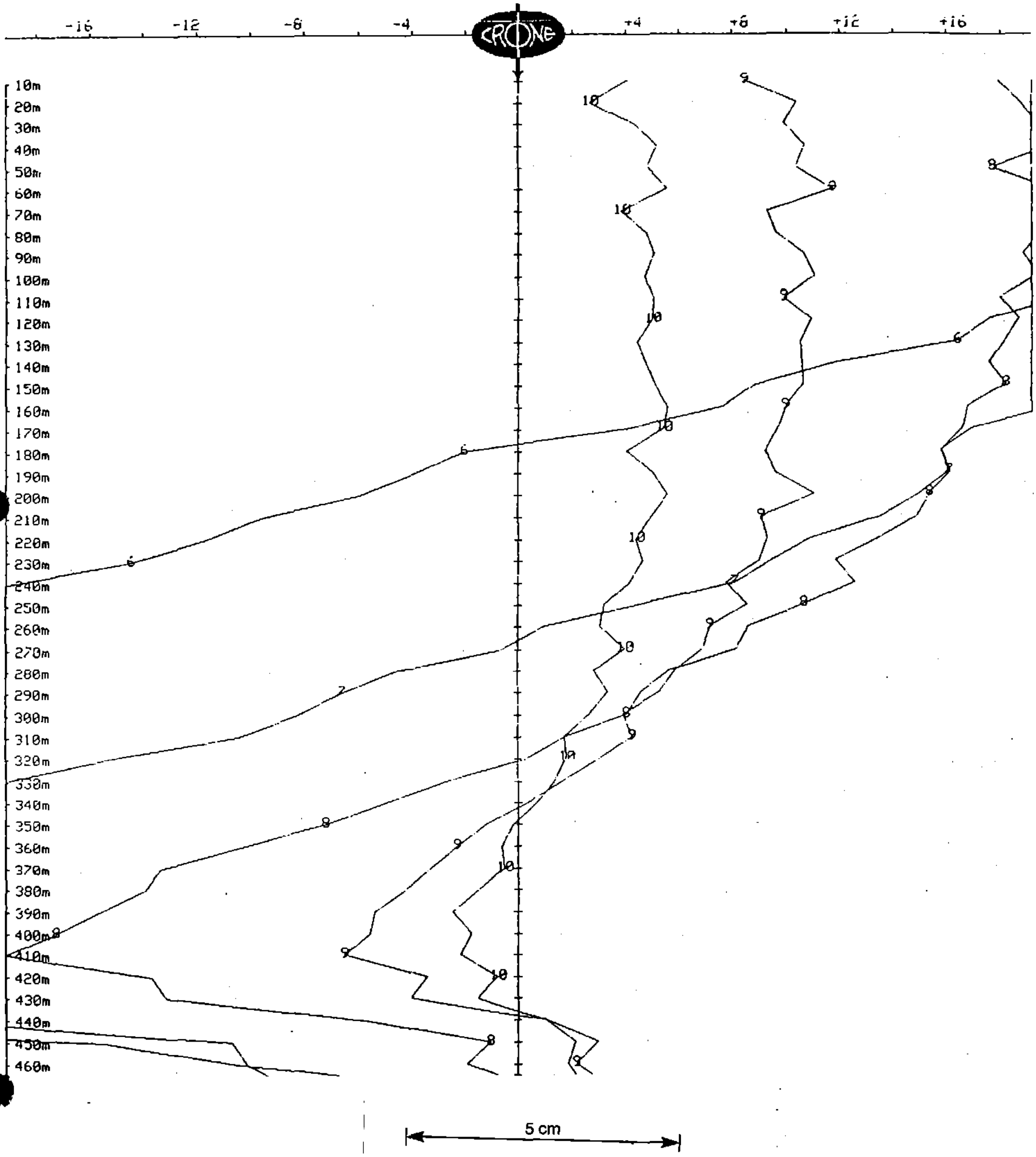
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 2 nT/s



845278

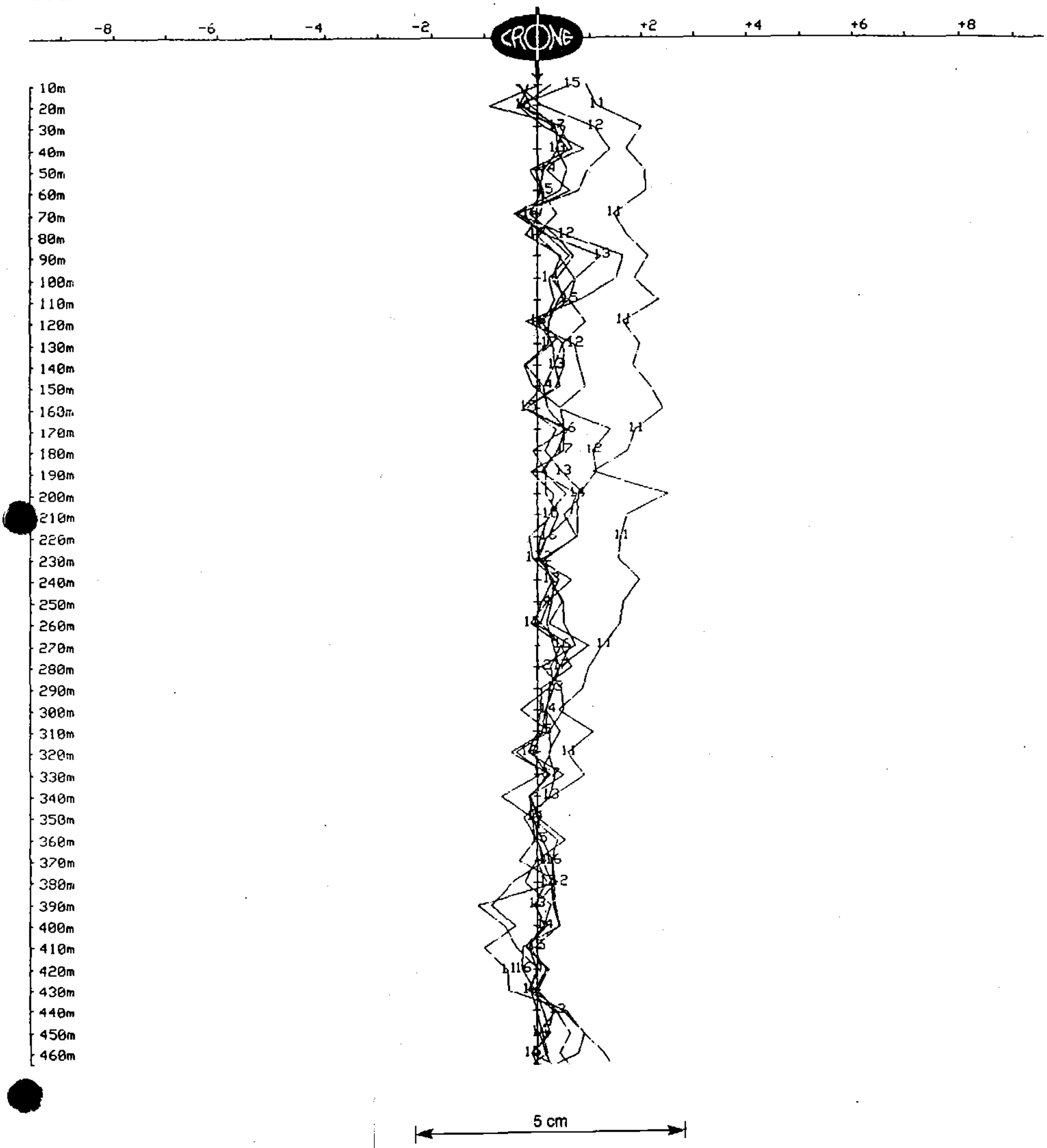
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: South
Date	: May 25, 1994	File name	: BPD80SZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1 nT/s



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OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 23, 1994
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 17
Sync Type : Cable
Loop Size : 300m X 400m
Current : 5 Amps

Hole : **BPD80**
Tx Loop : **West**
File name : BPD80WZ.PEM
Readings: 47
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : +
Receiver : Digital #106
Operator : Geoffrey Dunn

Loop Coordinates (X,Y,Z)
1. 2100m, 900m, 0m
2. 2550m, 900m, 0m
3. 2550m, 250m, 0m
4. 2100m, 250m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 400m, 1900m, 0m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	104	90	2	104	131	117
3	131	171	151	4	171	225	198	5	225	292	259
6	292	378	335	7	378	490	434	8	490	639	565
9	639	828	733	10	828	1075	952	11	1075	1395	1235
12	1395	1809	1602	13	1809	2348	2078	14	2348	3046	2697
15	3046	3951	3498	16	3951	5121	4536	17	5121	6646	5884

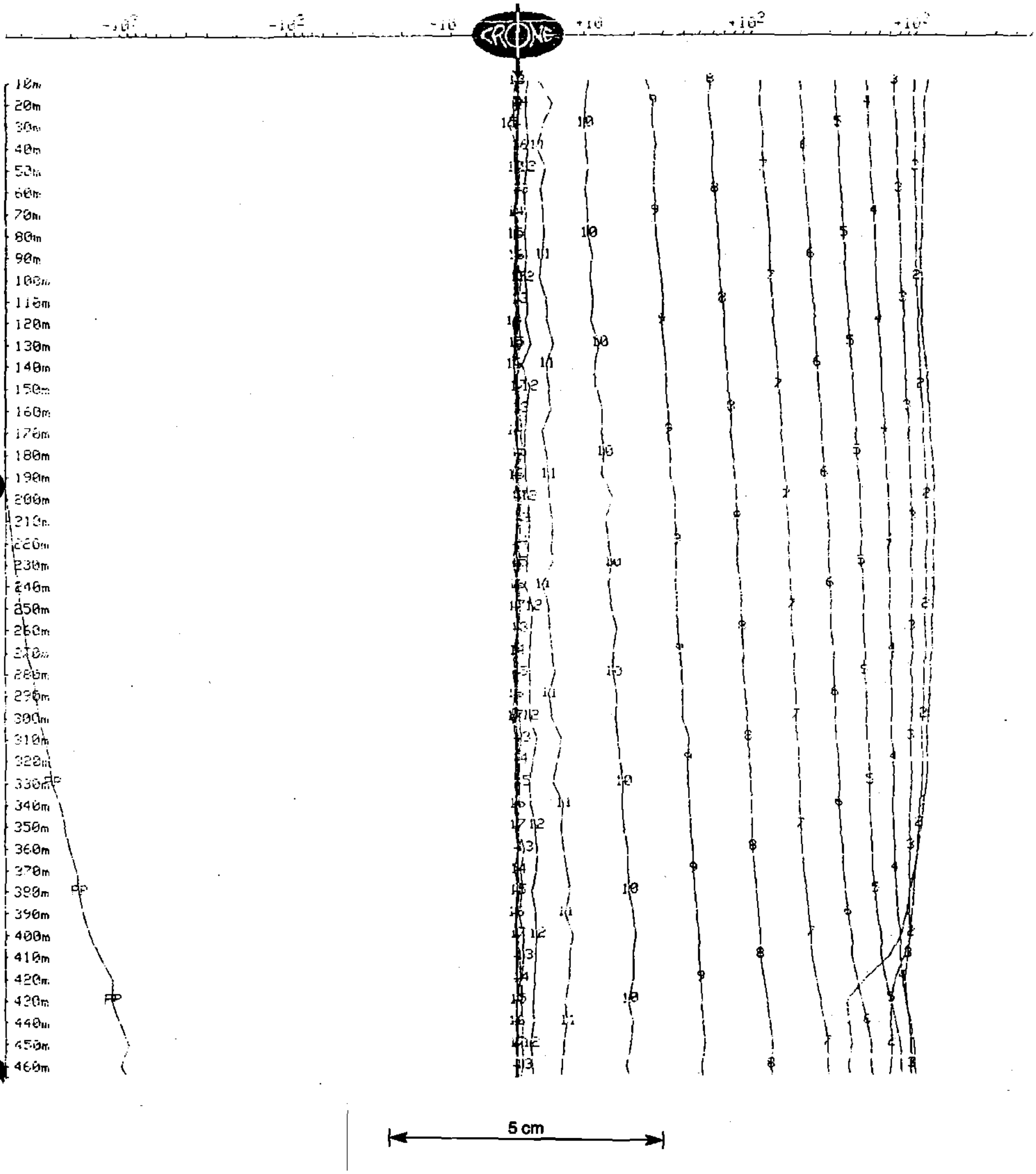
845280

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: West
Date	: May 23, 1994	File name	: BPD80WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500



845281

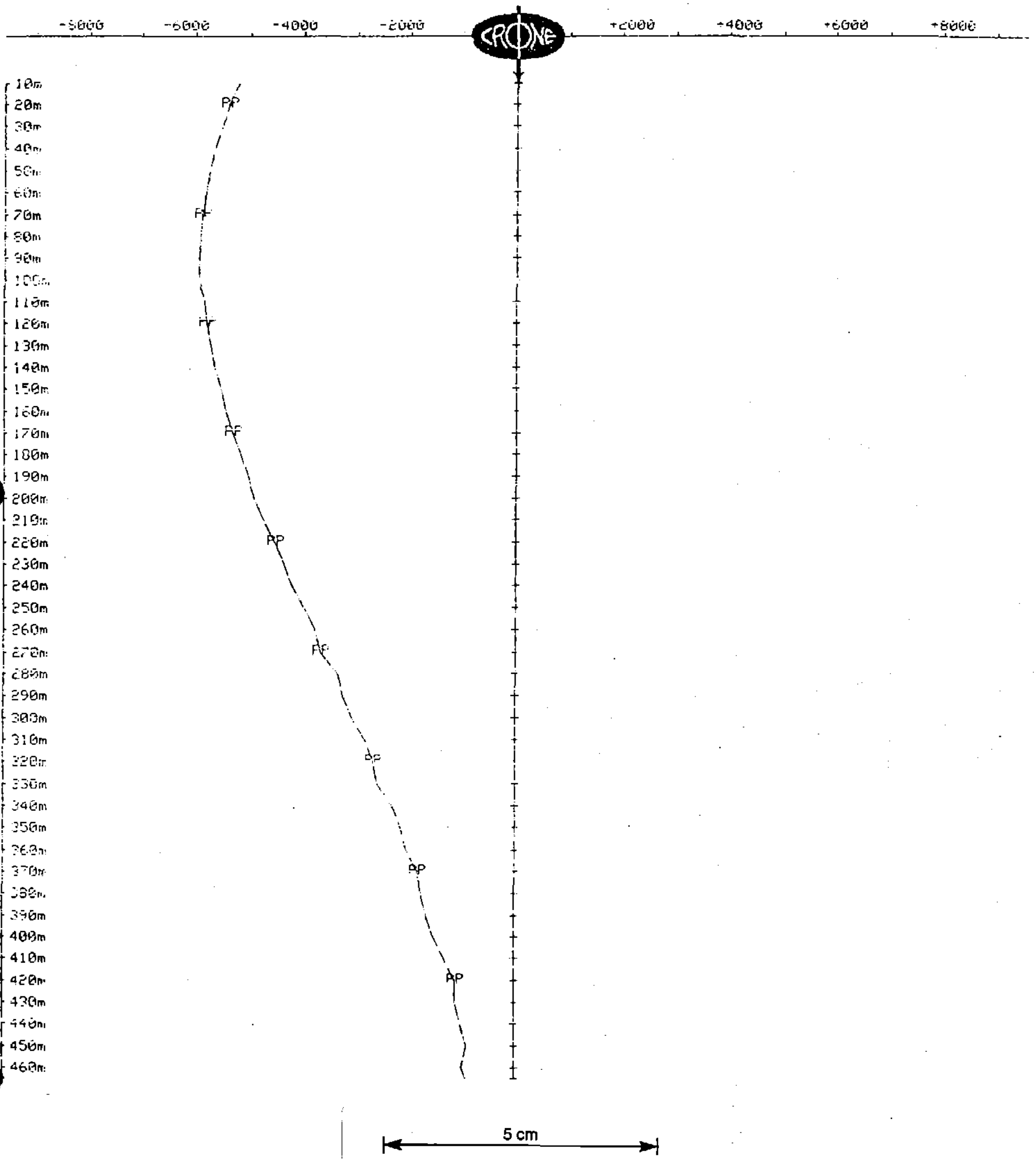
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: West
Date	: May 23, 1994	File name	: BPD80WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 1000 nT/s



DAS1109 L

845282

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

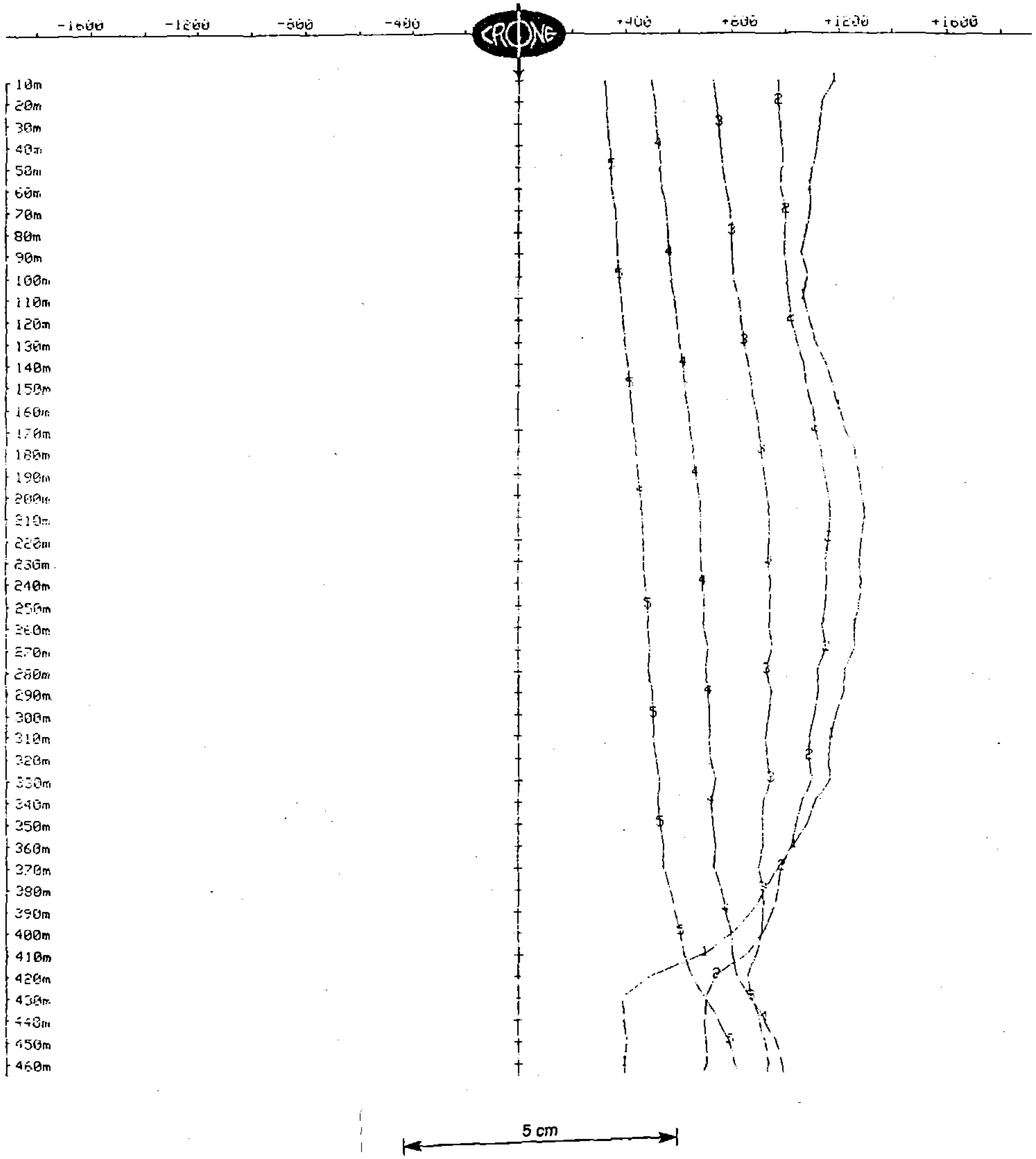
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 23, 1994

Hole : BPD80
Tx Loop : West
File name : BPD80WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 200 nT/s



PAB1109c

845283

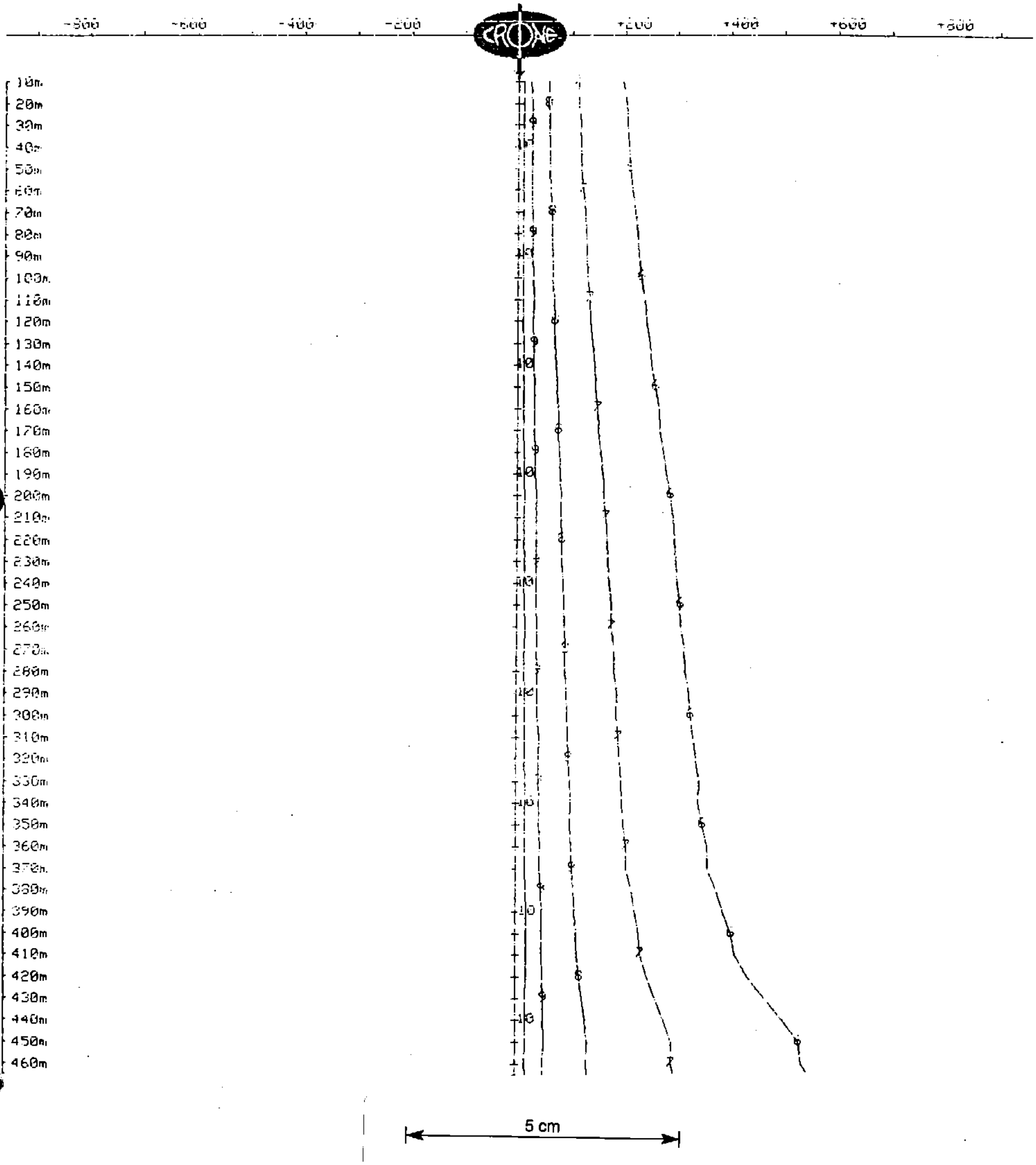
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD80
Grid	: Burns Peak	Tx Loop	: West
Date	: May 23, 1994	File name	: BPD80WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 100 nT/s



DAR1109 d

845284

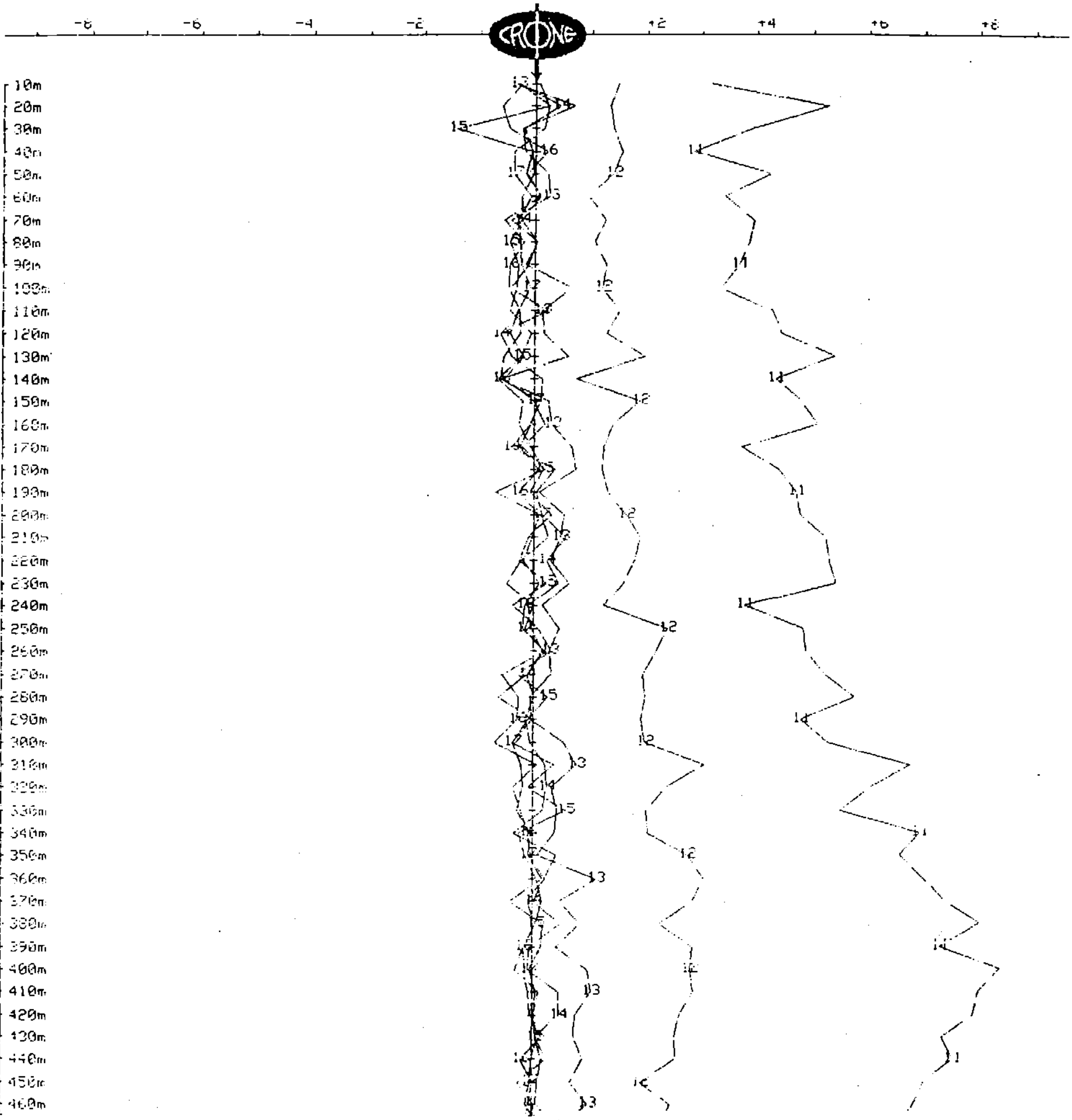
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD80
Grid	:	Burns Peak	Tx Loop	:	West
Date	:	May 23, 1994	File name	:	BPD80WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1 nT/s



5 cm

PAS1109e

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : Feb 1, 1993
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 8
Sync Type : Cable
Loop Size : 550m X 600m
Current : 4 Amps

Hole : BPD77
Tx Loop : West
File name : BPD77ZW.AM2
Readings: 54
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : +
Receiver : Digital #109
Operator : Brad Malpage

Loop Coordinates (X,Y,Z)
1. -2130m, 250m, 0m
2. -2130m, 900m, 0m
3. -2750m, 850m, 0m
4. -2750m, 250m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. -2050m, 550m, 0m
2. 305deg, 58deg, 472m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	131	104	2	131	225	178
3	225	378	302	4	378	639	508	5	639	1075	857
6	1075	1809	1442	7	1809	3046	2428	8	3046	5121	4084

045206

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : **Burns Peak**
Date : Feb 1, 1993
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 8
Sync Type : Cable
Loop Size : 550m X 600m
Current : 4 Amps

Hole : BPD77
Tx Loop : **East**
File name : BPD77ZE.AM2
Readings: 49
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : +
Receiver : Digital #109
Operator : Brad Malpage

Loop Coordinates (X,Y,Z)
1. -1500m, 250m, 0m
2. -1500m, 700m, 0m
3. -2130m, 900m, 0m
4. -2130m, 250m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. -2050m, 550m, 0m
2. 305deg, 58deg, 472m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	131	104	2	131	225	178
3	225	378	302	4	378	639	508	5	639	1075	857
6	1075	1809	1442	7	1809	3046	2428	8	3046	5121	4084

845287

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

```
Client     : Pasminco Exploration          Hole      : BPD77
Grid       : Burns Peak                    Tx Loop   : West
Date       : Feb 1, 1993                   File name : BPD77XYW.AM2
Time Base  : 10.00 ms                      # Readings: 110
Ramp Time  : 0.50 ms                       Stn Units : Metric
# Channels: 8                              Coil Area : 2800 sq m
Sync Type  : Cable                         Polarity  : +
Loop Size  : 550m  X  600m                 Receiver  : Digital #109
Current    : 4 Amps                        Operator  : Brad Malpage

Loop Coordinates (X,Y,Z)
  1. -2130m, 250m, 0m                2. -2130m, 900m, 0m
  3. -2750m, 850m, 0m                4. -2750m, 250m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
  1. -2050m, 550m, 0m                2. 305deg, 58deg, 472m

Channel Times (usec)
Ch Start   End Center   Ch Start   End Center   Ch Start   End Center
PP  -198   -99  -149     1    76   131   104     2   131   225   178
 3   225   378   302     4   378   639   508     5   639  1075   857
 6  1075  1809  1442     7  1809  3046  2428     8  3046  5121  4084
```

845288

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : **Pasminco Exploration**
Grid : **Burns Peak**
Date : Feb 1, 1993
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 8
Sync Type : Cable
Loop Size : 550m X 600m
Current : 4 Amps

Hole : **BPD77**
Tx Loop : **East**
File name : BPD77XYE.AM2
Readings: 106
Stn Units : Metric
Coil Area : 2800 sq m
Polarity : +
Receiver : Digital #109
Operator : Brad Malpage

Loop Coordinates (X,Y,Z)
1. -1500m, 250m, 0m
2. -1500m, 700m, 0m
3. -2130m, 900m, 0m
4. -2130m, 250m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. -2050m, 550m, 0m
2. 305deg, 58deg, 472m

Channel Times (usec)

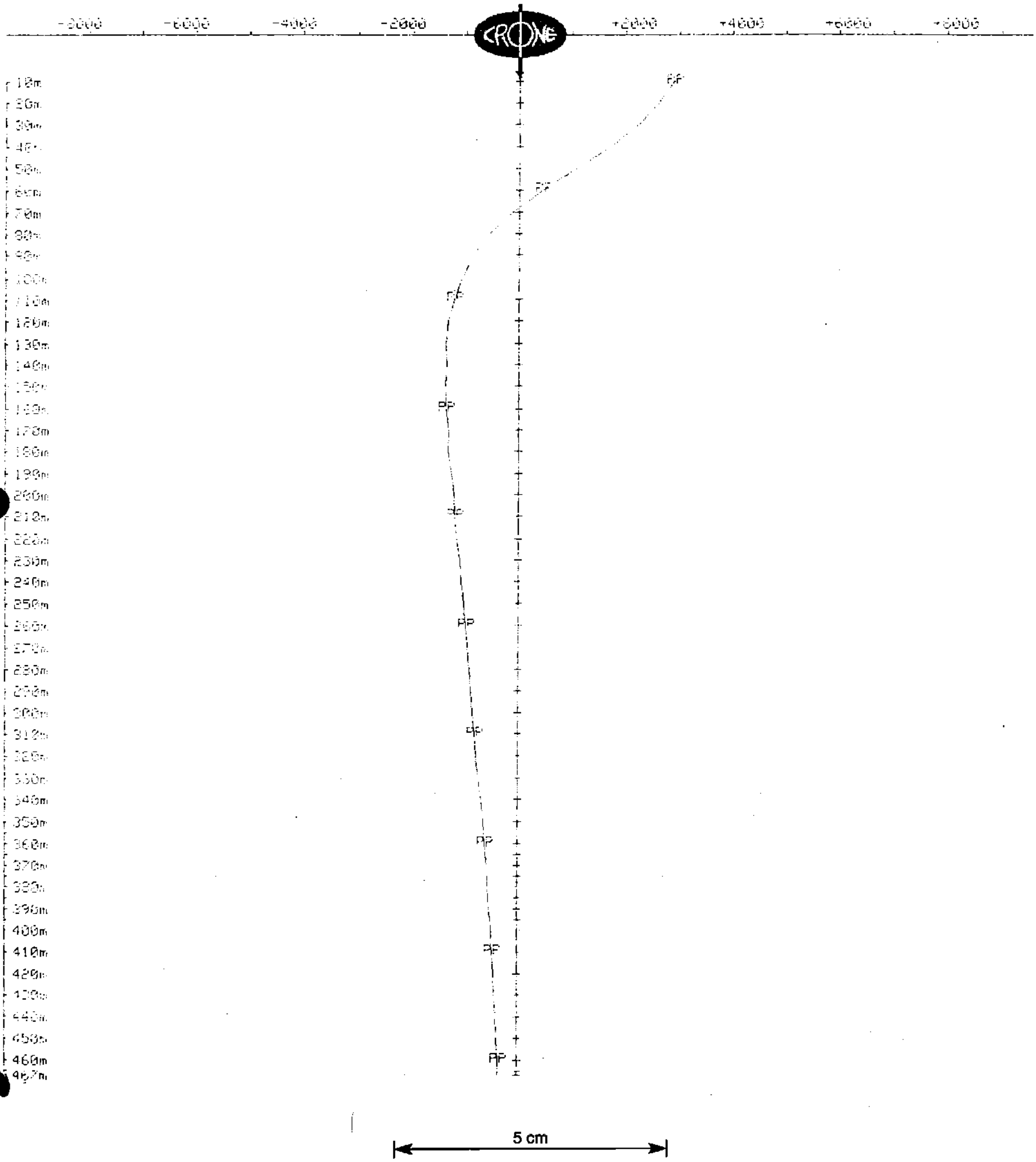
Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	131	104	2	131	225	178
3	225	378	302	4	378	639	508	5	639	1075	857
6	1075	1809	1442	7	1809	3046	2428	8	3046	5121	4084

845289

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : Feb 1, 1993
Hole : BPD77
Tx Loop : East
File name : BPD77XYE.AM2

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoVolt/amp-m² - 8 channels and PP
Scale: 1:2500
Unit Scale: 1cm = 1000



PAS1086 a

845260

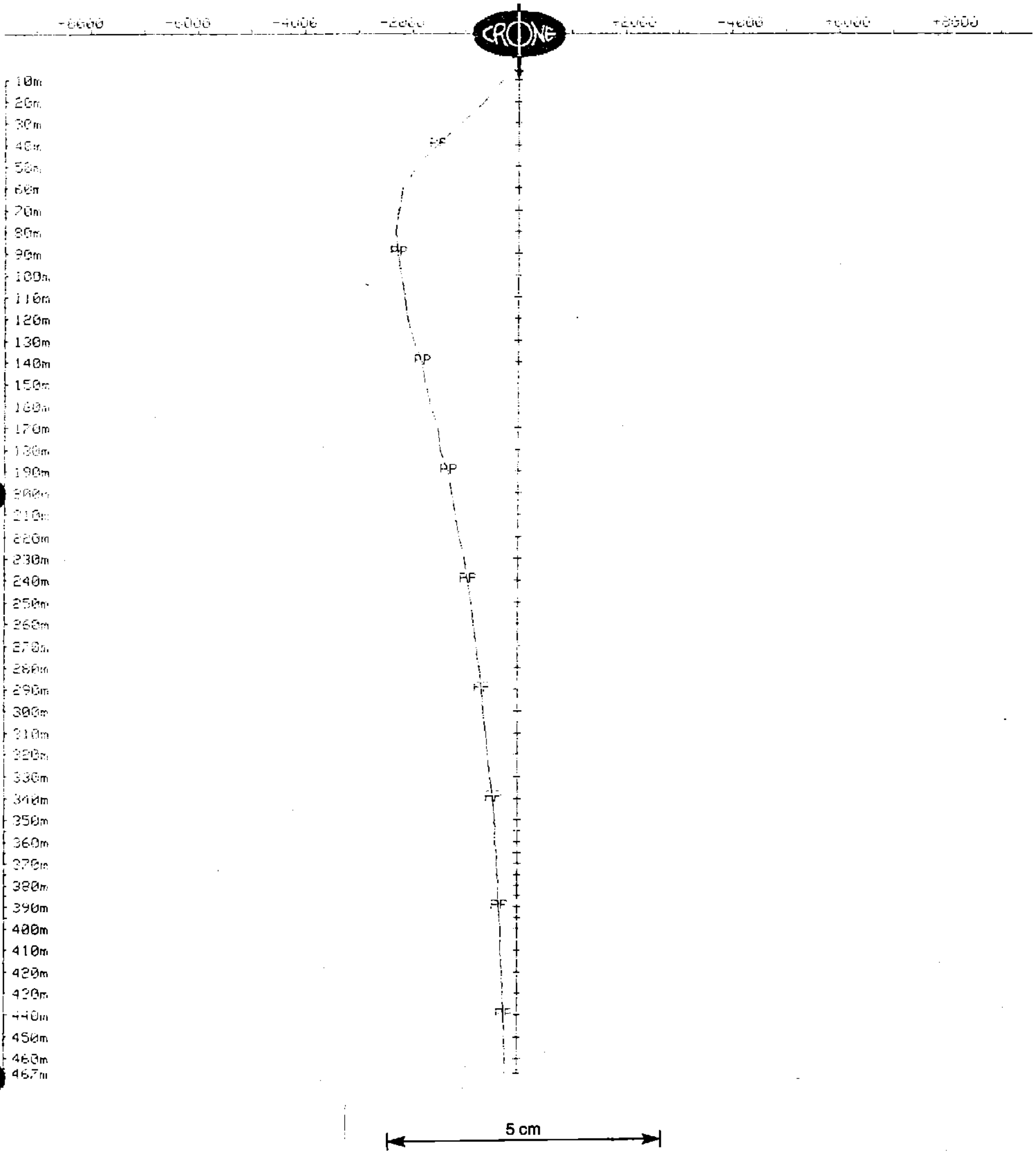
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD77
Grid	: Burns Peak	Tx Loop	: East
Date	: Feb 1, 1993	File name	: BPD77XYE.AM2

Data Corrected for Probe Rotation using Cleaned PP

Y COMPONENT dBy/dt nanoVolt/amp-m² - 8 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 1000



PA81086 b

845291

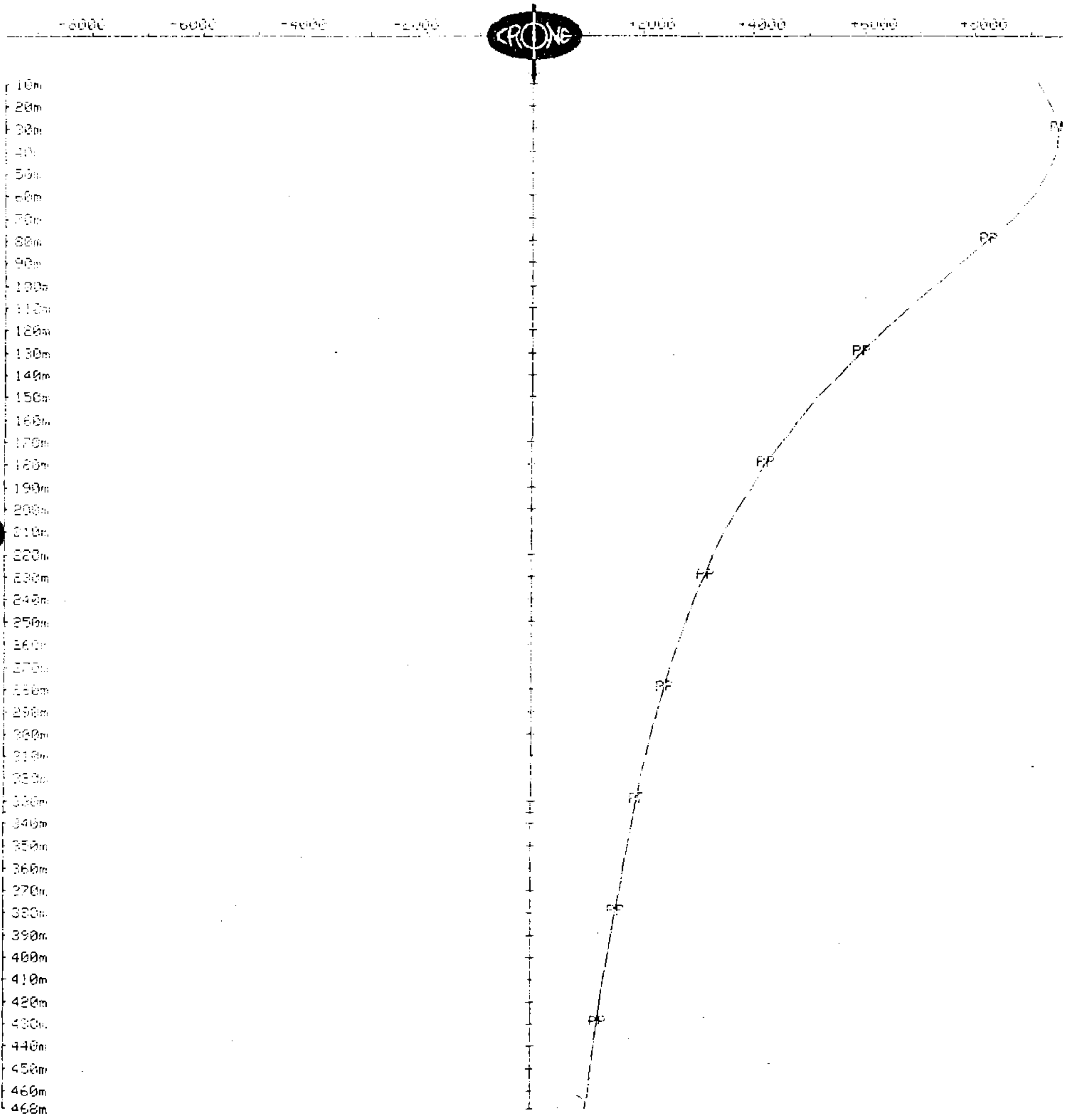
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD77
Grid	:	Burns Peak	Tx Loop	:	East
Date	:	Feb 1, 1993	File name	:	BPD77ZE.AM2

Z COMPONENT dBz/dt nanoVolt/amp-m² - 8 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 1000



5 cm

PAS1D96c

845802

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

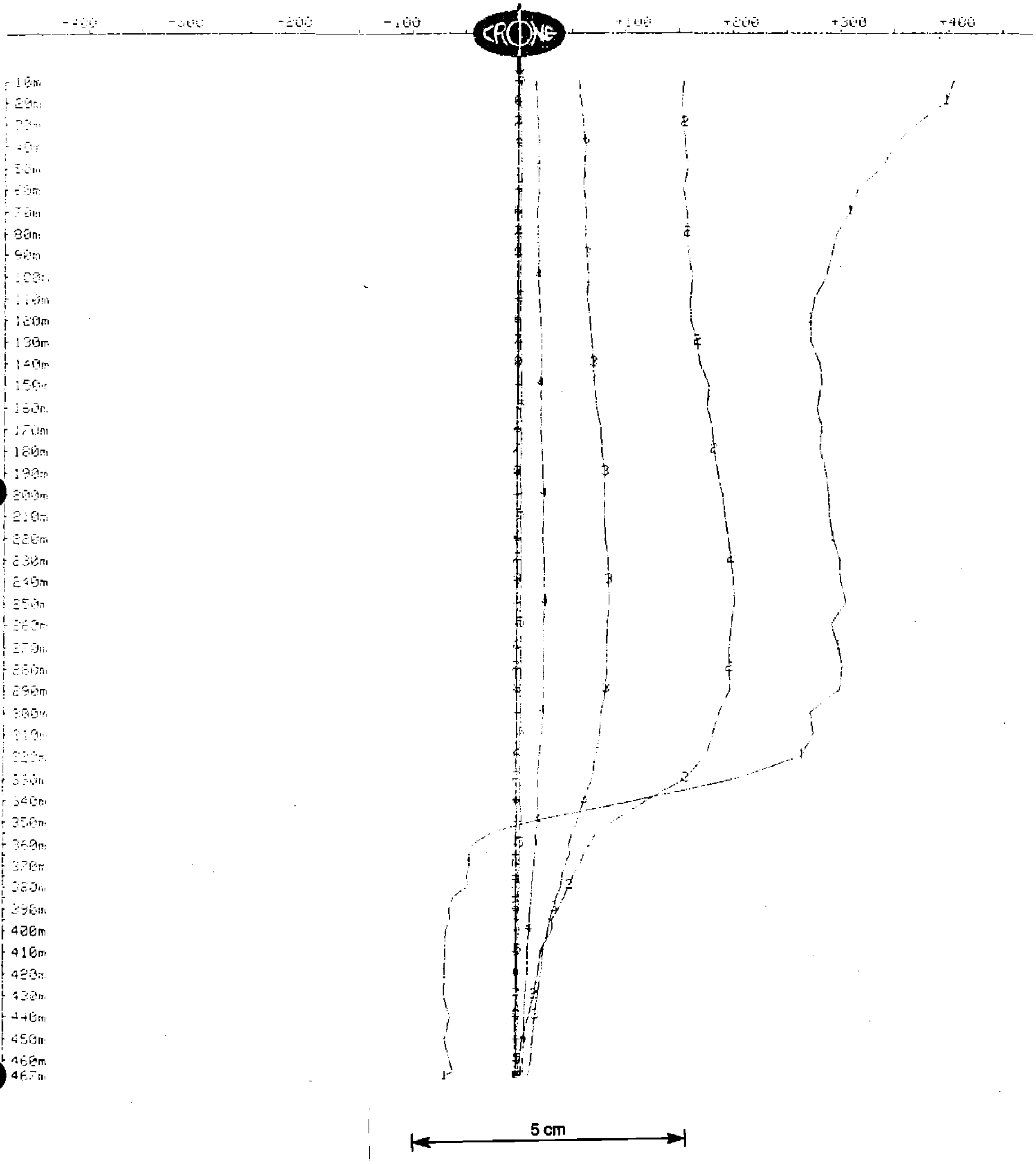
Client : Pasminco Exploration
Grid : Burns Peak
Date : Feb 1, 1993

Hole : BPD77
Tx Loop : East
File name : BPD77XYE.AM2

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoVolt/amp-m² - 8 channels

Scale: 1:2500

Unit Scale: 1cm = 50



PA81086d

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

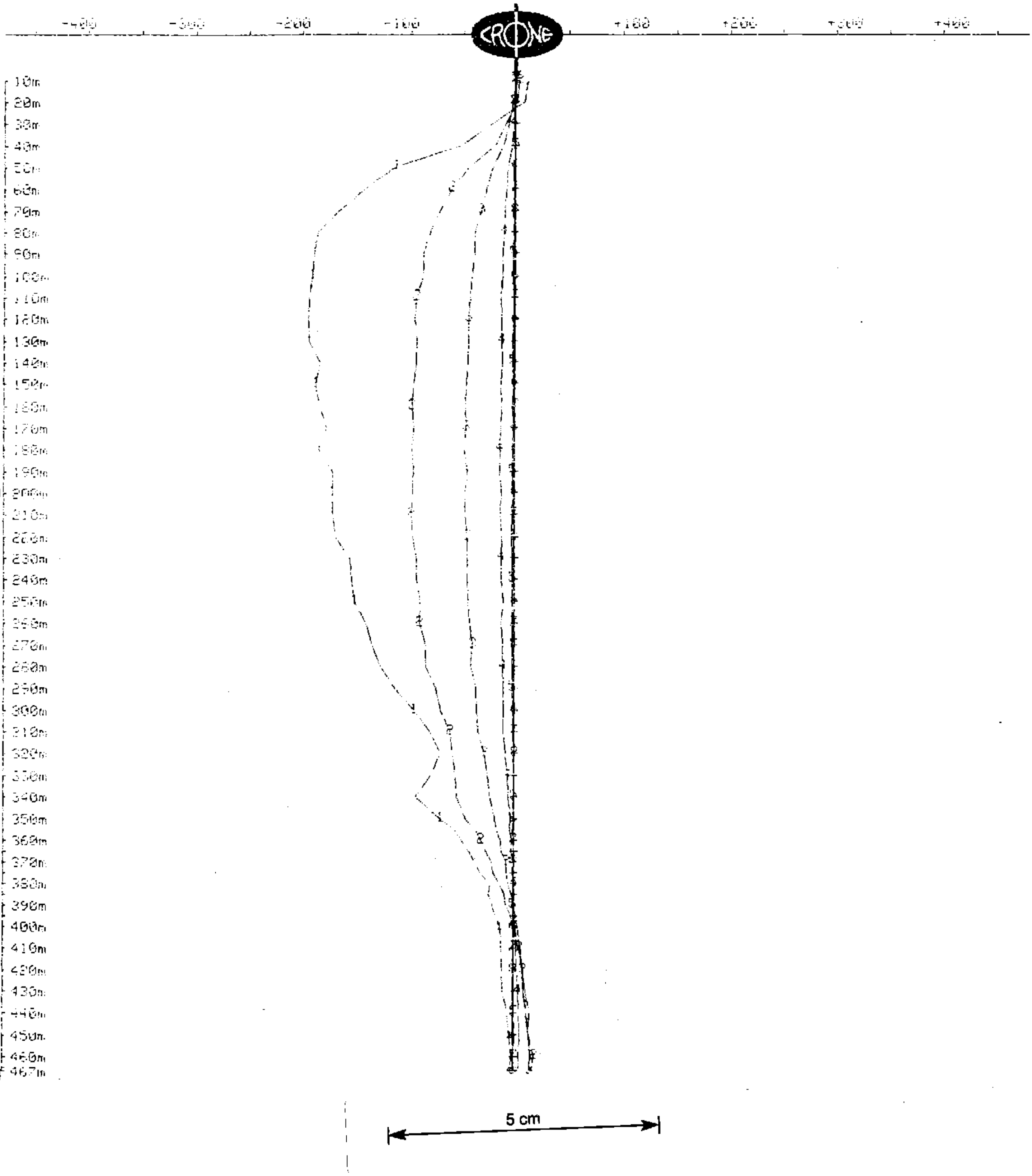
Client : Pasminco Exploration
Grid : Burns Peak
Date : Feb 1, 1993

Hole : BPD77
Tx Loop : East
File name : BPD77XYE.AM2

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoVolt/amp-m² - 8 channels

Scale: 1:2500

Unit Scale: 1cm = 50



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

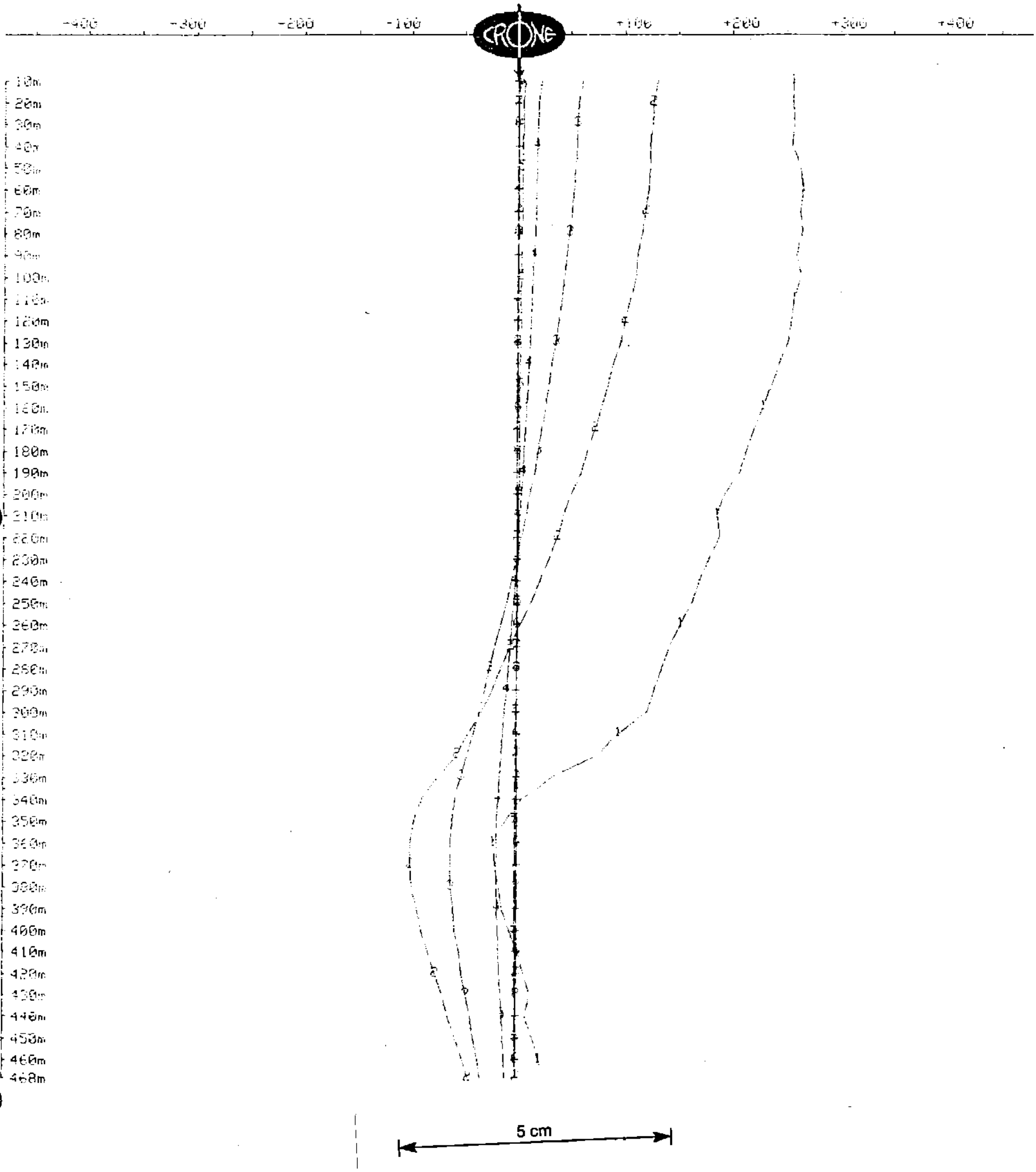
Client : Pasminco Exploration
Grid : Burns Peak
Date : Feb 1, 1993

Hole : BPD77
Tx Loop : East
File name : BPD77ZE.AM2

Z COMPONENT dBz/dt nanoVolt/amp-m² - 8 channels

Scale: 1:2500

Unit Scale: 1cm = 50



PAS1086 f.

1

843280

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

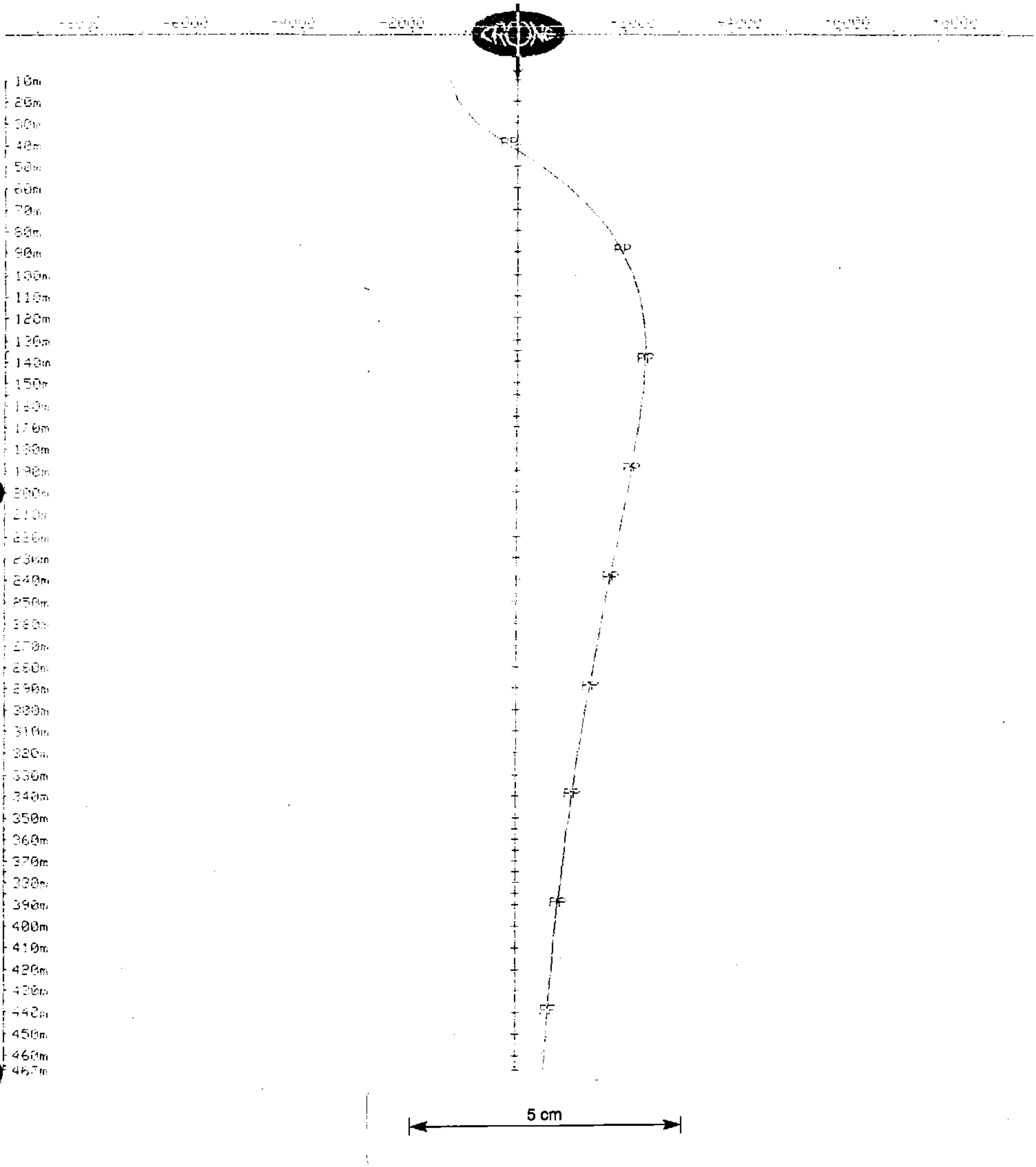
Client : Pasminco Exploration
Grid : Burns Peak
Date : Feb 1, 1993

Hole : BPD77
Tx Loop : West
File name : BPD77XYW.AM2

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoVolt/amp-m² - 8 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 1000



PAS1087 a

845266

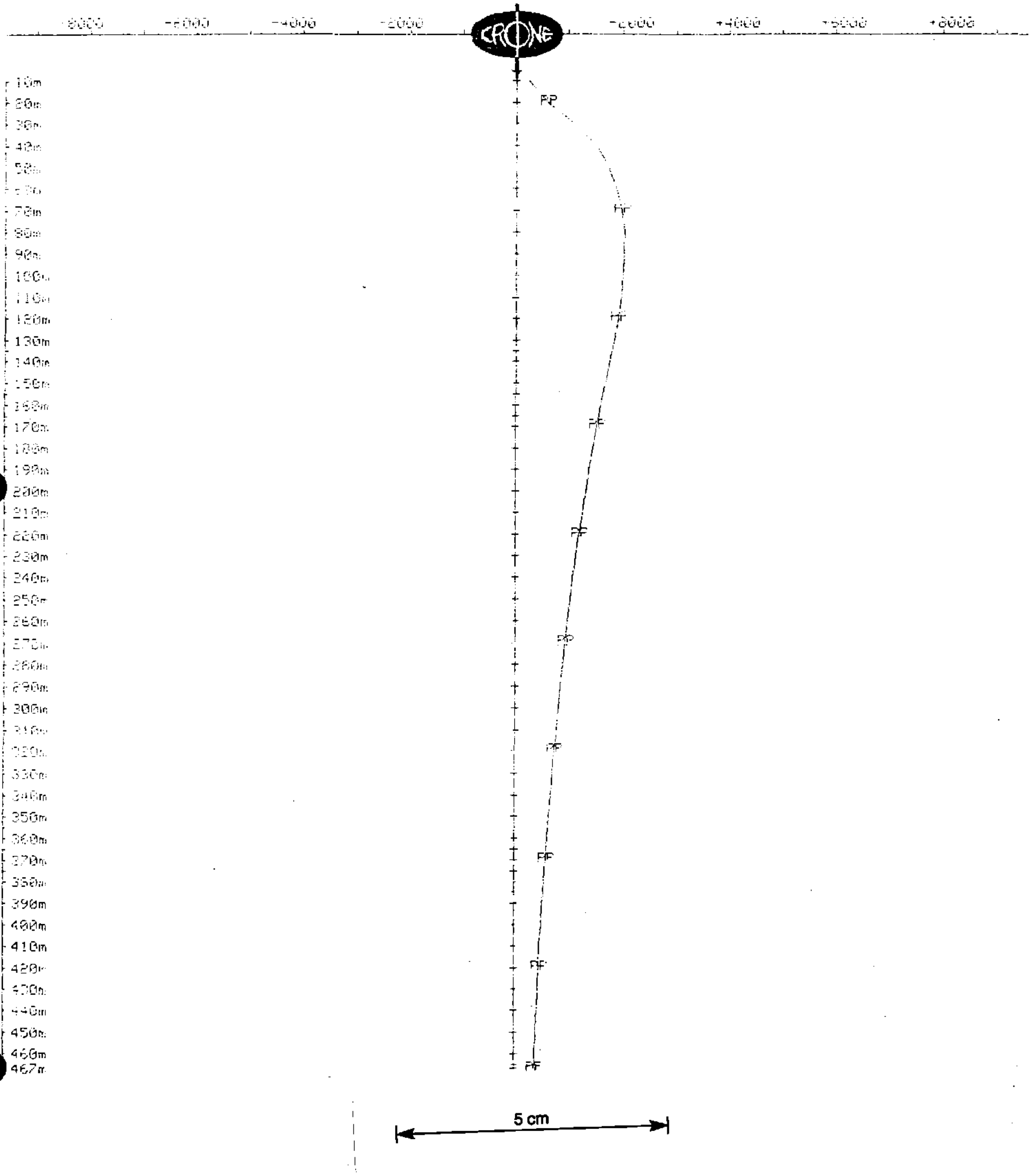
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD77
Grid	:	Burns Peak	Tx Loop	:	West
Date	:	Feb 1, 1993	File name	:	BPD77XYW.AM2

Data Corrected for Probe Rotation using Cleaned PP

Y COMPONENT dBy/dt nanoVolt/amp-m² - 8 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 1000



PAS1087 6

845207

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

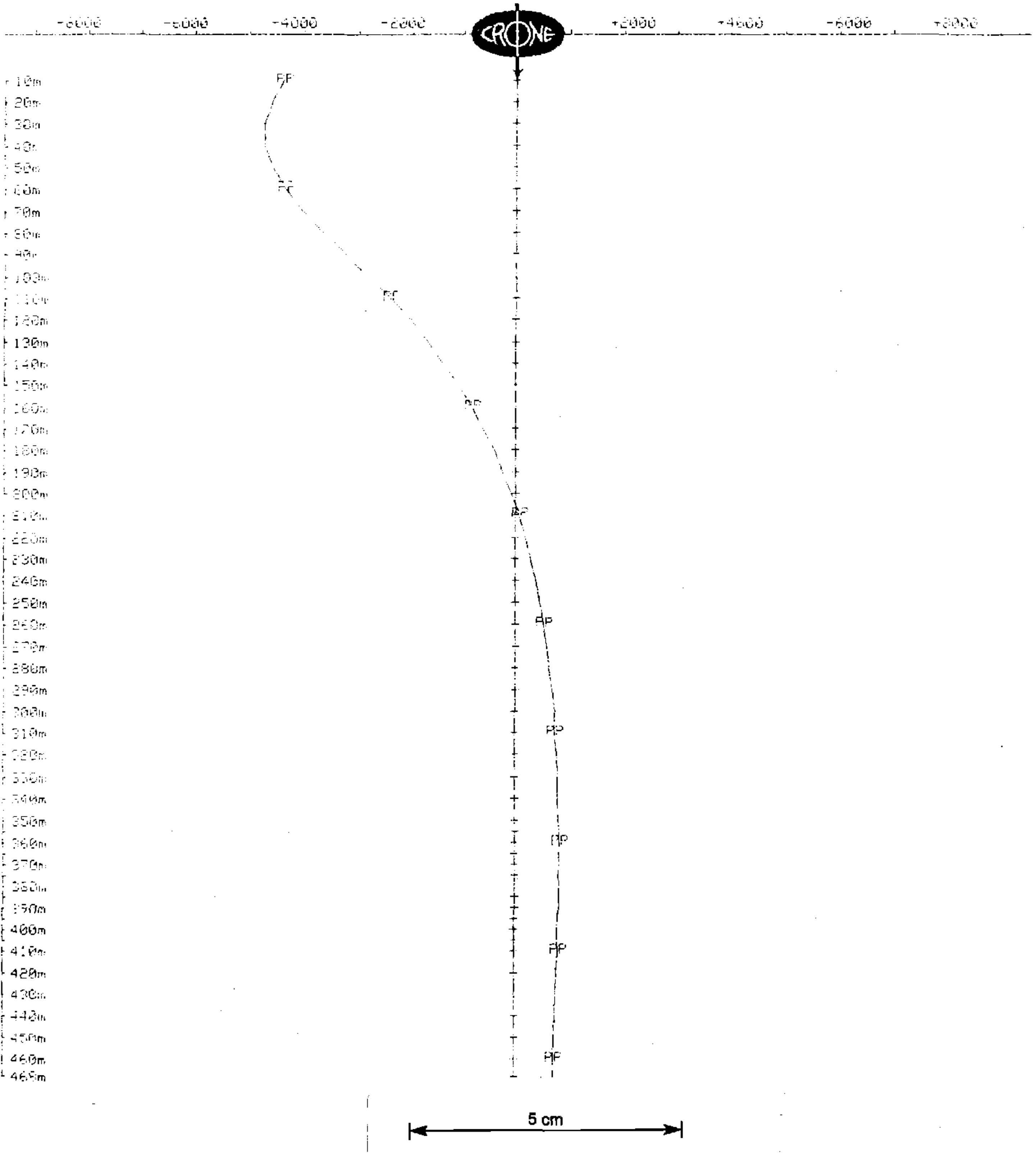
Client : Pasminco Exploration
Grid : Burns Peak
Date : Feb 1, 1993

Hole : BPD77
Tx Loop : West
File name : BPD77ZW.AM2

Z COMPONENT dBz/dt nanoVolt/amp-m² - 8 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 1000



PAS 1087 c

845298

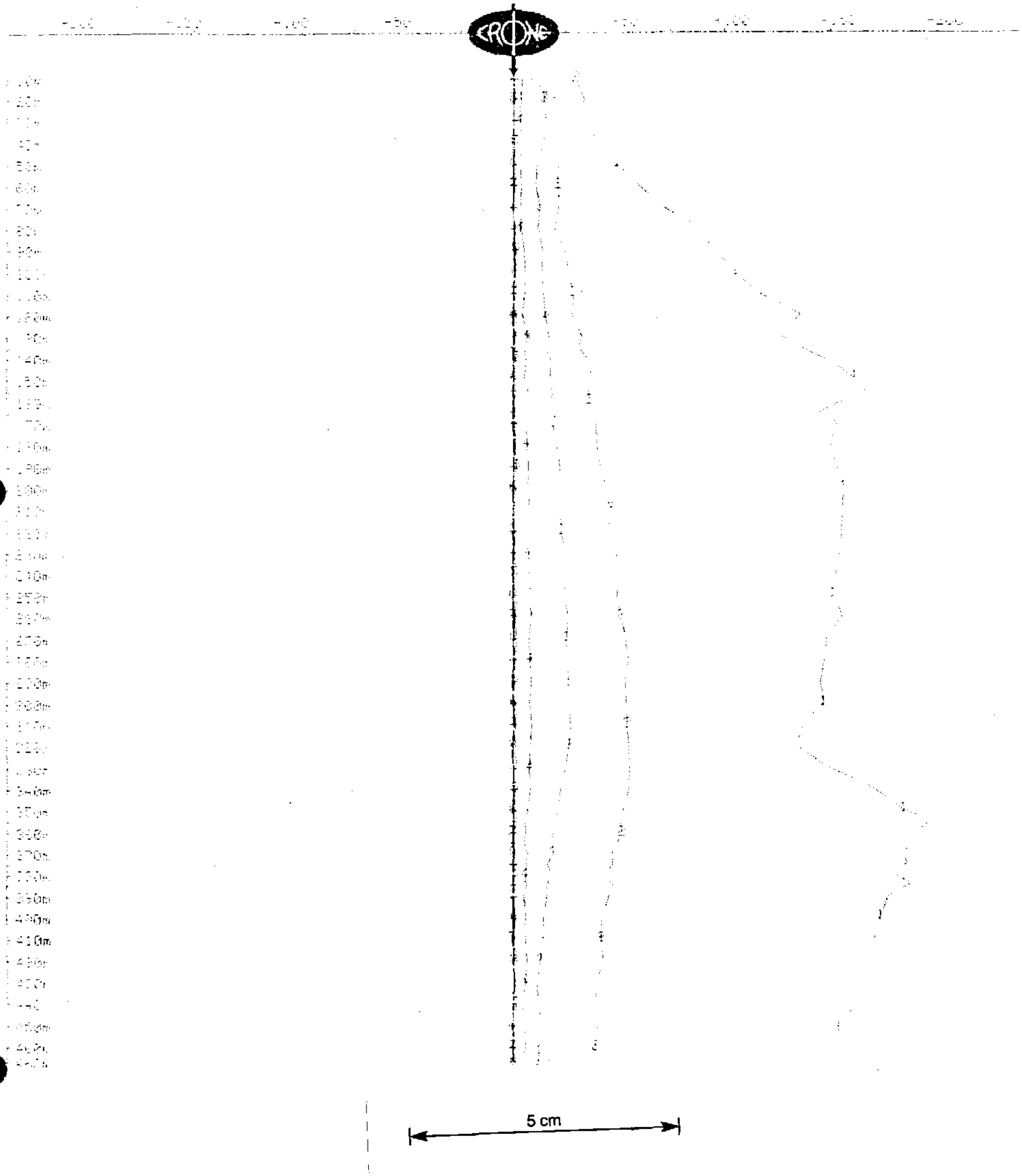
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD77
Grid	: Burns Peak	Tx Loop	: West
Date	: Feb 1, 1998	File name	: BPD77XXW.AM2

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoVolt/amp-m² - 8 channels

Scale: 1:2500

Unit Scale: 1cm = 25



PASI087 d

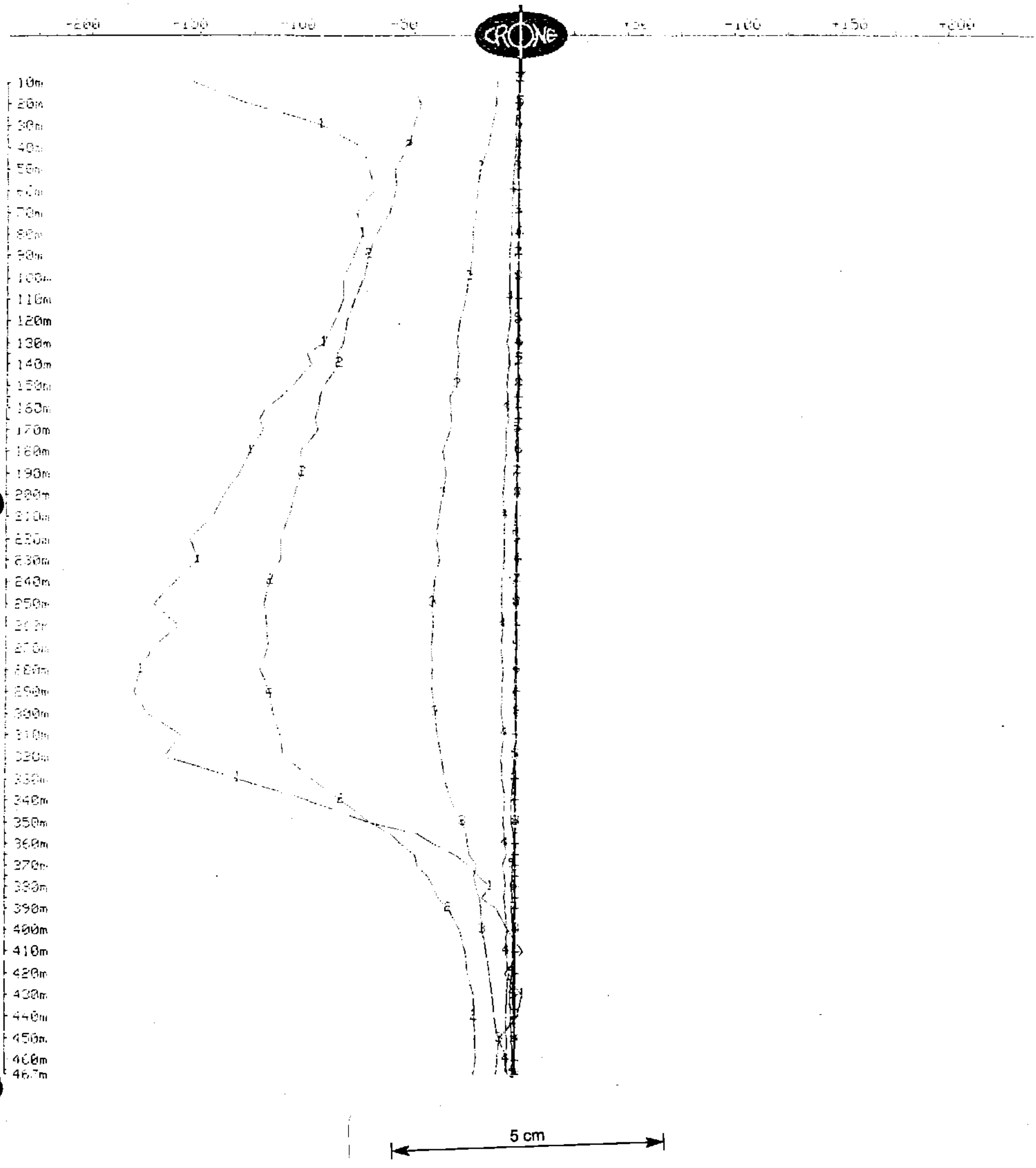
845299

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD77
Grid	: Burns Peak	Tx Loop	: West
Date	: Feb 1, 1993	File name	: BPD77XYW.AM2

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoVolt/amp-m² - 8 channels

Scale: 1:2500 Unit Scale: 1cm = 25



DASIC87 e

845300

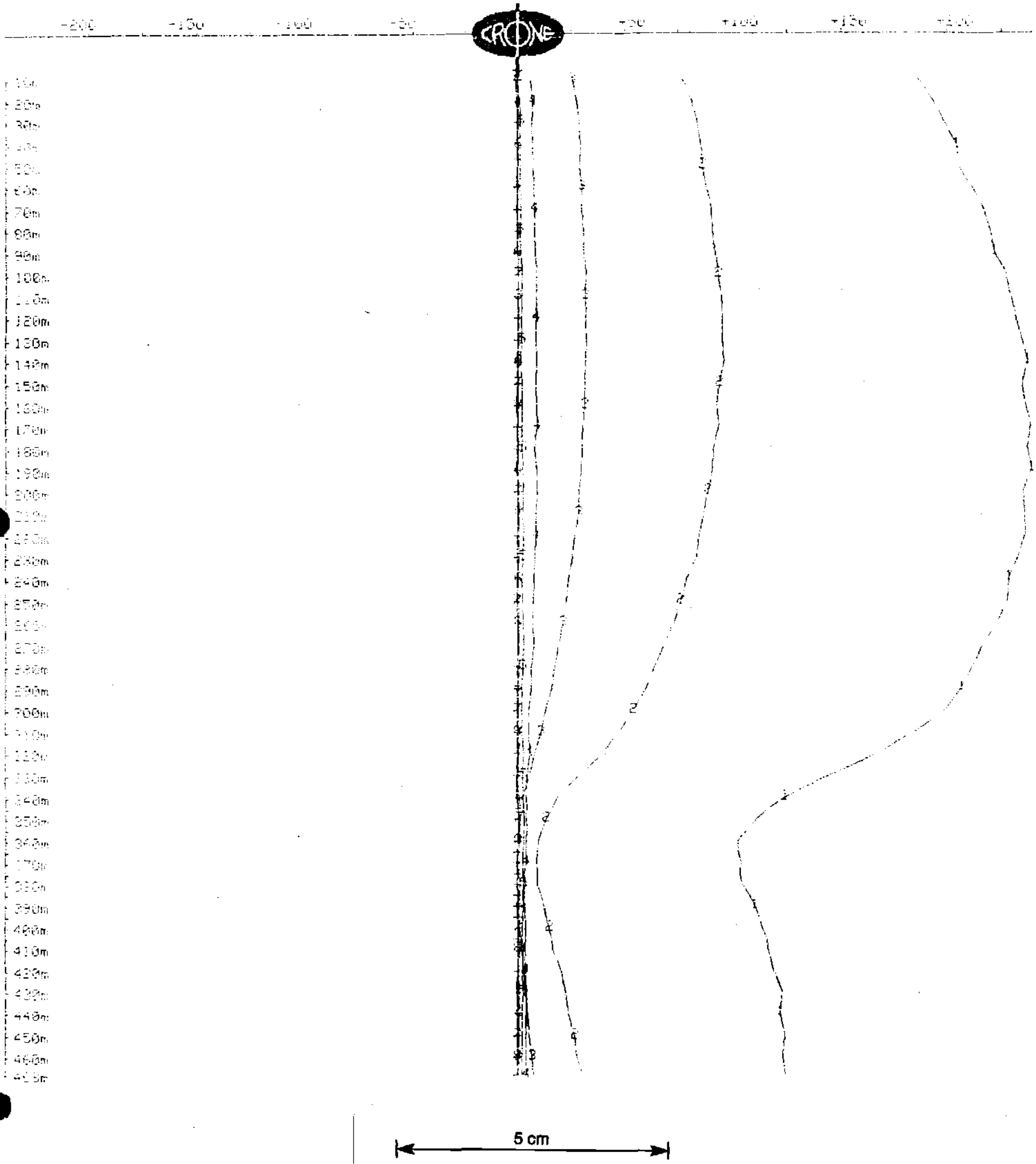
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	**BPD77**
Grid	:	Burns Peak	Tx Loop	:	**West**
Date	:	Feb 1, 1993	File name	:	BPD77ZW.AM2

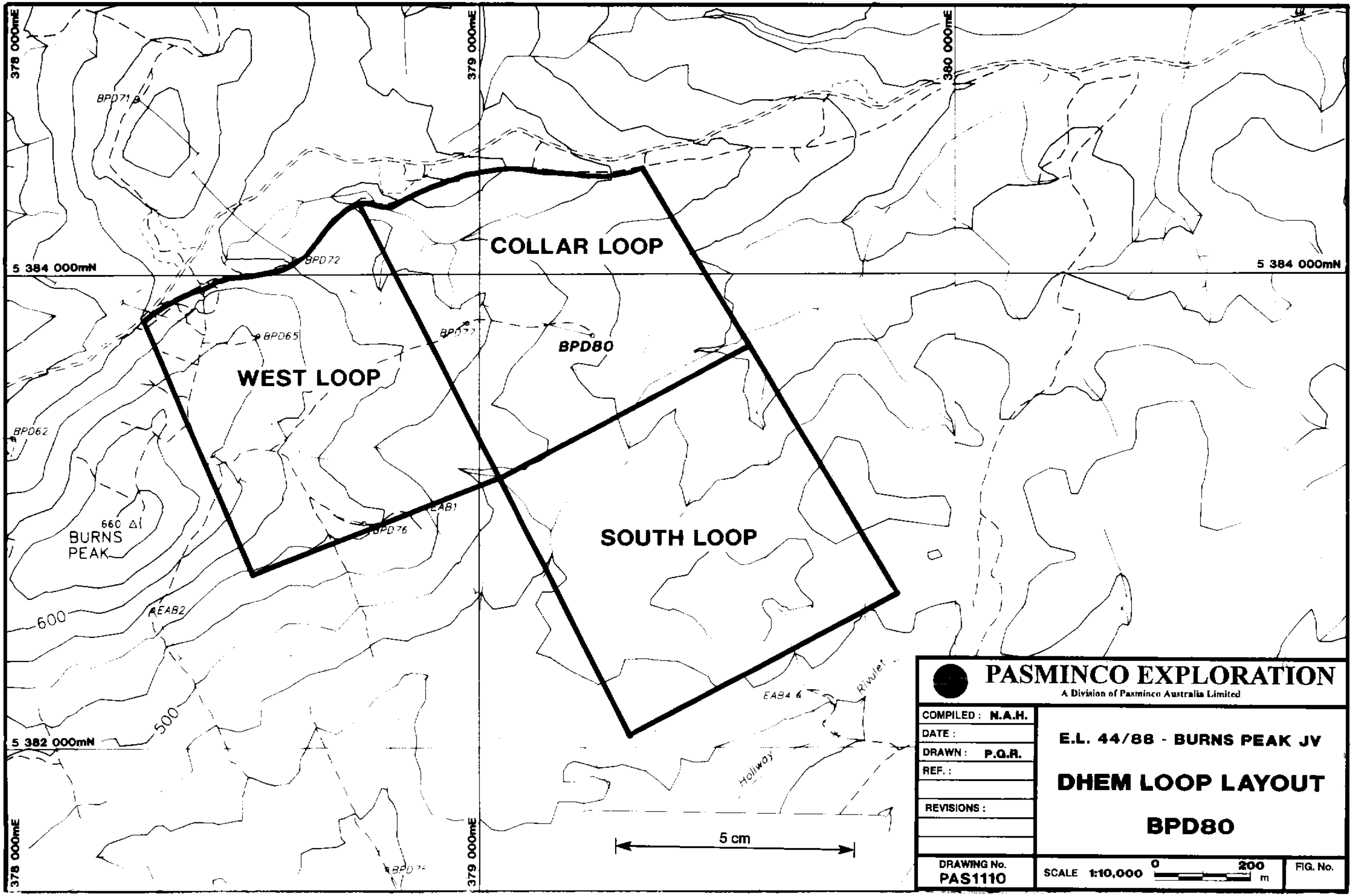
Z COMPONENT dBz/dt nanoVolt/amp-m² - 8 channels

Scale: 1:2500

Unit Scale: 1cm = 25



PASICE17F



PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED :	N.A.H.
DATE :	
DRAWN :	P.G.R.
REF. :	
REVISIONS :	

E.L. 44/88 - BURNS PEAK JV

DHEM LOOP LAYOUT

BPD80

DRAWING No. PAS1110

SCALE 1:10,000 0 200 m

FIG. No.

APPENDIX 12

DHEM BPD69

PASMINCO
EXPLORATION

A Division of Pasminco Australia Limited,
A.C.N. 004 074 962

Old Burnie Railway Station
Burnie, Tasmania 7320
G.P.O. Box 886
Burnie, Tasmania 7320

MEMORANDUM

TO: RA Poltock
FROM: PW Basford
DATE: 10 November, 1994
SUBJECT: **DHEM BPD69, EL 44/88 Burns Peak**
FILE: EP/02/3006/8.4

On October 22, 1994, Outer Rim Exploration surveyed hole BPD69 with the CRONE PEM system. Only the axial data was recorded as no off-hole anomalies were detected (PAS 1152).

The survey was recorded using a 10 msec time base, with 0.5 msec ramp. Seventeen channels of data were recorded from 0.07 to 6.6 msecs.

The aim of the survey was to determine the validity of the SIROTEM off-hole response recorded in 1990 (Bishop, 1991 from Burns Peak EL 44/88 Annual Report 1990-1991). The 3-component system would then aid in determining the location of the source. A larger loop was used for the repeat survey (PAS 1150) , with a nominal current of 4 amps. Note that the coupling from the new loop was similar (PAS 1151 for primary field vector plot) to that produced by the smaller 1989 loop.

As no off-hole response was observed, it is believed that the early survey results may be the result of over-voltage and/or drift of the SIROTEM system.

There are two very small (in-hole) features observable in the data, one at 325m, the other at 405m. Both of these coincide with formational contacts which are assumed to be causing the responses.

EAF 14 was also targeted for DHEM to follow up on the two off-hole conductors detected from previous EM-37 DHEM surveys. Neil Hughes recommended using the same loops, with low current to avoid over-voltage affects.

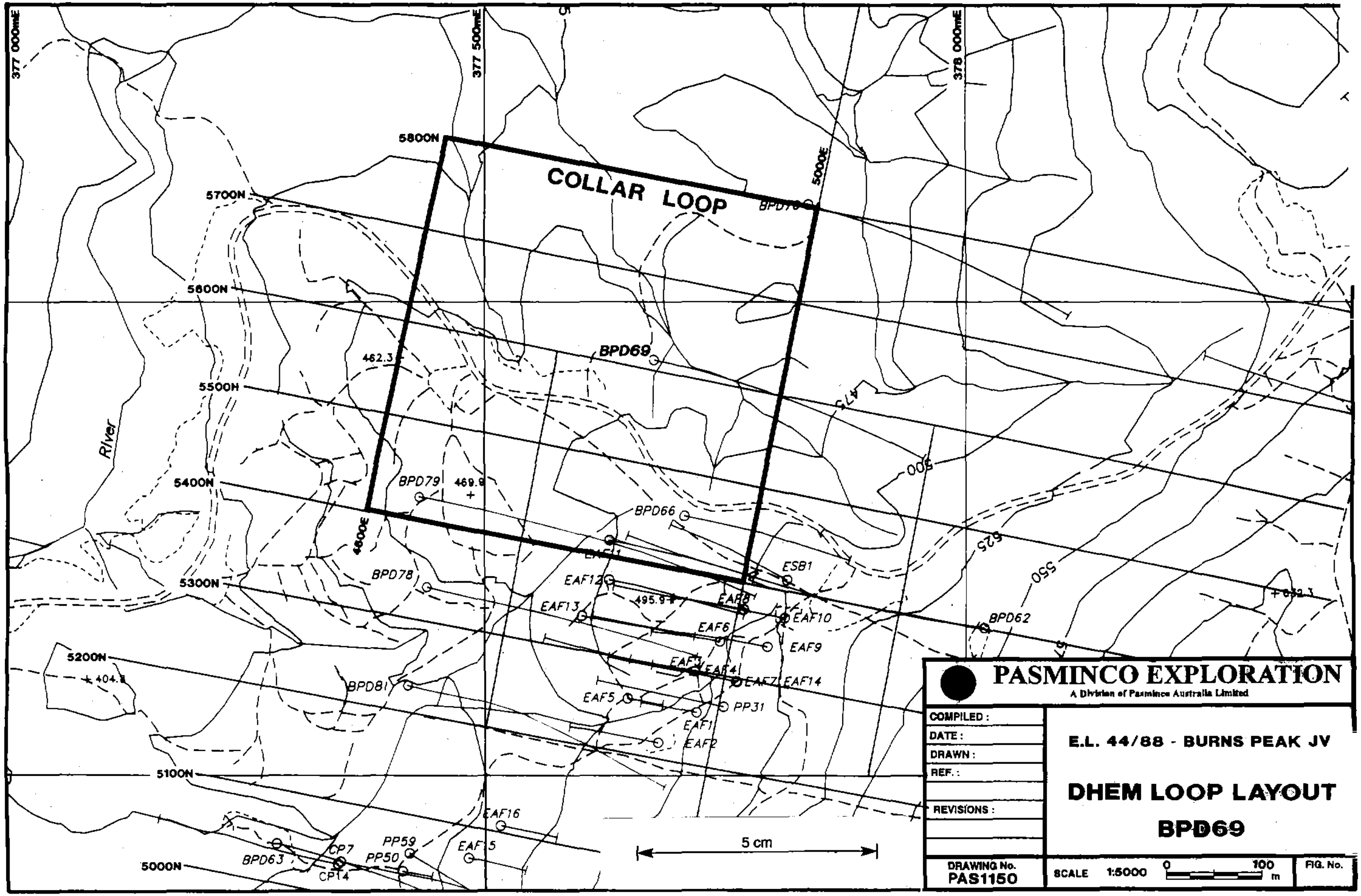
It was apparent when arriving at the site that the hole collar was accidentally driven over by a bulldozer or drill rig (holes were located on the edge of a road). A collar was found and dug out, however the dummy probe could only go down 35m.

No other holes in the region were deemed suitable, generally due to the short depth of the holes.

Paul Basford

ajs:pwb:94005

845305



PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED :
DATE :
DRAWN :
REF. :
REVISIONS :

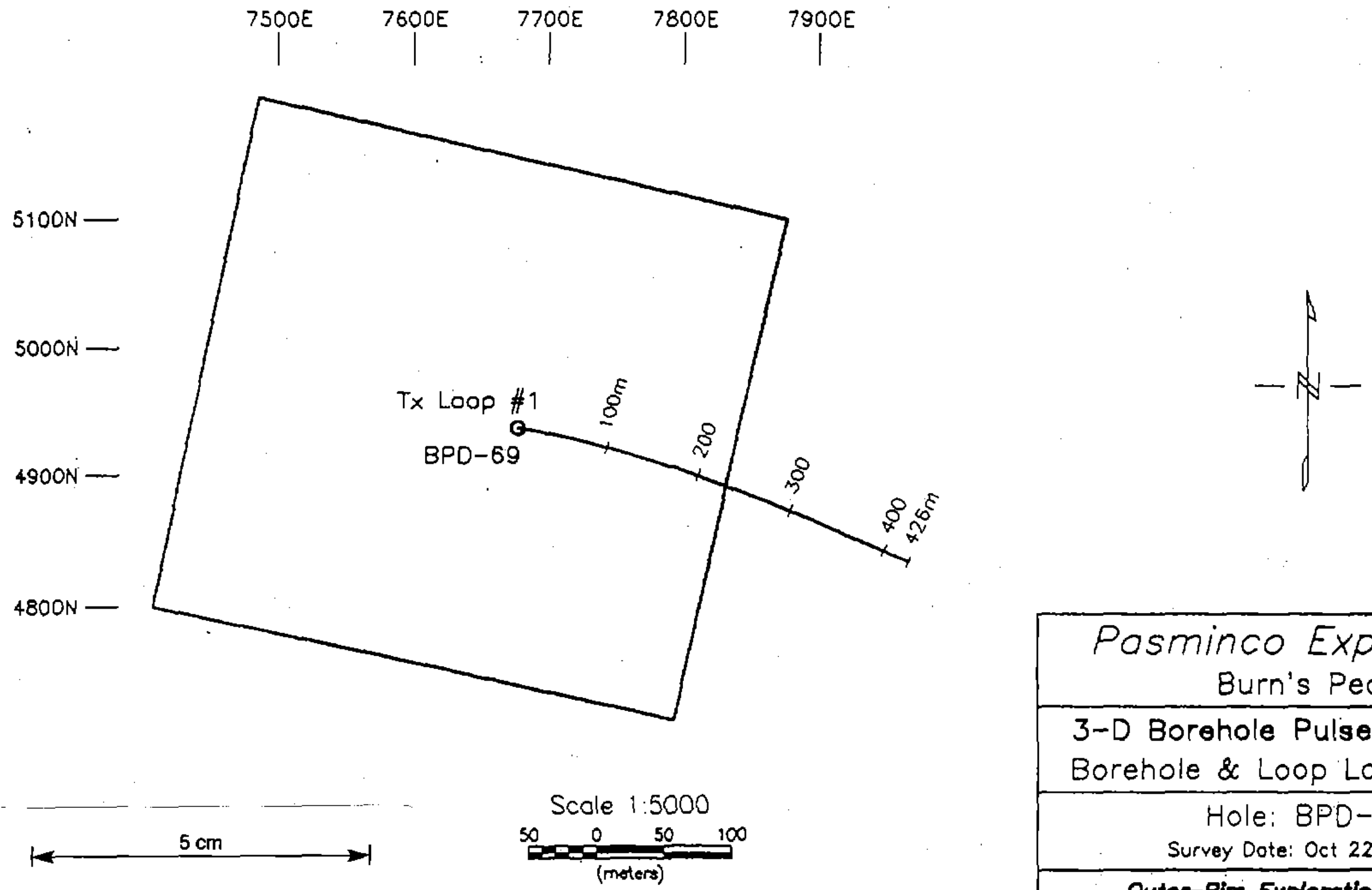
E.L. 44/88 - BURNS PEAK JV

DHEM LOOP LAYOUT
BPD69

DRAWING No. PAS1150

SCALE 1:5000 0 100 m

FIG. No.



Pasminco Exploration

Burn's Peak

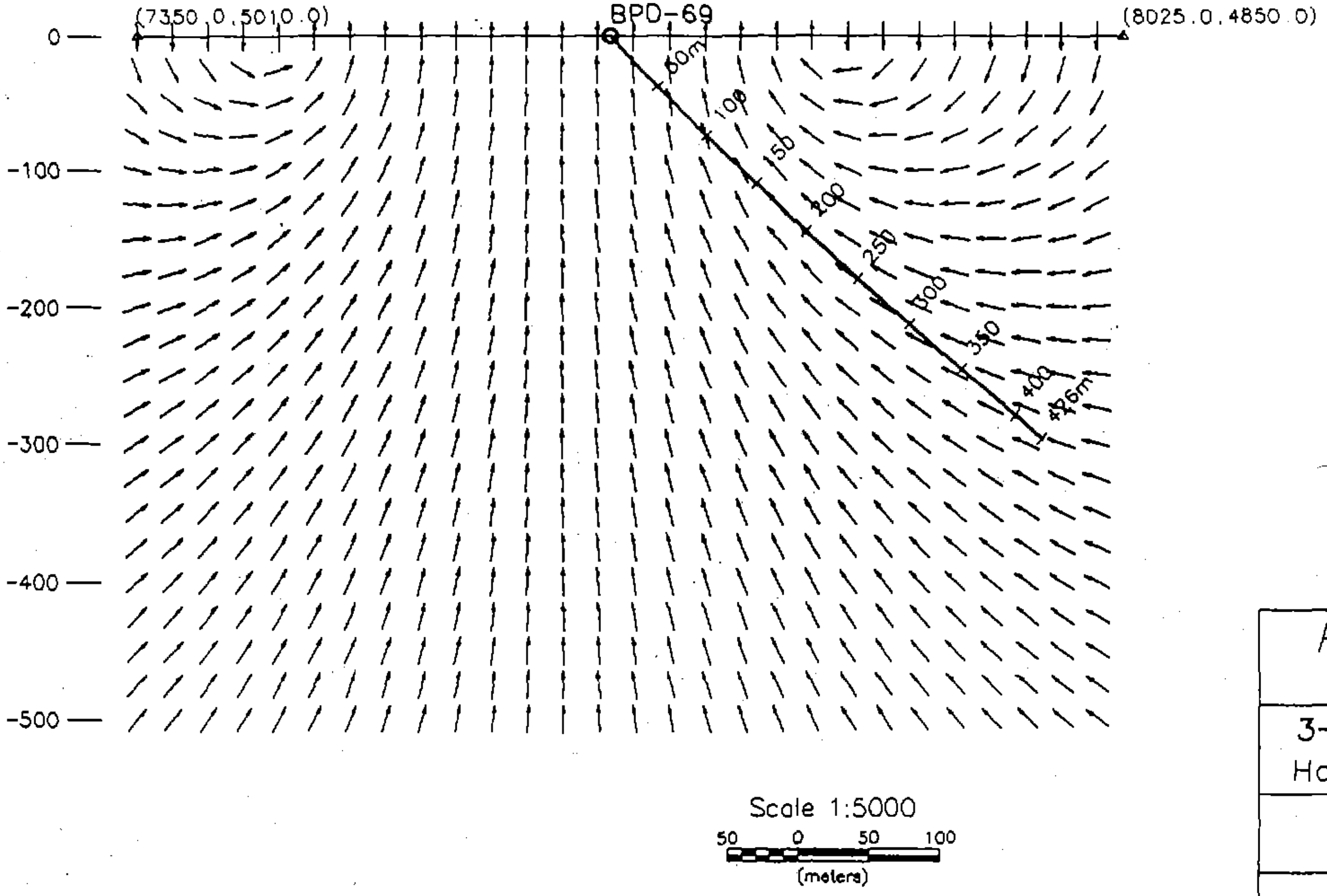
3-D Borehole Pulse EM Survey

Borehole & Loop Location Map

Hole: BPD-69

Survey Date: Oct 22, 1994

Outer-Rim Exploration Services



5 cm

Pasminco Exploration
Burn's Peak

3-D Borehole Pulse EM Survey
Hole Section with Primary Field

Hole: BPD-69
Survey Date: Oct 22, 1994

Outer-Rim Exploration Services

PAS 1151

845603

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burn's Peak
Date : Oct 22, 1994
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 17
Sync Type : Cable
Loop Size : 400m X 400m
Current : 4 Amps

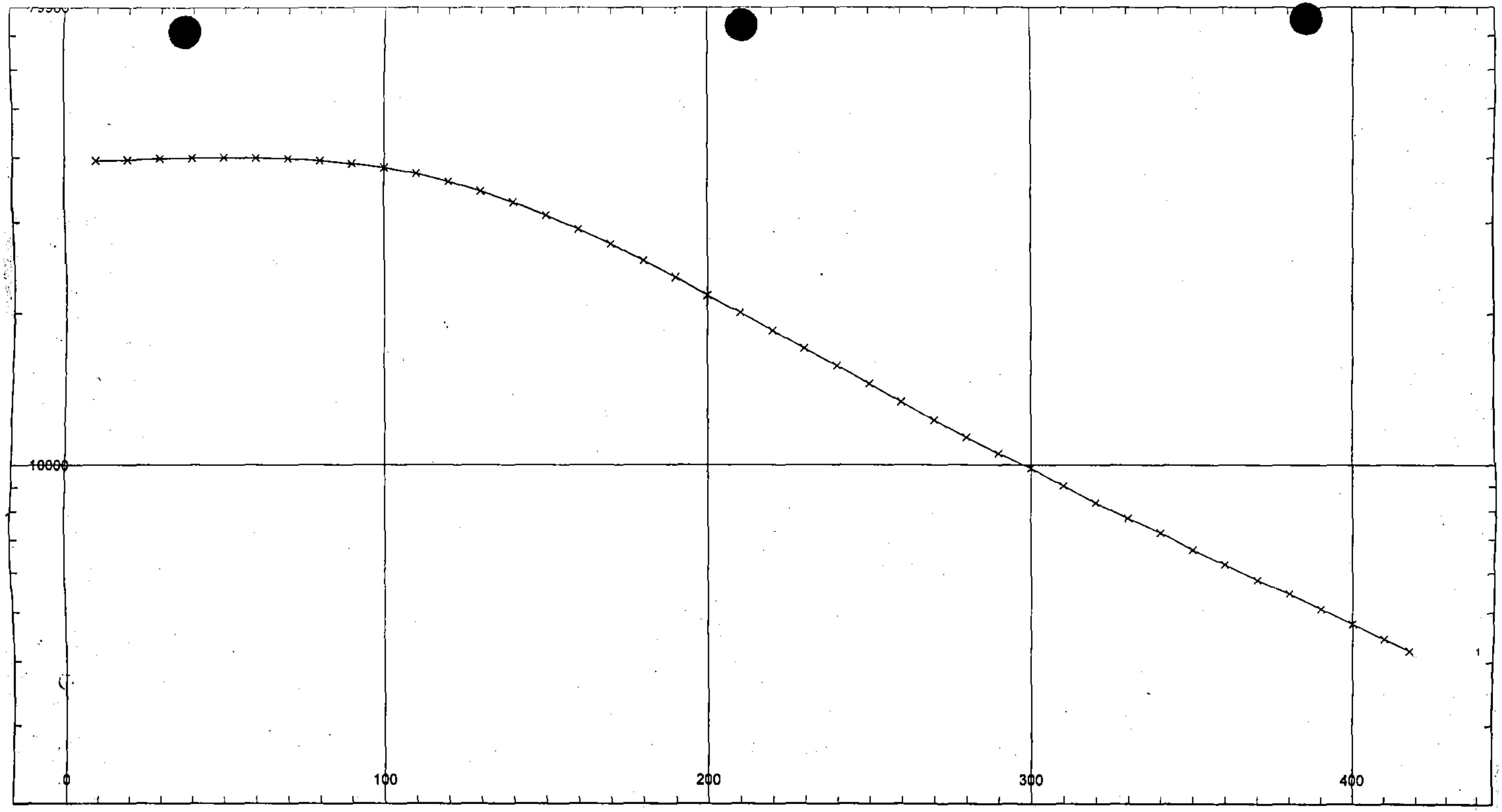
Hole : BPD-69
Tx Loop : #1
File name : BPD69Z.PEM
Readings: 42
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : +
Receiver : Digital #106
Operator : Kent Honner

Loop Coordinates (X,Y,Z)
1. 7405m, 4800m, 0m
2. 7790m, 4715m, 0m
3. 7875m, 5100m, 0m
4. 7485m, 5190m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 7676m, 4937m, 0m
2. 101deg, 50deg, 26m
3. 103deg, 48deg, 50m
4. 106deg, 46deg, 50m
5. 107deg, 45deg, 51m
6. 111deg, 44deg, 50m
7. 111deg, 43deg, 51m
8. 113deg, 42deg, 51m
9. 114deg, 41.5deg, 62m
10. 115deg, 41deg, 35m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	104	90	2	104	131	117
3	131	171	151	4	171	225	198	5	225	292	259
6	292	378	335	7	378	490	434	8	490	639	565
9	639	828	733	10	828	1075	952	11	1075	1395	1235
12	1395	1809	1602	13	1809	2348	2078	14	2348	3046	2697
15	3046	3951	3498	16	3951	5121	4536	17	5121	6646	5884



Primary Pulse

BPD69

Tx Loop 1

845309

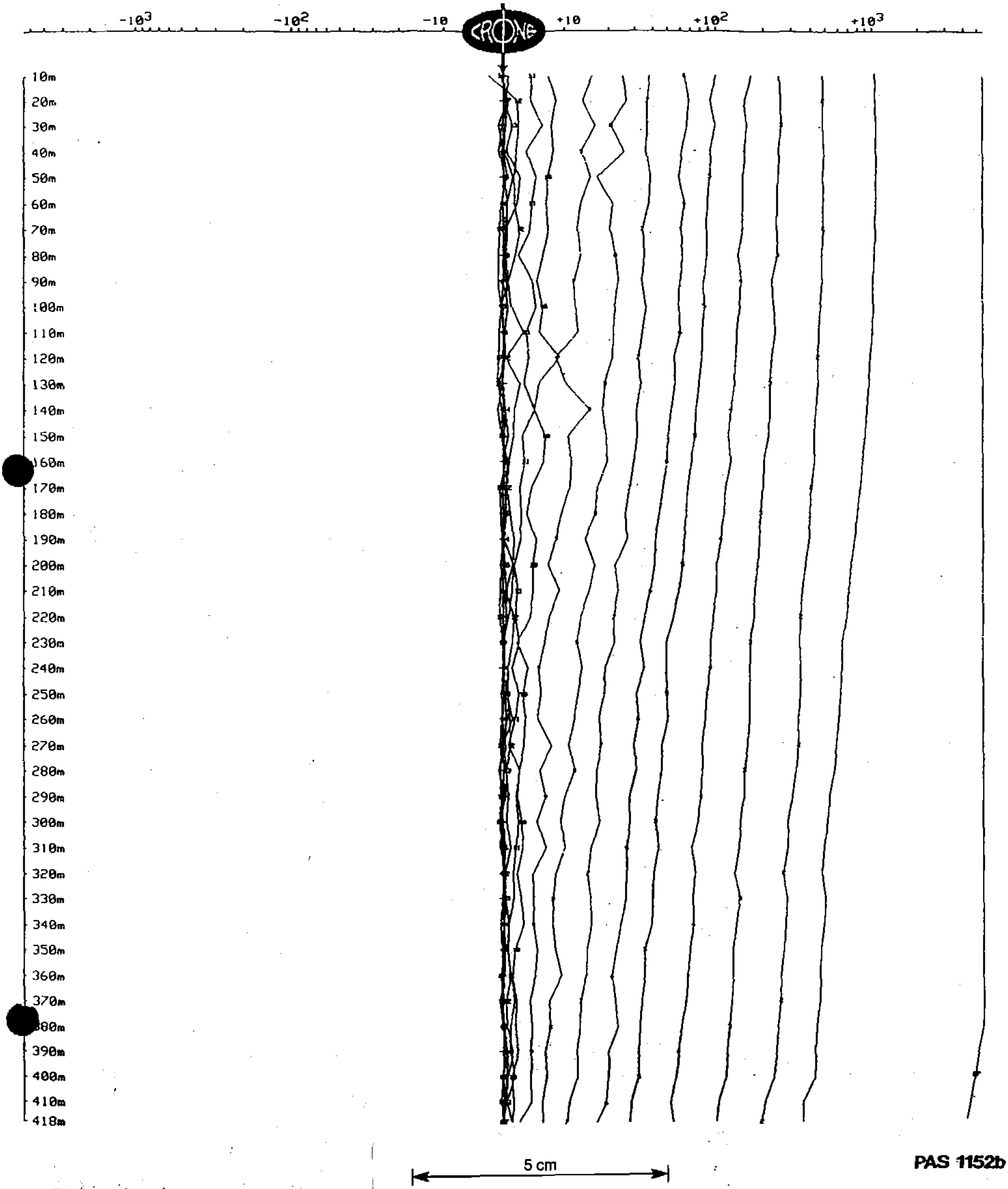
PAS 1152a

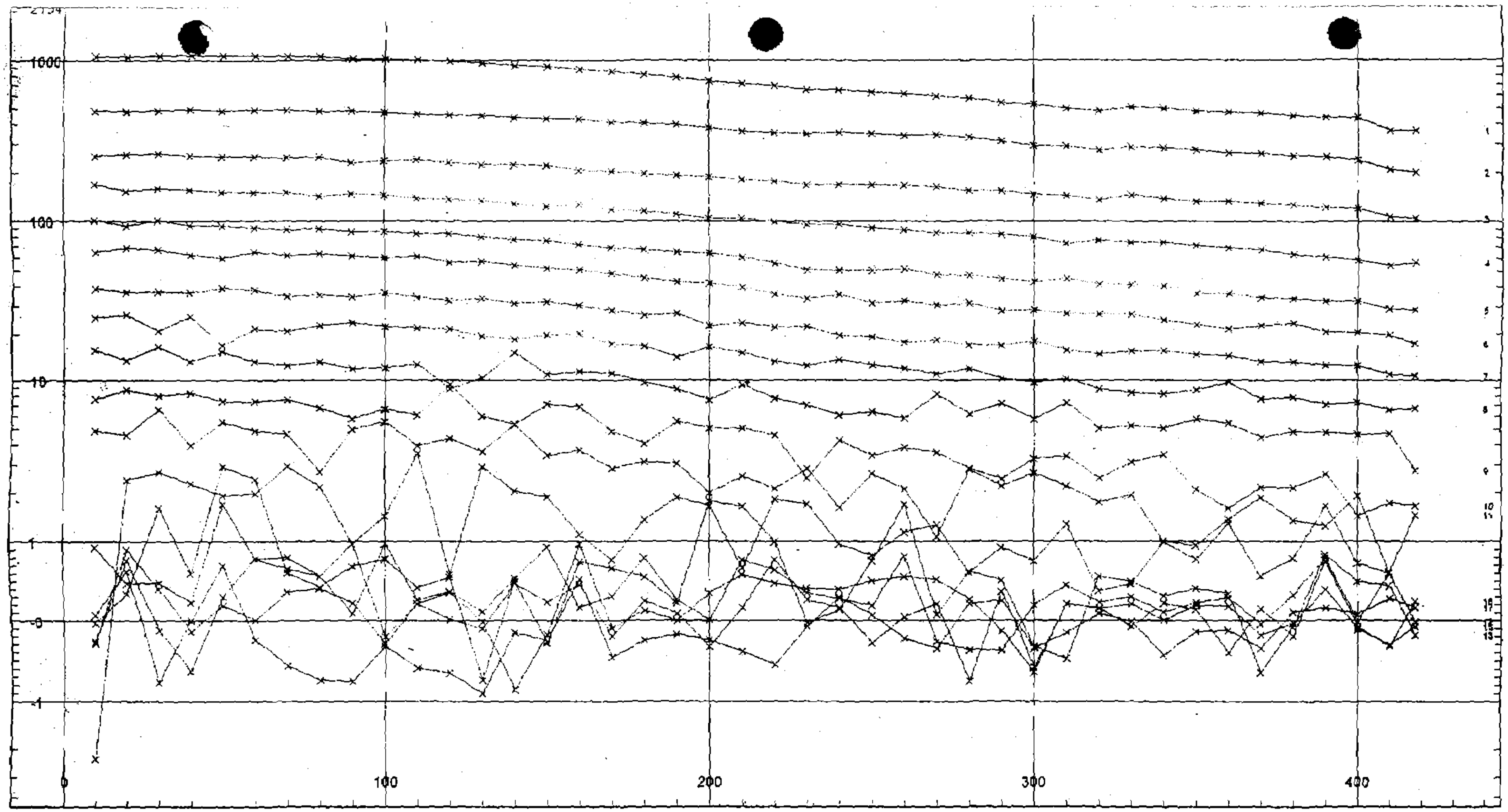
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD-69
Grid	: Burn's Peak	Tx Loop	: #1
Date	: Oct 22, 1994	File name	: BPD69Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2000





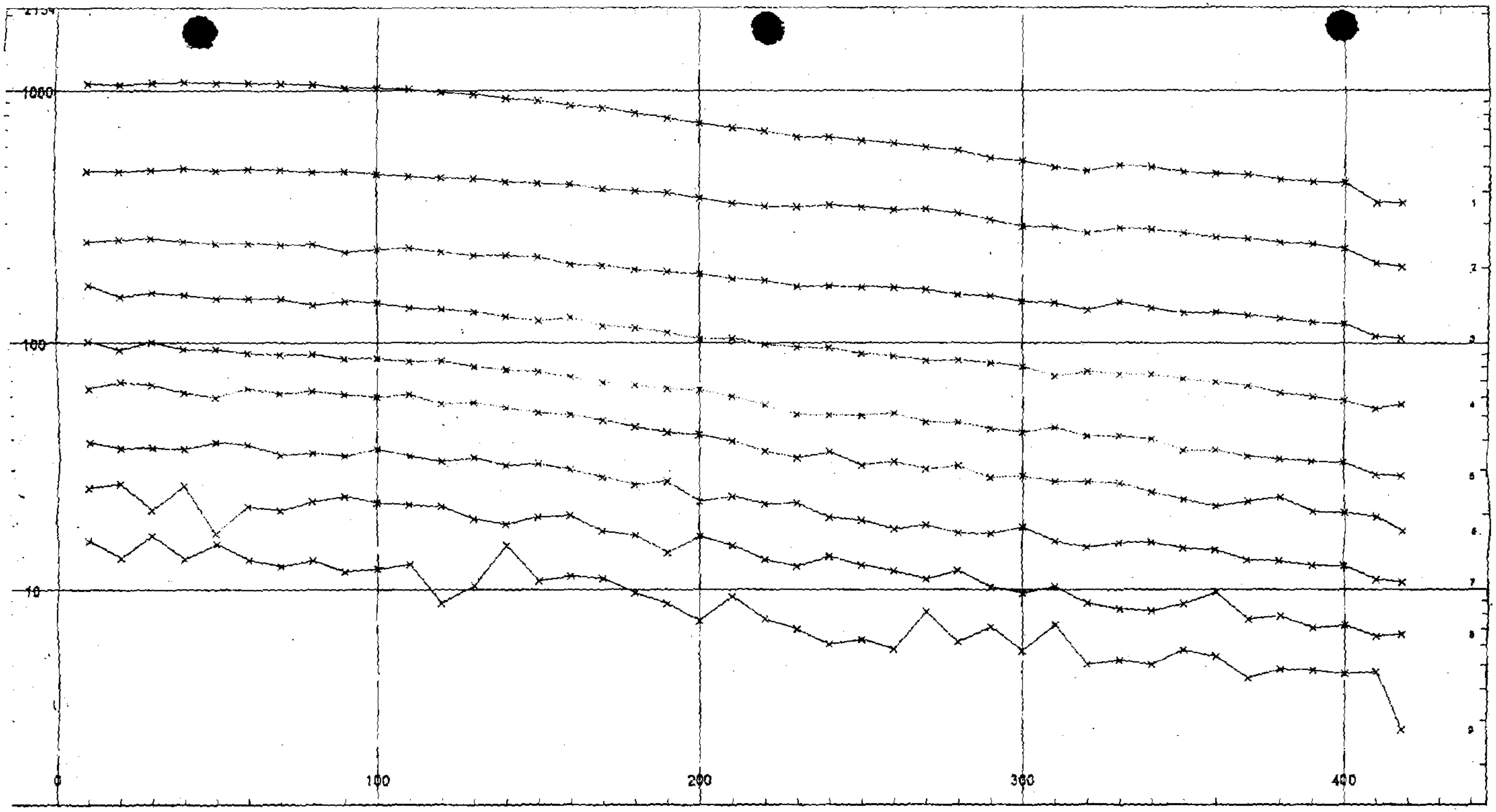
Z Component Data

BPD69

Tx Loop 1

PAS 1152c

840011



Z Component Data

BPD69

Tx Loop 1

PAS 1152d

845012

APPENDIX 13

DHEM Surveys in BPD81 – Brown's Tunnel

PASMINCO
EXPLORATION

A Division of Pasminco Australia Limited.
A.C.N. 004 074 962

Old Burnie Railway Station
Burnie, Tasmania 7320
G.P.O. Box 886
Burnie, Tasmania 7320

MEMORANDUM

TO: RA POLTOCK
FROM: NA HUGHES
DATE: 15 ~~24~~ August, 1994
SUBJECT: **DHEM SURVEYS IN BPD81, BROWNS TUNNEL**

Drill hole BPD81 was surveyed with the Crone DHEM system on May 22, 23 and 27, 1994 by Outer Rim Exploration of Townsville. Axial component data was collected from am east and west transmitter loop, and cross component data from the east transmitter loop only. Data is presented as profiles in PAS1103 and PAS1104. A plan showing the geographic location of the drill hole and transmitter loops is shown in PAS1105. Survey specifications may be found with the data profiles.

Axial data was collected on May 22nd and 23rd. A sharp trough in the east transmitter loop data between 80m and 200m prompted the collection of cross-component data for this loop, which was down on May 27th.

RESULTS

The data does not indicate the presence of any isolated conductors near the drill hole.

There is a strong "self-response" type anomaly near the top of the hole for the west loop indicating very resistive ground conditions.

The data for the east loop shows a very complicated pattern, and it is unclear what the cause is. The data has been proceeded to produce a vector amplitude plot for the XZ and XY planes (see PAS1106). It appears as though the ground is slightly more conductive below and to the south of the drill hole which would suggest the "smoke-ring" got hung up in the Rosebery Fault.

It should be noted that the XY data appears to be a lot noise than the axial data. Surveys with the XY data appears to be a lot noise than the axial data. Surveys with the XY probe done after BPD81 did not indicate that the probe was at fault.

ajs:nah:94008

845315

Title	DHEM PROFILES : BPD81 : EAST LOOP
Plan No.	PAS1103 a – o
Scale	1: 2500
Author	NAH
Month	AUGUST
Year	94
Report	Memorandum to Roger Pollock
State	TASMANIA
Tenement	3006
Area	Burns Peak, (Brans Tunnel)

Title	DHEM PROFILES : BPD81 : WEST LOOP
Plan No.	PAS1104 a – e
Scale	1:2500
Author	NAH
Month	AUGUST
Year	94
Report	Memorandum to Roger Pollock
State	TASMANIA
Tenement	3006
Area	Burns Peak

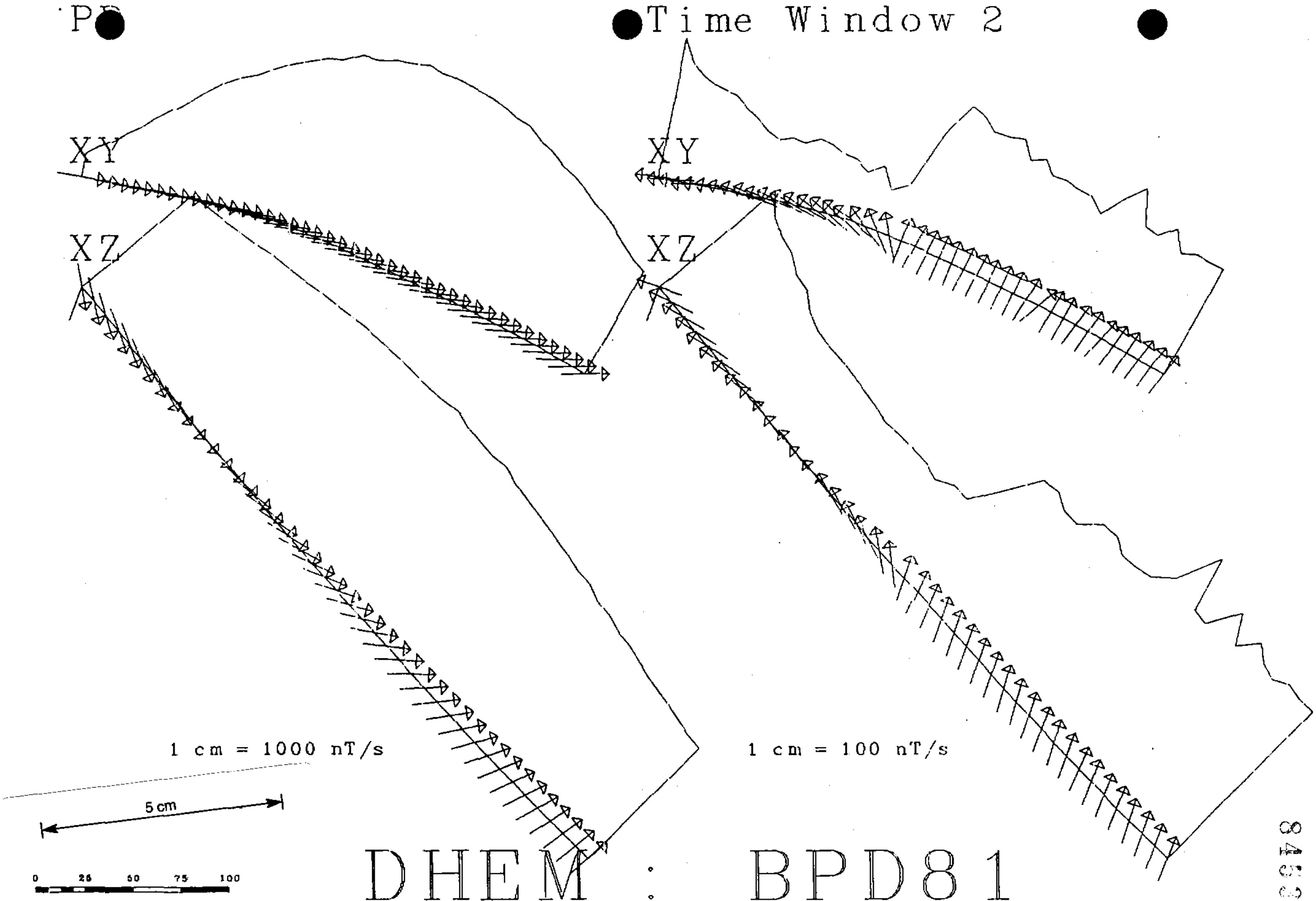
Title	DHEM LOOP LOCATIONS BPD81
Plan No.	PAS1105
Scale	1:5000
Author	NAH
Month	AUGUST.
Year	94
Report	Memorandum to Roger Pollock
State	TASMANIA
Tenement	3006
Area	Burns Peak

845316

Title	DHEM VECTOR PLOTS: BPD31: EAST LOO
Plan No.	PAS1106
Scale	1:2500
Author	NAH
Month	~~94~~ AUGUST
Year	94
Report	Memorandum to Roger Pollock
State	TASMANIA
Tenement	3006
Area	Burns Peak

Title	
Plan No.	
Scale	
Author	
Month	
Year	
Report	
State	
Tenement	
Area	

Title	
Plan No.	
Scale	
Author	
Month	
Year	
Report	
State	
Tenement	
Area	



PAS1106

843317

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

```
Client      : Pasminco Exploration          Hole        : BPD81
Grid        : Burns Peak                    Tx Loop     : East
Date        : May 23, 1994                  File name : BPD81EZ.PEM
Time Base : 10.00 ms                        # Readings: 42
Ramp Time : 0.50 ms                         Stn Units : Metric
# Channels: 17                              Coil Area : 6500 sq m
Sync Type : Cable                           Polarity    : -
Loop Size : 300m  X  400m                   Receiver    : Digital #106
Current     : 6 Amps                        Operator    : Geoffrey Dunn

Loop Coordinates (X,Y,Z)
   1. 5000m, 5400m, 0m                   2. 5000m, 5000m, 0m
   3. 5300m, 5000m, 0m                   4. 5300m, 5400m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
   1. 4600m, 5200m, 0m

Channel Times (usec)
Ch  Start   End Center     Ch  Start   End Center     Ch  Start   End Center
PP   -198   -99   -149      1     76   104     90      2    104   131    117
 3    131   171    151      4    171   225    198      5    225   292    259
 6    292   378    335      7    378   490    434      8    490   639    565
 9    639   828    733     10    828  1075    952     11   1075  1395   1235
12   1395  1809   1602     13   1809  2348   2078     14   2348  3046   2697
15   3046  3951   3498     16   3951  5121   4536     17   5121  6646   5884
```

845319

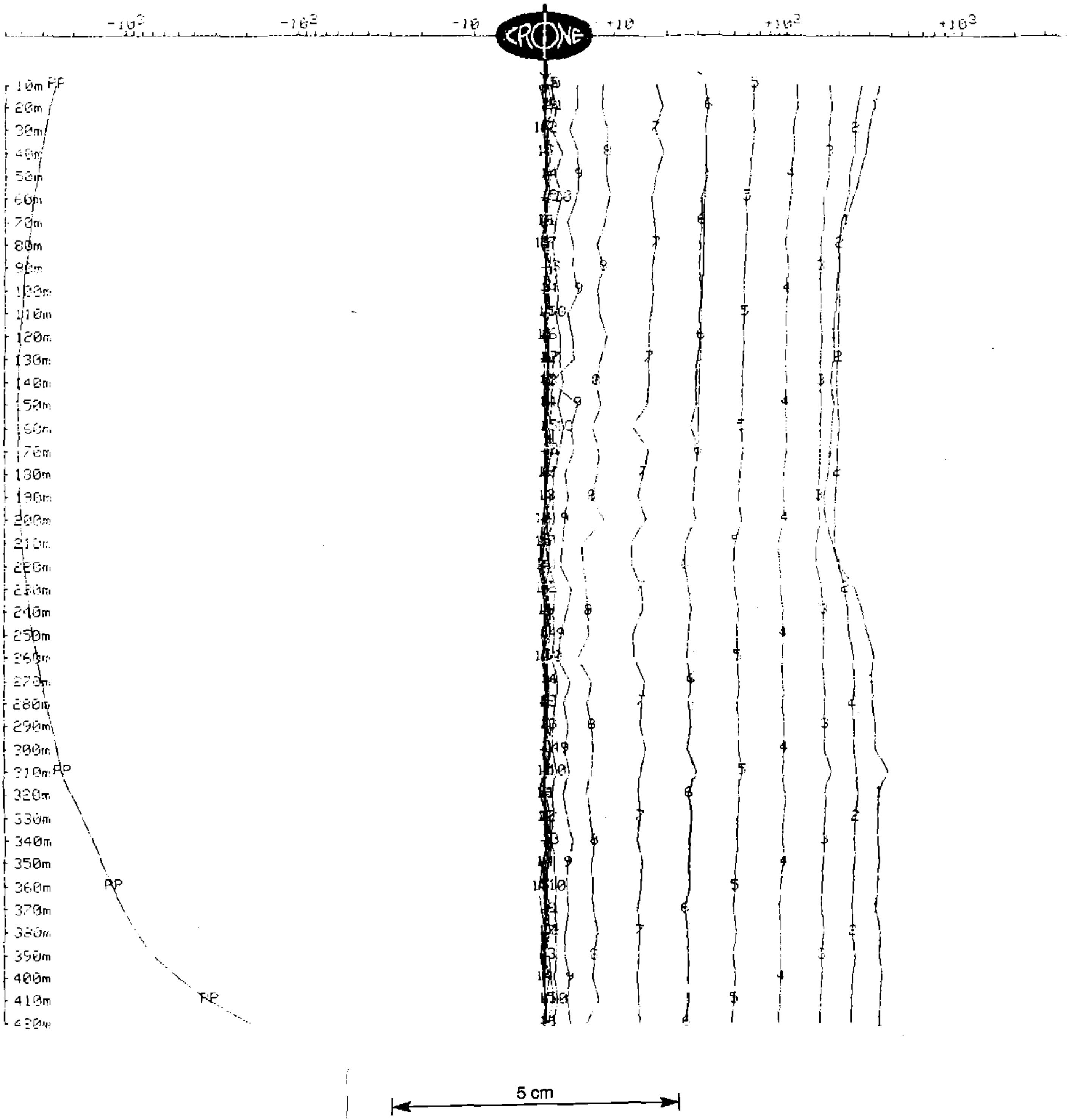
PA5IU09

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: East
Date	: May 23, 1994	File name	: BPD81EZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500



845320

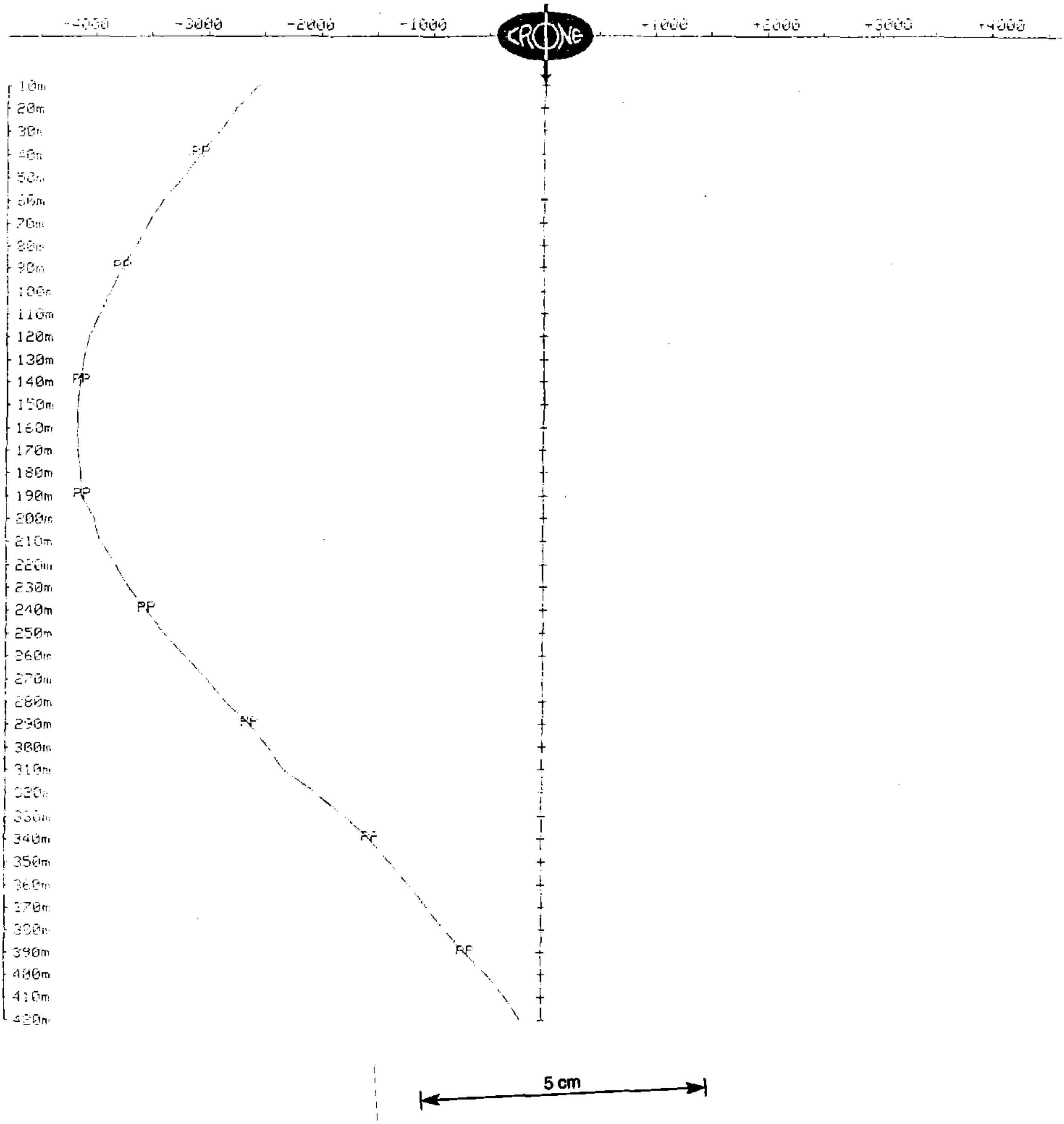
PAS 1103 b

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: East
Date	: May 23, 1994	File name	: BPD81EZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 500 nT



845321

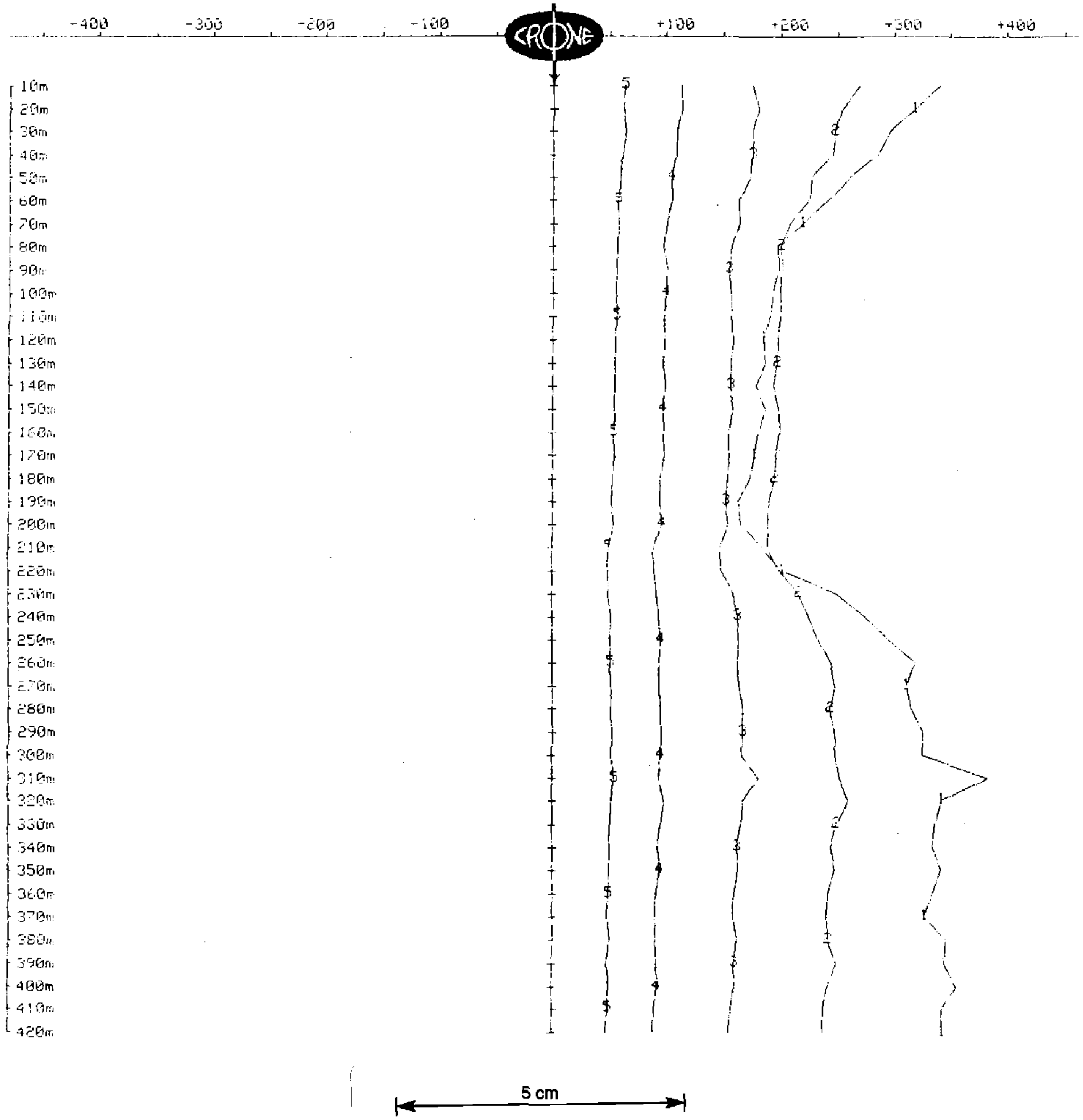
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: East
Date	: May 23, 1994	File name	: BPD81EZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 50 nT.



PASIIWSd

845322

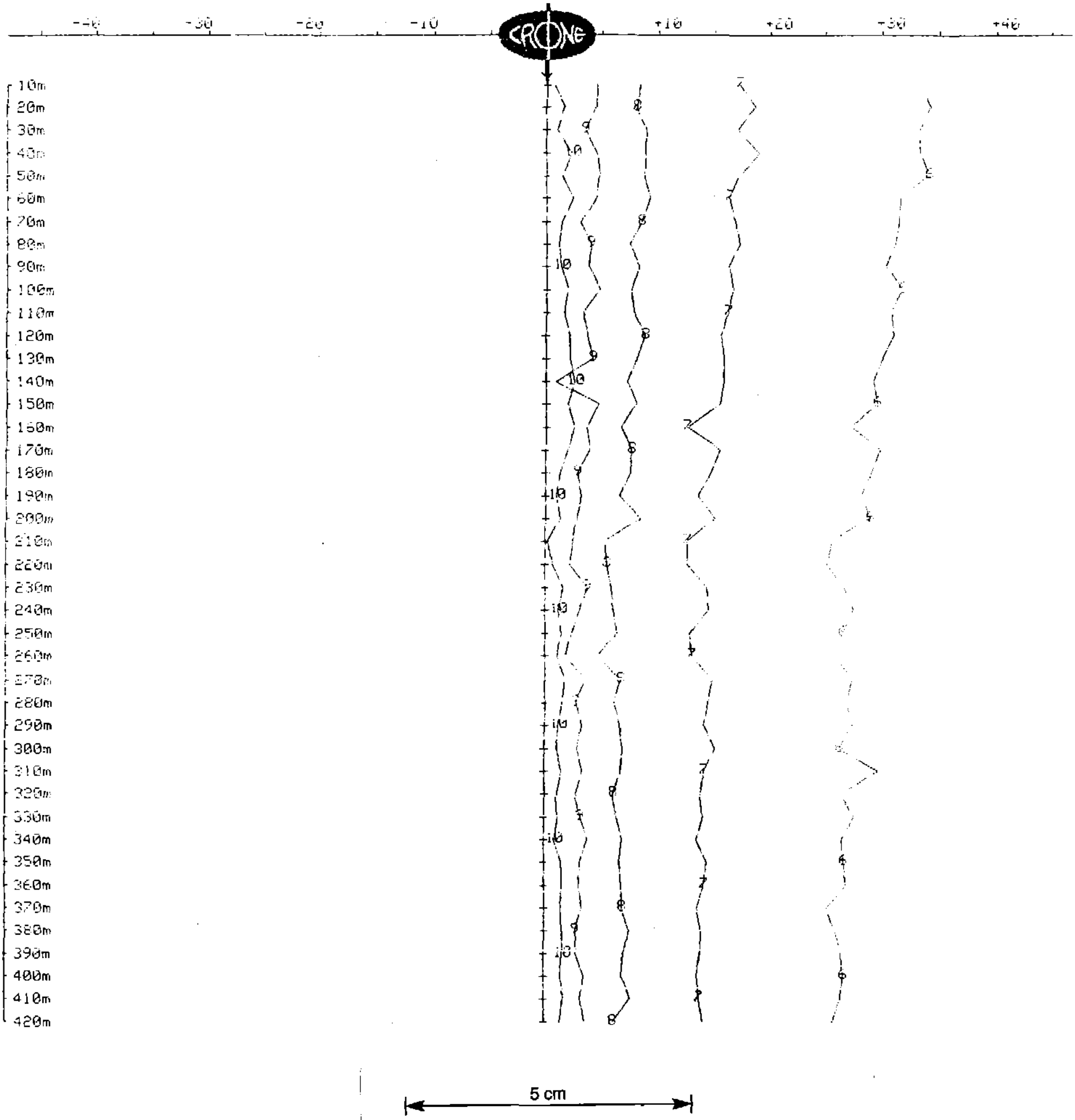
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: East
Date	: May 23, 1994	File name	: BPD81EZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 5 nT/



845323

PHS1103e

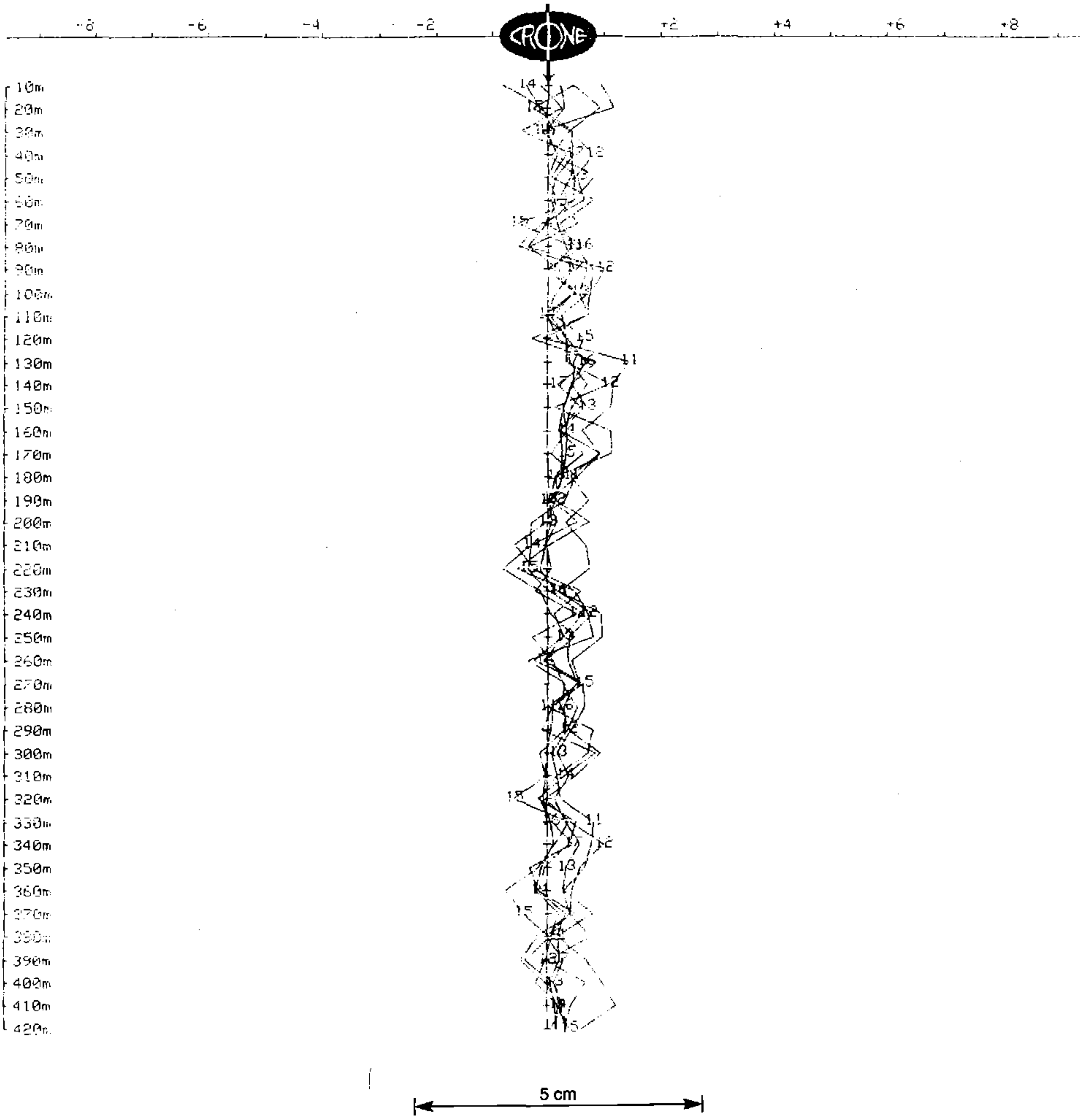
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 23, 1994
Hole : BPD81
Tx Loop : East
File name : BPD81EZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1 nT/



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 27, 1994
Time Base : 10.00 ms
Ramp Time : 0.50 ms
\# Channels: 17
Sync Type : Cable
Loop Size : 300m X 400m
Current : 7 Amps

Hole : BPD81
Tx Loop : East
File name : BPD81EXY.PEM
\# Readings: 84
Stn Units : Metric
Coil Area : 2800 sq m
Polarity : -
Receiver : Digital #106
Operator : Geoffrey Dunn

Loop Coordinates (X,Y,Z)

1. 377725m, 5.3847e+06m, 0m
2. 377700m, 5.3843e+06m, 0m
3. 377980m, 5.38424e+06m, 0m
4. 378060m, 5.38464e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. 377415m, 5.38456e+06m, 0m
2. 102deg, 50deg, 25m
3. 101deg, 50.5deg, 50m
4. 102deg, 49.5deg, 50m
5. 107deg, 49deg, 50m
6. 113deg, 46deg, 50m
7. 116deg, 45deg, 50m
8. 116deg, 44deg, 50m
9. 119deg, 43deg, 50m
10. 120deg, 41deg, 25m

Channel Times (usec)

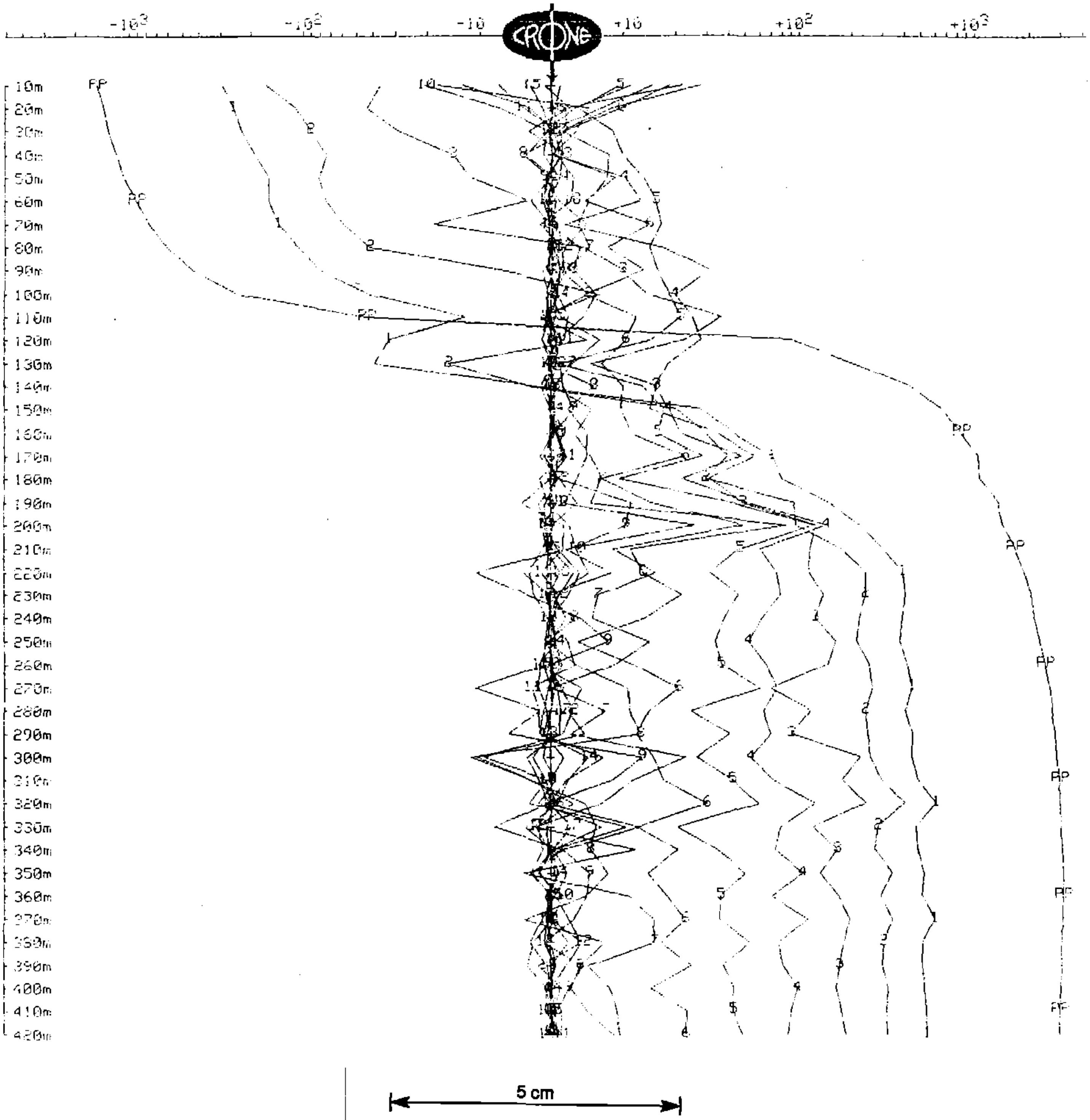
Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	104	90	2	104	131	117
3	131	171	151	4	171	225	198	5	225	292	259
6	292	378	335	7	378	490	434	8	490	639	565
9	639	828	733	10	828	1075	952	11	1075	1395	1235
12	1395	1809	1602	13	1809	2348	2078	14	2348	3046	2697
15	3046	3951	3498	16	3951	5121	4536	17	5121	6646	5884

845325 PAS1103f

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 27, 1994
Hole : BPD81
Tx Loop : East
File name : BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels and PP
Scale: 1:2500



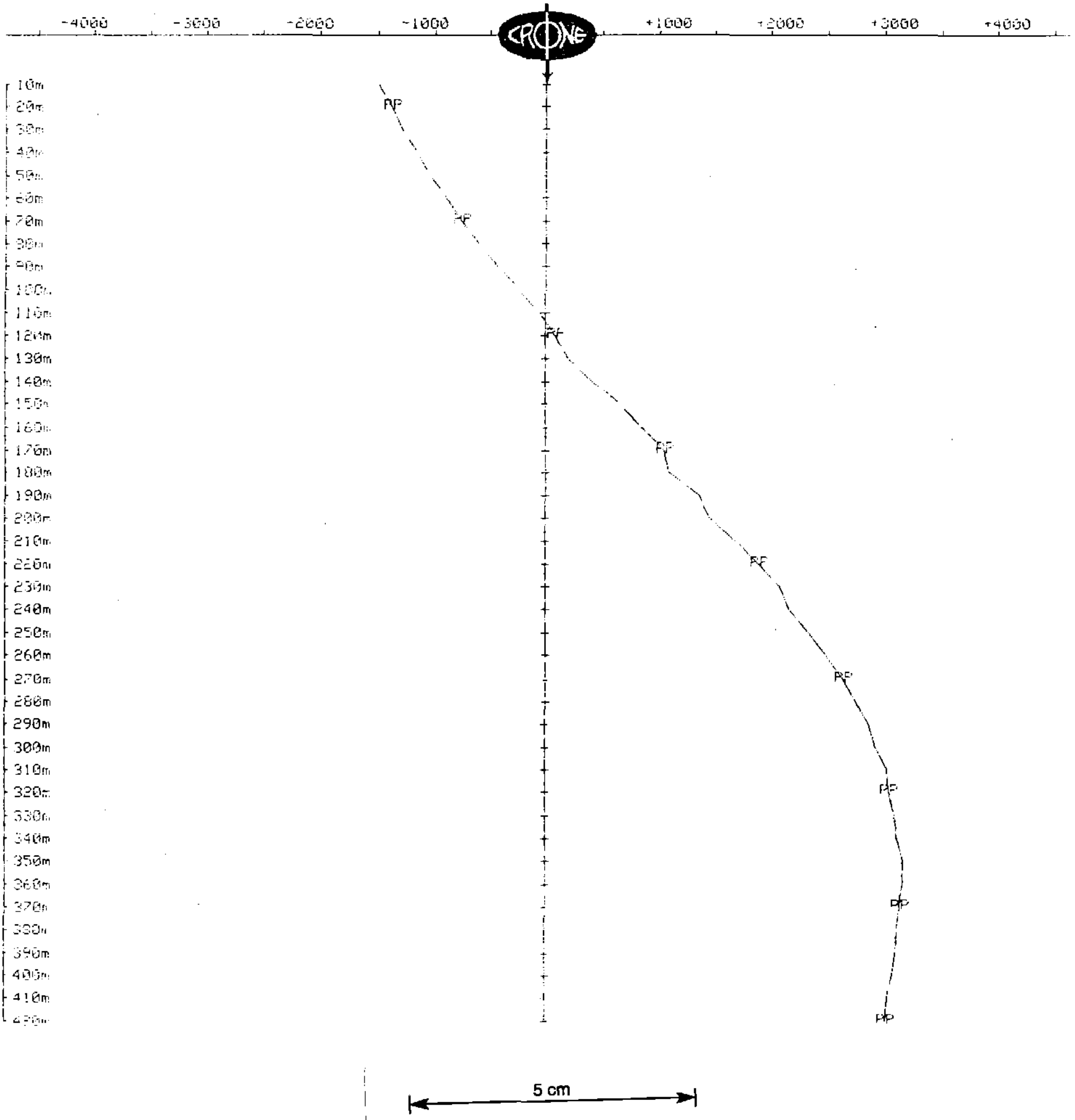
845326 PAS1103g

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD81
Grid	:	Burns Peak	Tx Loop	:	East
Date	:	May 27, 1994	File name	:	BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 500 nT/



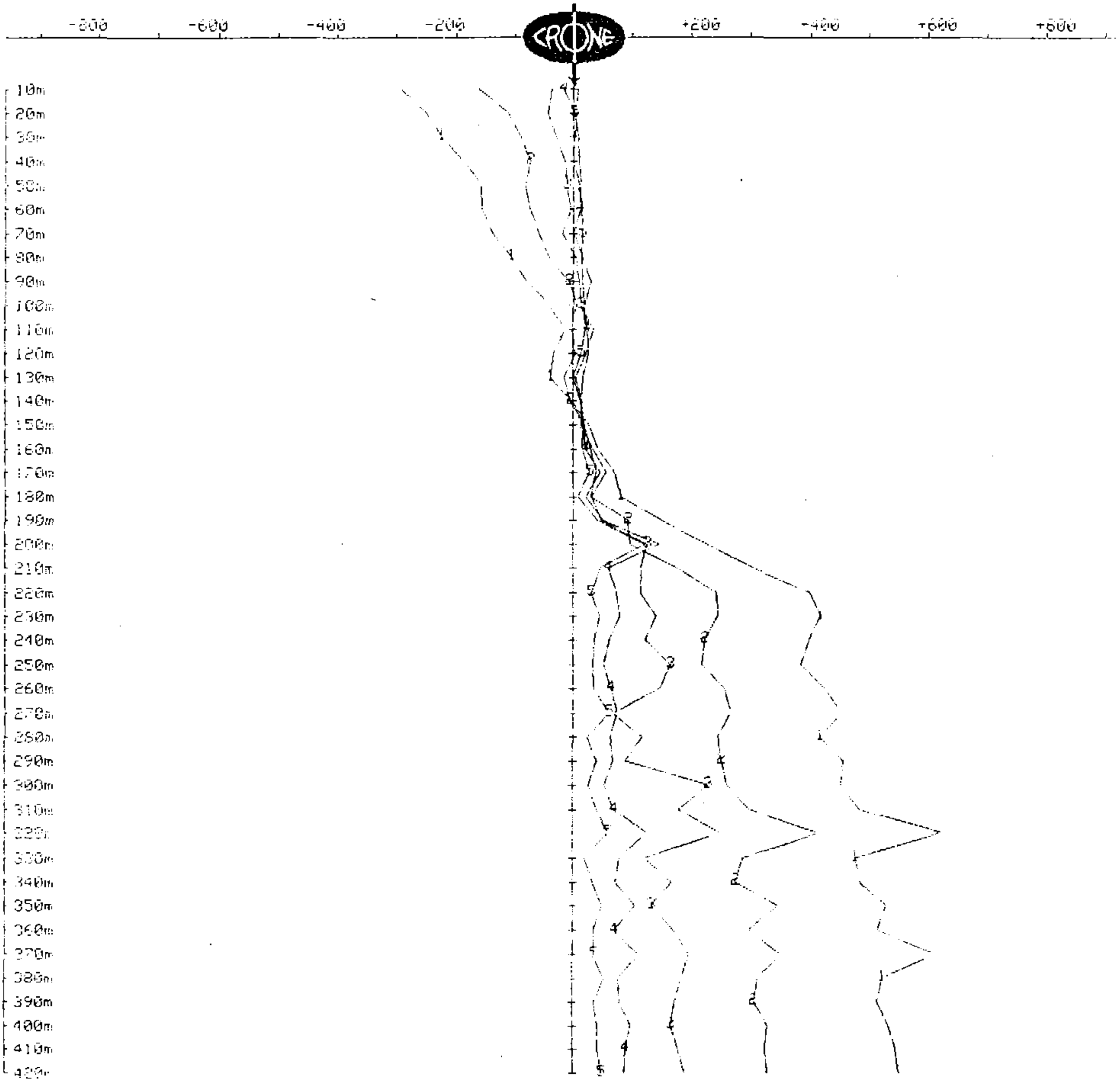
845327 PAS1103h

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD81
Grid	:	Burns Peak	Tx Loop	:	East
Date	:	May 27, 1994	File name	:	BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 100 nT



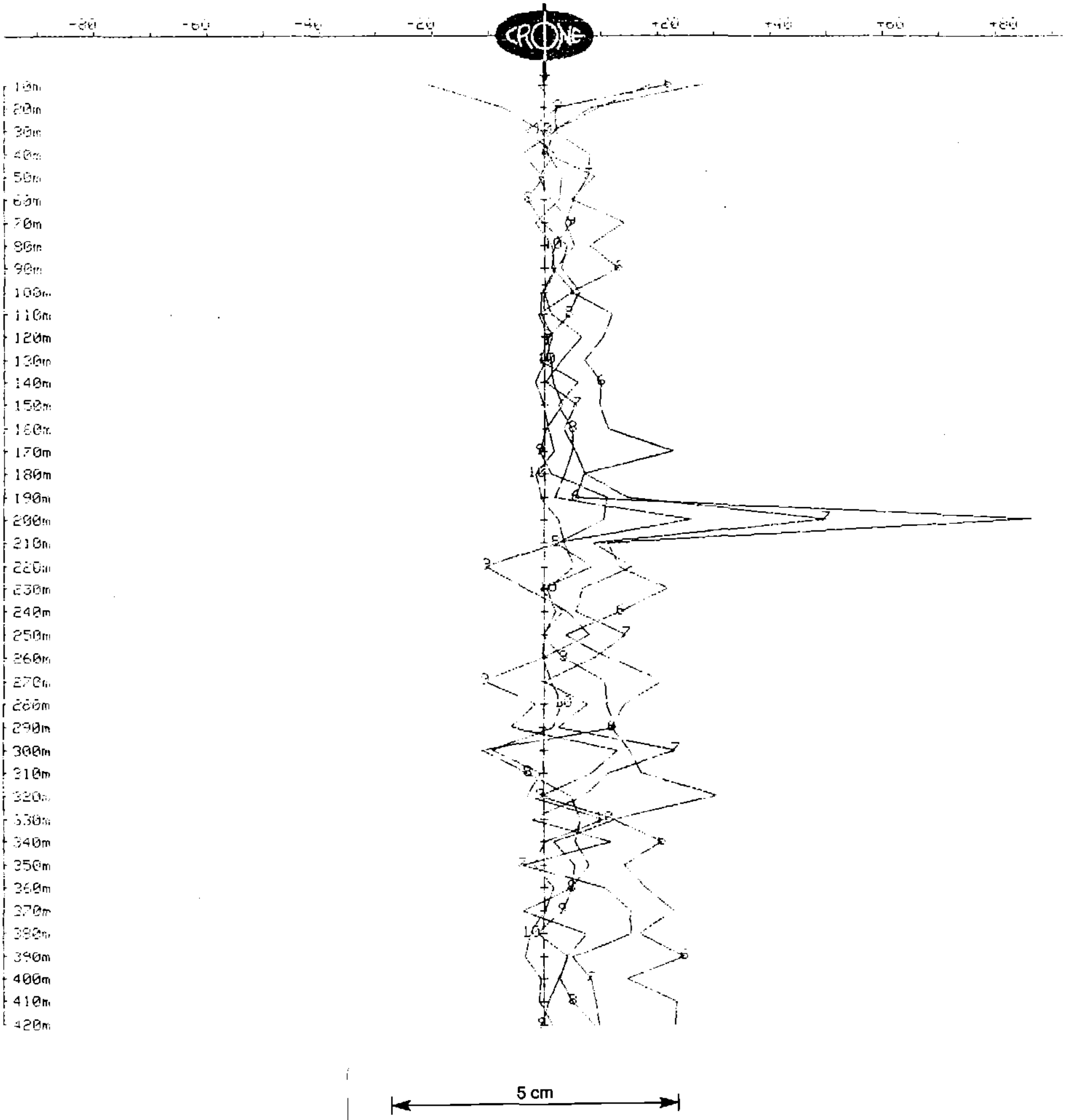
5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: East
Date	: May 27, 1994	File name	: BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 10 nT



845329 PAS11035

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

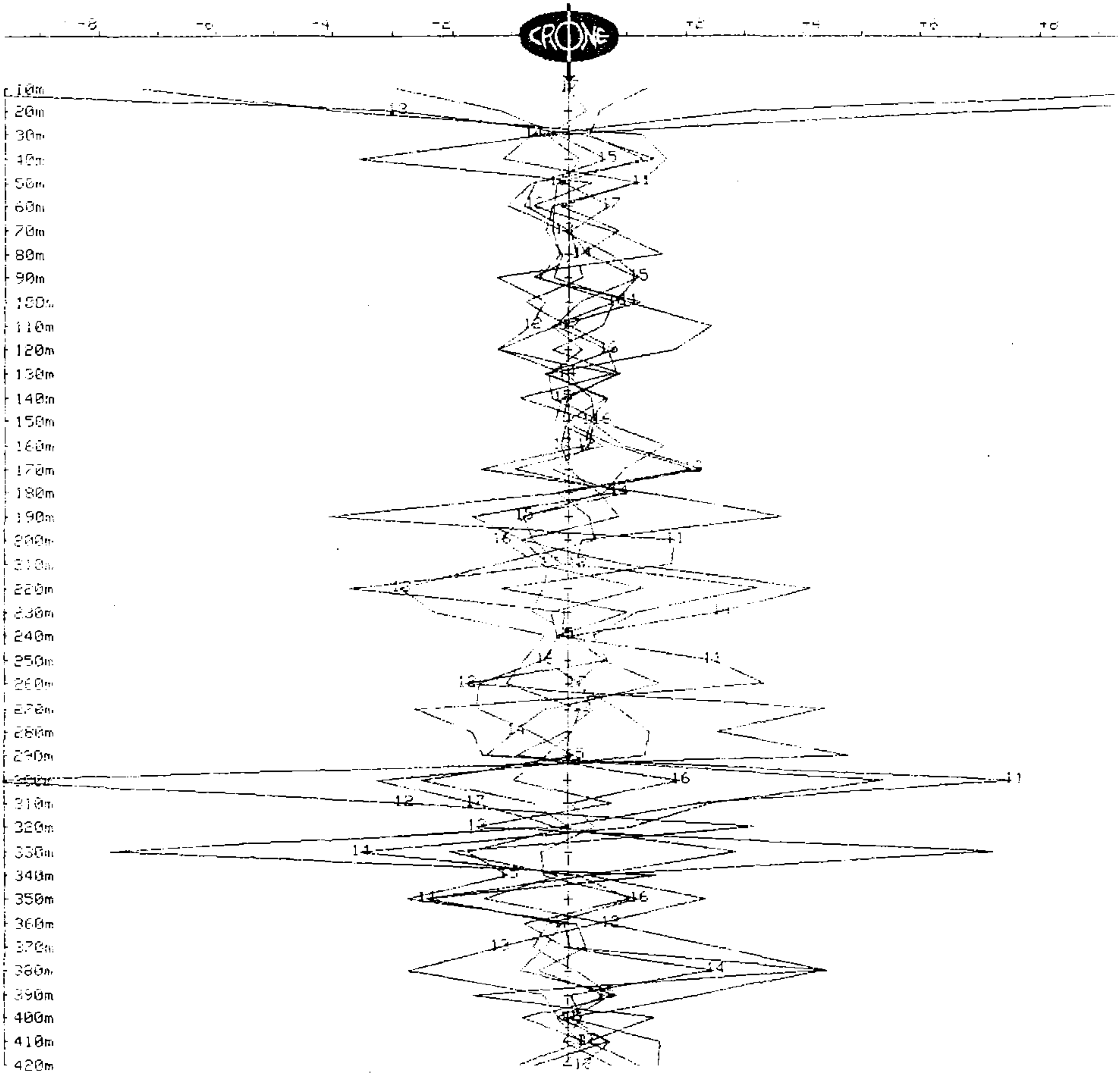
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 27, 1994

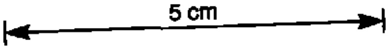
Hole : BPD81
Tx Loop : East
File name : BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
X COMPONENT dBx/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 1 nT





845330

PAS1103k

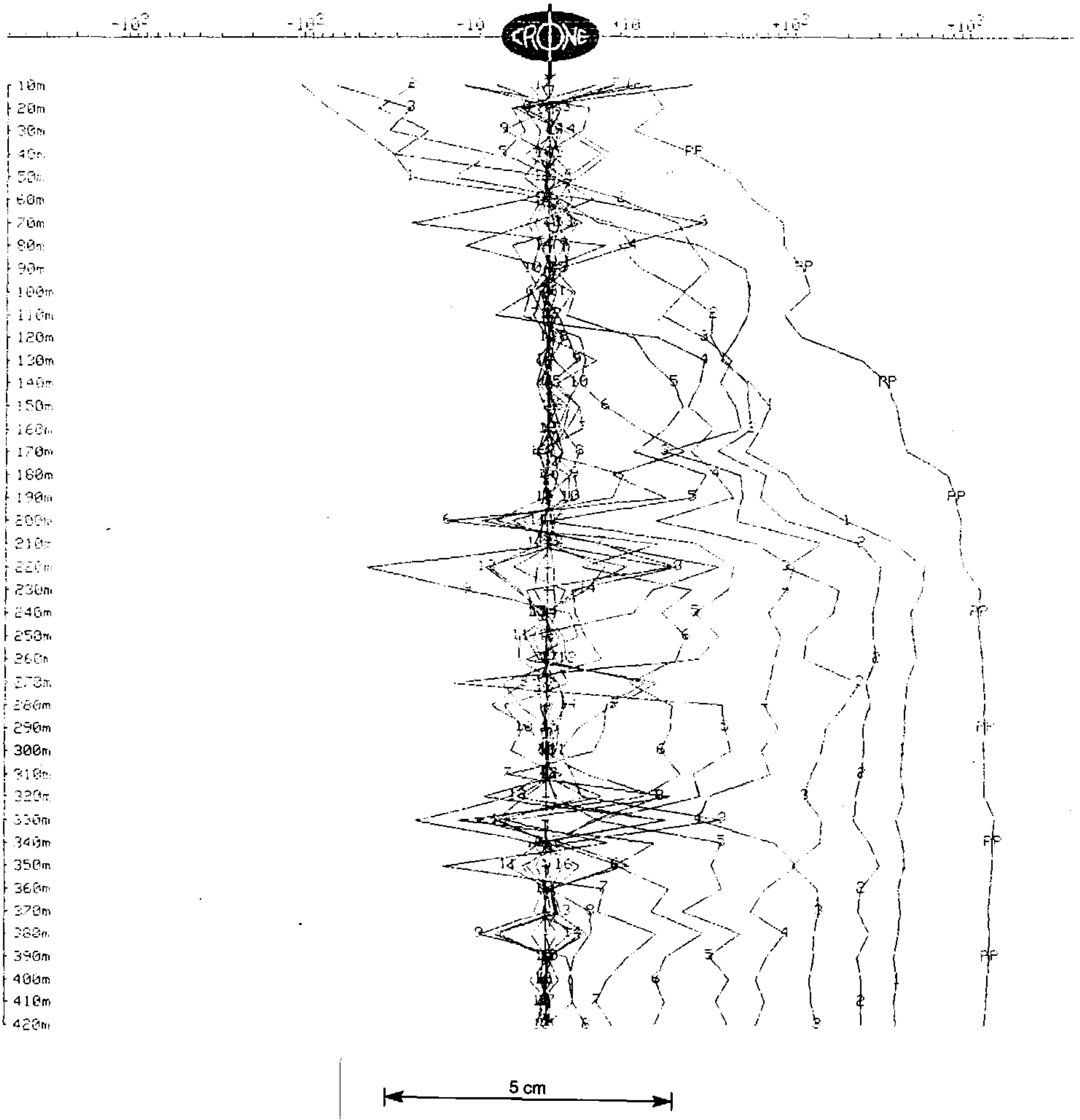
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	:	Pasminco Exploration	Hole	:	BPD81
Grid	:	Burns Peak	Tx Loop	:	East
Date	:	May 27, 1994	File name	:	BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP

Y COMPONENT dBy/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500



845331

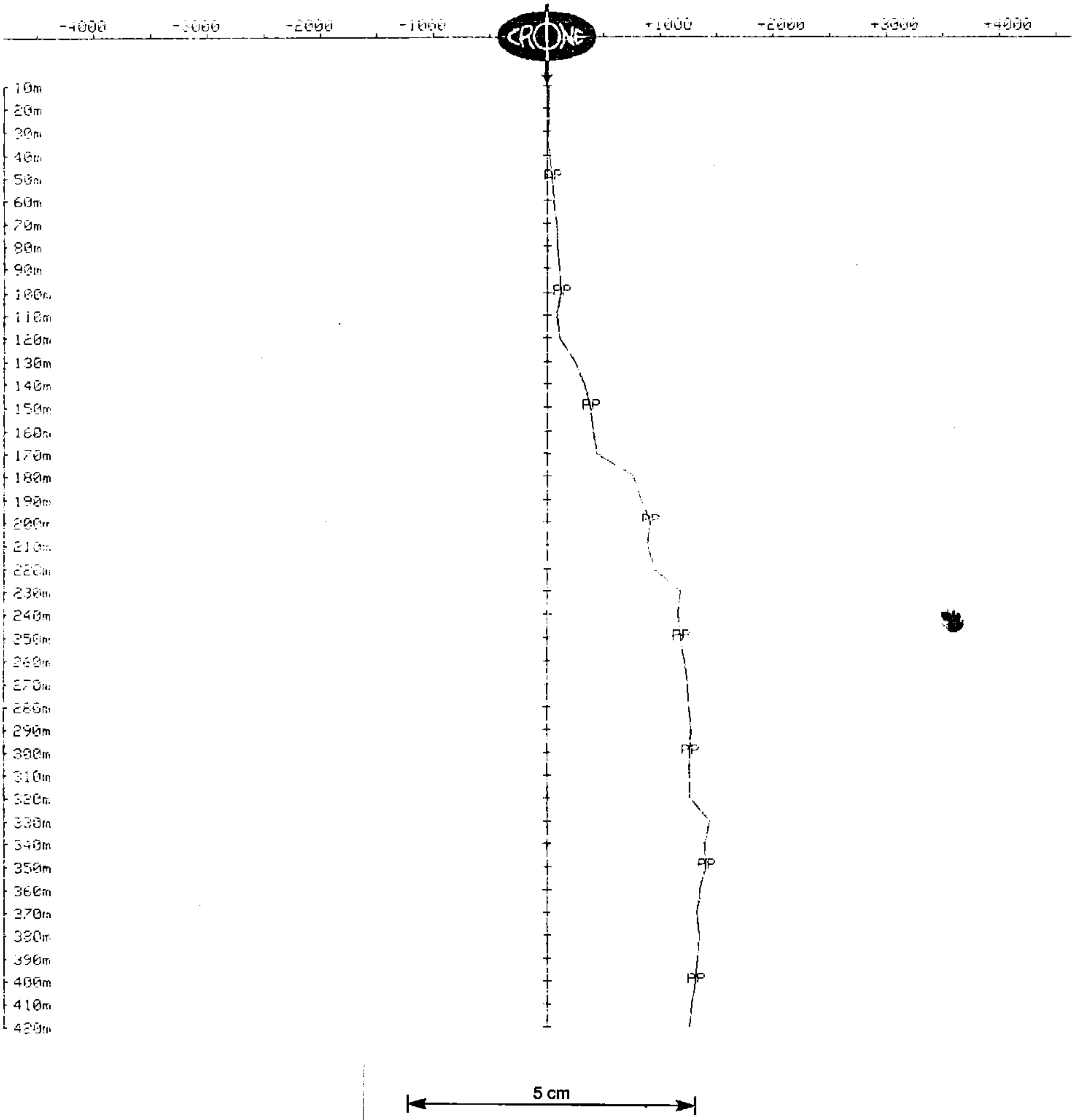
PAS11038

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: East
Date	: May 27, 1994	File name	: BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500 Unit Scale: 1cm = 500 nT



845332

PASII03m

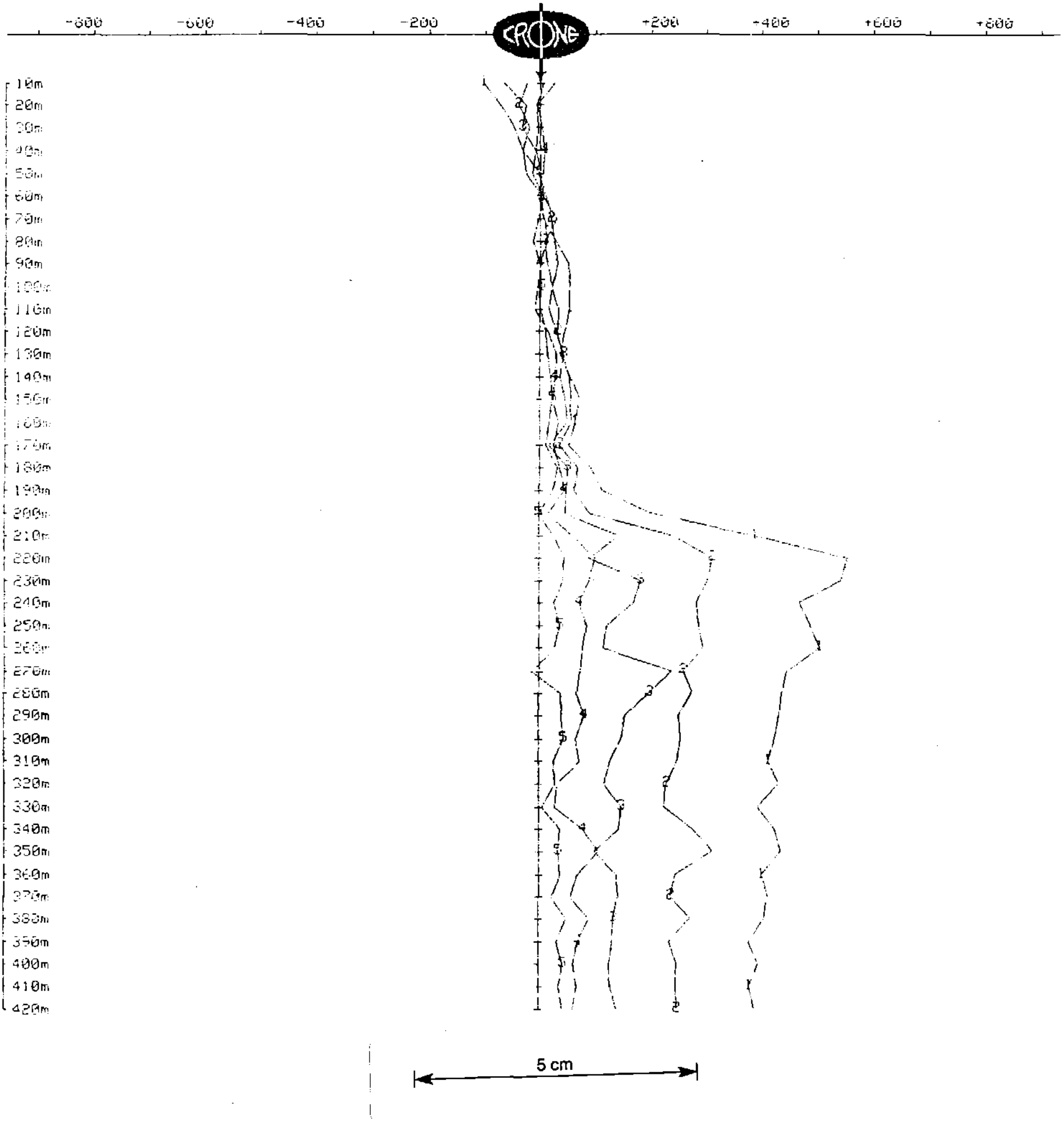
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 27, 1994
Hole : BPD81
Tx Loop : East
File name : BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 100 nT/



845333

PAS1103 N

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

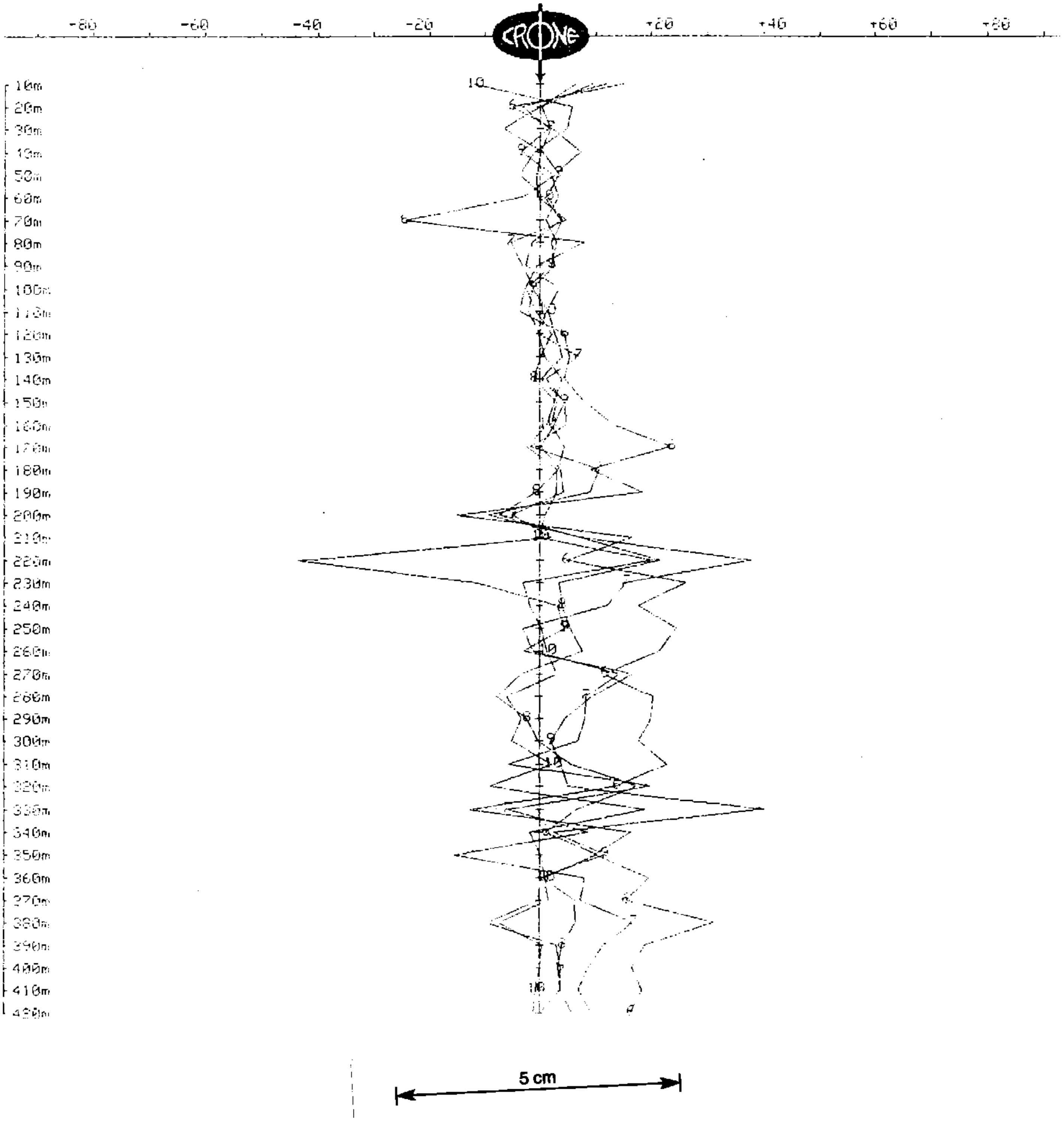
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 27, 1994

Hole : BPD81
Tx Loop : East
File name : BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 10 nT/



845334

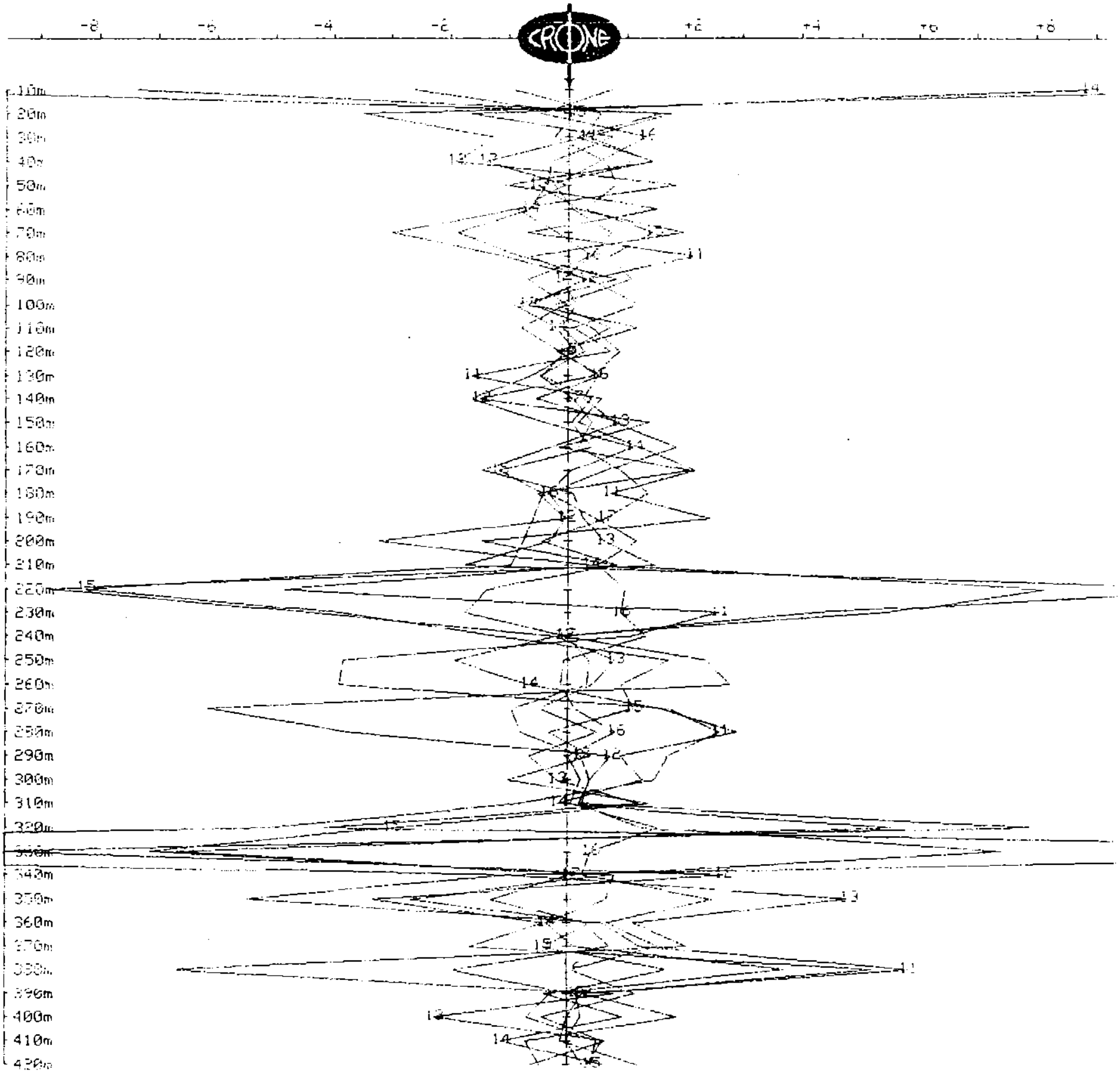
PAS11030

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: East
Date	: May 27, 1994	File name	: BPD81EXY.PEM

Data Corrected for Probe Rotation using Cleaned PP
Y COMPONENT dBy/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 1 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client : Pasminco Exploration
Grid : Burns Peak
Date : May 22, 1994
Time Base : 10.00 ms
Ramp Time : 0.50 ms
Channels: 17
Sync Type : Cable
Loop Size : 300m X 400m
Current : 5 Amps

Hole : BPD81
Tx Loop : West
File name : BPD81WZ.PEM
Readings: 42
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : -
Receiver : Digital #106
Operator : Geoffrey Dunn

Loop Coordinates (X,Y,Z)
1. 4700m, 5400m, 0m
2. 4700m, 5000m, 0m
3. 5000m, 5000m, 0m
4. 5000m, 5400m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 4600m, 5200m, 0m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	104	90	2	104	131	117
3	131	171	151	4	171	225	198	5	225	292	259
6	292	378	335	7	378	490	434	8	490	639	565
9	639	828	733	10	828	1075	952	11	1075	1395	1235
12	1395	1809	1602	13	1809	2348	2078	14	2348	3046	2697
15	3046	3951	3498	16	3951	5121	4536	17	5121	6646	5884

845336

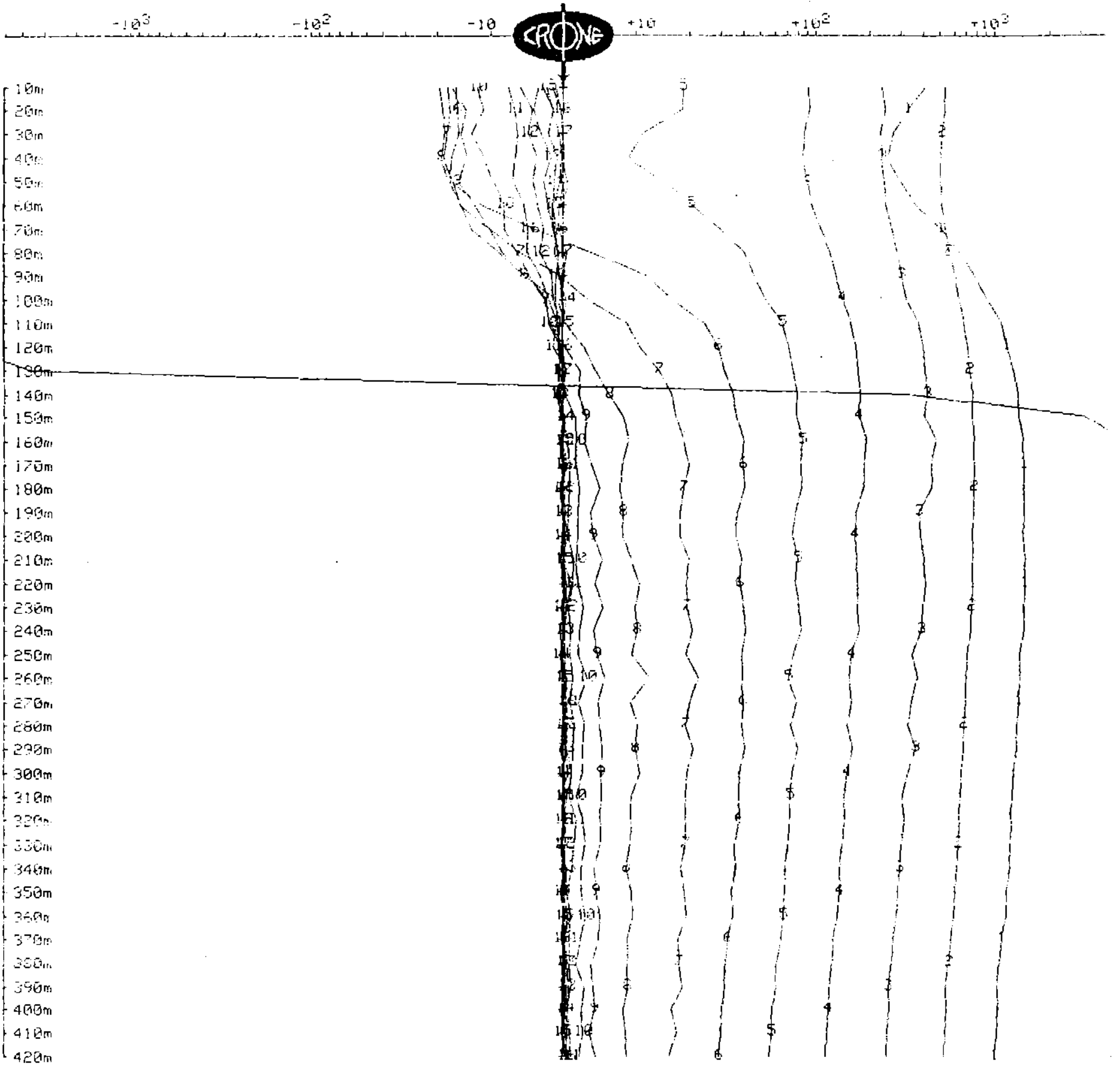
PAS1104 a

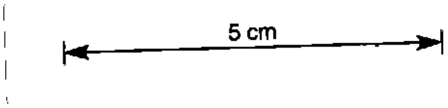
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	:	BPD81
Grid	: Burns Peak	Tx Loop	:	West
Date	: May 22, 1994	File name	:	BPD81WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500





845337

PAS11046

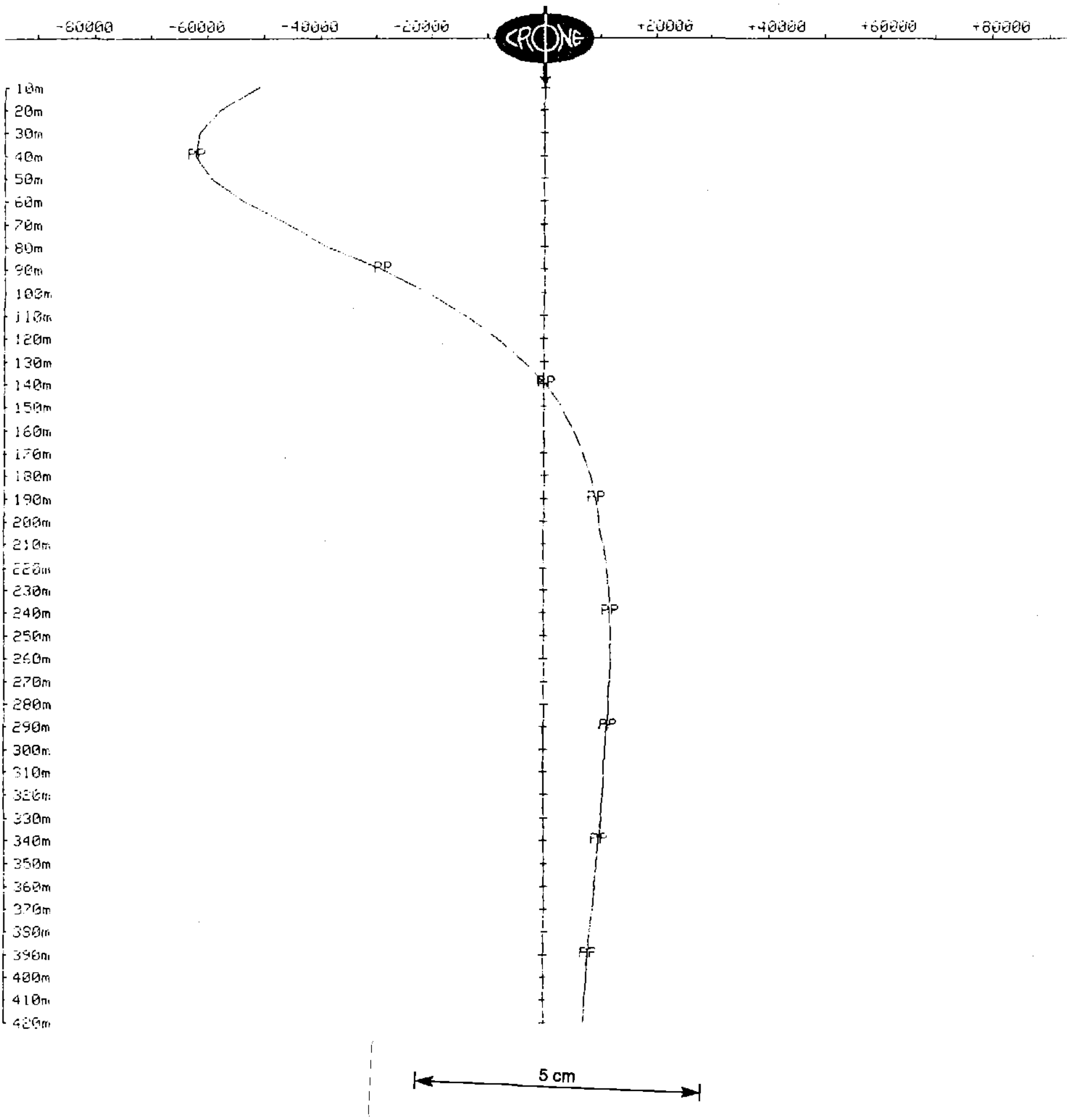
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: West
Date	: May 22, 1994	File name	: BPD81WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels and PP

Scale: 1:2500

Unit Scale: 1cm = 10000 nT



845338

PAS1104c

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

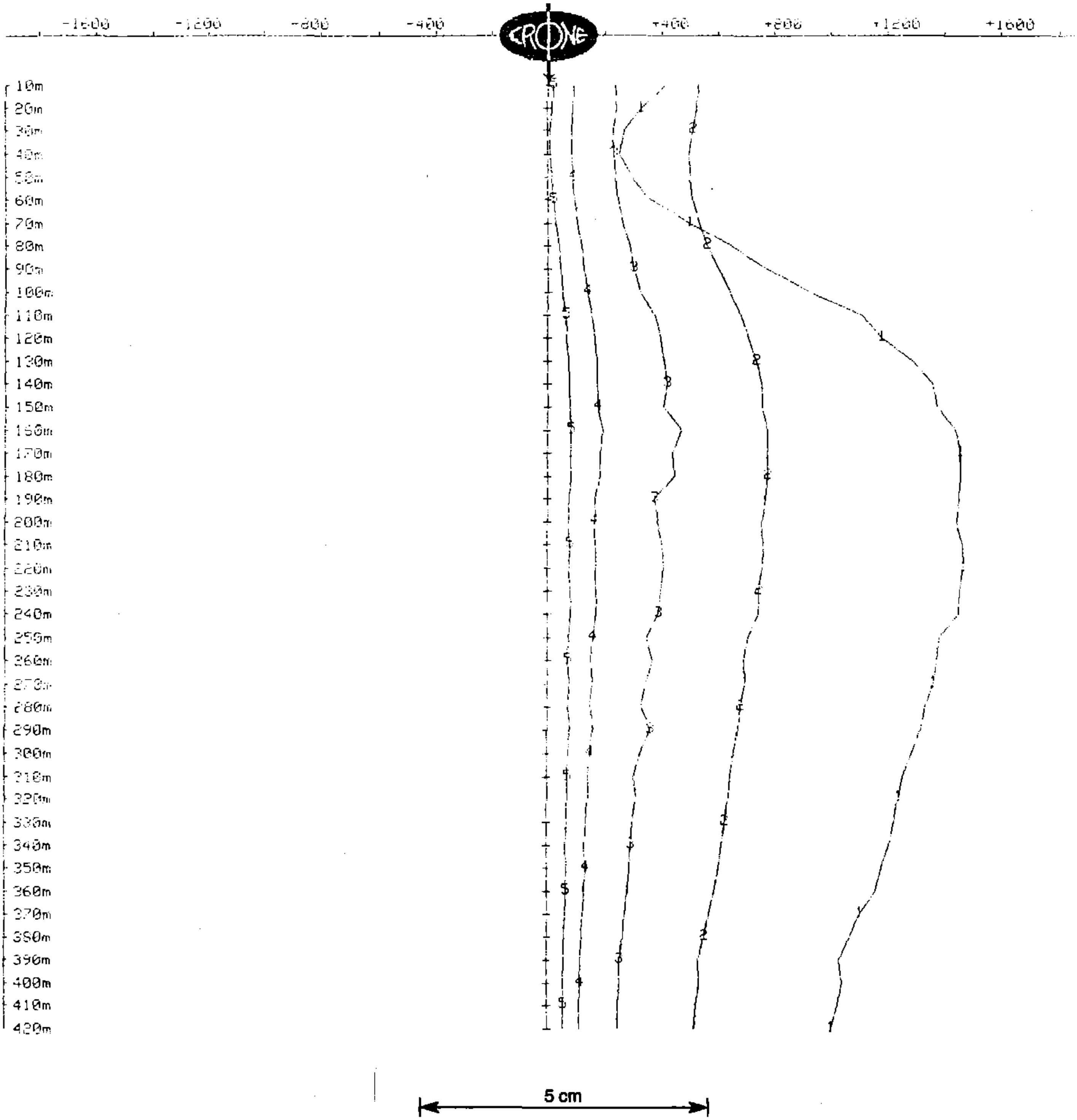
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 22, 1994

Hole : BPD81
Tx Loop : West
File name : BPD81WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 200 nT



845339

PAS110+d

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

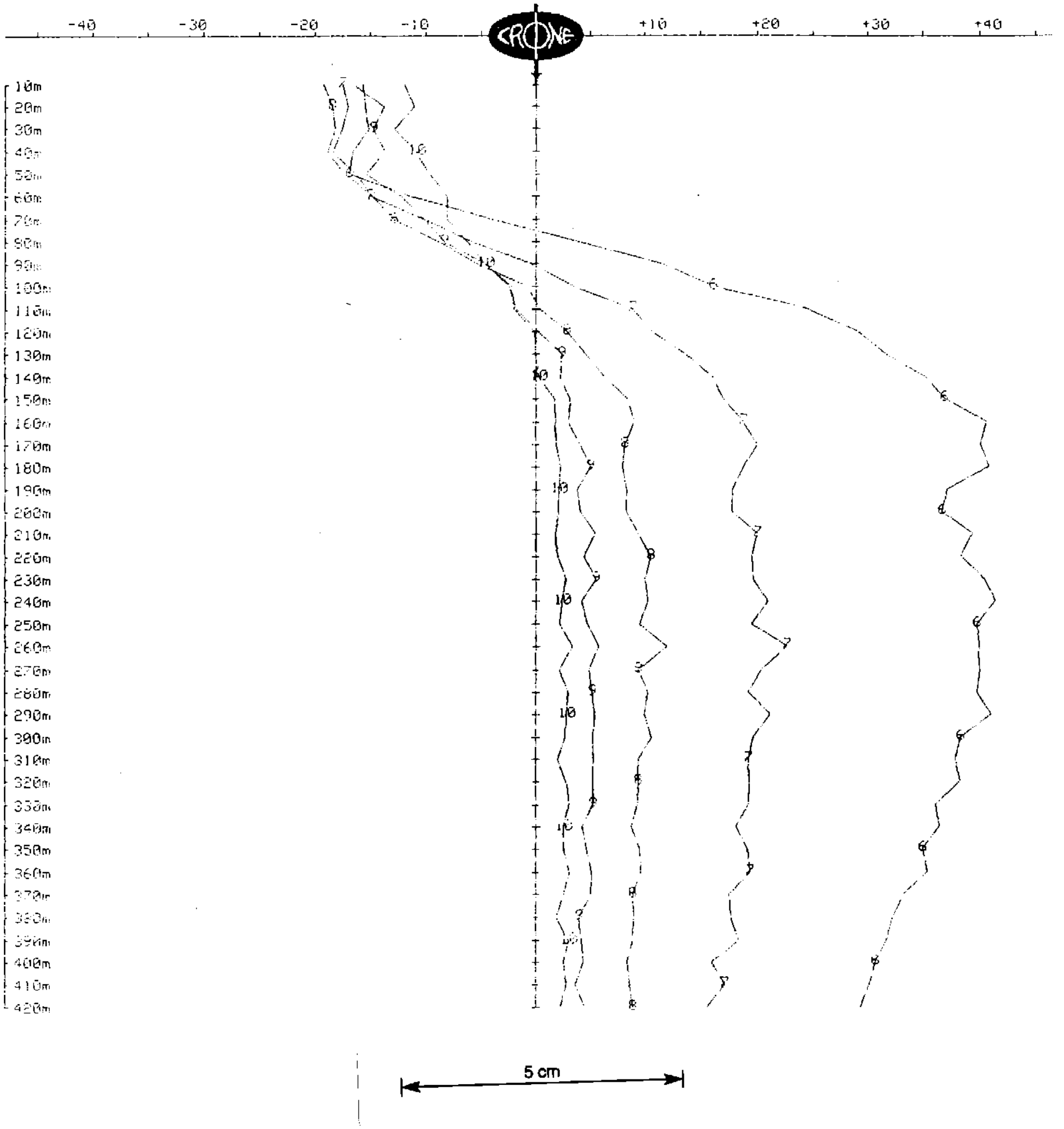
Client : Pasminco Exploration
Grid : Burns Peak
Date : May 22, 1994

Hole : BPD81
Tx Loop : West
File name : BPD81WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500

Unit Scale: 1cm = 5 nT/

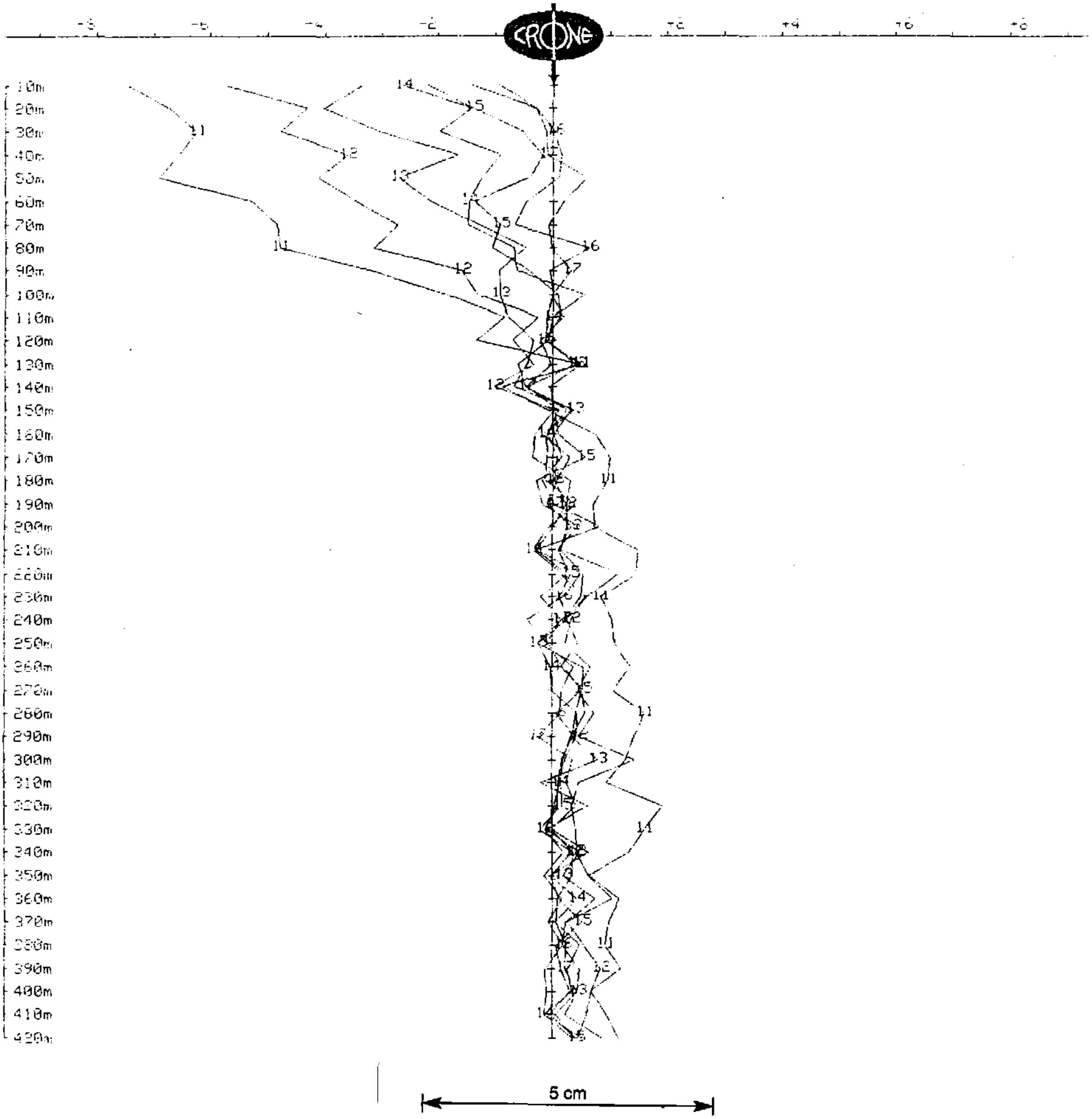


OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

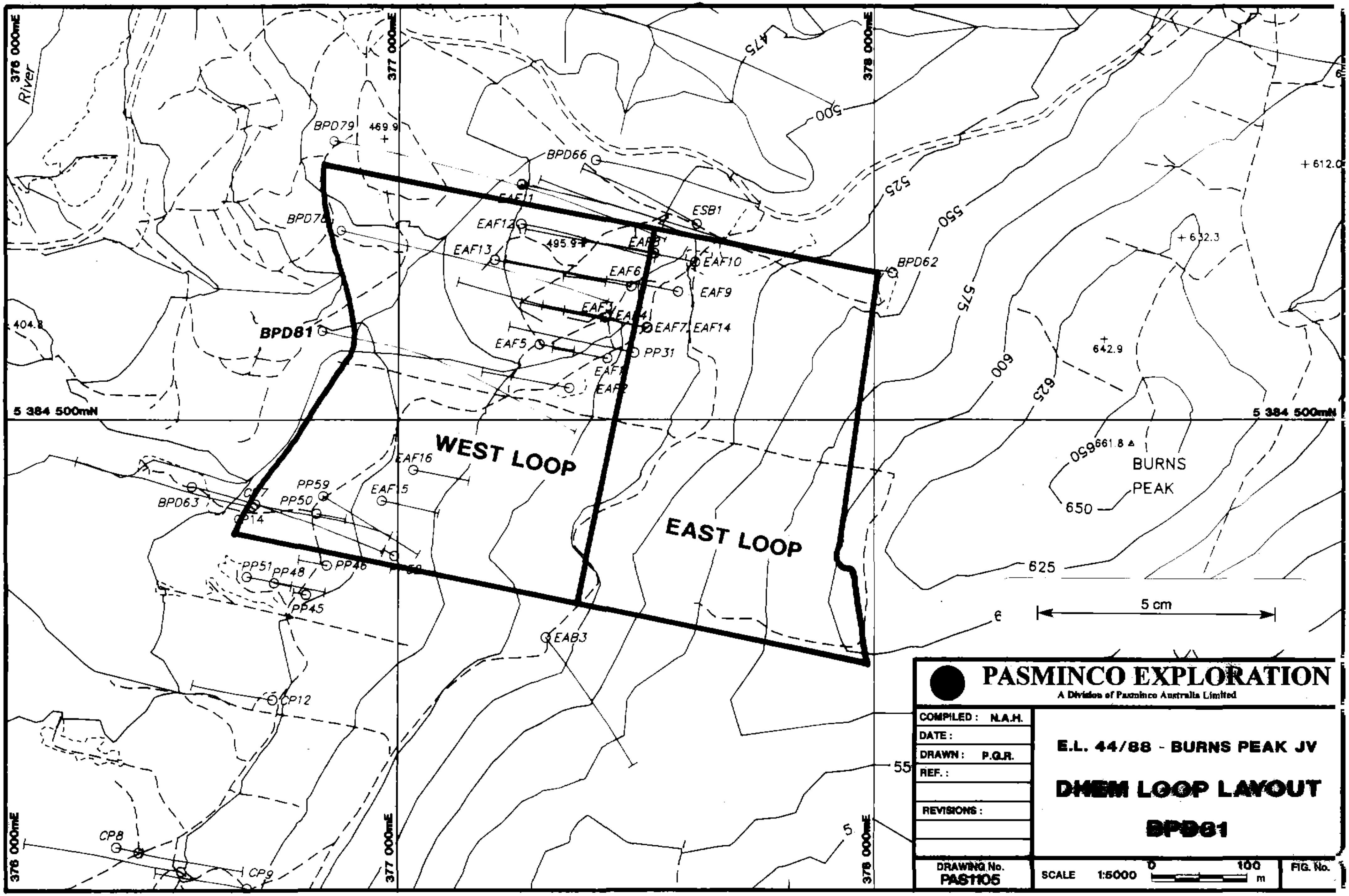
Client	: Pasminco Exploration	Hole	: BPD81
Grid	: Burns Peak	Tx Loop	: West
Date	: May 22, 1994	File name	: BPD81WZ.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 17 channels

Scale: 1:2500 Unit Scale: 1cm = 1 nT



845341



PASMINCO EXPLORATION

A Division of Pasminco Australia Limited

COMPILED : N.A.H.
DATE :
DRAWN : P.G.R.
REF. :
REVISIONS :

E.L. 44/88 - BURNS PEAK JV

DHEM LOOP LAYOUT

BPD81

DRAWING No. PAS1105
SCALE 1:5000
FIG. No.

845342

APPENDIX 14

EL 44/88 Shale Basin Ground Magnetics

845043

MEMORANDUM

PASMINCO
EXPLORATION

A Division of Pasminco Australia Limited.
A.C.N. 004 074 962

Old Burnie Railway Station
Burnie, Tasmania 7320
G.P.O. Box 886
Burnie, Tasmania 7320

TO: RA Poltock

FROM: PW Basford

DATE: 27 October 1994

SUBJECT: **EL 44/88 Shale Basin Ground Magnetics**

FILE: EP/02/3006/8.4

Five lines of ground magnetic data were collected by Pasminco employees on EL 44/88 Burns Peak, in the region known as Shale Basin, during October 1994. Two Geometrics G856 magnetometers were used, one as the recording magnetometer where a station spacing of 10m was employed. Line spacing was 200m with a total of 8 line kilometres surveyed (Pas Plan 1143). The other magnetometer was used as a base station, cycling every thirty seconds.

The data was processed for diurnal correction by the Magloc program and station assignment was carried out using the spreadsheet Quattro Pro. Profiles of the data have been generated from the program POTENT, with plots scaled at 1:10000 for the X axis (profile distance) and 1:200 for the observed response; Y axis (Pas plan 1144).

The plots indicate observed response to be noisy, with overall variation not greater than 20nT (except for some anomalous spikes). Major negative spikes occur at one end of three lines (6000N, 6200N and 6800N). These have been attributed to the magnetometer not being tuned in to the area, as they occurred at the start of surveying each day and there is no trend across the other lines for this response to be considered real.

There is also an apparent north-south gradient with the data to the north having a higher background response, decreasing to the south.

The data has been further processed to 'smooth' the responses, by passing a three point bell shaped averaging filter over the data (conducted in Quattro Pro). This filter uses the value to be smoothed and the two values either side, each having the weights' 0.5, 0.25 and 0.25 respectively. The resultant effect (plus the removal of the end spikes and sharp drop at 4940E) can be seen on Pas plan 1145.

The data clearly shows a drop in the magnetic response from west to east for lines 6800N, 6600N and 6400N. As lines 6200N and 6400N go only as far west as station 4000E, this drop is not as evident, however, the same trend may be inferred from the build up in response west of 4200E.

Overall there appears to be a large central low in the data, either due to a lithological unit with very low percentage of magnetite, or magnetic depletion of lithological units. Lines 6400N and 6600N show the best 'low', however, the broad low is less than 10nT in magnitude.

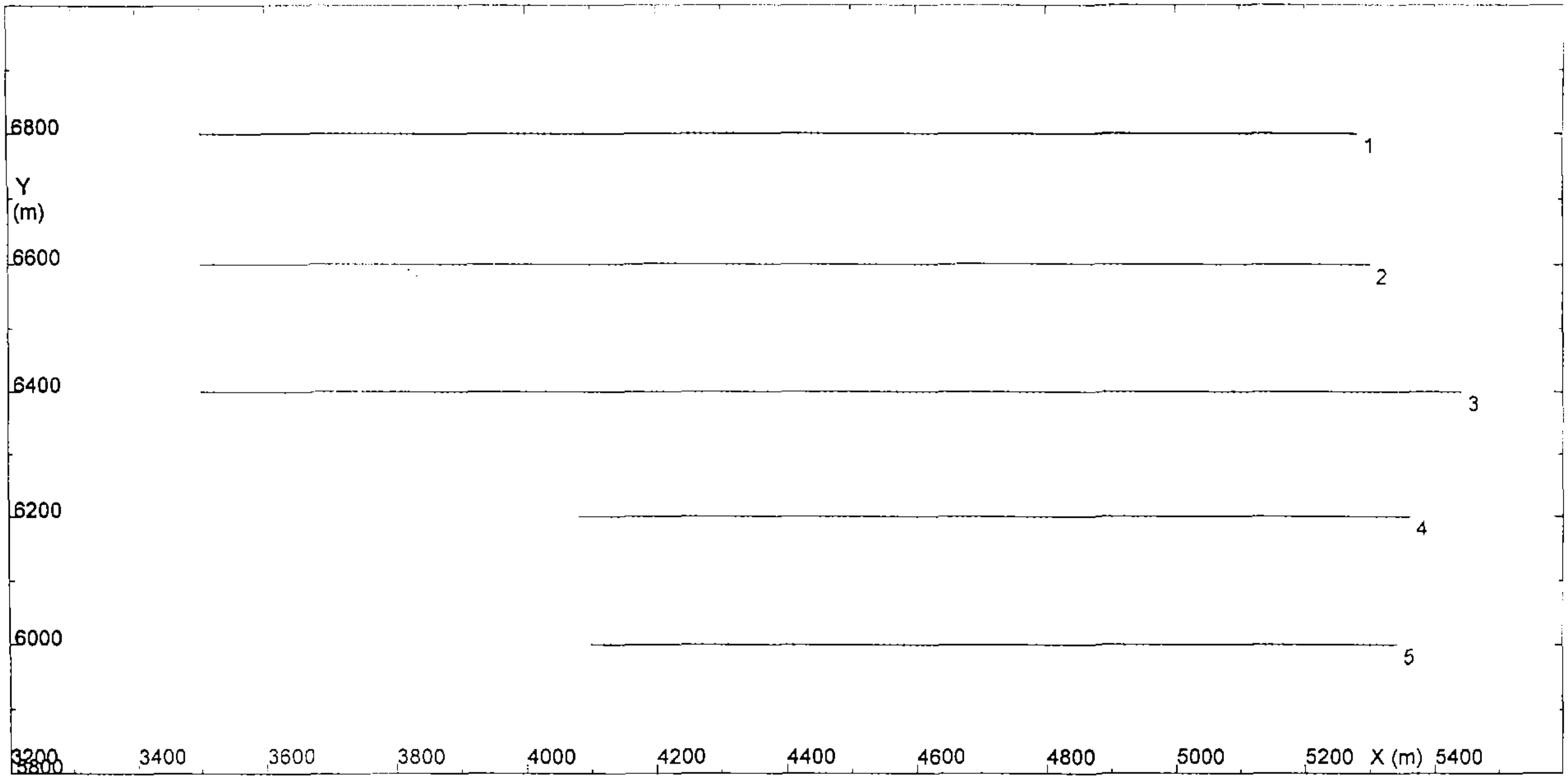
All lines have several small (>5nT) low 'pockets', which may be attributed to thickness variation of cover, lithological boundaries or zones of depletion. Responses on line 6400N show the widest variation, of which some appear to be magnetic depletion or thin lithological contacts. The cause of the responses is not likely to be due to topography as the area has a regional slope from east to west. However, this topographic change may have a small relationship to the overall observed magnetic response.

It is also evident in the five lines that there may be a small lithological change or zone of non-depletion around 5200E (not as pronounced on line 6800N).

Follow up of the ground magnetics should be initially done by overlaying the mapped geology to determine any correlation. This may aid in determining if a unit has undergone magnetic depletion. The three most northern lines indicate more variation, partially due to the data further west. However, the lows are still evident on the southern two lines, with the variation over a smaller range, inferring greater magnetic depletion? to the north.

Paul Basford

NB. Ground magnetic data collected to the south in January of this year and interpreted by Neil Hughes in March 1994 has not been incorporated with the current data. This should be conducted in the future. However, before the data is combined a base shift of 300nT needs to be removed (cause for which is unknown). Also, both surveys recorded along line 6000N. This line should be used as the pivotal tie-in, however, until the digital data is received (raw and processed) this can not be done.

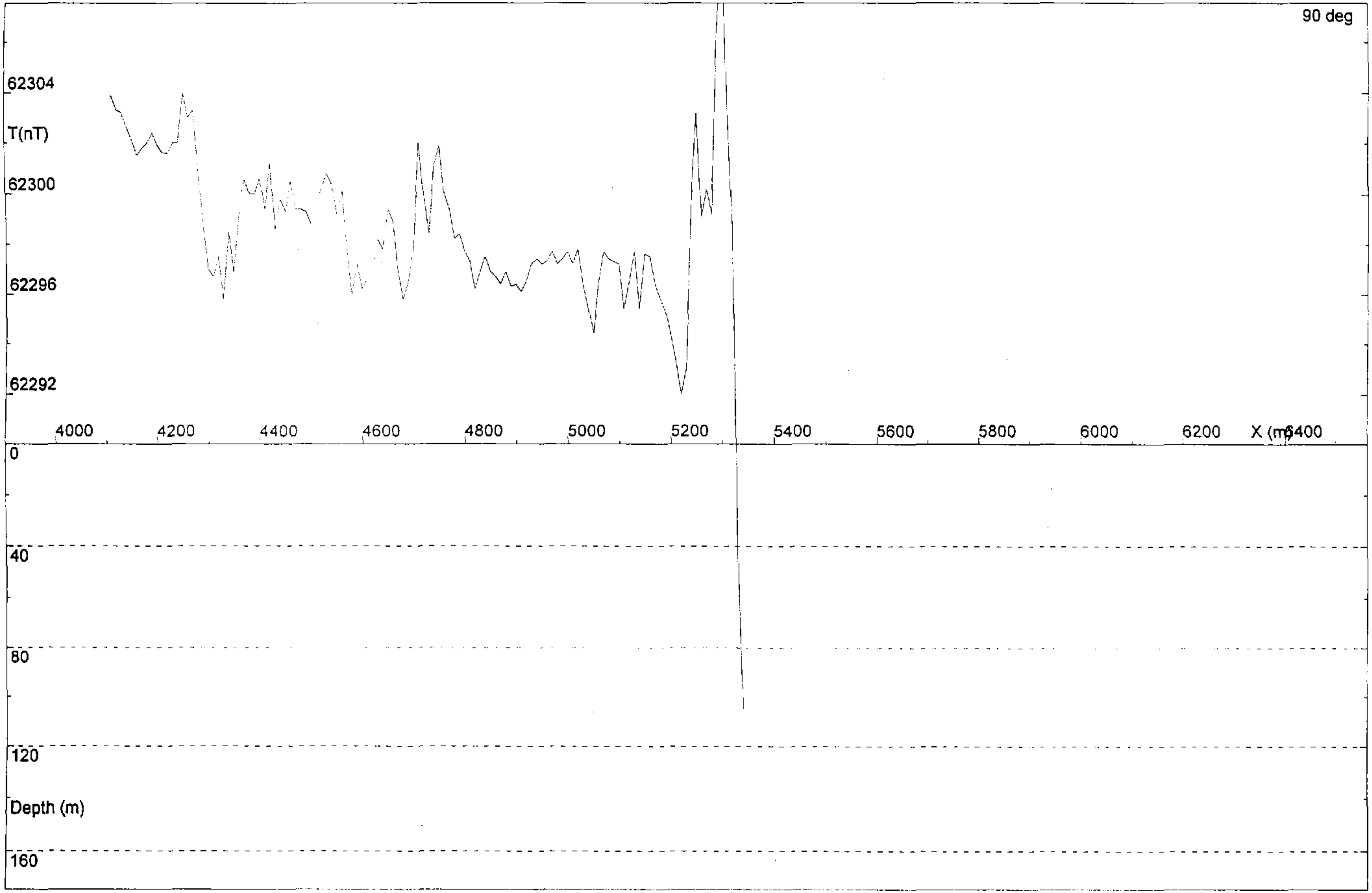


Observations:	Shale Basin Ground Magnetics (Burns Peak)	**Scale 1:10000**
Model:		
POTENT v3.04	Plan drawn at 09:33 24/10/1994 for Pasminco Exploration	

5 cm

845345

Pas Plan 1143



Observations: Shale Basin Ground Magnetics (Burns Peak)

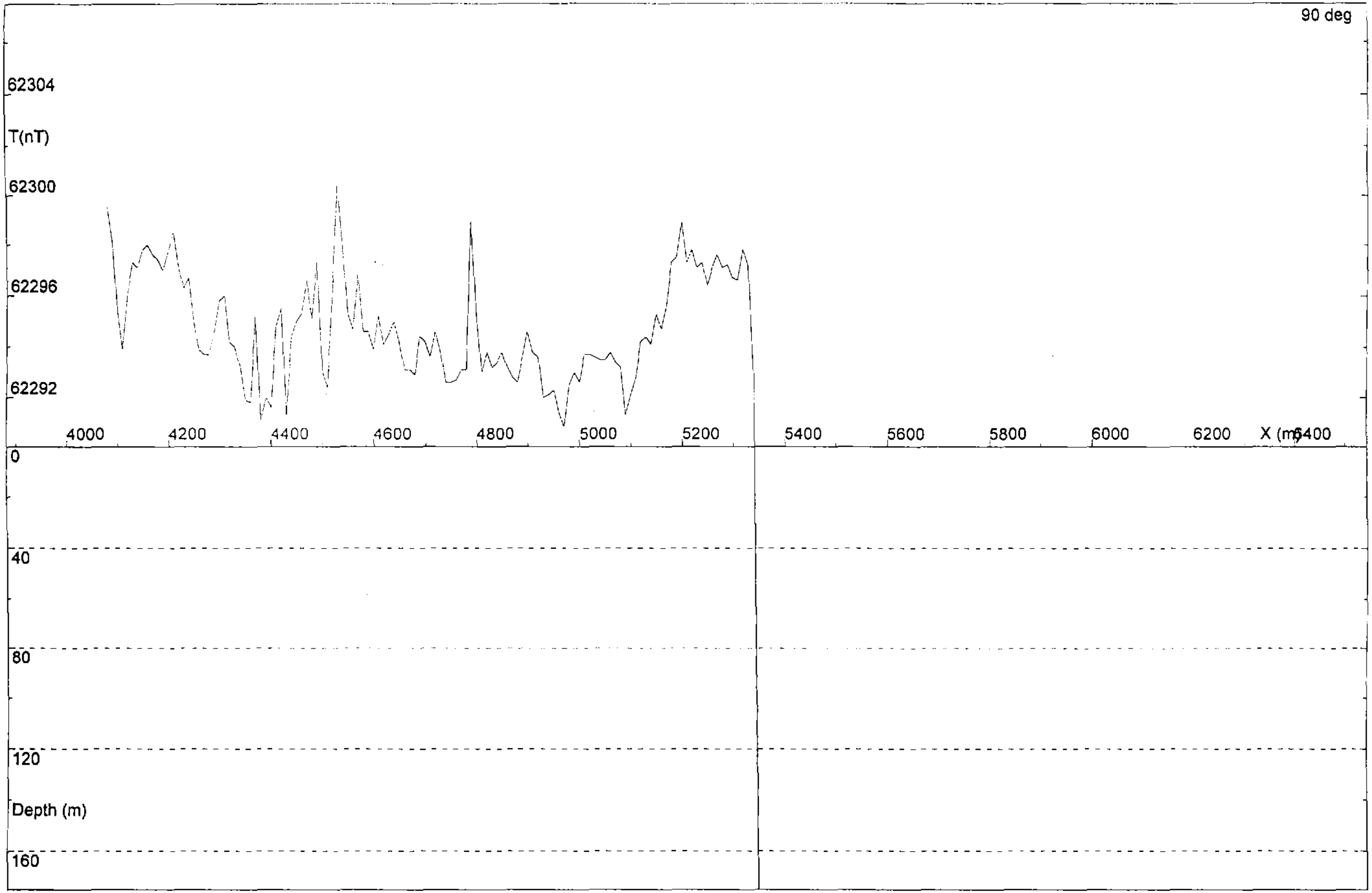
Profile #5; Line 6000

Model:

5 cm

Scale 1:10000

Pas Plan 1144a



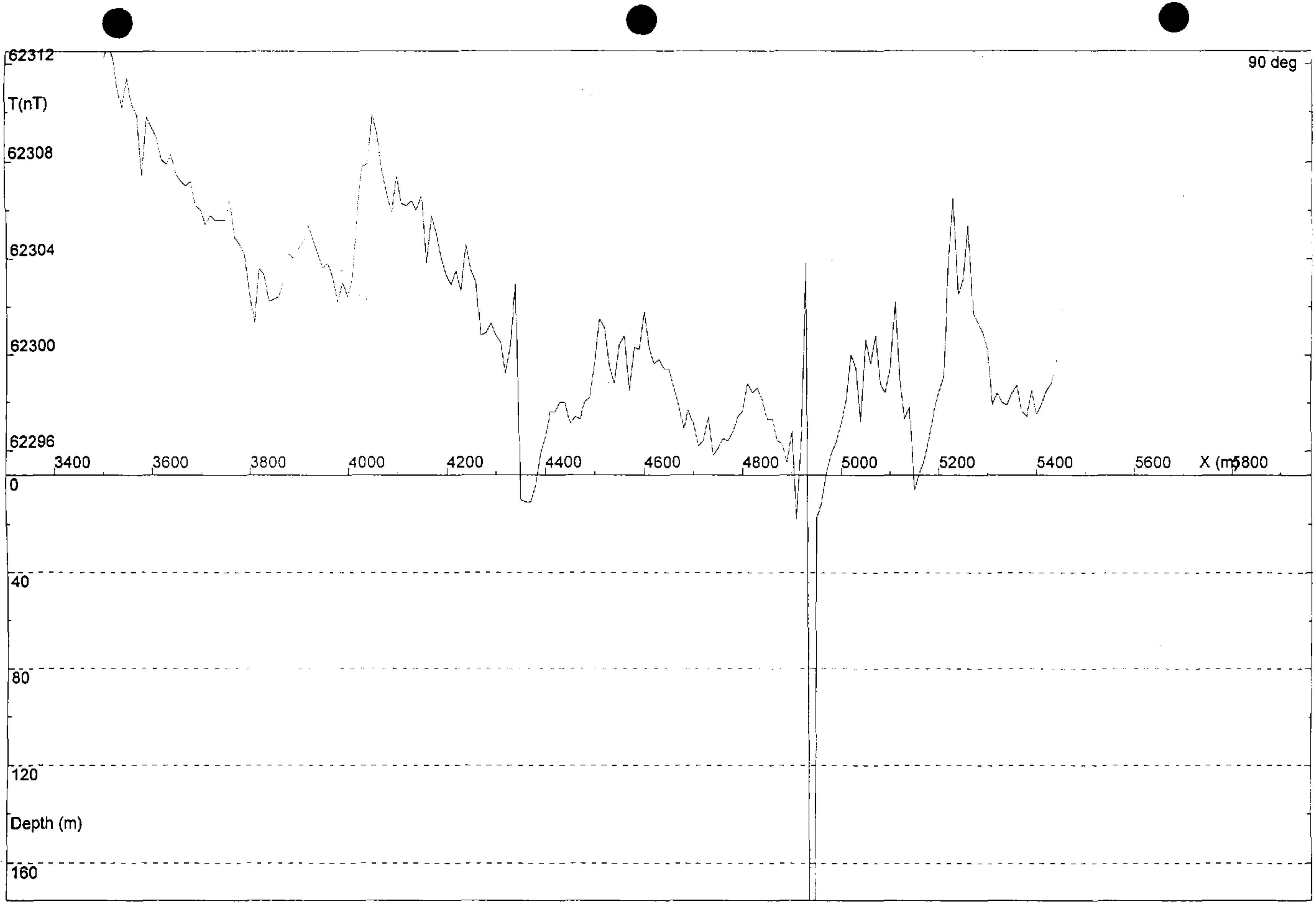
Observations: Shale Basin Ground Magnetics (Burns Peak)
Profile #4; Line 6200
Model:

5 cm

Scale 1:10000

Pas Plan 144b

845347

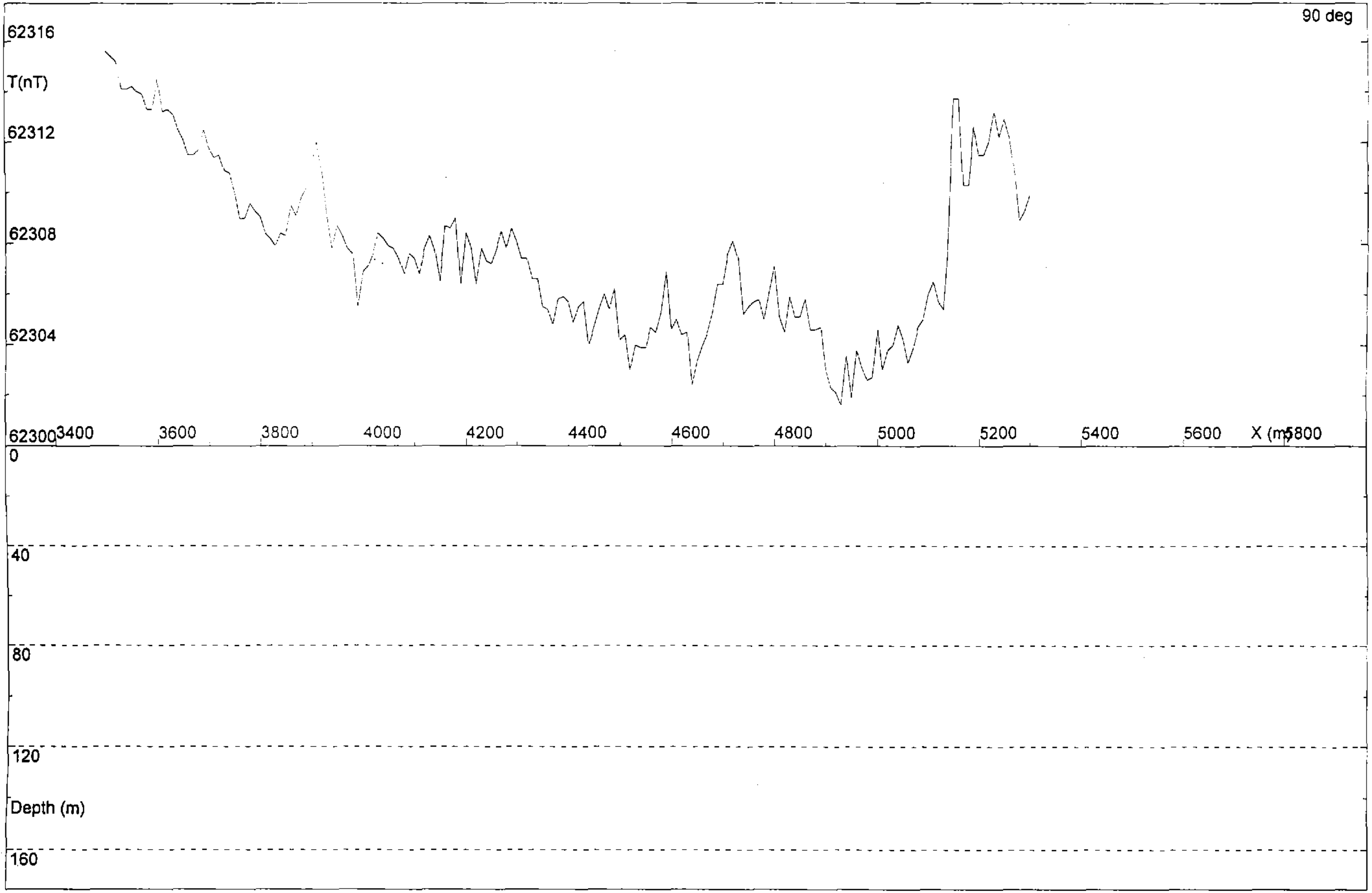


Observations: Shale Basin Ground Magnetics (Burns Peak)
Profile #3; Line 6400
Model:

5 cm

Scale 1:10000

Pas Plan 114c



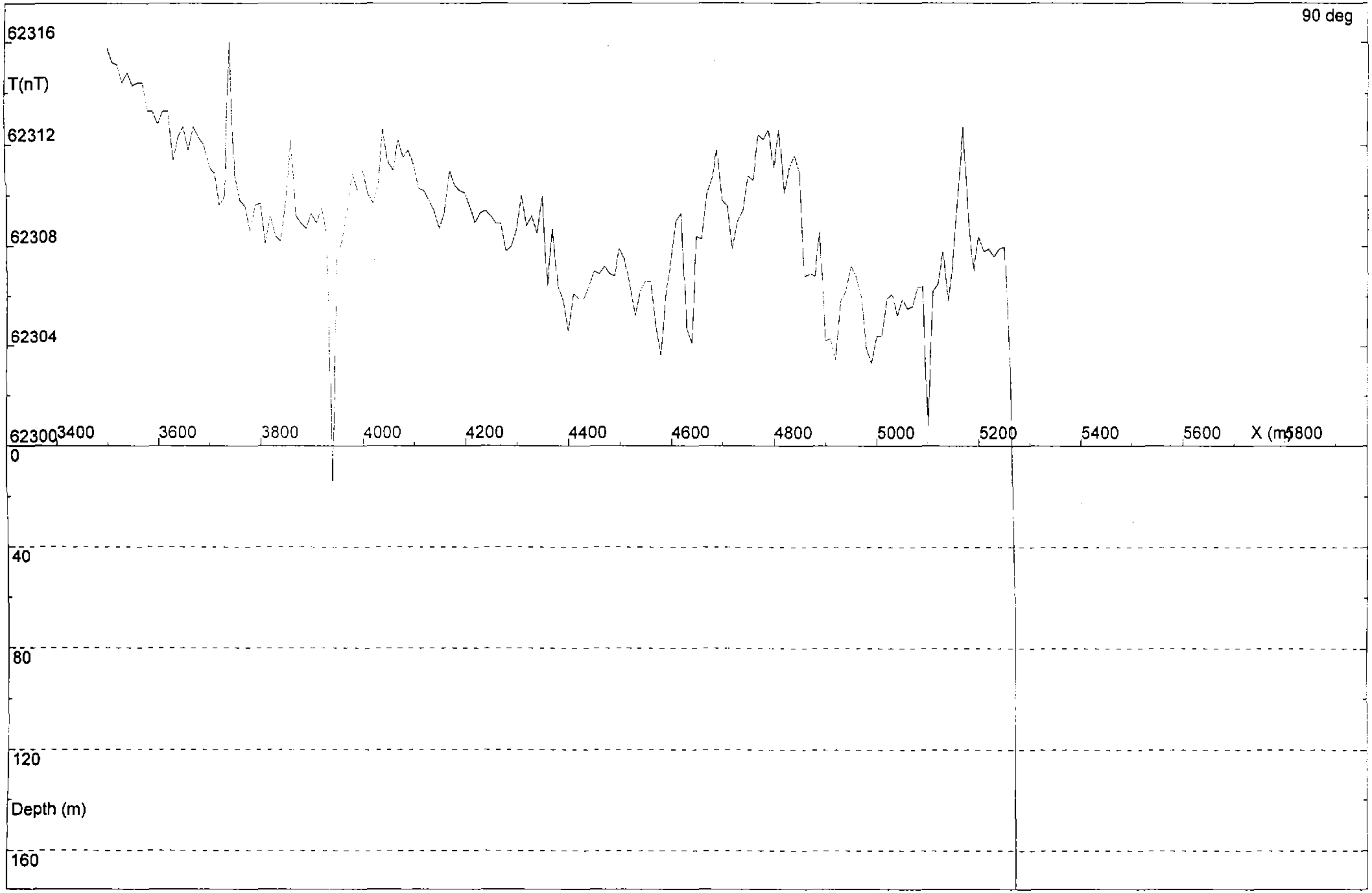
Observations: Shale Basin Ground Magnetics (Burns Peak)
Profile #2; Line 6600
Model:

5 cm

Scale 1:10000

Pas Plan 1144d

845349

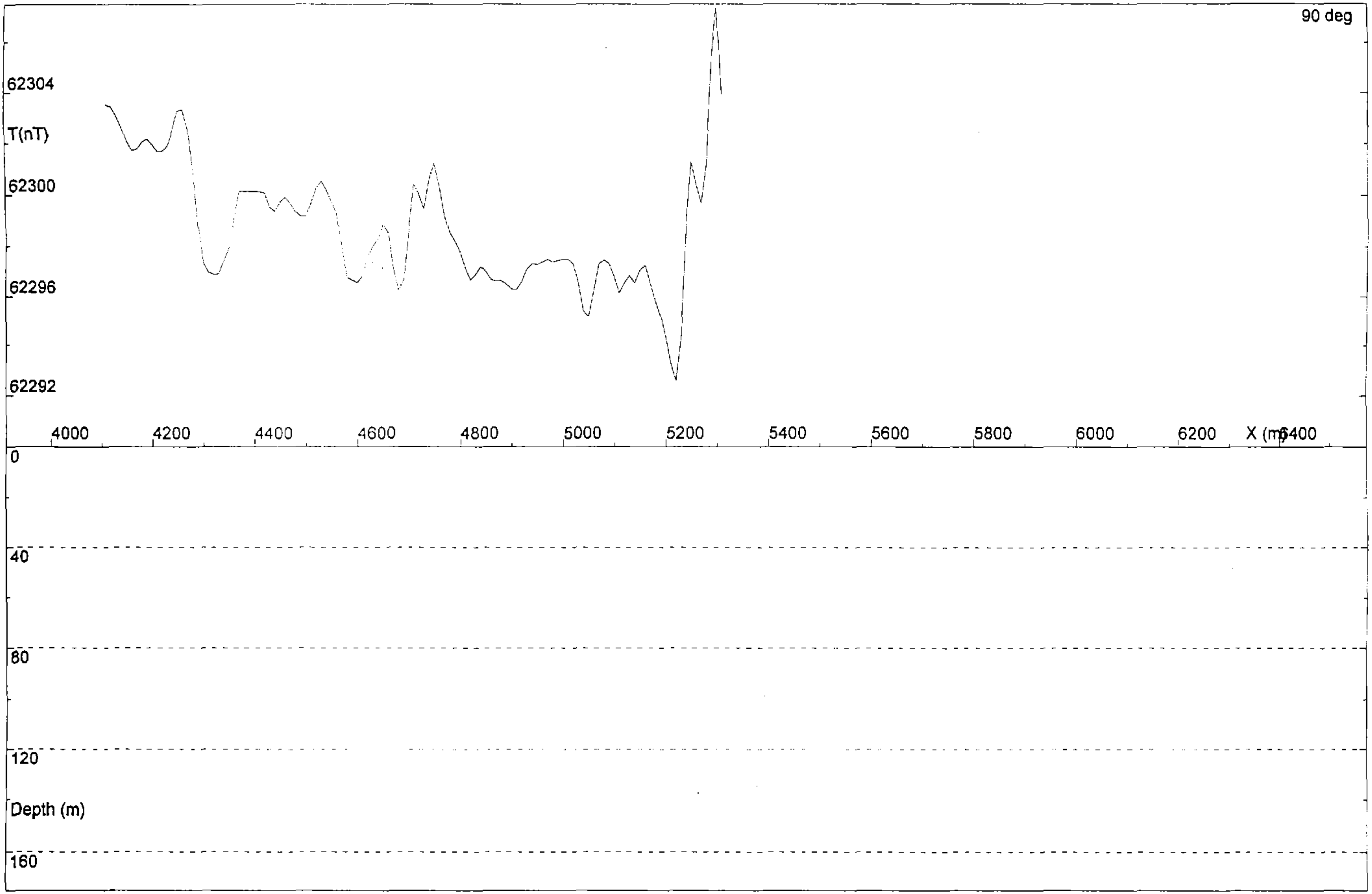


Observations: Shale Basin Ground Magnetics (Burns Peak)
Profile #1; Line 6800
Model:

5 cm

Scale 1:10000

Pas Plan 1144e

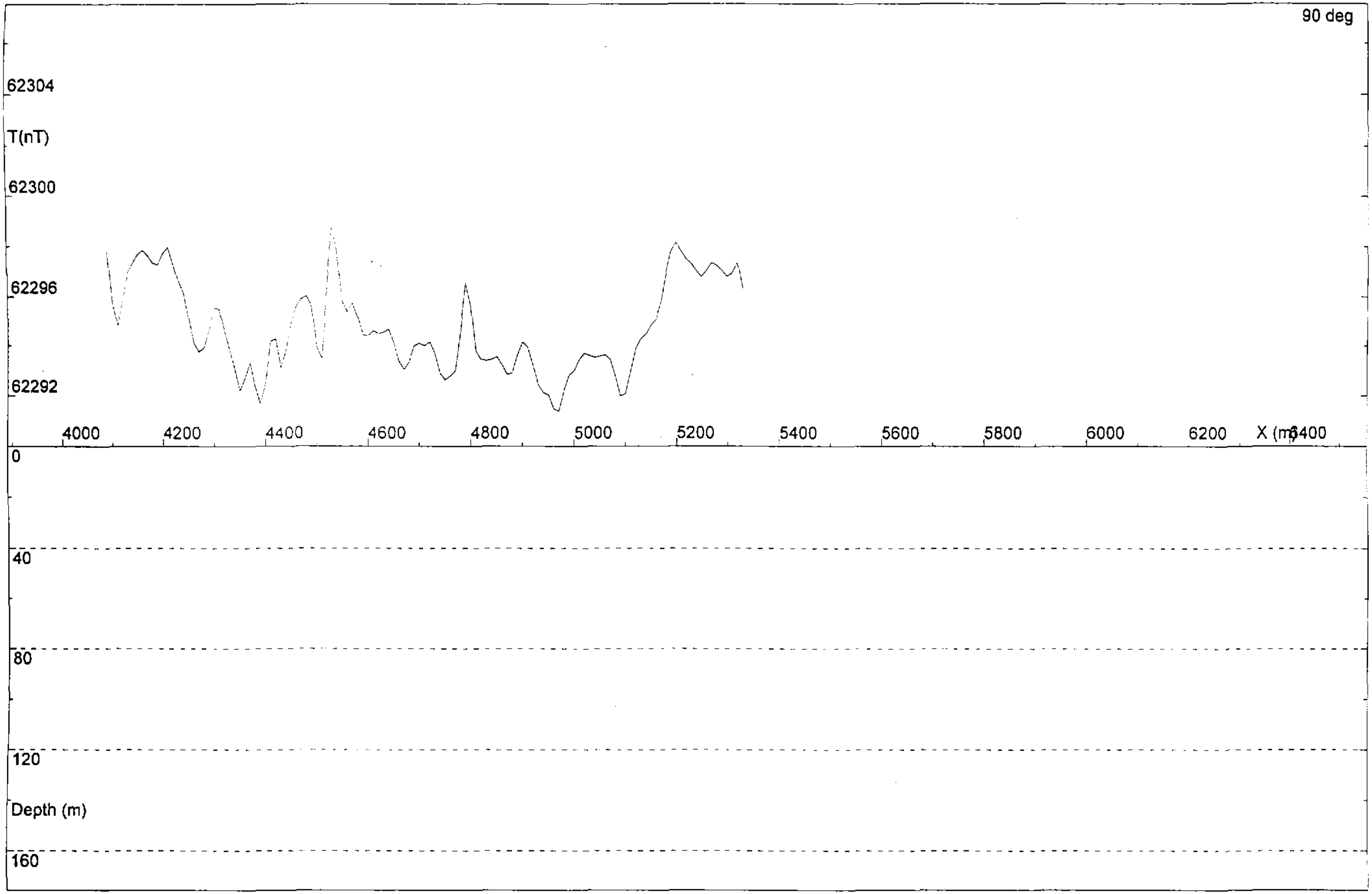


Observations:	Shale Basin Ground Magnetics (Smooth filtered)
Profile #5;	Line 6000
Model:	

5 cm

Scale 1:10000

Pas Plan 1145a



Observations: Shale Basin Ground Magnetics (Smooth filtered)

Profile #4; Line 6200

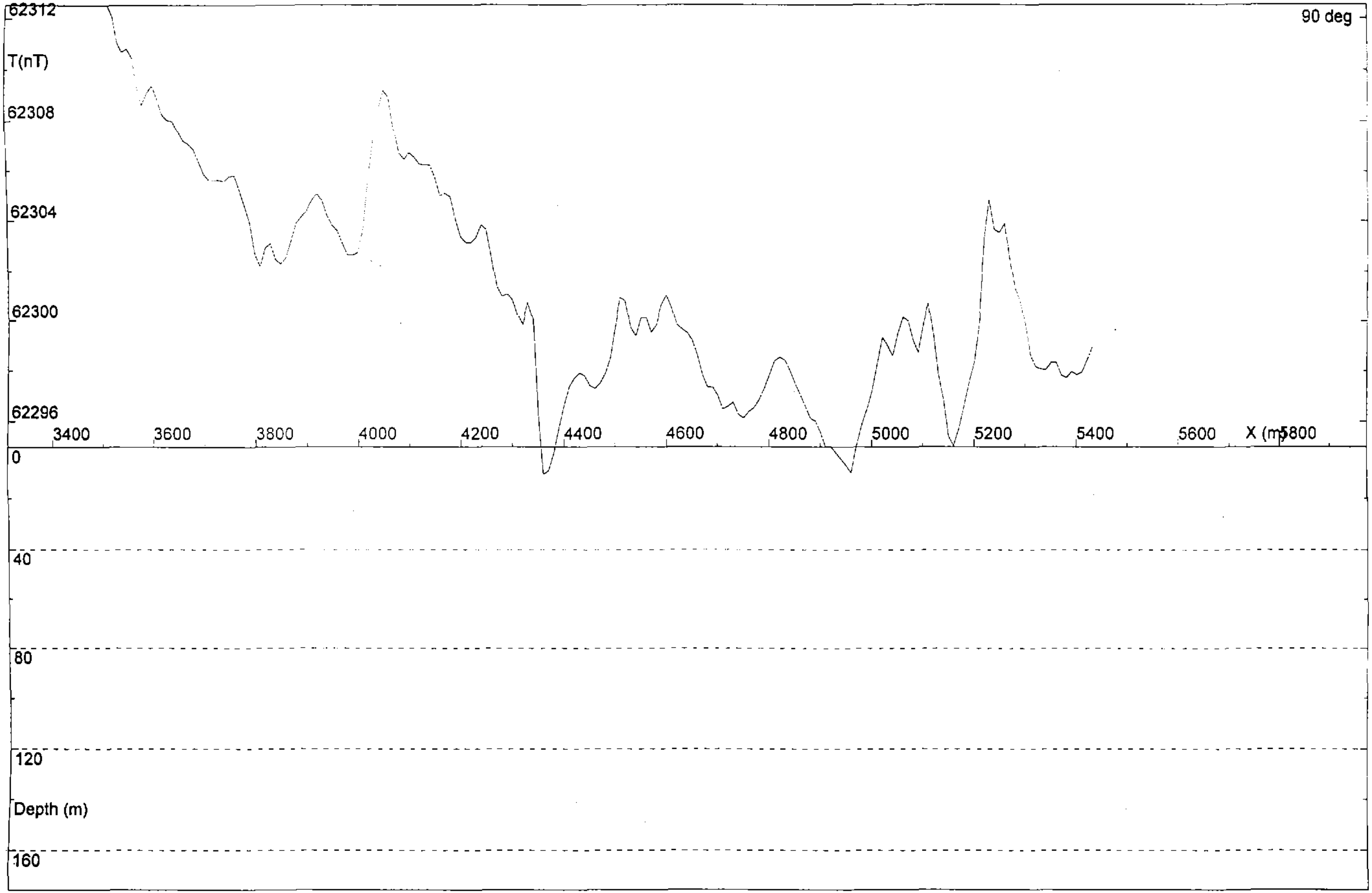
Model:

5 cm

Scale 1:10000

845352

Pas Plan 1145b

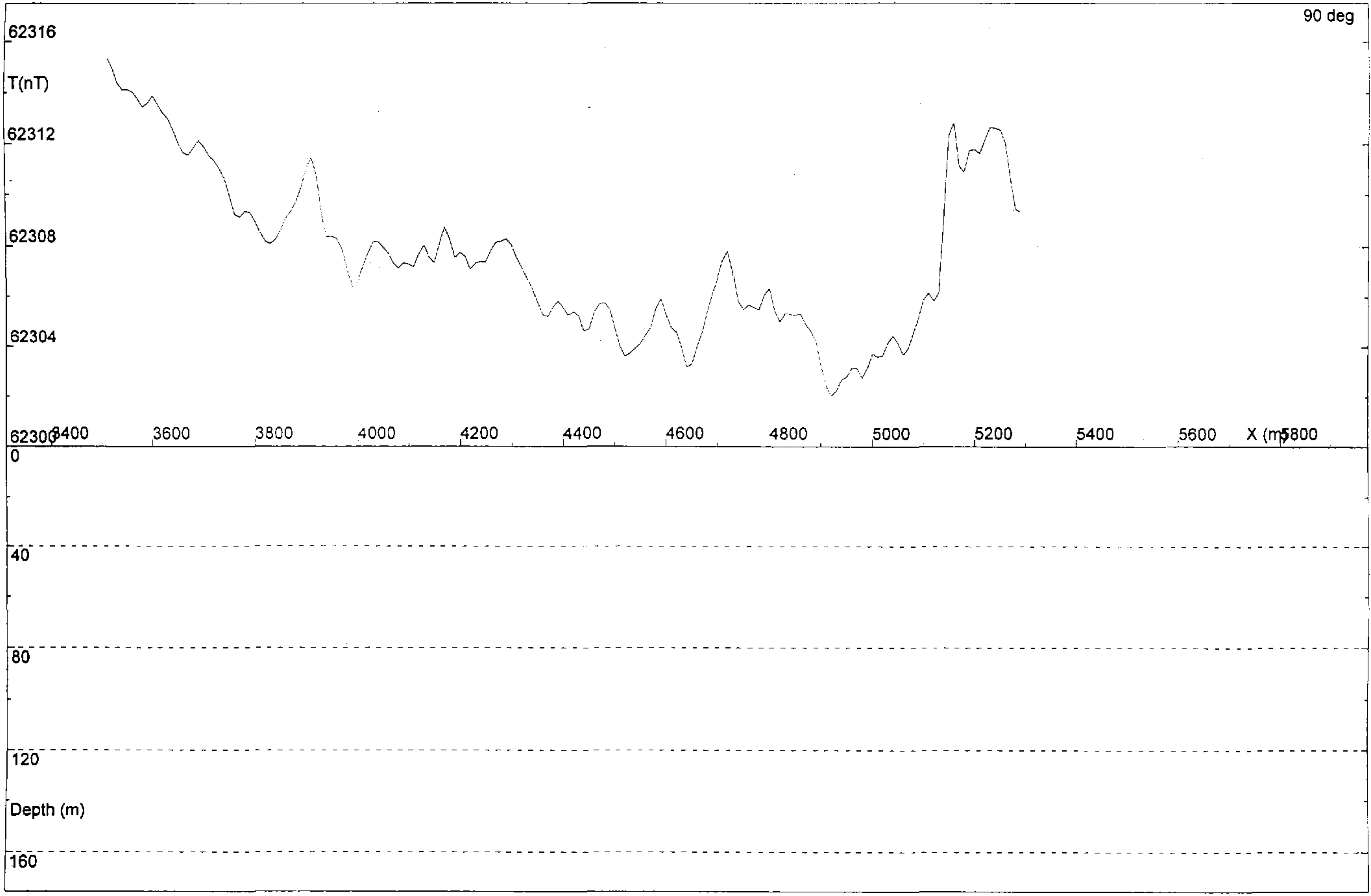


Observations: Shale Basin Ground Magnetics (Smooth filtered)
Profile #3; Line 6400
Model:

5 cm

Scale 1:10000

Pas Plan 1145c



Observations: Shale Basin Ground Magnetics (Smooth filtered)

Profile #2; Line 6600

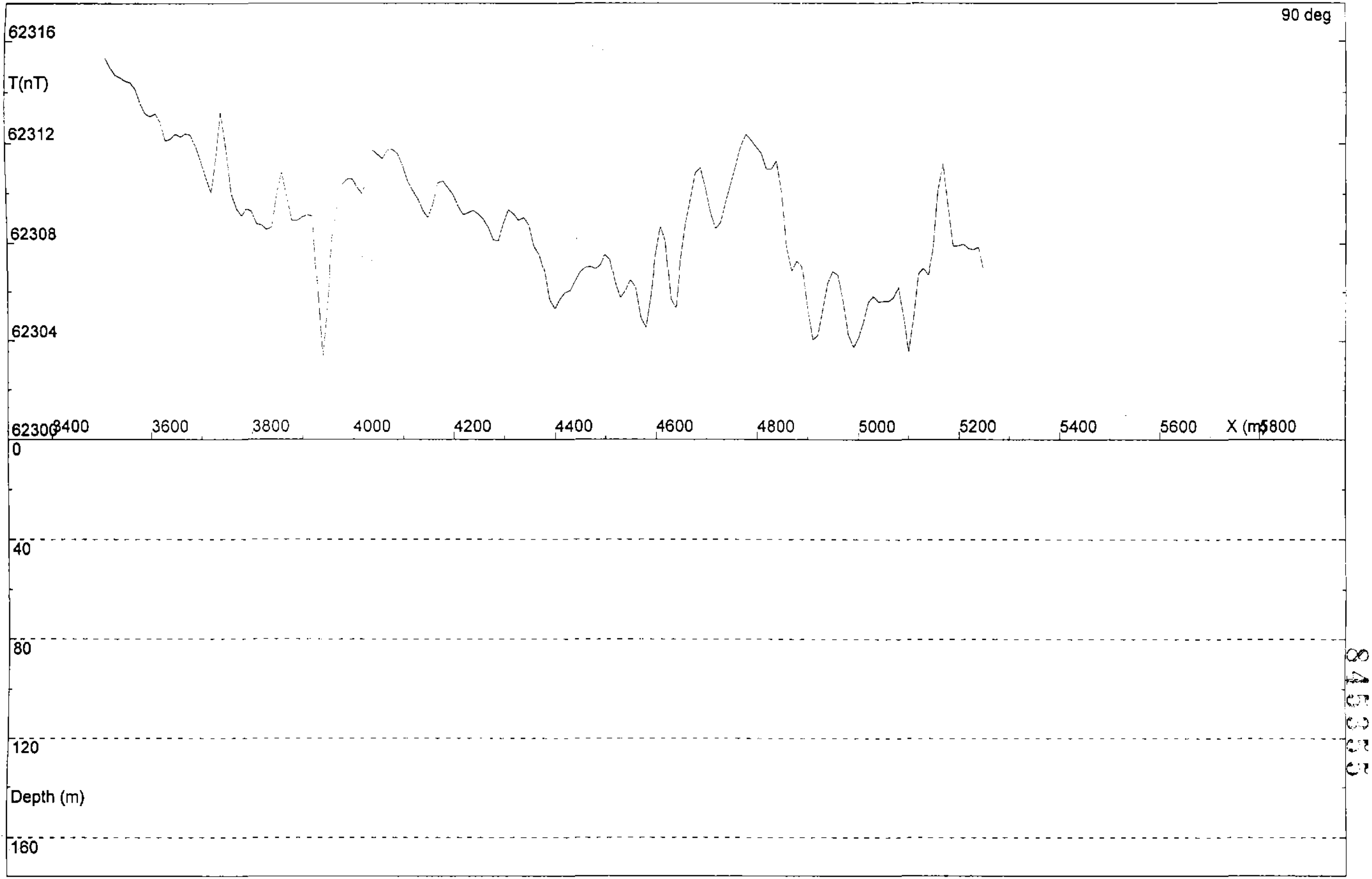
Model:

5 cm

Scale 1:10000

Pas Plan 1145d

845351



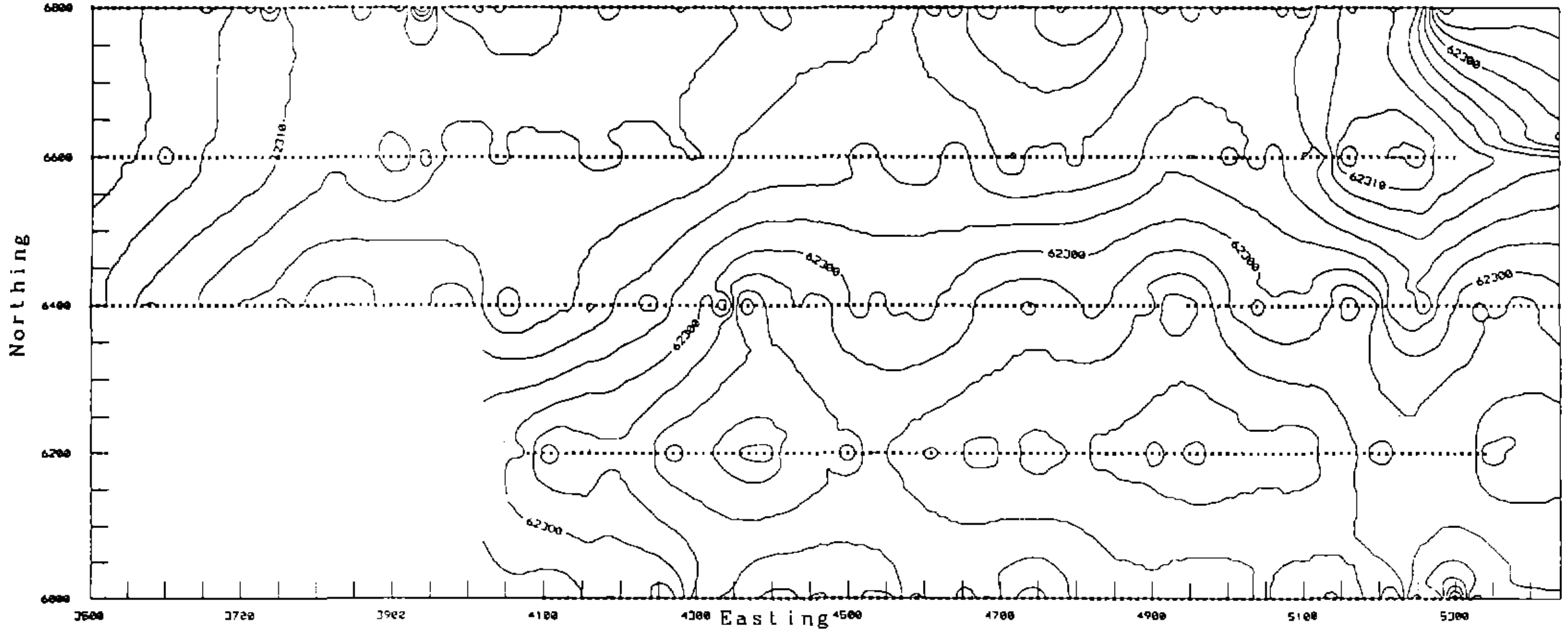
Observations: Shale Basin Ground Magnetics (Smooth filtered)
Profile #1; Line 6800
Model:

5 cm

Scale 1:10000

Pas Plan 1145e

Shale Basin Ground Magnetics
Burns Peak EL 44/88



SCALE 1 cm. = 100 Metres

5 cm

845356

PAS PLAN 1149

APPENDIX 15

Structure of the Hollway Andesite

LEAMAN GEOPHYSICS

Registered office:
3 MALUKA STREET, BELLERIVE, TAS. 7018
All correspondence to:
GPO BOX 320 D, HOBART, TAS. 7001
Telephone: (002) 44 1233
Fax: (002) 44 6674

MEMORANDUM

TO: PASMINCO EXPLORATION, BURNIE

ATTENTION: F.G. Fitzgerald, M. Saxon

FROM: D.E. Leaman

DATE: May 30, 1994

STRUCTURE OF THE HOLLWAY ANDESITE

I have examined the structure and relationships between the Hollway Andesite, the surrounding volcanics and the pyrite zones (labelled P1, P2 in Figure 1). I have reviewed the possible implications of the magnetic lows which appear to be directly related to the altered zones.

Figure 1 (actually Fig 6A, from a Memo dated Apr 20, 1992 on the Cone Hill-Pinnacle Prospect) presents what I consider to be the best magnetic data available. It is part of my original residual separation for the Burns Peak area and a slightly smoothed full contour map was later produced by R.G. Richardson based on my technique. I have used this original version for my interpretation.

Five profiles have been selected and dissected. These sample apparently normal relationships and magnetic field patterns as well as each pyritic zone.
This analysis was intended as a detailed examination of the options suggested in my "Interpretation Update; Burns Peak-North Pinnacles Ridge", of April 1993.
It is interesting to note the annual separations between these examinations around Burns Peak!

The model solutions are shown in Figures 2 to 6 and an alternate is included for profile "Burns". These models are consistent along the andesite unit and with earlier work. All suggest general dips to the NW and a fundamental root thrust since every element must be depth limited yet steeply dipping. Only the depth of this root thrust is in doubt since its definition depends on assumptions about near surface rock properties. It could be shallower than modelled but is unlikely to be deeper due to the marked observed gradients and the limitations these impose on the properties implied.

Inspection of Figures 3 and 6 shows that the mapped alteration is actually the western side of a zone which is magnetically distinct. The precise location of the mapped information may need checking. There is no doubt that subtractive property loss has occurred in the pyritic areas. A similar observation is true of the south Pinnacles area across the andesite (see Memo, *op. cit*).

I have experimented with the possible configurations of these zones and, while it cannot be stated beyond all doubt, it seems unlikely that any non 'concordant' association is feasible.

These sections and ideas cannot be confirmed by a gravity analysis since the coverage SE of Burns Peak is about the poorest in the region.

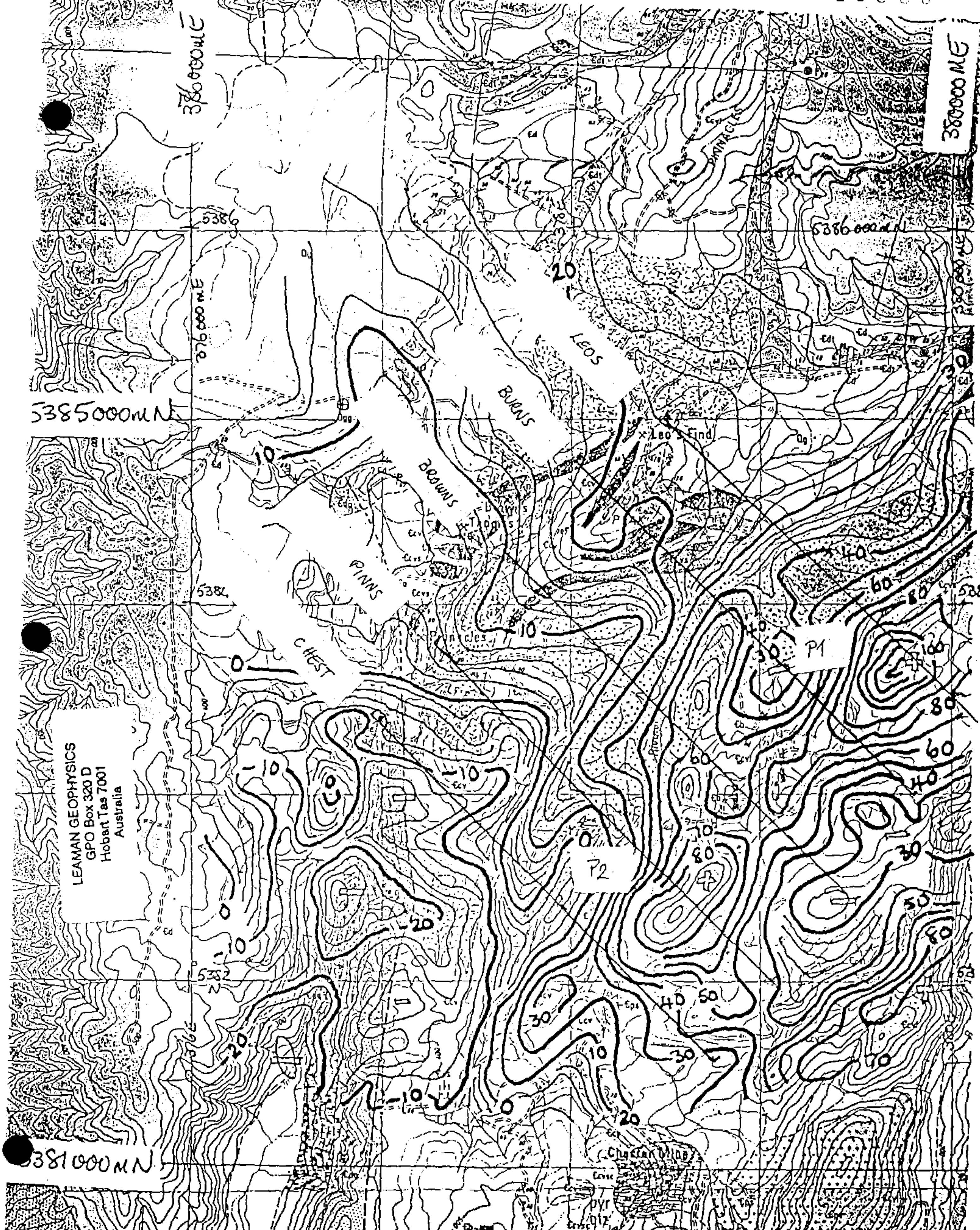
The entire interpretation has been summarised in Figure 7.
The contours present the variations in inferred magnetisations (multiplied by 10^5 cgs or 10^4 SI). These emphasize the altered character of the Pinnacles area overall but indicate that the alteration along the eastern side of the andesite might be regional. The two pyritic zones fall centrally into the areas with the greatest reduction in magnetisation.

Figure 7 also suggests the location of some major structures which have been proposed in the Burns Peak region. These are indicated by dots (structure or rift margins) and dashes (lineaments or crustal fracture patterns). Each dashed line is based on a regional review of residual gravity and magnetic data and my application of the SLOTS technique. The latter factor draws attention to the intersection of linears just east of the alteration (near the basalts!) and I would argue that the intersection of the ESE linear and the rift margins - a space now occupied by andesite - was the key site; it was held open by the ENE fracture. Alteration effects have spread from this site; along rift margins and into the dilated western block which has Cone Hill within it. Overthrusting has hidden the controlling elements. But this leads to an additional question. Why is the alteration reduced in the location of the active fracture between the known pyritic sites? Perhaps THIS is the truly anomalous portion of the andesite contact. Something else may be present. Basalts? Mineralisation? This position should be reviewed as, perhaps, should the Cone Hill area south of Pinnacles.

I hope these comments help with your target selection.

Sgd. D Leaman D.E. Leaman

845300



LEAMAN GEOPHYSICS
GPO Box 320 D
Hobart Tas 7001
Australia

RESIDUAL MAGNETIC DATA AND GEOLOGY BASE
(Mines Department base)

FIGURE 1

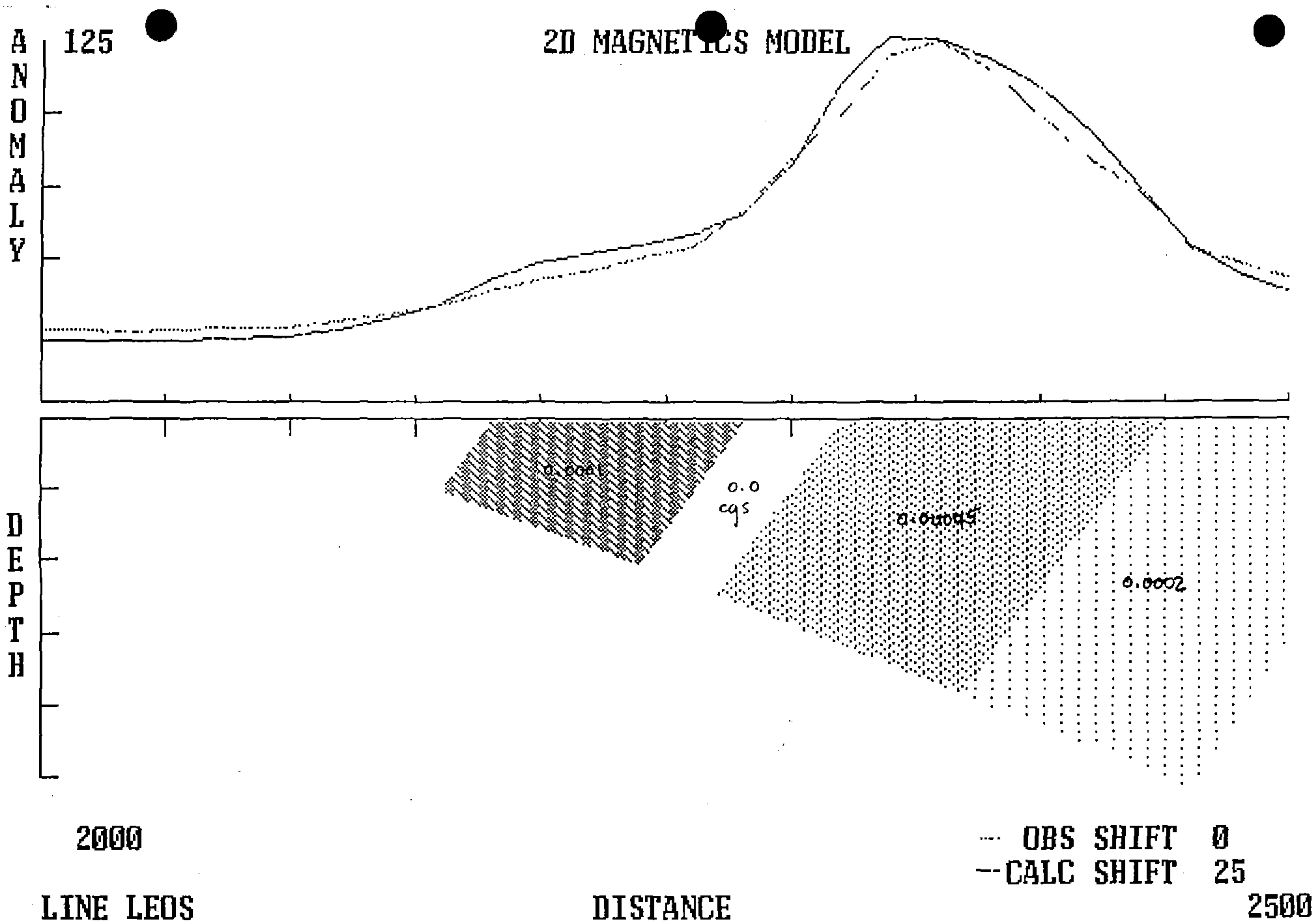
CODING FOR MODELS

MOUNT READ VOLCANICS

Normal	⁞
Elevated contrast	▒
Altered (reduced contrast)	░

ANDESITE

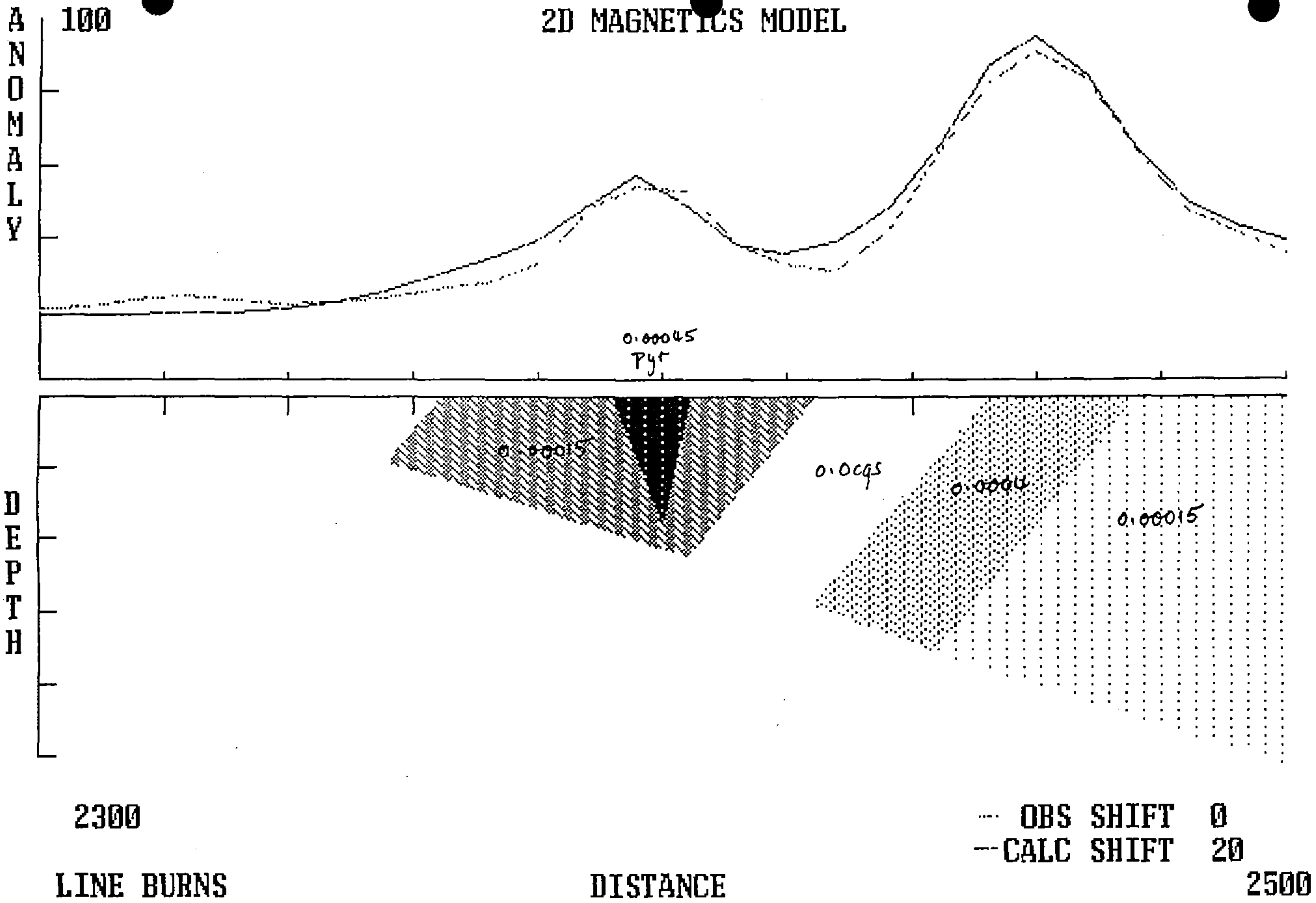
Normal (+ve contrast)	▧
Bulk altered (-ve contrast)	▒
Variation (+ve contrast)	▓
Variation (-ve contrast) incl pyr alteration	▨



LEOSMA NW-SE HOLLWAY ANDESITE FIGURE 2

LEAMAN GEOPHYSICS
GPO Box 320 D
Hobart Tas 7001
Australia

845002



BURNSMA NW-SE HOLLWAY ANDESITE FIGURE 3A

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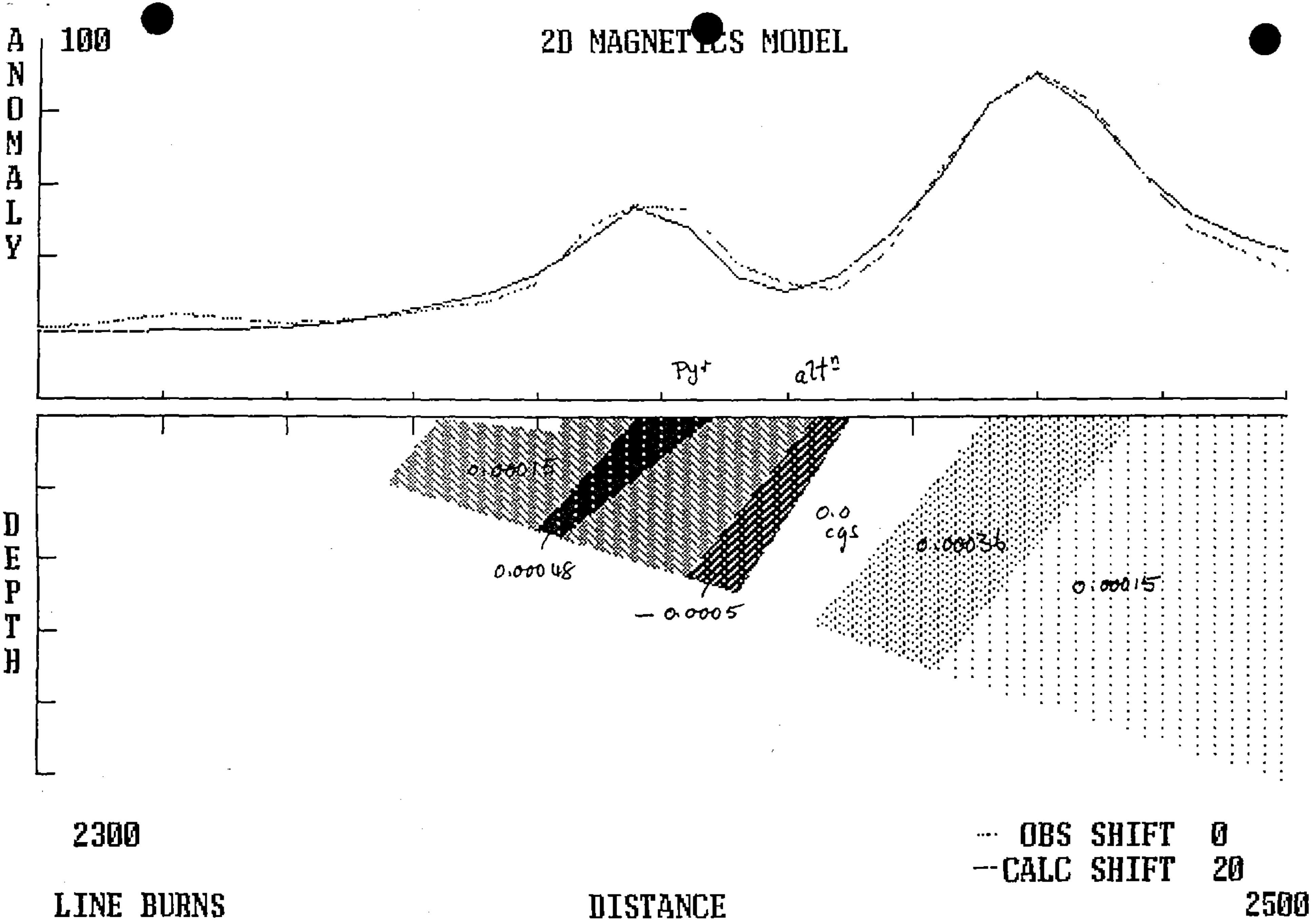
GPO Box 320 D
Hobart Tas 7001
Australia



BURNSMB NW-SE HOLLWAY ANDESITE FIGURE 3B

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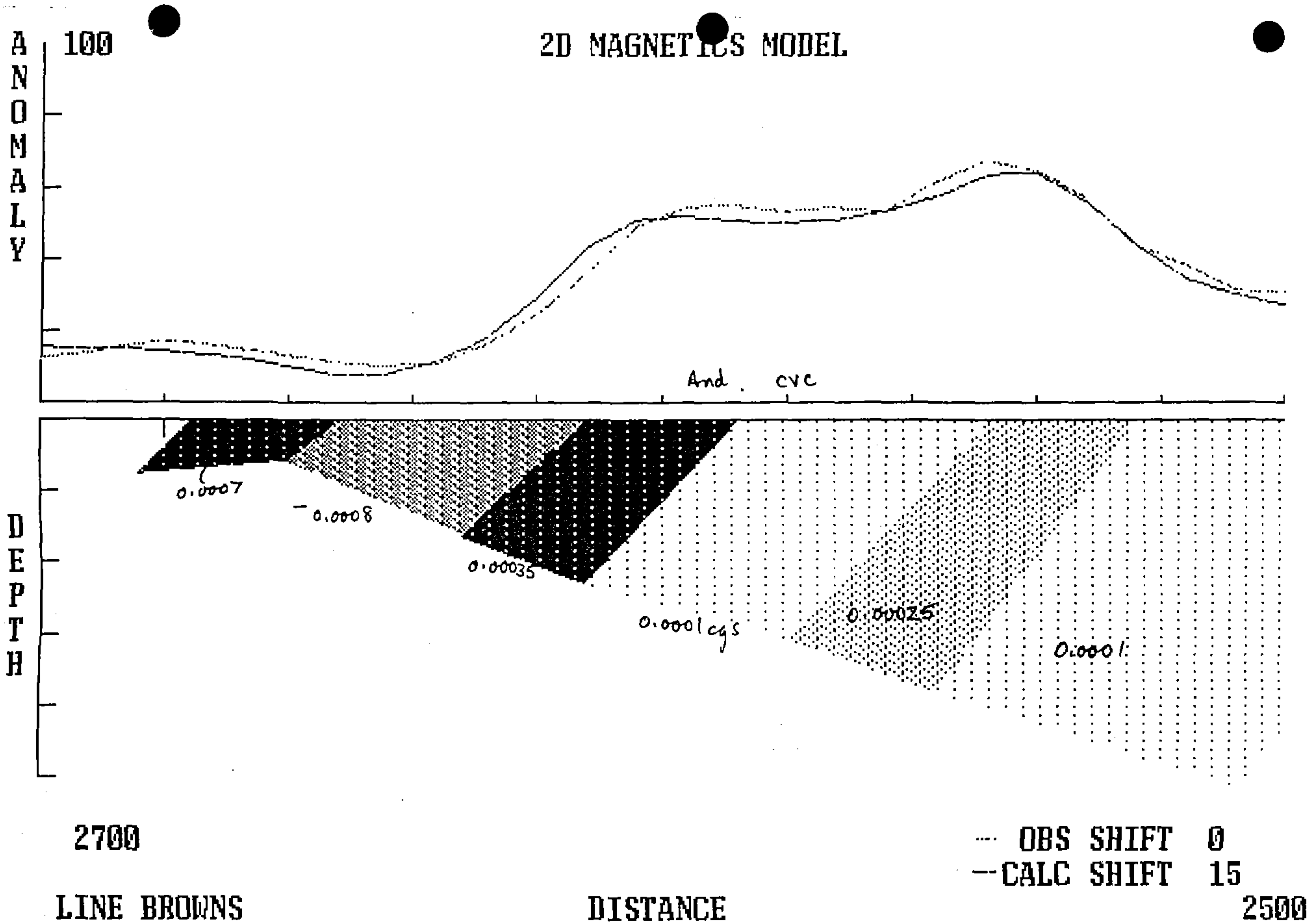
GPO Box 320 D
Hobart Tas 7001
Australia

843064



BROWNSMA NW-SE HOLLWAY ANDESITE FIGURE 4

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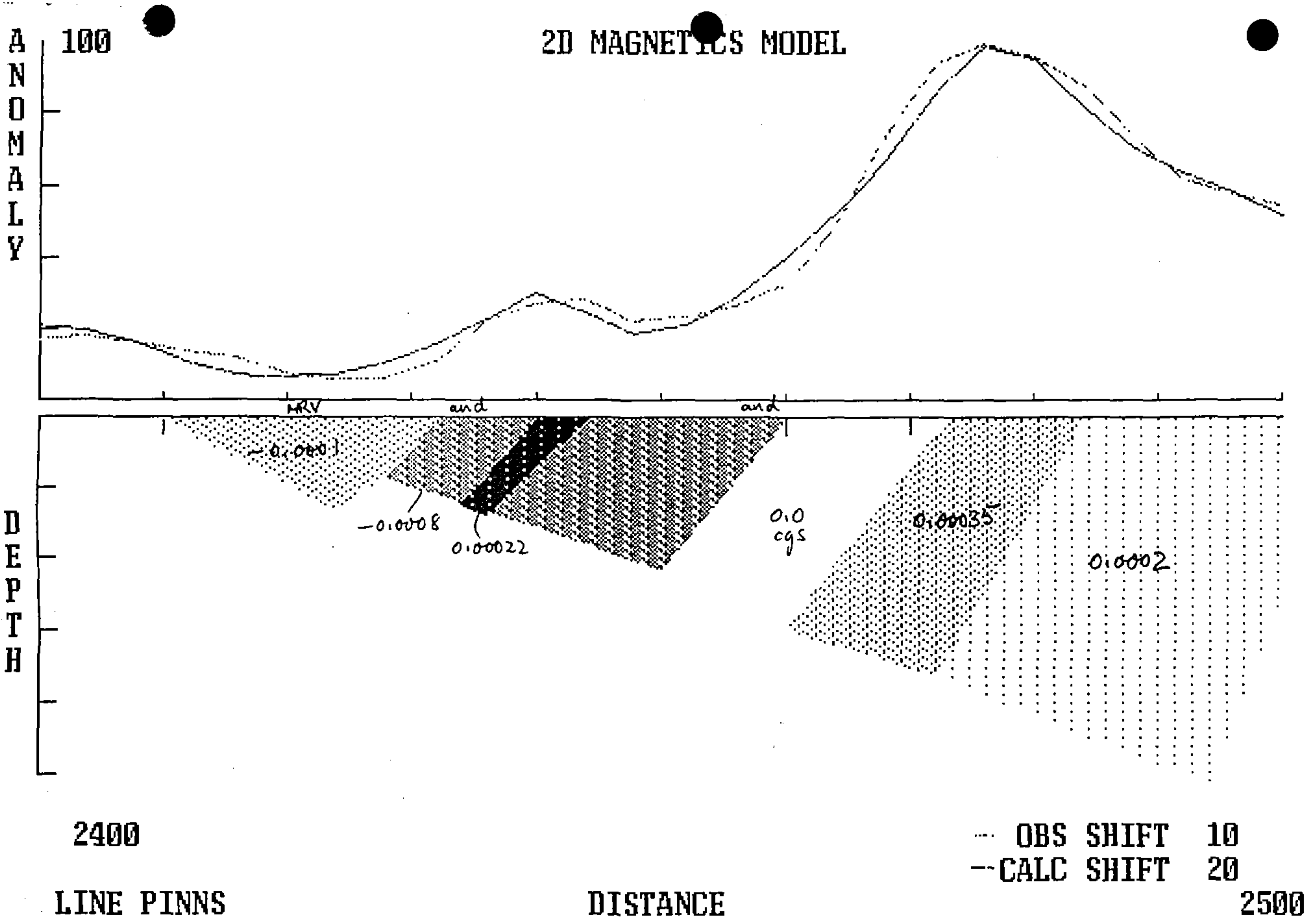
GPO Box 320 D
Hobart Tas 7001
Australia



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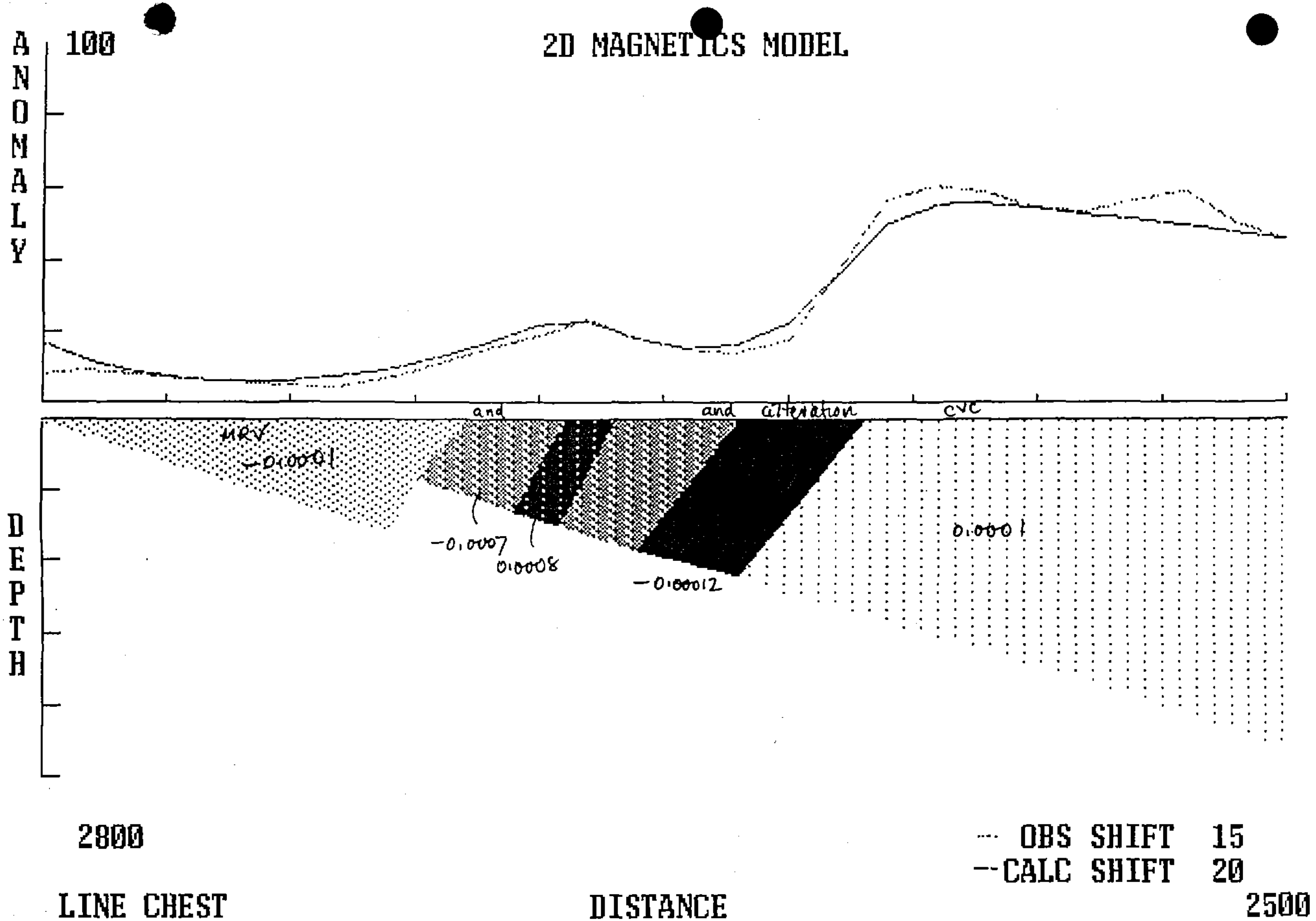
GPO Box 320 D
Hobart Tas 7001
Australia

PINNSMA NW-SE HOLLWAY ANDESITE FIGURE 5



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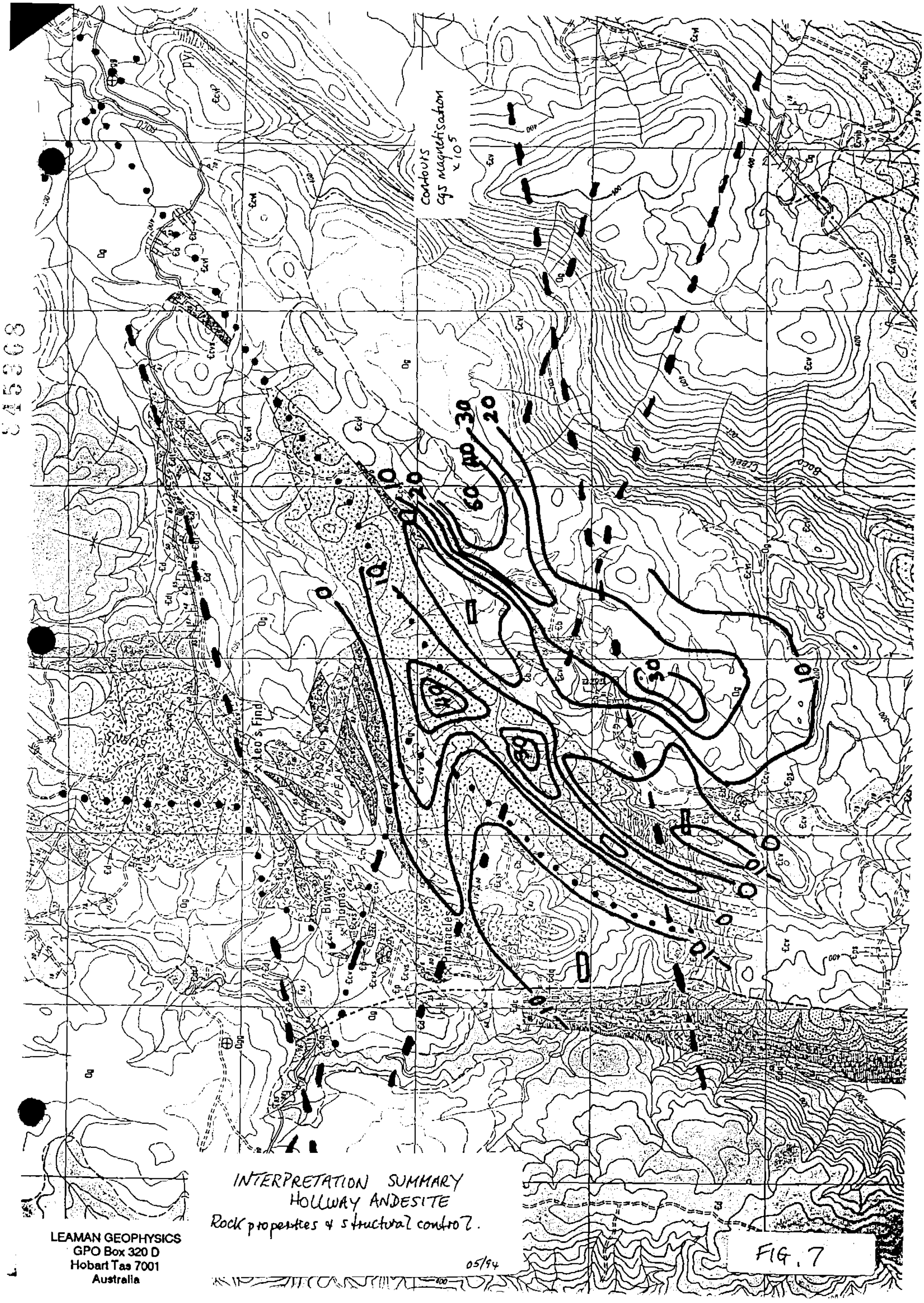
GPO Box 320 D
Hobart Tas 7001
Australia

CHESTMA NW-SE HOLLWAY ANDESITE FIGURE 6

843367



INTERPRETATION SUMMARY
HOLLWAY ANDESITE
Rock properties & structural control.

LEAMAN GEOPHYSICS
GPO Box 320 D
Hobart Tas 7001
Australia

05/94

FIG. 7

HOW TO "READ" THE MODEL INTERPRETATION DIAGRAMS

The model interpretation diagrams have a standard form and may be appraised consistently.

A title, describing the model or the particular version, is given at the bottom of the page.
A header, at the top of the page, describes the nature of the methods used (e.g. two dimensional - 2D) and whether gravity or magnetic data is involved.
Two scales are provided on the left hand side of the diagram. The upper scale defines the magnitude of the anomalous response. The full scale range is stated and there are five divisions of this range. The lower scale defines the depth range in the model. This is also divided into five parts and the maximum depth range is stated beneath the model.
A distance scale is given in the centre of the diagram. The length of the profile is stated and it is divided into ten equal parts.
All distances and depths are quoted in metres.
The magnetic anomaly scale is in nT, and the gravity scale in mgal.
The upper part of the diagram contains two profiles; the broken line represents the observed data and the heavier, continuous line the calculated effect of the model shown in the lower part of the diagram.

The model is defined by colour or pattern according to the sources and contrasts used. Separate magnetic and gravity models may be provided for the same section or profile since not all units may contribute to each calculation. Separate presentation allows for clear appraisal of what contributes to each anomaly type without confusion of many profiles in the upper half of the diagram.

Some other information is also provided in the diagram. The two shift statements in the lower right hand corner define precisely what was required to produce the curve match shown. The magnitude of the shift values is not usually important; their relationship is - and this should be consistent within a given area or data set. Irregularities in fit differential may indicate inconsistent or faulty solutions. This indication is provided regardless of the quality of fit, which may be absolutely perfect, but also quite irrelevant.

The issues involved in sound modelling practice and judgement about validity of solutions may be complex but have been distilled into five critical criteria. These have been discussed in three publications and review is recommended. Some of these criteria are often quoted but it is rare to find all five applied consistently. Most modern modelling programs either do not display, or do not retain, the crucial shift information which forms a critical part of one test.
The reader is referred to:
EAEG Extended Abstracts, 54th Annual Meeting, Paris, 1992, p 372-3.
First Break. April 1994.
Exploration Geophysics course manual. Vol 13. University of Tasmania Key Centre for Ore Deposit and Exploration Studies.
All papers are titled " Criteria for evaluation of potential field interpretations"

This interp allows a drift in base to cover the effect of the deep source beneath Sock Creek.
~ 5nT per line.

APPENDIX 16

Hollway UTEM & IP Surveys

845371

MEMORANDUM

PASMINCO
EXPLORATION

A Division of Pasminco Australia Limited,
A.C.N. 004 074 962

Level 7
380 St Kilda Road
Melbourne, Australia 3004
G.P.O. Box 1291K
Melbourne, Australia 3001

TO: M Saxon

FROM: PW Basford

DATE: 7 June 1994

SUBJECT: **Hollway UTEM and IP**

FILE: EP/02/3006/8.4

The Burns Peak geophysics review carried out by Neil Hughes in 1993 revealed several anomalous zones requiring further investigation (Kirsner et al, 1993). One such zone (Zone 4, Map 1, in Appendix 1, Kirsner et al, 1993), defined from electromagnetic and induced polarization surveys, has been reviewed to aid the geologist in the best approach to intersect the anomalous body causing observed responses.

The area of interest is in the region known as Hollway, previously known as Chester - Pinnacles. In the late 1980's Lamontagne conducted a UTEM survey in the region, for BHP. Data collected using loop 11 (Figure 1) inferred the presence of a conductor on lines 82500N, 82700N and 82900N, in the region of 8050E (Figures 2,3 & 4). The responses indicate a poor to moderate, shallow conductor, on all lines.

In 1993 Scintrex conducted dipole-dipole induced polarization surveys over the same region for Pasminco Exploration, with Neil Hughes interpreting an anomalous chargeability zone coincident with the Hollway pyrite zone (Figure 5; Kirsner et al, 1993 & Poltock et al, 1993).

Induced polarization anomalies located around 8000E on lines 82500N, 82700N and 82900N (Figures 6,7 & 8) are coincident with the three UTEM anomalies listed above. The latter two lines (82700N and 82900N) indicated a more chargeable induced polarization response, with line 82700N indicating the presence of a shallow, thick (west dipping?) body centred at 8050E. The response on line 82700N may also infer the presence of a contact to the east (8150E).

From the two electrical based geophysical surveys, a poor to moderate and chargeable conductor has been inferred, which should be tested. This conclusion is further supported by the presence of geochemical anomalies and a magnetic depletion zone in the region of interest.

The anomalous body is shallow and has a strike length in the order of 600m. A drill hole should be located on line 82700N, as it contains the most encouraging geophysical response. This hole should be positioned such that it intersects the target at approximately 60m depth directly above 8050E. The drill site should be situated to the west, so drilling can continue eastwards, to test the magnetic depletion zone at depth, as well as testing the existence of a contact located around 8150/8200E.

Paul Basford

Note: All figures, except UTEM profiles, have been reproduced from the two reports below. The UTEM data has been re-profiled, however, the label of early time channel 10, late time channel 1 used by Lamontagne has been reversed to the conventional label of early time channel 1, late time channel 10.

Figure 1 - Map 2 from Kirsner et al, 1993 (Appendix 1)

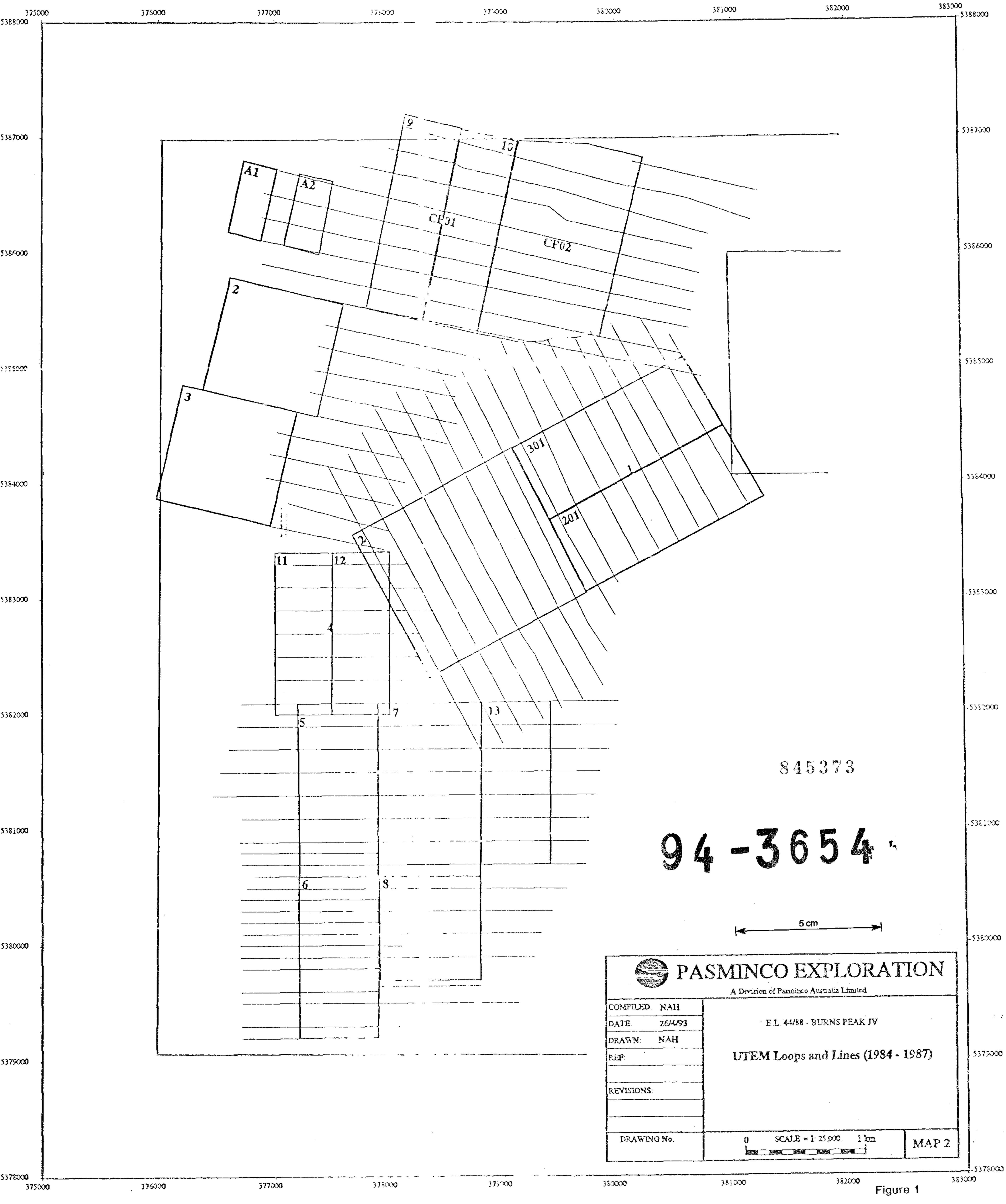
Figure 5 - Map 7 from Kirsner et al, 1993 (Appendix 1)

Figures 6, 7 & 8 - Figures BP 2.11, 2.12 & 2.13 from Poltock et al, 1993 (Appendix 12)

References:

Kirsner LW, Murphy FC, Saxon MS & Hughes NA, 1993. Burns Peak EL 44/88 Review. Project Review. Pasminco Exploration report T93-2 HL 290.

Poltock RA, Kirsner LW & Saxon MS, 1993. Burns Peak EL 44/88 Annual Report. November 1992 - October 1993. Pasminco Exploration report T93-16 HL 332.



845373

94-3654

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED:	NAH
DATE:	26/4/93
DRAWN:	NAH
REF:	
REVISIONS:	
DRAWING No.	

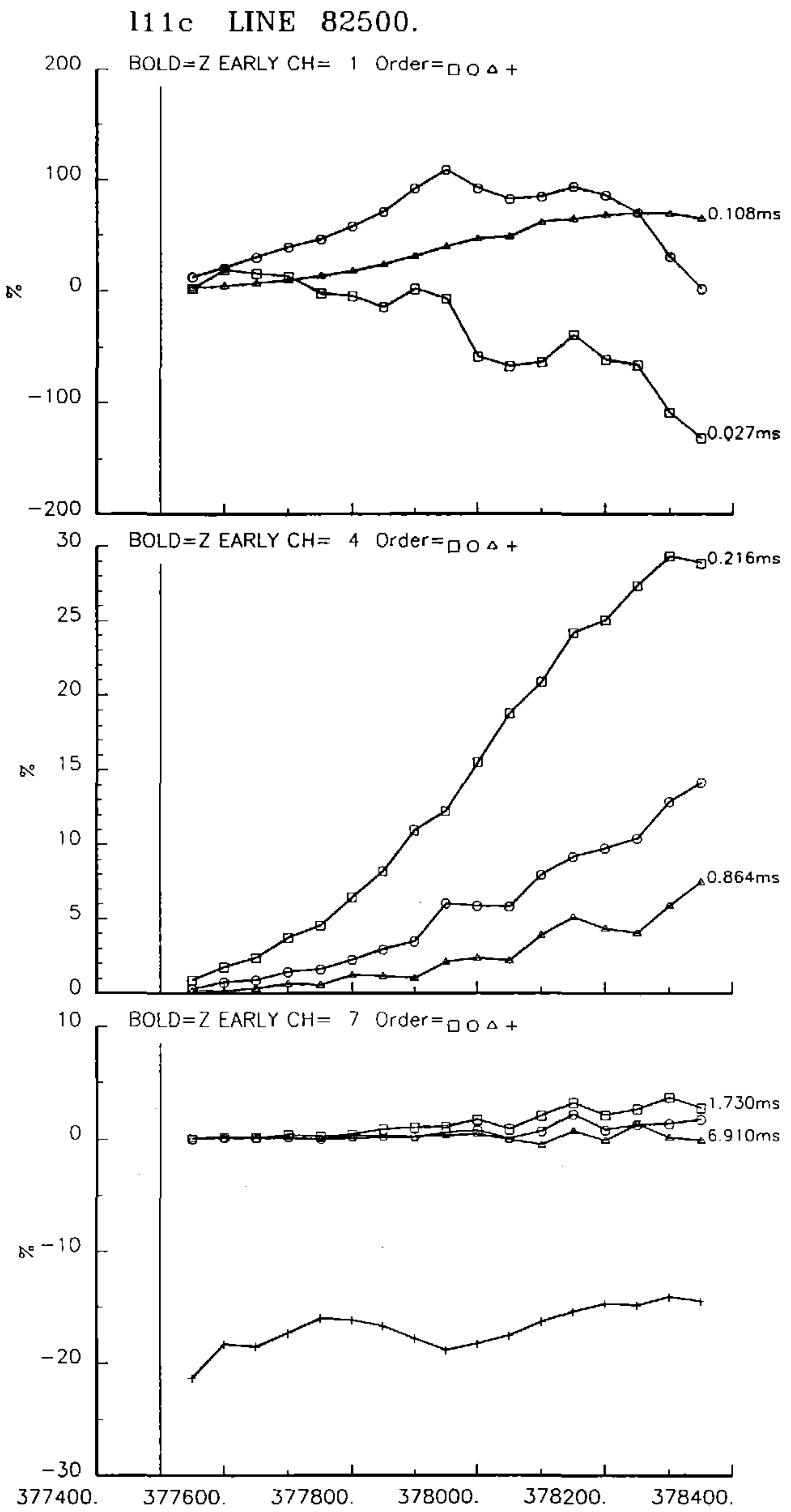
E.L. 44/88 - BURNS PEAK JV

UTEM Loops and Lines (1984 - 1987)

SCALE = 1:25 000

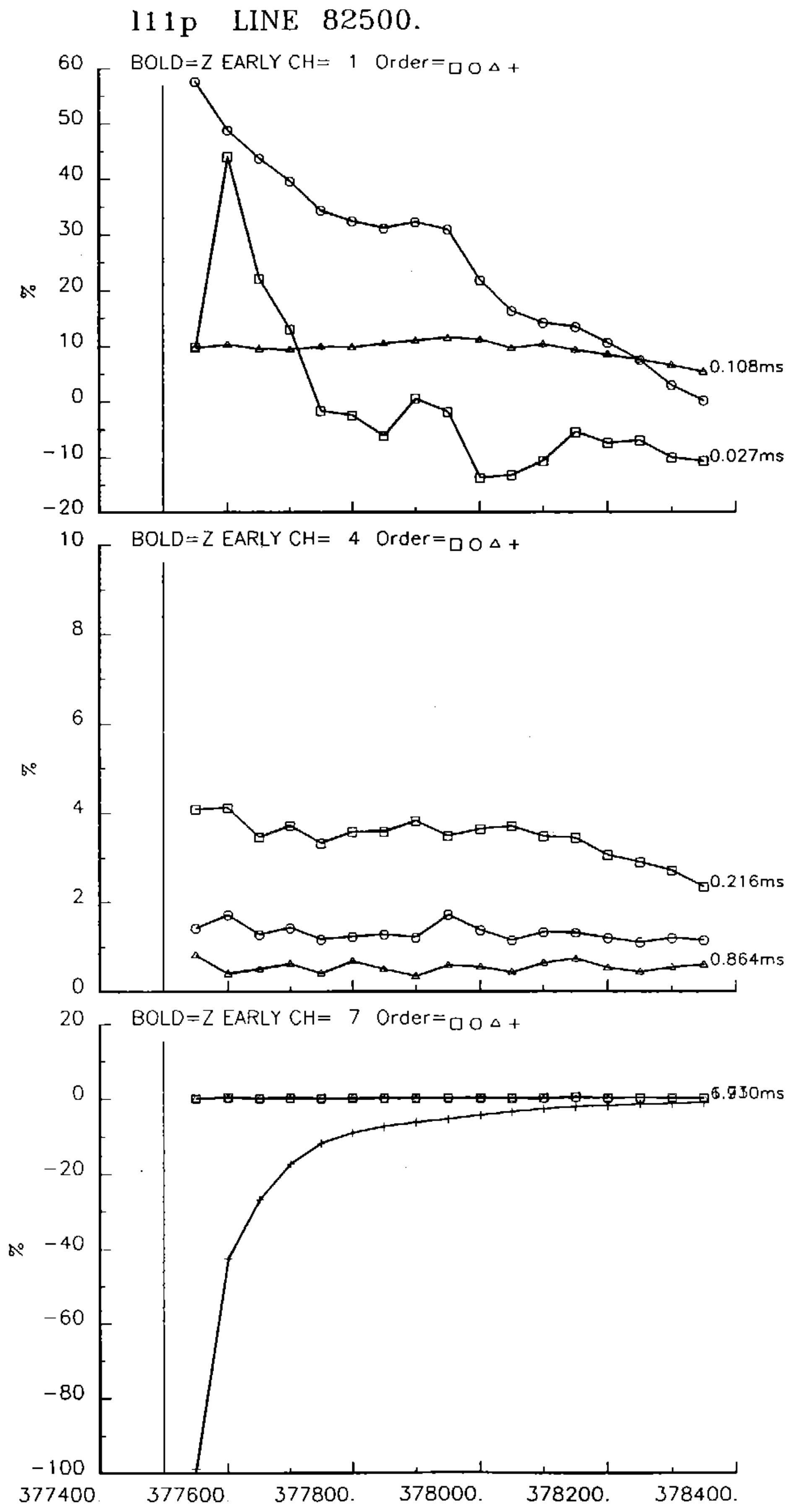
MAP 2

Figure 1



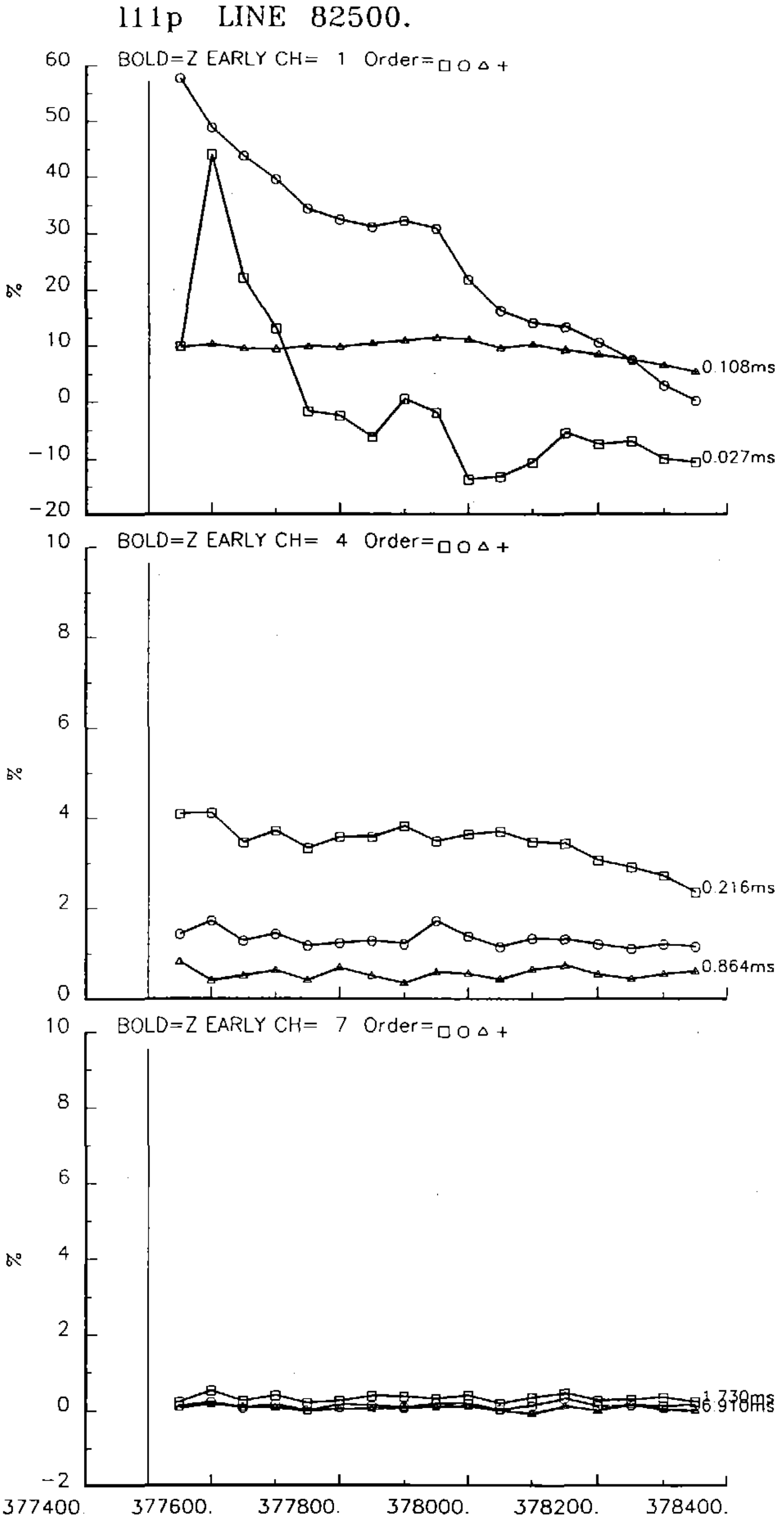
Continously Normalised data - Loop 11

Figure 2a



Point Normalised data - Loop 11

Figure 2b

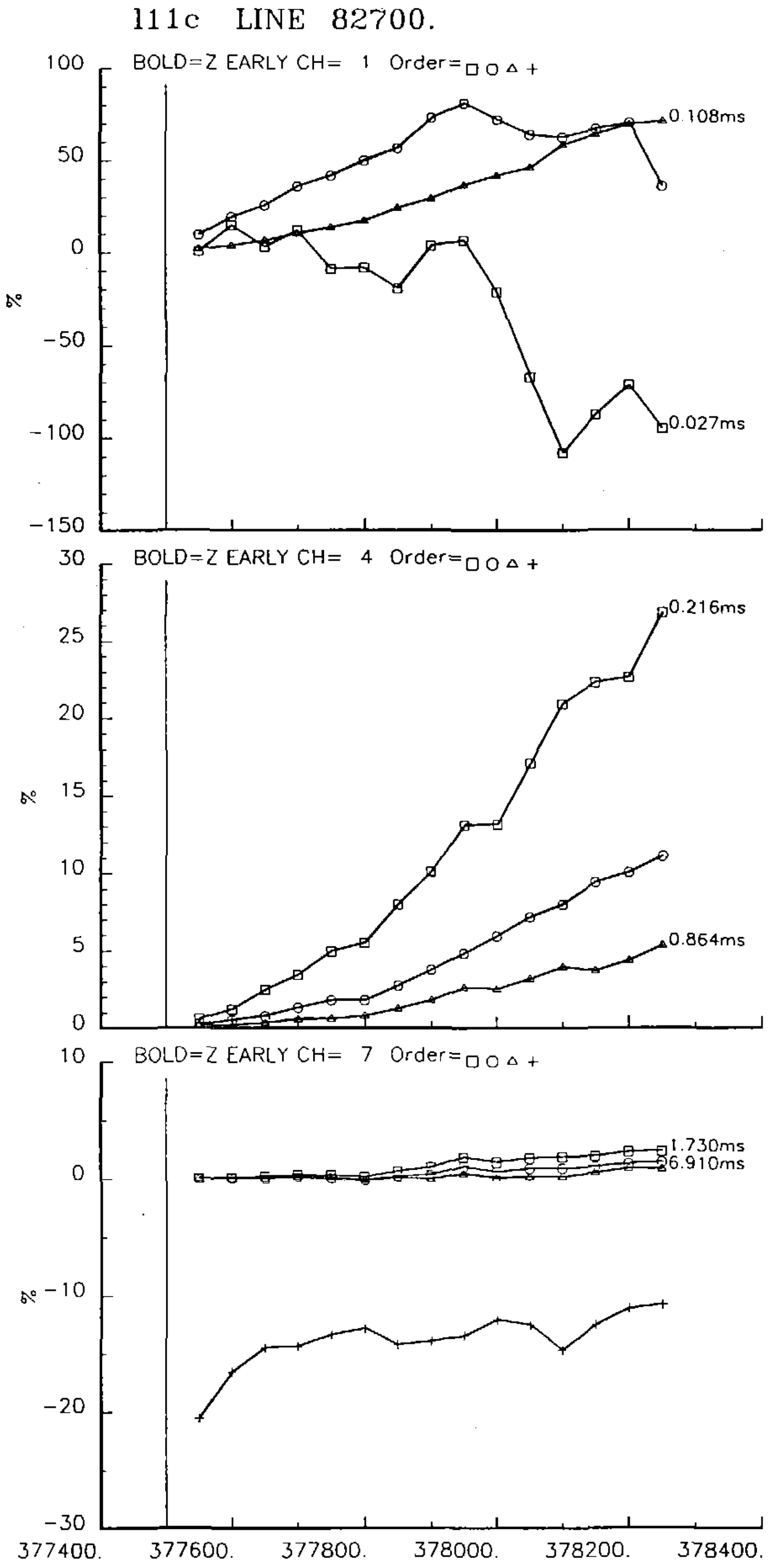

111p LINE 82500.

BOLD=Z EARLY CH= 1 Order=□○△+

BOLD=Z EARLY CH= 4 Order=□○△+

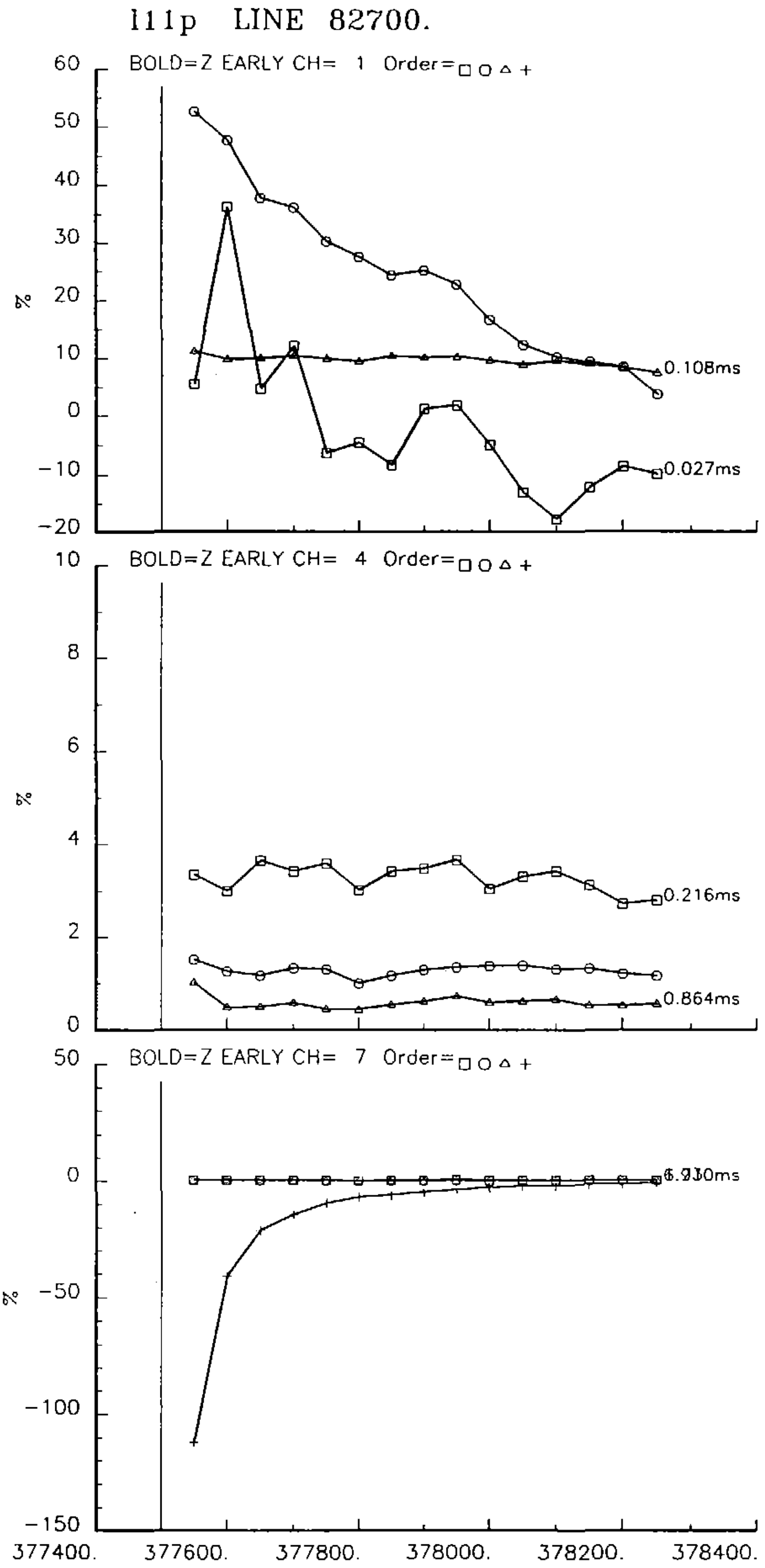
BOLD=Z EARLY CH= 7 Order=□○△+

Point Normalised data - Loop 11 Figure 2c



Continously Normalised data - Loop 11

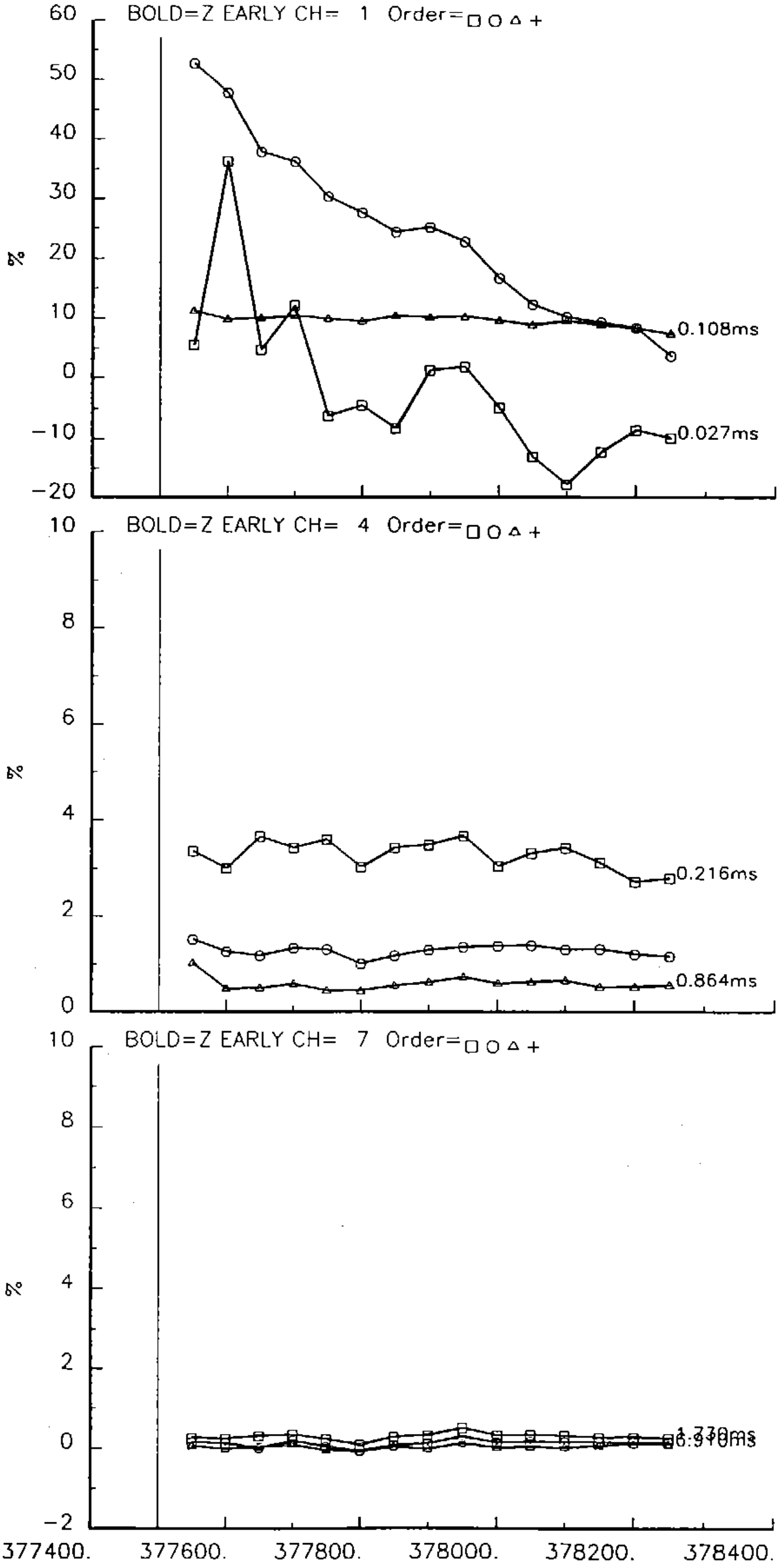
Figure 3a



Point Normalised data - Loop 11

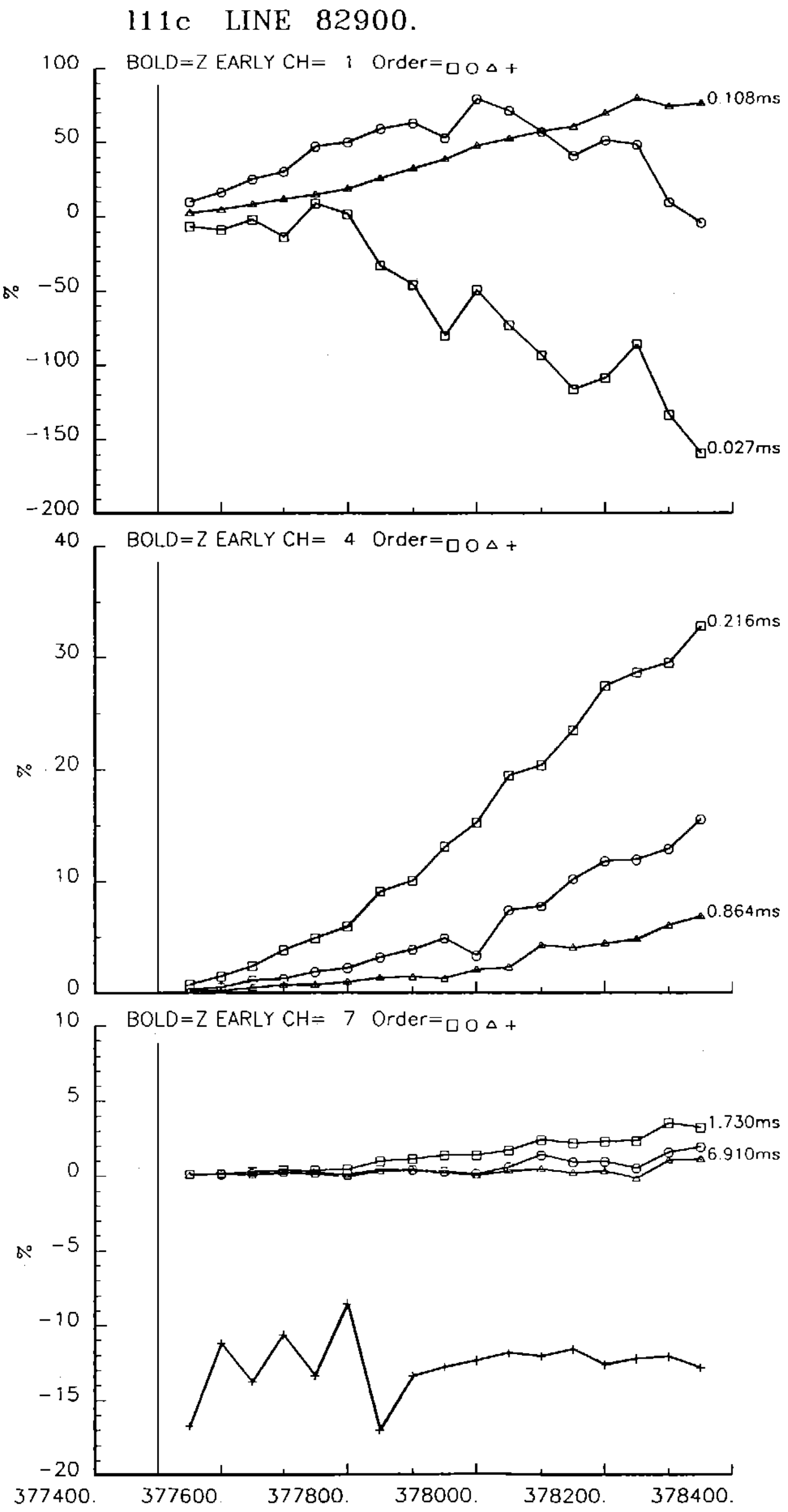
Figure 3b

111p LINE 82700.



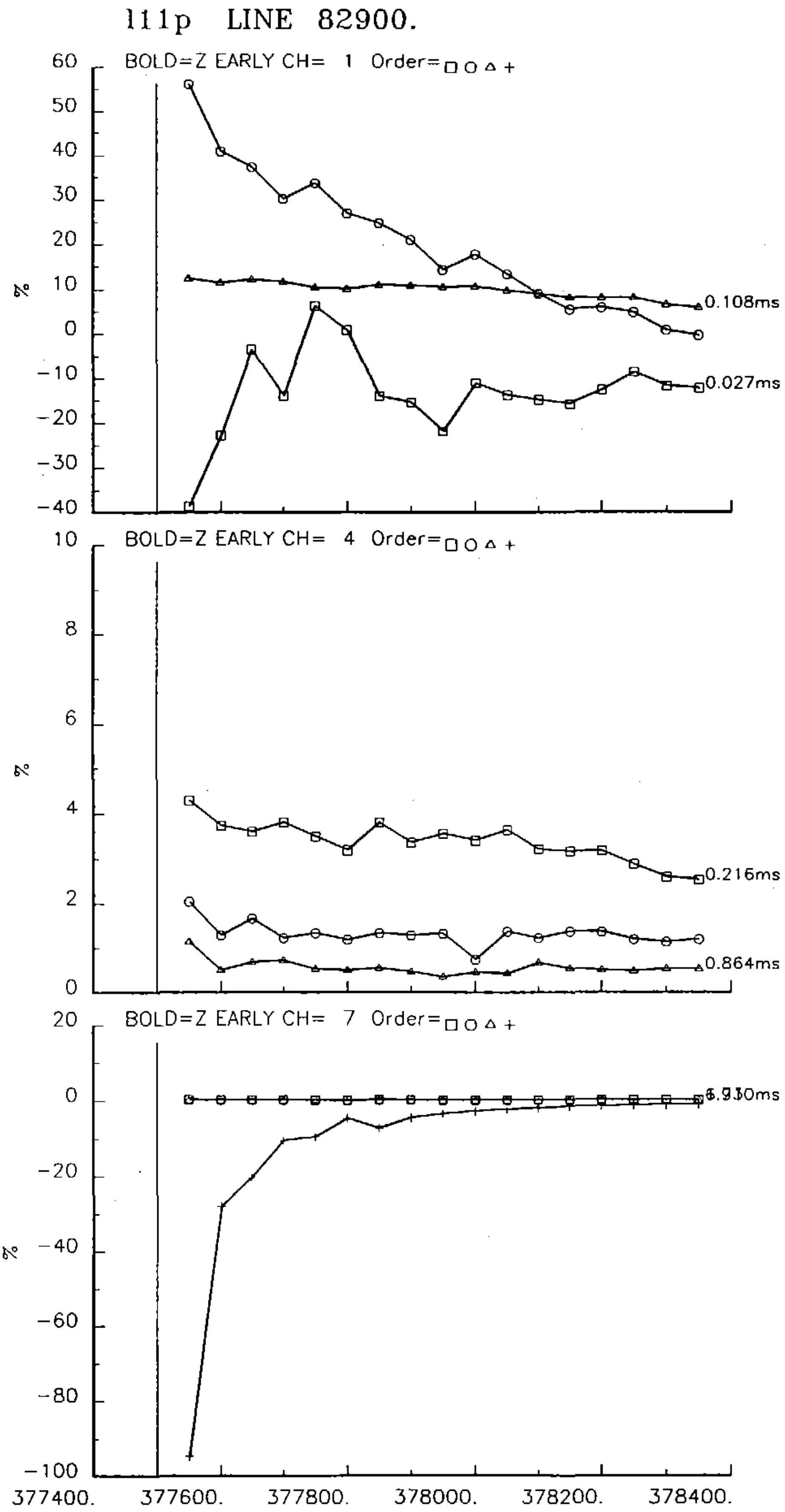
Point Normalised data - Loop 11

Figure 3c



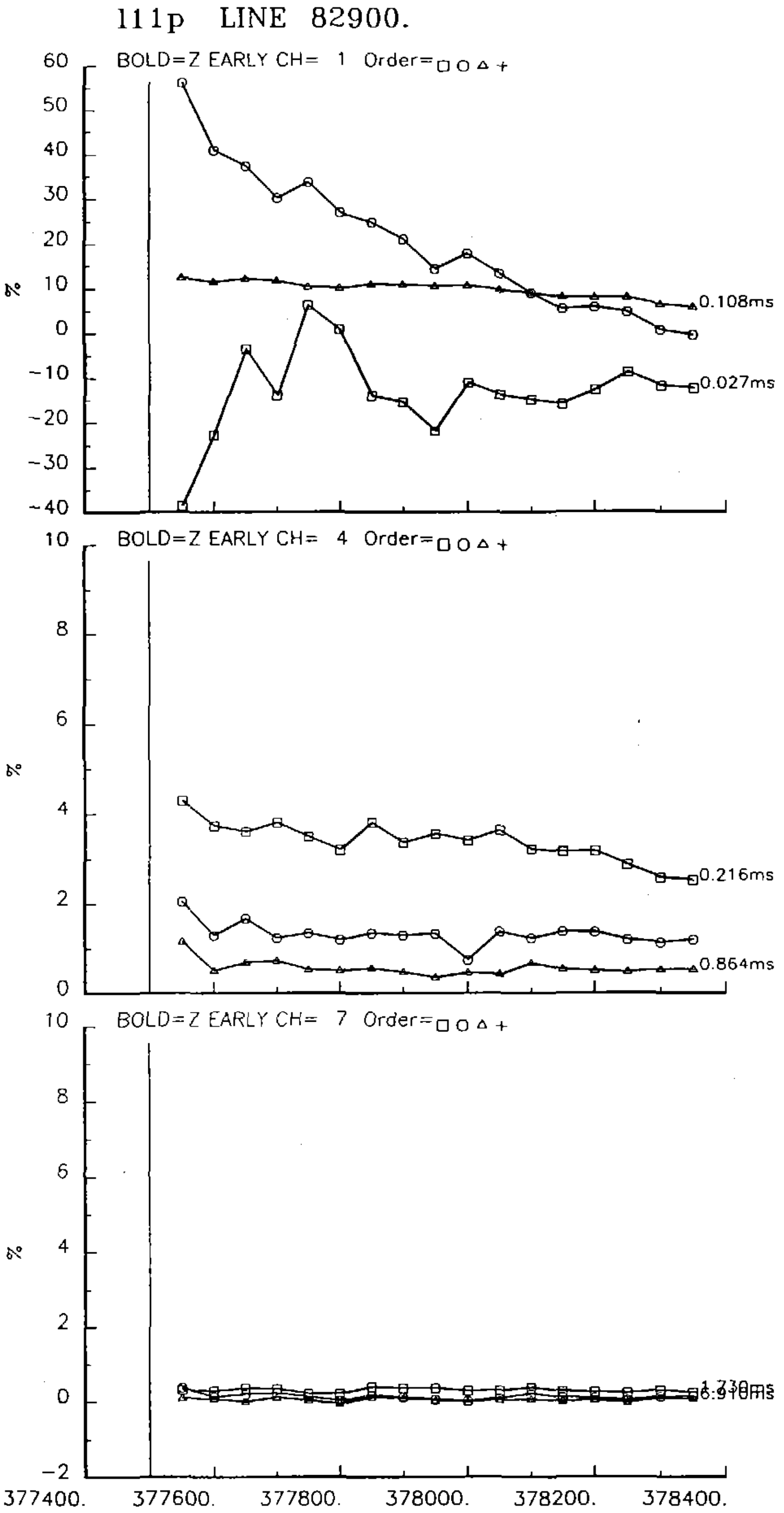
Continously Normalised data - Loop 11

Figure 4a



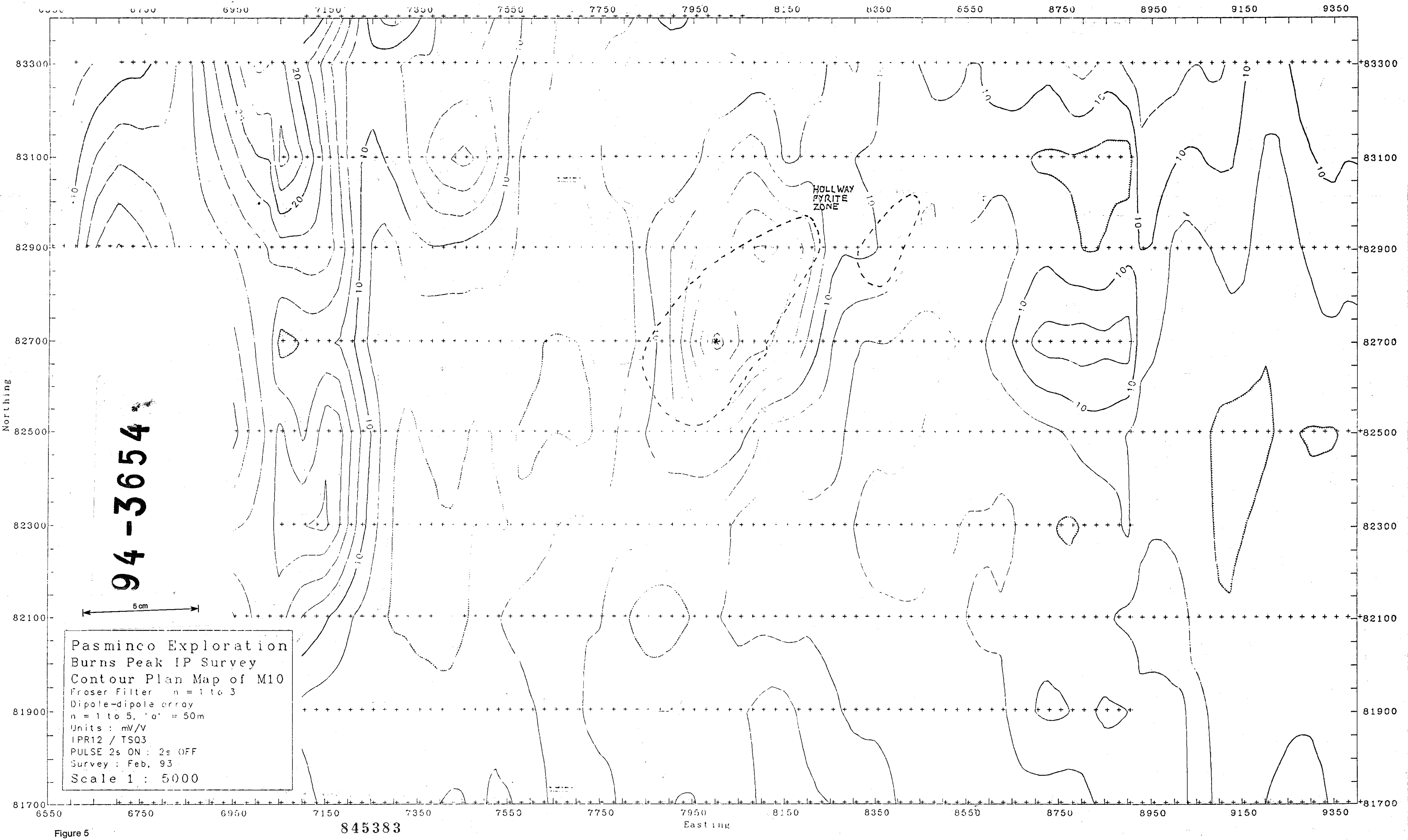
Point Normalised data - Loop 11

Figure 4b



Point Normalised data - Loop 11

Figure 4c



Pasminco Exploration
Burns Peak IP Survey
Contour Plan Map of M10
Froser Filter n = 1 to 3
Dipole-dipole array
n = 1 to 5, 'a' = 50m
Units : mV/V
IPR12 / TSQ3
PULSE 2s ON : 2s OFF
Survey : Feb, 93
Scale 1 : 5000

845383

Figure 5

Pasminco Exploration Ltd

EL 44/88
Burns Peak

Survey Parameters

Array : Dipole-Dipole
'a' = 50m
n = 1 to 5
Equipment : IPR12/TSQ3
Timing : 2s cycle
Survey : Feb/March 1993

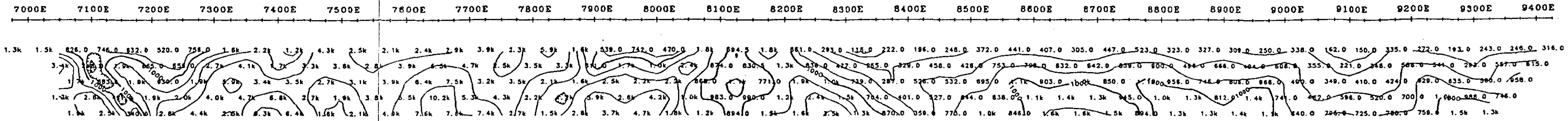
Line L82500N

Scale 1 : 5000

5 cm

IP & Resistivity Survey

RHO



M10

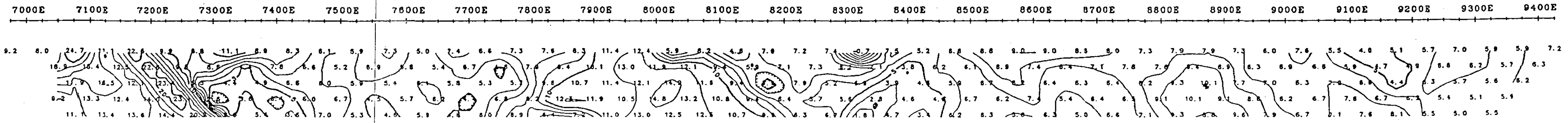


Figure BP2.11

Figure 6

845384

Pasminco Exploration Ltd

EL 44/88
Burns Peak

Survey Parameters

Array : Dipole-Dipole
'a' = 50m
n = 1 to 5
Equipment : IPR12/TSQ3
Timing : 2s cycle
Survey : Feb/March 1993

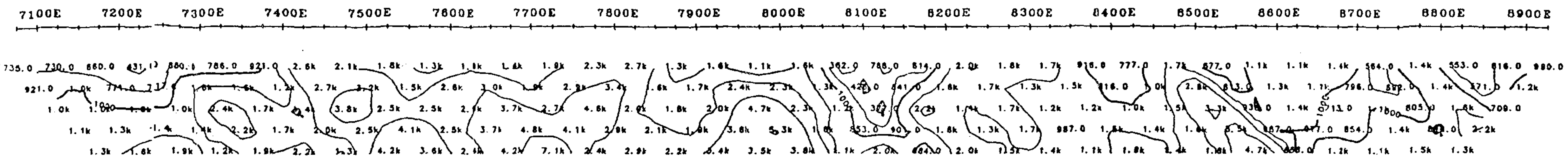
Line L82700N

Scale 1 : 5000

5 cm

IP & Resistivity Survey

RHO



M10

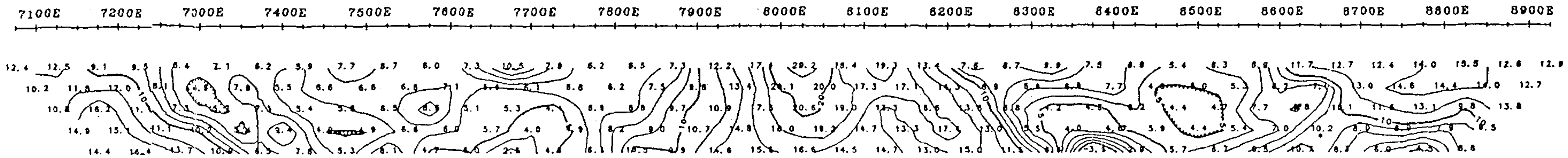


Figure BP2.12

Figure 7

Pasminco Exploration Ltd

EL 44/88
Burns Peak

Survey Parameters

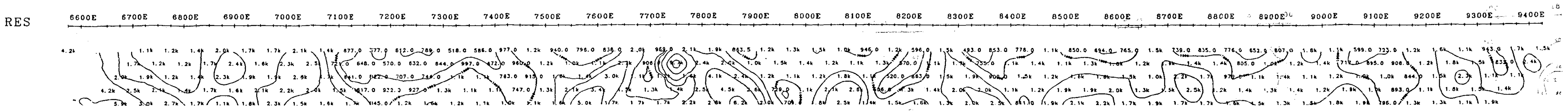
Dipole - Dipole
'a' = 50m
n = 1 to 5
Equipment : IPR12/TS
Timing : 2s cycle
Survey : Feruary 199

Line L82900N

Scale 1 : 5000

5 cm

IP & Resistivity Survey



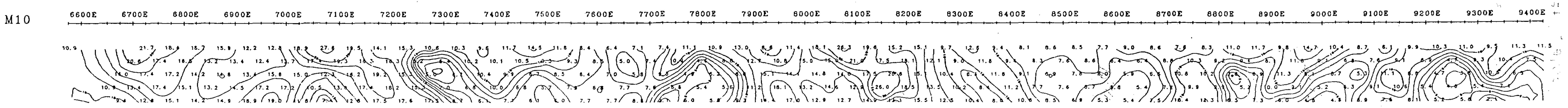


Figure BP2.13
Figure 8

845386

845387

OPEN FILE

PASMINCO EXPLORATION

BURNS PEAK EL 44/88
ANNUAL REPORT

FOR THE PERIOD
NOVEMBER 1993 – OCTOBER 1994

Volume 2 of 2

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FOR ACTION
FOR INFO.
REFERRED TO
DATE

AUTHOR: RA Pollock & MS Saxon

DATE: November 1994

REPORT No.: T94-13

SUBMITTED TO: Regional Exploration Manager – Tasmania

DISTRIBUTION: Mineral Resources Tasmania –
Department of State Development & Resources – Hobart
Pasminco Exploration – Burnie
– Melbourne
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SUBMITTED BY: R Pollock

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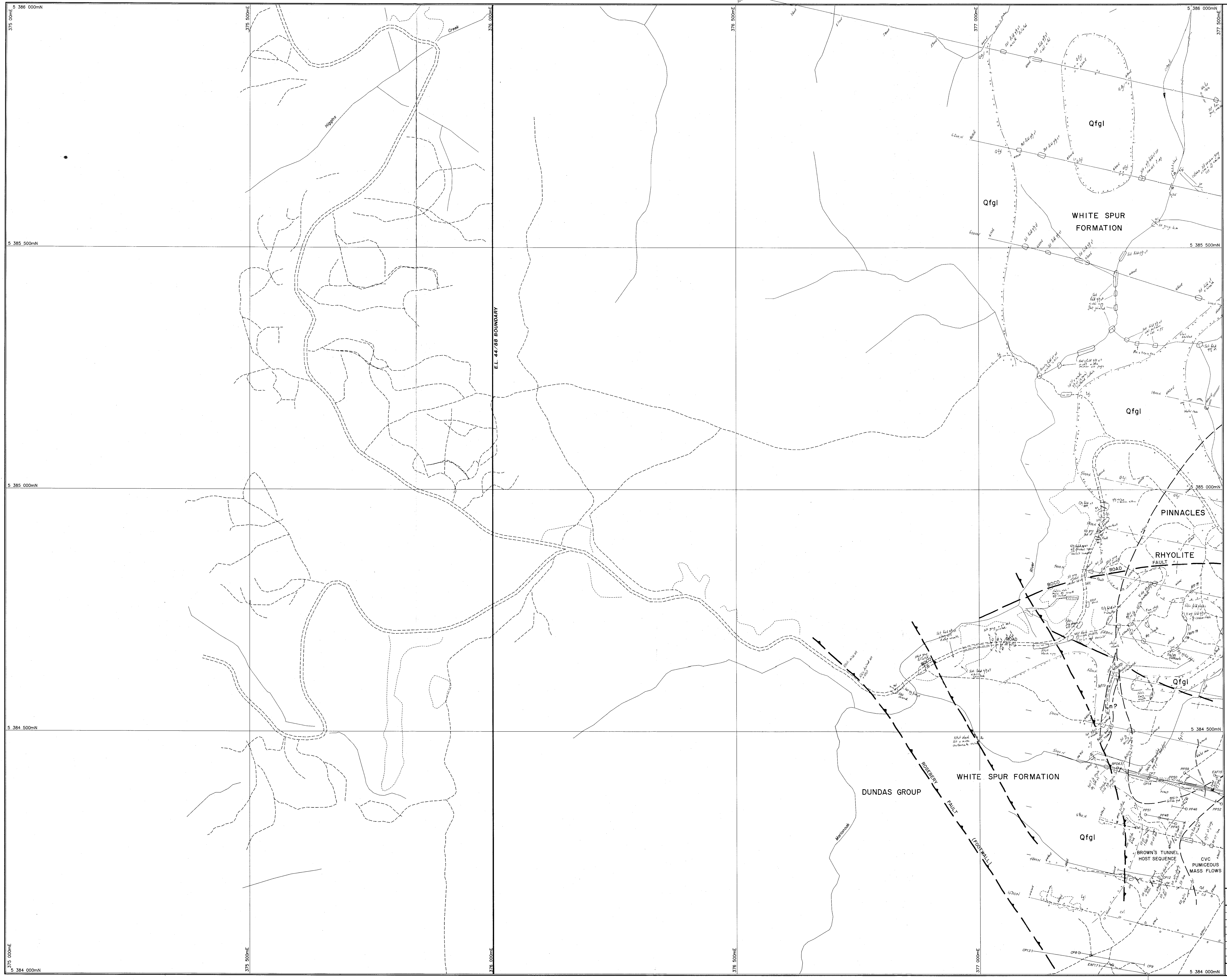
94-3654

BURNIE
November 1994

FIGURES



LEGEND

1. GENERAL FORM

Rock type, colour, grain size, overall texture, constituents and textures, alteration, mineralisation.
Rock Types can be combined using a -
Subordinate Rock Types are separated by /
Each Descriptor Group is separated by ,
Descriptors within a group are separated by .
Derwent series 19 colours (in brackets) are intended for the Cambrian sequences.

2. ROCK TYPES

Lavas Intrusives or Volcaniclastics	L I V	a	(14)	acid
		i	(46)	intermediate
		b	(49)	basic
		u	(23)	ultrabasic
		r		rhyolite
		d	(11)	dacite
		n	(46)	andesite
		ba	(49)	basalt
		g	(20)	granite
		di	(22)	diorite
		do	(45)	dolerite
		gb	(25)	gabbro
		s	(23)	serpentinite
Sediments or Volcaniclastics	S V	sh	(36)	shale
		slt	(35)	siltstone
		sst	(39)	sandstone
		w	(37)	greywacke
		cong	(39)	conglomerate
		bx		breccia
		tbd		turbidite
		msf		mass flow
		cht	(34)	chert
		lst	(65)	limestone
		dol	(65)	dolomite
		Fe	(64)	iron formation
		gl	(4)	glacial deposits
		fgl	(4)	fluvioglacial deposits
		alv	(4)	alluvial deposits
		cvl	(4)	colluvial deposits (talus)
		qzt		quartzite
Metamorphic and Tectonic Rocks Colours should be hatched	M	sht	(38)	schist
		qzt	(40)	quartzite
		hf	(50)	hornfels
		sk	(50)	skarn
		mb	(48)	marble
		m		mylonite
		fz		fault breccia (pug)
Unassigned		?		Use alone or as a qualifier to other rock types where uncertain

3. DESCRIPTORS

Colour :

ple	pale
dk	dark
gy	grey
or	orange
blk	black
pk	pink
rd	red
brn	brown
bl	blue
wht	white
yel	yellow
buf	buff
grn	green
ppl	purple
crm	cream
khk	khaki

Grainsize :

fg	fine grained
mg	medium grained
cg	coarse grained
vcg	very coarse grained

DESCRIPTORS continued

Overall Texture :

fb	flow banded
fbx	flow brecciated
hyl	hyaloclastic
pill	pillowed
pep	peperitic
msv	massive
blo	blocky
aph	aphyric
por	porphyric
peg	pegmatitic
bd	bedded
xbd	cross bedded
ufs	upwards fining sequence
ps	poorly sorted
cs	clast supported
ms	matrix supported
fol	foliated
clvd	cleaved
shd	sheared
bx	brecciated
aug	augen
vnd	veined

Constituents & Internal Texture :

ply	polymict
li	lithic
pm	pumice
xl	crystal
vit	vitric
sph	spherulites
ves	vesicles
amy	amygdales
wsp	wisps
sty	stylolites
f	feldspar
q	quartz
mic	micaceous
cal	calcareous
px	pyroxene
hb	horneblende
cr	chromite
mag	magnetite

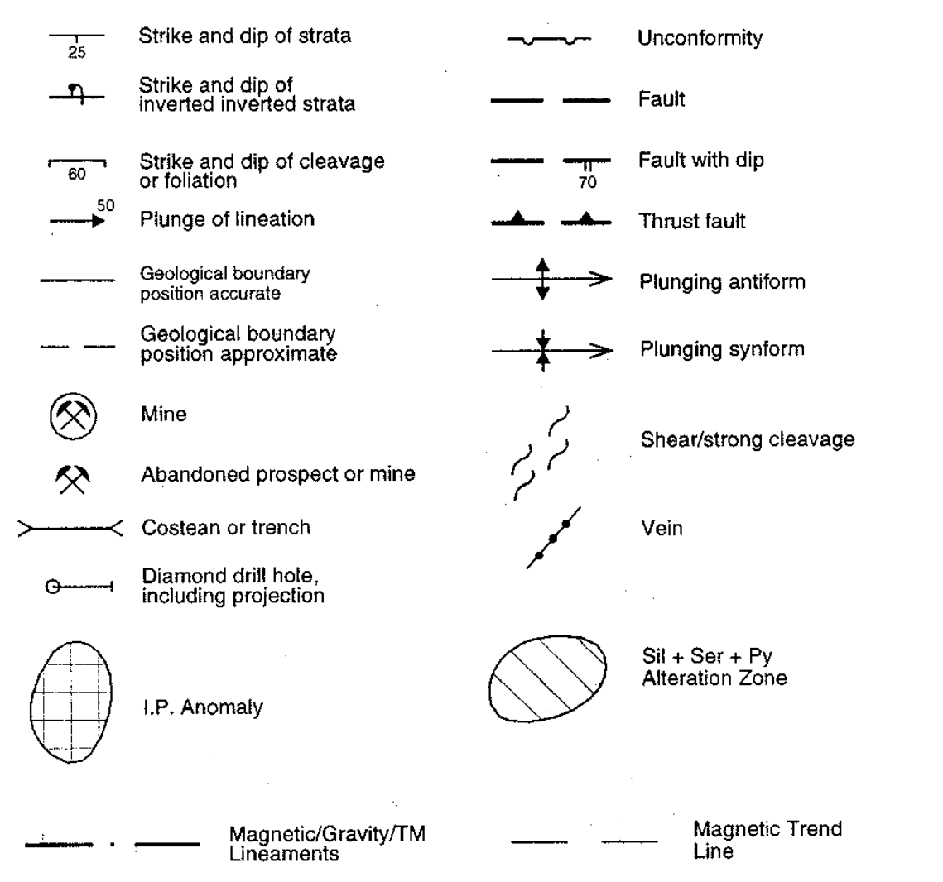
Alteration :

bch	bleached
dtx	de-textured
ox	oxidised
alb	albitised
co	carbonatised
chl	chloritised
ser	sericitised
kao	kaolinitised
ep	epidotised
sil	silicified
f	feldspar
fuc	fuchsitic

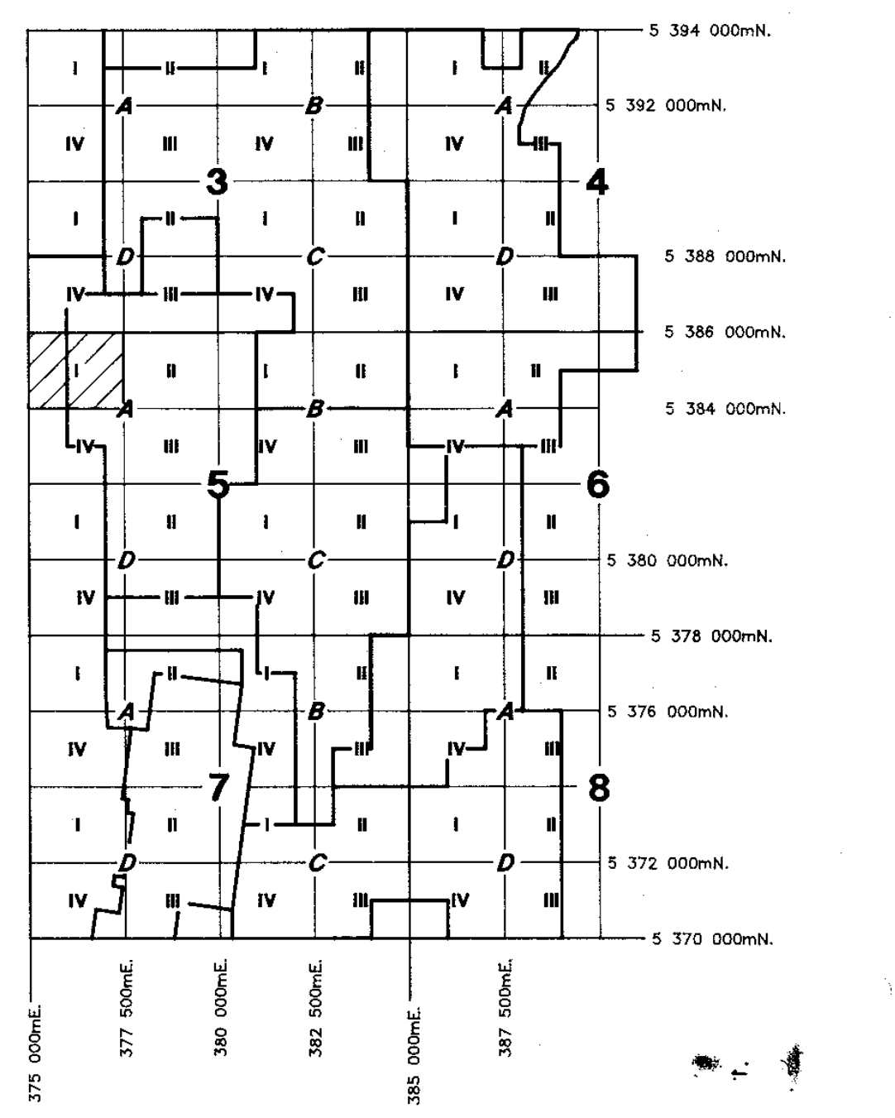
Mineralisation :

dis	disseminated
v	vein
str	stringer
msv	massive
bnd	banded
cla	clasts
gos	gossan
sul	sulphides
py	pyrite
po	pyrrhotite
asp	arsenopyrite
gn	galena
sp	sphalerite
cp	chalcopyrite
ba	barite
mag	magnetite
hm	haematite
lm	limonite
au	gold
ag	silver
to	tourmaline
q	quartz
cb	carbonate
sd	siderite
mn	manganese carbonate
fl	fluorite

4. MAPPING SYMBOLS

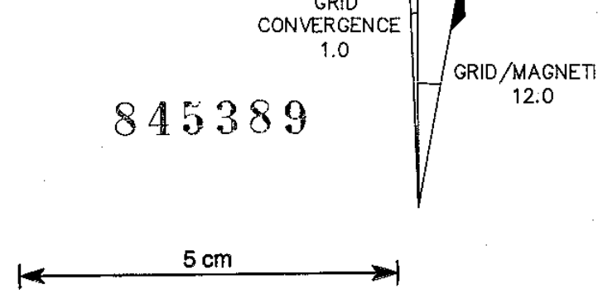


Strike and dip of strata
Strike and dip of inverted inverted strata
Strike and dip of cleavage or foliation
Plunge of lineation
Geological boundary position accurate
Geological boundary position approximate
Mine
Abandoned prospect or mine
Costean or trench
Diamond drill hole, including projection
I.P. Anomaly
Magnetic/Gravity/TM Lineaments
Unconformity
Fault
Fault with dip
Thrust fault
Plunging antiform
Plunging synform
Shear/strong cleavage
Vein
Sil + Ser + Py Alteration Zone
Magnetic Trend Line



5m Contours

845389



5 cm

94-3654

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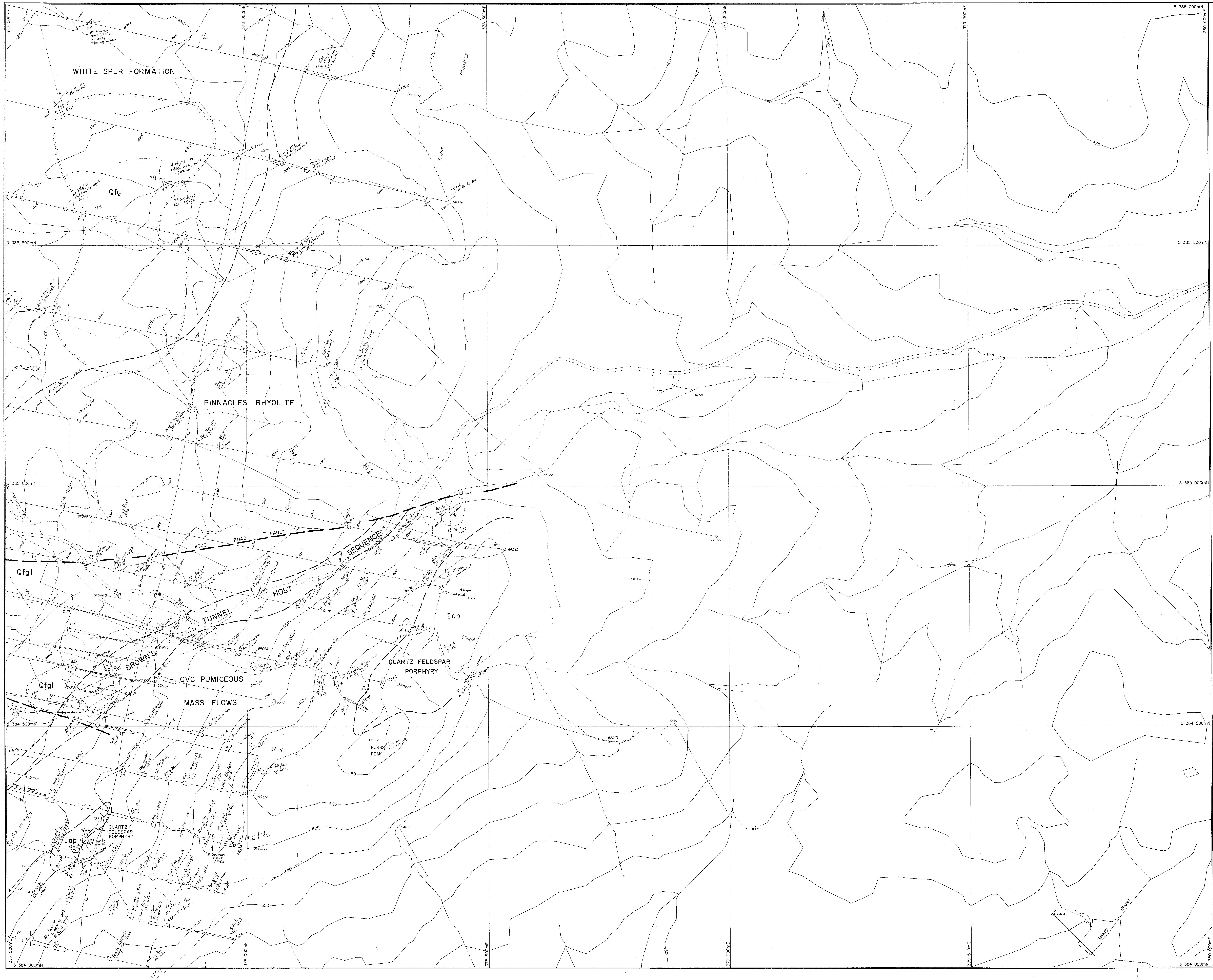
A Division of Pasminco Australia Limited

COMPILED : R.A.P.
DATE : Oct., 1994
DRAWN : R.A.P./G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 - BURNS PEAK JV
PINNACLES
EAF GRID
FACTUAL AND INTERPRETIVE GEOLOGY
SHEET 5A-1

DRAWING No.
SCALE 1:2500 0 50 100 m
FIG. No. 5



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		d	(11)	dacite
		n	(46)	andesite
		ba	(49)	basalt
		g	(20)	granite
		di	(22)	diorite
		do	(45)	dolerite
		gb	(25)	gabbro
		s	(23)	serpentinite
Sediments or Volcaniclastics	**S V**	bsh	(35)	black shale
		sh	(36)	shale
		slt	(35)	siltstone
		sst	(39)	sandstone
		w	(37)	greywacke
		cong	(39)	conglomerate
		bx		breccia
		tbd		turbidite
		msf		mass flow
		cht	(34)	chert
		lst	(65)	limestone
		dol	(65)	dolomite
		Fe	(64)	iron formation
		gl	(4)	glacial deposits
		fgl	(4)	fluvioglacial deposits
		alv	(4)	alluvial deposits
		cvl	(4)	colluvial deposits (talus)
		qzt		quartzite
Metamorphic and Tectonic Rocks Colours should be hatched	**M**	sht	(38)	schist
		qzt	(40)	quartzite
		hf	(50)	hornfels
		sk	(50)	skarn
		mb	(48)	marble
		m		mylonite
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ppl	purple
crm	cream
khk	khaki

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mg	medium grained
cg	coarse grained
vcg	very coarse grained

DESCRIPTORS continued

Overall Texture :

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fbx	flow brecciated
hyl	hyaloclastic
pill	pillowed
pep	peperitic
msv	massive
blo	blocky
aph	aphyric
por	porphyric
peg	pegmatitic
bd	bedded
xbd	cross bedded
ufs	upwards fining sequence
ps	poorly sorted
cs	clast supported
ms	matrix supported
fol	foliated
clvd	cleaved
shd	sheared
bx	brecciated
aug	augen
vnd	veined

Constituents & Internal Texture :

ply	polymict
li	lithic
pm	pumice
xl	crystal
vit	vitric
sph	spherulites
ves	vesicles
amy	amygdales
wsp	wisps
sty	stylolites
f	feldspar
q	quartz
mic	micaceous
cal	calcareous
px	pyroxene
hb	horneblende
cr	chromite
mag	magnetite

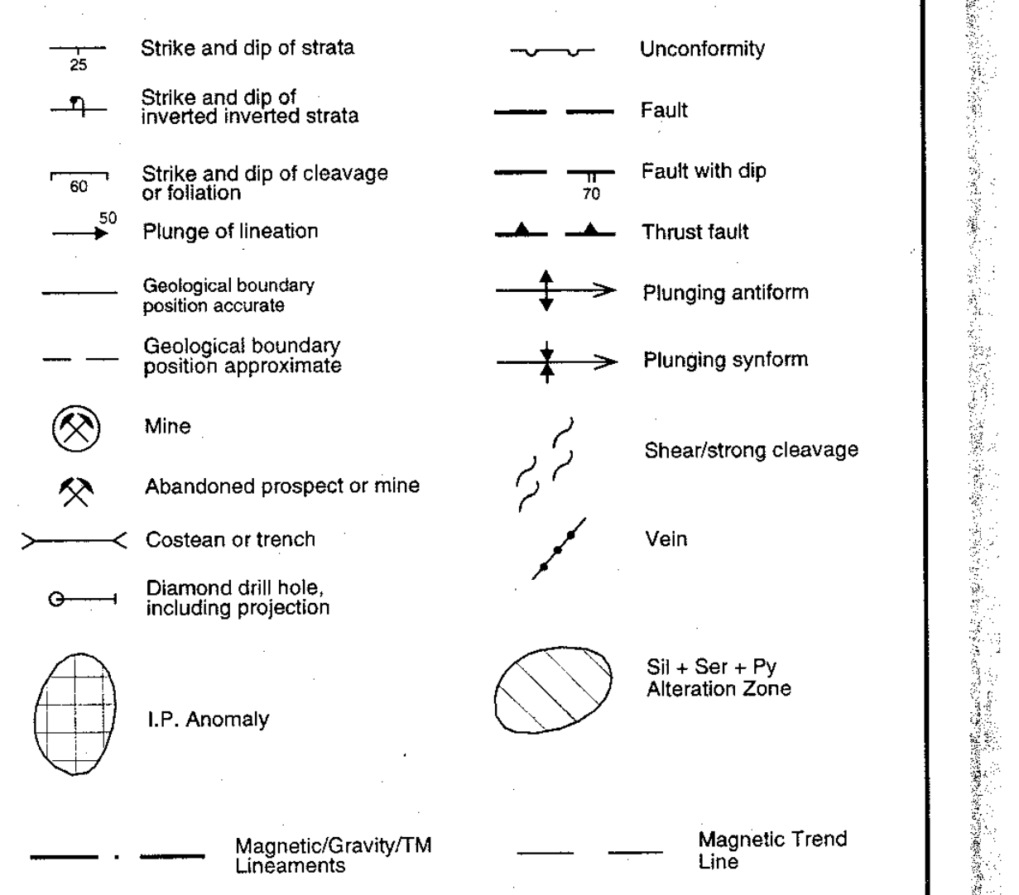
Alteration :

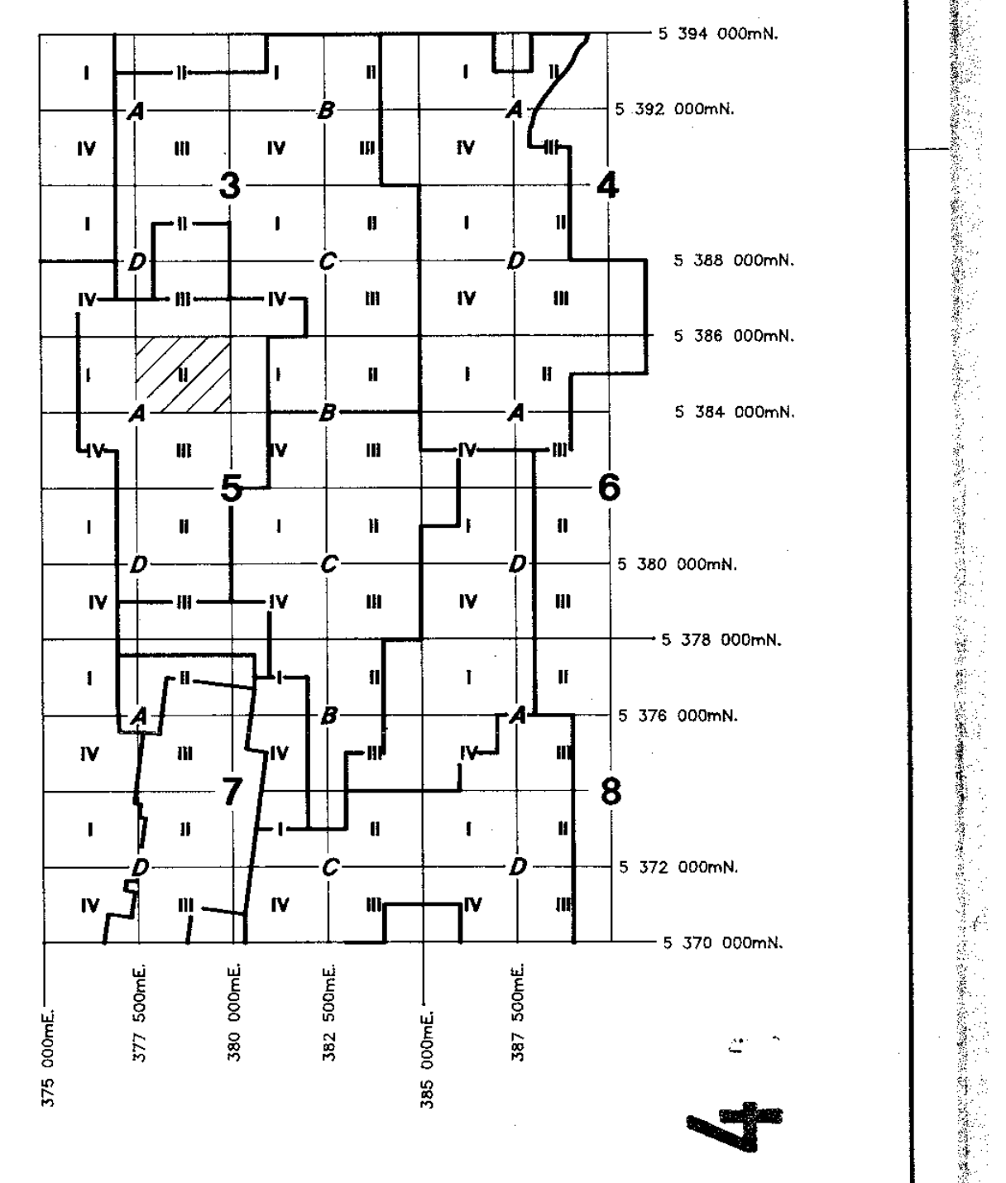
bch	bleached
dtx	de-textured
ox	oxidised
alb	albitised
co	carbonatised
chl	chloritised
ser	sericitised
kao	kaolinitised
ep	epidotised
sil	silicified
f	feldspar
fuc	fuchsitic

Mineralisation :

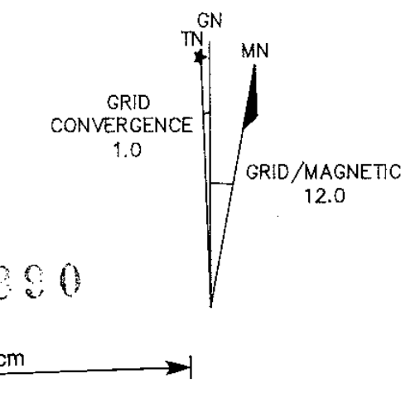
dis	disseminated
v	vein
str	stringer
msv	massive
bnd	banded
cla	clasts
gos	gossan
sul	sulphides
py	pyrite
po	pyrrhotite
asp	arsenopyrite
gn	galena
sp	sphalerite
cp	chalcopyrite
ba	barite
mag	magnetite
hm	haematite
lm	limonite
au	gold
ag	silver
to	tourmaline
q	quartz
cb	carbonate
sd	siderite
mn	manganese carbonate
fl	fluorite

4. MAPPING SYMBOLS





25m Contours



845390

94-3654

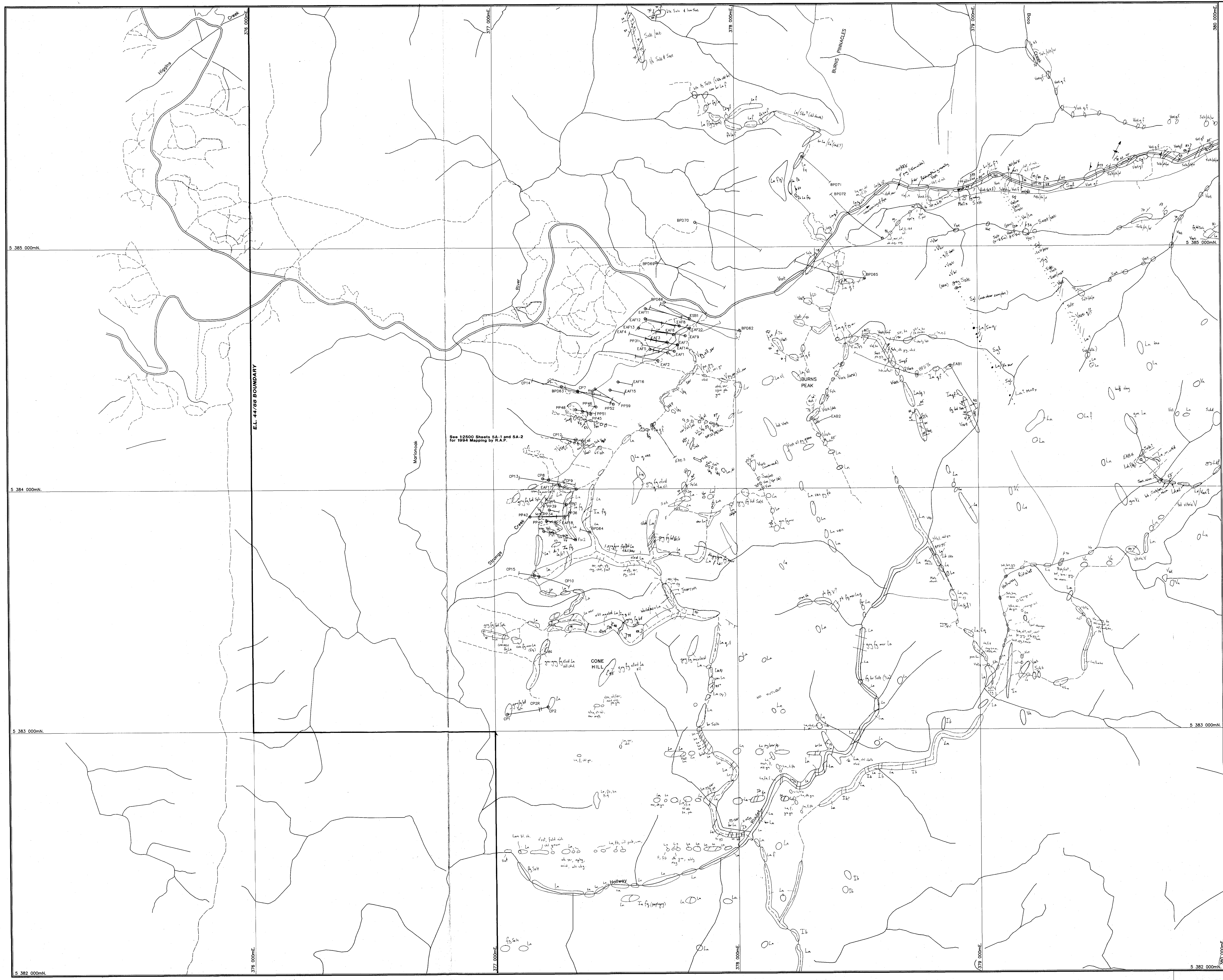
5 cm

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : R.A.P.
DATE : Oct., 1994
DRAWN : R.A.P./G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 - BURNS PEAK JV
PINNACLES
EAF GRID
FACTUAL AND INTERPRETIVE GEOLOGY
SHEET 5A-2

DRAWING No.
SCALE 1:2500 0 50 100 m
FIG. No. 6



L E G E N D

1. General Form

Colour, grain size, overall texture, Rock Type, constituents & textutres, alteration, mineralisation.

Descriptors and Rock Types to be separated by comma or slash. Derwent series 19 colours (in brackets) are intended for the Cambrian sequences.

2. Rock Types

Lavas	L	a	(9)	acid
		i	(46)	intermediate
		b	(49)	basaltic
		r	(9)	rhyolitic
		d	(11)	dacitic
		n	(46)	andesitic
Intrusives	I	a	(12)	acid
		i	(46)	intermediate
		b	(49)	basic
		fel		felsic
		p		porphyritic
		g	(12)	granitic
		peg		pegmatitic
Volcaniclastics	V	pm	(7)	pumiceous mass flow
		q	(32)	quartz phyric mass flow
		sst	(32)	sandstone
Sediments	S	sh	(35)	shale
		t	(36)	slate incl. black slate
		slt	(35)	siltstone
		sst	(39)	sandstone
		tb		turbidite
		w	(39)	wacke
		cong	(39)	conglomerate
		Δ		breccia
		cht	(34)	chert
		lst	(65)	limestone
		dol	(65)	dolomite
		q	(39)	quartzite
		Fe		iron formation
		gl	(4)	glacial deposits
		fgl	(4)	fluvioglacial deposits
		alv	(4)	alluvial deposits
		mst	(35)	mudstone
Metamorphic Rocks Colours should be hatched	M	sht	(38)	schist
		sp	(35)	semi-pelite
		ps	(39)	psammite
		amph	(49)	amphibolite
		gran		granulite
		sk		skarn
		mb	(65)	marble
		m		mylonite
Unassigned		?		Use alone or as a qualifier to other rock types where uncertain.

3. Descriptors

Colour:

ple	pale	bl	blue
dk	dark	wht	white
clr	clear	yel	yellow
or	orange	ol	olive
blk	black	grn	green
pk	pink	ppl	purple
rd	red	crm	cream
brn	brown		

Grainsize:

fg	fine grained
mg	medium grained
cg	coarse grained
vcg	very coarse grained

Overall Texture:

aug	augen
p	porphyritic
fol	foliated
clvd	cleaved
msv	massive
blk	blocky
bd	bedded
lam	laminated
xbd	cross bedded
xlam	cross laminated
br	brecciated
fb	flow banded
fΔ	flow brecciated

Constituents & Internal Textures:

f	feldspar
q	quartz
l	lithic
pm	pumice
styl	stylolites
wsp	wisps
ves	vesicles
sph	spherulites
lph	lithophysae

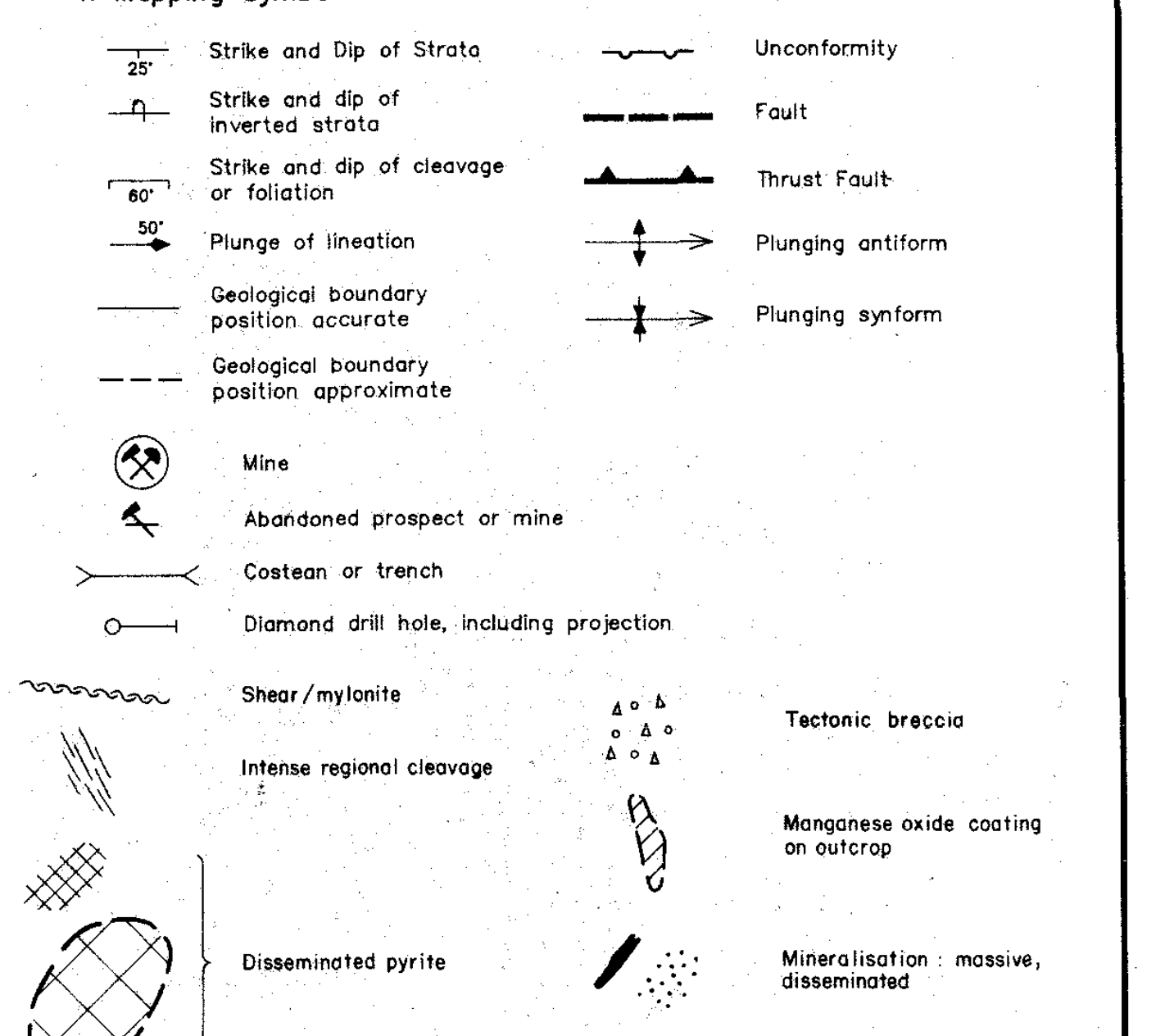
Alteration:

alb	albitised
co	carbonate alteration
chl	chloritised
ser	sericited
kao	kaolinised
ep	epidotised
sil	silicified

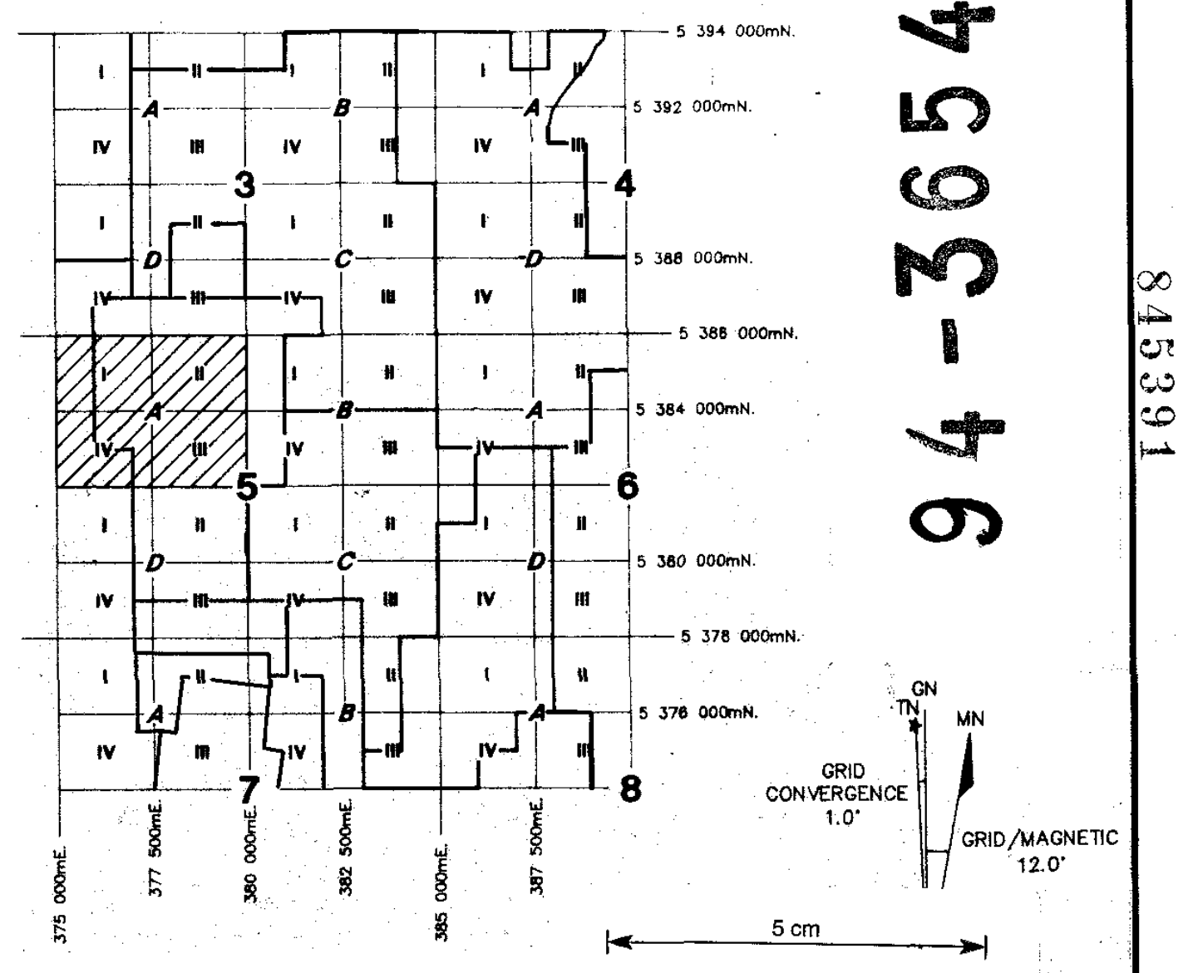
Mineralisation:

diss	disseminated
str	stringer
msv	massive
gos	gossan
bx	boxwork
py	pyrite
po	pyrrhotite
asp	arsenopyrite
gn	galena
sp	sphalerite
mag	magnetite
hm	haematite

4. Mapping Symbols



***NOTE* SOURCE :-**			
	Comstaff Mapping	**1984**	**10%**
	BHP Mapping	**1986**	**5%**
	Geopeko/Pasminco Mapping	**1988-1991**	**50%**
	R. Reid.(Tas. Uni.)	**1990**	**5%**
	B. Coutts (Tas. Uni.)	**1990**	**10%**



94-3654

845391

PASMINCO EXPLORATION

A Division of Pasminco Australia Limited

COMPILED : L.W.K.
DATE : Oct., 1991
DRAWN : G.M.B.
REFERENCE :

REVISIONS :
L. W. K. 1992
M.S.S. - April, 1994

DRAWING No. SHEET 5A

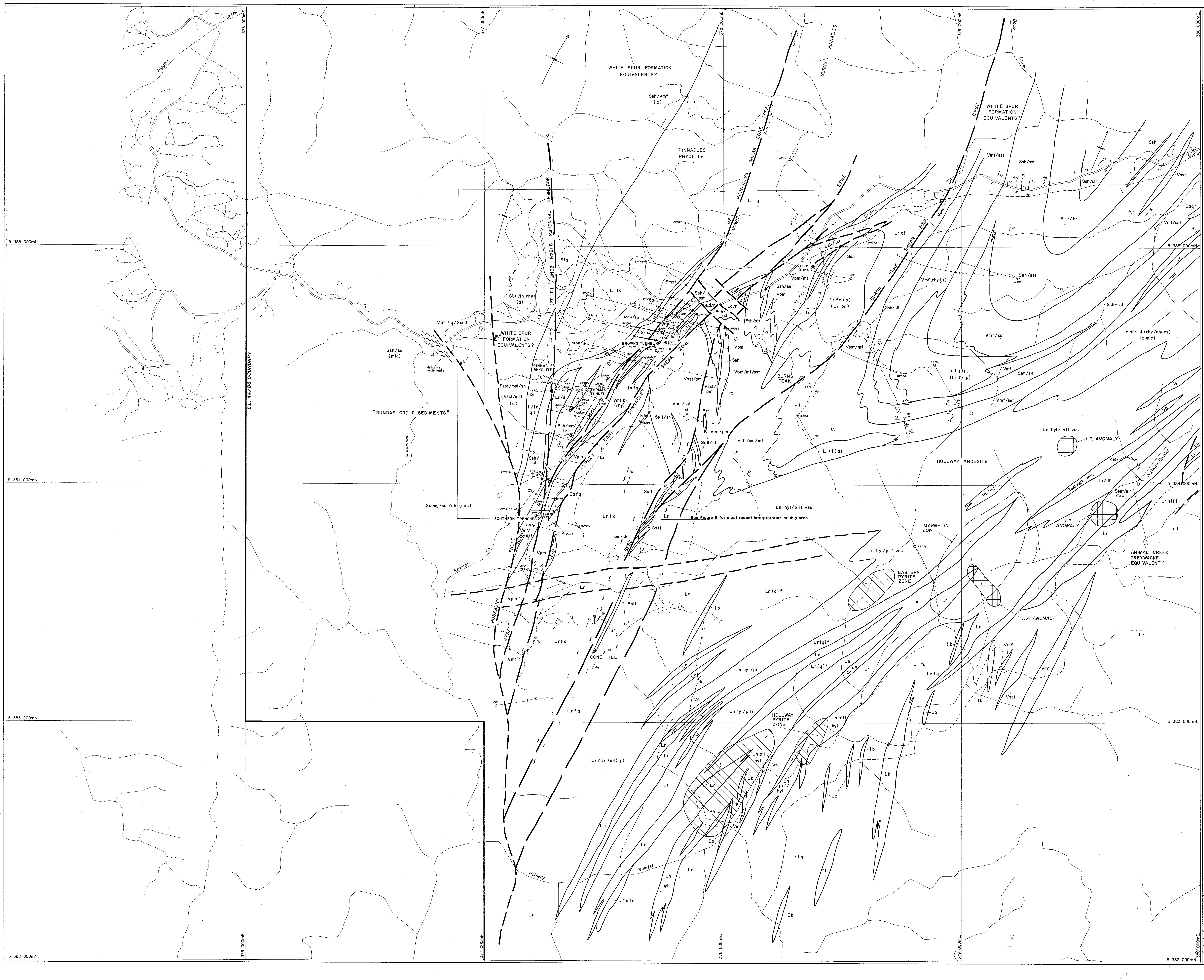
E.L. 44/88 - BURNS PEAK JV

OUTCROP

GEOLOGY

SCALE 1:5000 0 100 200 METRES

FIG. No. 7



L E G E N D

1. General Form

Colour, grain size, overall texture, Rock Type, constituents & textutres, alteration, mineralisation.

Descriptors and Rock Types to be separated by comma or slash. Derwent series 19 colours (in brackets) are intended for the Cambrian sequences.

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		sst	(39)	sandstone
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		cong	(39)	conglomerate
		Δ		breccia
		cht	(34)	chert
		lst	(65)	limestone
		dol	(65)	dolomite
		q	(39)	quartzite
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		sp	(35)	semi–pelite
		ps	(39)	psammite
		amph		amphibolite
		gran		granulite
		sk		skarn
		mb	(65)	marble
		m		mylonite
Unassigned		?		Use alone or as a qualifier to other rock types where uncertain.

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clvd	cleaved
msv	massive
blk	blocky
bd	bedded
lam	laminated
xbd	cross bedded
xlam	cross laminated
br	brecciated
fb	flow banded
fΔ	flow brecciated
ufs	upwards fining sequence
hyl	hyaloclastic
pill	pillowed
pep	peperitic

Constituents & Internal Textures:

f	feldspar
q	quartz
l	lithic
pm	pumice
styl	stylolites
wsp	wisps
ves	vesicles
sph	spherulites
lph	lithophysae
mic	micaceous

Alteration:

alb	albitised
co	carbonate alteration
chl	chloritised
ser	sericited
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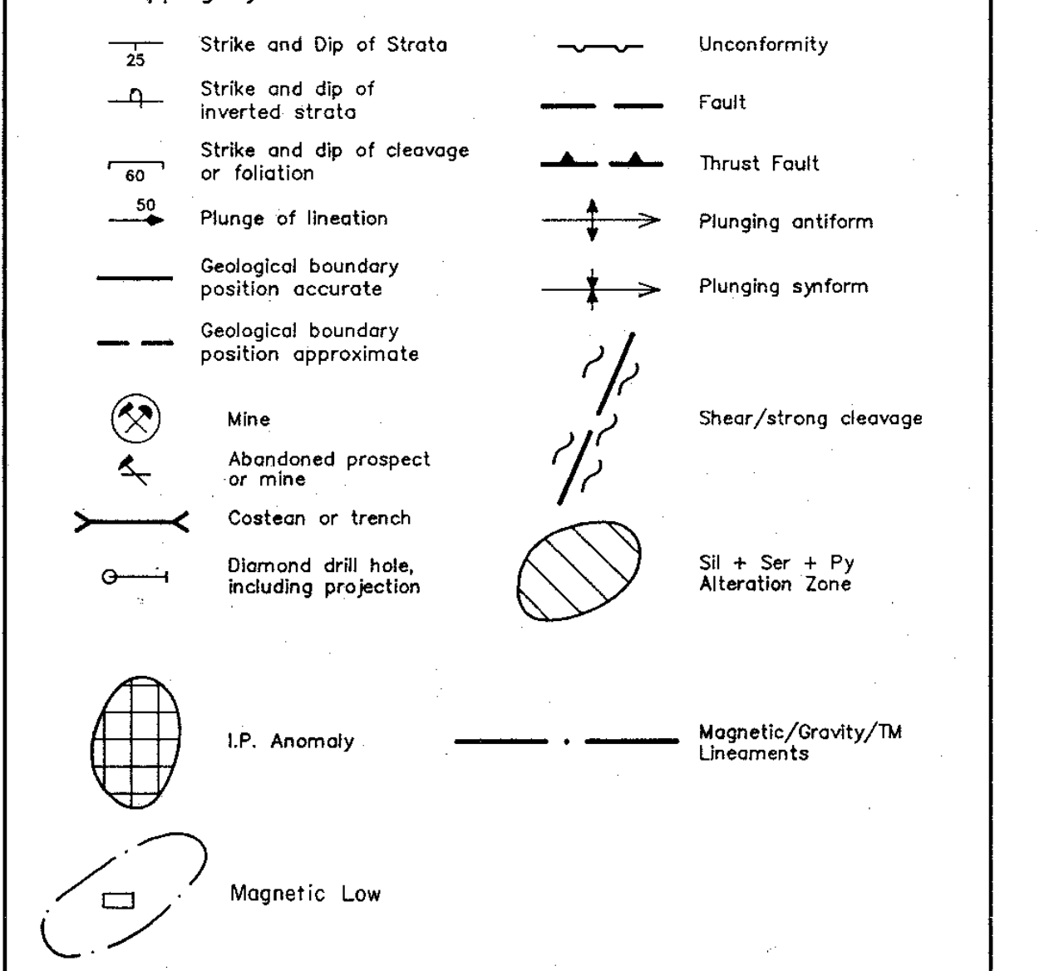
py	pyrite
po	pyrrhotite
asp	arsenopyrite
gn	galena
sp	sphalerite
mag	magnetite
hm	haematite

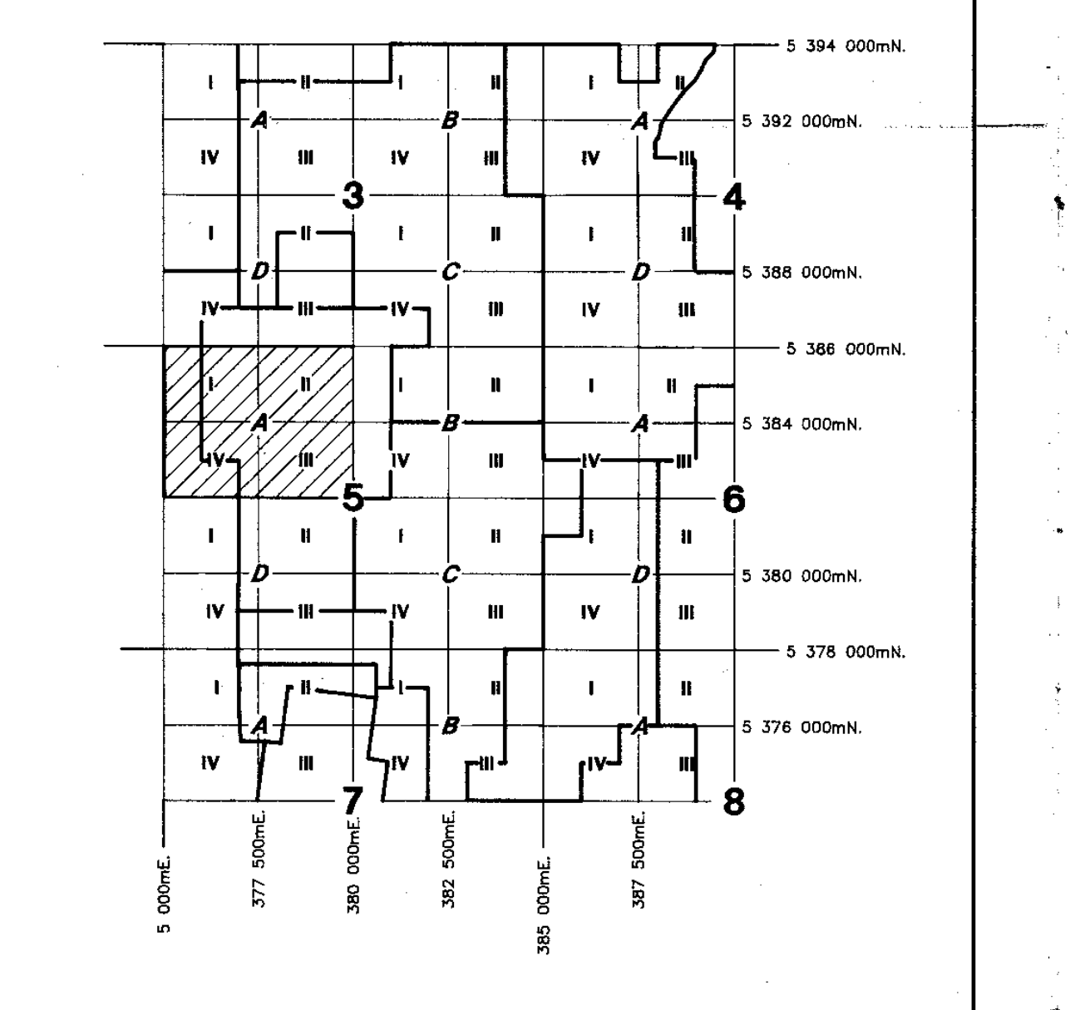
3. Mapping Symbols

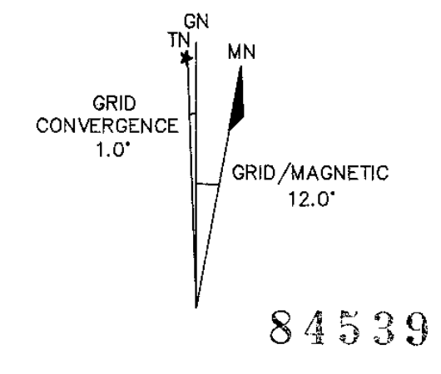


NOTE:

Geological mapping by: A.N. Lorrigan, L.W. Kirsner, M.S. Saxon, B. P. Coutts and R.O. Reid

Interpretation by: L.W. Kirsner, A.N. Lorrigan and M.S. Saxon





94-3654

845392

5 cm

PASMINCO EXPLORATION

A Division of Pasminco Australia Limited

COMPILED : A.N.L./L.W.K.	
DATE : October, 1992	
DRAWN : G.M.B.	
REFERENCE :	
REVISIONS : L.W.K.	
March, 1993.	
M.S.S. April 1994	
DRAWING No.	

E.L. 44/88 - BURNS PEAK JV

INTERPRETIVE GEOLOGY

SHEET 5A

SCALE 1:5000 0 100 200 m

FIG. No. 8

845393

94-3654

NOTE:

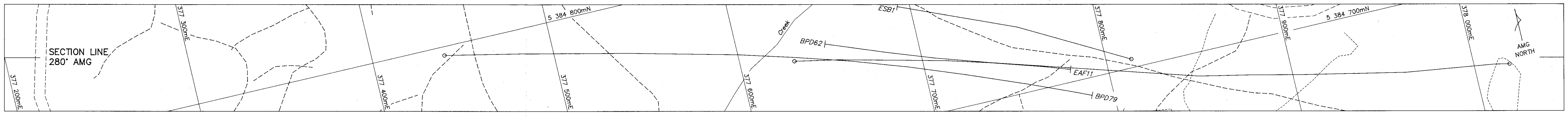
Maximum drilled intervals noted in brackets and all other intersections are interpreted true width, projected onto a vertical plane.

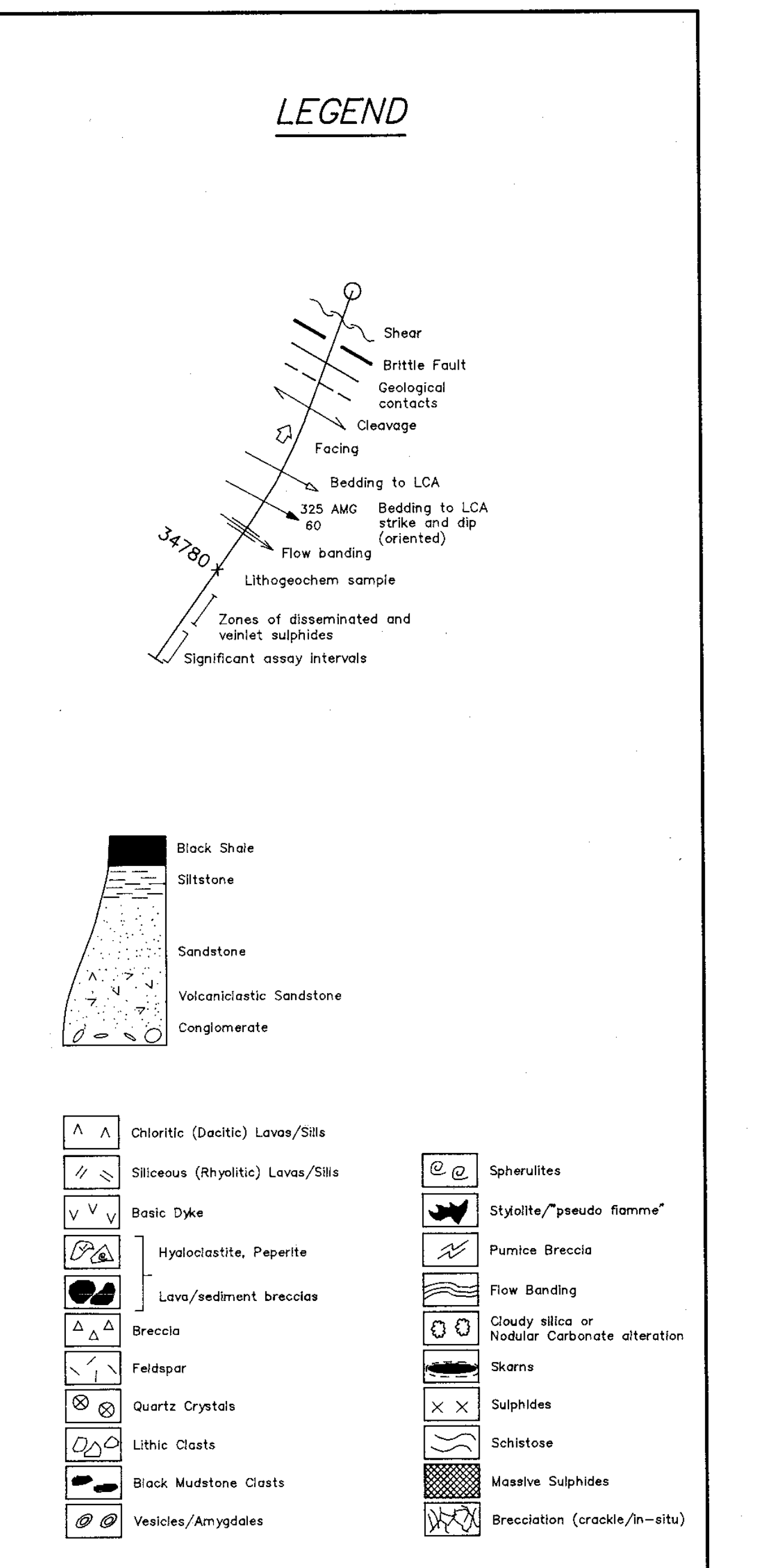
Cut offs used:– 3% Zn, 2% Pb, 5% Cu, 5g/t Au.

✳ Drill holes marked thus did not intersect the host horizon at the Pinnacles Shear Zone.

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : T. Lees	E.L. 44/88 - BURNS PEAK JV THOMAS' TUNNEL - BROWN'S TUNNEL LONG SECTION THROUGH 84 203.0mN, 77 317.5mE and 84 713.5mN, 77 777.5mE (AMG) (After A. N. Rosenhain, 1989)
DATE : Jan., 1992	
DRAWN : GEO	
REVISIONS:	
L.W.K. 13.04.93	
R.A.P. Nov., 1993	
R.A.P. Oct., 1994	
DRAWING No.	SCALE 1:1000 0 20 40 m
FIG. No. 15	





845394

5 cm

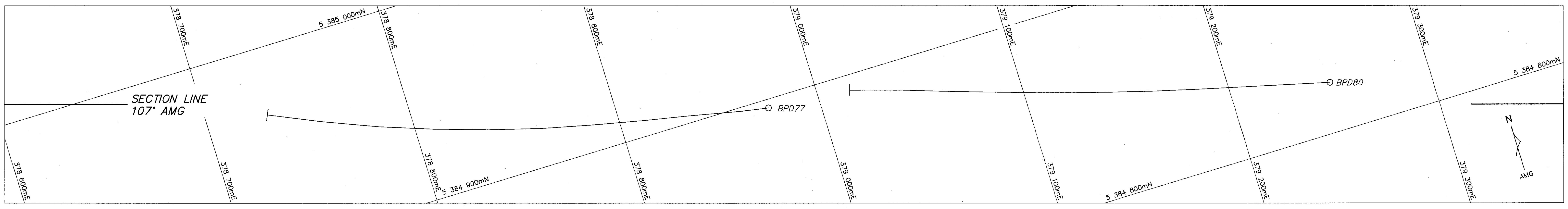
94-3654

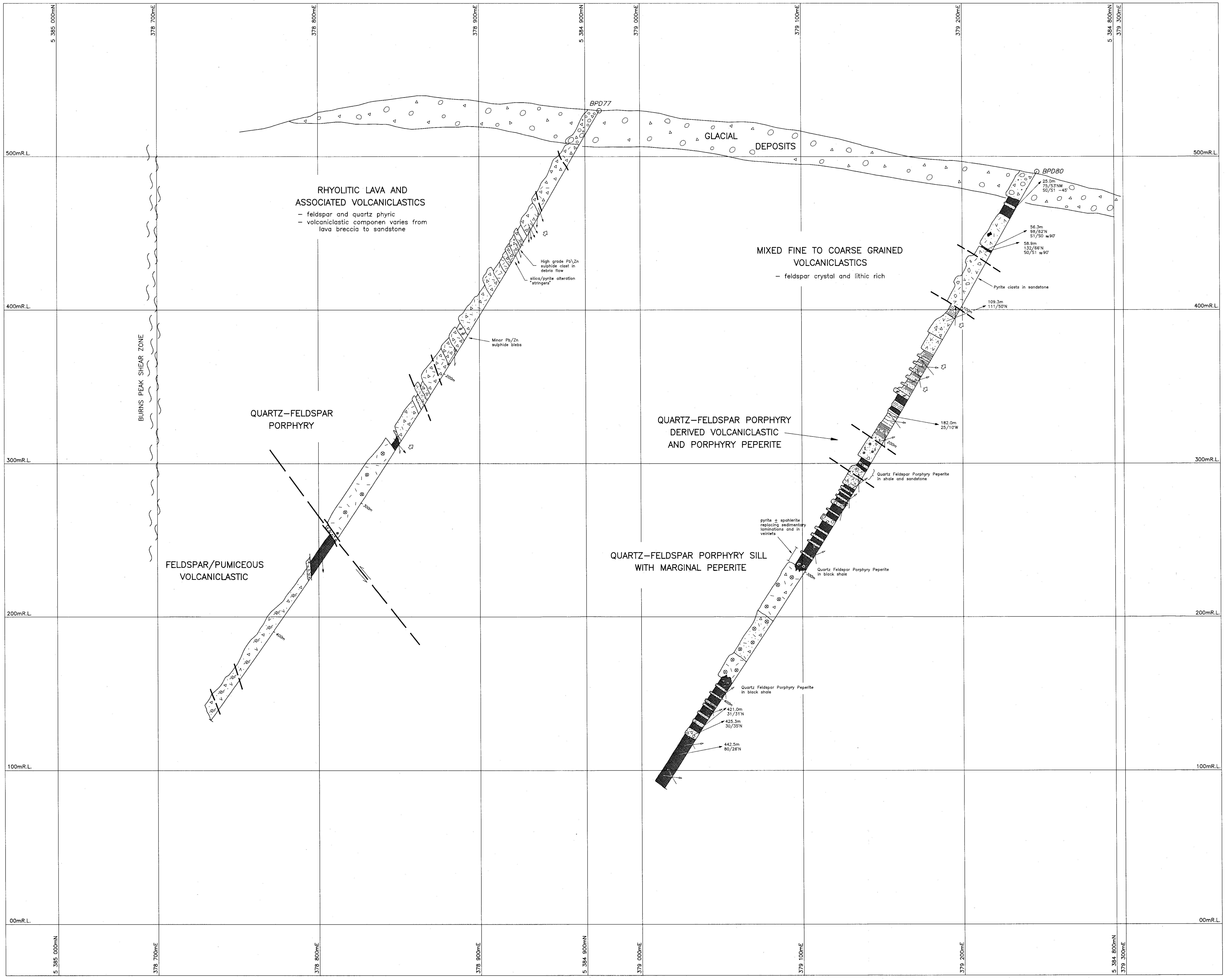
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

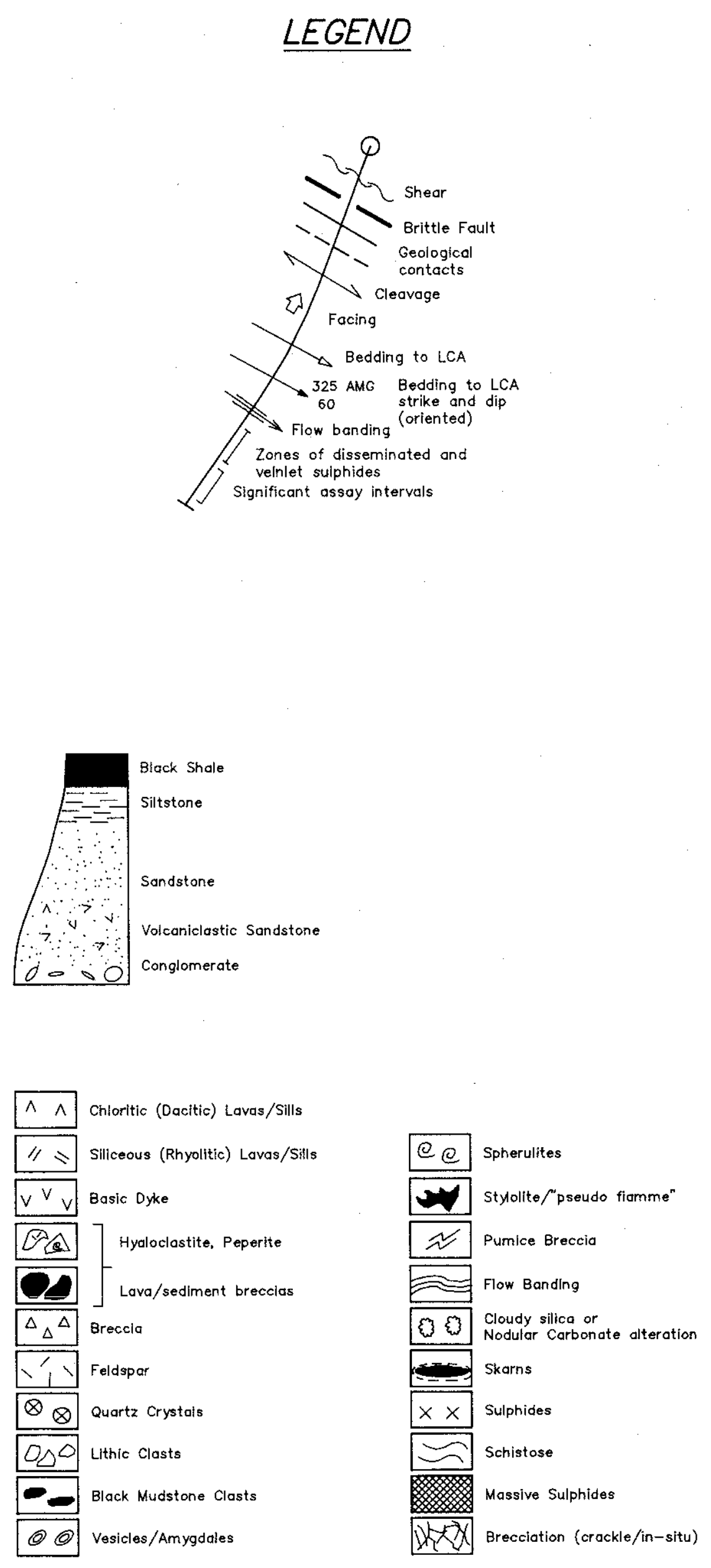
COMPILED : R.A.P.
DATE : Mar., 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV
PINNACLES
BPD79
INTERPRETED DRILL SECTION AMG
AMG 280°
EAF GRID LINE 5400N

DRAWING No. BPB79_A0
SCALE 1:1000 0 20 40 m
FIG. No. 17







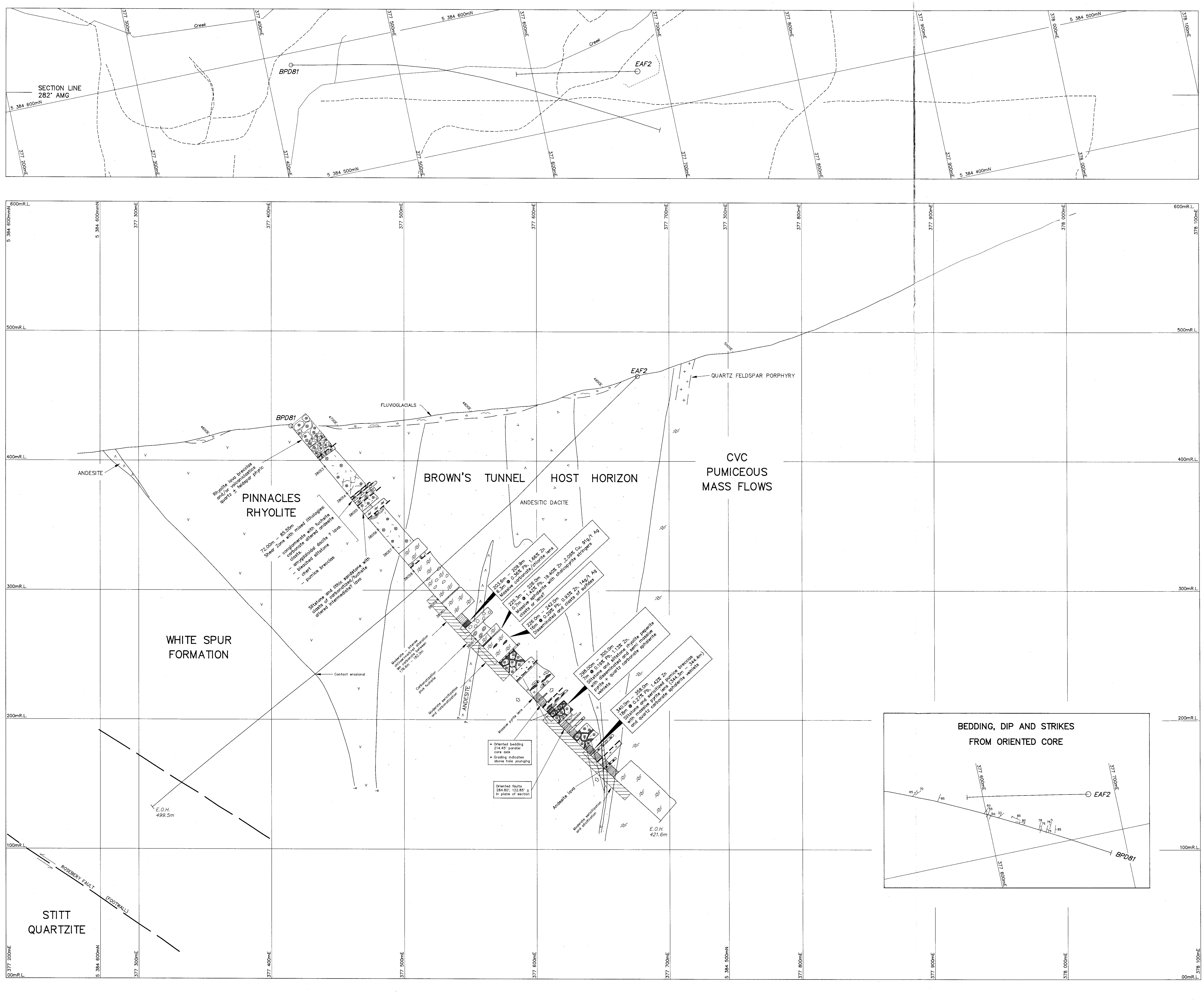
5 cm

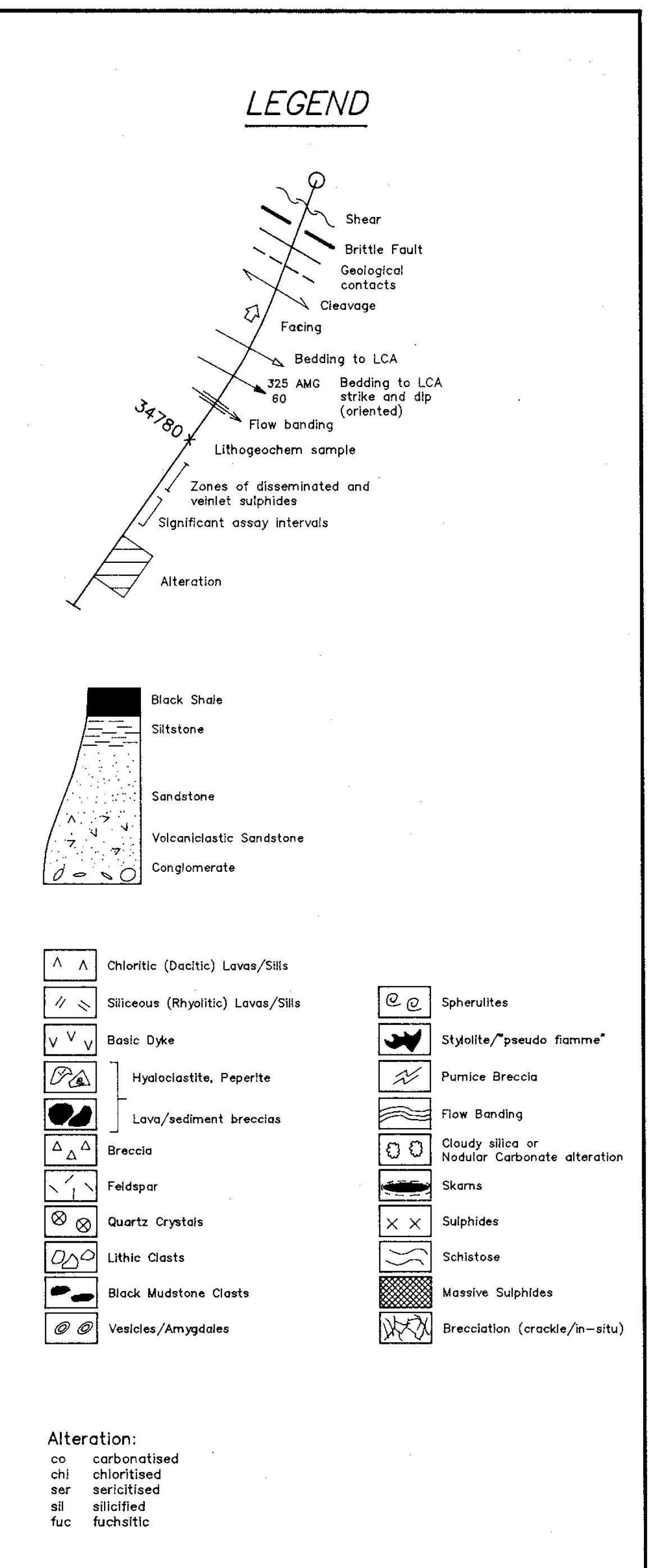
845395

94-3654

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED :L.W.K.	E.L. 44/88 – BURNS PEAK JV PINNACLES **DRILL SECTION** BPD77 AND BPD80 107° AMG
DATE : July 1993	
DRAWN : G.M.B.	
REFERENCE :	
REVISIONS : M.S.S.	
DDH BPD80 added	
DRAWING No.	SCALE 1:1000 0 20 40 m
FIG. No. 18	





Alteration:
co carbonatised
chl chloritised
ser sericitised
sil silicified
fuc fuchsitic

845396

5 cm

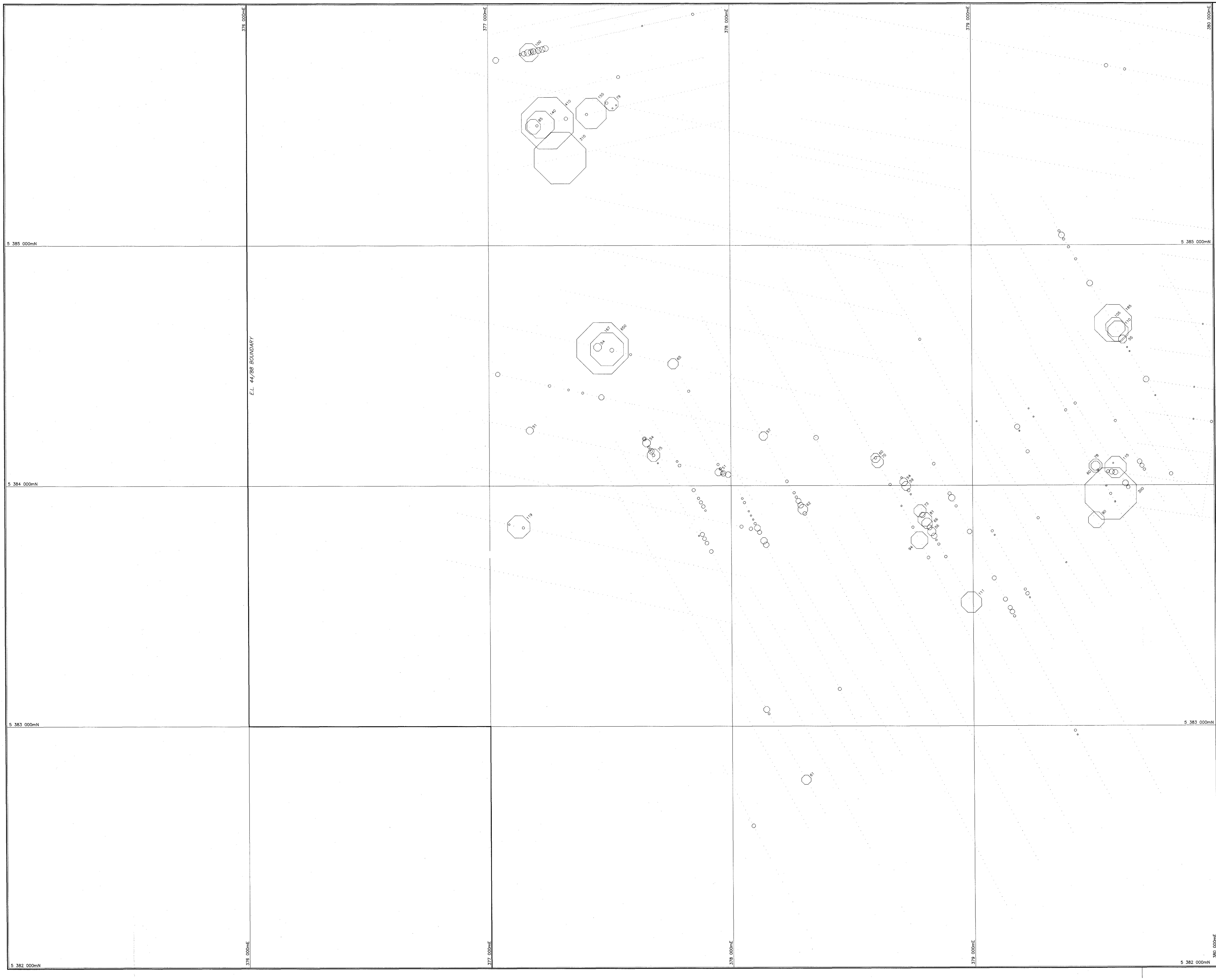
94-3654

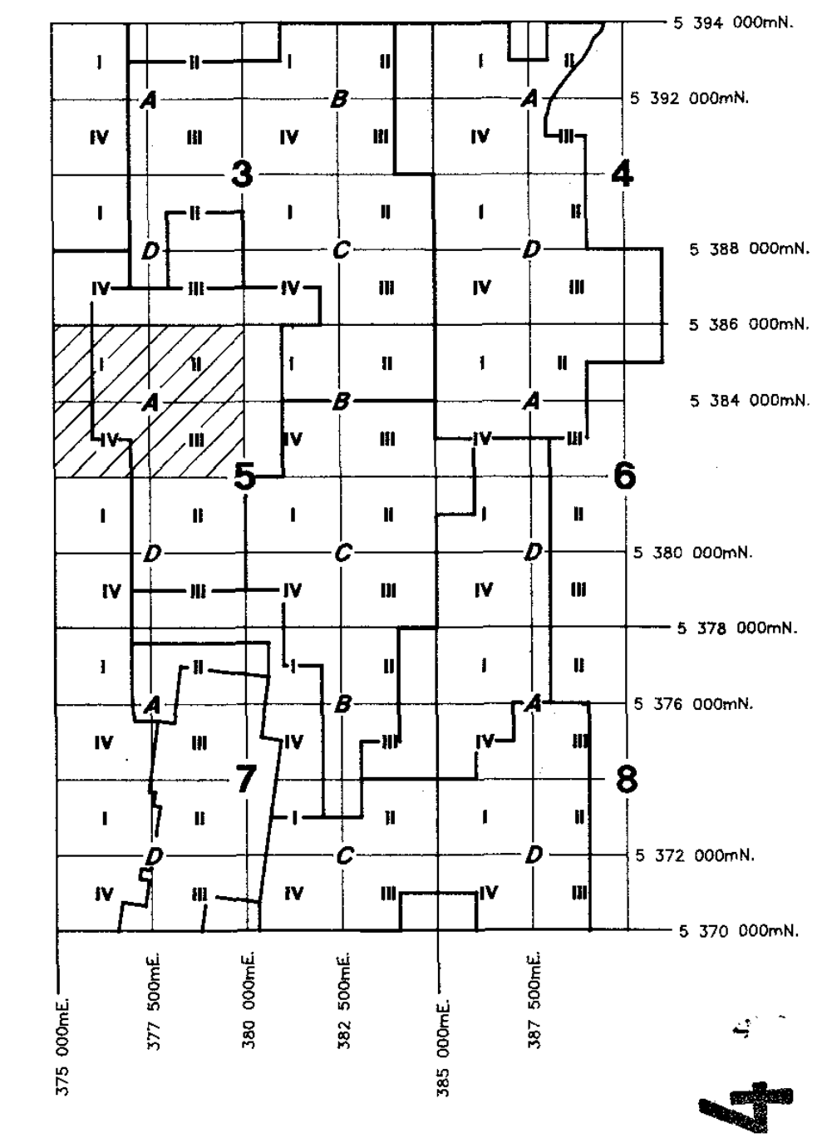
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

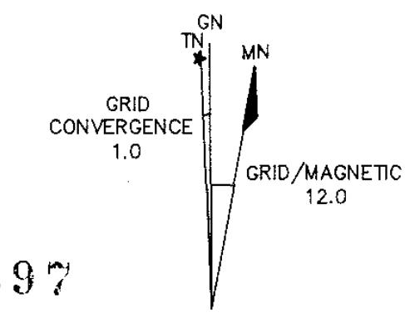
COMPILED : R.A.P.
DATE : Oct., 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV
PINNACLES
BPD81 and EAF2
INTERPRETED DRILL SECTION
AMG 282°
EAF GRID LINE 5200N

DRAWING No. BPB81_A0
SCALE 1:1000 0 20 40 m
FIG. No. 19







94-3654

845397

5 cm

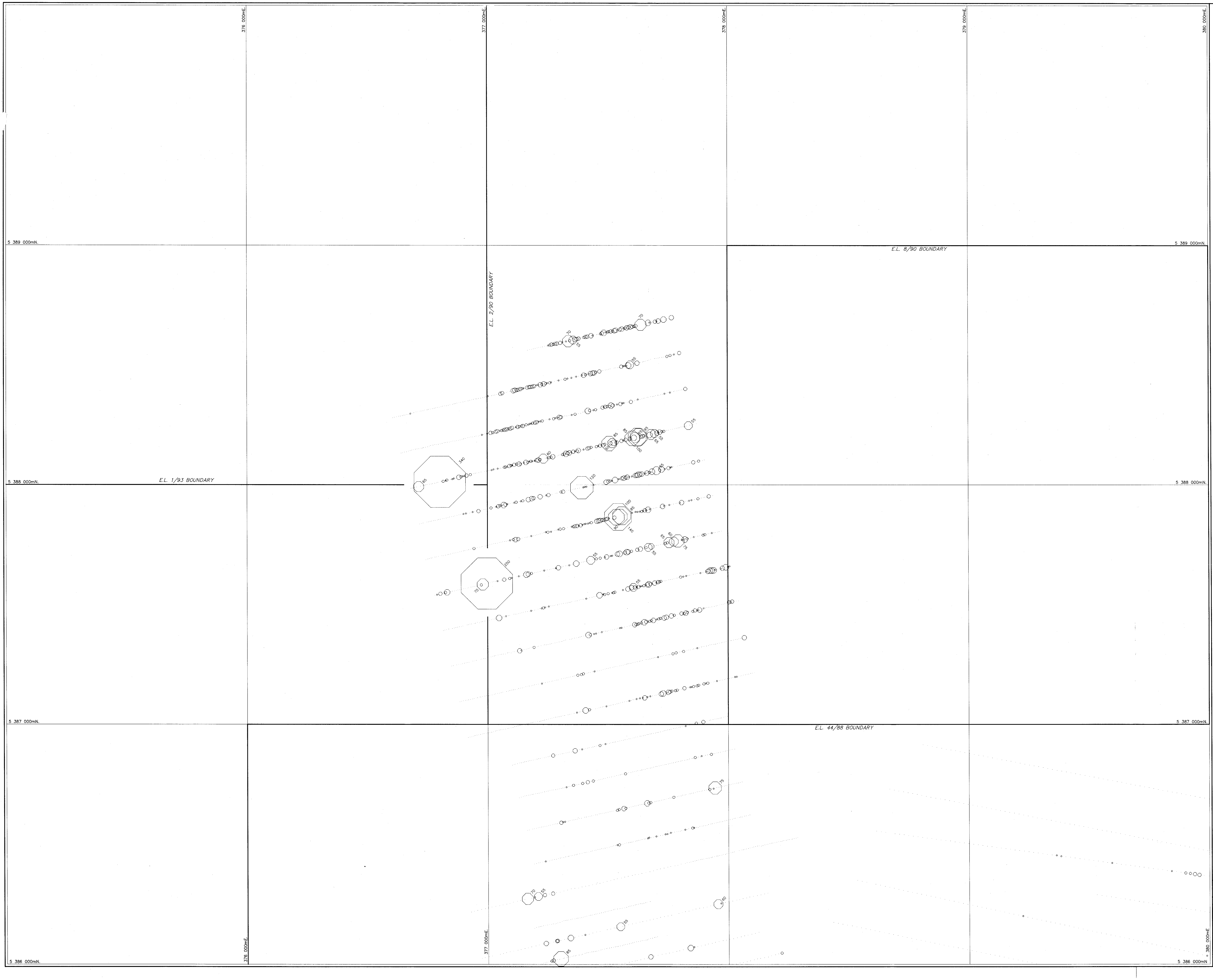
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

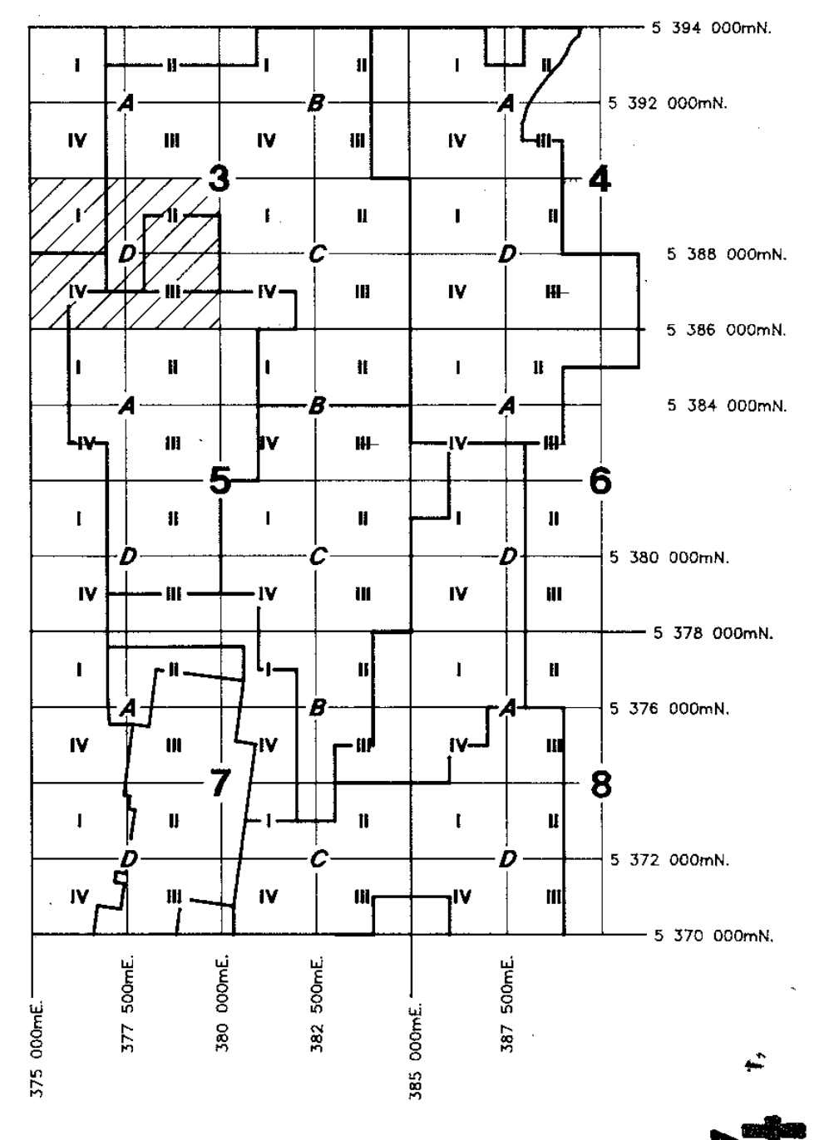
COMPILED : R.A.P.
DATE : October 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

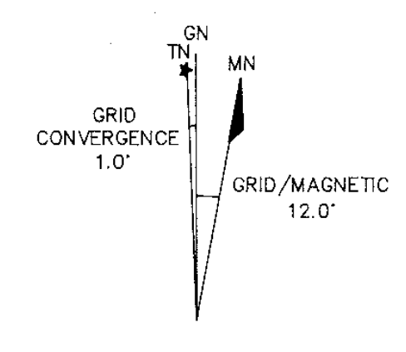
E.L. 44/88 – BURNS PEAK JV

SOIL GEOCHEMISTRY PROPORTIONAL PLOTS Cu

DRAWING No. 5A_SGCU
SCALE 1:5000 0 100 200 m
FIG. No. 20







94-3654

845398

5 cm

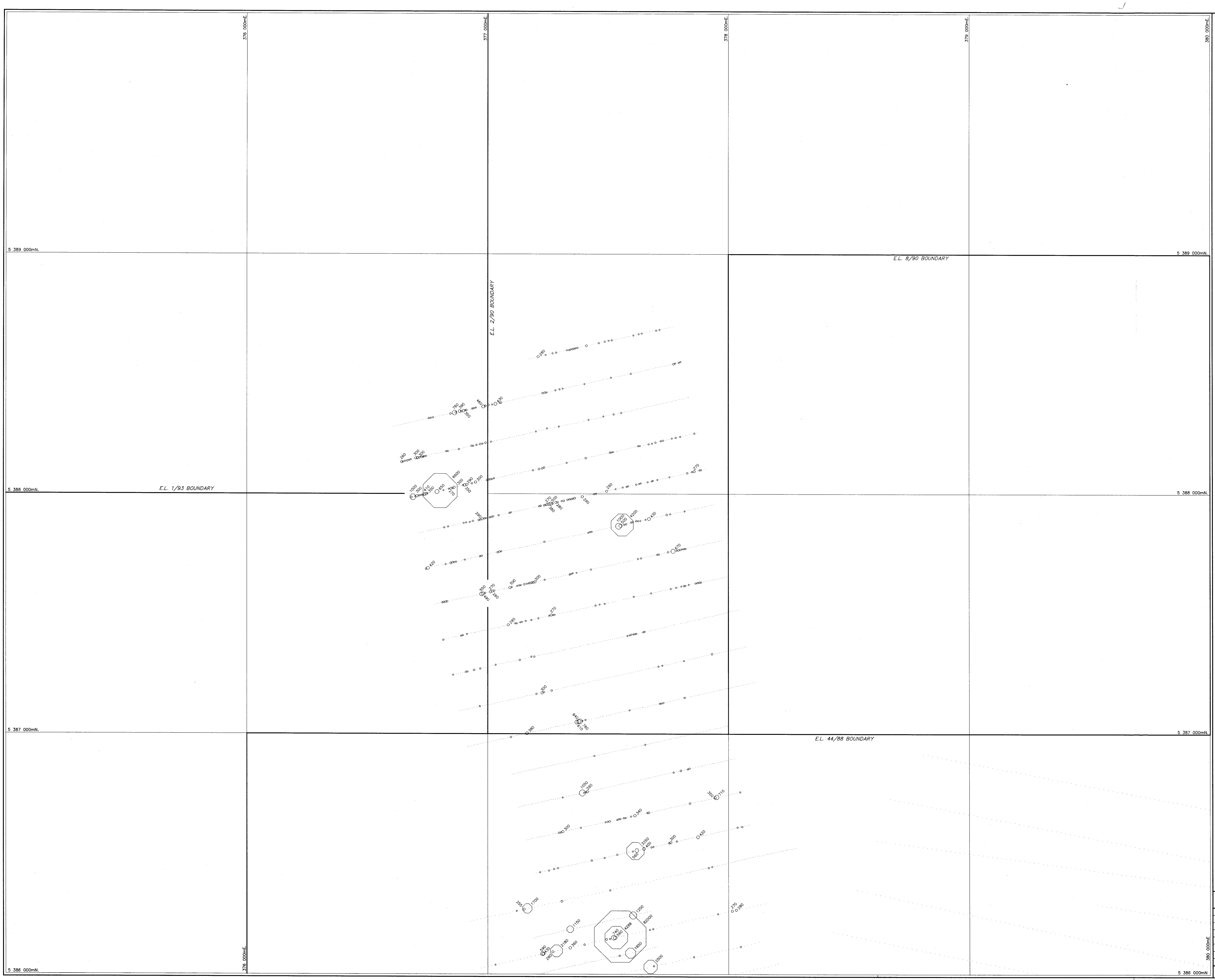
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

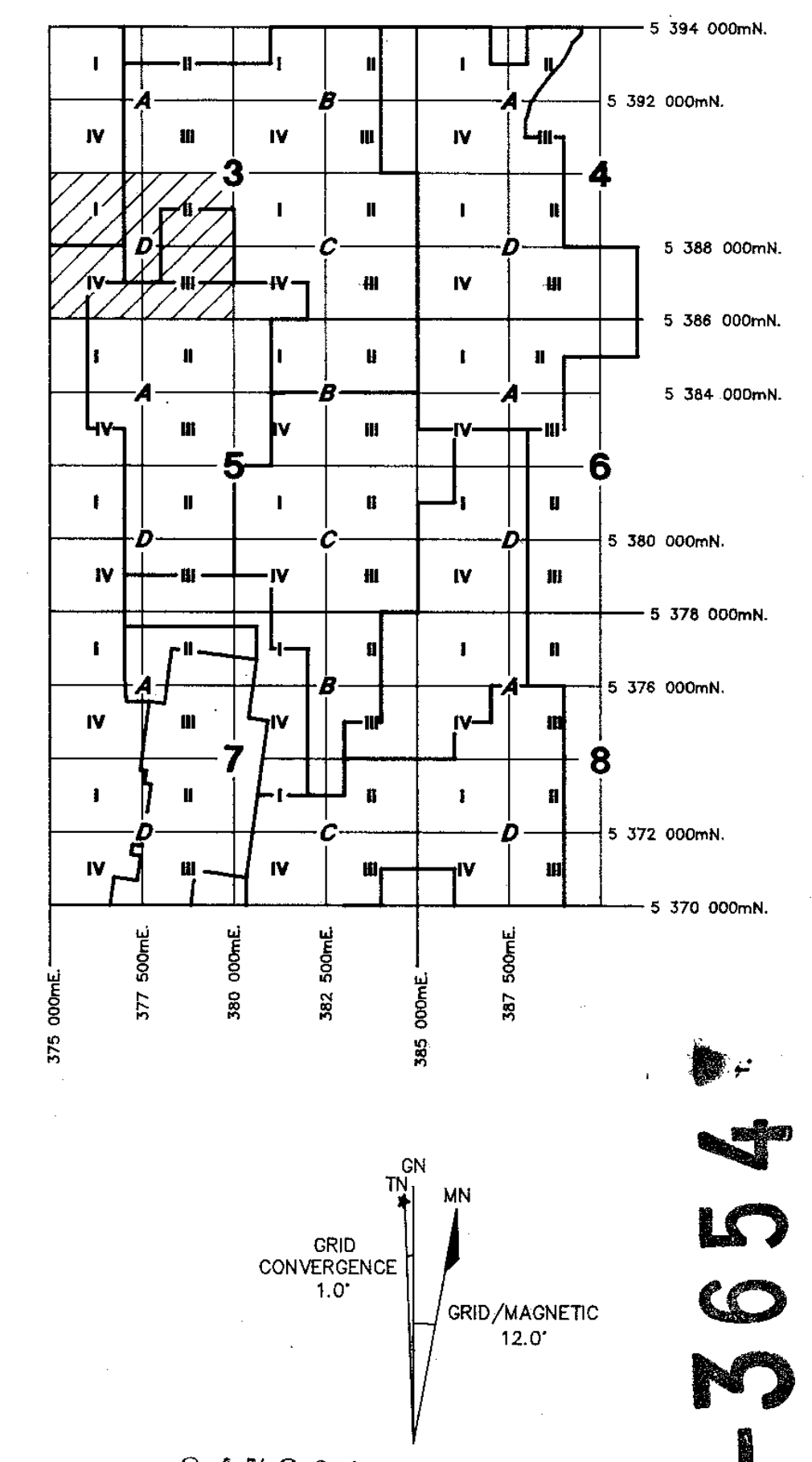
COMPILED : R.A.P.
DATE : October 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV

SOIL GEOCHEMISTRY PROPORTIONAL PLOTS
Cu

DRAWING No. 3D_SGCU
SCALE 1:5000 0 100 200 m
FIG. No. 21





94-3654

845399

5 cm

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED : R.A.P.
DATE : October 1994
DRAWN : G.M.B.
REFERENCE :
REVISIONS :

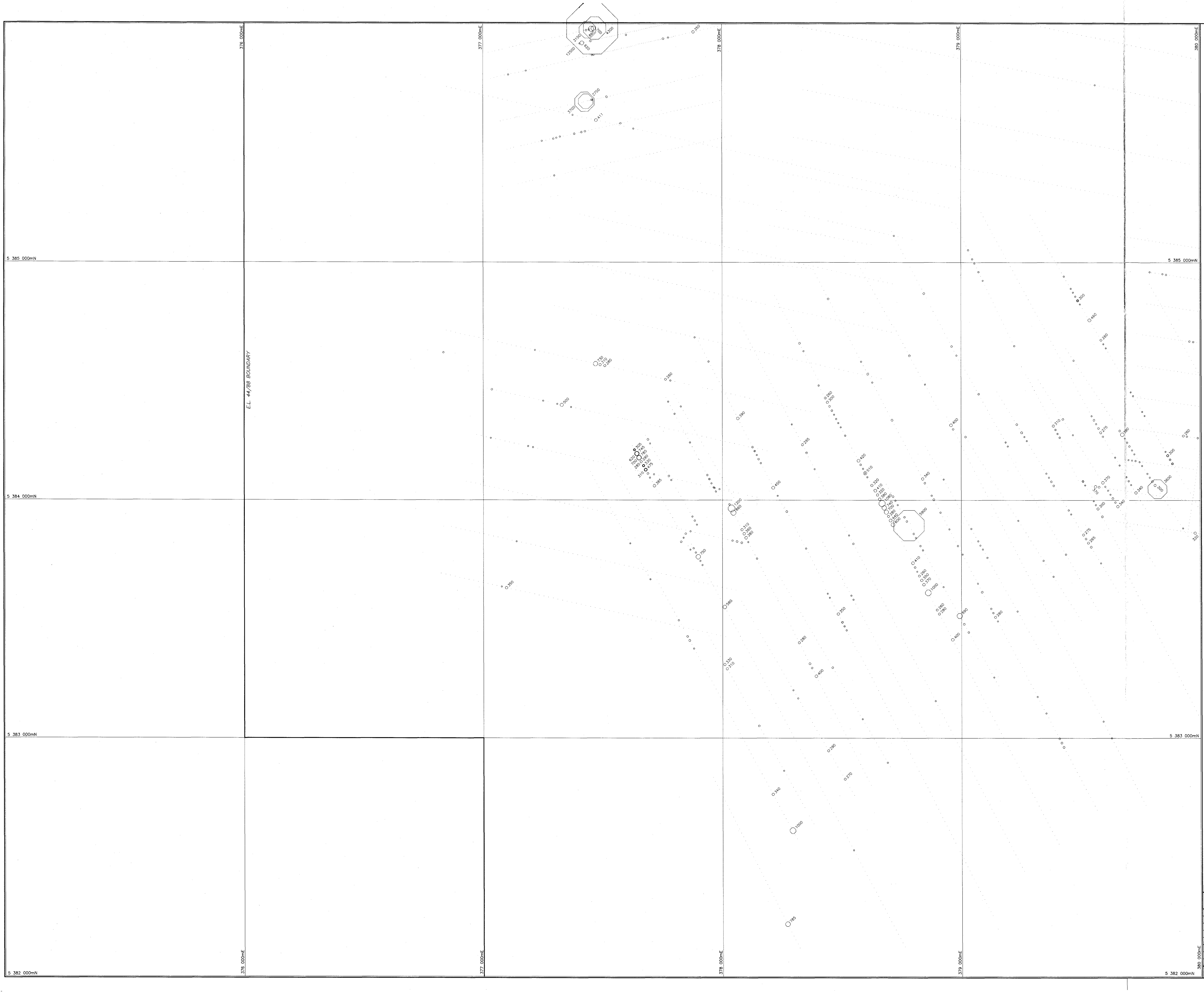
E.L. 44/88 – BURNS PEAK JV

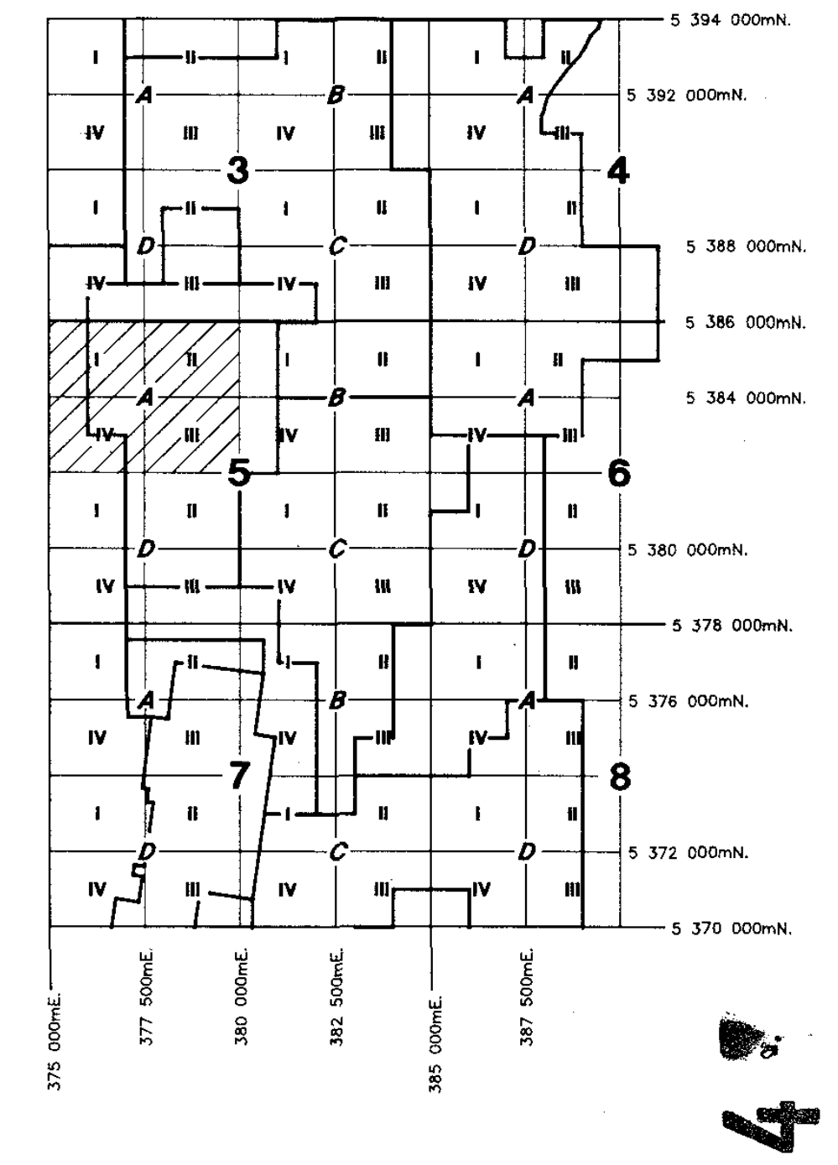
SOIL GEOCHEMISTRY PROPORTIONAL PLOTS Zn

DRAWING No. 3D_SGZN

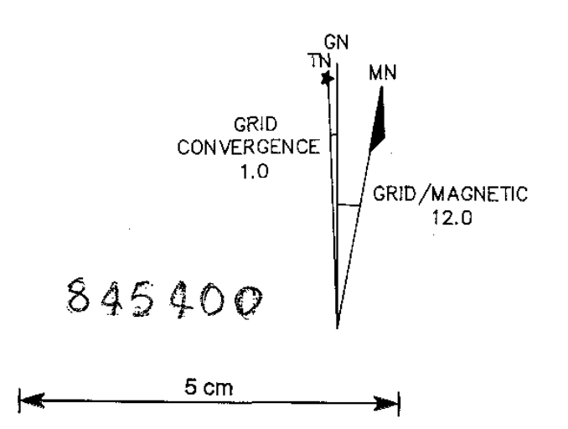
SCALE 1:5000 0 100 200 m

FIG. No. 23





94-3654



845400

5 cm

PASMINCO EXPLORATION
A Division of Pasminco Australia Limited

COMPILED :
DATE :
DRAWN :
REFERENCE :
REVISIONS :

E.L. 44/88 – BURNS PEAK JV

SOIL GEOCHEMISTRY
PROPORTIONAL PLOTS
Zn

DRAWING No.
5A_SGZN

SCALE 1:5000 0 100 200 m

FIG. No.
22