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MINERAL RESOURCES
FILE REF: EL8/96 PT 3
ACN 108 560 978
13 JUL 2001
DOC. REF:
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MINERAL RESOURCES
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TASMANIA

GOLDFIELDS EXPLORATION

PARTIAL RELINQUISHMENT REPORT

TASMANIAN GOLD PROJECT

EL 8/96

SOUTH HENTY

OPEN FILE

Vol 1 of 3
Text and Enclosures 1, and 2.

HELD BY: GOLDFIELDS LTD.

MANAGER & OPERATOR: GOLDFIELDS EXPLORATION LTD.

01_4575 Vol. 1 of 3

Partial Relinquishment Report Tasmanian Gold Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. EL8/1996

AUTHOR(s):Tim Callaghan

11 July 2001

PROSPECTS: Lake Newton prospect, Howard's Anomaly, Spillway Horizon, Canal Zone.

MAP SHEETS:	**1:25,000: Tyndall, Oceana Dundas**	**1:100,000: Sophia**
GEOGRAPHIC COORDS	**Min East: 379,000mE** **Min North: 5,356,000mN**	**Max East: 382,000mE** **Max North: 5,352,000mN**

COMMODITY(s): Au, Cu, Pb, Zn, Ag

KEY WORDS: Central Volcanic Complex, Tyndall Group, Yolande River Sequence, Henty Gold Mine, Mt Lyell

Distribution:

- **RGC Exploration Information Centre Reference:**
- **Goldfields Exploration Zeehan**
- **Department of Mineral Resources, Tasmania**
- **Resolute Ltd, Perth.**

SUMMARY

Goldfields Exploration are required to relinquish the southern portion of EL8/96 after MRT granted an Extension of Term for the northern part of the EL.

Work completed during the five years of operation under the Goldfields/Resolute JV included 18 diamond drillholes , geophysics surveys including CSAMT, DHEM and IP and reprocessing of old IP data as well as mapping and rockchip sampling.

The main focus of exploration activity was on the Lake Newton Prospect, a large low grade, zoned alteration system hosted in the CVC's and lower Tyndall Group.

The relinquished ground also contains the prospective Spillway Horizon. The Spillway Horizon is a subaqueous volcaniclastic mass flow unit containing massive sulphide clasts. No alteration zones related to this horizon have been identified to date.

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1.0 INTRODUCTION

This report provides details of work completed for the relinquished portion of EL 8/1996 "South Henty".

1.1 Tenure

EL 8/1996 was granted to Resolute Ltd on the 14th of June 1996. Resolute was granted the licence as the result of a tendering process in which Resolute committed to spending $1.4M in two years. After 18 months of exploration and an expenditure of $1.0M, Resolute negotiated a joint venture with Goldfields Exploration to complete expenditure commitments and continue exploration.

By letter agreement dated 21 July 2000 Resolute elected to withdraw from the JV retaining no further interest in the joint venture. Under the terms and conditions of the JV Resolute was required to transfer all of its interest, free of encumbrances, to Goldfields. A transfer of Resolute's 100% interest in Exploration Licence 8/96 to Goldfields is being registered with Mineral Resources Tasmania.

Goldfields are required to relinquish the southern portion of the EL after being granted an extension of Term for the north of the EL in May, 2001.

The license area consists of crown land and land vested in the HEC, both land uses coming under the mines act. The western part of the tenement is part of the Mt Read Recommended Area for Protection (RAP) but doesn't preclude exploration. Any disturbances in this area require notification and approval from MRT and the Department of Primary Industry, Water and the Environment (DPIWE). The conditions of Exploration are outlined in the Exploration Code of Practice.

The land vested in the HEC includes Lake Newton and associated pump station and access roads, the Henty Canal and service track, and the high-tension power lines and their services tracks.

1.2 Location and Access

The relinquished portion of South Henty EL 8/96 lies midway between Queenstown and Tullah on Tasmania's west coast (Figure 1).

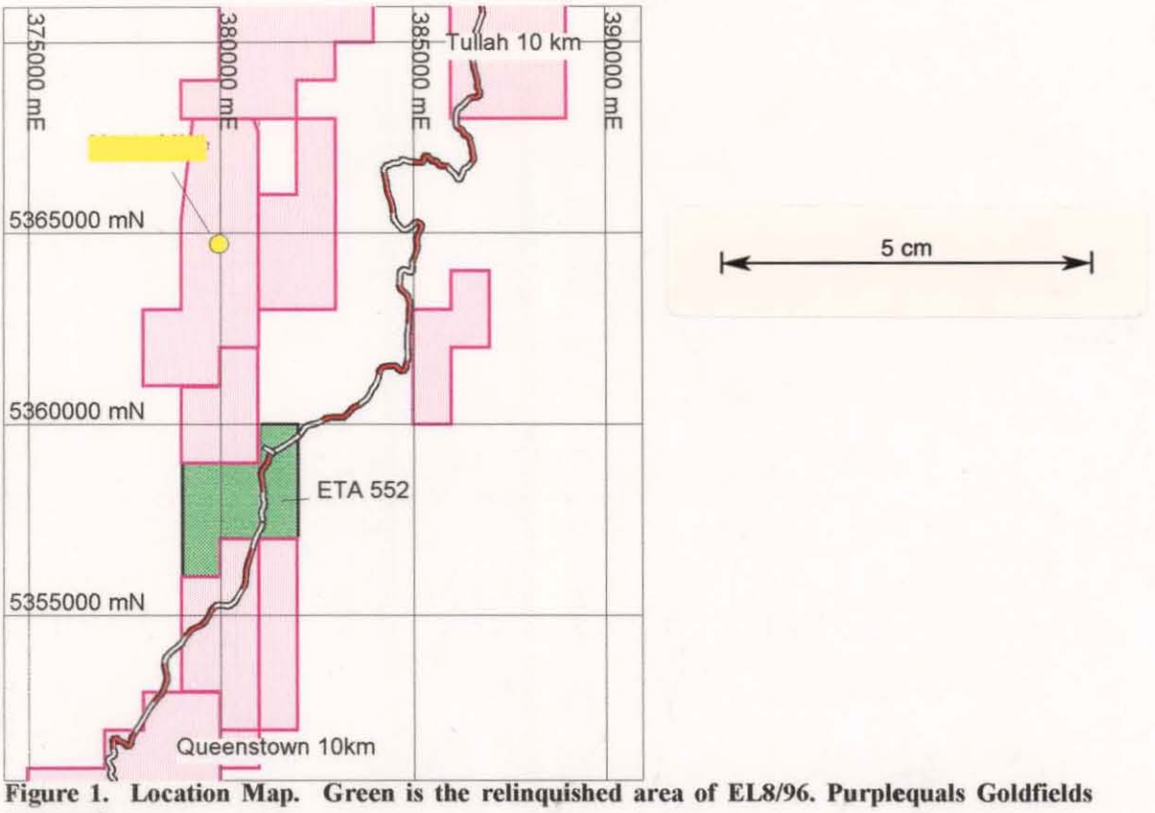


Figure 1. Location Map. Green is the relinquished area of EL8/96. Purplequals Goldfields tenements.

2.0 GEOLOGY

2.1 Stratigraphy

The stratigraphy of the South Henty lease has been well documented by Resolute geologists (Herrmann and MacDonald, 1996) through detailed lithogeochemistry, mapping and graphical logging. Goldfield's work to date has not altered the stratigraphy to any great degree and is summarised below. Goldfields stratigraphic codes are included.

Tyndall Group	Zig Zag Hill Fm	Post-eruptive rhyolitic, volcanolithic conglomerate and qtz-crystal rich sandstone. *Ctc*
	Mt Julia Member	Syn-eruptive qtz-feld crystal rich sandstone. *Ctt* Massive qtz-phyric rhyolitic lavas, breccias and intrusions. *Ctl*
	Lynchford Member	Syn-eruptive feld crystal rich volcaniclastic sandstone. *Cttl* Massive carbonate and marly sediments. *Ccarb* Dacitic volcaniclastic sediments. *Cttld* Howard's Basalt. Fine grained basaltic andesite dykes, lavas and lithic breccias. *Cb*
CVC (Suite II)	Suite II Porphyry	Qtz-feld-hbl porphyry. Intrusive, fractionated. *Cp*
	Anthony Road Andesite	Feld-hbl phyric andesite and breccia , extrusive and intrusive. *Ca*
CVC (Suite I)	Newton Creek Dacites	Dacitic to andesitic volcaniclastic sediments. *Ccv*

		Dacitic, feld phyric to aphyric lavas, breccias and intrusions. *Ccvl*
		Dacitic volcaniclastic pumice breccias. *Ccv*
	Spillway Breccia	Coarse polymict and dacitic massflows with some sulphide clasts. *Ccvag*
	Spillway Basalt	Massive to stratified monomictic "fire fountain' basalt breccia. *Cb*
Yolande River Sequence	Footwall pumice breccia	Massive feld-phyric pumice breccia. *Cymf*
		Vitric siltstones and sandstones. *Cys*

2.2 Structure

Two major faults control the geology of the South Henty Lease, the South Henty Fault to the west and the Great Lyell Fault to the east. The South Henty Fault is a steeply west dipping (60-90°) major regional structure extending for approximately 70km of strike length dividing the geology of the Mt Read Volcanics into distinct terrains. It forms the western boundary of the Yolande River Sequence, CVC and Tyndall Group rocks on the South Henty EL and Henty Mine Lease. The Great Lyell Fault is a large west dipping reverse fault with several hundred metres of displacement. The rocks of exploration interest lie between these two structures.

Bedding consistently faces east and is steeply east dipping to overturned west dipping on most of the EL. Bedding generally trends north, north-westerly and is truncated at low angles by the South Henty Fault. A tight, shallow north plunging syncline is located near the Great Lyell Fault in the south east of the lease and may be a southern extension of the Mt Julia syncline. The major regional S_2 foliation overprints most rocks and has a northwesterly strike and steep southwest dip.

Bedding is strongly controlled by the morphology of both the Mt Julia Rhyolite and the Suite II porphyry, and possibly syn-intrusive/growth faults. Thickening of the stratigraphic package around intrusive margins and stratigraphic variations including rapid local thickening of the basal Lynchford Member volcaniclastics, increased thickness and number of basaltic andesite flows, dacite domes and rhyolite domes suggests synvolcanic faulting within the Lake Newton Prospect area.

Extensive ductile deformation has focused on the Howard's basalt horizon, particularly in the southeast corner of the lease in the Howard's Anomaly area. The localised deformation has resulted in a strongly developed foliation and down dip stretching lineation in the chloritised basaltic breccias grading into brittle faulting and kinking of the earlier foliation. The fault represents the extended limb and hinge of a series of NNW trending asymmetric folds located in the SE corner of the EL and extending onto the Anthony EL. These structures mark the change from dominantly east facing-steeply dipping bedding strongly influenced by the Henty Fault in the west to flatter lying strata, disrupted by N to NNW trending open to tight folds and associated faulted limbs with wavelengths of approximately 200m in the east.

Many minor, late, east-west trending brittle faults with displacements of less than ten metres disrupt the stratigraphy.

2.3 Alteration and Mineralisation.

Detailed systematic exploration and research on the relinquished part of the South Henty EL has identified two target areas (Figure 2) with the potential to host Cambrian volcanogenic gold deposits and VHMS deposits:

- The Lake Newton Prospect (Cu-Au) (including Howard's Anomaly (Ba-Ag).
- The Spillway Horizon (polymetallic massive sulphide).

The Lake Newton Prospect was the main focus of exploration activity.

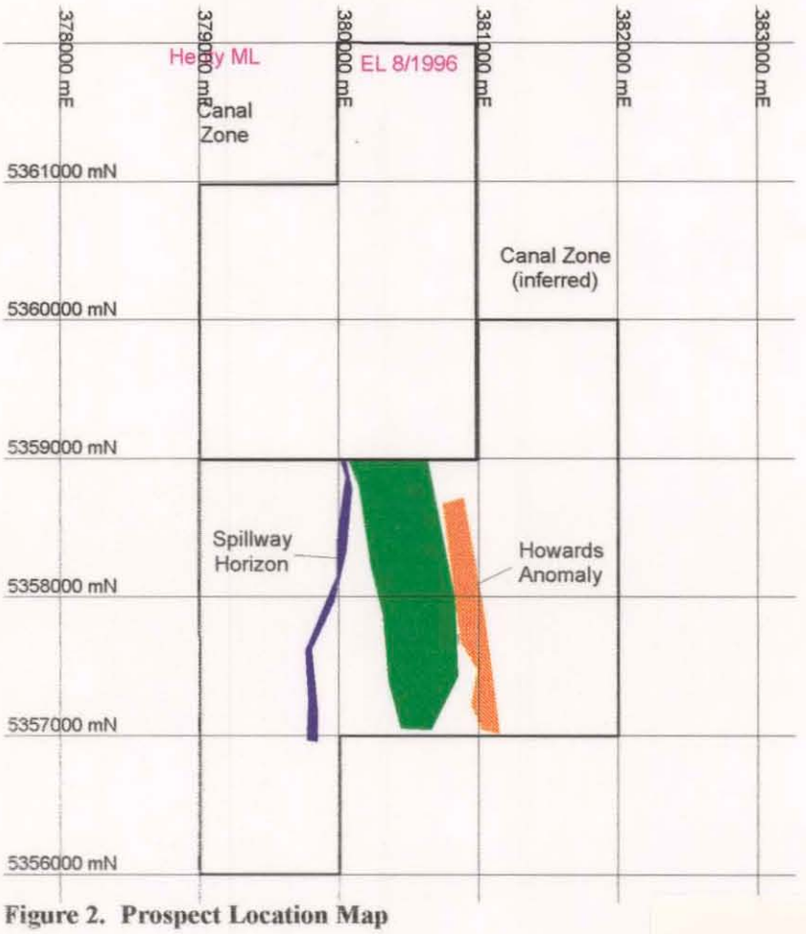


Figure 2. Prospect Location Map

Lake Newton Prospect

Exploration over the past three years has demonstrated that the basemetal-carbonate alteration extensively explored by Pasminco in the north of the EL, the Lake Newton sulphide alteration discovered by Goldfield's Exploration and extensively explored by Resolute Ltd., and the Howard's Anomaly alteration are all part of the one large hydrothermal system.

The prospect is a well zoned, epigenetic, low grade (0.2-0.4 g/t Au), disseminated copper-gold system with an extensive low grade (<1% Pb + Zn) base metal halo. Typical results from the inner zone include:

SHD16	615-736m	121m @ 0.2 g/t Au
	770.8-791.8m	21m @ 0.4 g/t Au
SHD22	346.0-392.0m	46m @ 0.2 g/t Au
	482.0-508.0m	26m @ 0.3 g/t Au

It is of considerable size and has many similarities with the Mt Lyell and Henty-Mt Julia copper-gold deposits of the district. The entire alteration zone extends over a strike length of at least 2kms, varies between 30m to over 400m in width and is open at depth. The alteration is well zoned from the outer halo moving inwards in the following order:

carbonate-chlorite halo
carbonate-sericite-(chlorite-sphalerite-galena)
sericite-pyrite-carbonate-(gold-galena-sphalerite)
sericite-silica-pyrite-(chalcopyrite±gold).

The top of the alteration system is characterised by either:

sericite-pyrite-barite-jasper-(sphalerite-galena)
hematite-carbonate-chlorite-jasper-(Ag-Ba)

The alteration is dominantly hosted in the polymict to dacitic massflows of the Spillway Horizon and overlying massive dacitic pumice breccias of the Newton Creek dacites, but also overprints the Spillway Basalt and extends down into the underlying Yolande River Sequence rhyolitic pumice breccias and vitric siltstones. The alteration partially overprints the boundary of the Suite II porphyry implying a syn to post porphyry timing of the hydrothermal event. Because the Suite II porphyry has peperitic contacts with the overlying Lynchford Member (as seen in SHD17, SHD19 etc.), it would appear that the porphyry and therefore the alteration postdate the carbonates and basaltic andesites of the Henty-Comstock Horizon.

The top of the alteration is hosted in the lower Tyndall Group, particularly the Howard's basalt and Lynchford Member volcaniclastics. Mineralisation within the upper zone is rare, occuring as small discontinuous lenses of barite-sulphide alteration (eg. Tyndall Creek), weak, disseminated pyrite-sericite (eg. SHD21) or occasional elevated Ag assays from hematite altered volcaniclastics (eg. Howard's Anomaly, HA4 and HA6). The Lower Tyndall Group possibly represents a near seafloor position during the mineralising event. The presence of barite and jasper veining supports this hypothesis.

Although the mineralisation is diffuse and low grade, the Cu-Au rich hydrothermal fluids are capable of forming economic deposits if the right physical and/or chemical conditions existed.

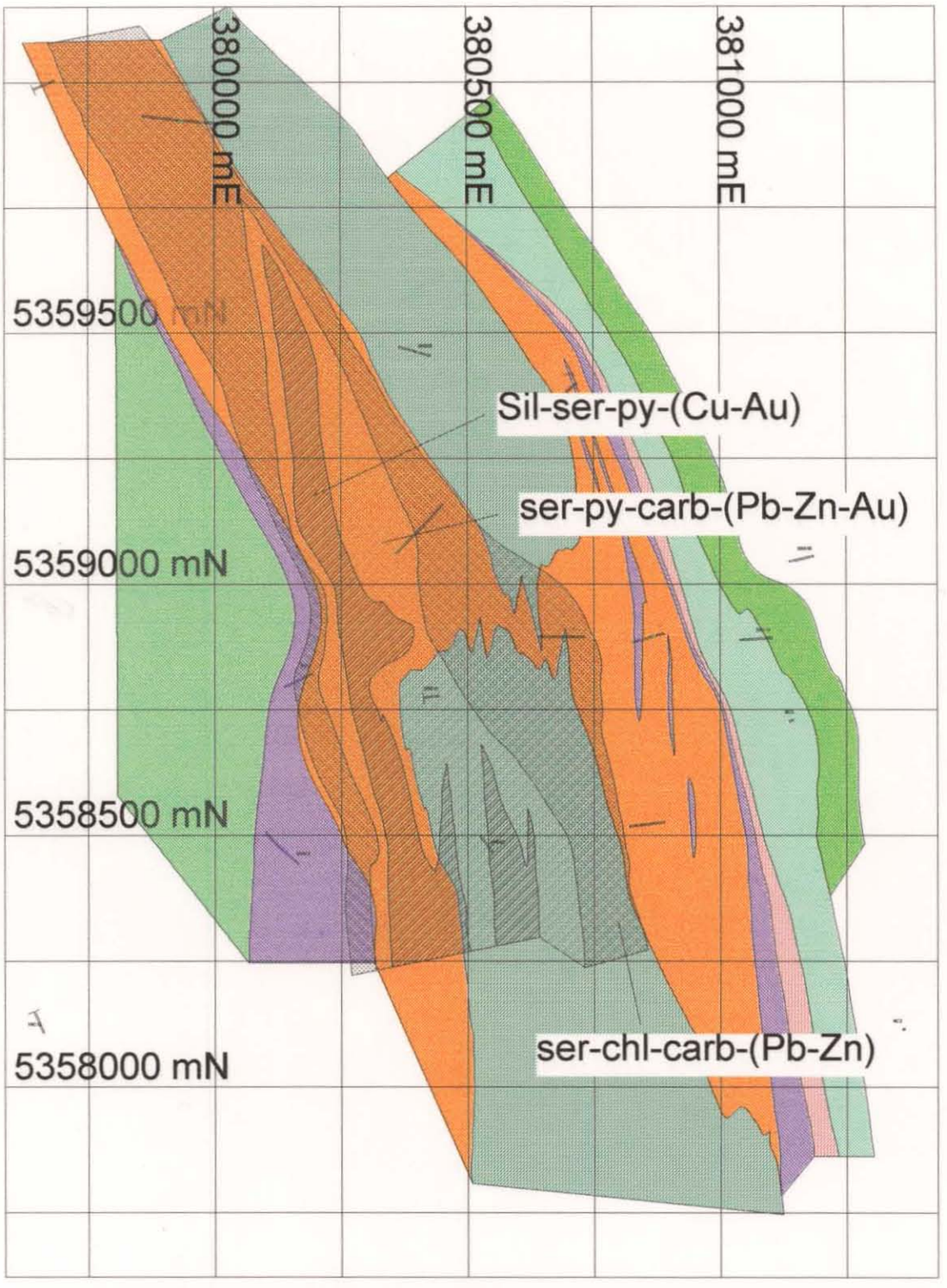
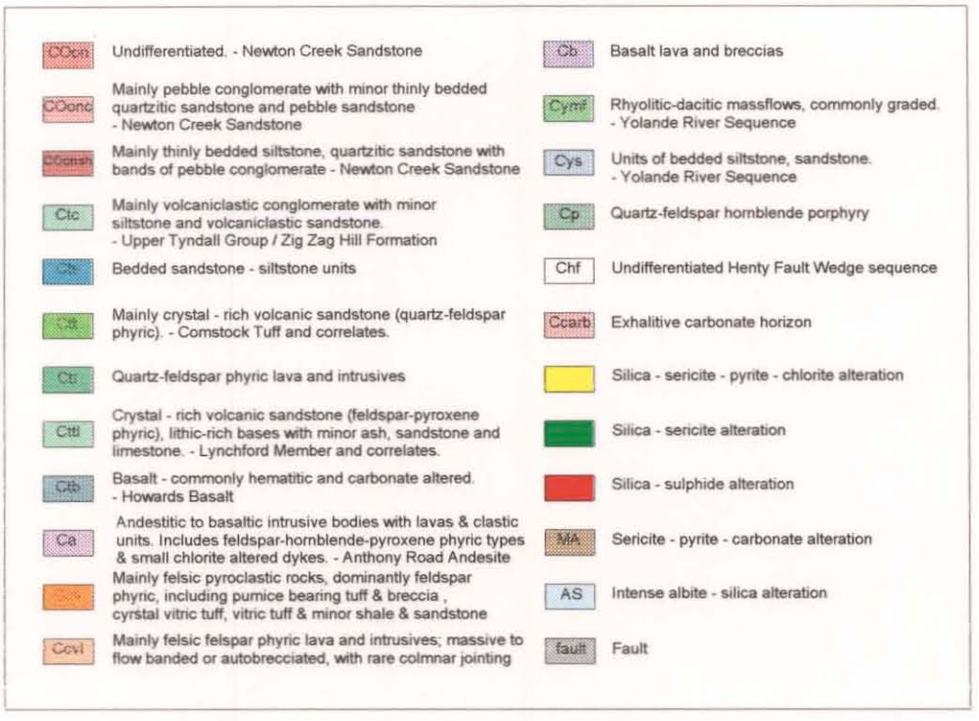


Figure 3. Lake Newton Prospect Alteration Zonation Level Plan 100mRL. (Legend for Figure 2, is located in the following table.)

5 cm



3.0 WORK COMPLETED BY GOLDFIELDS/RESOLUTE JV 1996-2001

Work completed between 1996 and 2001 by Resolute Ltd and Goldfields Exploration on the relinquished portion of EL8/96 is summarised below.

1996-1997

1:5000 mapping of EL 8/1996.
Rock Chip Sampling.
Relogging and review of previous data
Gridding 10.5km's
C-Horizon soil "wacker" sampling (389 samples)
Dipole-Dipole IP, 14km
Diamond drilling, SHD1-13 drillhole for 4369m.
Downhole EM survey.
Petrology and lithogeochemical sampling.

1997-1998

1:5000 mapping of EL 8/1996.
Rock Chip Sampling.
Diamond drilling, SHD16 by Goldfields Exploration, SHD14 by Resolute Ltd.
Downhole EM.
Lithogeochemical sampling.

1998-1999

Mapping of the southern part of EL 8/1996 and minor reinterpretation of the northern sheet.
Rock Chip Sampling and lithogeochemistry.
Downhole electro-magnetics.
CSAMT survey, 24 line km's.
Compilation of previous IP data.
Sulphur Isotope Study.
Alteration Geochemistry Study.

1999-2000

Processing and imaging of CSAMT survey.
Inversion and imaging of old IP sections.
Diamond drilling of three holes, SHD21, SHD22 and SHD25.
DHEM survey and modelling of new drillholes (SHD20, SHD21, SHD22).
Additional DHEM survey and modelling of earlier drillholes (SHD16, SHD2, SHD1, NC4, SHD12).
Sulphur isotope study.
BSc. (Hons) Study, University of Tasmania.

2000-2001

No work completed on relinquished ground.

The results from Resolute's first year of work are located in an Open File Report by Resolute Ltd. (Herrmann and MacDonald, 1997). All later work completed on the relinquished ground is documented in this report and closed file reports (Callaghan, 1998, Callaghan, 1999 and Callaghan, 2000).

3.1 Diamond Drilling

Drillholes SHD1 to SHD13 are documented in Herrmann and MacDonald, (1996). Drillhole logs for SHD14, SHD16, SHD21, SHD22 and SHD25 are located in Appendix 1. Drill sections and level plans are located in Enclosures.

SHD14

The hole was designed to test the Lake Newton alteration zone above SHD1. A cross section of the hole is included in Enclosures. The hole did not intercept the altered dacitic pumice breccias as anticipated but intercepted a large basaltic unit followed by the Suite II quartz-feldspar-hornblende porphyry. The end of the hole intersected weak Au anomalism (2m @ 0.48 g/t and other above detection limit results) associated with minor pyrite-albite-sericite-silica alteration. This suggests the hole was stopped near the bottom contact of the porphyry immediately above the altered pumiceous volcaniclastics intersected in SHD2.

There are marked facies changes in the Lower Tyndall group and Upper CVC between SHD14 and SHD1 complicated by a small intrusive dacite dome at the CVC and Tyndall Group boundary.

SHD16

SHD16 was designed to intersect the Henty Horizon underneath the historic workings of the Tyndall Mine and test the underlying footwall volcanics. The target horizon was faulted out but the drillhole intersected an extensive, zoned alteration system in the CVC pumice breccias with the bulk of the alteration occurring between 550-780m.

A summary log for the hole is as follows:

0-50m	Dacitic to andesitic, crystal lithic volcaniclastic massflows. Lynchford Member.
50-66.8	Carbonates and carbonate impregnated volcaniclastics, Lynchford Member.
66.8-161.4	Volcaniclastic massflows and sandstones. Lynchford Member.
161.4-438.5	Qtz-feld porphyry. Suite II porphyry. Faulted upper and lower contacts.
438.5-462.8	Altered dacitic volcaniclastics, mostly graded pumiceous breccias. Dissem Py, pervasive sericite-chlorite. CVC.
462.8-552.2	Dacitic pumiceous breccias. Sericite-pyrite-carbonate alteration, 0.5% disseminated pyrite. CVC.
552.2-589.4	Strongly silica-sericite-pyrite$\pm$chalcopyrite altered dacitic pumiceous breccias. Disseminated pyrite 2-5% with minor patchy chalcopyrite. CVC.
589.4-620.2	Strongly carbonate-sericite-pyrite altered dacitic pumiceous volcaniclastics. Disseminated pyrite 2-5%. CVC.
620.2-750	Strong silica-sericite-pyrite$\pm$chalcopyrite and carbonate-sericite-pyrite altered dacitic pumice breccias. Zoned alteration. Disseminated sulphides to 5%. CVC.
750-755.8	Massive quartz vein.
755.8-771.8	Carbonate-chlorite altered basaltic breccia. Minor pyrite alteration and chalcopyrite vein at 771m. Spillway Basalt.
771.8-787.8	Vitric siltstone. Carbonate chlorite altered. Disseminated pyrite to 776m. Yolande River Sequence.
787.8-828	Massive pumiceous breccia. Polymict top grading to monomict base. Moderate carbonate-chlorite alteration. Yolande River sequence.

A large alteration zone with low grade Au and Cu has been intersected including :

615-736, 121m @ 0.2 g/t Au
770.8-791.8, 21m @ 0.4 g/t Au.

These alteration zones include best intersections of :

654.3-672.6, 18.3m @ 0.4 g/t Au.
683.8-694.0, 10.2m @ 0.4 g/t Au.

622.2-626.2, 4.0m @ 0.5 g/t Au.
771.8-775.8, 4.0m @ 1.4 g/t Au.

Best Cu assays include:

667.3-672.6, 5.3m @ 1.9% Cu.
719.5-721.5, 2.0m @ 1.3% Cu.

The Henty position was actually located further east than anticipated and was unaltered in SHD16 (see Enclosures for cross sections). The extensive zone of moderately to strongly altered volcaniclastics appears to be a major northern extension of the Lake Newton Prospect hosted in the dacitic pumice breccias of the CVC.

The alteration zone indicates a voluminous Cu-Au hydrothermal system was active at the Lake Newton Prospect. The alteration is zoned from an outer halo of pervasive sericite-carbonate, to sericite-carbonate-pyrite, to sericite-silica-pyrite±chalcopyrite. The sulphides are disseminated and constitute approximately 1-5% of the sulphidic alteration facies. The alteration style is consistent with the Cu-Au hydrothermal systems found southeast of the Henty Fault (Mt Lyell, Henty-Mt Julia). The system has many similarities with the Mt Lyell Cu-Au system found in the same rocks 20km to the south (316Mt @ 0.96% Cu and 0.3 g/t Au), but the Cu/Au ratio has more similarities to the Henty-Mt Julia system. The Cu-Au fluids that formed the Lake Newton Prospect could form high grade Au mineralisation similar to the Henty Deposit in the right depositional environment (ie. seafloor exhalation, fluid mixing or interaction with reactive sediments). The Henty Horizon is located less than 200m up stratigraphy from the intersected alteration so there is a high probability of a significant deposit existing in this locality.

SHD21

Diamond drillhole SHD21 was targeted on coincident CSAMT and DHEM anomalies within the Lake Newton Prospect. The entire hole was altered from the base of the Tyndall Group (171.3m) to the end of hole at 928m. The hole was terminated when the Longyear 44 reached its limit with NQ drill rods. Cross sections are located in Enclosures and Figure 4.

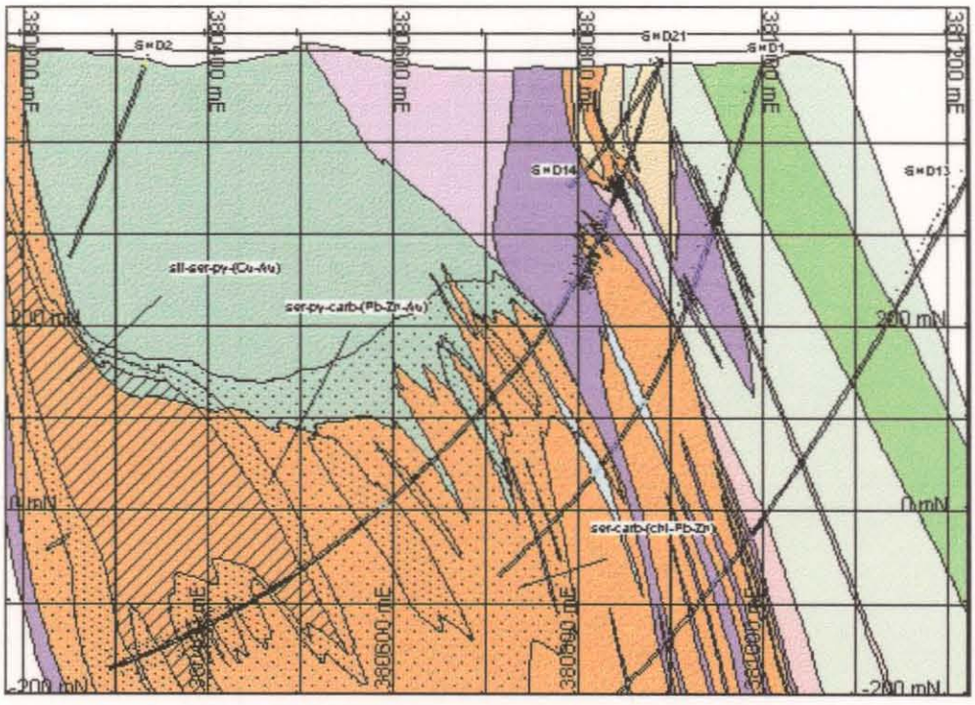


Figure 4. Section 5358900N, SHD21 (Legend as for Figure 3).

5 cm

A summary log of the hole is as follows:

0 – 12.5	Feldspar crystal lithic volcaniclastic sandstone and vitric siltstone. Lynchford member.
12.5 – 82.6	Autoclastic feldspar phyric dacite lava. Newton Creek dacites.
82.6 – 103.8	Feldspar-qtz phyric rhyolite intrusive. Mt Julia rhyolite.
103.8 – 139.4	Massive, feldspar crystal lithic volcaniclastic breccia. Lynchford Member.
139.4 – 171.3	Massive white to purple carbonate with hematite veins and clasts.
171.3 – 314.4	Interbedded basaltic lithic breccia, basaltic lava and limestone. Howard's basalt. Moderate sericite-pyrite-barite alteration.
314.4 – 319.8	Qtz phyric porphyry. Suite II porphyry. Intense sericite-pyrite alteration.
319.8 – 322.3	Massive pyrite.
322.3 – 432.1	Massive, dacitic lithic volcaniclastics with qtz-feldspar porphyry intrusions and peperite. Pervasive sericite-carbonate alteration with minor silica-pyrite veins.
432.1 – 446.1	Qtz phyric suite II porphyry. Intense carbonate-sericite alteration with strong silica-pyrite veining and late basemetal sulphide veining.
446.1 – 501.1	Dacitic pumice breccia. Newton Creek dacites. Pervasive sericite-chlorite-carbonate alteration.
501.1 – 511.1	Qtz-Feld phyric Suite II porphyry. Sericite-carbonate alteration. Pyrite veinlets.
511.1 – 569.2	Dacitic pumice breccia. Newton Creek dacites. Dominantly sericite-carbonate alteration with minor zones of silica-sericite pyrite.

569.2 – 586.9	Black shale. Minor sphalerite-galena veins.
586.9 – 691.0	Dacitic pumice breccia. Newton creek dacites. Pervasive sericite-carbonate-pyrite alteration. Zones of silicification.
691.0 – 733.0	Dacitic pumice breccia. Newton Creek dacites. Intense silica-sericite-pyrite alteration.
733.0 – 850.8	Dacitic pumice volcaniclastic sandstone. Newton Creek dacites. Pervasive sericite-carbonate-chlorite alteration with zones of silica-pyrite alteration.
850.8 – 864.0	Dacitic pumice breccia. Newton Creek dacites. Intense silica-pyrite-sericite alteration.
864.0 – 873.0	Massive white quartz vein. Pyrite-chalcopyrite crystals.
873.0 – 885.9	Dacitic pumiceous volcaniclastic sandstone. Newton creek dacites. Intense silica-sericite-pyrite alteration.
885.9 – 898.8	Dacitic pumiceous volcaniclastic sandstone. Newton Creek dacites. Silica-sericite-pyrite-carbonate alteration.
898.8 – 921.7	Dacitic pumiceous volcaniclastic sandstone. Newton creek dacites. Intense silica-sericite-pyrite alteration.
921.7 – 928	Dacitic pumiceous volcaniclastic sandstone. Newton Creek dacites. Sericite-pyrite-carbonate alteration.

The following table details alteration styles and associated assay results:

SHD21 Alteration Summary Table.

To	From	Lithology	Alteration	Best Results
314.4	220.0	Basaltic VC	Ser-py-barite	No significant results.
319.8	322.3	Massive pyrite	py	2.5m @1.0% Zn (No Au)
322.3	432.1	Dacitic VC	Ser-carb.	No significant results
432.1	446.1	Qtz porphyry	Carb-sphal-gal-Sil-py stockwork	7m @ 0.4 g/t Au, 1% Pb, 1.9%Zn. Incl. 1m @ 1.8 g/t Au, 3.3% Pb, 6.8% Zn
446.1	928.0	Dacitic pumice Breccia	Interfingering ser-carb and silica-ser-py	851 – 866m 15m @ 0.3 g/t Au

This drillhole confirms the continuity of the large, zoned, alteration system identified in SHD16. However only low level Cu-Au and Zn-Pb values were returned. The CSAMT and DHEM surveys have successfully identified the alteration system at depth. A high grade core has yet to be identified. The hole was lined with PVC and a DHEM survey completed. Two significant offhole conductors were identified as discussed in Section 3.3. The larger conductor (Body 1, Asten, 2000) is located within the inner silica-sericite-pyrite core of the alteration system and may represent this style of alteration. Alternatively it may represent higher grade mineralisation within the zoned alteration. The dimensions of the anomaly (800m x 150m x 50m) contains a potential resource in excess of 15Mt.

A stronger, deeper anomaly was detected off and below SHD1 and SHD21 at a depth of approximately 800m from surface.

SHD22

Diamond drillhole SHD22 was collared from Jasper Point in December 1999. The hole was designed to test a deep CSAMT anomaly, off-hole electromagnetic anomaly from NC4 and geochemical zonation defined from previous drilling and mapping. Jasper point is the only site available for positioning a rig to test the 5358500 AMG northing due to the Lake Newton HEC impoundment.

The hole intersected extensive Au and basemetal anomalous silica-sericite-pyrite and sericite-pyrite-carbonate alteration from 94.5m to the end of hole at 616m. The hole was stopped at 616 metres in intensely altered CVC volcanics. The alteration zone proved to be extensive but low grade. The hole swung 30° to the north from the planned azimuth and was not going to test a broad enough stratigraphic package, resulting in the hole being stopped. Cross sections are located in Enclosures and Figure 5.

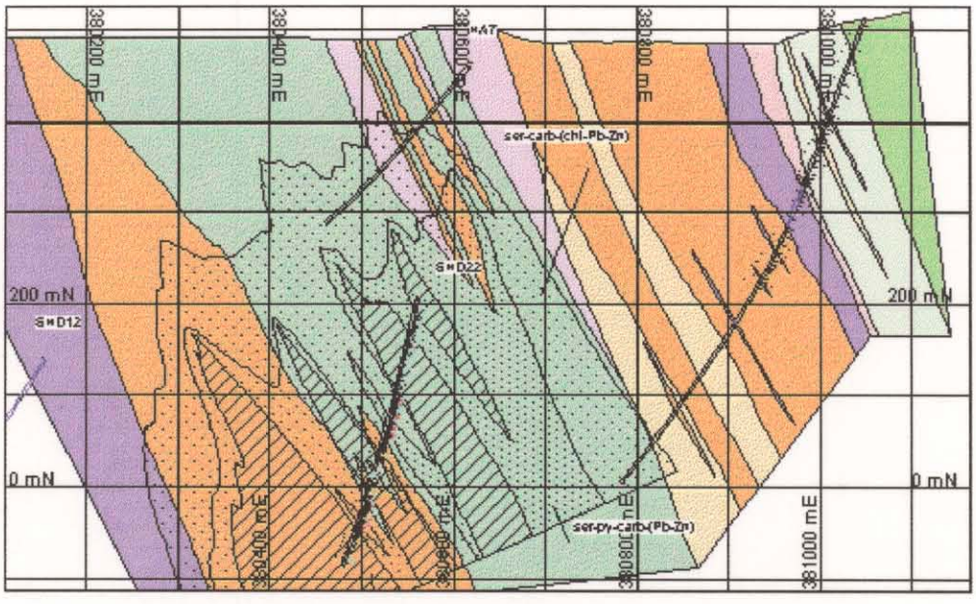


Figure 5. Section 5358500, SHD22 (Legend as for Figure 3).

5 cm

A summary log of the hole is listed below:

0.0-94.5m	Quartz-feldspar-(hornblende) porphyry. Suite II Porphyry. Pervasive chlorite alteration, 2-5% jasper veins. Cp
94.5-452.8m	Massive quartz porphyry. Suite II porphyry. Intense silica-sericite-pyrite alteration with minor carbonate alteration and basemetals. Intensely foliated, sub-mylonitic. Cp
452.8-476.0m	Dacitic pumice breccia. Intense silica-sericite alteration. Disseminated pyrite (2-5%) with chlorite halos. Minor sphalerite-galena blebs and veins. Ccv
476.0-491.0m	Quartz porphyry. Suite II Porphyry. Intense silica-sericite-pyrite alteration with minor carbonate alteration. Cp
491.0-519.0m	Dacitic lithic volcaniclastic breccia and vitric siltstone. Intense silica-sericite-pyrite alteration. Minor chlorite and sphalerite-galena alteration. Ccv

519.0-530.9 Quartz porphyry. Suite II porphyry. Intense silica-sericite-pyrite alteration. Cp.

530.9-567.6 Massive dacitic-lithic volcaniclastic breccia. Pervasive sericite-chlorite carbonate alteration. <1% disseminated pyrite. Cvc

567.6-616 Massive, graded volcaniclastic massflows. Dacitic lithic and polymict breccias with silty tops. Intense silica-sericite-pyrite alteration with pyrite to 5%. Ccv

No ore grade intersections were returned from the alteration zone although significant zones of anomalous gold and basemetals were indicated. The following table summarises the best intersections and the associated alteration styles.

SHD22 Alteration Summary Table.

From	To	Lithology	Alteration	Best Results
138.0	146.0	Qtz porphyry	Silica-ser-py	8.0m @ 0.1 g/t Au
288.0	308.0	Qtz Porphyry	Silica-ser-py	20.0m @ 0.1 g/t Au
346.0	392.0	Qtz Porphyry	Silica-ser-py	46.0m @ 0.2 g/t Au inc. 2.0m @ 0.4 g/t Au
482.0	508.0	Qtz Porphyry & Pumice Brxx/Sslt	Silica-ser-py	26.0m @ 0.3 g/t Au inc. 8.0m @ 0.6 g/t Au
512.0	528.0	Qtz Porphyry & Pumice Brxx/Sslt	Silica-ser-py	16.0m @ 0.1 g/t Au
592.0	610.0	Qtz Porphyry & Pumice Brxx/Sslt	Silica-ser-py	18.0m @ 0.2 g/t Au

This hole confirms the continuity of the extensive Au anomalous core and low grade basemetal halo of the Lake Newton Prospect to the south. DHEM modelling of SHD22 indicates offhole conductor body 1 (Asten, 2000) lies just west of this drillhole. Alteration intensity is greatest at the bottom of the hole. A hole collared from Jasper point and drilled due west is recommended to test this zone. This hole has the potential to test the Spillway Horizon on a favourable structure as well as the Lake Newton Prospect.

SHD25

Diamond drillhole SHD25 was targeted on a prominent inverted IP target located on Line 22 of the old Mt Lyell grid at about 381000mE. The anomaly lies within the Howard's basalt, a favourable potential seafloor horizon at a similar stratigraphic level to the Henty mineralisation. The target horizon occurs in the upper zone of the Lake Newton alteration system. The Howard's basalt is weakly sericite-pyrite-barite altered 1km to the north in drillholes SHD21 and SHD14 although no significant mineralisation is associated with the alteration. The two holes immediately north are weakly altered and silver mineralised (HA3 49m @ 8 g/t Ag, NC4 intersected carbonated-sericite altered dacitic volcaniclastics and intrusives at the end of the hole), consisting of abundant hematite-carbonate altered basaltic lithic breccias and associated limestones. The two holes intersecting the horizon to the south (HA4 and HA6) contain anomalous silver mineralisation (HA4 35m @ 34 g/t Ag, HA6 4.1m @ 6.3 g/t Ag). The conductive zone of the target horizon was considered to be a

potential high grade lens of mineralisation formed at or near the seafloor position above the extensive Lake Newton alteration zone.

Unfortunately no significant mineralisation or alteration was identified in SHD25. Very similar rocks to those of nearby HA3 were intersected. The chargability anomaly possibly is associated with a thin, laminated pyritic vitric siltstone unit at the top of the Howard's basalt..

A summary log for the hole is as follows:

0-19.3m	Massive feldspar-quartz crystal lithic volcaniclastic breccia. Albite-chlorite altered. Comstock Formation, Mt Julia Member. "Comstock Tuff".
19.3-160.5m	Massive, graded feldspar crystal lithic volcaniclastic sandstone/breccia. Dominantly chlorite altered. Lynchford Member "Lynchford Tuff".
160.5-179.5	Massive, matrix to clast supported polymict volcaniclastic breccias. Calcite veined and Lst clast bearing. Lynchford Member.
179.5-181	White to pink fossiliferous Limestone.
181-182.4	Feldspar phyric dacite autobreccia. Chlorite altered. Newton Creek Dacites
182.4-183.8	Fine grained, ashy, basaltic vitric siltstone, minor pyrite. Howard's Basalt.
183.8-204.1	Massive, basaltic lithic volcaniclastic breccia. Strong hematite alteration. Howard's Basalt.
204.1-215.4	Mixed Basaltic lithic breccia and limestone breccia. Hematite altered. Limestone.
215.4-217.1	Broken core. Fault.
217.1-222	Massive, basaltic lithic volcaniclastic breccia. Strong hematite alteration. Carbonate clasts and bands. Howard's Basalt.
222.0-222.4	Limestone.
222.4-224.8	Massive, basaltic lithic volcaniclastic breccia. Strong hematite alteration. Carbonate clasts and bands. Howard's Basalt
224.8-226.4	Limestone.
226.4-233.2	Massive, basaltic lithic volcaniclastic breccia. Strong hematite alteration. Howard's Basalt.
233.2-234.8	Limestone.
234.8-262.3	Massive, basaltic lithic volcaniclastic breccia. Strong hematite alteration. Howard's Basalt.
262.3-263.2	Limestone.
263.2-267.4	Massive, basaltic lithic volcaniclastic breccia. Strong hematite alteration. Howard's Basalt.
267.4-269.0	Limestone.
269.0-315.0	Massive, basaltic lithic volcaniclastic breccia. Strong hematite alteration. Howard's Basalt.
315.0-315.4	Vein.
315.4-367.0	Feldspar phyric andesite. Hematite altered ferromagnesian minerals. Brecciated and calcite veined.

3.2 Geophysics.

Consultant geophysicist, Mike Asten, (Flagstaff Geoconsultants) completed processing and analysis of the CSAMT survey conducted by Zonge in March 1999. A consultants report, imaged sections and plans are located in Appendix 2. The survey completes the 400m spaced coverage of the South Henty, Anthony and Basin Lake EL's, the last two EL's previously surveyed by Billiton during the 1980's.

The most significant CSAMT anomaly is a broad zone of low resistivity (Cagniard resistivity) coincident with the sericite-pyrite alteration of the Lake Newton Prospect to a depth of greater than 500m. A simplified plan of the CSAMT Cagniard Resistivity anomaly over lake Newton at 1024hz (300-500m) with the known mineralisation is included in figure 6. The survey has proved useful in defining the trend of the deposit as well as identifying the more intensely altered core of the system. Unfortunately the survey could not be completed over the centre of the prospect due to the HEC impoundment. Bostick inversions of the data are harder to interpret, and give spotty results that are difficult to correlate with the known mineralisation.

The Cagniard Resistivity anomaly over the Lake Newton Prospect was drill tested by diamond drillholes SHD20, SHD21 and SHD22 as discussed in section 3.1. The 1km southern extension of the anomaly remains untested.

A smaller CSAMT anomaly and coincident IP anomaly is detected on lines 5357400N and 5357800N in the vicinity of the Spillway Horizon stratigraphic position.

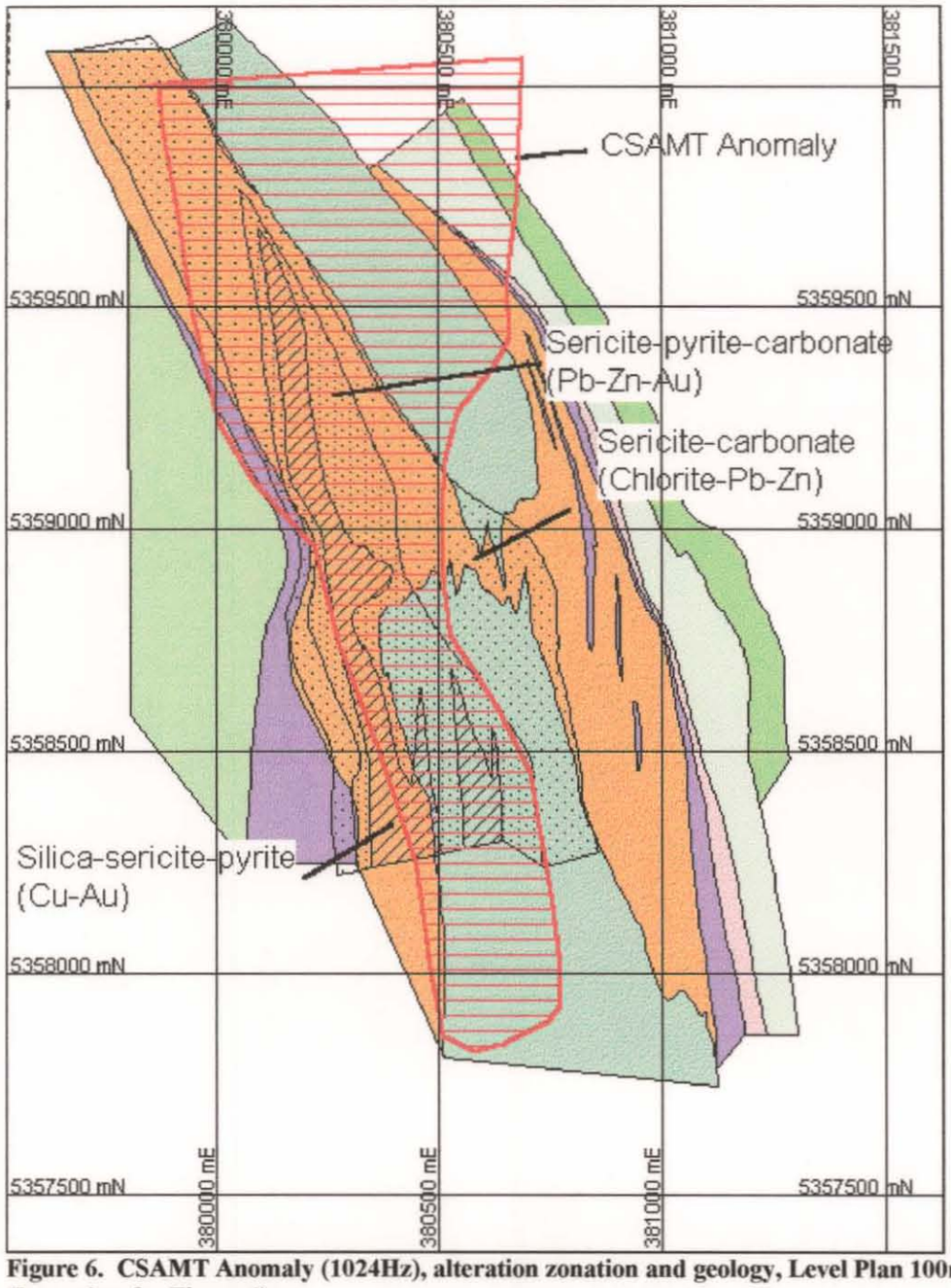


Figure 6. CSAMT Anomaly (1024Hz), alteration zonation and geology, Level Plan 100mRL. (Legend as for Figure 3).

5 cm

DHEM

Results and Modelling Reports of DHEM surveys are located in Appendix 3.

Outer Rim Exploration were contracted to complete the DHEM surveys using the Crone PEM three component downhole system.

After preliminary study of the existing DHEM data by Mike Asten in 1999, it was concluded that additional information could be gained by resurveying some holes with different loop configurations.

Modelling of borehole EM data for holes SHD1 and SHD2 indicates a thick conductive zone exists between these holes. The conductor strikes north-south, has a width of 300m, a shallow dip and a thickness of up to 400m (Asten, 1999). The conductive zone is only weakly detected in SHD16 which was not logged to the bottom of the hole due to shallow dips. The conductive zone is weakly detected between NC4 and SHD12 in the south, giving the zone an overall length of 800m, open to both the north and south.

This conductor is coincident with the CSAMT anomaly and the geochemical zonation of the Lake Newton Prospect. The EM target was drilled by drillholes SHD21 and SHD22, both of which intersected extensive alteration zones and anomalous Au and Pb-Zn mineralisation.

The final DHEM report for drillholes SHD20, SHD21 and SHD22 is located in Appendix 3. Modelling of the data, combined with previously acquired data has identified three conductive bodies within the Lake Newton Prospect (Asten, 2000).

Body 1 (Figure 7) lies above SHD21, between SHD21 and SHD2 and extends south to the end of SHD22 and north through SHD16. It is 800m long, 150m wide and approximately 50m deep. The conductive body lies in exactly the same vicinity as the inner silica-sericite-pyrite-(Cu-Au) core of the Lake Newton prospect and has possibly been intersected by SHD16. The anomaly represents either:

1 The inner silica-sericite-pyrite zone of the alteration system.

2 A higher grade zone within the inner core.

Drilling to date suggests the first possibility.

Body 2 (Figure 7) is the best conductor identified on the prospect. It lies beyond and below the ends of SHD21 and SHD1 at a depth of approximately –270m RL or 770m from surface.

Body 3 is a weak off hole conductor located below and east of SHD20, coincident with the deep CSAMT anomaly. The anomaly occurs approximately 800m below surface making it a low priority target.

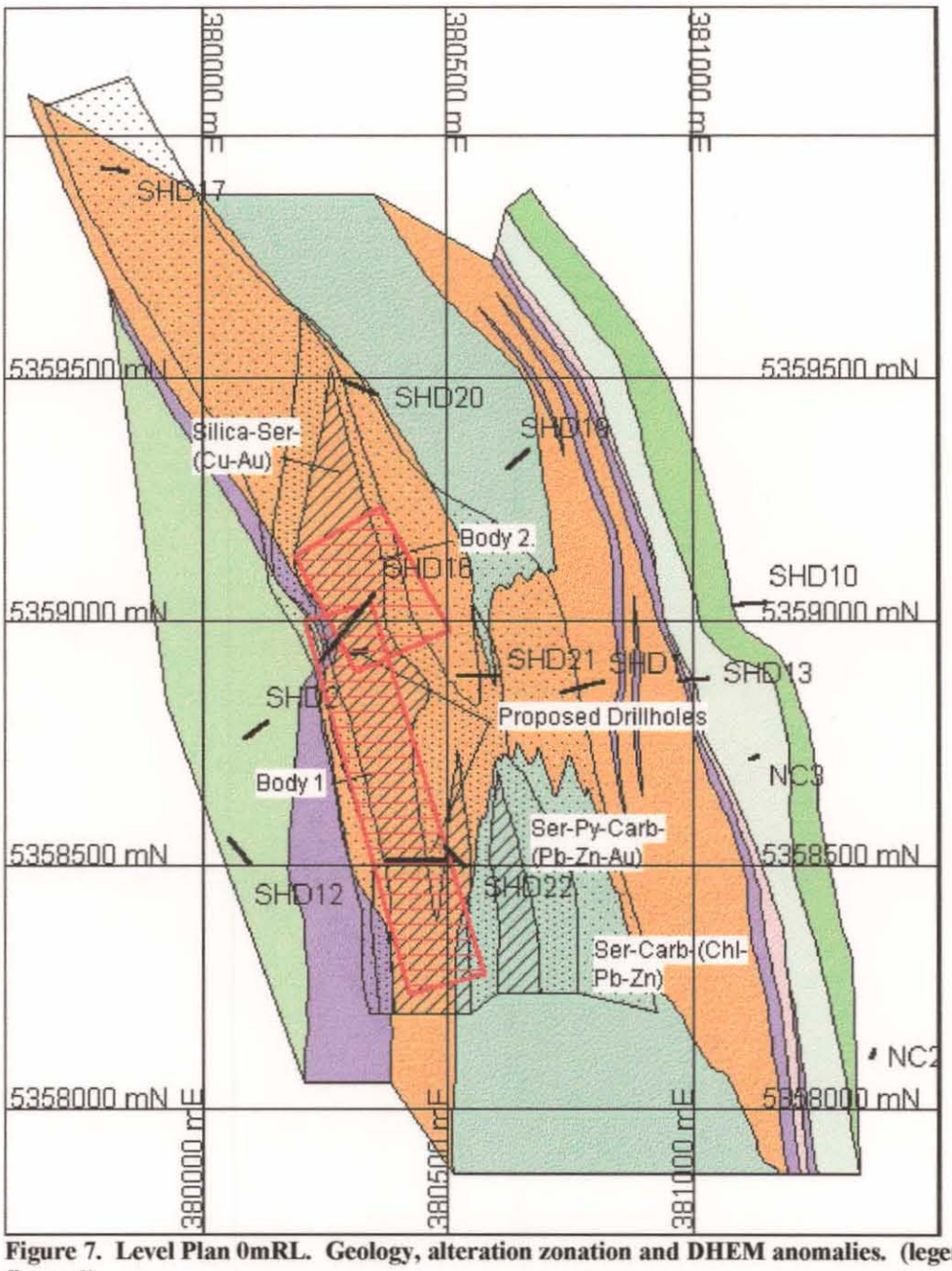


Figure 7. Level Plan 0mRL. Geology, alteration zonation and DHEM anomalies. (legend as for figure 3).

5 cm

IP Compilation

Old dipole-dipole IP data from the 1967 Mt Lyell Mining and Railway Co. exploration work (Purvis *et al*, 1983) was reprocessed by Mike Asten of Flagstaff Geoconsultants. The data was inverted and imaged cross-sections of the 400m spaced lines produced. The consultants report on the survey is located in Appendix 2.

A continuous IP anomaly on lines 20N, 22N and 24N is coincident with the silver-hematite zone located at the top of the Lake Newton Prospect. The anomaly occurs at the base of the Tyndall Group within the Howard's basalt and limestones, a correlate of the Henty-Comstock horizon. Although this anomaly had been previously drilled (HA3, NC4, HA6 and HA4), one short diamond drillhole, SHD25 was drilled to test

the strongest anomaly on line 22. The hole did not detect any significant mineralisation. A small pyritic vitric siltstone unit at the top of the Howard's basalt may be responsible for the IP response.

An IP anomaly over the Lake Newton Prospect disseminated sulphide mineralisation has been well tested by old drillholes HA7 and HA8 as well as the new program of drilling.

The Henty Canal area in the vicinity of the South Henty Fault also has a prominent IP response. This alteration has been tested by Pasminco drillholes YNC14 and YNC15.

3.3 Sulphur Isotopes

Two separate sulphur isotope studies for the Lake Newton prospect were completed between 1997 and 2000. The corresponding reports for these are located in Appendix 4.

Sulphur isotope studies have defined a distinct zonation of $\delta^{34}S$ within the Lake Newton Prospect with the Cu-Au mineralised core having lighter $\delta^{34}S$ (~6) than the surrounding Pb-Zn anomalous halo (~12). The zonation is similar to that defined by basemetal geochemistry and alteration mapping (Callaghan, 1998, Callaghan, 1999). All of these techniques provide vectors to the proximal alteration system. Gold anomalous alteration is associated with low $\delta^{34}S$ (Callaghan, 1999).

The zonation reflects one of two possible mechanisms for the formation of the alteration system:

1) Mixing of low $\delta^{34}S$ magmatic derived fluids with higher $\delta^{34}S$ reduced Cambrian seawater circulating through the upper volcanic pile.
2) Mixing of VHMS type, seawater dominated hydrothermal fluid with low $\delta^{34}S$ (from scavenged rock sulphur) with higher $\delta^{34}S$ reduced Cambrian seawater circulating through the upper volcanic pile.

Stable Isotopes of Sulphur along with metal and alteration zonation provide good vectors within the hydrothermal system.

4.0 Environmental Impacts and Rehabilitation

A summary of the environmental impacts and rehabilitation activities on the South Henty EL is provided on Table 1. The main impact was caused by the site preparation and access track construction for the drilling program. Of the total 4030m^2 disturbed by diamond drilling, 2960m^2 has yet to be rehabilitated. Other exploration activities (track cutting, rockchip sampling etc) caused only minor disturbance.

5.0 DISCUSSION

Goldfields are forced to relinquish the southern part of EL8/96 after the expiry date of 14/6/2001. The northern part has been retained after granting of an extension of term.

Table 1 Environmental Impacts and Rehabilitation - EL 8/1996 - South Henty

Company	Activity	Hole No.	Type of Impact	Intensity of impact	Area disturbed (m^2)	Access track area (m^2)	Area rehabilitated (m^2)	Area to be rehabilitated (m^2)	Comments
Resolute	Drill Hole	SHD1	Mechanical digging	High	30	500	530	0	Previously disturbed site
Resolute	Drill Hole	SHD2	Mechanical digging	High	30	2000	0	2030	1
Resolute	Drill Hole	SHD3	Mechanical digging	Low	10		10	0	Natural regeneration is expected
Resolute	Drill Hole	SHD4	Mechanical digging	Low	10		10	0	Natural regeneration is expected
Resolute	Drill Hole	SHD5	Mechanical digging	Low	10		10	0	Natural regeneration is expected
Resolute	Drill Hole	SHD7	Mechanical digging	Low	10		10	0	Natural regeneration is expected
Resolute	Drill Hole	SHD11	Mechanical digging	High	10		10	0	Natural regeneration is expected
Resolute	Drill Hole	SHD12	Mechanical digging	High	30		30	0	Collared on old road
Resolute	Drill Hole	SHD13	Mechanical digging	High	30		30	0	Collared on old road
Resolute	Drill Hole	SHD14	Mechanical digging	High	30	100	130	0	Previously disturbed site
Goldfields	Drill Hole	SHD15	Mechanical digging	High	30	250	280	0	
Goldfields	Drill Hole	SHD16	Mechanical digging	High	30	250	280	0	Previously disturbed site
Goldfields	Drill Hole	SHD21	Mechanical digging	High	100	30	130	0	Collared on SHD14 site
Goldfields	Drill Hole	SHD22	Mechanical digging	High	30	900		930	Old access track reestablished, previously disturbed site, 2
Goldfields	Drill Hole	SHD25	Mechanical digging	High	30	0	30	0	Site yet to be rehabilitated, 3
Resolute	Grid		Vegetation cutting	Low		10.5 line km			Natural regeneration is expected
Goldfields	Grid		Vegetation cutting	Low		24 line km			Natural regeneration is expected
Resolute	DHEM Loops		Vegetation cutting	Low		10.8 line km			Natural regeneration is expected
Goldfields	DHEM Loops		Vegetation cutting	Low		11.8 line km			Natural regeneration is expected
Resolute	Wacker sampling		Mechanical digging	Low					389 samples, Natural regeneration is expected
Goldfields	Rockchip sampling		Manual digging	Low					Natural regeneration is expected

Notes:

1 Drill site and access track may be used to test DHEM target at Lake Newton.
2 Drill site and access track may be used to test DHEM target at Lake Newton.
3 Drill hole not cased with PVC. May extend hole at later date
4 Rehabilitation scheduled for March 2001

Although diffuse and low grade, the Lake Newton Prospect and possibly Spillway Horizon contain some targets warranting further exploration.

Lake Newton Prospect

Drilling of DHEM and CSAMT targets on the Lake Newton Prospect failed to identify economic mineralisation, despite intersecting extensive alteration zones with low level gold and lead-zinc mineralisation. It is becoming increasing likely that the Lake Newton Prospect is a large, zoned alteration system with only low grade disseminated base metal mineralisation and low grade gold mineralisation. However several anomalies remain untested within the Lake Newton Prospect. These lie within the 'proximal' alteration zone and may be due to higher concentrations of sulphide mineralisation.

Drillholes SHD21 and SHD22 were targeted on coincident DHEM and CSAMT anomalies. Both holes intersected significant alteration and extensive low grade gold mineralisation. Further DHEM modelling suggests they have narrowly missed more conductive bodies associated with the alteration zone. This area still has the possibility of hosting an orebody in excess of 15Mt. Alteration zonation suggests the survey is picking up the silica-sericite-pyrite (Cu-Au) core of the alteration system, already intersected in SHD16 and the end of SHD22.

The CSAMT survey has identified the pyritic alteration zone over a strike length in excess of 2kms. The southern kilometre remains untested. This area of anomalism underlies the barite-basemetal mineralisation of Tyndall Creek.

Spillway Horizon

The Spillway horizon has had limited investigation from the Goldfields/Resolute exploration program.

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MacDonald G. 1997. EL 8/96 South Henty, Annual Report on Exploration, June 96 to June 97. Resolute Ltd. (unpublished).

379000 mE
379500 mE
380000 mE
380500 mE
381000 mE
381500 mE
382000 mE
5359500 mN
5359000 mN
5358500 mN
5358000 mN
5357500 mN
5357000 mN
5356500 mN
5356000 mN
SHD10
SHD1
SHD13
SHD14
SHD2
HEC3193
HEC3091
HEC3190
SHD11
HEC3187
HA008
NC3
HEC3185
HA007
NC4
HEC3181
SHD22
SHD12
HA003
NC2
YNC2
YNC1
YNC12
SHD3
SHD4
SHD5
HA006
HA004
YNC13
HA001
NC1
HA005
TC3
TC1
5 cm

COon	Undifferentiated. - Newton Creek Sandstone	Cb	Basalt lava and breccias
COonc	Mainly pebble conglomerate with minor thinly bedded quartzitic sandstone and pebble sandstone - Newton Creek Sandstone	Cymf	Rhyolitic-dacitic massflows, commonly graded. - Yolande River Sequence
COonsh	Mainly thinly bedded siltstone, quartzitic sandstone with bands of pebble conglomerate - Newton Creek Sandstone	Cys	Units of bedded siltstone, sandstone. - Yolande River Sequence
Ctc	Mainly volcaniclastic conglomerate with minor siltstone and volcaniclastic sandstone. - Upper Tyndall Group / Zig Zag Hill Formation	Cp	Quartz-feldspar hornblende porphyry
Cts	Bedded sandstone - siltstone units	Chf	Undifferentiated Henty Fault Wedge sequence
Ctt	Mainly crystal - rich volcanic sandstone (quartz-feldspar phyric). - Comstock Tuff and correlates.	Ccarb	Exhalitive carbonate horizon
Ctl	Quartz-feldspar phyric lava and intrusives	MZ	Silica - sericite - pyrite - chlorite alteration
Cttl	Crystal - rich volcanic sandstone (feldspar-pyroxene phyric), lithic-rich bases with minor ash, sandstone and limestone. - Lynchford Member and correlates.	MV	Silica - sericite alteration
Ctb	Basalt - commonly hematitic and carbonate altered. - Howards Basalt	MQ	Silica - sulphide alteration
Ca	Andestitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene phyric types & small chlorite altered dykes. - Anthony Road Andesite	MA	Sericite - pyrite - carbonate alteration
Ccv	Mainly felsic pyroclastic rocks, dominantly feldspar phyric, including pumice bearing tuff & breccia , cyrstal vitric tuff, vitric tuff & minor shale & sandstone	AS	Intense albite - silica alteration
Ccvl	Mainly felsic felspar phyric lava and intrusives; massive to flow banded or autobrecciated, with rare colmnar jointing	fault	Fault

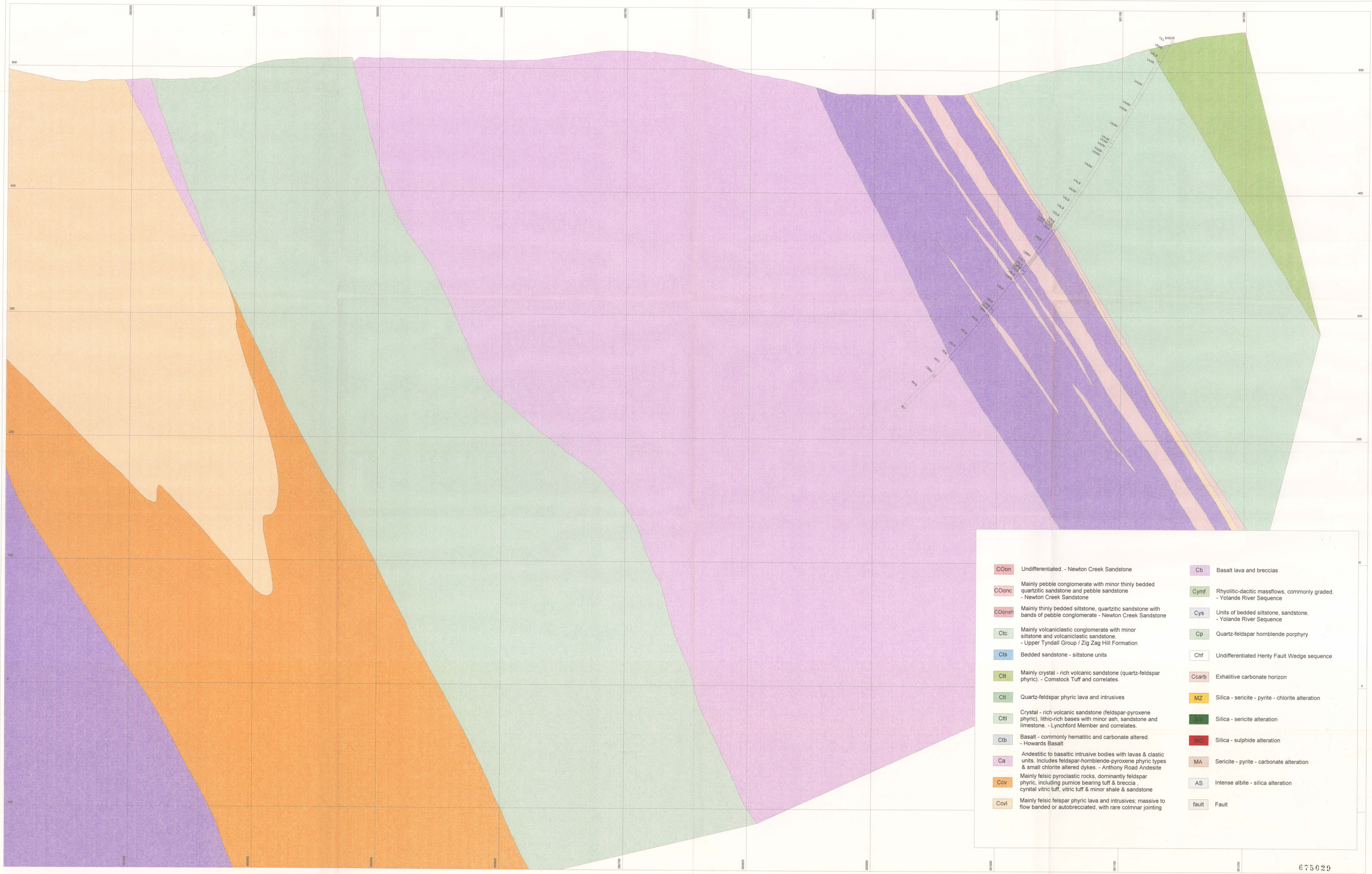
GOLDFIELDS EXPLORATION
Sth Henty EL8/96
Geology and DDH Location Map

ENCLOSURE 1.
675628

01_4575

Partial Relinquishment Report Tasmanian Gold Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. EL8/1996

Scale 1:5000
T. Callaghan
28/06/01



COon	Undifferentiated. - Newton Creek Sandstone	Cb	Basalt lava and breccias
COonc	Mainly pebble conglomerate with minor thinly bedded quartzitic sandstone and pebble sandstone - Newton Creek Sandstone	Cymf	Rhyolitic-dacitic massflows, commonly graded. - Yolande River Sequence
COonsh	Mainly thinly bedded siltstone, quartzitic sandstone with bands of pebble conglomerate - Newton Creek Sandstone	Cys	Units of bedded siltstone, sandstone. - Yolande River Sequence
Ctc	Mainly volcaniclastic conglomerate with minor siltstone and volcaniclastic sandstone. - Upper Tyndall Group / Zig Zag Hill Formation	Cp	Quartz-feldspar hornblende porphyry
Cts	Bedded sandstone - siltstone units	Chf	Undifferentiated Henty Fault Wedge sequence
Ctt	Mainly crystal - rich volcanic sandstone (quartz-feldspar phyric). - Comstock Tuff and correlates.	Ccarb	Exhalitive carbonate horizon
Ctl	Quartz-feldspar phyric lava and intrusives	MZ	Silica - sericite - pyrite - chlorite alteration
Cttl	Crystal - rich volcanic sandstone (feldspar-pyroxene phyric), lithic-rich bases with minor ash, sandstone and limestone. - Lynchford Member and correlates.	MV	Silica - sericite alteration
Ctb	Basalt - commonly hematitic and carbonate altered. - Howards Basalt	MQ	Silica - sulphide alteration
Ca	Andestitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene phyric types & small chlorite altered dykes. - Anthony Road Andesite	MA	Sericite - pyrite - carbonate alteration
Ccv	Mainly felsic pyroclastic rocks, dominantly feldspar phyric, including pumice bearing tuff & breccia , cyrstal vitric tuff, vitric tuff & minor shale & sandstone	AS	Intense albite - silica alteration
Ccvl	Mainly felsic felspar phyric lava and intrusives; massive to flow banded or autobrecciated, with rare colmnar jointing	fault	Fault

675629

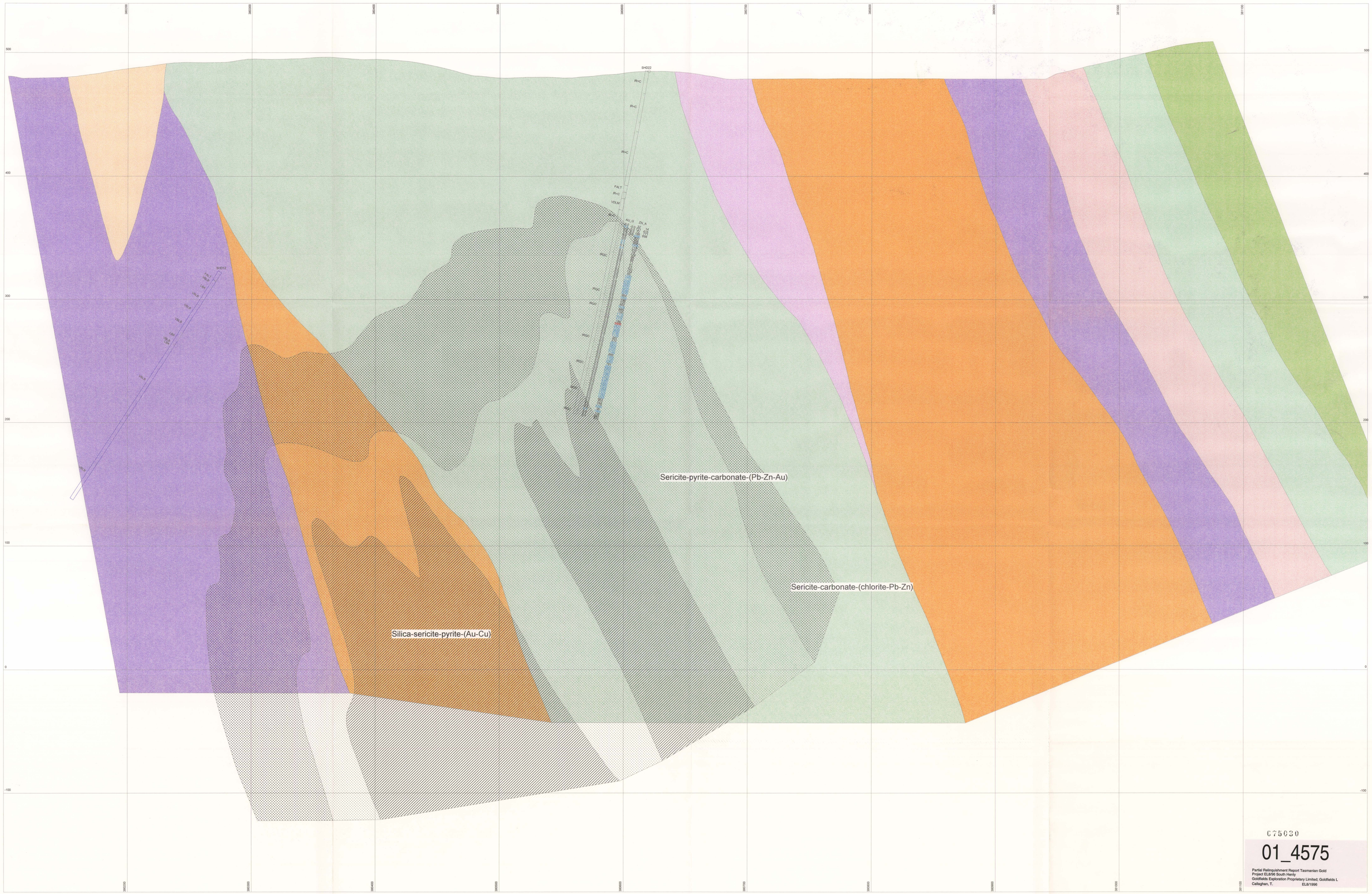
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Section 5357900

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T.Callaghan
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Partial Relinquishment Report Tasmanian Gold
Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. EL8/1996



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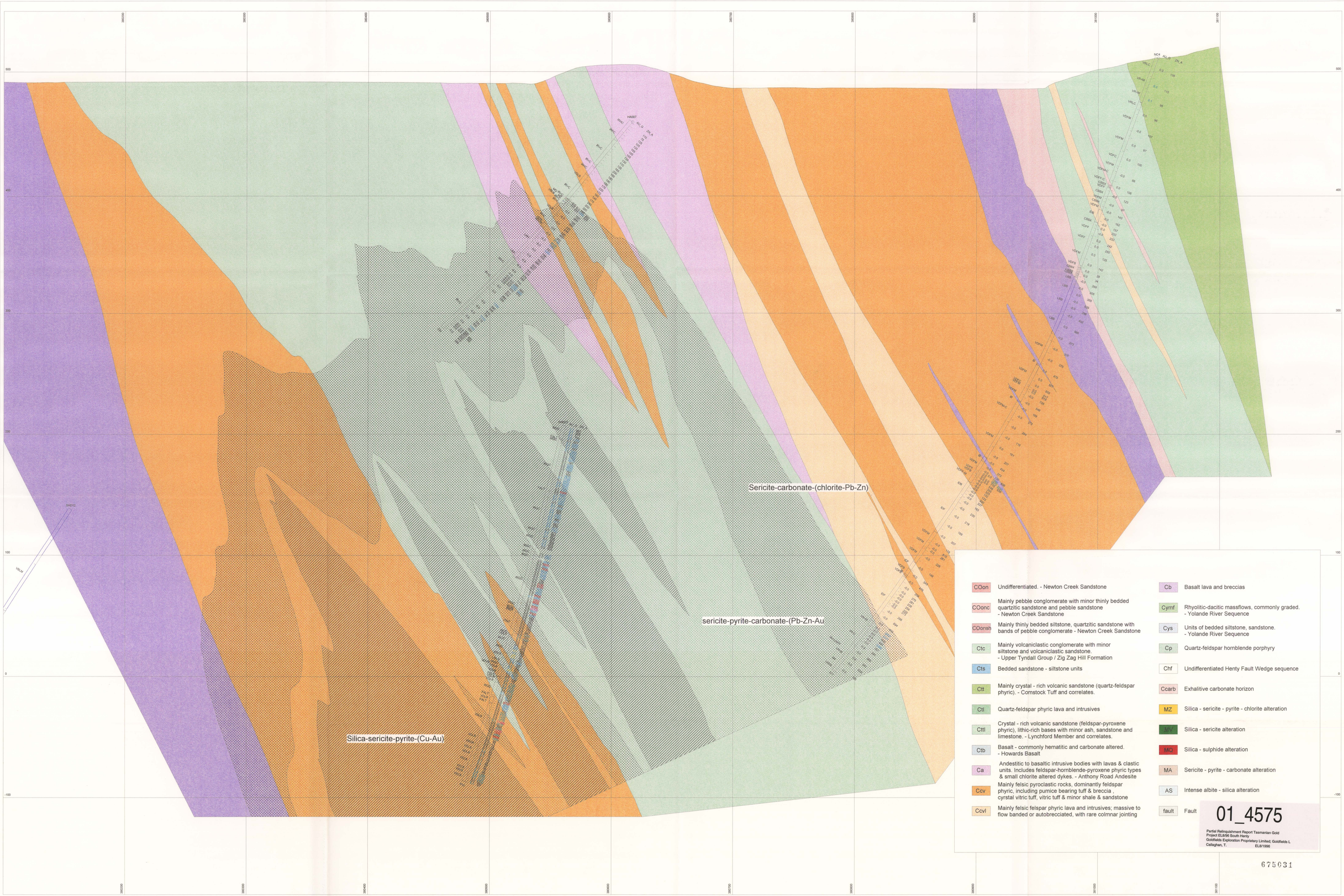
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Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. ELB/1996

ENCLOSURE 2B.

Scale 1:1000
6/06/01
T. Callaghan

5 cm

Section 5358400



Scale 1:1000
6/06/01
T. Callaghan

ENCLOSURE 2.C.

section 5358500

380100 380200 380300 380400 380500 380600 380700 380800 380900 381000

500 400 300 200 100 0 -100

HEC3093 HEC3091

SHD2 SHD4

Sericite-carbonate-(chlorite-Pb-Zn)

Silica-sericite-pyrite-(Cu-Au)

Seritie-pyrite-carbonate-(Pb-Zn-Au)

COon	Undifferentiated. - Newton Creek Sandstone	Cb	Basalt lava and breccias
COonc	Mainly pebble conglomerate with minor thinly bedded quartzitic sandstone and pebble sandstone - Newton Creek Sandstone	Cymf	Rhyolitic-dacitic massflows, commonly graded. - Yolande River Sequence
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Ctl	Quartz-feldspar phyric lava and intrusives	MZ	Silica - sericite - pyrite - chlorite alteration
Cttl	Crystal - rich volcanic sandstone (feldspar-pyroxene phyric), lithic-rich bases with minor ash, sandstone and limestone. - Lynchford Member and correlates.	SeriPy	Silica - sericite alteration
Ctb	Basalt - commonly hematitic and carbonate altered. - Howards Basalt	MCI	Silica - sulphide alteration
Ca	Andestitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene phyric types & small chlorite altered dykes. - Anthony Road Andesite	MA	Sericite - pyrite - carbonate alteration
Ccv	Mainly felsic pyroclastic rocks, dominantly feldspar phyric, including pumice bearing tuff & breccia , cyrstal vitric tuff, vitric tuff & minor shale & sandstone	AS	Intense albite - silica alteration
Ccvl	Mainly felsic felspar phyric lava and intrusives; massive to flow banded or autobrecciated, with rare colmnar jointing	fault	Fault

675632

5 cm

01_4575

Partial Relinquishment Report Tasmanian Gold Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. EL8/1996

Scale 1:1000
7/06/01
T. Callaghan

ENCLOSURE 2D.

Section 5358800

Silica-sericite-pyrite-(Cu-Au)

Sericite-pyrite-carbonate-(Pb-Zn-Au)

Sericite-Carbonate-(chlorite-Pb-Zn)

COun	Undifferentiated. - Newton Creek Sandstone	Cb	Basalt lava and breccias
COonc	Mainly pebble conglomerate with minor thinly bedded quartzitic sandstone and pebble sandstone - Newton Creek Sandstone	Cymf	Rhyolitic-dacitic massflows, commonly graded. - Yolande River Sequence
COsnsh	Mainly thinly bedded siltstone, quartzitic sandstone with bands of pebble conglomerate - Newton Creek Sandstone	Cys	Units of bedded siltstone, sandstone. - Yolande River Sequence
Cto	Mainly volcaniclastic conglomerate with minor siltstone and volcaniclastic sandstone. - Upper Tyndall Group / Zig Zag Hill Formation	Cp	Quartz-feldspar hornblende porphyry
Cts	Bedded sandstone - siltstone units	Chf	Undifferentiated Henty Fault Wedge sequence
Ctf	Mainly crystal - rich volcanic sandstone (quartz-feldspar phyric). - Comstock Tuff and correlates.	Ccarb	Exhalitive carbonate horizon
Ctl	Quartz-feldspar phyric lava and intrusives	MZ	Silica - sericite - pyrite - chlorite alteration
Cttl	Crystal - rich volcanic sandstone (feldspar-pyroxene phyric), lithic-rich bases with minor ash, sandstone and limestone. - Lynchford Member and correlates.	SMC	Silica - sericite alteration
Ctb	Basalt - commonly hematitic and carbonate altered. - Howards Basalt	Bsc	Silica - sulphide alteration
Ca	Andesitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene phyric types & small chlorite altered dykes. - Anthony Road Andesite	MA	Sericite - pyrite - carbonate alteration
Cev	Mainly felsic pyroclastic rocks, dominantly feldspar phyric, including pumice bearing tuff & breccia., crystal vitric tuff, vitric tuff & minor shale & sandstone	AS	Intense albite - silica alteration
Cevf	Mainly felsic felspar phyric lava and intrusives; massive to flow banded or autobrecciated, with rare colinnar jointing	fault	Fault

Scale 1:1000
7/6/01
T.Callaghan

01_4575

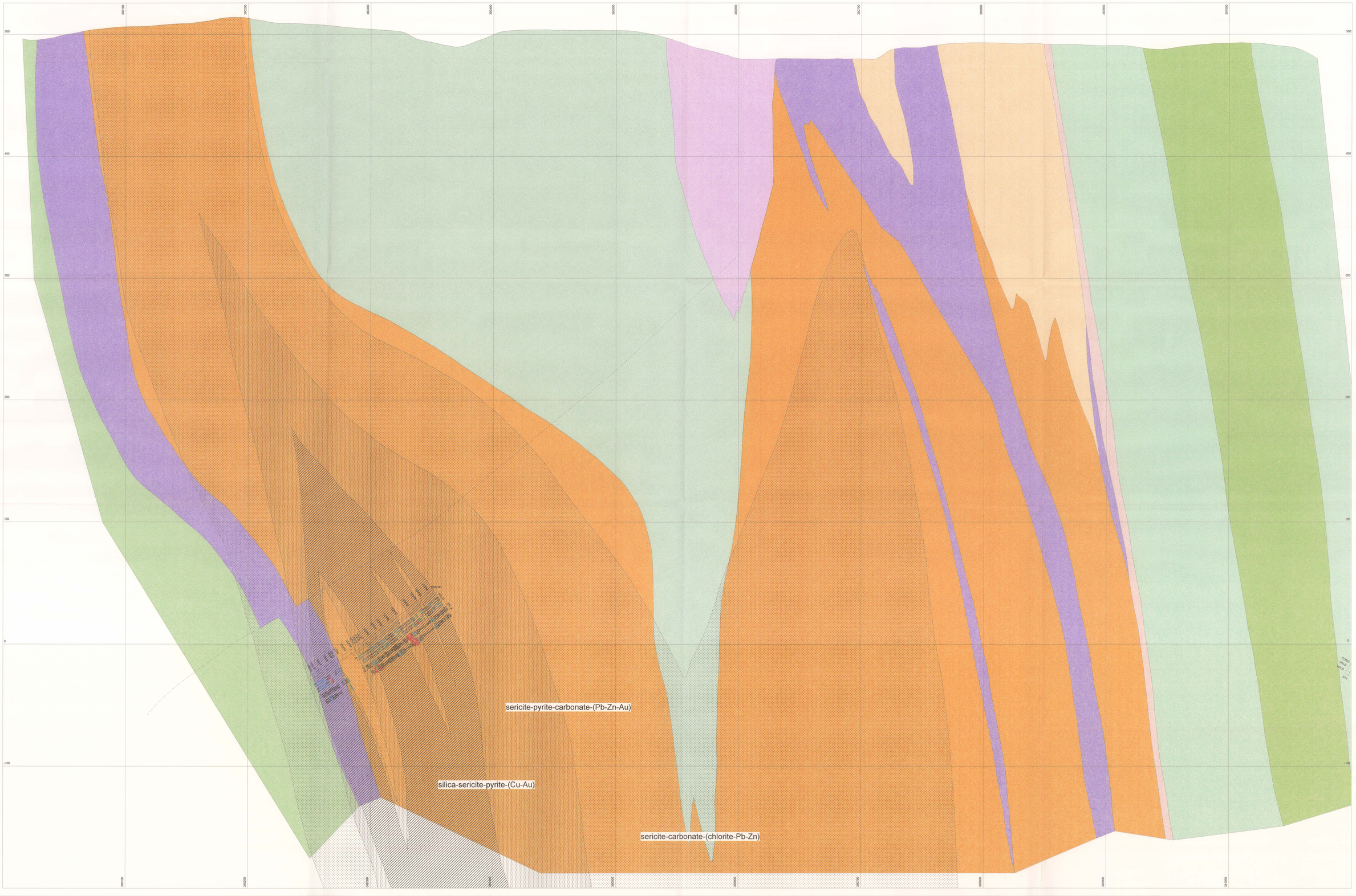
Partial Relinquishment Report Tasmanian Gold
Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. EL8/1996

ENCLOSURE 2E.

section 5358900

075033

5 cm



01_4575

Partial Relinquishment Report Tasmanian Gold Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan. T. EL8/1996

Scale 1:1000
7/6/01
T. Callaghan

ENCLOSURE 2F.

5 cm

section 5359000

675034

379750 380000 380250 380500 380750 381000 381250

5360250 5360000 5359750 5359500 5359250 5359000 5358750 5358500 5358250 5358000 5357750 5357500 5357250

SHD17
SHD20
SHD19
SHD16
SHD21
SHD1
SHD13
SHD2
SHD12
SHD22
NC3
NC2

Sericite-carbonate-(chlorite-Pb-Zn)-ID10

Silica-sericite-pyrite-(Cu-Au)

sericite-carbonate-pyrite-(Pb-Zn-Au)

COon	Undifferentiated. - Newton Creek Sandstone	Cb	Basalt lava and breccias
COonc	Mainly pebble conglomerate with minor thinly bedded quartzitic sandstone and pebble sandstone - Newton Creek Sandstone	Cymf	Rhyolitic-dacitic massflows, commonly graded. - Yolande River Sequence
COonsh	Mainly thinly bedded siltstone, quartzitic sandstone with bands of pebble conglomerate - Newton Creek Sandstone	Cys	Units of bedded siltstone, sandstone. - Yolande River Sequence
Ctc	Mainly volcaniclastic conglomerate with minor siltstone and volcaniclastic sandstone. - Upper Tyndall Group / Zig Zag Hill Formation	Cp	Quartz-feldspar hornblende porphyry
Cts	Bedded sandstone - siltstone units	Chf	Undifferentiated Henty Fault Wedge sequence
Ctt	Mainly crystal - rich volcanic sandstone (quartz-feldspar phyric). - Comstock Tuff and correlates.	Ccarb	Exhalitive carbonate horizon
Ctl	Quartz-feldspar phyric lava and intrusives	MZ	Silica - sericite - pyrite - chlorite alteration
Cttl	Crystal - rich volcanic sandstone (feldspar-pyroxene phyric), lithic-rich bases with minor ash, sandstone and limestone. - Lynchford Member and correlates.	MV	Silica - sericite alteration
Ctb	Basalt - commonly hematitic and carbonate altered. - Howards Basalt	MQ	Silica - sulphide alteration
Ca	Andestitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene phyric types & small chlorite altered dykes. - Anthony Road Andesite	MA	Sericite - pyrite - carbonate alteration
Ccv	Mainly felsic pyroclastic rocks, dominantly feldspar phyric, including pumice bearing tuff & breccia , cyrstal vitric tuff, vitric tuff & minor shale & sandstone	AS	Intense albite - silica alteration
Ccvl	Mainly felsic felspar phyric lava and intrusives; massive to flow banded or autobrecciated, with rare colmnar jointing	fault	Fault

01_4575

Partial Relinquishment Report Tasmanian Gold
Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. EL8/1996

Scale 1:1000
6/06/01
T. Callaghan.

Plan 0mRL

675035

ENCLOSURE 2G.

5 cm

379750 380000 380250 380500 380750 381000 381250

YNC6

5360250

YNC10

SHD17

5360000

5359750

5359500

SHD20

SHD19

5359250

SHD16

Sericite-pyrite-carbonate-(Pb-Zn-Au)

SHD10

5359000

SHD21

SHD1

SHD13

SHD2

SHD14

Sericite-carbonate-(chlorite-Pb-Zn)

5358750

NC3

silica-sericite-pyrite-(Cu-Au)

NC4

5358500

SHD22

SHD12

5358250

YNC12

NC2

5358000

5357750

5357500

5357250

COon	Undifferentiated. - Newton Creek Sandstone	Cb	Basalt lava and breccias
COonc	Mainly pebble conglomerate with minor thinly bedded quartzitic sandstone and pebble sandstone - Newton Creek Sandstone	Cymf	Rhyolitic-dacitic massflows, commonly graded. - Yolande River Sequence
COonsh	Mainly thinly bedded siltstone, quartzitic sandstone with bands of pebble conglomerate - Newton Creek Sandstone	Cys	Units of bedded siltstone, sandstone. - Yolande River Sequence
Ctc	Mainly volcaniclastic conglomerate with minor siltstone and volcaniclastic sandstone. - Upper Tyndall Group / Zig Zag Hill Formation	Cp	Quartz-feldspar hornblende porphyry
Cts	Bedded sandstone - siltstone units	Chf	Undifferentiated Hent/ Fault Wedge sequence
Ctf	Mainly crystal - rich volcanic sandstone (quartz-feldspar phyric). - Comstock Tuff and correlates.	Ccarb	Exhalitive carbonate horizon
Ctl	Quartz-feldspar phyric lava and intrusives	MZ	Silica - sericite - pyrite - chlorite alteration
Ctfl	Crystal - rich volcanic sandstone (feldspar-pyroxene phyric), lithic-rich bases with minor ash, sandstone and limestone. - Lynchford Member and correlates.	MW	Silica - sericite alteration
Ctb	Basalt - commonly hematitic and carbonate altered. - Howards Basalt	MS	Silica - sulphide alteration
Ca	Andestitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene phyric types & small chlorite altered dykes. - Anthony Road Andesite	MA	Sericite - pyrite - carbonate alteration
Ccv	Mainly felsic pyroclastic rocks, dominantly feldspar phyric, including pumice bearing tuff & breccia , cyrstal vitric tuff, vitric tuff & minor shale & sandstone	AS	Intense albite - silica alteration
Ccvl	Mainly felsic felspar phyric lava and intrusives; massive to flow banded or autobrecciated, with rare colmnar jointing	fault	Fault

675036

01_4575

Partial Relinquishment Report Tasmanian Gold
Project EL8/96 South Henty
Goldfields Exploration Proprietary Limited; Goldfields L
Callaghan, T. EL8/1996

Scale 1:1000
7/06/01
T. Callaghan

Plan 100

ENCLOSURE 2H.

5 cm

675037

APPENDIX 1

675038

Hole_Id	AMG East	AMG North	AMG RL	Total Depth
SHD14	380890.00	5358890.00	485.00	616.00

Depth	Azm_AMG	Dip	
0.00	253.50	-57	
13.00	246.50	-57	
28.00	249.50	-56.5	
43.00	246.50	-55.33	
58.00	246.50	-54.33	
76.00	247.00	-53	
91.00	248.00	-52	
118.00	247.50	-48.66	
148.00	248.00	-46	
178.00	249.50	-43	
205.00	251.00	-39	
244.00	256.50	-34.5	
274.00	256.50	-32.25	
304.00	256.50	-31.75	
334.00	256.50	-30	
370.00	256.50	-28.75	
400.00	258.00	-27.5	
436.00	259.00	-26.5	
466.00	259.50	-25.25	
514.00	261.00	-24	
560.00	264.00	-22.5	
616.00	264.50	-22.5	

675039

Hole_Id	Sample No	Depth From	Depth To	AG_A	AS_A	AU_G	CU_A	P_X	PB_A	TI_X	V_X	ZN_A	ZR_X
SHD14	10001	92.00	93.00	2	2	0.01	9		48	1508		95	302
SHD14	10002	125.00	126.00	6	8	0.03	29		234	1924		382	225
SHD14	10003	126.00	127.00	3	6	0.01	42		511	1989		1395	208
SHD14	10004	128.00	129.00	1	2	-0.01	11		5	3130		201	218
SHD14	10005	166.00	167.00	3	2	0.01	26		125	7652		967	163
SHD14	10006	167.00	168.00	3	1	0.02	74		168	8423		684	193
SHD14	10007	168.00	169.00	5	16	-0.01	77		245	7606		534	189
SHD14	10008	169.00	170.00	8	24	-0.01	55		87	7064		496	172
SHD14	10009	170.00	171.00	7	13	0.01	66		187	7086		510	198
SHD14	10010	171.00	172.00	6	10	0.01	98		99	7573		523	186
SHD14	10011	176.00	177.00	4	13	0.01	74		15	8385		288	200
SHD14	10012	177.00	178.00	12	22	-0.01	121		1826	6734		1316	155
SHD14	10013	178.00	179.00	5	10	-0.01	43		103	7623		502	164
SHD14	10014	179.00	180.00	3	5	1.96	33		27	7619		497	162
SHD14	10015	180.00	181.00	7	11	-0.01	89		46	6354		350	147
SHD14	10016	181.00	182.00	7	10	-0.01	66		105	6411		648	147
SHD14	10017	192.00	193.00	3	23	-0.01	19		17	6023		45	214
SHD14	10018	193.00	194.00	5	54	0.02	43		43	5380		809	199
SHD14	10019	194.00	195.00	6	42	-0.01	44		96	8074		249	177
SHD14	10020	195.00	196.00	6	419	-0.01	54		96	7787		205	165
SHD14	10021	196.00	197.00	4	56	-0.01	55		43	8546		274	169
SHD14	10022	197.00	198.00	5	42	-0.01	82		532	7708		3210	154
SHD14	10023	218.00	219.00	3	9	-0.01	46		19	8110		310	170
SHD14	10024	232.00	233.00	3	50	-0.01	44		23	8337		173	187
SHD14	10025	233.00	234.00	3	32	-0.01	38		74	6637		392	141
SHD14	10026	234.00	235.00	4	135	-0.01	50		16	6380		314	151
SHD14	10027	235.00	236.00	4	51	-0.01	69		66	5093		926	140
SHD14	10028	236.00	237.00	4	47	-0.01	49		77	4796		2593	86
SHD14	10029	237.00	238.00	4	55	-0.01	55		65	6886		737	144
SHD14	10030	238.00	239.00	4	57	-0.01	47		44	7363		308	155
SHD14	10031	239.00	240.00	3	45	-0.01	29		22	6312		830	128
SHD14	10032	240.00	241.00	3	58	-0.01	57		19	7106		231	138
SHD14	10033	241.00	242.00	3	46	-0.01	42		16	5907		373	116
SHD14	10034	258.00	259.00	3	4	-0.01	56		-3	7578		152	156
SHD14	10035	307.00	308.00	1	4	-0.01	28		3	2427		45	150

SHD14	10036	320.00	321.00	2	14	-0.01	21		14	4040		71	250
SHD14	10037	332.00	333.00	2	14	-0.01	28		29	2198		70	149
SHD14	10038	337.00	338.00	2	82	-0.01	21		253	2602		670	200
SHD14	10039	358.00	359.00	1	4	-0.01	26		23	2605		118	162
SHD14	10040	405.00	406.00	1	2	-0.01	63		-3	2317		146	141
SHD14	10041	470.00	471.00	2	6	-0.01	45		-3	2373		144	152
SHD14	10042	483.00	484.00			-0.01							
SHD14	10043	484.00	485.00			-0.01							
SHD14	10044	544.00	545.00			-0.01							
SHD14	10045	545.00	546.00			-0.01							
SHD14	10046	546.00	547.00			-0.01							
SHD14	10047	547.00	548.00			-0.01							
SHD14	10048	548.00	549.00			-0.01							
SHD14	10049	549.00	550.00			-0.01							
SHD14	10050	560.00	561.00			-0.01							
SHD14	10051	561.00	562.00			-0.01							
SHD14	10052	562.00	563.00			-0.01							
SHD14	10053	563.00	564.00			0.01							
SHD14	10054	564.00	565.00			-0.01							
SHD14	10055	572.00	573.00			-0.01							
SHD14	10056	573.00	574.00			0.01							
SHD14	10057	574.00	575.00			-0.01							
SHD14	10058	575.00	576.00			0.01							
SHD14	10059	576.00	577.00			0.01							
SHD14	10060	577.00	578.00			-0.01							
SHD14	10061	578.00	579.00			-0.01							
SHD14	1021117	579.00	580.00	-1		-0.01	32		26			144	
SHD14	1021118	580.00	581.00	1		0.01	78		73			2948	
SHD14	1021119	581.00	582.00	2		-0.01	52		32			180	
SHD14	1021121	582.00	583.00	1		-0.01	42		26			218	
SHD14	1021122	583.00	584.00	1		-0.01	47		6			142	
SHD14	1021123	584.00	585.00	1		-0.01	32		32			188	
SHD14	1021124	585.00	586.00	1		-0.01	40		63			181	
SHD14	1021125	586.00	587.00	1		-0.01	43		6			100	
SHD14	1021126	587.00	588.00	1		-0.01	90		37			66	
SHD14	1021127	588.00	589.00	1		-0.01	97		44			58	

SHD14	1021128	589.00	590.00	1		-0.01	55		32			65	
SHD14	1021129	590.00	591.00	1		0.02	67		76			250	
SHD14	1021130	591.00	592.00	1		0.03	60		138			1234	
SHD14	1021131	592.00	593.00	1		0.01	106		53			385	
SHD14	1021132	593.00	594.00	1		0.02	36		173			455	
SHD14	1021133	594.00	595.00	1		0.02	45		336			1194	
SHD14	1021134	595.00	596.00	1		0.01	66		344			834	
SHD14	1021135	596.00	597.00	1		0.01	38		278			856	
SHD14	1021136	597.00	598.00	1		0.01	66		632			2224	
SHD14	1021137	611.00	612.00	2		0.02	72		172			690	
SHD14	1021138	612.00	613.00	2		-0.01	78		330			1902	
SHD14	1021139	613.00	614.00	1		-0.01	73		80			288	
SHD14	1021140	614.00	615.00	1		-0.01	48		99			850	
SHD14	1021141	615.00	616.00	1		-0.01	35		196			1043	
SHD14	1080019	44.00	44.20										
SHD14	1080020	57.60	57.80										
SHD14	1080021	91.00	91.20										
SHD14	1080022	117.60	117.80										
SHD14	254138	598.00	599.00			0.04							
SHD14	254139	599.00	600.00			0.03							
SHD14	254140	600.00	601.00			0.02							
SHD14	254141	601.00	602.00			0.02							
SHD14	254142	602.00	603.00			0.04							
SHD14	254143	603.00	604.00			0.01							
SHD14	254144	604.00	605.00	3	50	0.06	225		301			1268	
SHD14	254145	605.00	606.00	2	52	0.03	93		85			229	
SHD14	254146	606.00	607.00	4	37	0.07	180		182			386	
SHD14	254147	607.00	608.00	3	43	0.05	154		49			428	
SHD14	254148	608.00	609.00	2	15	0.05	146		21			215	
SHD14	254149	609.00	610.00	6	46	0.55	1099		289			124	
SHD14	254150	610.00	611.00			0.44							

675042

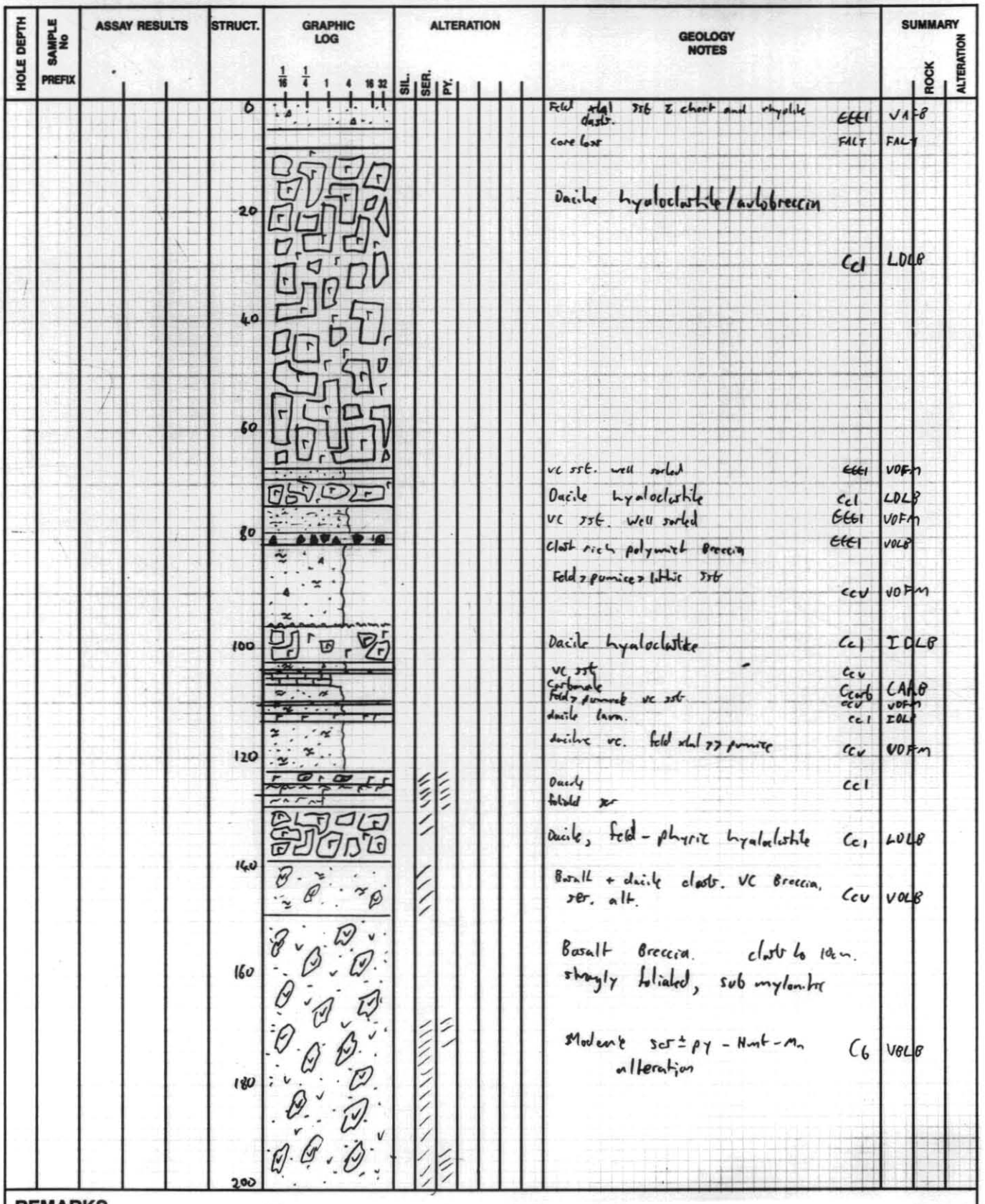
RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 1 OF 4

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	:
LOGGED BY	: T. Cullingham



REMARKS

5 cm

675043

RGC EXPLORATION PTY LTD

DRILL HOLE No 5H014

SHEET 2 OF 4

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
200										
220										
240								Ser - Py - Ba alteration		
260										
280								FAULT + Qtz vnt.	FALT	FALT
300								Qtz - Feld - Hbl porphyry. Foliated. Weak anastamosing sericite alteration.	CP	IRTC
320								Basalt Breccia	Eb	VBLB
340								Dacite hyaloclastite	CP Ccl	IDLB
360								Qtz - Feld - Hbl porphyry Breccia. Dacite Breccia. Feld phyric. Qtz - Feld - Hbl porphyry	CP Ccl	IATC IDLB
380										
400										

REMARKS

5 cm

675044

RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 3 OF 4

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	: 6-5-98
LOGGED BY	: T. Callaghan

— Bedding
⌴ Cleavage
▲ Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY.)	GEOLOGY NOTES	SUMMARY (ROCK, ALTERATION)
400							
420							
440							
460							
480							
500							
520							
540						543.8 Increased A16 - kfeld at ± qtz vns. weak Py	
560							
580							
600							

REMARKS

5 cm

675045

RGC EXPLORATION PTY LTD

DRILL HOLE No 514014

SHEET 4 OF 4

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	: 6-5-98
LOGGED BY	: T. Callaghan

— Bedding
⌊⌋ Cleavage
▲ Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
			600					
			620			EOH 616		

REMARKS

5 cm
~~~

675046

RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 1 OF

— Bedding	Disseminated
⌊ Cleavage	Massive
▲ Foliation	Pervasive
~ Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL. SER. PY.	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
0						Feld xtal matrix ± chert and rhyolite clasts. Albitised clasts, chlantic matrix EEEU	VAFB	
			Broken core	Broken core Core loss ~ 3m		5.0		
							FALT	
						8.50 Coarse monomict Breccia hyaloclastite or resedimented hyaloclastite? clasts of Feldspar + (Qtz?) phyric dacite/rhyolite. Some jigsaw fit texture. Some peperite?		
10						Dacite Lava Cel	LDLB	
20								
30								
40								

REMARKS

5 cm

675047

RGC EXPLORATION PTY LTD

DRILL HOLE No 5ND14

SHEET 2 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL. SER. PY.	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
40								
50								
60						massive qtz veins		
						67.3 Fine vc ss. well sorted, green Feld-xtl. chl. alt	EEE(?)	VOFm
70						69 peperitic dacite/rhyolite lava. ± feld xtl ss + Carbonate. 90% lava Breccia. feld > qtz phyric.	Ecl(?)	LDLB
						74.1 m Bedded, dacite/andesite vc ss. well bedded. laminar to 30cm beds. Very minor carbonate beds.	EEEI	VOFm
80						78.7m clast rich polymict Breccia.		

REMARKS

5 cm

675048

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD 14

SHEET 3 OF

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	:
PROSPECT	: 5th Henty
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
80						Jasper + carbonate ± rhyolite, ductile clasts	VDLB	
						81.0m Feld-pumice-(lithic?) VC sst. Mod. foliated	Ccv	VDFM
						82.6m Coarse, feld-phyric ductile lava breccia	Ccl	IDFC
						88.0m Feld-pumice lithic sst Mod-foliated		
90						Feld > pumice. Weak chl-ser cleavage.	Ccv	VDFM
						96.2m Ductile hyaloclastite. Coarse feld xtals	Ccl	IDLB
100						103.2m Pumice-feld xtal sst. Foliated	Ccv	VDFM
						104.8 Polymict brxx. foliated.	Ccv	VDLB
						106.8 Pink Lst/sst. qtz pheno rich ± carb matrix	Ccv-L	CARB
						Feld > pumice ductile sst. domainal sericite alteration	Ccv	VDFM
110						109.9 Polymict VC breccia, subrounded 110.3m	Ccv	VDLB
							Ccv	VDFM
						112.0 Ductile hyaloclastite. 112.9	Ccl	IDLB
						Feld-pumice(?) lithic sst. foliated, chloritized	Ccv	VDFM
120								

REMARKS

5 cm

675049

RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 4 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
120						123.5 chl alt. dacite hyaloclastite.	Ccl	LOLB
						127 - 127.3 fg-mg schist. some Py	?	SCHT
						mylonitic dacite hyaloclastite.	Ccl	LOLB
						127.4 sch - silica altered schist / dac. ?	Ccl	LOLB
						129.0		
130						Dacite, feld phyric hyaloclastic. foliated.		
							Ccl	LOLB
						139.5 sericite altered VC Breccia. clast supported? basalt + dacite(?) clasts. strongly foliated		
140							Ccv	VDLB
						149 Intensely foliated, chlorite - Mn - Haem. altered basalt breccia.		
150							Eb	VBLB
160								

REMARKS

5 cm

675050

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD14

SHEET 5 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., Chl)	GEOLOGY NOTES	SUMMARY (ROCK, ALTERATION)
160			foliation core angle ~50°				
170						← 0.5% qtz Augen or Ba clasts in mylonitic "basalt" weak to moderate ser-chl alteration I/V weak limit	
						← minor qtz augen	
180						178 Hapon-MnO_2 wk basalt breccia, Ba + Chl + py	
190						← Ba vein	
200							

REMARKS

5 cm

675051

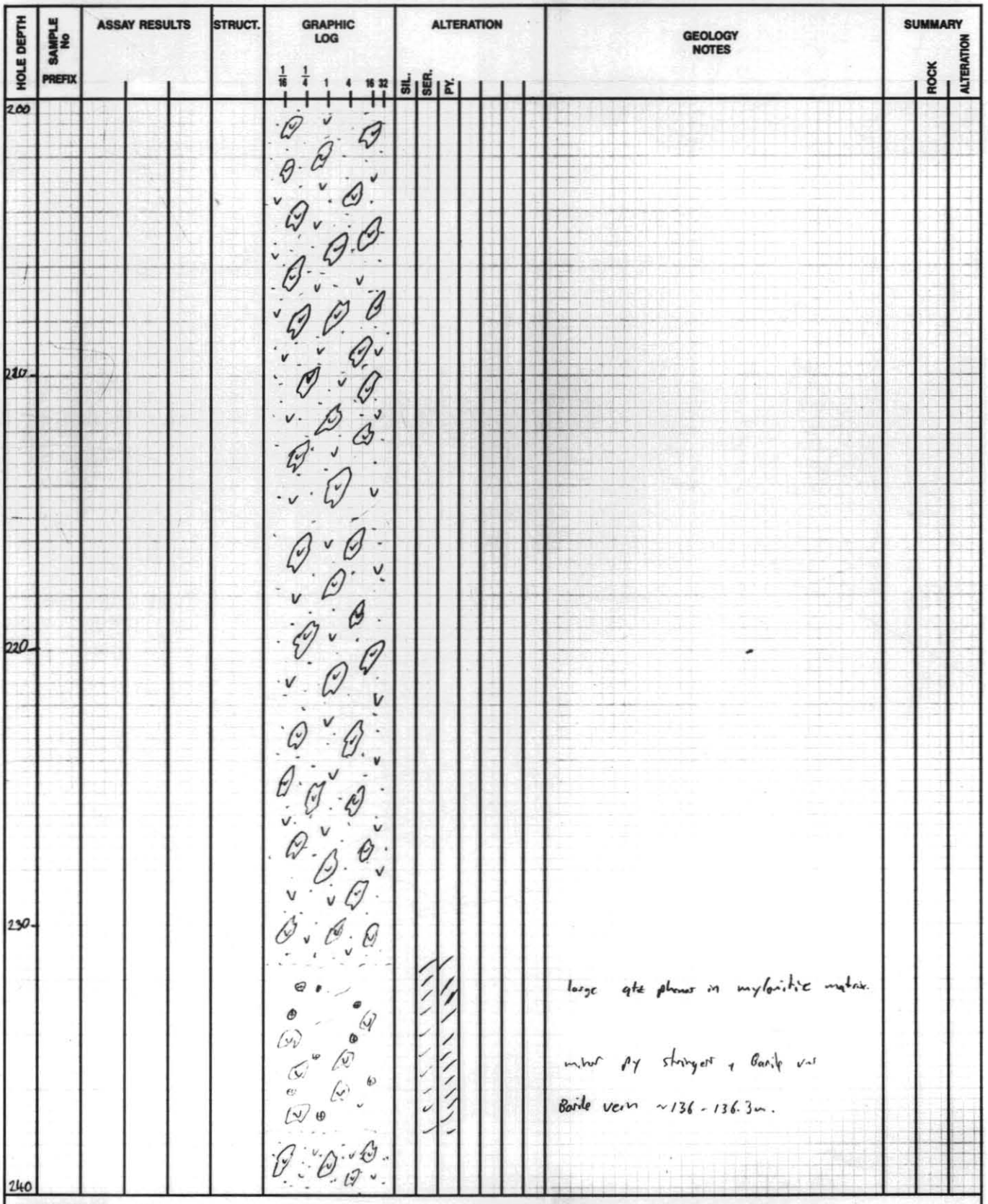
RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 6 OF

PROJECT	: 5th Hendy
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm

675052

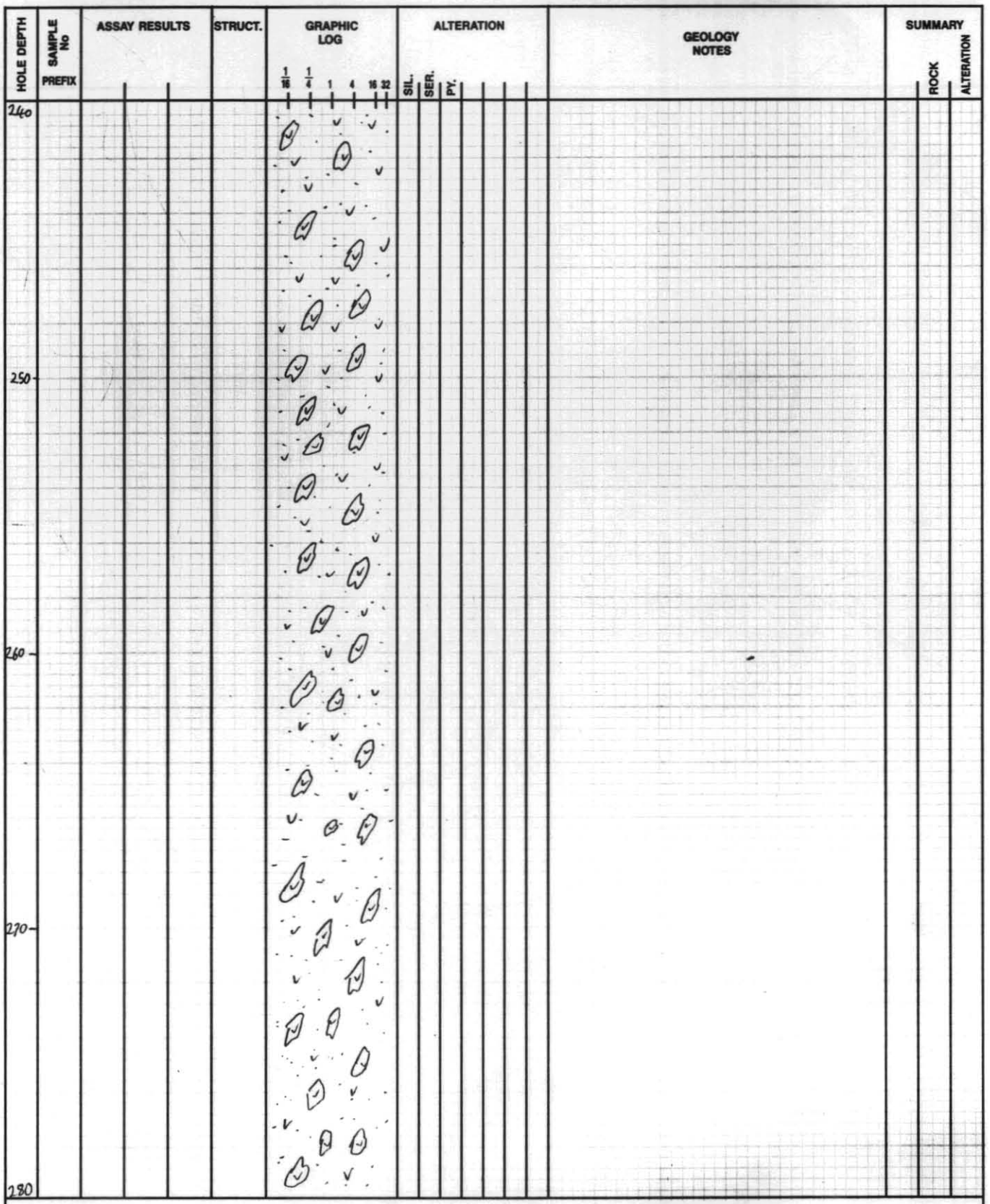
RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 7 OF

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

PROJECT	: Sth Hanky
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan



REMARKS

5 cm

675053

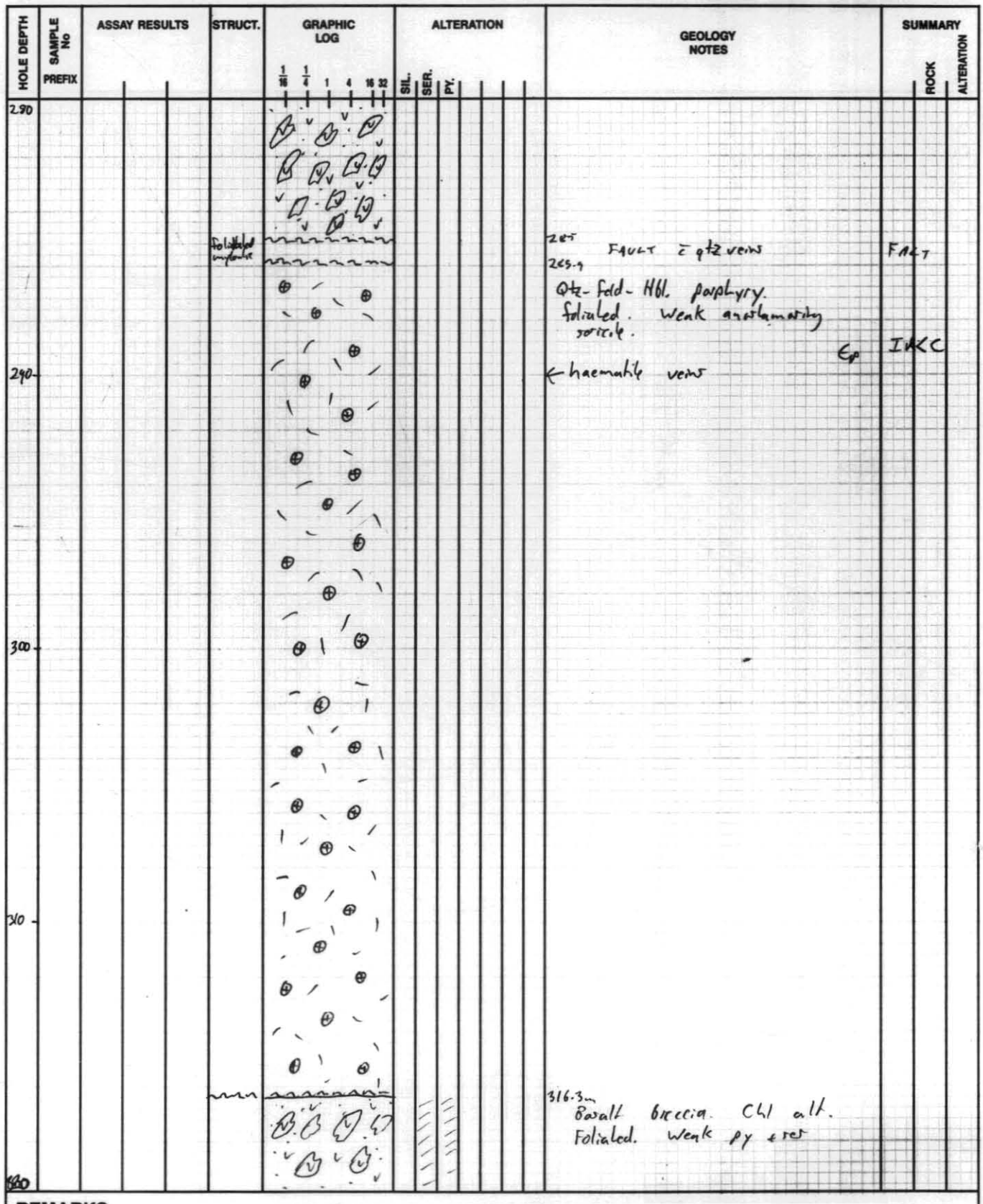
RGC EXPLORATION PTY LTD

DRILL HOLE No SHD14

SHEET 8 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
▲ Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm
~~~

675054

RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 9 OF

— Bedding
⌊ Cleavage
▲ Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

PROJECT	: 5th Hourly
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
320						325.1m Intrusive contact. Qtz-feld-Hbl porphyry Abundant large Qtz phenos. weak anastamosing ser alt		IR>C
330						Ep		IR>C
						336.4m Intense silica-sericite altered. Dacite? Breccia	Ccl	IDS
340						341.2 Qtz-feld. Hbl porphyry Breccia.		
						Ep		IR>C
350						353.9 Dacite Breccia. Feld phyric. weak silica-sericite alt.	Ccl	IR>LB
						357.1 Qtz-feld-Hbl porphyry Breccia.		
360								

REMARKS

5 cm

675055

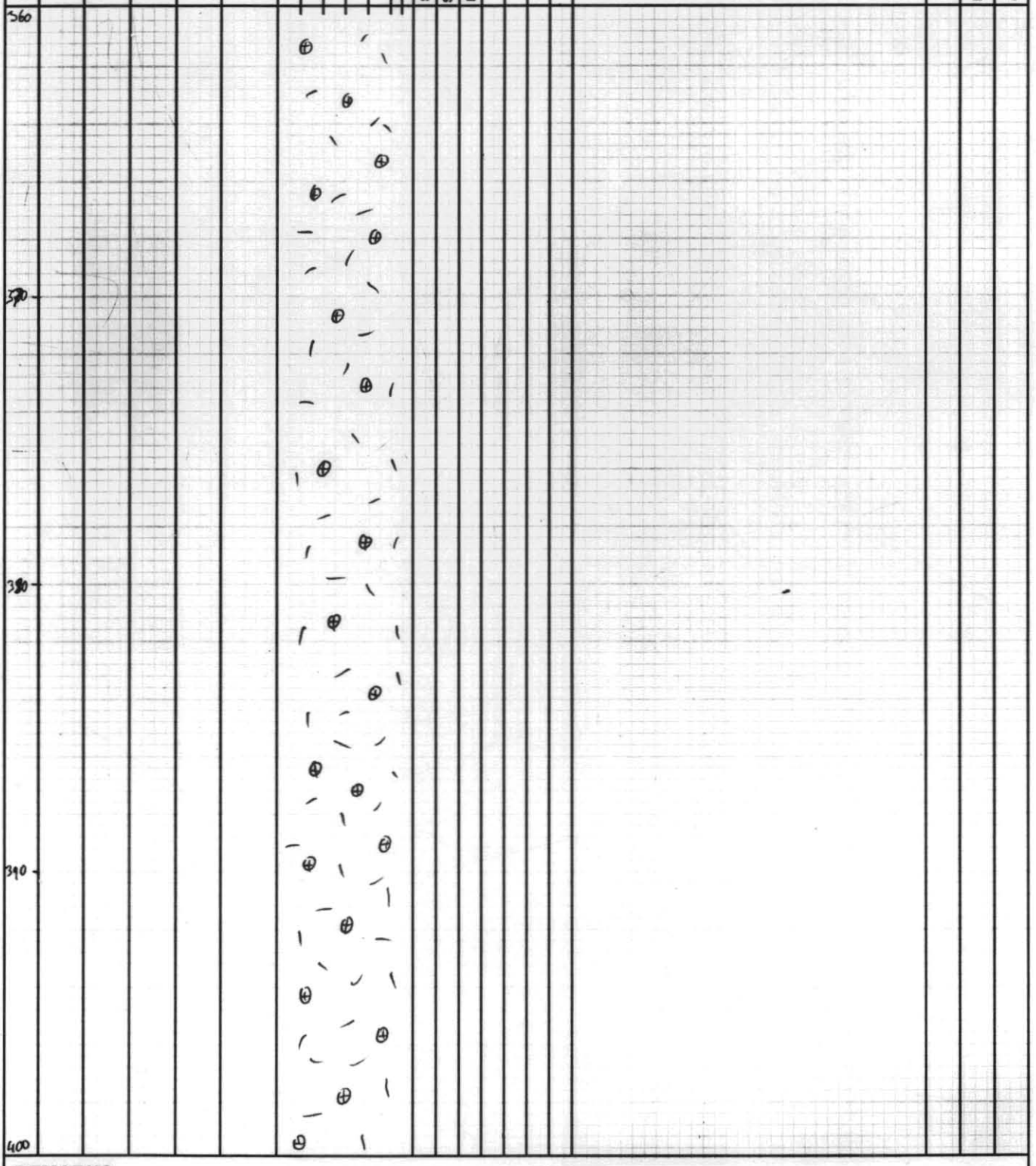
RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 10 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold



REMARKS

5 cm

675056

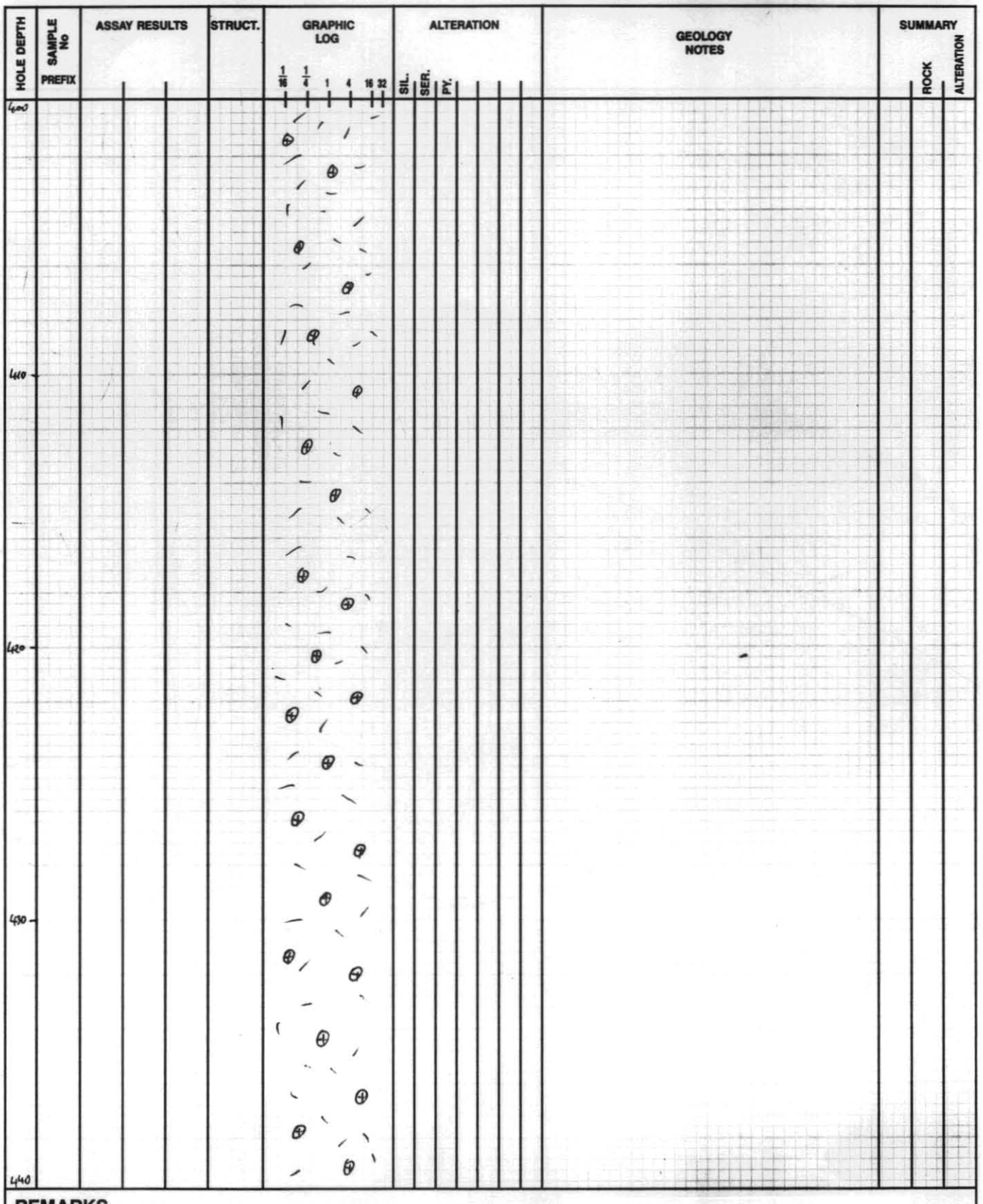
RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET 11 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold



REMARKS

5 cm

675057

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET 12 OF

— Bedding	Disseminated
⌊ Cleavage	Massive
▲ Foliation	Pervasive
~ Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Heaky
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY.)	GEOLOGY NOTES	SUMMARY (ROCK, ALTERATION)
440							
						← weak Alk-feld alt	
450							
460							
470							
480							

REMARKS

5 cm

675058

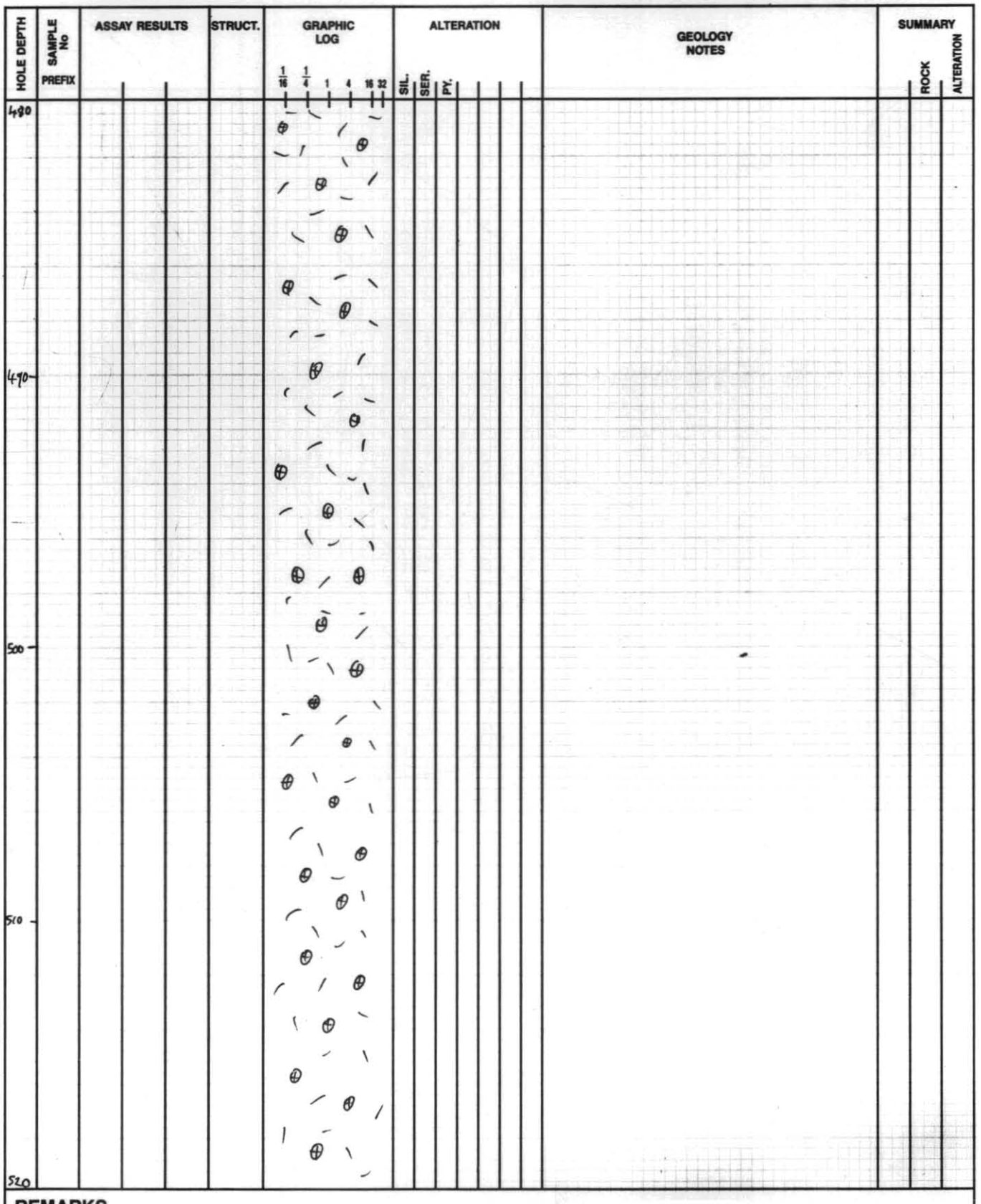
RGC EXPLORATION PTY LTD

DRILL HOLE No 5H014

SHEET 13 OF

PROJECT	: 5th Hanky
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold



REMARKS

5 cm

675059

RGC EXPLORATION PTY LTD

DRILL HOLE No SH014

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 5-5-98
LOGGED BY	: T. Callaghan

— Bedding
⌴ Cleavage
— Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION
520										
530										
540								543.8 Increased chl alt. Weak pervasive. Qtz-Feld-Hbl. porphyry.		
550								550 K-feld/Alb altered Qtz-Hbl-feld Alt.		
560										

REMARKS

5 cm
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675060

RGC EXPLORATION PTY LTD

DRILL HOLE No 5H014

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
▲ Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY.)	GEOLOGY NOTES	SUMMARY (ROCK, ALTERATION)
560							
570						Patchy (domainal) K-feld → weak ser-py alteration minor qtz vns.	
580							
590							
600							

REMARKS

5 cm

675061

RGC EXPLORATION PTY LTD

DRILL HOLE No _____

SHEET _____ OF _____

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	:
PROSPECT	:
DATE	:
LOGGED BY	:

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG 1/16 1/4 1 4 16 32	ALTERATION SIL. SER. PY.	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION

REMARKS

5 cm

675062

Hole_Id	AMG East	AMG North	AMG RL	otal Dept	Geologist
SHD15	380030.25	5360647.32	540.00	384.50	TC

Depth	Azm AMG	Dip	
0.00	273.00	-59.8	
15.00	273.00	-59.8	
30.00	273.00	-59.25	
46.00	273.00	-58	
72.60	273.00	-57	
100.00	275.00	-56.5	
130.00	276.00	-56	
160.00	278.00	-55.5	
190.00	278.00	-54.5	
220.00	276.50	-52	
250.00	274.00	-49	
280.00	274.00	-46.5	
310.00	275.00	-45	
340.00	272.00	-42	

Hole_Id	AMG East	AMG North	AMG RL	Total Depth	Geologist
SHD16	380617.19	5359390.60	495.00	828.00	TC

Depth	Azm_AMG	Dip	
0.00	209.00	-58	
30.00	209.00	-58	
60.00	209.00	-58	
90.00	210.00	-56	
120.00	210.00	-55	
149.00	212.00	-53.2	
179.00	213.00	-51	
209.00	213.00	-51	
239.00	214.50	-50	
280.00	216.00	-48.5	
311.00	218.00	-47.5	
341.00	219.00	-45.5	
371.00	220.00	-45	
401.00	222.00	-43.5	
431.00	221.00	-42.5	
461.00	223.00	-41	
492.00	223.00	-39	
522.00	223.00	-37	
552.00	223.00	-35	
582.00	224.00	-33	
612.00	224.00	-32	
642.00	224.00	-29.5	
672.00	224.50	-28.5	
702.00	225.00	-27	
732.00	226.00	-26	
762.00	226.00	-24.5	
792.00	226.00	-23.5	
882.00	227.00	-22.5	

Hole_Id	Sample No	From	To	AG_A	AS_A	AU_G	CU_A	P_X	PB_A	TI_X	V_X	ZN_A	ZR_X
SHD16	1020801	586.00	587.00	1	163	0.12	4476		47			101	
SHD16	1020802	587.00	588.00	-1	90	0.06	812		61			400	
SHD16	1020803	588.00	589.40	-1	68	0.02	114		234			1212	
SHD16	1020804	589.40	590.40	-1	-50	0.01	21		280			410	
SHD16	1020805	590.40	591.40	-1	-50	0.01	24		154			354	
SHD16	1020806	591.40	592.40	-1	-50	0.01	22		134			441	
SHD16	1020807	592.40	593.40	-1	-50	0.01	19		106			331	
SHD16	1020808	593.40	594.40	-1	52	0.01	33		117			402	
SHD16	1020809	594.40	595.40	-1	73	0.02	14		129			350	
SHD16	1020810	595.40	596.40	-1	-50	0.01	23		102			454	
SHD16	1020811	596.40	597.40	-1	83	0.01	20		153			387	
SHD16	1020812	597.40	598.40	-1	54	0.01	28		150			380	
SHD16	1020813	598.40	599.40	-1	64	0.01	42		217			665	
SHD16	1020814	599.40	600.30	-1	77	0.03	45		287			959	
SHD16	1020815	600.30	601.30	-1	-50	0.02	42		310			760	
SHD16	1020816	601.30	602.30	-1	-50	0.03	60		278			1623	
SHD16	1020817	602.30	603.30	-1	-50	0.03	63		263			1253	
SHD16	1020818	603.30	604.30	-1	-50	0.01	54	603	163	2308	77	626	210
SHD16	1020819	604.30	605.30	-1	-50	0.02	62		216			973	
SHD16	1020820	605.30	607.00	-1	-50	0.01	44		178			803	
SHD16	1020821	607.00	608.00	-1	-50	-0.01	55		247			775	
SHD16	1020823	608.00	609.00	-1	121	0.05	44		403			992	
SHD16	1020824	609.00	610.00	-1	-50	0.01	38		246			711	
SHD16	1020825	610.00	611.00	-1	-50	0.02	85		316			719	
SHD16	1020826	611.00	612.00	-1	-50	0.01	73		307			722	
SHD16	1020827	612.00	613.00	-1	-50	0.07	70		268			711	
SHD16	1020828	613.00	614.00	-1	-50	0.05	74		264			1691	
SHD16	1020829	614.00	615.00	1	62	0.08	102		1480			4853	
SHD16	1020830	615.00	616.00	1	-50	0.13	70		1930			8600	
SHD16	1020831	616.00	617.00	-1	-50	0.15	53		528			2155	
SHD16	1020832	617.00	617.80	-1	-50	0.03	49		273			820	
SHD16	1020833	617.80	618.80	-1	50	0.14	102		424			2092	
SHD16	1020834	618.80	620.20	-1	66	0.59	831		50			94	
SHD16	1020835	620.20	621.20	-1	-50	0.04	224		36			1100	
SHD16	1020836	621.20	622.20	-1	-50	0.04	286		104			583	

SHD16	1020837	622.20	623.20	2	-50	0.1	4811		30			86	
SHD16	1020838	623.20	624.20	1	-50	1.24	2488		16			33	
SHD16	1020839	624.20	625.20	2	108	0.33	3839		49			21	
SHD16	1020840	625.20	626.20	-1	-50	0.16	1872		44			59	
SHD16	1020841	626.20	627.20	-1	-50	0.03	175		37			167	
SHD16	1020843	627.20	628.20	-1	-50	0.07	45		169			9000	
SHD16	1020844	628.20	629.20	-1	-50	0.07	90		104			6900	
SHD16	1020845	629.20	630.20	-1	-50	0.04	217		42			338	
SHD16	1020846	630.20	631.20	-1	-50	0.04	493	621	31	2588	89	804	227
SHD16	1020847	631.20	632.60	-1	-50	0.1	494		12			172	
SHD16	1020848	632.60	633.60	-1	-50	0.09	826		13			121	
SHD16	1020849	633.60	634.60	-1	-50	0.06	727		33			275	
SHD16	1020851	634.60	635.60	-1	-50	0.1	514		19			156	
SHD16	1020852	635.60	636.60	-1	-50	0.05	542		13			190	
SHD16	1020853	636.60	637.60	-1	-50	0.34	3829		14			62	
SHD16	1020854	637.60	638.60	-1	-50	0.15	6600		11			55	
SHD16	1020855	638.60	639.60	-1	-50	0.1	2514		13			172	
SHD16	1020856	639.60	641.00	-1	-50	0.05	3537		6			165	
SHD16	1020857	641.00	642.00	-1	-50	0.13	545		9			40	
SHD16	1020858	642.00	643.00	-1	-50	0.15	211		7			39	
SHD16	1020859	643.00	644.00	-1	-50	0.09	566		15			177	
SHD16	1020860	644.00	645.00	-1	-50	0.14	711		10			46	
SHD16	1020861	645.00	646.00	1	-50	0.18	3454		13			48	
SHD16	1020862	646.00	647.00	-1	-50	0.1	174		13			150	
SHD16	1020863	647.00	648.00	-1	-50	0.05	34	399	10	2524	70	261	205
SHD16	1020864	648.00	649.00	-1	-50	0.05	54		14			255	
SHD16	1020865	649.00	650.00	-1	-50	0.05	468		12			310	
SHD16	1020866	650.00	650.80	-1	-50	0.04	485		16			557	
SHD16	1020867	650.80	651.80	-1	-50	0.03	295		43			918	
SHD16	1020869	651.80	652.80	-1	-50	0.02	69		94			3557	
SHD16	1020870	652.80	654.30	-1	-50	0.07	202		63			1385	
SHD16	1020871	654.30	655.30	-1	-50	0.21	3766		18			47	
SHD16	1020872	655.30	656.30	-1	-50	0.53	977		11			-2	
SHD16	1020873	656.30	657.30	-1	-50	0.26	1919		11			-2	
SHD16	1020874	657.30	658.30	-1	-50	0.32	63		18			3	
SHD16	1020875	658.30	659.30	-1	-50	0.58	124		14			4	

SHD16	1020876	659.30	660.30	-1	-50	0.64	112		16			5		
SHD16	1020877	660.30	661.30	-1	-50	0.53	107		18			2		
SHD16	1020878	661.30	662.30	-1	-50	0.46	53		24			-2		
SHD16	1020880	662.30	663.30	-1	-50	0.36	50		23			-2		
SHD16	1020881	663.30	664.30	-1	-50	0.25	70		16			-2		
SHD16	1020882	664.30	665.30	-1	-50	0.76	134		13			-2		
SHD16	1020883	665.30	666.30	-1	-50	1.79	227		11			2		
SHD16	1020884	666.30	667.30	-1	-50	0.32	143		10			2		
SHD16	1020885	667.30	668.30	-1	-50	0.2	3025		21			-2		
SHD16	1020886	668.30	669.30	-1	-50	0.08	6200		9			4		
SHD16	1020887	669.30	670.30	2	-50	0.18	21900		7			37		
SHD16	1020889	670.30	671.30	-1	-50	0.23	11400	606	20	2561	75	43	223	
SHD16	1020890	671.30	672.60	-1	-50	0.11	3168		16			111		
SHD16	1020891	672.60	673.60	-1	-50	0.08	528		14			184		
SHD16	1020892	673.60	674.60	-1	-50	0.04	240		15			193		
SHD16	1020893	674.60	675.60	-1	-50	0.03	204		78			1431		
SHD16	1020894	675.60	676.60	-1	-50	0.02	35		47			1004		
SHD16	1020895	676.60	677.60	-1	201	0.03	59		145			1532		
SHD16	1020896	677.60	678.60	-1	104	0.02	89		1168			8400		
SHD16	1020897	678.60	679.60	1	63	0.02	64		3251			5600		
SHD16	1020898	679.60	680.60	1	-50	0.03	109		4082			11900		
SHD16	1020899	680.60	681.60	-1	-50	0.02	60		1853			14300		
SHD16	1020900	681.60	682.60	-1	-50	0.03	132		75			8000		
SHD16	1020901	682.60	683.80	-1	-50	0.03	243		49			5800		
SHD16	1020902	683.80	684.80	2	-50	0.39	820		515			294		
SHD16	1020903	684.80	685.80	2	-50	0.27	109		215			71		
SHD16	1020904	685.80	686.80	5	-50	0.54	440		137			52		
SHD16	1020905	686.80	688.00	1	-50	0.24	456		20			528		
SHD16	1020906	688.00	689.00	-1	-50	0.45	108		16			-2		
SHD16	1020907	689.00	690.00	-1	-50	0.44	131	379	317	2477	80	117	216	
SHD16	1020908	690.00	691.00	2	-50	0.98	281		87			2		
SHD16	1020909	691.00	692.00	1	-50	0.56	102		32			-2		
SHD16	1020910	692.00	693.00	1	-50	0.37	1275		24			2		
SHD16	1020911	693.00	694.00	1	-50	0.21	1816		9			37		
SHD16	1020912	694.00	695.00	-1	-50	0.06	740		87			293		
SHD16	1020913	695.00	696.00	-1	-50	0.02	195		47			349		

SHD16	1020914	696.00	697.00	-1	-50	0.01	33		31			1026		
SHD16	1020915	697.00	698.00	-1	-50	-0.01	27		121			949		
SHD16	1020916	698.00	699.00	-1	-50	-0.01	10		46			643		
SHD16	1020917	699.00	700.00	-1	-50	0.02	9		255			964		
SHD16	1020918	700.00	701.00	-1	-50	0.02	158		64			1534		
SHD16	1020919	701.00	702.00	1	-50	0.03	461		160			455		
SHD16	1020920	702.00	703.00	2	66	0.29	853		471			190		
SHD16	1020921	703.00	704.00	8	-50	0.32	323		1580			147		
SHD16	1020923	704.00	705.00	4	-50	0.24	92		697			67		
SHD16	1020924	705.00	706.00	2	-50	0.12	120		161			33		
SHD16	1020925	706.00	707.00	5	-50	0.16	2342	269	82	2171	59	45	169	
SHD16	1020926	707.00	708.50	5	-50	0.45	249		50			19		
SHD16	1020927	708.50	709.50	1	-50	0.44	1069		14			120		
SHD16	1020928	709.50	710.50	1	-50	0.3	2328		15			134		
SHD16	1020929	710.50	711.50	-1	-50	0.06	103		59			261		
SHD16	1020930	711.50	712.50	1	-50	0.03	385		218			678		
SHD16	1020931	712.50	713.50	-1	-50	0.1	180		234			335		
SHD16	1020932	713.50	714.50	-1	130	0.31	39		85			73		
SHD16	1020933	714.50	715.50	1	-50	0.16	1046		70			57		
SHD16	1020934	715.50	716.50	3	-50	0.11	6700		14			42		
SHD16	1020935	716.50	717.50	1	-50	0.21	3093		10			58		
SHD16	1020936	717.50	718.50	-1	-50	0.16	453		18			40		
SHD16	1020937	718.50	719.50	-1	-50	0.08	456		15			19		
SHD16	1020938	719.50	720.50	4	107	0.48	16800		31			224		
SHD16	1020939	720.50	721.50	4	96	0.22	9100	373	24	1578	30	240	177	
SHD16	1020940	721.50	722.60	-1	80	0.15	1004		21			113		
SHD16	1020941	722.60	723.60	-1	95	0.09	39		20			238		
SHD16	1020942	723.60	725.00	-1	66	0.06	213		63			1749		
SHD16	1020943	725.00	726.00	1	-50	0.03	86		1243			7800		
SHD16	1020944	726.00	727.00	-1	-50	0.01	22	333	977	1902	38	1269	194	
SHD16	1020945	727.00	728.30	1	-50	0.02	66		1516			3927		
SHD16	1020946	728.30	729.30	2	-50	0.05	115		2739			3242		
SHD16	1020947	729.30	730.80	2	67	0.07	193		1685			8100		
SHD16	1020948	730.80	731.80	1	-50	0.1	179		30			114		
SHD16	1020949	731.80	732.80	5	130	0.21	186		203			79		
SHD16	1020950	732.80	733.80	5	73	0.38	543		207			243		

SHD16	1020951	733.80	735.00	4	90	0.3	286		166			221	
SHD16	1020953	735.00	736.00	-1	-50	0.12	394		130			681	
SHD16	1020955	739.00	740.00	-1	-50	0.05	44	256	271	2251	80	519	245
SHD16	1020955.5	761.00	762.50	1	-50	0.2	913		149			955	
SHD16	1020955.51	760.00	761.00	-1	-50	0.08	148		443			1848	
SHD16	1020956	759.00	760.00	-1	-50	0.01	46	621	120	4717	342	2786	133
SHD16	1020957	765.00	766.00	2	-50	0.02	318	482	517	5342	388	972	87
SHD16	1020958	770.80	771.80	-1	67	0.11	71		16			226	
SHD16	1020959	771.80	772.80	10	51	1.85	47		70			25	
SHD16	1020960	772.80	773.80	19	89	1.52	62		52			35	
SHD16	1020961	773.80	774.80	12	81	0.57	31		26			-2	
SHD16	1020962	774.80	775.80	28	-50	1.71	123		140			165	
SHD16	1020963	775.80	776.80	2	50	0.24	1412		43			44	
SHD16	1020964	776.80	777.80	-1	-50	0.07	541	500	15	2766	57	176	202
SHD16	1020965	777.80	778.80	-1	-50	0.08	496		16			287	
SHD16	1020966	778.80	779.40	-1	69	0.22	291		36			271	
SHD16	1020967	779.40	780.40	-1	70	0.24	83		48			195	
SHD16	1020968	780.40	781.40	1	104	0.33	51		84			201	
SHD16	1020969	781.40	782.40	-1	110	0.27	23		60			146	
SHD16	1020970	782.40	783.40	-1	74	0.19	31		50			127	
SHD16	1020971	783.40	784.40	-1	97	0.19	54		48			3000	
SHD16	1020972	784.40	785.40	-1	86	0.23	23	452	37	2153	51	177	182
SHD16	1020973	785.40	786.40	-1	103	0.39	485		34			244	
SHD16	1020974	786.40	787.80	-1	120	0.4	410	548	36	2818	82	259	235
SHD16	1020975	787.80	788.80	-1	-50	0.11	45		50			216	
SHD16	1020976	788.80	789.80	-1	-50	0.05	354		35			108	
SHD16	1020977	789.80	790.80	-1	-50	0.09	1110		40			145	
SHD16	1020978	790.80	791.80	-1	-50	0.13	489	311	37	3062	128	247	184
SHD16	1020980	809.00	810.00	-1	-50	0.11	523	344	129	1878	34	255	188
SHD16	1020981	825.00	826.00	-1	-50	0.01	18	350	54	2011	36	106	203
SHD16	1021143	446.00	447.30	-1	-50	0.01	29		21			36	
SHD16	1021144	447.30	448.30	-1	-50	0.01	15		23			111	
SHD16	1021145	448.30	449.30	-1	-50	-0.01	16		20			114	
SHD16	1021146	449.30	450.30	-1	-50	-0.01	26		12			111	

SHD16	1021147	450.30	451.30	-1	-50	-0.01	13		14			103		
SHD16	1021148	451.30	452.30	-1	-50	-0.01	17		15			145		
SHD16	1021149	452.30	453.30	-1	-50	-0.01	35		55			706		
SHD16	1021150	453.30	454.30	-1	-50	-0.01	44		122			794		
SHD16	1021151	454.30	455.30	-1	-50	0.01	17		210			226		
SHD16	1021152	455.30	456.20	-1	-50	0.01	32		161			340		
SHD16	1021153	456.20	457.20	-1	-50	0.01	44		142			563		
SHD16	1021154	457.20	458.20	-1	-50	0.02	77		298			3203		
SHD16	1021155	458.20	459.20	-1	-50	0.02	46		325			2490		
SHD16	1021156	459.20	460.70	-1	52	0.01	42		980			1462		
SHD16	1021157	465.50	466.50	-1	51	0.01	21		114			247		
SHD16	1021158	466.50	468.30	-1	55	0.04	33		284			1095		
SHD16	1021159	491.90	492.90	-1	-50	0.04	10	622	330	2763	66	323	155	
SHD16	1021160	492.90	493.90	-1	-50	0.02	4		152			287		
SHD16	1021161	502.40	503.10	-1	-50	0.01	270		375			283		
SHD16	1021163	503.10	504.10	-1	-50	0.01	101	572	51	2979	74	154	178	
SHD16	1021164	552.20	553.20	-1	-50	0.01	147		112			2386		
SHD16	1021165	553.20	554.20	-1	-50	0.03	310		298			1906		
SHD16	1021166	554.20	555.20	-1	-50	0.03	2073		370			2536		
SHD16	1021167	555.20	556.20	-1	-50	0.01	56		1368			2663		
SHD16	1021169	556.20	557.20	-1	-50	0.08	535		381			1135		
SHD16	1021171	557.20	558.20	-1	-50	0.07	266		22			35		
SHD16	1021172	558.20	559.20	-1	-50	0.09	435		39			124		
SHD16	1021173	559.20	560.20	-1	-50	0.13	43		20			280		
SHD16	1021174	560.20	561.20	-1	-50	0.1	236		138			1596		
SHD16	1021175	561.20	562.20	-1	-50	0.03	199		445			1652		
SHD16	1021176	562.20	563.20	-1	-50	0.04	679		97			499		
SHD16	1021177	563.20	564.20	-1	-50	0.03	2070		41			1322		
SHD16	1021178	564.20	565.20	-1	-50	0.03	77		59			59		
SHD16	1021179	565.20	566.20	-1	-50	0.11	97		361			267		
SHD16	1021180	566.20	567.20	-1	-50	0.12	94		416			572		
SHD16	1021181	567.20	568.20	-1	-50	0.15	217		185			1968		
SHD16	1021182	568.20	569.20	5	-50	0.2	169		755			179		
SHD16	1021183	569.20	570.20	1	-50	0.09	55		150			269		
SHD16	1021184	570.20	571.20	7	-50	0.44	105		240			368		
SHD16	1021185	571.20	572.20	3	-50	0.04	1208		1235			4823		

SHD16	1021187	572.20	573.20	1	-50	0.01	91		2703			9700	
SHD16	1021188	573.20	574.20	-1	-50	0.01	17		300			5000	
SHD16	1021190	574.20	575.20	-1	-50	0.1	192		124			3135	
SHD16	1021191	575.20	576.20	-1	51	0.05	73		101			245	
SHD16	1021192	576.20	577.20	2	-50	0.06	1036		125			359	
SHD16	1021193	577.20	578.20	-1	-50	0.01	56		818			1442	
SHD16	1021194	578.20	579.20	-1	-50	0.01	64		770			2019	
SHD16	1021195	579.20	580.20	-1	-50	0.1	431		278			727	
SHD16	1021196	580.20	581.20	-1	-50	0.01	21		189			861	
SHD16	1021197	581.20	582.20	-1	-50	0.01	33		287			904	
SHD16	1021198	582.20	583.20	-1	-50	0.01	50		2318			6200	
SHD16	1021199	583.20	585.00	-1	-50	0.03	272		128			830	
SHD16	1021200	585.00	586.00	-1	69	0.06	1829		51			240	
SHD16	255976	366.30	366.50				15	984	23	2232	121	664	152
SHD16	255978	210.40	210.60				15	913	10	2122	106	141	147
SHD16	255979	116.00	116.20				32	936	60	2526	111	4284	154

675071

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET 1 OF 5

— Bedding
⌴ Cleavage
— Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary
DATE	: 4-5-98
LOGGED BY	: T-Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL. SER. PY.	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
0						Glacials Qg	TILL	
						Massive grey effusive breccias Intermixed rock. ± carbonates + Jaspers. Chl alt. dacite clasts. Feld xtal rich matrix. EEEI	VOLB	
20								
40						EEEI	VOLB	
60						Sandy VC impregnated ± Carbonate cement. Weak to Moderate Ccarb brecciation VOLB		
80						Rhyolite hyaloclastite EEI	IRK	
						massive poorly sorted VC sst. feld xtal rich. Intermixed with Rhyolite intrusive. qtz phyric EEEI EPI		
						Massive xtal-lithic VC sst. (like base of ZZN sandstones) EEEI	VRKm	
100						FAULT VC sst/breccia. lithic rich ± Jasper ± carb. EEEI FAULT	VOLB	
						FAULT Rhyolite qtz-phyric EEI		
						xtal sst. ± carb cement + lithics. EEEI	VOLB	
120						FAULT qtz-phyric rhyolite EEI FAULT	FAULT ZONE	
						Massive, polymict VC Breccia, carb intraclasts. EEEI	VOLB	
140						Massive, polymict VC Breccia EEEI	VOLB	
						Carb-chert-dacite-SSlk clasts Feld xtal matrix.		
						Soft sediment deformation VOLB		
160						Minor Jasper alteration basalt.		
						Qtz-feld-(Hbl?) phyric Rhyolite Albitised. Gp? Suite II?		
180								
200								

REMARKS

5 cm

675072

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET 2 OF 5

— Bedding	Disseminated
⌊ Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Henry
PROSPECT	: 1:1000 Summary log
DATE	: 4-5-98
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY.)	GEOLOGY NOTES	SUMMARY (ROCK, ALTERATION)
			200			Qtz-feld porphyry	
			220				
			240				
			260				
			280				
			300				
			320				
			340				
			360				
			380				
			400				

REMARKS

5 cm

675073

RGC EXPLORATION PTY LTD

DRILL HOLE No SK016

SHEET 3 OF 5

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	:
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	CCV	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION
400											
420									Anastamosing sericite alteration Ep	IRK	
440									Schistose sed-rock Eccv	VA	
									Rhyolite Qtz-feld Ep	IRK	
									FAULT	FALT	
									silica-CO_3-ser±py alt schist. mylonitic Ccv	?	
460									vc sst CO_3-ser vc sst. Ccv		
									vc sslt grey v.thin Ccs	VOLF	
									mylonitic schist silica-CO_3-ser-sulphide Ccv	VOLF	
									Black slt to sst. Ccs	SLCT	
480									Felsic sst. Black shale lap CO_3 alt Ccv		
									Ccs	SLCT	
									Feld-lithic breccia polymict ccv	VDFB	
500									pumice-feld lithic vc. CO_3 alt Ccv		
									Massive, matrix supported vc Brxx		
									Feld-xtal pumice. Black shale intraclast. chert. CO_3-diss Py Ccv	VOFB	
520									mostly black shale Ccs	SLCT	
540									massive, graded feld-xtal-pumice Brxx Ccv	VOFB	
560									silica-Py±Cpy alt.		
									Cpy		
580											
600											

REMARKS

5 cm

675074

RGC EXPLORATION PTY LTD

DRILL HOLE No 518016

SHEET 4 OF 5

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	: 4-5-98
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/8 1/4 1 4 16 32)	ALTERATION (SIL. SER. PY. Cby Chl)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
600								
620						ser-py altered vitric sslt Eεs disrupted vitric sslt lap to pumice – fold xbdd Eεv bxx	VDVF	
640						pumiceous sst. Eεv	VDPM	
660						polymict Bxx. basalt (?) + pumice clast Eεvq pumice – fold xbd Bxx	VDPB	
680						minor cby disseminated py. Eεv pumice sst.	VDPB	
700						Massive VC pumice Bxx Eεv	VDPM	
720						vitric sslt to shale Eεs	VDVF	
						polymict VC Breccia sil-chl-silica-cby Eεvq	VBPB	
						Black shale + polymict Bxx clasts of dacite – chert – pumice. vitric sslt Eεvq	VBLB	
740						Feld-lithic sst. disturbed bedding well sorted Eεv	VDPM	
						VEIN QTZ		
760						Bedded, graded basalt Breccia Eb well sorted, clast supported basalt Breccia Eb	VBLM VBLB	
780						vitric siltstone. py bands. Eεs mixed vitric siltstone & basaltic clasts Eεs slump breccia. Eεs	VBVF VB-B VB-M	
800						Pumice – basalt – lithic VC Breccia Eεvq	VDLB	

REMARKS

5 cm

675075

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET 5 OF 5

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Henry
PROSPECT	: 1:1000 Summary Log
DATE	: 4-5-98
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/8, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	CO3	CLAY	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION
			800							Coarse feld-pumice Brxx		
			820							Mod. ser-chl alt. CO_3 dlt.		
										EOH 828		
			840									

REMARKS

5 cm

675076

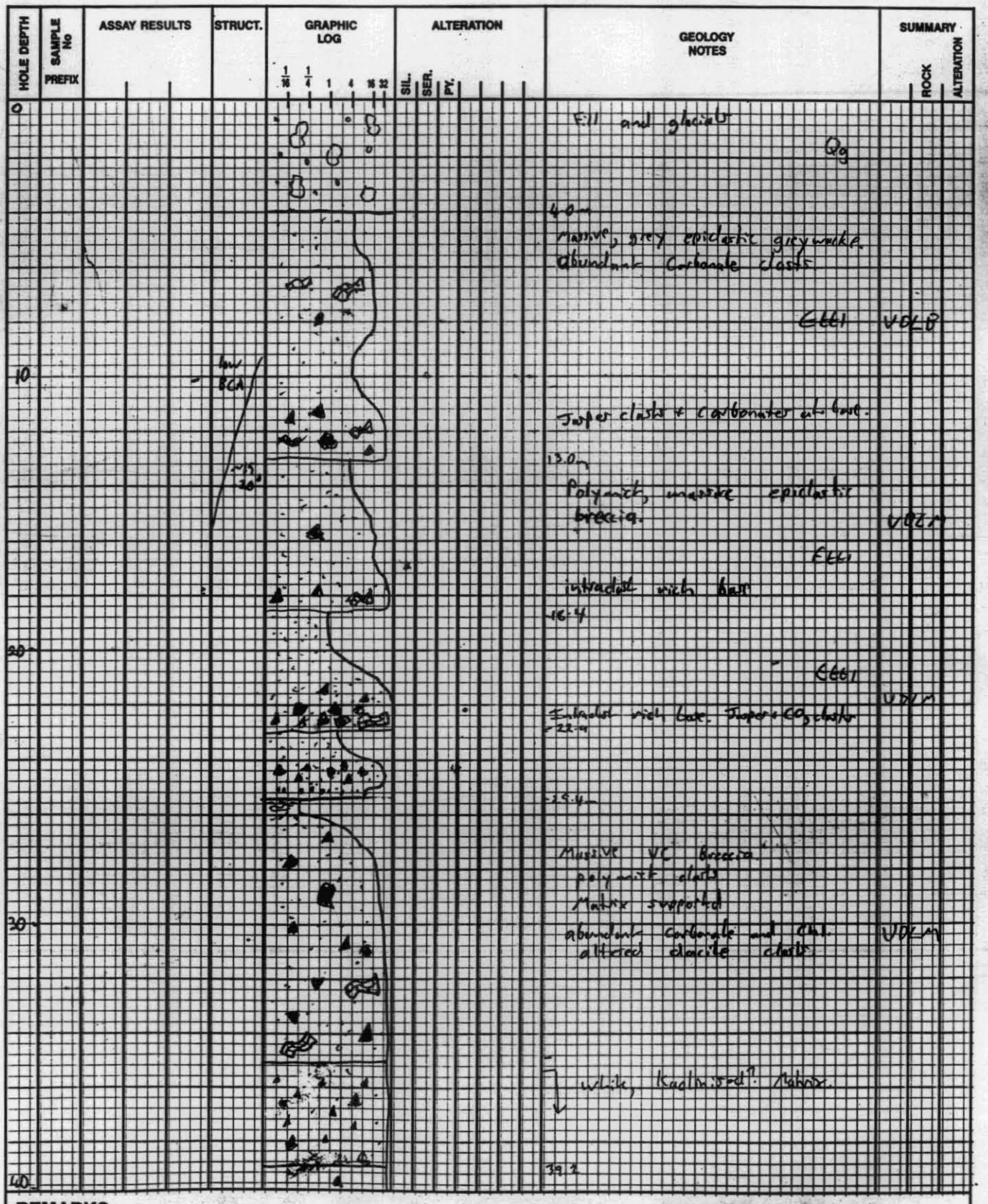
RGC EXPLORATION PTY LTD

DRILL HOLE No SHD16

SHEET 1 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm

675077

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD16

SHEET 2 OF

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 2-4-98
LOGGED BY	: T. Callaghan

HOLE DEPTH | SAMPLE No PREFIX | ASSAY RESULTS | STRUCT. | GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32) | ALTERATION (SIL. SER. PY.) | GEOLOGY NOTES | SUMMARY (ROCK, ALTERATION)

40

Carbonate rich + carbonate clast rich mass flow. Slumped calcarenite + clastic? sst.

VDLB

EEEI

50

-50m
grades into dismembered calcarenite.

Sandy volcaniclastic impregnated & carbonate veins to moderate brecciation.

Ceol? VDLB

60

70

-66.8
Fine grained sst. looks like Ebc sst but not much qtz ~ 2%. Minor Sulf + Qtz porphyry clasts.

-70.7
qtz-feld. lithic sst & carb intraclasts at base.

EEEI VALB

75.5

Hyaloclastite / peperite ME Julia Rhyolite

EEI JRL

-76.8
sst

Brecciated LSt base. VC Sil

EEEI VRLM

80

REMARKS

5 cm

675078

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD16

SHEET 3 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 2-4-98
LOGGED BY	: T. Callaghan.

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL. SER. PY.	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
80						80.5 Massive, poorly sorted Sst. xtal rich. 2% Qtz	EE or EEE	VRCM
						85.8 Hyaloclastite/peperite MGR		
		Broken Core				86.9 Broken ME Julia Rhyolite PROTO?	EE?	IRC
90						88.9 Faulted contact. Massive xtal-lithic Sst. looks like Clowes Zig Zag Hill Sandstone		
							EEE	VRCM
100		Fault.				99 FAULT. Brittle. Weathered		
						100.6 Broken and Faulted Volcaniclastic breccia. xtal-lithic sst & tuff + Carb clasts intruded by qtz porphyry. Peperite and hyaloclastic.	EEE	IRC
						106.6 Flow foliated Qtz-Feld Porphyry	EQ	IRC
110		Pro Core				109.6 Matrix supported Mud flow 110.3 Feld xtal sst. Lith. Carb altered. Minor lithics.	EEE	VRCM
		Lim. Core Loss				113.6 114.6 Massive, Lmn altered. qtz-feld porphyritic Rhyolite.	EQ	IRC
120								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675079

DRILL HOLE No SHD18

SHEET 4 OF

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 8-4-98
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CC, CX)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
120						120.4 Massive Piggy fault. Inclusion of VDFM embedded.	FALT	
		Piggy fault				123.8 Massive VC breccia. Mod chl. EEEI	VDLB	
		Broken core				125.0 126 Massive volcaniclastic, polymict, lithic Breccia. Carb-ser altered. Weak sericite		
130						132.4 133.7 Massive polymict volcaniclastic Breccia. Carb altered. Abundant intraclasts. Soft sed. deformation. EEEI	SLST VDLB	
						138.9 " " " EEEI	VDLB	
140						140.8 Massive, matrix supported, polymict volcanic lithic breccia. Few vein, carb, chl, clast. Soft clasts EEEI	VDLB	
150		Fault				151.2 Hematite altered VC. 151.4 Carb alt. Veinlets? Massive, polymict. VC Breccia. Soft sediment deformation. Some minor pyrite. QP	VDLB VDLB	
160								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675080

DRILL HOLE No SH016

SHEET 5 OF _____ (Sheet 6 missing)

PROJECT	:
PROSPECT	: 5th Henley
DATE	:
LOGGED BY	: T. Gallagher

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION
160			Fault					minor Supergene alteration -161.6m Qtz-feld phyric rhyolite. weak alb alt. 2-5% CO_3 and Qtz Vns Mafic inclusions? Suite II porphyry	Ep	IR?
170										
180								-179.3 Fault. Qtz vns -180	FALT	
									Ep	IR?
190										
200										

REMARKS

5 cm

675081

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET 7 OF (Sheet 6 missing)

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 21-4-98
LOGGED BY	: T. Callaghan

— Bedding
⌴ Cleavage
▲ Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG 1/16 1/4 1 4 16 32	ALTERATION SIL. SER. PY.	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
240								
250						Qtz-feldspar porphyry. porphyritic? spherulitic moderate alb. alteration.		
						ep	IRCC	
260								
						broken core		
270								
280								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675682

DRILL HOLE No SH016

SHEET 8 OF

PROJECT	: Jth Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
290						Epl Feld- Qtz phyric rhyolite. Coarse 25-30% phenos. decreasing weak albite. Fresh rhyolite.		
340								
390								
440								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675083

DRILL HOLE No SH016

SHEET 9 OF

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 21-4-98
LOGGED BY	: T. Callaghan

HOLE DEPTH | SAMPLE No PREFIX | ASSAY RESULTS | STRUCT. | GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32) | ALTERATION (SIL., SER., PY.) | GEOLOGY NOTES | SUMMARY (ROCK, ALTERATION)

320

330

340

350

360

Qtz-Feld. phyric rhyolite. ?

Suite II: porphyritic rhyolite.

Massive carbonate vein

Fresh unaltered

REMARKS

5 cm

6750084

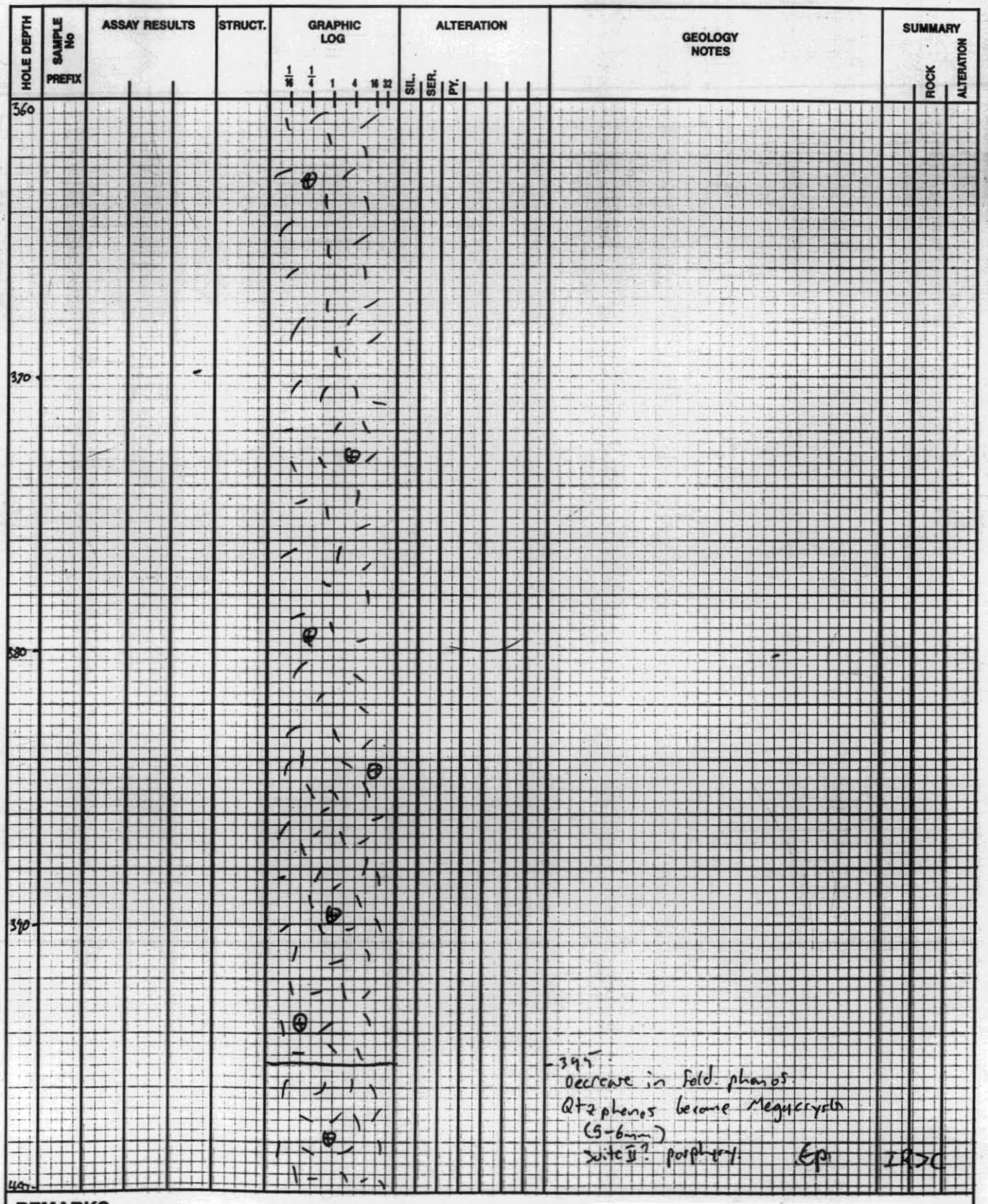
RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET 10 OF

PROJECT	: 5th Hendy
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
▲ Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm
~~~

RGC EXPLORATION PTY LTD

675085

DRILL HOLE No SH016

SHEET 11 OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
▲ Foliation
~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CC)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
400								
410								
420			Foliation ca. = 30°			420 Qtz - feld porphyry. Foliated Weak anastomosing sct. Suite II porphyry ep	51	
430								
440			Fault/foliation			- 438.4 Footwall sct. carb alt. VC?	57	CG

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No STY016 675086

SHEET 12 OF

PROJECT	: 3rd Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CO_3 CHL.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
440						Indeterminate rock. aerial ash? sericite schist. Cad	VA	
						441.8m Qtz-Feld phyric rhyolite foliated. Weak sericite-chlorite CO_3 alt. GD	IR>C	
		Fault.				446 sericite schist/mylonite. FAU?	SS	
						447.3 chl-ser-carb 0.1%py altered VC? tuff. Indeterminate. Ancient? mylonite EGW	schist	
450						silica-chl altered porphyroclasts in mylonitic sericitised matrix. EGW		
						456.2 Silica-CO_3-ser schist. CO_3 and silica layers in ser. mylonitic matrix. 0.2% sphalerite-py microveins. EGW	SS schist	SAS
460						460.7 CO_3-ser altered VC? tuff. density ?? foliated.	VDFM	CSS?
						462.8 Fine, grey volcaniclastic siltstone. CO_3 nodules at 10-15% mylonitic. Silicified-py altered. disseminated py. EGW	VDMS	CTPS SAK
						465.5 Silica CO_3 alt. tuff? Mylonitic. pervasive CO_3-silica. 0.1% fine-sulphides sphal-gal-py. EGW	Schist	CTQS
470						468.3 Silica-ser-py alt. VC tuff. intensely foliated. Intrusive? of fine black shale to volcaniclastic tuff. EES	VDMF	SAQS
						graded base ser-CO_3 altered intrusive at VC tuff. EGW	VDFM	
						472.9 Felsic tuff & black shale bnd. strong CO_3 alt. 2% disem py. foliated ser alt. V. minor galena. EGW	VDFM	
480						grooved, possibly felsic pumice tuff. but to altered to tell accurately.		

REMARKS

5 cm

675087

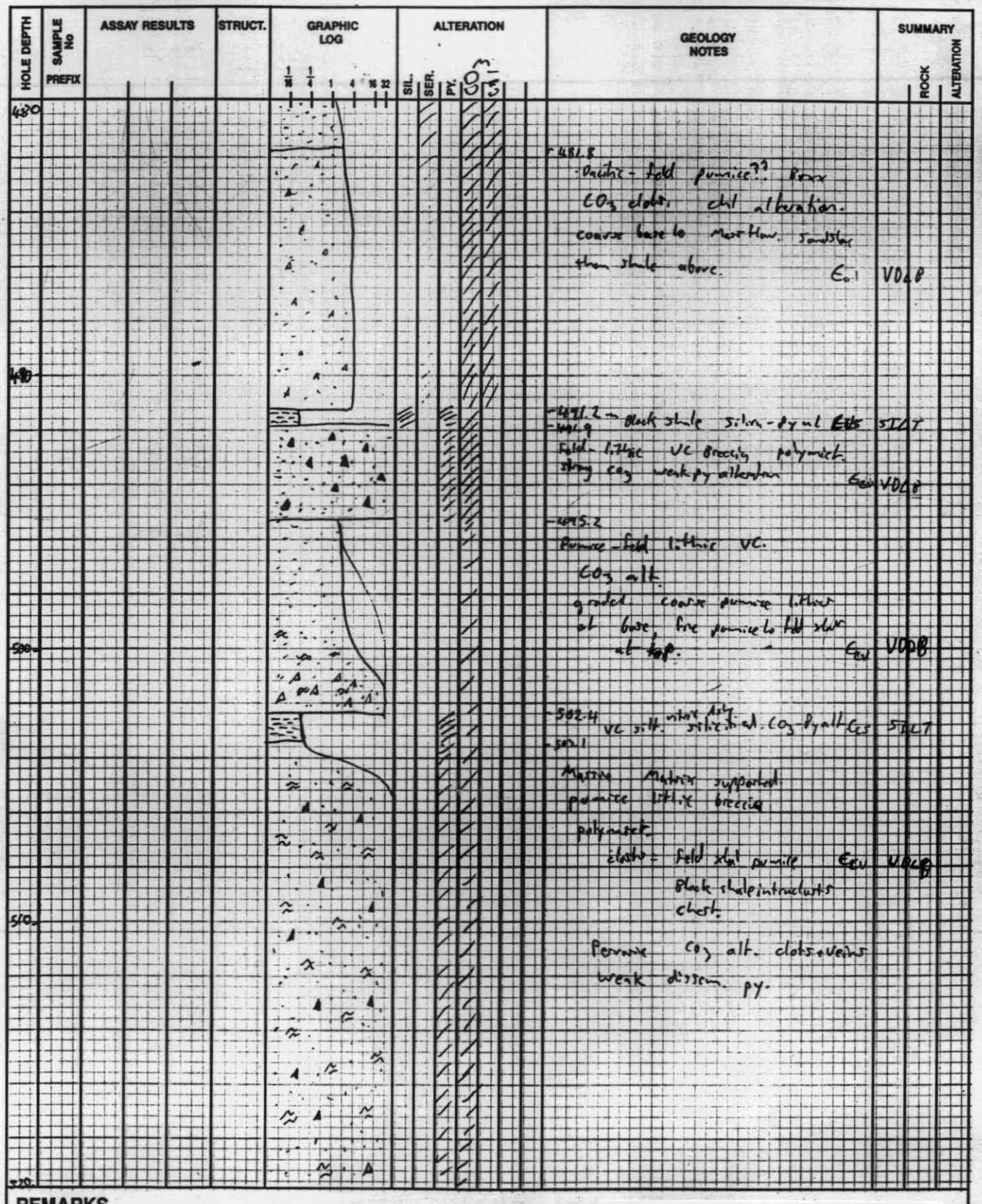
RGC EXPLORATION PTY LTD

DRILL HOLE No SND 16

SHEET 13 OF

PROJECT	5th Hanky
PROSPECT	
DATE	
LOGGED BY	T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm

675088

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Cullingham

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	CO3	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION
520									ser-py-carb alt Py as lenticular aggregates CO_3 as blebs.		
									524.6 Mostly Black shale 2 minor bedded, dacitic pumiceous(?) vc. weak to moderate ser-CO_3-py Ccs alt pumiceous units altered.	SILT	CSP1
540									534.1 Massive, graded feld-pumice(?) dacitic vc Brxx. CO_3 blebs. Pervasive sericite. 0.5% disem Py Ccv	VOLM	CSP3
									543.6m massive, graded, feld-pumice vc xtls. Text altered. Ccv	VOLM	
560									553.5 increased ser-py-silica alteration texture destructive except for clastic veins. Good alteration 1-2% Py pervasive silica + sericite layers.		
580											

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675089

DRILL HOLE No SHD16

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., C°)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
560						texture destructive silic-py alt. ± set alt.		
						1-3% py pervasive silica - less CO_3 py as fine euhedral aggregates.	F-V	Q7 05
						CCV	VQRM	
580						571.2 pumiceous clast Breccia decreasing silica alt. + py.	CCV	VDLB C957
						sericite ~ 5-10%		
						CO_3 ~ 5-10%		
						Py < 0.2%		
						increased silica + py. decreased CO_3 + sericite	CCV	VDLB
600								
							CCV	VDLB
						585.0 Coarse - polymict Breccia silicified, grey pervasive silica silica - py - pink alt.		
			qtz vein			qtz veins + clasts ±	Cong	VDLB Q7P7
						py aggregates.		
620						- 589.4		
						Coarse, polymict VC Breccia strong CO_3 alt. py - py alt.		
						Py ~ 0.5-1.0% Euhedral aggregates		
							CCVwg	
640								

REMARKS

5 cm

675090

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
— Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	CO3	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION
600									600.2 increased py py as aggregated: atm. fine euhedral grains ~ 1-3% CO_3 as blebs		
									607 increased CO_3, py as lenticular aggregates. pervasive sericite. CO_3 to 15-20%		C7I7
620									618.8 strongly altered vitric tuff.	Ccs	VOVF J5I5
									620.2 Felsic porphyry? breccia/tuff. CO_3 blebs qtz veins. silicified. banded fine py	Ccv	VOPM Q7P7
									624.2 graded massive clasts vc. felsic porphyry(?) tuff disseminated py 2-3% weak pervasive sericite large CO_3 blebs (1-4cm) minor chlorite	Ccv	VOFM
640									632.6 fine clastic vc tuff.	Ccv	VOFM

REMARKS

5 cm

675091

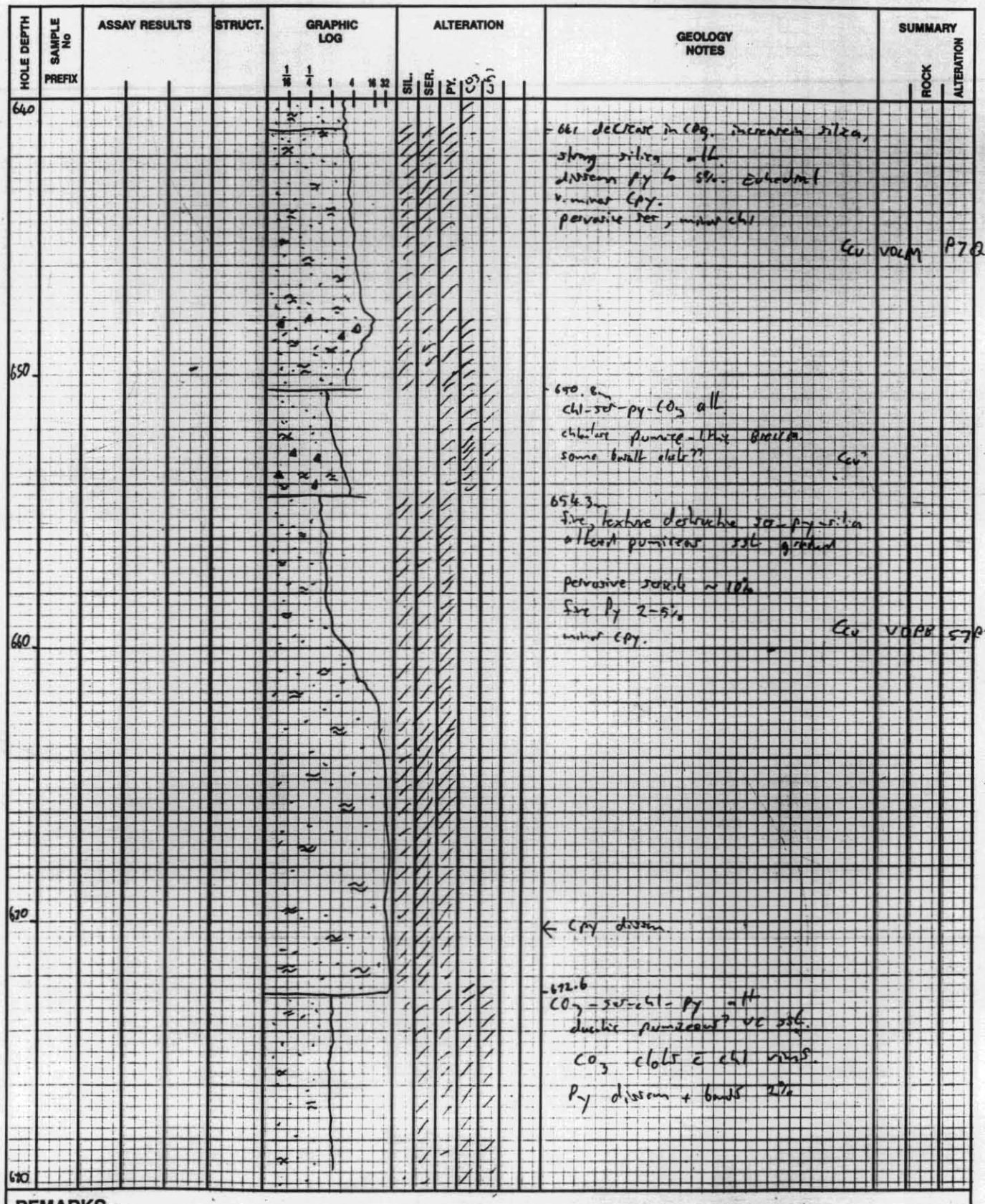
RGC EXPLORATION PTY LTD

DRILL HOLE No SHD66

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
— Foliation
~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

675092

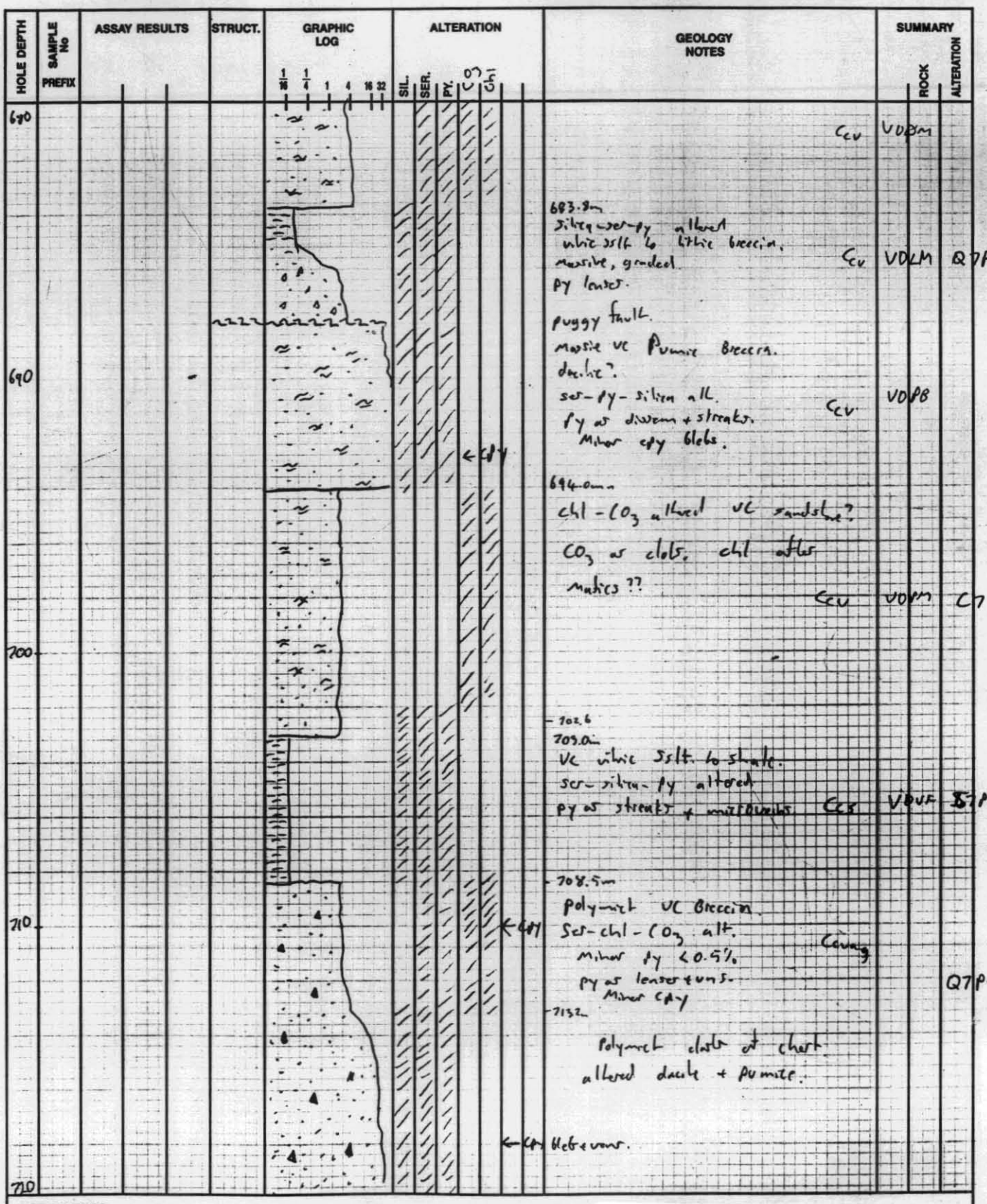
RGC EXPLORATION PTY LTD

DRILL HOLE No SHD 16

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
▲ Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm
~~~

675093

RGC EXPLORATION PTY LTD

DRILL HOLE No SH016

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., 0°)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
720						Cmy 1-3%		
						722.6 No ser or py. Black shaley + polymict Bxx's.	Ces VDVF	Cs
						725. polymict vc Breccia. clasts of dacite, chert and pumice almost clast supported	Ccvmy VDLO	Cs
						728.3m well sorted vc sst. subrounded fragments, clast supported? minor py - CO_3	Ccvmy VDLM	CSP
730						730.8m vc vitric sslt disem py	Ces VDVF	Ps
						735.0m Feldslithic vc sst CO_3 clots. bedded, well sorted. several graded beds to 750m. diffusely bedded.	Ccv? VDFM	
740						740.1	Ccv VDFM	
						743.8m		
						744 increased CO_3 - Ay - ser		
750			Vcvr	vein		750 white massive qtz veins.	VEIN	
						755.8m Bedded, graded, basalt breccia.	Cb VBLM	
760								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675094

DRILL HOLE No SH016

SHEET _____ OF _____

PROJECT	: 3rd Hanky
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	CO3	Chl	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION
760										760.2 fine vc sstn. basaltic?	EES	VBVF	CSOC
										762.0 well sorted basalt Breccia. clast supported. chloritized. Aphyric	VBLB	CSOC
											C6	
770												
										771.8m vitric siltstone. py bands		
											CCS	VBVF	PY
780										779.4 mixed vitric siltstone and basaltic clasts + sand. Slump breccia??	EB	VBLB	CSOC
										786.4 basaltic sst	EB?	VBLM	CS
										787.8 Massive polymict vc breccia clasts of basalt, vitric siltstone. Jasper?? pumice, dacite		
790												
											Coring	VR
800												

REMARKS

5 cm

675095

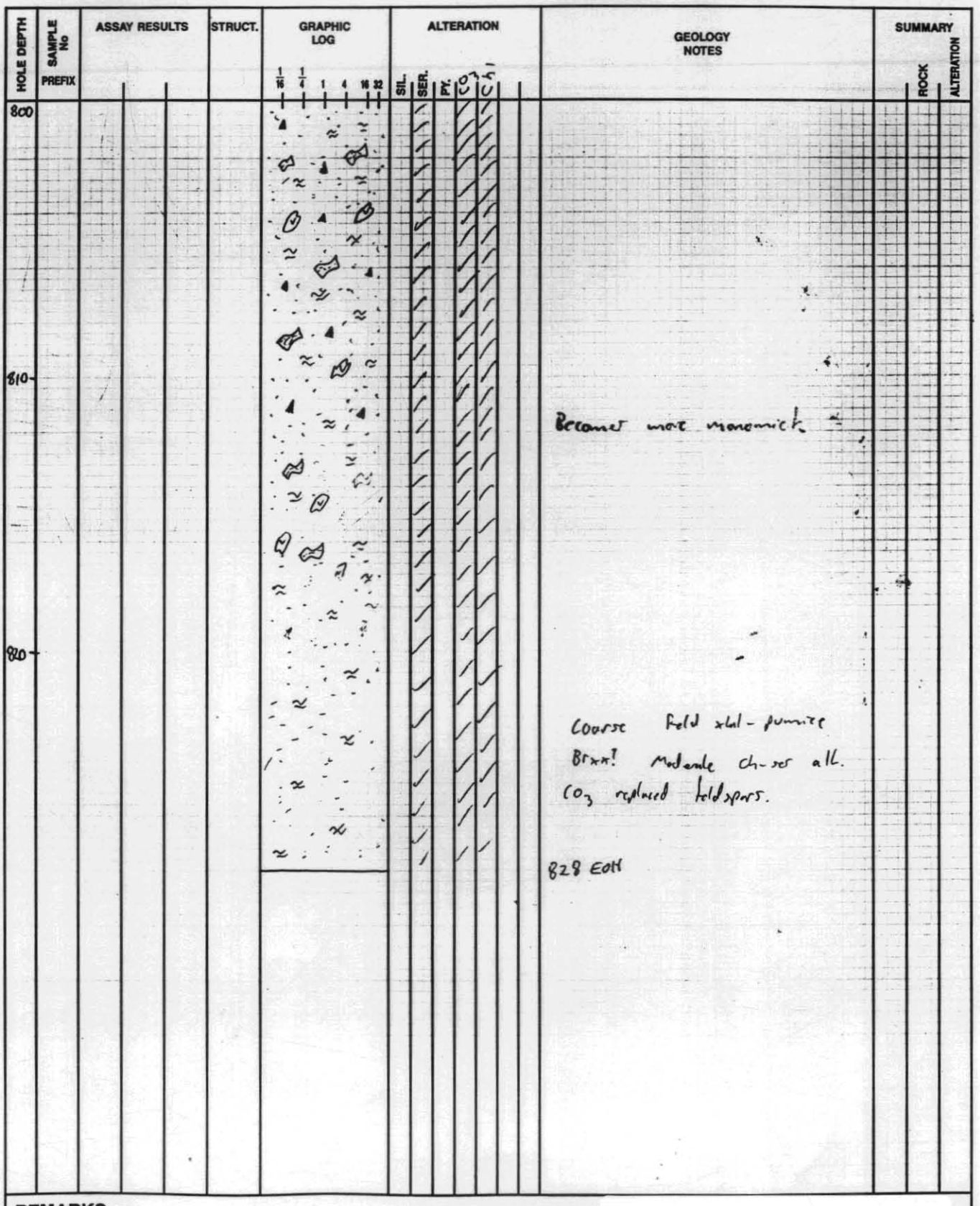
RGC EXPLORATION PTY LTD

DRILL HOLE No SH046

SHEET _____ OF _____

PROJECT	: 5th Henry
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold



REMARKS

5 cm

Hole_Id	AMG East	AMG North	AMG RL	Total Depth	Geologist
SHD21	380885.00	5358895.00	485.00	928.00	TC

Depth	Azm_AMG	Dip	Remarks
0.00	270.00	-73.8	
15.00	270.00	-73.8	
30.00	268.00	-73.1	
64.00	270.00	-72.8	
90.00	270.00	-72	
120.00	270.00	-71.5	
151.00	270.00	-69	
184.00	273.00	-66.5	
211.00	270.00	-65	
238.00	275.00	-62.8	
246.00	273.00	-62	
265.00	272.50	-60.7	
280.00	272.00	-58	
310.00	271.00	-56	
334.00	271.00	-54.5	
360.00	271.00	-52	
391.00	271.00	-50.5	
421.00	270.00	-49	
451.00	270.00	-47.4	
481.00	270.00	-46	
511.00	269.00	-44	
541.00	268.00	-43	
571.00	268.00	-41.5	
616.00	270.00	-39	
649.00	271.00	-37.5	
688.00	272.00	-35.5	
718.00	273.00	-33.1	
751.00	274.00	-31	
784.00	275.00	-29	
817.00	276.00	-27	
850.00	276.00	-25	
880.00	276.00	-23	
916.00	275.00	-20	

Hole_Id	Sample No	From	To	AG_A	AS_A	AU_G	BI_A	CU_A	P_X	PB_A	TI_X	V_X	ZN_A	ZR_X
SHD21	1021923	205.00	206.00	3	130	-0.01	-10	79		1575			12400	
SHD21	1021924	206.00	207.00	2	90	-0.01	-10	122		508			2520	
SHD21	1021925	207.00	208.00	2	-50	-0.01	-10	176		1325			834	
SHD21	1021926	223.00	224.00	-1	-50	-0.01	-10	28		63			307	
SHD21	1021927	224.00	225.00	1	-50	-0.01	-10	31		41			251	
SHD21	1021928	225.00	226.00	-1	-50	-0.01	-10	27		102			298	
SHD21	1021929	226.00	227.00	1	-50	-0.01	-10	37		154			725	
SHD21	1021933	231.00	232.00	-1	-50	-0.01	-10	24		135			153	
SHD21	1021934	232.00	233.00	-1	-50	-0.01	-10	34		364			1355	
SHD21	1021935	233.00	234.00	-1	-50	-0.01	-10	24		835			1915	
SHD21	1021936	234.00	235.00	-1	-50	-0.01	-10	64		169			576	
SHD21	1021937	235.00	236.00	1	-50	-0.01	-10	40		298			1165	
SHD21	1021938	236.00	237.00	1	-50	-0.01	-10	208		180			799	
SHD21	1021939	240.00	241.00	-1	-50	-0.01	-10	47		123			295	
SHD21	1021940	241.00	242.00	-1	-50	-0.01	-10	56		140			496	
SHD21	1021941	242.00	243.00	-1	-50	-0.01	-10	59		123			531	
SHD21	1021942	243.00	244.00	-1	-50	-0.01	-10	63		167			476	
SHD21	1021943	244.00	245.00	-1	-50	-0.01	-10	77		61			299	
SHD21	1021944	245.00	246.00	-1	-50	-0.01	-10	65		180			367	
SHD21	1021945	249.00	250.00	-1	-50	-0.01	-10	48		150			673	
SHD21	1021946	250.00	251.00	-1	-50	-0.01	-10	46		69			431	
SHD21	1021947	251.00	252.00	-1	-50	-0.01	-10	50		157			396	
SHD21	1021949	253.00	254.00	-1	-50	0.04	-10	42		69			1035	
SHD21	1021950	254.00	255.00	-1	-50	-0.01	-10	44	1130	107	6100	222	981	137
SHD21	1021951	255.00	256.00	-1	-50	-0.01	-10	55		87			657	
SHD21	1021952	256.00	257.00	-1	-50	-0.01	-10	45		80			410	
SHD21	1021953	257.00	258.00	-1	-50	-0.01	-10	30		53			335	
SHD21	1021954	258.00	259.00	-1	-50	-0.01	-10	40		94			905	
SHD21	1021955	259.00	260.00	-1	-50	-0.01	-10	38		295			1100	
SHD21	1021956	260.00	261.00	-1	-50	-0.01	-10	60		462			1730	
SHD21	1021957	261.00	262.00	-1	-50	-0.01	-10	120		663			462	
SHD21	1021958	262.00	263.00	-1	-50	-0.01	-10	79		443			407	
SHD21	1021959	263.00	264.00	-1	-50	-0.01	-10	64		120			456	
SHD21	1021960	264.00	265.00	-1	-50	-0.01	-10	101	1070	229	7660	286	170	207
SHD21	1021961	278.00	279.00	-1	-50	-0.01	-10	37		29			193	

SHD21	1021962	279.00	280.00	-1	-50	-0.01	-10	11		13			97	
SHD21	1021963	280.00	281.00	-1	-50	-0.01	-10	38		18			203	
SHD21	1021964	281.00	282.00	-1	-50	-0.01	-10	53		17			247	
SHD21	1021965	282.00	283.00	1	-50	-0.01	-10	109		23			408	
SHD21	1021966	283.00	284.00	-1	-50	-0.01	-10	17		13			225	
SHD21	1021967	284.00	285.00	-1	-50	-0.01	-10	37		25			199	
SHD21	1021969	285.00	286.00	-1	-50	-0.01	-10	47		259			173	
SHD21	1021970	286.00	287.00	3	-50	-0.01	-10	129		261			1010	
SHD21	1021971	287.00	288.00	1	-50	-0.01	-10	100		59			411	
SHD21	1021972	288.00	289.00	2	-50	-0.01	-10	118		251			320	
SHD21	1021973	289.00	290.00	1	-50	-0.01	-10	40		47			420	
SHD21	1021974	290.00	291.00	-1	-50	-0.01	-10	33		40			448	
SHD21	1021975	291.00	292.00	-1	-50	-0.01	-10	51		72			283	
SHD21	1021976	292.00	293.00	-1	-50	-0.01	-10	83		104			314	
SHD21	1021977	293.00	294.00	-1	-50	-0.01	-10	57		69			295	
SHD21	1021978	294.00	295.00	-1	-50	-0.01	-10	56		127			301	
SHD21	1021979	295.00	296.00	-1	-50	-0.01	-10	40		92			356	
SHD21	1021980	296.00	297.00	-1	-50	-0.01	-10	41		78			314	
SHD21	1021981	297.00	298.00	-1	-50	-0.01	-10	25		64			435	
SHD21	1021982	298.00	299.00	-1	-50	-0.01	-10	26		73			498	
SHD21	1021983	299.00	300.00	-1	-50	-0.01	-10	32		60			341	
SHD21	1021984	300.00	301.00	-1	-50	-0.01	-10	44		68			377	
SHD21	1021985	301.00	302.00	-1	-50	-0.01	-10	37		150			883	
SHD21	1021986	302.00	303.00	-1	-50	-0.01	-10	31		40			471	
SHD21	1021987	303.00	304.00	-1	-50	-0.01	-10	32		93			409	
SHD21	1021988	304.00	305.00	-1	-50	-0.01	-10	25		36			336	
SHD21	1021989	305.00	306.00	-1	-50	-0.01	-10	25	1240	44	7130	285	417	184
SHD21	1021991	306.00	307.00	-1	-50	-0.01	-10	25		28			450	
SHD21	1021992	307.00	308.00	-1	-50	-0.01	-10	20		38			413	
SHD21	1021993	308.00	309.00	-1	-50	-0.01	-10	29		40			366	
SHD21	1021994	309.00	310.00	-1	-50	-0.01	-10	28		90			362	
SHD21	1021995	310.00	311.00	-1	-50	-0.01	-10	20		36			371	
SHD21	1021996	311.00	312.00	-1	-50	-0.01	-10	20		71			374	
SHD21	1021997	312.00	313.00	-1	-50	-0.01	-10	22		34			408	
SHD21	1021998	313.00	314.00	-1	-50	-0.01	-10	23		175			385	
SHD21	1021999	314.00	315.00	-1	-50	-0.01	-10	38		29			321	

SHD21	1022000	315.00	316.00	-1	-50	-0.01	-10	45		33			248	
SHD21	1081001	316.00	317.00	-1	-50	-0.01	-10	31		50			215	
SHD21	1081002	317.00	318.00	1	85	-0.01	-10	40	1200	89	7520	379	167	222
SHD21	1081003	318.00	319.00	3	80	-0.01	-10	30		197			79	
SHD21	1081004	319.00	319.80	4	65	-0.01	-10	38		240			202	
SHD21	1081005	319.80	321.00	15	140	-0.01	-10	224		1405			5400	
SHD21	1081006	321.00	322.30	17	190	0.04	-10	264		4500			13600	
SHD21	1081007	322.30	323.00	3	-50	-0.01	-10	32		366			308	
SHD21	1081008	323.00	324.00	-1	-50	-0.01	-10	13		117			477	
SHD21	1081009	324.00	325.00	-1	-50	-0.01	-10	9		178			133	
SHD21	1081010	325.00	326.00	1	-50	-0.01	-10	28		230			257	
SHD21	1081011	326.00	327.00	-1	-50	-0.01	-10	24		82			139	
SHD21	1081012	327.00	328.00	1	-50	-0.01	-10	35	370	119	2590	75	226	240
SHD21	1081013	328.00	329.00	1	-50	-0.01	-10	17		203			399	
SHD21	1081014	329.00	330.00	-1	-50	-0.01	-10	18		169			1035	
SHD21	1081015	330.00	331.00	-1	-50	-0.01	-10	37		139			993	
SHD21	1081016	331.00	332.00	-1	-50	-0.01	-10	23		170			494	
SHD21	1081017	332.00	333.00	-1	-50	-0.01	-10	22		163			107	
SHD21	1081018	333.00	334.00	-1	-50	-0.01	-10	22		126			201	
SHD21	1081019	334.00	335.00	-1	-50	-0.01	-10	12		89			141	
SHD21	1081020	335.00	336.00	-1	-50	-0.01	-10	13		152			207	
SHD21	1081021	336.00	337.00	1	-50	-0.01	-10	14		323			696	
SHD21	1081023	337.00	338.00	-1	-50	-0.01	-10	7		150			223	
SHD21	1081024	338.00	339.00	-1	-50	-0.01	-10	13		261			953	
SHD21	1081025	339.00	340.00	-1	-50	-0.01	-10	10		211			488	
SHD21	1081026	340.00	341.00	-1	-50	-0.01	-10	6		106			337	
SHD21	1081027	341.00	342.00	-1	-50	-0.01	-10	7		74			267	
SHD21	1081028	342.00	343.00	-1	-50	-0.01	-10	7		99			481	
SHD21	1081029	343.00	344.00	-1	-50	-0.01	-10	6		93			666	
SHD21	1081030	344.00	345.00	-1	-50	-0.01	-10	9		130			882	
SHD21	1081031	345.00	346.00	-1	-50	-0.01	-10	10		131			1130	
SHD21	1081032	346.00	347.00	22	-50	-0.01	20	131		1050			1665	
SHD21	1081033	347.00	348.00	1	120	-0.01	-10	14		266			263	
SHD21	1081034	348.00	349.00	-1	-50	-0.01	-10	11		79			92	
SHD21	1081035	349.00	350.00	-1	-50	-0.01	-10	19		72			90	
SHD21	1081036	350.00	351.00	-1	90	-0.01	-10	22		165			171	

SHD21	1081037	351.00	352.00	-1	-50	-0.01	-10	18		170			101	
SHD21	1081038	352.00	353.00	-1	-50	-0.01	-10	17		193			462	
SHD21	1081039	353.00	354.00	-1	-50	-0.01	-10	14		160			364	
SHD21	1081040	354.00	355.00	-1	-50	-0.01	-10	6		119			204	
SHD21	1081041	355.00	356.00	-1	-50	-0.01	-10	8		134			720	
SHD21	1081043	356.00	357.00	-1	-50	-0.01	-10	12		198			454	
SHD21	1081044	357.00	358.00	2	-50	-0.01	-10	15		286			417	
SHD21	1081045	358.00	359.00	1	-50	-0.01	-10	16		278			351	
SHD21	1081046	359.00	360.00	2	50	-0.01	-10	18		380			925	
SHD21	1081047	360.00	361.00	3	95	-0.01	-10	49		356			1205	
SHD21	1081048	361.00	362.00	19	320	0.05	-10	334		692			2240	
SHD21	1081049	362.00	363.00	1	120	-0.01	-10	73		257			300	
SHD21	1081050	363.00	364.00	1	-50	-0.01	-10	42		143			368	
SHD21	1081051	364.00	365.00	1	60	-0.01	-10	58		206			792	
SHD21	1081052	365.00	366.00	-1	-50	-0.01	-10	34		276			418	
SHD21	1081053	366.00	367.00	-1	-50	-0.01	-10	70		123			327	
SHD21	1081054	367.00	368.00	-1	-50	-0.01	-10	58		144			333	
SHD21	1081055	368.00	369.00	1	-50	-0.01	-10	39		127			815	
SHD21	1081056	369.00	370.00	-1	-50	-0.01	-10	15		231			401	
SHD21	1081057	370.00	371.00	1	55	-0.01	-10	10		250			465	
SHD21	1081058	371.00	372.00	-1	85	-0.01	-10	33		119			207	
SHD21	1081059	372.00	373.00	2	185	-0.01	-10	42		133			218	
SHD21	1081061	373.00	374.00	4	50	-0.01	-10	53		267			957	
SHD21	1081062	374.00	375.00	3	95	-0.01	-10	71		113			301	
SHD21	1081063	375.00	376.00	-1	435	-0.01	-10	69		107			215	
SHD21	1081064	376.00	377.00	-1	570	-0.01	-10	118		107			492	
SHD21	1081065	377.00	378.00	3	85	-0.01	-10	36		357			1000	
SHD21	1081066	378.00	379.00	2	55	-0.01	-10	20		351			1030	
SHD21	1081067	379.00	380.00	1	65	-0.01	-10	30		242			669	
SHD21	1081068	380.00	381.00	4	95	0.02	-10	74		522			1085	
SHD21	1081069	381.00	382.00	2	410	0.02	-10	28		418			1355	
SHD21	1081070	382.00	383.00	2	210	0.03	-10	15		476			1465	
SHD21	1081071	383.00	384.00	2	180	0.04	-10	32		535			1340	
SHD21	1081072	384.00	385.00	1	455	0.02	-10	22		232			740	
SHD21	1081073	385.00	386.00	-1	295	-0.01	-10	13		118			121	
SHD21	1081074	386.00	387.00	-1	170	-0.01	-10	13		106			134	

SHD21	1081075	387.00	388.00	-1	60	-0.01	-10	8		25			94	
SHD21	1081076	388.00	389.00	-1	-50	-0.01	-10	17		17			94	
SHD21	1081077	389.00	390.00	-1	-50	-0.01	-10	84		10			751	
SHD21	1081078	395.00	396.00	-1	85	-0.01	-10	15		38			174	
SHD21	1081079	399.00	400.00	3	60	-0.01	-10	184		493			1215	
SHD21	1081081	400.00	401.00	3	425	-0.01	-10	149		541			2540	
SHD21	1081082	412.00	413.00	1	60	-0.01	-10	32		732			1465	
SHD21	1081083	413.00	414.00	-1	-50	-0.01	-10	27		250			242	
SHD21	1081084	414.00	415.00	-1	-50	-0.01	-10	51		38			210	
SHD21	1081085	415.00	416.00	-1	80	-0.01	-10	44		461			1785	
SHD21	1081086	416.00	417.00	-1	-50	-0.01	-10	24		230			445	
SHD21	1081087	417.00	418.00	-1	-50	-0.01	-10	11		268			1105	
SHD21	1081088	418.00	419.00	-1	-50	-0.01	-10	13		220			489	
SHD21	1081089	419.00	420.00	-1	-50	-0.01	-10	16		142			186	
SHD21	1081090	420.00	421.00	-1	-50	-0.01	-10	12		115			408	
SHD21	1081091	421.00	422.00	-1	-50	-0.01	-10	8		83			275	
SHD21	1081092	422.00	423.00	-1	115	-0.01	-10	13		160			618	
SHD21	1081093	423.00	424.00	-1	185	-0.01	-10	13		251			426	
SHD21	1081094	424.00	425.00	-1	495	-0.01	-10	23		225			492	
SHD21	1081095	425.00	426.00	-1	50	-0.01	-10	25		465			1095	
SHD21	1081096	426.00	427.00	1	70	-0.01	-10	28		433			1060	
SHD21	1081097	427.00	428.00	-1	-50	-0.01	-10	18		53			659	
SHD21	1081098	428.00	429.00	1	-50	-0.01	-10	42		984			1285	
SHD21	1081099	429.00	430.00	1	-50	-0.01	-10	42		899			216	
SHD21	1081101	430.00	431.00	-1	-50	-0.01	-10	44		1025			166	
SHD21	1081102	431.00	432.00	2	-50	-0.01	-10	55		1245			446	
SHD21	1081103	432.00	433.00	1	-50	-0.01	-10	44		423			737	
SHD21	1081104	433.00	434.00	2	-50	0.1	-10	32		544			1280	
SHD21	1081105	434.00	435.00	1	-50	-0.01	-10	24		386			683	
SHD21	1081106	435.00	436.00	1	50	-0.01	-10	34		439			1710	
SHD21	1081107	436.00	437.00	-1	-50	-0.01	-10	32		457			862	
SHD21	1081108	437.00	438.00	1	-50	-0.01	-10	83		1135			3180	
SHD21	1081109	438.00	439.00	3	-50	0.14	-10	82		4300			6800	
SHD21	1081110	439.00	440.00	12	-50	0.29	-10	440		10200			28200	
SHD21	1081111	440.00	441.00	15	-50	0.25	-10	491		9100			14200	
SHD21	1081112	441.00	442.00	2	-50	0.07	-10	80		3550			4990	

SHD21	1081113	442.00	443.00	3	-50	0.13	-10	80		3500			5600	
SHD21	1081114	443.00	444.00	4	-50	1.84	-10	474		33400			68100	
SHD21	1081115	444.00	445.00	4	-50	0.19	-10	203		7500			6600	
SHD21	1081116	445.00	446.00	1	-50	0.02	-10	104		892			2920	
SHD21	1081117	446.00	447.00	-1	-50	-0.01	-10	22		471			1475	
SHD21	1081118	447.00	448.00	-1	-50	-0.01	-10	26		435			826	
SHD21	1081119	448.00	449.00	-1	-50	-0.01	-10	30		233			1180	
SHD21	1081122	459.00	460.00	-1	-50	-0.01	-10	93		860			2520	
SHD21	1081123	460.00	461.00	-1	-50	-0.01	-10	24		72			271	
SHD21	1081124	461.00	462.00	-1	-50	-0.01	-10	32		92			69	
SHD21	1081125	462.00	463.00	-1	-50	-0.01	-10	48		48			72	
SHD21	1081126	463.00	464.00	-1	-50	-0.01	-10	55		15			62	
SHD21	1081127	464.00	465.00	-1	-50	-0.01	-10	29		33			129	
SHD21	1081128	465.00	466.00	-1	-50	-0.01	-10	27		65			70	
SHD21	1081129	466.00	467.00	-1	-50	-0.01	-10	17		55			97	
SHD21	1081130	467.00	468.00	-1	-50	-0.01	-10	18		16			58	
SHD21	1081131	468.00	469.00	-1	-50	-0.01	-10	35		-3			56	
SHD21	1081132	469.00	470.00	-1	-50	-0.01	-10	17		5			43	
SHD21	1081133	470.00	471.00	-1	-50	-0.01	-10	14		3			57	
SHD21	1081134	471.00	472.00	-1	-50	-0.01	-10	12		-3			47	
SHD21	1081135	472.00	473.00	-1	-50	-0.01	-10	22		-3			70	
SHD21	1081136	473.00	474.00	-1	-50	-0.01	-10	16		9			76	
SHD21	1081137	500.00	501.00	-1	-50	0.02	-10	23		401			376	
SHD21	1081138	501.00	502.00	1	-50	-0.01	-10	99		730			5300	
SHD21	1081139	502.00	503.00	2	60	-0.01	-10	54		808			1750	
SHD21	1081140	503.00	504.00	3	-50	-0.01	-10	117		1365			4530	
SHD21	1081141	504.00	505.00	-1	-50	-0.01	-10	33		198			537	
SHD21	1081142	505.00	506.00	-1	-50	-0.01	-10	16		122			353	
SHD21	1081143	506.00	507.00	-1	-50	-0.01	-10	53		215			996	
SHD21	1081144	507.00	508.00	-1	-50	-0.01	-10	22		160			431	
SHD21	1081145	508.00	509.00	1	-50	-0.01	-10	80		350			1590	
SHD21	1081146	509.00	510.00	4	-50	-0.01	-10	138		727			2600	
SHD21	1081147	510.00	511.00	2	-50	-0.01	-10	65		390			1980	
SHD21	1081148	511.00	512.00	1	-50	-0.01	-10	68		167			706	
SHD21	1081149	512.00	513.00	1	-50	-0.01	-10	35		131			893	
SHD21	1081151	513.00	514.00	1	110	-0.01	-10	68		258			1375	

SHD21	1081152	514.00	515.00	3	50	-0.01	-10	100		737			2540	
SHD21	1081153	515.00	516.00	1	-50	-0.01	-10	39		246			985	
SHD21	1081154	516.00	517.00	1	-50	-0.01	-10	32		177			825	
SHD21	1081155	517.00	518.00	-1	-50	-0.01	-10	43		177			1415	
SHD21	1081156	518.00	519.00	-1	-50	-0.01	-10	30		51			394	
SHD21	1081157	519.00	520.00	-1	55	-0.01	-10	50		91			304	
SHD21	1081158	520.00	521.00	-1	-50	-0.01	-10	29		65			216	
SHD21	1081159	521.00	522.00	-1	-50	-0.01	-10	18		145			321	
SHD21	1081160	522.00	523.00	-1	-50	-0.01	-10	21		175			424	
SHD21	1081161	523.00	524.00	-1	105	-0.01	-10	35		298			821	
SHD21	1081162	524.00	525.00	-1	220	0.05	-10	65		652			3140	
SHD21	1081163	449.00	450.00	-1	-50	-0.01	-10	9		776			450	
SHD21	1081164	450.00	451.00	-1	-50	-0.01	-10	10		340			196	
SHD21	1081165	451.00	452.00	-1	-50	-0.01	-10	11		30			47	
SHD21	1081166	452.00	453.00	-1	-50	-0.01	-10	10		28			48	
SHD21	1081167	453.00	454.00	-1	-50	-0.01	-10	31		21			47	
SHD21	1081168	454.00	455.00	-1	-50	-0.01	-10	24		19			67	
SHD21	1081169	455.00	456.00	-1	-50	-0.01	-10	10		33			69	
SHD21	1081170	456.00	457.00	-1	-50	-0.01	-10	20		302			334	
SHD21	1081171	457.00	458.00	-1	-50	-0.01	-10	12		72			97	
SHD21	1081172	458.00	459.00	-1	-50	-0.01	-10	18		79			92	
SHD21	1081173	525.00	526.00	-1	-50	0.01	-10	21		79			168	
SHD21	1081174	530.00	531.00	-1	-50	0.08	-10	50		93			1135	
SHD21	1081175	531.00	532.00	-1	-50	0.01	-10	36		66			778	
SHD21	1081176	532.00	533.00	-1	-50	-0.01	-10	18		152			653	
SHD21	1081177	533.00	534.00	-1	-50	-0.01	-10	14		68			134	
SHD21	1081178	534.00	535.00	-1	-50	-0.01	-10	25		95			248	
SHD21	1081179	535.00	536.00	-1	-50	-0.01	-10	21		93			129	
SHD21	1081181	536.00	537.00	-1	-50	-0.01	-10	37		152			660	
SHD21	1081182	537.00	538.00	-1	-50	-0.01	-10	18		73			138	
SHD21	1081183	538.00	539.00	-1	-50	-0.01	-10	15		61			100	
SHD21	1081184	539.00	540.00	-1	-50	0.02	-10	19		79			148	
SHD21	1081185	540.00	541.00	-1	-50	0.01	-10	11		112			482	
SHD21	1081186	541.00	542.00	-1	-50	-0.01	-10	17		90			510	
SHD21	1081187	542.00	543.00	-1	-50	-0.01	-10	25		120			435	
SHD21	1081188	543.00	544.00	-1	-50	0.01	-10	11		107			309	

SHD21	1081189	544.00	545.00	-1	-50	0.02	-10	37		671			1385	
SHD21	1081190	545.00	546.00	-1	-50	0.01	-10	26		418			739	
SHD21	1081191	546.00	547.00	-1	50	0.03	-10	70		465			1245	
SHD21	1081192	547.00	548.00	-1	-50	0.01	-10	53		1375			1865	
SHD21	1081193	554.00	555.00	-1	-50	-0.01	-10	23		18			283	
SHD21	1081194	555.00	556.00	-1	-50	-0.01	-10	40		262			818	
SHD21	1081195	556.00	557.00	-1	-50	0.01	-10	41		356			945	
SHD21	1081196	557.00	558.00	-1	-50	-0.01	-10	41		262			521	
SHD21	1081197	558.00	559.00	-1	-50	-0.01	-10	16		435			2130	
SHD21	1081198	559.00	560.00	-1	-50	-0.01	-10	35		327			1345	
SHD21	1081199	560.00	561.00	-1	-50	-0.01	-10	31		227			351	
SHD21	1081201	561.00	562.00	-1	95	-0.01	-10	53		212			377	
SHD21	1081202	562.00	563.00	-1	145	0.02	-10	47		165			531	
SHD21	1081203	563.00	564.00	-1	-50	-0.01	-10	22		611			872	
SHD21	1081204	564.00	565.00	-1	-50	0.01	-10	50		1280			976	
SHD21	1081205	565.00	566.00	-1	-50	0.01	-10	30		541			1840	
SHD21	1081206	566.00	567.00	-1	-50	-0.01	-10	22		483			1970	
SHD21	1081207	567.00	568.00	-1	-50	0.02	-10	17		547			951	
SHD21	1081208	568.00	569.00	-1	-50	-0.01	-10	19		198			698	
SHD21	1081209	569.00	570.00	-1	-50	0.01	-10	46		303			350	
SHD21	1081210	570.00	571.00	-1	55	0.01	-10	45		244			912	
SHD21	1081211	571.00	572.00	-1	-50	0.01	-10	26		124			863	
SHD21	1081212	572.00	573.00	-1	-50	0.01	-10	19		158			392	
SHD21	1081213	573.00	574.00	-1	-50	0.02	-10	30		142			491	
SHD21	1081214	574.00	575.00	-1	-50	-0.01	-10	18		172			234	
SHD21	1081215	575.00	576.00	-1	-50	0.01	-10	35		140			256	
SHD21	1081216	576.00	577.00	2	55	0.03	-10	51		198			246	
SHD21	1081217	577.00	578.00	2	-50	0.02	-10	25		690			2760	
SHD21	1081218	578.00	579.00	2	-50	0.03	-10	19		184			466	
SHD21	1081219	579.00	580.00	3	-50	0.04	-10	37		99			88	
SHD21	1081221	580.00	581.00	3	60	0.08	-10	47		162			31	
SHD21	1081222	581.00	582.00	2	-50	0.06	-10	44		208			478	
SHD21	1081223	582.00	583.00	1	-50	0.01	-10	60		251			4730	
SHD21	1081224	583.00	584.00	1	-50	0.04	-10	43		445			1530	
SHD21	1081225	584.00	585.00	2	55	0.03	-10	61		163			684	
SHD21	1081226	585.00	586.00	2	-50	-0.01	-10	30		146			181	

SHD21	1081227	586.00	587.00	1	-50	0.02	-10	57		159			688	
SHD21	1081228	587.00	588.00	-1	-50	0.05	-10	13		121			238	
SHD21	1081229	588.00	589.00	-1	-50	-0.01	-10	10		253			371	
SHD21	1081230	589.00	590.00	-1	-50	0.01	-10	9		255			319	
SHD21	1081231	590.00	591.00	-1	-50	0.01	-10	9		47			117	
SHD21	1081232	591.00	592.00	-1	-50	0.01	-10	24		105			342	
SHD21	1081233	592.00	593.00	-1	-50	-0.01	-10	14		113			496	
SHD21	1081234	593.00	594.00	-1	-50	0.02	-10	15		141			220	
SHD21	1081235	594.00	595.00	-1	-50	0.02	-10	12		71			243	
SHD21	1081236	595.00	596.00	-1	-50	0.01	-10	20		227			330	
SHD21	1081237	596.00	597.00	-1	-50	0.01	-10	19		121			286	
SHD21	1081238	597.00	598.00	-1	-50	0.01	-10	13		175			229	
SHD21	1081239	598.00	599.00	-1	-50	-0.01	-10	17		138			446	
SHD21	1081241	599.00	600.00	-1	-50	0.01	-10	7		79			91	
SHD21	1081242	600.00	601.00	-1	-50	0.01	-10	7		117			178	
SHD21	1081243	601.00	602.00	-1	-50	0.01	-10	7		164			251	
SHD21	1081244	602.00	603.00	-1	-50	0.01	-10	10		184			316	
SHD21	1081245	603.00	604.00	-1	-50	-0.01	-10	6		155			205	
SHD21	1081246	604.00	605.00	-1	-50	0.03	-10	7		143			368	
SHD21	1081247	605.00	606.00	-1	-50	0.02	-10	13		184			327	
SHD21	1081248	606.00	607.00	-1	-50	0.02	-10	7		132			191	
SHD21	1081249	607.00	608.00	-1	-50	0.01	-10	10		69			164	
SHD21	1081250	608.00	609.00	-1	250	0.01	-10	28		129			671	
SHD21	1081251	609.00	610.00	-1	-50	0.01	-10	19		179			441	
SHD21	1081252	610.00	611.00	-1	-50	-0.01	-10	27		229			602	
SHD21	1081253	611.00	612.00	-1	-50	0.01	-10	22		163			309	
SHD21	1081254	612.00	613.00	-1	-50	0.01	-10	15		196			359	
SHD21	1081255	613.00	614.00	-1	-50	-0.01	-10	12		132			152	
SHD21	1081256	614.00	615.00	-1	-50	-0.01	-10	11		134			250	
SHD21	1081257	615.00	616.00	-1	-50	-0.01	-10	7		112			185	
SHD21	1081258	616.00	617.00	-1	-50	-0.01	-10	7		97			138	
SHD21	1081259	617.00	618.00	-1	-50	-0.01	-10	8		89			252	
SHD21	1081261	618.00	619.00	-1	-50	0.02	-10	10		141			137	
SHD21	1081262	619.00	620.00	-1	-50	0.01	-10	6		116			175	
SHD21	1081263	620.00	621.00	-1	-50	0.01	-10	7		132			160	
SHD21	1081264	621.00	622.00	-1	-50	-0.01	-10	5		121			332	

SHD21	1081265	622.00	623.00	-1	-50	-0.01	-10	8		135			200	
SHD21	1081266	623.00	624.00	-1	-50	0.02	-10	8		222			175	
SHD21	1081267	624.00	625.00	-1	-50	-0.01	-10	5		209			489	
SHD21	1081268	625.00	626.00	-1	-50	-0.01	-10	5		102			121	
SHD21	1081269	626.00	627.00	-1	-50	0.01	-10	7		33			110	
SHD21	1081270	627.00	628.00	-1	-50	-0.01	-10	13		61			120	
SHD21	1081271	628.00	629.00	-1	-50	0.01	-10	22		428			2170	
SHD21	1081272	629.00	630.00	-1	-50	0.05	-10	272		723			2150	
SHD21	1081273	630.00	631.00	-1	-50	0.08	-10	49		140			1710	
SHD21	1081274	631.00	632.00	-1	-50	-0.01	-10	13		110			716	
SHD21	1081275	632.00	633.00	-1	-50	-0.01	-10	8		75			134	
SHD21	1081276	633.00	634.00	-1	-50	-0.01	-10	6		52			71	
SHD21	1081277	634.00	635.00	-1	-50	-0.01	-10	13		147			190	
SHD21	1081278	635.00	636.00	-1	-50	-0.01	-10	31		106			332	
SHD21	1081279	636.00	637.00	-1	-50	-0.01	-10	7		114			491	
SHD21	1081281	637.00	638.00	-1	-50	-0.01	-10	6		78			121	
SHD21	1081282	638.00	639.00	-1	-50	-0.01	-10	7		62			418	
SHD21	1081283	639.00	640.00	-1	-50	-0.01	-10	5		58			249	
SHD21	1081284	640.00	641.00	-1	-50	-0.01	-10	5		61			157	
SHD21	1081285	641.00	642.00	-1	-50	-0.01	-10	13		281			347	
SHD21	1081286	642.00	643.00	-1	-50	-0.01	-10	6		37			118	
SHD21	1081287	643.00	644.00	-1	-50	-0.01	-10	5		117			179	
SHD21	1081288	644.00	645.00	-1	-50	-0.01	-10	10		107			203	
SHD21	1081289	645.00	646.00	-1	-50	-0.01	-10	8		98			229	
SHD21	1081290	646.00	647.00	-1	-50	-0.01	-10	7		143			184	
SHD21	1081291	647.00	648.00	-1	-50	-0.01	-10	13		257			211	
SHD21	1081292	648.00	649.00	-1	-50	-0.01	-10	6		41			81	
SHD21	1081293	649.00	650.00	-1	-50	-0.01	-10	5		61			90	
SHD21	1081294	650.00	651.00	-1	-50	-0.01	-10	13		282			1265	
SHD21	1081295	651.00	652.00	-1	-50	-0.01	-10	28		613			4300	
SHD21	1081296	652.00	653.00	-1	-50	-0.01	-10	7		35			163	
SHD21	1081297	653.00	654.00	-1	-50	-0.01	-10	6		59			119	
SHD21	1081298	654.00	655.00	-1	-50	-0.01	-10	8		44			243	
SHD21	1081299	655.00	656.00	-1	-50	-0.01	-10	125		117			390	
SHD21	1081301	656.00	657.00	-1	-50	-0.01	-10	30		76			206	
SHD21	1081302	657.00	658.00	-1	-50	-0.01	-10	12		60			709	

SHD21	1081303	658.00	659.00	-1	-50	-0.01	-10	11		84			69	
SHD21	1081304	659.00	660.00	-1	-50	-0.01	-10	11		51			116	
SHD21	1081305	660.00	661.00	-1	-50	-0.01	-10	37		150			536	
SHD21	1081306	661.00	662.00	-1	-50	-0.01	-10	9		86			98	
SHD21	1081307	662.00	663.00	-1	-50	-0.01	-10	17		87			202	
SHD21	1081308	663.00	664.00	-1	-50	-0.01	-10	6		45			109	
SHD21	1081309	664.00	665.00	-1	-50	-0.01	-10	6		45			217	
SHD21	1081310	665.00	666.00	-1	-50	-0.01	-10	9		92			128	
SHD21	1081311	666.00	667.00	-1	-50	-0.01	-10	10		103			162	
SHD21	1081312	667.00	668.00	-1	-50	-0.01	-10	9		128			124	
SHD21	1081313	668.00	669.00	-1	-50	-0.01	-10	11		100			421	
SHD21	1081314	669.00	670.00	-1	-50	-0.01	-10	22		186			376	
SHD21	1081315	670.00	671.00	-1	-50	-0.01	-10	18		72			246	
SHD21	1081316	671.00	672.00	-1	-50	-0.01	-10	11		41			181	
SHD21	1081317	672.00	673.00	-1	-50	-0.01	-10	11		82			90	
SHD21	1081318	673.00	674.00	-1	-50	-0.01	-10	13		230			129	
SHD21	1081319	674.00	675.00	-1	-50	-0.01	-10	12		129			206	
SHD21	1081321	675.00	676.00	-1	-50	-0.01	-10	15		58			243	
SHD21	1081322	676.00	677.00	-1	-50	-0.01	-10	11		23			158	
SHD21	1081323	677.00	678.00	-1	-50	-0.01	-10	11		30			105	
SHD21	1081324	678.00	679.00	-1	-50	-0.01	-10	8		41			70	
SHD21	1081325	679.00	680.00	-1	-50	-0.01	-10	6		13			80	
SHD21	1081326	680.00	681.00	-1	-50	-0.01	-10	5		13			71	
SHD21	1081327	681.00	682.00	-1	-50	-0.01	-10	9		13			76	
SHD21	1081328	682.00	683.00	-1	-50	-0.01	-10	10		18			98	
SHD21	1081329	683.00	684.00	-1	-50	-0.01	-10	10		33			83	
SHD21	1081330	684.00	685.00	-1	-50	-0.01	-10	16		48			74	
SHD21	1081331	685.00	686.00	-1	-50	-0.01	-10	12		69			69	
SHD21	1081332	686.00	687.00	-1	-50	-0.01	-10	8		69			71	
SHD21	1081333	687.00	688.00	-1	-50	-0.01	-10	8		147			81	
SHD21	1081334	688.00	689.00	-1	-50	-0.01	-10	12		137			233	
SHD21	1081335	689.00	690.00	-1	-50	-0.01	-10	33		172			849	
SHD21	1081336	690.00	691.00	-1	-50	-0.01	-10	10		112			152	
SHD21	1081337	691.00	692.00	-1	-50	-0.01	-10	7		82			150	
SHD21	1081338	692.00	693.00	-1	-50	-0.01	-10	6		58			122	
SHD21	1081339	693.00	694.00	-1	70	-0.01	-10	9		88			247	

SHD21	1081341	694.00	695.00	-1	-50	0.03	-10	17		205			214	
SHD21	1081342	695.00	696.00	-1	-50	-0.01	-10	10		265			164	
SHD21	1081343	696.00	697.00	-1	-50	-0.01	-10	16		149			125	
SHD21	1081344	697.00	698.00	-1	65	-0.01	-10	12		59			436	
SHD21	1081345	698.00	699.00	-1	215	0.02	-10	47		128			782	
SHD21	1081346	699.00	700.00	-1	60	-0.01	-10	27		115			463	
SHD21	1081347	700.00	701.00	1	70	-0.01	-10	14		203			241	
SHD21	1081348	701.00	702.00	-1	55	-0.01	-10	10		213			647	
SHD21	1081349	702.00	703.00	-1	-50	-0.01	-10	13		118			182	
SHD21	1081350	703.00	704.00	-1	-50	-0.01	-10	10		62			230	
SHD21	1081351	704.00	705.00	1	-50	-0.01	-10	13		257			399	
SHD21	1081352	705.00	706.00	-1	-50	-0.01	-10	14		280			435	
SHD21	1081353	706.00	707.00	1	-50	-0.01	-10	12		419			386	
SHD21	1081354	707.00	708.00	1	-50	-0.01	-10	15		224			255	
SHD21	1081355	708.00	709.00	-1	-50	-0.01	-10	20		378			262	
SHD21	1081356	709.00	710.00	-1	-50	-0.01	-10	19		336			239	
SHD21	1081357	710.00	711.00	-1	-50	-0.01	-10	22		206			391	
SHD21	1081358	711.00	712.00	-1	-50	-0.01	-10	24		333			332	
SHD21	1081359	712.00	713.00	-1	-50	-0.01	-10	85		201			1620	
SHD21	1081361	713.00	714.00	3	95	0.03	-10	488		242			2680	
SHD21	1081362	714.00	715.00	8	200	-0.01	-10	1555		415			459	
SHD21	1081363	715.00	716.00	11	100	0.03	-10	293		956			815	
SHD21	1081364	716.00	717.00	5	110	0.02	-10	389		1080			2640	
SHD21	1081365	717.00	718.00	1	-50	-0.01	-10	33		410			319	
SHD21	1081366	718.00	719.00	1	-50	-0.01	-10	27		419			1190	
SHD21	1081367	719.00	720.00	-1	-50	-0.01	-10	20		386			362	
SHD21	1081368	720.00	721.00	1	-50	-0.01	-10	15		436			308	
SHD21	1081369	721.00	722.00	-1	-50	-0.01	-10	12		397			183	
SHD21	1081370	722.00	723.00	1	-50	-0.01	-10	12		415			214	
SHD21	1081371	723.00	724.00	1	-50	-0.01	-10	13		348			241	
SHD21	1081372	724.00	725.00	-1	-50	-0.01	-10	21		691			464	
SHD21	1081373	725.00	726.00	-1	-50	-0.01	-10	22		423			492	
SHD21	1081374	726.00	727.00	1	-50	-0.01	-10	25		560			339	
SHD21	1081375	727.00	728.00	1	-50	0.05	-10	25		361			757	
SHD21	1081376	728.00	729.00	1	-50	0.02	-10	13		288			958	
SHD21	1081377	729.00	730.00	1	55	0.06	-10	29		349			133	

SHD21	1081378	730.00	731.00	1	-50	0.02	-10	55		171			61	
SHD21	1081379	731.00	732.00	1	90	0.03	-10	250		139			4830	
SHD21	1081381	732.00	733.00	1	-50	0.05	-10	34		387			3200	
SHD21	1081382	733.00	734.00	1	-50	-0.01	-10	36		592			2110	
SHD21	1081383	734.00	735.00	-1	-50	-0.01	-10	12		339			426	
SHD21	1081384	735.00	736.00	-1	-50	-0.01	-10	12		298			197	
SHD21	1081385	736.00	737.00	-1	-50	-0.01	-10	19		332			201	
SHD21	1081386	737.00	738.00	-1	-50	-0.01	-10	14		167			125	
SHD21	1081387	738.00	739.00	-1	-50	-0.01	-10	14		158			225	
SHD21	1081388	739.00	740.00	-1	-50	-0.01	-10	21		186			216	
SHD21	1081389	740.00	741.00	-1	-50	-0.01	-10	8		148			226	
SHD21	1081390	741.00	742.00	-1	-50	-0.01	-10	8		12			142	
SHD21	1081391	742.00	743.00	-1	-50	-0.01	-10	8		84			170	
SHD21	1081392	743.00	744.00	-1	-50	-0.01	-10	21		159			349	
SHD21	1081393	744.00	745.00	-1	-50	-0.01	-10	6		83			130	
SHD21	1081394	745.00	746.00	-1	-50	-0.01	-10	6		86			106	
SHD21	1081395	746.00	747.00	-1	-50	-0.01	-10	5		82			185	
SHD21	1081396	747.00	748.00	-1	-50	-0.01	-10	6		122			279	
SHD21	1081397	748.00	749.00	1	-50	-0.01	-10	9		210			189	
SHD21	1081398	749.00	750.00	-1	-50	-0.01	-10	8		333			223	
SHD21	1081399	750.00	751.00	1	-50	-0.01	-10	11		668			416	
SHD21	1081400	751.00	752.00	2	-50	0.1	-10	63		562			2920	
SHD21	1081401	752.00	753.00	-1	-50	-0.01	-10	31		473			2280	
SHD21	1081402	753.00	754.00	-1	-50	-0.01	-10	46		549			2820	
SHD21	1081403	754.00	755.00	-1	-50	-0.01	-10	20		247			1905	
SHD21	1081404	755.00	756.00	1	-50	-0.01	-10	48		220			3400	
SHD21	1081405	756.00	757.00	1	-50	-0.01	-10	24		303			1340	
SHD21	1081406	757.00	758.00	1	-50	-0.01	-10	40		2190			2620	
SHD21	1081407	762.00	763.00	1	-50	-0.01	-10	47		487			1225	
SHD21	1081408	763.00	764.00	1	-50	-0.01	-10	36		683			1365	
SHD21	1081409	764.00	765.00	1	-50	-0.01	-10	46		557			2990	
SHD21	1081410	765.00	766.00	7	-50	0.04	-10	102		1540			915	
SHD21	1081411	766.00	767.00	4	-50	-0.01	-10	120		2090			4480	
SHD21	1081412	767.00	768.00	1	-50	-0.01	-10	33		425			2750	
SHD21	1081413	768.00	769.00	1	-50	-0.01	-10	28		630			1785	
SHD21	1081414	769.00	770.00	13	235	0.18	-10	1000		2120			15000	

SHD21	1081415	770.00	771.00	4	-50	0.1	-10	71		716			391	
SHD21	1081416	771.00	772.00	3	-50	0.04	-10	109		719			2340	
SHD21	1081417	772.00	773.00	1	-50	-0.01	-10	43		218			4780	
SHD21	1081418	773.00	774.00	-1	-50	-0.01	-10	16		295			1225	
SHD21	1081419	783.00	784.00	1	-50	-0.01	-10	34		1570			4120	
SHD21	1081420	786.00	787.00	2	-50	0.03	-10	86		2600			6000	
SHD21	1081421	787.00	788.00	3	-50	0.05	-10	79		4430			6200	
SHD21	1081422	788.00	789.00	2	-50	0.05	-10	55		2070			6500	
SHD21	1081423	789.00	790.00	2	-50	0.03	-10	59		1590			8300	
SHD21	1081424	790.00	791.00	1	-50	0.01	-10	32		625			3090	
SHD21	1081425	791.00	792.00	2	-50	0.04	-10	151		1280			6300	
SHD21	1081426	792.00	793.00	2	-50	0.03	-10	39		1965			4370	
SHD21	1081427	793.00	794.00	2	-50	0.02	-10	58		1765			3720	
SHD21	1081428	794.00	795.00	2	-50	0.01	-10	45		4130			5200	
SHD21	1081429	795.00	796.00	5	-50	0.04	-10	55		8300			5800	
SHD21	1081430	801.00	802.00	1	-50	0.02	-10	131		1330			6400	
SHD21	1081431	802.00	803.00	1	-50	0.02	-10	104		550			6400	
SHD21	1081432	803.00	804.00	1	-50	0.06	-10	72		2570			10900	
SHD21	1081433	804.00	805.00	4	75	0.12	-10	156		5500			14300	
SHD21	1081434	811.00	812.00	3	55	0.09	-10	327		3520			13700	
SHD21	1081435	812.00	813.00	2	-50	0.06	-10	235		1145			7800	
SHD21	1081436	813.00	814.00	2	50	0.12	-10	84		1075			1200	
SHD21	1081437	814.00	815.00	1	55	0.07	-10	37		540			2800	
SHD21	1081438	815.00	816.00	2	-50	0.09	-10	126		1280			15500	
SHD21	1081439	816.00	817.00	-1	-50	0.07	-10	70		288			6100	
SHD21	1081441	821.00	822.00	-1	-50	-0.01	-10	58		872			6300	
SHD21	1081442	822.00	823.00	1	-50	0.03	-10	430		1750			8000	
SHD21	1081443	823.00	824.00	1	-50	0.08	-10	420		624			2620	
SHD21	1081444	824.00	825.00	3	-50	0.08	-10	889		640			5400	
SHD21	1081445	825.00	826.00	4	-50	0.14	-10	1195		295			145	
SHD21	1081446	826.00	827.00	-1	-50	-0.01	-10	124		126			624	
SHD21	1081447	833.00	834.00	1	-50	-0.01	-10	143		2880			5700	
SHD21	1081448	834.00	835.00	3	-50	0.05	-10	166		4860			6700	
SHD21	1081449	835.00	836.00	-1	-50	0.03	-10	153		1625			4150	
SHD21	1081450	840.00	841.00	-1	-50	0.04	-10	63		877			3400	
SHD21	1081451	841.00	842.00	-1	-50	0.2	-10	1170		86			49	

SHD21	1081452	842.00	843.00	1	-50	0.29	-10	1240		33			35	
SHD21	1081453	843.00	844.00	-1	-50	0.1	-10	639		45			146	
SHD21	1081454	849.00	850.00	-1	-50	-0.01	-10	151		28			127	
SHD21	1081455	850.00	851.00	-1	-50	0.03	-10	214		22			99	
SHD21	1081456	851.00	852.00	4	-50	0.21	11	5000		26			49	
SHD21	1081457	852.00	853.00	1	-50	0.56	-10	84		20			17	
SHD21	1081458	853.00	854.00	1	-50	0.38	-10	50		18			78	
SHD21	1081459	854.00	855.00	1	-50	0.21	-10	167		34			89	
SHD21	1081461	855.00	856.00	2	-50	0.2	-10	51		116			77	
SHD21	1081462	856.00	857.00	3	-50	0.25	-10	174		543			246	
SHD21	1081463	857.00	858.00	1	-50	0.25	-10	126		47			16	
SHD21	1081464	858.00	859.00	1	-50	0.23	-10	106		66			13	
SHD21	1081465	859.00	860.00	1	-50	0.25	-10	135		79			16	
SHD21	1081466	860.00	861.00	1	-50	0.11	-10	55		57			18	
SHD21	1081467	861.00	862.00	2	-50	0.37	-10	100		136			15	
SHD21	1081468	862.00	863.00	2	-50	0.38	-10	98		205			80	
SHD21	1081469	863.00	864.00	3	-50	0.19	-10	192		401			208	
SHD21	1081470	864.00	865.00	4	-50	0.16	-10	485		1055			6100	
SHD21	1081471	865.00	866.00	1	-50	0.12	-10	2780		693			1790	
SHD21	1081472	866.00	867.00	1	-50	0.03	-10	93		149			166	
SHD21	1081473	867.00	868.00	6	-50	-0.01	10	81		1510			132	
SHD21	1081474	868.00	869.00	-1	-50	-0.01	-10	55		60			50	
SHD21	1081475	869.00	870.00	-1	-50	-0.01	-10	10		8			17	
SHD21	1081476	870.00	871.00	-1	-50	-0.01	-10	6		15			72	
SHD21	1081477	871.00	872.00	-1	-50	-0.01	-10	6		153			170	
SHD21	1081478	872.00	873.00	-1	-50	-0.01	-10	8		19			14	
SHD21	1081479	873.00	874.00	-1	-50	0.05	-10	48		103			83	
SHD21	1081481	874.00	875.00	-1	-50	0.03	-10	42		37			38	
SHD21	1081482	875.00	876.00	1	-50	0.03	-10	42		39			17	
SHD21	1081483	876.00	877.00	1	-50	-0.01	-10	46		24			9	
SHD21	1081484	877.00	878.00	2	-50	-0.01	-10	54		96			13	
SHD21	1081485	878.00	879.00	2	-50	-0.01	-10	367		633			4160	
SHD21	1081486	879.00	880.00	1	-50	-0.01	-10	64		1385			4680	
SHD21	1081487	880.00	881.00	-1	-50	-0.01	-10	27		1625			3330	
SHD21	1081488	881.00	882.00	-1	-50	-0.01	-10	33		413			1685	
SHD21	1081489	882.00	883.00	-1	-50	-0.01	-10	50		260			902	

SHD21	1081490	883.00	884.00	2	-50	0.27	-10	182		367			181	
SHD21	1081491	884.00	885.00	1	-50	0.04	-10	55		56			14	
SHD21	1081492	885.00	886.00	1	-50	-0.01	-10	45		77			21	
SHD21	1081493	886.00	887.00	2	-50	0.03	-10	91		217			31	
SHD21	1081494	887.00	888.00	2	-50	0.02	-10	516		244			1895	
SHD21	1081495	888.00	889.00	2	-50	-0.01	-10	307		895			2880	
SHD21	1081496	889.00	890.00	2	-50	-0.01	-10	87		1025			2600	
SHD21	1081497	890.00	891.00	1	-50	-0.01	-10	74		1435			1600	
SHD21	1081498	891.00	892.00	1	-50	-0.01	-10	34		1315			2330	
SHD21	1081499	892.00	893.00	1	-50	-0.01	-10	64		817			2170	
SHD21	1081501	893.00	894.00	3	-50	0.03	-10	483		467			1395	
SHD21	1081502	894.00	895.00	2	-50	-0.01	-10	129		850			2040	
SHD21	1081503	895.00	896.00	4	-50	0.19	-10	136		1045			732	
SHD21	1081504	896.00	897.00	2	-50	0.06	-10	69		287			123	
SHD21	1081505	897.00	898.00	1	-50	0.05	-10	47		255			86	
SHD21	1081506	898.00	899.00	4	-50	0.14	-10	110		2640			1395	
SHD21	1081507	899.00	900.00	1	-50	-0.01	-10	22		218			663	
SHD21	1081508	900.00	901.00	-1	-50	-0.01	-10	24		262			1015	
SHD21	1081509	901.00	902.00	1	-50	-0.01	-10	172		172			627	
SHD21	1081510	902.00	903.00	-1	-50	-0.01	-10	28		399			993	
SHD21	1081511	903.00	904.00	1	-50	-0.01	-10	30		551			1015	
SHD21	1081512	904.00	905.00	1	-50	-0.01	-10	26		1565			1785	
SHD21	1081513	905.00	906.00	1	-50	-0.01	-10	16		692			702	
SHD21	1081514	906.00	907.00	1	-50	-0.01	-10	9		572			791	
SHD21	1081515	907.00	908.00	1	-50	-0.01	-10	7		435			350	
SHD21	1081516	908.00	909.00	1	-50	-0.01	-10	6		481			284	
SHD21	1081517	909.00	910.00	-1	-50	-0.01	-10	7		398			734	
SHD21	1081518	910.00	911.00	-1	-50	-0.01	-10	12		466			431	
SHD21	1081519	911.00	912.00	-1	-50	-0.01	-10	12		646			923	
SHD21	1081521	912.00	913.00	-1	-50	-0.01	-10	21		636			1205	
SHD21	1081522	913.00	914.00	1	-50	-0.01	-10	14		867			1020	
SHD21	1081523	914.00	915.00	1	-50	-0.01	-10	19		988			1060	
SHD21	1081524	915.00	916.00	1	-50	-0.01	-10	190		1025			1470	
SHD21	1081525	916.00	917.00	-1	-50	-0.01	-10	17		648			1370	
SHD21	1081526	917.00	918.00	-1	-50	-0.01	-10	109		487			1100	
SHD21	1081527	918.00	919.00	1	60	0.04	-10	262		893			916	

SHD21	1081528	919.00	920.00	-1	-50	-0.01	-10	7		13			9	
SHD21	1081529	920.00	921.00	2	-50	0.04	-10	39		69			71	
SHD21	1081530	921.00	922.00	4	-50	0.04	11	781		251			870	
SHD21	1081531	922.00	923.00	1	-50	-0.01	-10	48		347			9100	
SHD21	1081532	923.00	924.00	1	-50	-0.01	-10	55		152			7600	
SHD21	1081533	924.00	925.00	5	-50	0.12	-10	927		34			1245	
SHD21	1081534	925.00	926.00	1	-50	0.02	-10	52		304			554	
SHD21	1081535	926.00	927.00	-1	-50	-0.01	-10	9		385			188	
SHD21	1081536	927.00	928.00	1	-50	-0.01	-10	73		114			3410	

675114

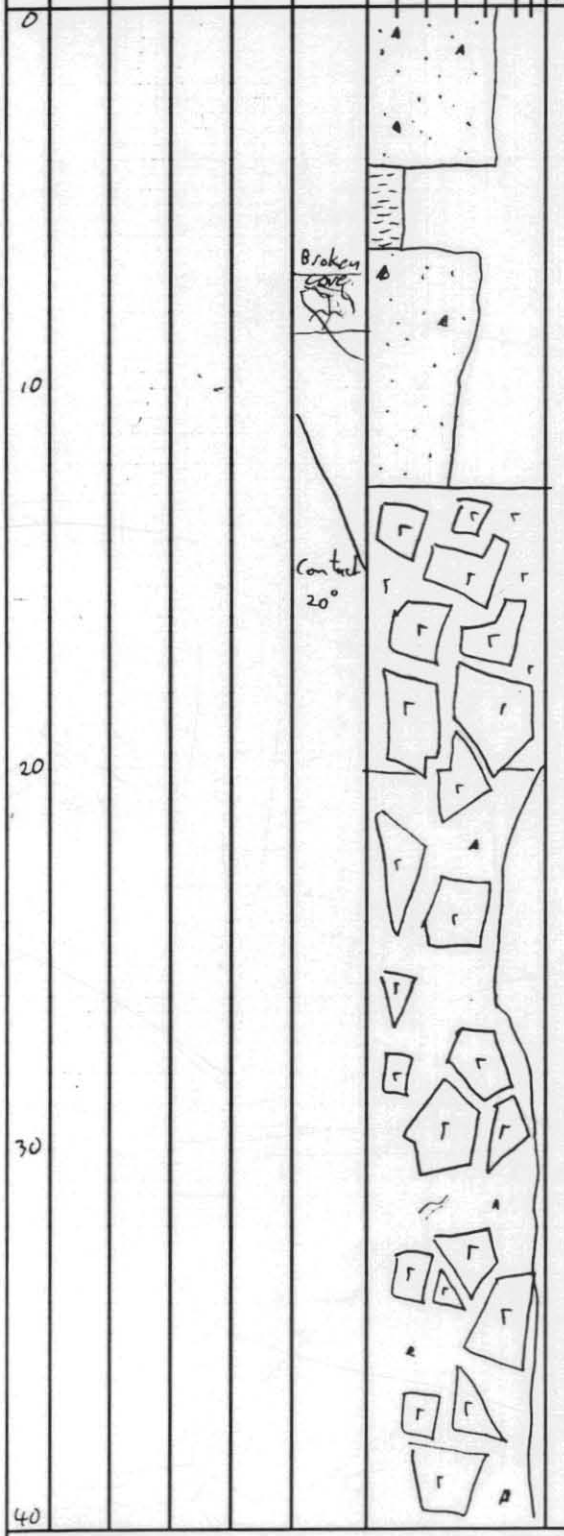
RGC EXPLORATION PTY LTD

DRILL HOLE No ~~SH021~~

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌐ Cleavage
— Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



GEOLOGY NOTES

0
green, feld xtal - lithic vc sst. Minor qtz xtals, lithic fragments + feld + lab. Lynchford Member. ∈+l VR×m

4.2m
pale grey vitric siltstone. Devitrification spots ∈ts VAVA

6.3
Feld xtal - lithic vc breccia grading into fine vc sst. pervasive chlorite alteration. Minor jasper clasts. ∈+l VR×m

12.5
Feld - phyric dacite autobreccia Feld phenocrysts to 3mm ~10% Cal LO LO

20
Fluidised dacite breccia/pepperite. Flow banded, lithic clasts & abundant dacite lava autobrecciated clasts. Pervasive, weak chlorite - silica alteration. Cal LO LO

SUMMARY
ROCK
ALTERATION

REMARKS

5 cm

675115

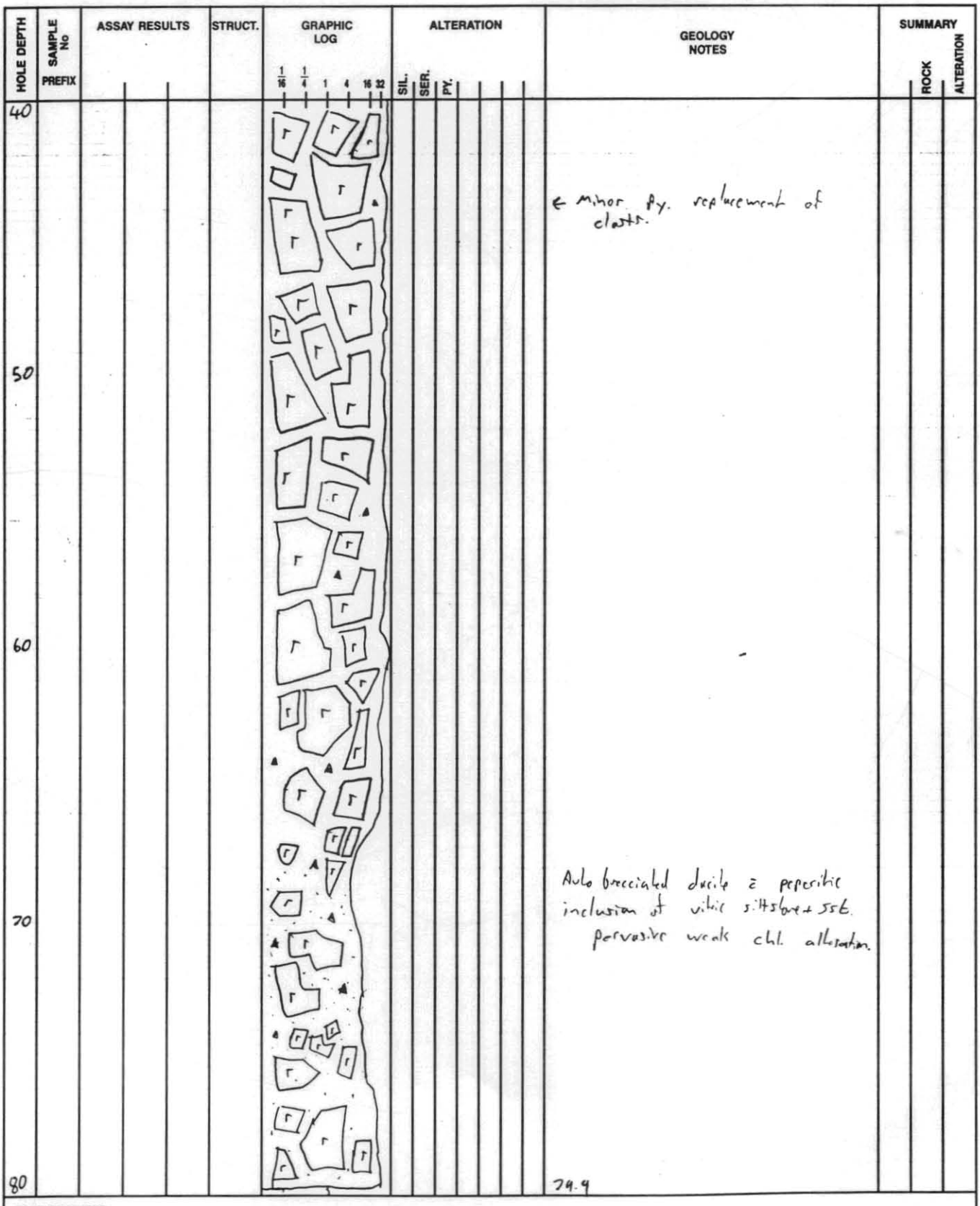
RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Hearty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm

675116

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION	
60								dacitic hyaloclastic VC shard rich + feld xtals. Pervasive chl alt. Cav Alt alk. feld. 82.6	VD	LB	04
								Orange, albitised, feld ?? qtz phyric breccia. Mt Julia Rhyolite ??			
								Pervasive, domainal Alb-chl. alteration.			
90								CEI	LR	LB	Ac
100		Broken Core									
								103.8 Fine grained vitric VC sslt/sst. chl. altered. CHI	VOL	M	0
								105.7 Broken, faulted contact			
								Dacitic VC/hyaloclastite. Monomict. Alb. altered feld xtals. chl alt matrix. Moderately foliated. Cav	VO	LM	0
110								111 Dacitic VC hyaloclastite & dacitic AutoBreccia intrusion. Silicified. Minor flow banding.			
								Cc1	LO	LB	
								117.6 Qtz-Py-calcite vein. vuggy wlds. 118.2	VE	IN	
120											

REMARKS

5 cm

675117

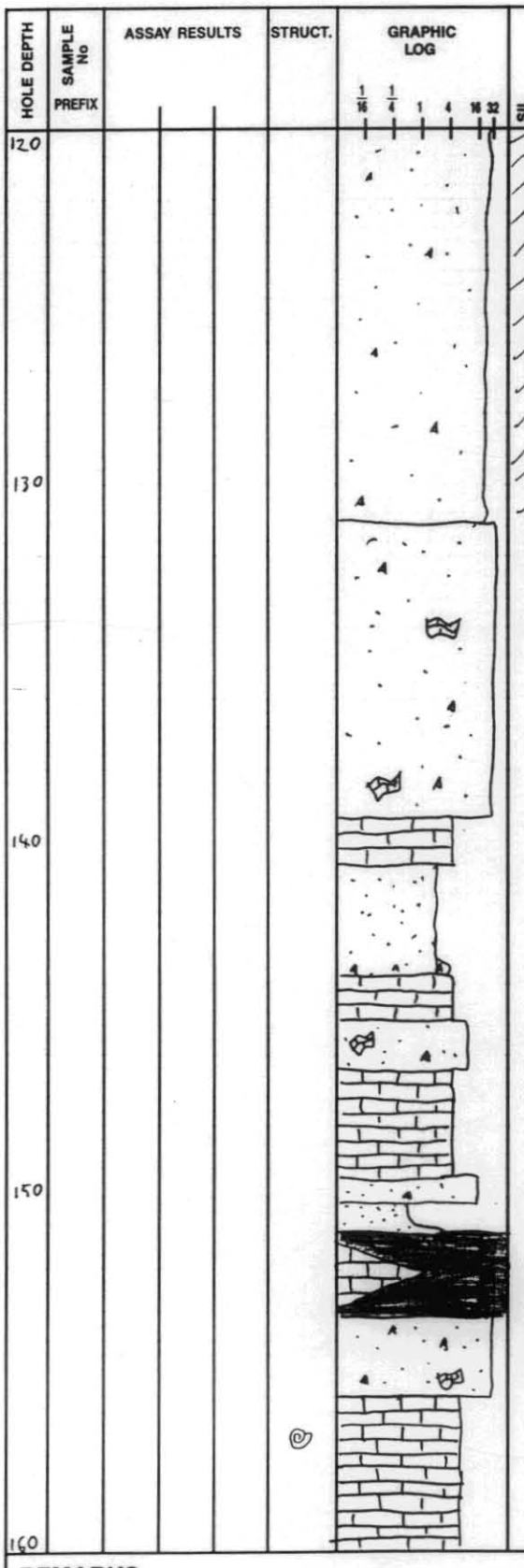
RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



GEOLOGY NOTES

Dacitic, fold - lithic vc breccia. Monomict, reworked dacitic hyaloclastite. Foliated. Weak silica - chl - alb alt. Ccv

131
Dominantly fold xtl sst ± clasts of qtz-phyric rhyolite and carbonate. Poly-mict, matrix supported breccia. Weak Alb-chl alt. Ethl

139.4 Massive, white-purple stylolitic carbonate, minor jasper fragments. Ecarb
140.7 Massive, well sorted, fold xtal rich vc sst, chl alt. Minor lithics and mafic xtls. Ethl

143.8 Massive, white carbonate. Ecarb

144 Poly-mict, vc breccia. clasts of rhyolite + carb. Ethl
146.3 Massive, stylolitic carb breccia. Purple to white. Minor jasper/haematite clasts. Ecarb

149.3 dacitic vc breccia. minor CO_3 clasts. Ccv
150.1 graded, dacitic vc sst
151 Massive, red, jasper/haematite veins ± minor carbonate matrix. Granular

153.4 Massive, dacitic, lithic breccia. clast to matrix supported. weak Alb. alt. Ccv
155.5 Massive white to purple carbonate. stylolitic ± abundant jasper fragments. Haem alt. echinoderm spicules?. Ecarb

ROCK	ALTERATION	
VOLB		G
VALB		O
CARB		C
VAXM		O
CARB		C
VALB		O
CARB		C
VOLM		A
VEIN		H
VOLB		A
CARB		C

SUMMARY

REMARKS

5 cm

675118

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan.

— Bedding
⌐ Cleavage
▲ Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION
160										
170								171.3 massive, brown alt. Basalt? seafloor weathering 172.6 Intense brown alt. Red. Basaltic lithic breccia 2 cog intraclasts. Pervasive chl alteration	Eb LB A Eb VBL B	H O4
180								185.8 massive, late qtz-carb vein. 187 Massive, amygdaloidal basalt. Calcite filled amygdales. pervasive chl alt.	VEIN Eb LB	O
190								192.3 foliated, polymict vc breccia. Basalt, rock, jasper clasts. 196.6 Monomict, hyaloclastic vc sst 198 massive, fold phyric ductile dyke Alt-chl alt 198.1 Purple, brown alt, seafloor weathered? basalt breccia.	Eb VBL B Ccv VOL M Cal ID F Eb VB LB	25 H
200										

REMARKS

5 cm

675119

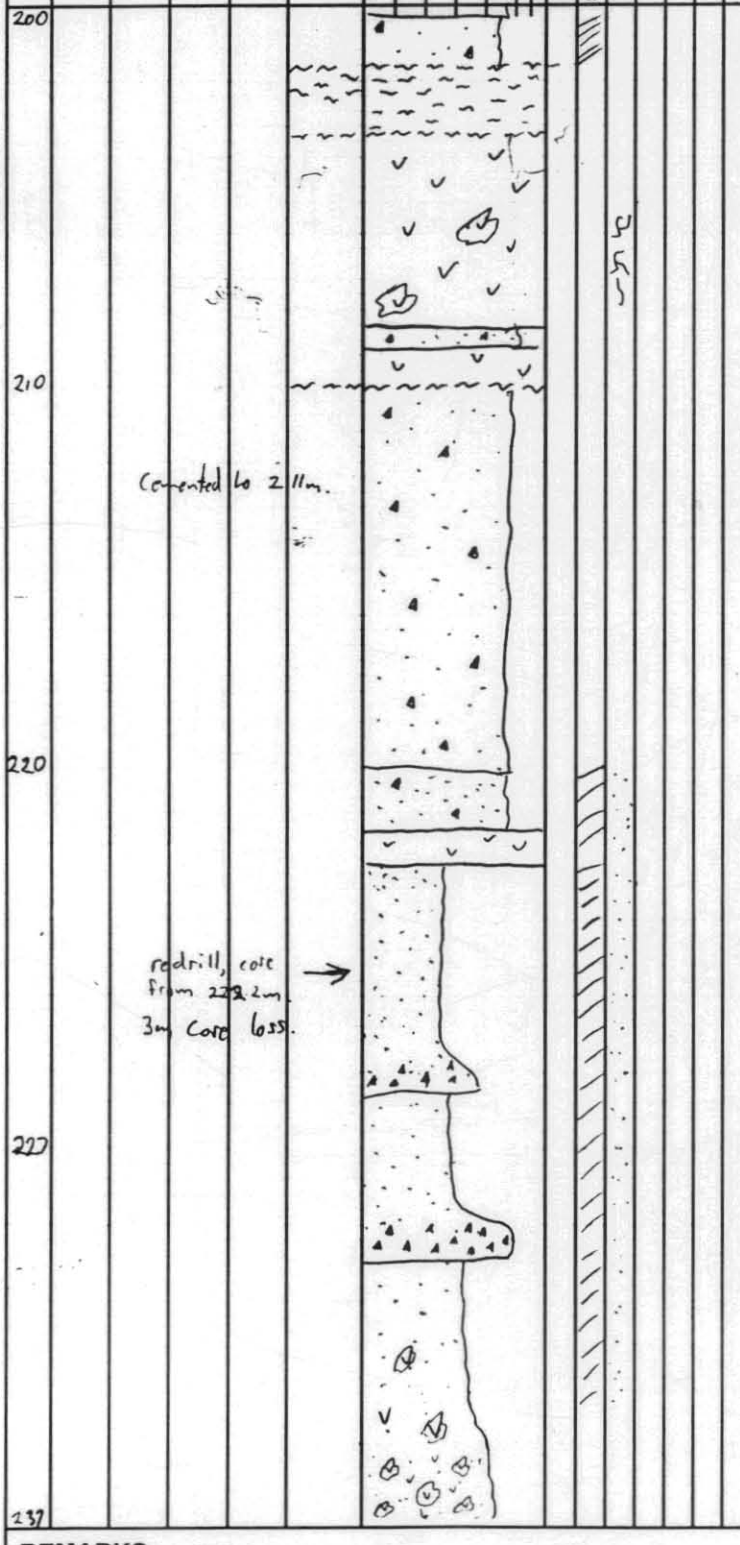
RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
└ Cleavage
— Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



GEOLOGY NOTES

208.2 Dacitic VC sst/brax. Hyaloclastite. Ccv
201.6 Fault, foliated + puggy.
203.5 Massive to brecciated basalt. chl alt. pyroxene? phenocrysts. Pervasive chl alk. 1-2% massive pyrite veins Eb
208.3 Dacitic VC/hyaloclastite Ccv
209 Massive basalt lava. Eb
210 Massive, monomict dacitic VC. Redeposited hyaloclastite Pervasive chl. alk. Pervasively foliated.
Ccv
220 weak ser-py alt dacitic VC sst. Ccv
221.8 Basalt Breccia? fine grained ser-py alt. Eb
222.7 graded, fine grained dacitic VC sst. Ash rich. pervasive ser alk. Minor dissem py. Ccv
Polymict, clast supported base
225.3 graded, fine grained dacitic sst. Ash rich Lap. Ccv
Polymict base.
229.6
Ccv
clast supported basalt breccia. chl alk. Eb

SUMMARY

HOLE DEPTH	ROCK	ALTERATION
200	UOFM	
	FAULT	
	LBP	
208.3	VOLM	
209	LBA	
210	VOLM	
220	VOLM	
221.8	LBP	
222.7	VOAM	
225.3	VOAM	
229.6	VOLM	
	VBCR	

REMARKS

5 cm

675120

RGC EXPLORATION PTY LTD

DRILL HOLE No SN021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
237						Massive, basaltic lava, chl alt. Py vein. basaltic(?) lithic breccia. chl-ser alt. py veins + disseminated.		
							EG	VBLB
						241.8 graded, clast supported basaltic lithic breccia. weak py alt. pervasive chl-ser. Foliated, flattened clasts.	EG	VBLB
247						247.7 graded, basaltic lithic breccia. py-ser alt in coarser lithic base. chl altered lst.	EG	VBLB
						Minor barite veins + fine, pale brown CO_3 veinlets. weak patchy disseminated py.		
257								
						263.2 graded, basaltic VC sst. Foliated, pervasive ser-chl alt. Minor barite veins		
267							EG	VBLB
						270 clast supported, basaltic lithic VC breccia chl altered. Foliated.		
							EG	VBLB
277								

REMARKS

5 cm

675121

RGC EXPLORATION PTY LTD

DRILL HOLE No ~~MSD7~~ SH021

SHEET _____ OF _____

PROJECT	: 5th Monty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS T:/Zr	STRUCT.	GRAPHIC LOG 1/16 1/4 1 4 16 32	ALTERATION SIL. SER. PY. chl CO	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
277						278.6 Ser alt. basaltic lithic vc breccia. Perlie clasts from deformed veins. €6	VBLB	SE
						280.4 Ba-chl-CO3-ser alt basaltic lithic vc breccia. strongly foliated. €6	VBLB	SE
287						← strong ser-py altered vc lithic breccia. Basaltic.		
						289.4 Basaltic-lithic vc breccia. Polymict? chl alt. €6	VBLP	05
						291 Basaltic(?) lithic vc breccia. strong ser-py alt. Intensely foliated. €6	VBLB	SE
						294.6 Basaltic? vitric tuff. Strong pyrite sericite alteration €6	VBLA	SE
297						296 Basaltic lithic vc breccia. Strong py-ser alt. Flattened clasts. €6	VBLB	SE
		38-8				305.2 Basaltic lithic breccia. Some polymict clasts at dac.b vc ss6. Pervasive chl alt. Patchy blebby to pervasive carbonate alt. Possibly clasts of dacite + dacitic vc ss6. Dominantly basaltic lithic fragments. €6	VBLB	05
307						314.1 Intensely ser-py altered Qtz porphyry breccia. €P		
311								

REMARKS

5 cm

675122

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD21

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
— Foliation
~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS T/2m	STRUCT.	GRAPHIC LOG 1/16 1/4 1 4 16 32	ALTERATION SIL. SER. PY. Chl CO3 Alb	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
317		33.9				fragmental or pseudo fragmental? Intense foliation. Texture destructive. ~10% py alt. Relict Qtz phenos.	IR LB	SA
						319.8 Massive Py - minor CO_3 320.2 Fine dacitic VC 326. 328-328.1 massive py	Ep sulphide Cav	VEIN Zeo VOLM	PIC OS
						328.5 Massive Py, alt. Fine grained. Replacing dacitic 326?? 328.3	sulphide	MP	PIC
						dacitic VC 326/lithic breccia. Pale grey. Mod-strong ser. alt.	Cav	VOLM	SI
						327.8 silica-ser-chl altered dacitic, lithic VC 326. Pervasive alteration. Strongly foliated	Cav	VOLM	C
327		10.8							
						333.4 Pervasive, moderate sericite - CO_3 (ferroan) altered massive dacites. Monomict dacitic hyaloclastites.			
337							Cav	VOLM	SI
						← large, ser alt pumice rafts??			
						348.7 Pink, albitic altered dacitic laval massive hyaloclastite.	Cav	VOLM	AE
						342.7 ser-CO_3 altered dacitic hyaloclastite. Massive, foliated. Pinkish green. Minor silica-py veins < 0.5%	Cav	VOLM	CE
347						348.6 Dacitic VC 326/328. Strong Py veins ~10% 349.1	Cav	VOLM	PY
						Massive dacitic VC 326. Ser-CO_3 alt.		VOLM	SE
						349.2 Polymict dacitic breccia. Dacitic clasts and dacitic 326 intercalcs.	Cav	VOLC	SER
						358.2 Massive, hyaloclastic dacitic VC/lava. Strong pervasive CO_3 alt + veining & patchy silica-py microveins and CO_3-py mosaic breccia	Cav	VOLB	C
357									
360									

REMARKS

5 cm

675123

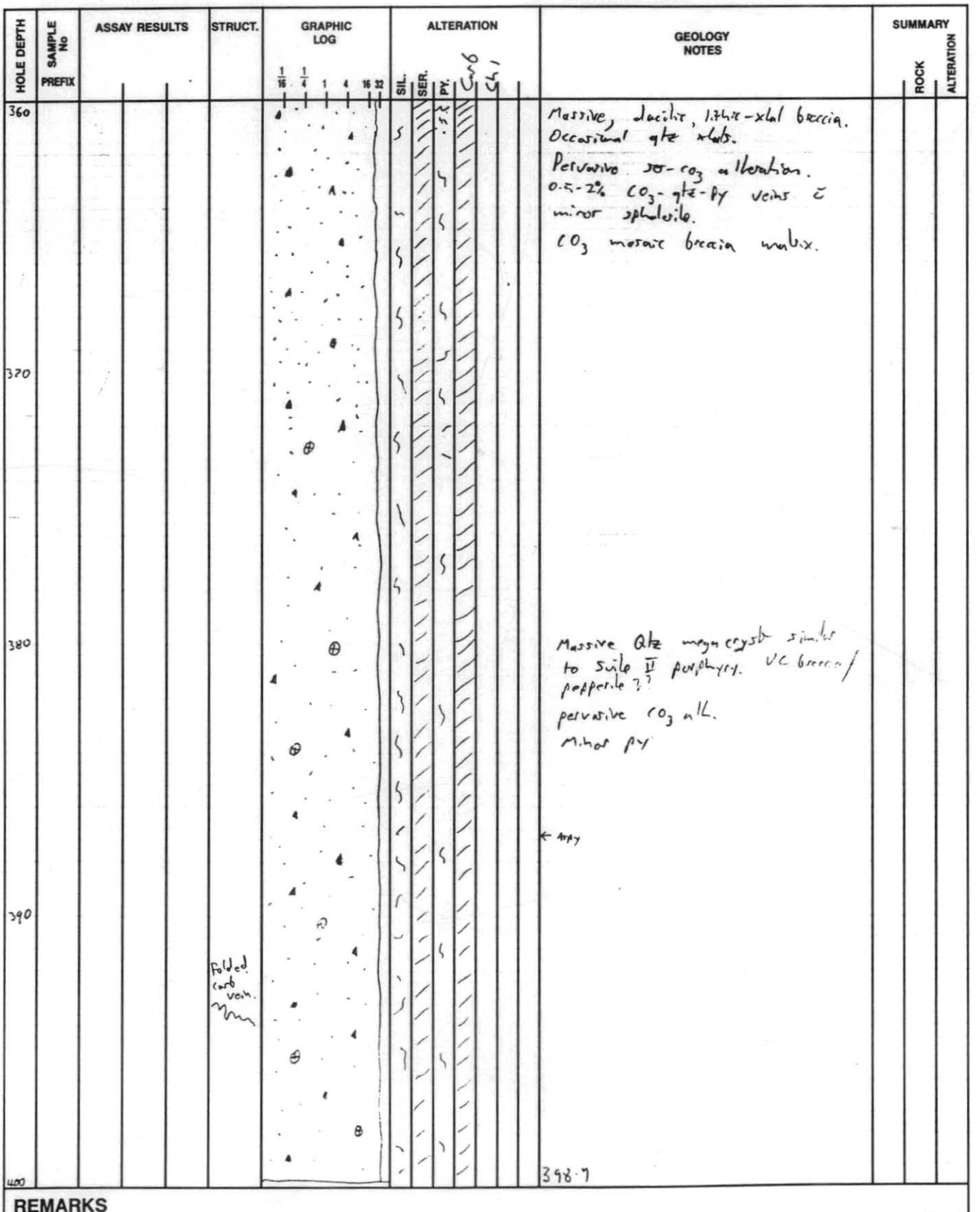
RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Hourly
PROSPECT	:
DATE	:
LOGGED BY	: T Callaghan

— Bedding
⌊ Cleavage
— Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



675124

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Hanky
PROSPECT	: Lake Newton.
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	CO_3	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION	
400									Massive, dacitic? lithic VC breccia. polymict clasts of pumice, VC sst, vitric siltstone and suite II porphyry? breccia. Pervasive CO_3 alt. Mod ser alt. Minor py to 1%. Ccv	VOLP		C8.
									407.6 Massive, dacitic lithic breccia pumice & dacitic sst clasts pervasive strong ser-CO_3 alt. Ccv	VOLP		C8
410									411.6 CO_3 altered qtz-feld: porphyry suite II porphyry. Carb filled Amygdales. Minor py alt. Ep	IR>C		C9
									419.4 Massive, dacitic lithic breccia, Intrusions = peperitic suite II porph-yry. pervasive CO_3 alt. Mod pervasive ser alt.			
420									← 1.5PY Ccv	VOLB		C9
									425.1 Rhyolitic, xtal-vitric siltstone breccia. fine qtz xtals & abundant vitric rich matrix. brecciated and altered & devitrified margins to clasts. pervasive ser-CO_3 alt. Minor dissem py. Bleached. Ccv	VRVA		C9
430									429.6 As above but grey 2-5% disem py-sst Ccv	VRVA		57
		Crackle Breccia.							432.1 qtz phyric suite II porphyry. feld totally destroyed Pervasive CO_3 alteration. Intense crackle breccia of silica-py overprint & several large cpy-sphal-gal veins/stockworks. All veins deformed. GP ← Base metal vein.	IR>C		C9
440												

REMARKS

5 cm

675125

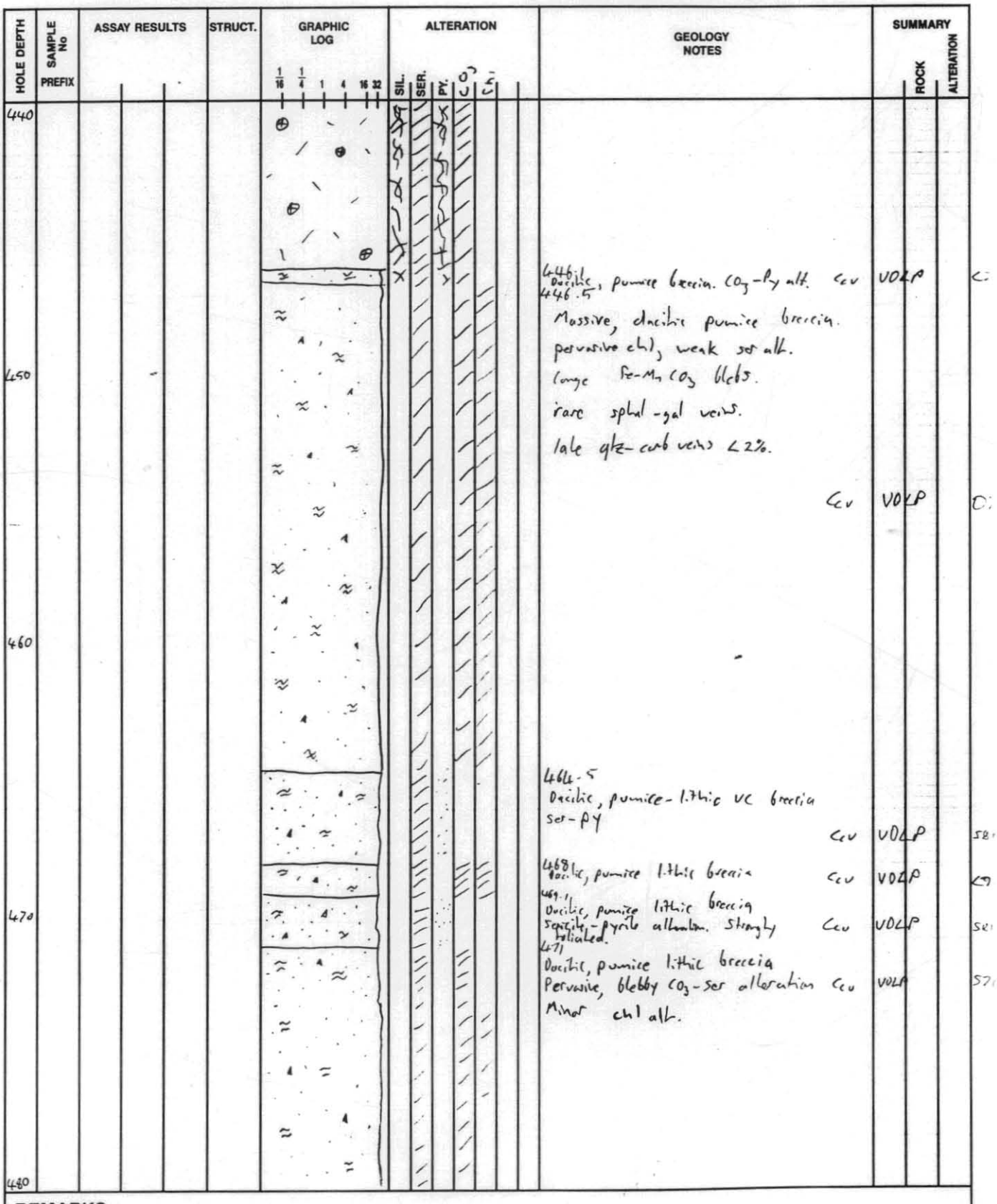
RGC EXPLORATION PTY LTD

DRILL HOLE No 5H021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan.

— Bedding
⌊ Cleavage
— Foliation
~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm

675126

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	:
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CO_3 CHL)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
480								
490								
500						501.1 Massive qtz phyric porphyry? Intense CO_3 alt. Abundant late colliform CO_3-Py veins & selvedge of sericite. Clastic intrusive??	Ep	I RQC C
						506.1 Massive, qtz phyric porphyry ser alt. CO_3 filled amygdales? + Veins. 507.9 Py veins.	Ep	IR QC 58
510						Qtz phyric porphyry. Large qtz megacrysts. Pervasive ser-Py alt Foliated. Late, euhedral Py veins.	Ep	IR QC 5
						511.5 Massive, pumiceous lithic breccia. Pervasive silica-ser alt Py veins & dissem. Minor CO_3 spotting. 517.5 Fine grained, clastic pumiceous breccia/ vitric rich ash/silt. Pervasive ser-silica alt, CO_3 spots. Py veins + dissem	Cev	VD LP Q
520							Ces	VD VA

REMARKS

5 cm

675127

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	:
PROSPECT	:
DATE	:
LOGGED BY	: T. Cullingford

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	CO_3	chl	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION	
520										520.0 Dac. tic, pumice breccia. Felsl xtals CO_3 alt. + blebs. Pervasive ser-chl alt. Ccv	VOLP		C
										523.6 VC dacitic, pumice breccia. Intense silica-ser-py alt. Folded, euhedral veins of py. Ccv	VOLP		Q
										527 Massive, dacitic pumice brxx. CO_3 spots + Felsl replacement. Ccv	VOLP		Ci
530										530 Vitric rich VC siltstone. Pervasive CO_3-ser alt. late py veins + blebs. Ccs	VOVA		CTS
										531.5 Massive, dacitic VC pumice brxx. CO_3 spots + blebs, pervasive ser alt. Ccv	VOLP		C
										536 Dacitic VC brxx. strong ser-CO_3 alt. Ccv 536.5 Massive, dacitic, pumiceous Brxx strong CO_3 spotting. Pervasive ser alt. Rare py replaced clasts + fine disems.	VOLP		CS
540										Ccv	VOLP		CF
										544 Fine, vitric rich VC sslt and fine pumiceous sst. Pervasive CO_3 alt. Late py - silica veins. Minor sphal. Ccs	VOVA		CES
										547.2 Massive, dacitic, pumiceous breccia. CO_3 spotting + replacement. Pervasive ser alt. Ccv	VOLP		CBS
550										554 Massive, dacitic pumice Brxx. Pervasive ser-silica-CO_3 alt. V. minor py Ccv	VOLP		CS
560													

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675128

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT :	5th Henty
PROSPECT :	
DATE :	
LOGGED BY :	T. Cullaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CO_3 Chl)	GEOLOGY NOTES		SUMMARY ROCK	SUMMARY ALTERATION
560						560.8 Fine grained, pumiceous sst / intra sst. Py veins + blebs. Pervasive CO_3 alt. Barite ?? xtals. large pumice fragments ser alt. ← strong Py altered Pumice	Ecv	VOLM	cei
						569.8 Ductile pumice lithic VC Brec. Black shale impregnated base	Ccv	VOLM	Si
						569.2 Black shale. CO_3 blebs	Ecs	SILT	C
570						570.6 Ductile, pumiceous sst. numerous shale intraclasts. graded? Mod. CO_3 alt.	Ccv	VOLM	Si
						575.5 Black laminated shale. Disrupted bedding Py-sphaleritic veins + bedding replacement. large CO_3 veins + xtals.			
580			Highly veined				Ccs	SILT	F
						586.4 Ductile VC sst Intense silica-py alt.			
590						590.8 Massive, pumiceous-feld xtal VC Breccia. Poly mict Bx ε mfp clasts of Black shale. Pervasive ser. alt. CO_3 blebs 5-10% Disem. Py at Bx.	Ccv	VOLP	Si
						596.5-597.1 Black shale + v.fine sslt + pumice clasts.	Ccs	SILT	Ci
600						Massive ductile pumice VC Breccia Intense ser-silica-CO_3 alt ε Disem. Py. CO_3 blebs +	Ccv	VOLP	S

REMARKS

5 cm

RGC EXPLORATION PTY LTD

675129

DRILL HOLE No 5H021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CO_3 chl)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
600						feldspar replacements. occasional polymict clasts, disseminated py alt.		
610								
620						619 Massive ductile pumiceous VC Breccia. Intense ser-silica-py alt. Ccv	VOLP	Q7r
						622.5 Massive, ductile pumiceous VC Breccia. Pervasive silica-ser-alt. CO_3 blebs + feld xtal replacements. Minor disseminated Py Ccv	VOLP	57C
630						628.7 massive ductile pumice Brxx. Intense silica-ser-py alt. Ccv	VOLP	Q[illegible]
						631.1 massive ductile pumiceous VC Brxx. large CO_3 clasts. Pervasive ser alt. Ccv	VOLP	5[illegible]
640						635.2 Massive, ductile - pumiceous [illegible] VC Brxx. Polymict clasts frequently Py. replaced. Large CO_3 clasts. Pervasive ser-chl alt. Minor disseminated py. Ccv	VOLP	C[illegible]

REMARKS

5 cm

675130

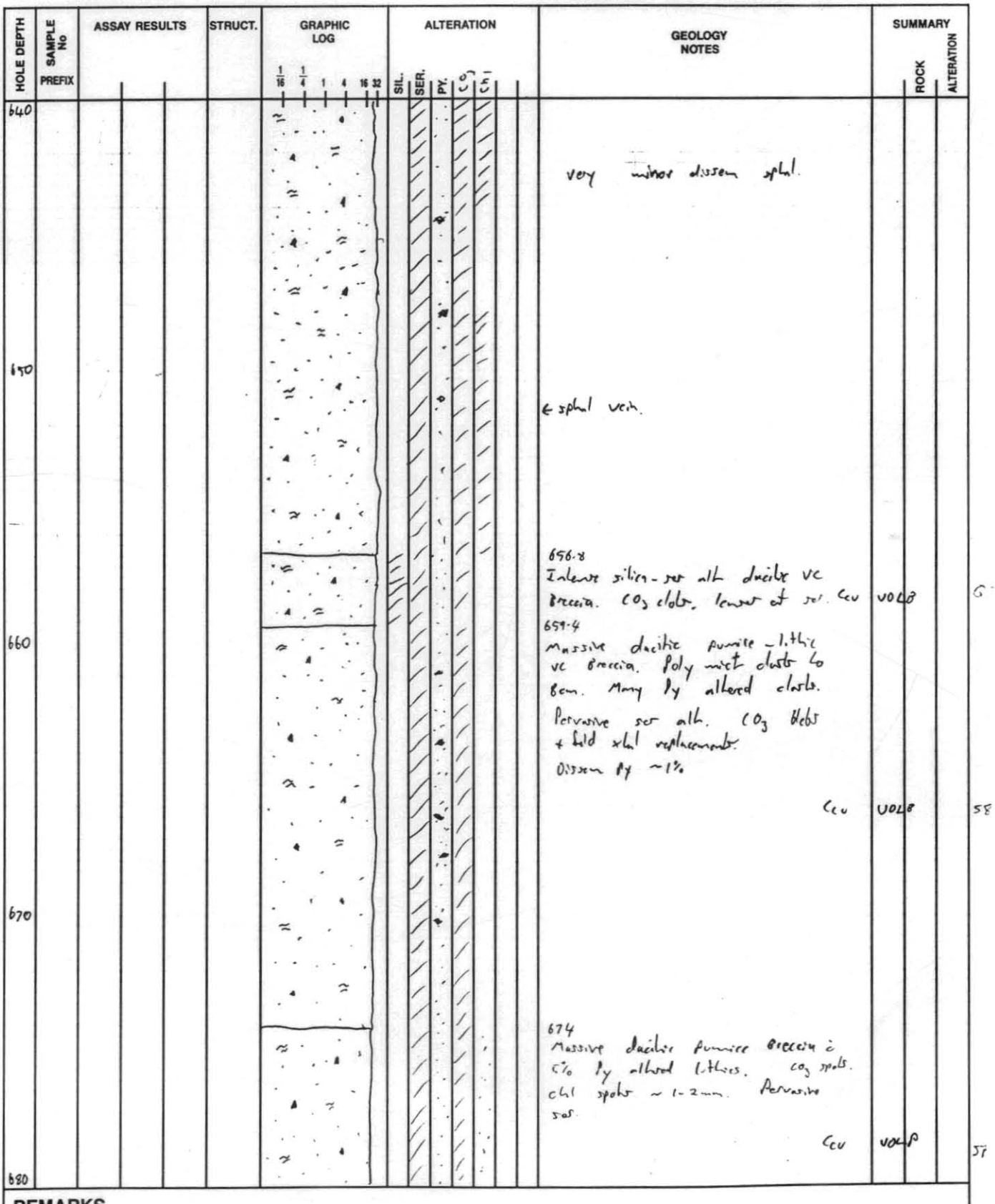
RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan.

— Bedding
⌊ Cleavage
▲ Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm
~~~

675131

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: Sth Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
▲ Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CO_3 CHL)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
680						684.2 Polymict, dacitic pumice-lithic vc Brxx. Pervasive ser alt. CO_3 clots. Py dissem + lithic clast replacement.	Ccv	VOL P
690						691 Intensely bleached, silica-ser alt. polymict dacitic vc Brxx.	Ccv	VOL P
						693.7 ser-py-silica altered vc Brxx. Gradational decrease in CO_3 alt	Ccv	VOL P
700						697 Polymict, dacitic pumice-lithic vc Brxx. Intense silica-ser alt. 2-3% dissem py. Py replaced lithics. Pale grey colour. Rare weak CO_3 spots. Bleached + foliated.	Ccv	VOL P
710								
720								

REMARKS

5 cm
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675132

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	5th Henty
PROSPECT	
DATE	
LOGGED BY	T. Callaghan

— Bedding
⌊ Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CO3, CHL)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
720						724 Dacitic, pumice-lithic VC brxx Pervasive silica-ser alk. CO_3 blebs + spots. disseminated py. large dacitic lithics replaced by py Ccv	VLCP	59
						727.1 Dacitic pumice-lithic breccia. Intensely ser-silica alk. Strong foliation. Py replaced lithics + disseminations. Ccv	VOLP	5
730			vein			730 massive, late veiny qtz-CO_3 vein.	VEIN	
			Fault			730.8 Medium grained? dacitic [illegible] Intense ser-py alk. Intense foliation 733 Ccv	VOLP	5
						massive, dacitic pumice-lithic breccia. Intensely ser-CO_3 alk ~ discrete py aggregates ~ 1-2mm diam. Bleached, cream coloured. Ccv	VOLP	5
740						742-9 Dacitic pumice-fold xtal sst/brxx. CO_3 replaced fold. Pervasive, mod ser-chl alk. Occasional py replaced clasts. Ccv	VOLM	C
750						749-8 Dacitic pumice-lithic VC brxx ser-CO_3 alk. Ccv 751.3 Graded, dacitic VC sst. Weak chl-CO_3 alk Ccv	VOLP	C
			Fault Puggy			754.1 Puggy, faulted + disked dacitic sst. silica ser alk. Minor weak disseminated py 756.1 Dacitic, massive, fine grained VC sst. CO_3 spots + veins. Minor base metal veins. Ccv	FAULT VOLM	
760								

REMARKS

5 cm

675133

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CO3, CHL)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
760						762.8 Dacitic vc 336. Fine grained. Intensely foliated. 5% Py veins + bands. Ser-silica alt. Ccv	VOLM	57
						766.7 Pale cream dacitic vc 336. Abundant CO_3 - barren veins. Bleached. gal-Py. Ccv	VOLM	C
770						769 massive to semi-massive Py-silica-ser-alt vc 336. Ccv	VOLM	PC
						770 strong silica-Py altered vc 336. foliated + bleached. Ccv	VOLM	Q
						772.4 Bleached, CO_3 altered vc 336. Intense CO_3 alt. Ccv	VOLM	C
						774.6 Massive, dacitic vc pumiceous 336/ breccia. Pervasive ser-chl alt. CO_3 spots + blebs. Ccv	VOLM	07
780						Minor Barren-Py-CO_3 veins / Galena-Py veins ← gal veins		
						785.7 Massive, medium grained dacitic vc 336. Pervasive ser-chl alt. CO_3 spots. 2-5% silica-Py-gal-CO_3 veins. Ccv	VOLM	57
790			Fuzzy Fault.			796.7 Fractured, silica-ser-CO_3 altered dacitic 336. 797.6 Medium grained, dacitic vc 336, Pervasive chl alt. Minor Py ± 2-5% CO_3 veins + blebs Ccv	VOLM	C
800								

REMARKS

5 cm

675134

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD21

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CO_3, Chl.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
800						801.6 Fine grained vc ssb. Pervasive silica-ser alt. Dissem Py + Py veins. CO_3 veins. Cvv	VOLM	Q
						805.5 Massive, ductile vc ssb. Pervasive chl-ser alt. CO_3 spots + veins. Minor gal-CO_3 veins Cvv	VOLM	Q
810						811.4 Ductile vc ssb. Pervasive silica-ser alt. Py dissem + large (to 5cm) zones of Py veining. Cvv	VOLM	Q
						817.1 Massive, fine grained ductile vc sst. Pervasive chl-ser alt. Py-CO_3 veins. Cvv	VOLM	Q
820						822.1 Intensely silica-ser alt. ductile vc. 5% Py-cpy veins. dissem Py. (possibly some minor cpy). Cvv	VOLM	Q
						826.4 Massive, ductile vc Brxx/ssb. pumiceous. large CO_3 blebs. Pervasive ser-chl alt Cvv	VOLM	Q
830						833.9 Graded, ductile pumice Brxx. Pervasive chl-ser alt. Large CO_3 spots + blebs. Minor dissem Py. Cvv	VOLB	C
840								

REMARKS

5 cm

675135

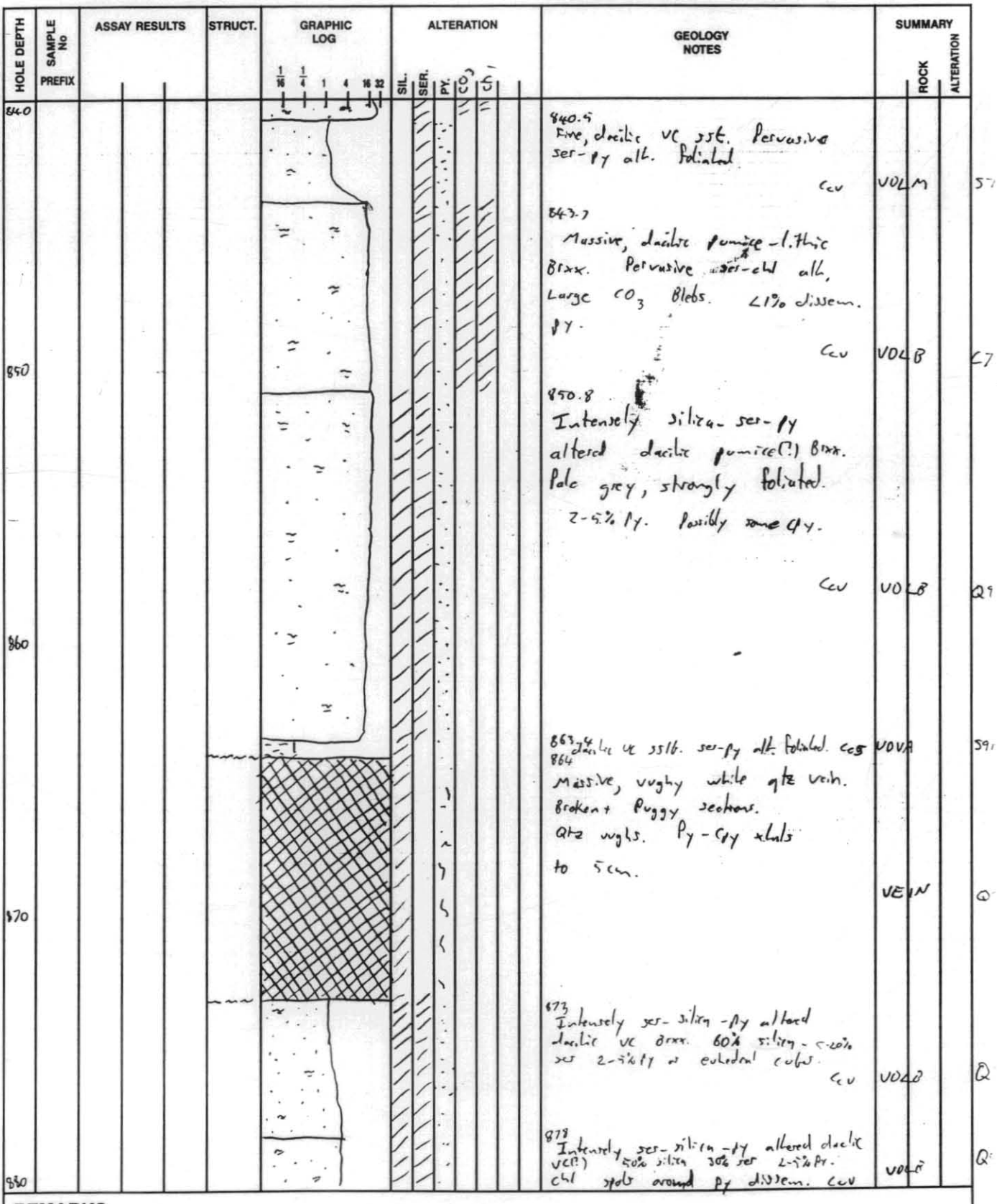
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DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT :	5th Hanky
PROSPECT :	
DATE :	
LOGGED BY :	T. Callaghan

— Bedding
⌊ Cleavage
— Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



840.4
Fine, dacitic vc sst. Pervasive ser-py alt. foliated
Ccv VOLM 57

843.7
Massive, dacitic pumice-lithic Brxx. Pervasive ser-chl alt, Large CO_3 Blebs. <1% dissem. py.
Ccv VOLB C7

850.8
Intensely silica-ser-py altered dacitic pumice(?) Brxx. Pale grey, strongly foliated. 2-5% py. Possibly some qtz.
Ccv VOLB Q9

863.4 Dacitic vc sst. ser-py alt. foliated. ccs
864
Massive, vuggy white qtz vein. Broken + Puggy sections. Qtz vugs. Py-Qtz xtals to 5cm.
VOVA 59
VEIN Q

873
Intensely ser-silica-py altered dacitic vc Brxx. 60% silica-c.20% ser 2-5% py + euhedral cubes.
Ccv VOLD Q

878
Intensely ser-silica-py altered dacitic vc(?) 50% silica 30% ser 2-5% Py. chl spots around py dissem. Ccv VOLD Q

REMARKS

5 cm

675136

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

——	Bedding	▭	Disseminated
⌊	Cleavage	▬	Massive
▲	Foliation	▨	Pervasive
~~	Fault, Shear	◣	Narrow vein
▽△▽ △▽△	Breccia	*	Visible gold
▩	Broken core		

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CO3 Chl)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
880						Pale green colour, Minor Fe-Mn CO_3 clot		
			Py vein →			883.7 Intense silica-ser-py alt. dacitic VC. Pale grey. Ccv	VOLP	Q4
						885.4 Massive, dacitic-pumice Brxx. Intense ser-silica-py-CO_3 alt. Pale green colour CO_3 clots + feld replacements. Ccv	VOLP	S8
890						894.6 Intense silica-ser-py alt. dacitic pumice Brxx. 50-60% silica. Ccv	VOLP	Q?
						898.8 Intensely ser-CO_3-py altered dacitic pumice VC Brxx. 1-3% disem Py. Pale green colour. Ccv	VOLP	S?
900						902.3 Dacitic VC pumice Brxx. Intense silica-ser-py alt & occasional CO_3 spots Pale grey. Ccv	VOLP	Q?
910						912.1 Dacitic pumice VC Brxx. Intense silica-ser-disem Py alt & 10-15% CO_3 blobs Buff coloured. Minor galena. Ccv	VOLP	S?
						917.4 Dacitic VC Brxx. Intense silica-ser-py alt. Ccv	VOLP	Q
919			massive py →			918.7		

REMARKS

5 cm

675137

RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CT CHL)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
920						Buff coloured silica-ser-py alt. Ccv	VOLP	Q9
						920.4 Intense silica-ser-py alt. dacitic Ccv	VOLP	Q9
						921.7 Dacitic pumice VC Brxx ser-chl-py-CO_3 alt. CO_3 as blebs. disseminated py. Minor vughy Basemetal vein. Ccv	VOLP	57(
						926.7 silica-ser-py alt dacitic VC Brxx Ccv	VOLP	Q
						928.4 ser-CO_3-py alt dacitic pumice Brxx Ccv	VOLP	57(
930						928 EOH		
940								
950								
960								

REMARKS

5 cm

675138

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD21

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION	
0								0-4.2 Feld xtal, lithic vc SST.	Ett VR	XM	04
								4.2-6.3 Vitric siltstone.	Ets VA	A	03
10								6.3-12.5 Feld xtal - lithic vc breccia minor jasper clasts.	Ett VR	XM	04
								12.5 - 79.9 Feld phyric ductile lava. Autoclastic breccia ± minor peperite + hyaloclastite			
50									Ccl LD	FM	03
80								79.9 - 82.6 ductile hyaloclastic SST.	Ccv VOL	B	04
90								82.6 - 103.8 Orange, silb.bed. Feld >qtz phyric rhyolite breccia. Mt Julia rhyolite ??	Ch LR	LB	ASC
100			Broken core								
110								103.8-104.7 Monomict, ductile vc SST/hyaloclastite	Ccv VOL	M	04
								104.7 - 131 Massive, feld xtal - lithic vc Breccia.			
120									Ccv VOL	B	Q3
130								131 - 139.4 Polymict, vc Breccia.	Ett VA	LB	Q3A
140								Lynchford Member.	Ecarb CAR	B	CQ
								carbonate 139.4 - 140.7	Ccv VOL	M	
								140.7 - 143.8 ductile SST.			
150								143.8 - 149.3 Carbonate	Ecarb CAR	B	CQ
								149.3 - 153.4 Massive, haematite veins.			
								153.4 - 155.5 Polymict vc Brec. ductile	Ecv VOL	B	05
160								155.5 - 171.3 Massive, white - purple carbonate ± minor Haem clasts + replacements.	Ecarb CAR	B	CQ
170								171.3 - 172.6 Haem, silt basalt.	Eb LBA		H10
								172.6 - 187 Basaltic lithic Breccia ± carbonate intraclasts	Ec VBL	B	01
190								187 - 192.3 Massive basaltic lava.	Eb LBA		01
								192.3 - 196 Basaltic lithic breccia.	Eb VBL	B	02
								196 - 198.1 Basaltic lava	Eb LBA		ASC
200											

REMARKS

5 cm

675139

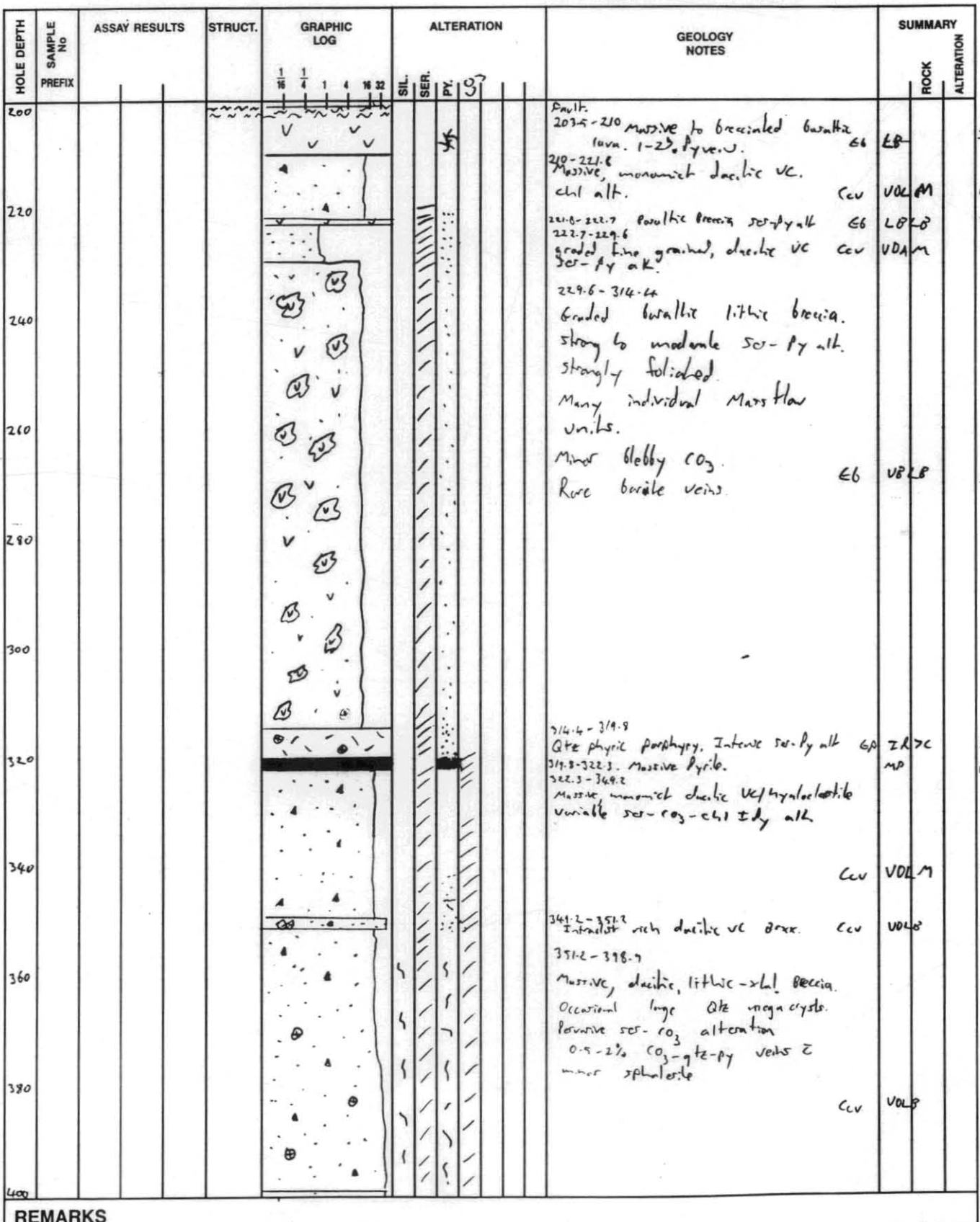
RGC EXPLORATION PTY LTD

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
— Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



GEOLOGY NOTES

Fault.
203.5 - 210 Massive to brecciated basaltic lava. 1-2% pyrite. ∈6 LB
210 - 221.8 Massive, monomict dacitic vc. chl alt. Cvv VOLM
221.8 - 222.7 Basaltic breccia ser-py alt ∈6 LBLB
222.7 - 229.6 graded fine grained, dacitic vc ser-py alt Cvv VOLM
229.6 - 314.44 Graded basaltic lithic breccia. Strong to moderate ser-py alt. Strongly foliated. Many individual Massflow units. Minor blebby CO_3. Rare barite veins. ∈6 VBLB
314.4 - 319.8 Qtz phyric porphyry. Intense ser-py alt ∈A IRDC
319.8 - 322.3 Massive Pyrite. MP
322.3 - 349.2 Massive, monomict dacitic vc/hyaloclastite variable ser-CO_3-chl-py alt. Cvv VOLM
341.2 - 351.2 Intraclastic rich dacitic vc breccia. Cvv VOLB
351.2 - 398.7 Massive, dacitic, lithic-xtal breccia. Occasional large Qtz mega crysts. Pervasive ser-CO_3 alteration 0.5-2% CO_3-qtz-py veins & minor sphalerite Cvv VOLB

SUMMARY
ROCK
ALTERATION

REMARKS

5 cm
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675140

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD21

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary log
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION: SIL.	SER.	PY.	CO_3	Chl	GEOLOGY NOTES	SUMMARY: ROCK	ALTERATION
400										378.9-407.6 Polymict lithic breccia ± GP intrusives + xhlb. Ser-CO_3 alt. Minor Py		
										407.6-411.6 Massive, ductile lithic Brxx. Pumice + ductile clasts. Ccv	VOLA	CS
										411.6-415.6 CO_3 alt ate-field porphyry GP	VOLP	CS
420										415.6-425.1 Massive, ductile-lithic VC Brxx. EP intrusives + deposits Ccv	IRZC	C9
										425.1-432.1 Rhyolite xhal-vitric SSt/Brxx. Ccv	VOLB	C9
										432.1-446.1 Qtz phyric suite II porphyry. Pervasive CO_3 alt. Silica-Py vein Brxx ± large Sphal-gal stringer veins. EP	VRVA	57
440		Crackle Breccia.									IRZC	C9
										446.1-466.5 Massive ductile, pumice-lithic VC Brxx Pervasive Ser-chl alt. CO_3 blebs. rare sphal-gal veins. Ccv	VOLP	07
460										466.5-471 Ductile pumice lithic VC Ser-Py alt. Ccv	VOLP	55
										471-501 Ductile pumice lithic VC Brxx. Blebby CO_3-Ser alt. Ccv	VOLA	5
480												
500										501.1-507.9 Qtz-feld phyric suite II porphyry. Intense CO_3 alt. late CO_3-Py veins GP	IRQC	C9
										507.9-511.5 Qtz phyric suite II porphyry GP	IRQC	55
										511.5-517.5 Ductile Pumice Brxx. Ccv	VOLP	QS
										517.5-520 Ductile vitric SSt. Pervasive silica-ser alt. Ccv		57
520										520-530 Ductile pumice-lithic Brxx. CO_3 alt + blebs ± intense silica-Py 522.6-527m Ccv	VOLP	C7
										530-554 Graded, massive, ductile pumice-lithic VC Brxx. Pervasive CO_3-Ser alt. Minor Py veins Ccv	VOLP	C7
540												
										554-560.8 Ductile pumice Brxx. Silica-Ser-CO_3 alt Ccv	VOLP	C8
560										560.8-569.2 graded, ductile VC pumice Brxx. shale interclasts. Ser-CO_3-Py alt. Ccv	VOLM	C8
										569.2-586.9 Black shale. Py-sphal veins + replacement CO_3 veins. Ccs	SILT	PS
580												
										586.9-634.2 Massive ductile pumiceous VC Brxx. Pervasive Silica-Ser alt CO_3 blebs. disem Py		
600												

REMARKS

5 cm

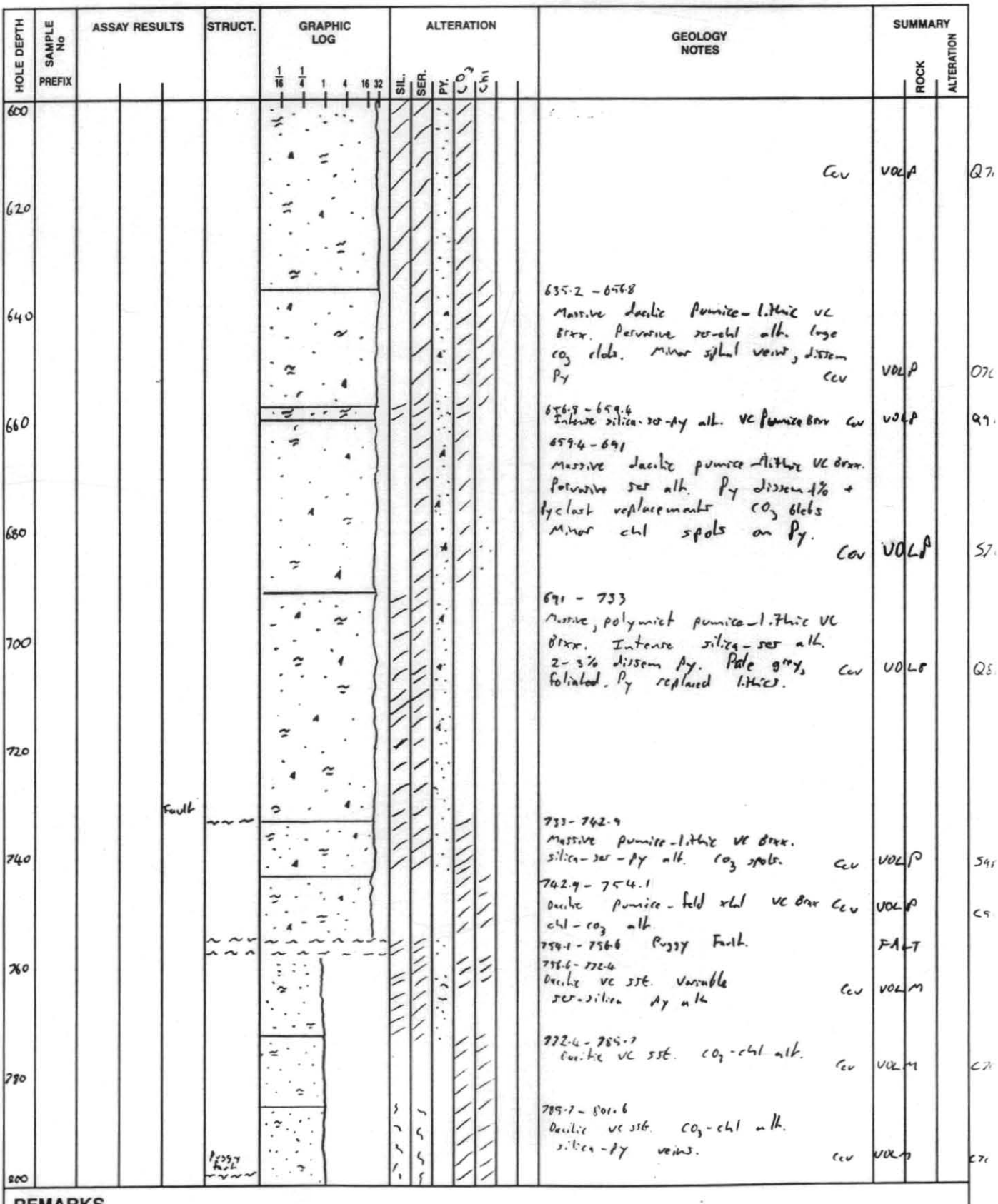
RGC EXPLORATION PTY LTD

DRILL HOLE No 675141 5H021

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary Log
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm

RGC EXPLORATION PTY LTD

675142

DRILL HOLE No SH021

SHEET _____ OF _____

PROJECT	: 5th Monty
PROSPECT	: 1:1000 Summary Log
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
└ Cleavage
▲ Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CO_3, chl)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
800						801.7 - 817.1 Dacitic VC sst. Pervasive CO_3-chl alt. Patchy silica-ser-py alt. ccv	VOL M	Q7
820						817.1 - 822.5 dacitic VC sst. chl-CO_3 alt. ccv 822.5 - 826.4 Dacitic VC sst. silica-ser-py alt. ccv	VOL M VOL M	07C Q9
840						826.4 - 850.8 Dacitic pumice-lithic VC brxx Pervasive CO_3-chl alt. ccv	VOL P	65C
860						850.8 - 864 Intensely silica-ser-py altered VC brxx. Pale grey. 2-5% py ccv	VOL P	Q9/
						864 - 873 Massive, vuggy white qtz vein Py-cpy xtals.	VEIN	Q1C
880						873 - 895.9 Intensely silica-ser-py alt. dacitic pumice brxx ccv	VOL P	Q9.
900						895.9 - 898.8 silica-ser-py alt. VC pumice brxx. Minor CO_3 spots. ccv 898.8 - 902.3 dacitic pumice brxx. ser-py-CO_3 alt ccv	VOL P VOL P	58 58
920						902.3 - 921.7 Massive, dacitic pumice-lithic VC brxx. Intense silica-ser-py alt. ccv 921.7 - 928 Dacitic pumice-lithic VC brxx ser-py alt. Variable silica-CO_3 alt. ccv 928 EOH	VOL P VOL P	Q 57

REMARKS

5 cm
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Hole_Id	AMG East	AMG North	AMG RL	Total Depth	Geologist
SHD22	380602.00	5358439.00	482.00	616.00	TC

Hole_Id	Depth	AZM_AMG	Dip	
SHD22	0.00	294.00	-79.8	
SHD22	16.00	294.00	-79.8	
SHD22	31.00	295.00	-79	
SHD22	61.00	298.00	-78	
SHD22	88.00	299.00	-77	
SHD22	121.00	301.00	-76.1	
SHD22	151.00	304.00	-75.7	
SHD22	181.00	308.00	-74.8	
SHD22	211.00	310.00	-74	
SHD22	244.00	310.00	-73	
SHD22	271.00	313.00	-72	
SHD22	300.00	316.00	-71	
SHD22	330.00	318.00	-69.8	
SHD22	361.00	321.00	-69.2	
SHD22	391.00	324.00	-67.8	
SHD22	421.00	324.00	-66	
SHD22	488.00	327.00	-62	
SHD22	518.00	329.00	-60	
SHD22	548.00	329.00	-59	
SHD22	583.00	328.00	-56	
SHD22	616.00	329.00	-54	

Hole_Id	Sample No	From	To	AG_A	AS_A	AU_G	BI_A	CU_A	P_X	PB_A	TI_X	V_X	ZN_A	ZR_X
SHD22	1081611	125.00	126.00	-1	-50	-0.01	-10	59		32			32	
SHD22	1081612	126.00	127.00	-1	-50	-0.01	-10	57		26			14	
SHD22	1081613	127.00	128.00	4	-50	0.16	-10	136		57			721	
SHD22	1081614	128.00	129.00	-1	70	-0.01	-10	83		53			415	
SHD22	1081615	129.00	130.00	1	-50	-0.01	-10	93		146			72	
SHD22	1081616	130.00	131.00	3	65	0.01	-10	364		783			771	
SHD22	1081617	131.00	132.00	3	145	0.01	-10	925		66			186	
SHD22	1081618	132.00	133.00	2	95	0.01	-10	664		261			898	
SHD22	1081619	133.00	134.00	1	70	-0.01	-10	256		1555			2090	
SHD22	1081621	134.00	136.00	-1	105	0.03	-10	375		1020			300	
SHD22	1081622	136.00	138.00	-1	-50	0.03	-10	62		481			304	
SHD22	1081623	138.00	140.00	-1	-50	0.12	-10	117		799			208	
SHD22	1081624	140.00	142.00	1	-50	0.12	-10	172		2170			1205	
SHD22	1081625	142.00	144.00	-1	-50	0.09	-10	118		469			114	
SHD22	1081626	144.00	146.00	-1	-50	0.1	-10	145		326			319	
SHD22	1081627	146.00	148.00	-1	-50	0.06	-10	50		170			78	
SHD22	1081628	148.00	150.00	-1	-50	0.03	-10	72		167			129	
SHD22	1081629	150.00	152.00	-1	-50	-0.01	-10	85		204			96	
SHD22	1081630	152.00	154.00	-1	-50	0.02	-10	195		84			89	
SHD22	1081631	154.00	156.00	-1	-50	0.03	-10	53		148			71	
SHD22	1081632	156.00	158.00	-1	-50	0.06	-10	58		144			41	
SHD22	1081633	158.00	160.00	-1	-50	0.05	-10	54		140			23	
SHD22	1081634	160.00	162.00	-1	110	0.05	-10	410		141			143	
SHD22	1081635	162.00	164.00	-1	215	0.03	-10	775		73			154	
SHD22	1081636	164.00	166.00	-1	-50	-0.01	-10	128		47			65	
SHD22	1081637	166.00	168.00	-1	-50	0.01	-10	111		200			1350	
SHD22	1081638	168.00	170.00	-1	-50	-0.01	-10	35		806			1775	
SHD22	1081639	170.00	172.00	-1	-50	0.08	-10	50		1065			2080	
SHD22	1081641	172.00	174.00	-1	-50	-0.01	-10	28		1190			2250	
SHD22	1081642	174.00	176.00	1	-50	-0.01	-10	60		1290			2850	
SHD22	1081643	176.00	178.00	4	80	-0.01	-10	277		985			2290	
SHD22	1081644	178.00	180.00	1	-50	-0.01	-10	70		252			2080	
SHD22	1081645	180.00	182.00	3	70	0.02	-10	180		355			3240	
SHD22	1081646	182.00	184.00	3	-50	0.04	-10	125		525			954	
SHD22	1081647	184.00	186.00	1	-50	0.01	-10	100		510			1635	

SHD22	1081648	186.00	188.00	-1	-50	-0.01	-10	46		335			748	
SHD22	1081649	188.00	190.00	-1	-50	-0.01	-10	45		296			720	
SHD22	1081650	190.00	192.00	-1	-50	-0.01	-10	51		400			892	
SHD22	1081651	192.00	194.00	1	-50	-0.01	-10	53		717			1425	
SHD22	1081652	194.00	196.00	-1	-50	-0.01	-10	44		423			886	
SHD22	1081653	196.00	198.00	6	200	0.03	-10	525		129			130	
SHD22	1081654	198.00	200.00	2	-50	0.02	-10	169		166			1115	
SHD22	1081655	200.00	202.00	3	75	0.02	-10	206		491			1025	
SHD22	1081656	202.00	204.00	3	-50	-0.01	-10	224		739			1115	
SHD22	1081657	204.00	206.00	3	100	0.02	-10	298		474			186	
SHD22	1081658	206.00	208.00	3	-50	-0.01	-10	134		1320			5900	
SHD22	1081659	208.00	210.00	2	-50	-0.01	-10	66		931			2830	
SHD22	1081661	210.00	212.00	1	-50	-0.01	-10	49		486			1230	
SHD22	1081662	212.00	214.00	3	-50	0.02	-10	87		1895			3960	
SHD22	1081663	214.00	216.00	2	-50	-0.01	-10	124		850			2180	
SHD22	1081664	216.00	218.00	10	185	0.03	-10	748		1510			1125	
SHD22	1081665	218.00	220.00	6	75	0.08	-10	184		606			301	
SHD22	1081666	220.00	222.00	9	205	0.02	-10	678		270			212	
SHD22	1081667	222.00	224.00	2	-50	-0.01	-10	72		1030			2810	
SHD22	1081668	224.00	226.00	1	-50	0.02	-10	58		1425			3500	
SHD22	1081669	226.00	228.00	1	-50	-0.01	-10	64		965			1850	
SHD22	1081670	228.00	230.00	2	-50	0.02	-10	69		834			2020	
SHD22	1081671	230.00	232.00	3	-50	0.02	-10	102		424			1145	
SHD22	1081672	232.00	234.00	1	-50	-0.01	-10	44		334			895	
SHD22	1081673	234.00	236.00	-1	-50	-0.01	-10	40		322			1365	
SHD22	1081674	236.00	238.00	1	-50	-0.01	-10	107		613			1130	
SHD22	1081675	238.00	240.00	4	-50	0.01	-10	193		1060			2260	
SHD22	1081676	240.00	242.00	1	-50	0.01	-10	43		146			761	
SHD22	1081677	242.00	244.00	1	-50	-0.01	-10	31		769			2630	
SHD22	1081678	244.00	246.00	1	-50	-0.01	-10	40		1030			2990	
SHD22	1081679	246.00	248.00	1	-50	-0.01	-10	42		409			1075	
SHD22	1081681	248.00	250.00	1	-50	-0.01	-10	44		252			1080	
SHD22	1081682	250.00	252.00	4	90	0.01	-10	364		308			1270	
SHD22	1081683	252.00	254.00	5	120	0.02	-10	371		1900			4730	
SHD22	1081684	254.00	256.00	2	-50	-0.01	-10	111		1425			4360	
SHD22	1081685	256.00	258.00	1	-50	-0.01	-10	98		704			2480	

SHD22	1081686	258.00	260.00	1	-50	-0.01	-10	71		774			2990	
SHD22	1081687	260.00	262.00	5	190	0.02	-10	501		440			1265	
SHD22	1081688	262.00	264.00	5	155	0.03	-10	503		409			1555	
SHD22	1081689	264.00	266.00	11	435	0.03	-10	1305		498			1325	
SHD22	1081690	266.00	268.00	7	290	0.03	-10	953		298			1340	
SHD22	1081691	268.00	270.00	2	-50	0.01	-10	182		190			1055	
SHD22	1081692	270.00	272.00	3	80	-0.01	-10	379		165			663	
SHD22	1081693	272.00	274.00	4	115	-0.01	-10	395		236			722	
SHD22	1081694	274.00	276.00	4	110	0.01	-10	334		178			779	
SHD22	1081695	276.00	278.00	3	-50	0.03	-10	156		458			2280	
SHD22	1081696	278.00	280.00	1	-50	-0.01	-10	35		97			26	
SHD22	1081697	280.00	282.00	18	765	0.1	-10	2040		398			1465	
SHD22	1081698	282.00	284.00	1	-50	0.04	-10	60		159			106	
SHD22	1081699	284.00	286.00	2	-50	0.05	-10	72		201			246	
SHD22	1081701	286.00	288.00	3	165	0.07	-10	501		210			813	
SHD22	1081702	288.00	290.00	3	285	0.11	-10	838		212			887	
SHD22	1081703	290.00	292.00	3	245	0.12	-10	706		327			359	
SHD22	1081704	292.00	294.00	2	115	0.11	-10	348		220			771	
SHD22	1081705	294.00	296.00	7	445	0.18	-10	1935		287			739	
SHD22	1081706	296.00	298.00	6	270	0.2	-10	980		770			1290	
SHD22	1081707	298.00	300.00	3	70	0.08	-10	233		424			837	
SHD22	1081708	300.00	302.00	5	110	0.14	-10	1565		1475			3050	
SHD22	1081709	302.00	304.00	2	80	0.12	-10	1205		382			2570	
SHD22	1081710	304.00	306.00	1	90	0.14	-10	341		299			757	
SHD22	1081711	306.00	308.00	1	55	0.11	-10	148		510			1340	
SHD22	1081712	308.00	310.00	1	55	0.06	-10	177		766			2530	
SHD22	1081713	310.00	312.00	2	60	0.06	-10	115		1310			3360	
SHD22	1081714	312.00	314.00	2	60	0.04	-10	132		855			2780	
SHD22	1081715	314.00	316.00	6	220	0.07	-10	922		1260			4870	
SHD22	1081716	316.00	318.00	5	190	0.08	-10	819		235			181	
SHD22	1081717	318.00	320.00	4	80	0.05	-10	306		1725			3200	
SHD22	1081718	320.00	322.00	2	-50	0.03	-10	226		1125			4890	
SHD22	1081719	322.00	324.00	1	-50	0.02	-10	151		1480			4300	
SHD22	1081721	324.00	326.00	5	145	0.09	-10	455		661			791	
SHD22	1081722	326.00	328.00	4	120	0.05	-10	401		151			105	
SHD22	1081723	328.00	330.00	10	205	0.09	-10	672		6900			1815	

SHD22	1081724	330.00	332.00	13	310	0.13	-10	988		2300			1780	
SHD22	1081725	332.00	334.00	4	60	0.07	-10	199		1565			3450	
SHD22	1081726	334.00	336.00	5	185	0.24	-10	572		923			3400	
SHD22	1081727	336.00	338.00	6	215	0.2	-10	643		1055			3580	
SHD22	1081728	338.00	340.00	6	180	0.1	-10	508		450			1650	
SHD22	1081729	340.00	342.00	4	60	0.05	-10	121		1220			4350	
SHD22	1081730	342.00	344.00	3	-50	0.02	-10	111		1340			6300	
SHD22	1081731	344.00	346.00	2	55	0.03	-10	90		1230			4590	
SHD22	1081732	346.00	348.00	4	80	0.14	-10	407		1020			2770	
SHD22	1081733	348.00	350.00	12	165	0.12	-10	482		1025			4210	
SHD22	1081734	350.00	352.00	6	-50	0.12	-10	75		374			1490	
SHD22	1081735	352.00	354.00	6	265	0.05	-10	812		1650			3880	
SHD22	1081736	354.00	356.00	7	215	0.1	-10	668		398			852	
SHD22	1081737	356.00	358.00	5	290	0.12	-10	867		516			1525	
SHD22	1081738	358.00	360.00	4	170	0.16	-10	492		677			685	
SHD22	1081739	360.00	362.00	2	-50	0.2	-10	94		303			663	
SHD22	1081741	362.00	364.00	1	70	0.16	-10	136		110			2390	
SHD22	1081742	364.00	366.00	3	170	0.2	-10	477		989			2260	
SHD22	1081743	366.00	368.00	4	235	0.18	-10	754		719			955	
SHD22	1081744	368.00	370.00	4	400	0.19	-10	1130		540			1070	
SHD22	1081745	370.00	372.00	1	110	0.18	-10	507		172			662	
SHD22	1081746	372.00	374.00	5	65	0.23	13	873		424			578	
SHD22	1081747	374.00	376.00	3	70	0.14	-10	715		659			1570	
SHD22	1081748	376.00	378.00	1	70	0.08	-10	157		700			2150	
SHD22	1081749	378.00	380.00	8	55	0.43	-10	406		479			821	
SHD22	1081750	380.00	382.00	3	75	0.1	10	1060		387			597	
SHD22	1081751	382.00	384.00	1	-50	0.1	-10	1040		91			854	
SHD22	1081752	384.00	386.00	1	-50	0.05	-10	639		76			403	
SHD22	1081753	386.00	388.00	4	-50	0.28	-10	249		401			368	
SHD22	1081754	388.00	390.00	2	-50	0.13	-10	96		482			260	
SHD22	1081755	390.00	392.00	6	-50	0.28	11	381		264			598	
SHD22	1081756	392.00	394.00	1	-50	0.02	-10	274		703			626	
SHD22	1081757	398.00	400.00	1	-50	0.05	-10	239		742			1220	
SHD22	1081758	400.00	402.00	1	-50	0.02	-10	171		501			2060	
SHD22	1081759	404.00	406.00	1	-50	0.01	-10	466		940			3690	
SHD22	1081761	406.00	408.00	1	-50	-0.01	-10	78		2750			5800	

SHD22	1081762	408.00	410.00	1	-50	-0.01	-10	68		1650			2560	
SHD22	1081763	410.00	412.00	4	-50	-0.01	-10	271		6700			7500	
SHD22	1081764	412.00	414.00	2	-50	-0.01	-10	156		2510			4500	
SHD22	1081765	414.00	416.00	2	-50	-0.01	-10	113		2240			3720	
SHD22	1081766	416.00	418.00	1	-50	-0.01	-10	60		1100			2890	
SHD22	1081767	418.00	420.00	-1	-50	-0.01	-10	37		400			1195	
SHD22	1081768	420.00	422.00	-1	-50	-0.01	-10	30		302			742	
SHD22	1081769	422.00	424.00	1	-50	-0.01	-10	37		408			928	
SHD22	1081770	424.00	426.00	1	-50	-0.01	-10	103		2420			5700	
SHD22	1081771	426.00	428.00	2	-50	-0.01	-10	135		2740			6100	
SHD22	1081772	428.00	430.00	4	65	0.02	-10	173		4250			1490	
SHD22	1081773	430.00	432.00	4	-50	0.07	-10	347		938			1250	
SHD22	1081774	432.00	434.00	4	-50	0.04	-10	977		2070			2620	
SHD22	1081775	434.00	436.00	3	-50	0.03	-10	131		2760			6100	
SHD22	1081776	436.00	438.00	3	-50	0.14	-10	107		2320			4860	
SHD22	1081777	438.00	440.00	4	-50	0.05	-10	850		2990			5300	
SHD22	1081778	440.00	442.00	2	60	-0.01	-10	130		2530			8600	
SHD22	1081779	442.00	444.00	1	-50	-0.01	-10	95		974			3750	
SHD22	1081781	444.00	446.00	2	-50	-0.01	-10	140		2190			6700	
SHD22	1081782	446.00	448.00	3	60	-0.01	-10	165		3630			10700	
SHD22	1081783	448.00	450.00	2	-50	-0.01	-10	147		1040			2640	
SHD22	1081784	450.00	452.00	3	-50	0.03	-10	738		2050			7100	
SHD22	1081785	452.00	454.00	2	70	0.02	-10	116		1610			4490	
SHD22	1081786	454.00	456.00	1	55	-0.01	-10	38		351			693	
SHD22	1081787	456.00	458.00	1	-50	0.03	-10	30		172			185	
SHD22	1081788	458.00	460.00	1	-50	-0.01	-10	62		178			341	
SHD22	1081789	460.00	462.00	1	-50	-0.01	-10	24		114			415	
SHD22	1081790	462.00	464.00	1	-50	-0.01	-10	24		118			236	
SHD22	1081791	464.00	466.00	1	-50	-0.01	-10	22		114			144	
SHD22	1081792	466.00	468.00	1	-50	0.02	-10	26		147			112	
SHD22	1081793	468.00	470.00	-1	-50	-0.01	-10	24		376			647	
SHD22	1081794	470.00	472.00	-1	70	-0.01	-10	28		282			1220	
SHD22	1081795	472.00	474.00	-1	-50	0.16	-10	54		169			701	
SHD22	1081796	474.00	476.00	-1	60	0.13	-10	208		222			1620	
SHD22	1081797	476.00	478.00	1	75	0.09	-10	392		494			870	
SHD22	1081798	478.00	480.00	1	-50	0.02	-10	370		397			725	

SHD22	1081799	480.00	482.00	-1	-50	0.02	-10	101		153			414	
SHD22	1081801	482.00	484.00	2	50	0.13	-10	1295		443			399	
SHD22	1081802	484.00	486.00	3	55	0.19	-10	1470		220			528	
SHD22	1081803	486.00	488.00	5	-50	0.7	18	4930		328			168	
SHD22	1081804	488.00	490.00	3	55	0.34	-10	2040		273			122	
SHD22	1081805	490.00	492.00	2	-50	0.56	13	1965		116			32	
SHD22	1081806	492.00	494.00	2	60	0.6	12	1275		147			18	
SHD22	1081807	494.00	496.00	1	-50	0.26	-10	44		416			400	
SHD22	1081808	496.00	498.00	2	-50	0.26	-10	68		557			2240	
SHD22	1081809	498.00	500.00	-1	-50	0.12	-10	48		108			268	
SHD22	1081810	500.00	502.00	-1	-50	0.12	-10	60		126			55	
SHD22	1081811	502.00	504.00	2	-50	0.16	-10	184		459			978	
SHD22	1081812	504.00	506.00	3	-50	0.63	24	303		693			251	
SHD22	1081813	506.00	508.00	1	-50	0.1	-10	431		1240			2580	
SHD22	1081814	508.00	510.00	1	-50	0.02	-10	182		2050			4240	
SHD22	1081815	510.00	512.00	-1	-50	0.02	-10	76		1080			1245	
SHD22	1081816	512.00	514.00	-1	-50	0.1	-10	72		454			338	
SHD22	1081817	514.00	516.00	-1	-50	0.28	-10	52		62			14	
SHD22	1081818	516.00	518.00	-1	-50	0.08	-10	680		67			1155	
SHD22	1081819	518.00	520.00	2	-50	0.13	-10	836		698			3180	
SHD22	1081821	520.00	522.00	1	-50	0.2	-10	496		756			1430	
SHD22	1081822	522.00	524.00	-1	-50	0.1	-10	499		104			2800	
SHD22	1081823	524.00	526.00	-1	-50	0.08	-10	287		39			1335	
SHD22	1081824	526.00	528.00	-1	-50	0.11	-10	427		193			1915	
SHD22	1081825	528.00	530.00	1	-50	0.07	-10	334		134			2430	
SHD22	1081826	530.00	532.00	-1	-50	0.05	-10	171		134			1620	
SHD22	1081827	532.00	534.00	-1	-50	0.02	-10	42		174			776	
SHD22	1081828	534.00	536.00	-1	-50	0.03	-10	54		2360			6700	
SHD22	1081829	536.00	538.00	-1	-50	0.02	-10	40		1195			2660	
SHD22	1081830	538.00	540.00	-1	-50	0.05	-10	118		1780			2620	
SHD22	1081831	540.00	542.00	-1	-50	0.02	-10	33		1355			1675	
SHD22	1081832	542.00	544.00	-1	-50	0.02	-10	47		623			776	
SHD22	1081833	544.00	546.00	-1	-50	0.02	-10	69		786			2310	
SHD22	1081834	546.00	548.00	-1	-50	0.01	-10	34		1100			1100	
SHD22	1081835	548.00	550.00	-1	-50	0.01	-10	37		1235			1150	
SHD22	1081836	550.00	552.00	-1	-50	0.01	-10	48		458			1715	

SHD22	1081837	552.00	554.00	-1	90	0.12	-10	207		1355			11400	
SHD22	1081838	554.00	556.00	-1	-50	0.03	-10	90		1170			2670	
SHD22	1081839	556.00	558.00	-1	-50	-0.01	-10	26		449			948	
SHD22	1081841	558.00	560.00	-1	-50	-0.01	-10	148		1680			4200	
SHD22	1081842	560.00	562.00	-1	-50	-0.01	-10	116		3380			11700	
SHD22	1081843	562.00	564.00	-1	-50	-0.01	-10	111		1300			7200	
SHD22	1081844	564.00	566.00	-1	-50	-0.01	-10	57		1195			4860	
SHD22	1081845	566.00	568.00	-1	-50	0.01	-10	107		2160			6400	
SHD22	1081846	568.00	570.00	-1	-50	0.02	-10	188		96			3400	
SHD22	1081847	570.00	572.00	-1	-50	0.03	-10	68		67			68	
SHD22	1081848	572.00	574.00	-1	-50	0.03	-10	93		47			76	
SHD22	1081849	574.00	576.00	-1	-50	0.03	-10	98		35			14	
SHD22	1081850	576.00	578.00	-1	-50	0.04	-10	96		32			18	
SHD22	1081851	578.00	580.00	-1	-50	0.05	-10	56		63			20	
SHD22	1081852	580.00	582.00	-1	-50	0.06	-10	60		51			21	
SHD22	1081853	582.00	584.00	-1	-50	0.18	-10	45		66			22	
SHD22	1081854	584.00	586.00	-1	-50	0.03	-10	59		19			17	
SHD22	1081855	586.00	588.00	-1	-50	0.1	-10	67		39			15	
SHD22	1081856	588.00	590.00	-1	-50	0.08	-10	93		43			16	
SHD22	1081857	590.00	592.00	-1	-50	0.07	-10	64		44			12	
SHD22	1081858	592.00	594.00	-1	-50	0.14	-10	1220		55			26	
SHD22	1081859	594.00	596.00	-1	-50	0.12	-10	1880		27			28	
SHD22	1081861	596.00	598.00	-1	-50	0.08	-10	82		47			51	
SHD22	1081862	598.00	600.00	-1	-50	0.05	-10	1270		33			18	
SHD22	1081863	600.00	602.00	3	-50	0.1	13	2190		463			33	
SHD22	1081864	602.00	604.00	4	-50	0.3	15	198		544			22	
SHD22	1081865	604.00	606.00	4	-50	0.17	12	1400		1680			1495	
SHD22	1081866	606.00	608.00	4	-50	0.24	-10	1055		2160			1070	
SHD22	1081867	608.00	610.00	2	-50	0.21	-10	499		416			1530	
SHD22	1081868	610.00	612.00	-1	-50	0.06	-10	271		1940			4350	
SHD22	1081869	612.00	614.00	-1	-50	0.03	-10	908		1575			942	
SHD22	1081870	614.00	616.00	2	-50	0.15	-10	113		213			87	

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD22

SHEET OF

PROJECT	: 5th Heaty
PROSPECT	: 1:1000 Summary log
DATE	:
LOGGED BY	: T. Callaghan.

— Bedding
⌴ Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

675151

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1M, 1/2, 1, 4, M 22)	ALTERATION (SIL. SER. PY. CHL. HE)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION	
0						0-18.5 Qtz-feld-Hbl Suite II porphyry. 2-5% Jasper Veins. Chlorite alteration. Ep	IR	CC	04
20						18.5-96.5 Qtz-feld± Hbl Suite II porphyry pervasive chlorite alteration 2-5% Jasper Veins.			
40						Ep	IR	CC	04
60									
80									
100						94.5-105.5 Qtz-feld Suite II porphyry. Sericitely altered. Mylonitic textures. Ep	IR	CC	57
120						105.5-115 Dacitic vc sst. Qtz porphyry peperite ? Qtz phenos. Ser-chl alt. Cav	VOLM		57
140						115-127.2 Qtz porphyry. Large Qtz phenos in pale grey groundmass, intense ser-chl altered matrix. Strongly foliated. Ep	IR	QC	57
160						127.2-240 Qtz porphyry. Intensely foliated. Intense ser alt. 1-5% diffuse Py + Py veinlets. Silica-Py veinlets. Minor peperitic inclusions of vitric siltstone	IR	QC	59
180									
200									

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD22

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	: 1:1000 Summary log
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌴ Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY
				1/8 1/4 1 4 16 22	STL. SER. PY. chl CO3		ROCK ALTERATION
200						0-240	
220							
240						240-392.4 Massive Qtz porphyry. Pale grey. Intense ser-dissmnly alt. (1-5%) Intensely foliated. Py veins + vnlt cpy blebs.	
260						Ep IR QC	59
280							
300			FAULT				
320							
340							
360							
380			cpy→ cpy→				
400						392.4-398.2 Qtz porphyry. chl-CO3-py alt. Ep IR QC 398.2-end.5 ser-py alt Qtz porphyry Ep IR QC	07 39

REMARKS

5 cm

675152

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD22

SHEET ____ OF ____

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

PROJECT	: South Healy
PROSPECT	: 1:1000 Summary log
DATE	:
LOGGED BY	: T. Callaghan

6751453

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/8, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CO_3, Chl.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
400						404.4-404.8 Qtz-porphyry chl-musk fg alk. Gp	IR	QC 07
						404.8-444 Qtz porphyry. Pervasive CO_3-py alk. weak fg mod. by disem. Spkl-gal veining. Gp Suite II porphyry.	IR	QC C7
420								
440						444-449.8 Qtz Porphyry. Strong py-fg CO_3 alk. 1-2% Gp	IR	QC C8
			Fault			449.8-452.4 Qtz-porphyry CO_3-py alk Gp	IR	QC 07
						452.8-476.0 Dacitic pumice Brxx. Intense, silica-py alk. Disem fg ± chlorite bands. Minor spkl-gal		
460						Cvc	VOLA	Q8
480						476-491 Qtz phyric Suite II porphyry. Silica-py-fg alk ± Zone of CO_3 alk. Gp	IR	QC Q9
						491-499.9 Dacitic - pumice lithic Brxx Ccv	VOLB	Q9
500						499.9-504.9 Laminated, vitric rich vc ± Intense, silica-fg alk fg bands Ccs	VOLA	Q9
			Fault			504.9-513 Polymict vc Brxx. Silica-chl alk. Disem fg. Spkl-gal clasts. Ccv	VOLB	07
						513-519 Dacitic lithic vc Brxx. 10% fg silica. Ccv	VOLB	Q9
520						519-530.9 Qtz-feld porphyry. Peperitic. Pervasive silica-py-fg alk. Gp	IR	QC Q7
			Fault			Puggy Fault 532.4-587.6	FALT	
540						Massive, dacitic lithic vc Brxx Pervasive CO_3-chl alk. <1% disem fg. Cvc	VOLB	C80
560								
580						587.6-616 Massive, graded mass flows of dacitic lithic vc Brxx + polymict Brxx. Intense silica-py-fg alk. fg to 5% Cvc	VOLB	Q9
600								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No : SHD22

SHEET _____ OF _____

PROJECT	: South Hooky
PROSPECT	: 1/1000 Summary Log
DATE	:
LOGGED BY	: T. Cullyhan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (MI 1/4 1/4 1 4 16 32)	ALTERATION (SIL. SER. PY.)	GEOLOGY NOTES	SUMMARY (ROCK ALTERATION)
600							
620						EOH 616.0m	
640							

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SH022

SHEET ____ OF ____

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

6251550

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/8 1/4 1 4 16 32)	ALTERATION (SIL. SER. PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
0						Qtz-feld-Hbl porphyry. Massive. 2-5% large jasper veins. Weathered. Suite II porphyry		
						Ep	IR	<C 04
10								
						18.5 massive Qtz-feld-Hbl phyric porphyry. 5-10% jasperoids and calcite veins. Pervasive chl. alteration		
20								
						Ep	IR	<C 04
30								
40								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD22

SHEET OF

PROJECT :	5th Henty
PROSPECT :	
DATE :	
LOGGED BY :	T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
40						42 Qtz - fold_Hbl phyric porphyry Pervasive chlorite alteration Chl - weak hematite veins Suite II porphyry CP	IRZC	OS
50								
60								
70		HQ/NQ 70.3m	→					
80								

REMARKS

5 cm

6751350

RGC EXPLORATION PTY LTD

DRILL HOLE No 5HDZ2

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
80								
90			FOL ≈ 10			Increasing foliation		
						96-5 Intensely foliated - broken Qtz-feld porphyry. Mylonitic textures. Strong sericite-chl - weak py alteration. Fault/Qtz-feld porphyry -	FALT	S7
100						100.2 Massive Qtz-feld porphyry. Suite II porphyry. Sø-Alt. alteration. Buff-orange colour. EP	IR	CC AS
						105.5 Fine grained dacitic VC sst. Qtz-feld porphyry. Aphanitic + large inclusion rich qtz phenos. Pervasive ser-chl alt. Cev	VOLM	S7
110						109 Qtz-feld porphyry. Strong ser-chl alteration. Mod to strong foliation. Pale grey-green colour EP	IR	CC S7
120								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHO12

SHEET _____ OF _____

PROJECT	: Sth Henty
PROSPECT	:
DATE	:
LOGGED BY	: S. Gallagher

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6755358

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/4, 1, 4, 16, 22)	ALTERATION (SIL., SER., PY., CHL.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
120								
						127.2 Dacite porphyry. Intensely foliated + altered. Pale grey. Strong ser alt. 1-5% disem and vein qtz Silica - qtz stringer vein. Mylonite		
130								
140								
150								
EOH						EA	TAQC	59.

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD22

SHEET OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6751150

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
160						2% diseminated py. py stringers ... w.		
170		FCA = 10 0 45						
180						Finer grained qtz phenos 179.5 Qtz porphyry + devitrified feldspar - lithic vc area. Deposits possible. Intensely foliated + altered. Qtz-ser-diseminated py. alt. GP	IR	QC 591
190						185.0 Qtz porphyry? Intense ser-py-silica alteration. Mylonitic. Occasional deposits (devitrified vc?). GP	IR	QC 591
200						Coarse qtz phenos		

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHO22

SHEET OF

PROJECT	: 5th Henry
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6751160

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/8, 1/4, 1, 4, 16, 32)	ALTERATION (SIL, SER, PY)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
200								
						204 Qtz porphyry. Intense overall disseminated py ~1-2% (up to 5%). Includes ? dacite vessel? and minor silicification. Patchy Ep	TRQC	54
210								
220								
230								
240						239.6		

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SH022

SHEET OF

PROJECT	: 5th Hady
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6751661

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
240						Qtz porphyry. Large qtz phenos in matrix of intense sericite-silica-py alt. Strongly foliated. Bleached and silicified Calcite veins. EP	IRQC	591
250						248.2 Qtz porphyry. Large qtz phenos in matrix of intense ser-silica-py alt. Strongly foliated Py veins EP	IRQC	591
260								
270								
280								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No GHO22

SHEET OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

6251669

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
280					SIL. SER. PY.			
						293.5 Broken & intensely foliated Qtz porphyry. Ser-py alt. Ep		
						Qtz porphyry. Large Qtz phenos in intensely foliated ser-dissem py matrix. Pale grey colour. Ep	IR	QC 591
290								
						298-6 Qtz vein/Fault. 299-4	FAC	
300						Qtz porphyry. Intense ser alteration. dissem py + py veins. Some Cpy veins. Ep	IR	QC 59
						302.4 Qtz porphyry. Intense ser. alt. dissem py + py veins. Broken along foliation. Ep	IR	QC 591
310								
320								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD22

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION
320										
330										
340								344 Broken faulted Qtz porphyry. 346.6 Qtz porphyry. Silicified. large qtz phenos in intense ser-silica-disrem py altered matrix. Pale grey. Intensely foliated. Disseminated Py + Py veins. EP	FALT IR QC	39f
350										
360										

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHD22

SHEET OF

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

6251964

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CO_3, Chl.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
360								
370						← Qtz		
380						379 Qtz porphyry. CO_3-ser alt. Pale cream. Ep 380.6 Qtz porphyry. ser-disscm Py ← Qtz alt. Pale grey. Py veins. Ep	IR QC	C7
						Ep	IR QC	591
390						392.4 chl. altered qtz porphyry. Foliated. 1% disscm Py. Minor CO_3. Ep	IR QC	D7
400						398.2 Qtz porphyry. ser-Py alt. Ep	IR QC	591

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SH022

SHEET OF

PROJECT :	5th Henty
PROSPECT :	
DATE :	
LOGGED BY :	T. Callaghan.

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6751165

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY. CO_3 CHL)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
400						Geol 1: Qtz porphyry. chl - diss Py (1%) wk. minor CO_3 alt.	IB	QC
						Geol 2: Qtz porphyry. Pervasive CO_3 - set alt. Weak - mod Py. mod. foliation. Base metal veins	IB	QC
440						Qtz - Py veins. Zones of silica - Py veins		
480								
520								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No
SHEET OF

PROJECT : Mt Leyshon
PROSPECT :
DATE :
LOGGED BY : T. Callaghan

— Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6751466

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
460			Brx veins			466 Qtz Porphyry, strong carbonate sericite alteration & 1-2% fine veinlets. Py veins + dissem. Ep	IRQC	Cl
470						469.8 Qtz porphyry. chl-ser-CO_3 all. Ep 471 Qtz porphyry CO_3-ser all. Ep 472 & 473 Broken, foliated QCV. Intense All. 473.6 Intense silica-ser alt (chl+) & CO_3-chl all. + Py & chl halos. Minor sulphides. Oxidised pumice 473.6 Cvc Some sphal-galena.	FALT VOLP	Cl Qtz
480			PCA ≈20°			473.6 Qtz porphyry silica-ser-py all, totally Ep 474.4 Oxidise-pumice Brax. Intense silica-ser alt. chl patches. Py & chl halos. CCV 476 Massive Qtz phyric Suite II porphyry. Pervasive chl alt. Minor ser - 1% dissem. Py Ep	IRQC VOLP IRQC	Sph Qtz Qtz

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE NO

SHEET OF

PROJECT	:
PROSPECT	:
DATE	:
LOGGED BY	:

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
490						490 Qtz phyric sericite porphyry. Strong silica-clay alt. Minor ser. 2-5% disem py + 1-2% qtz calcite veins + disem. ep	IRQC	Q9
490						491 Dacite-pumice lithic vc Brxx clasts of dacite lava, vc ss/b pumice. Intensely foliated. Ccv Intense silica-py alt. Minor 495.4 clay. 10% py Finely laminated volcanoclastic vc ss/b. Intense silica-py alt. Py bands Ccs	VOLB VOVA	Q9 Q9
500			Massive Qtz vein			← Massive qtz vein		
						502 Qtz phyric porphyry. silica-ser-pyalt. ep 502.5 Laminated vc ss/ss/b. Intense silica-py alt. Py bands Ccv 506.9 Massive, dacitic lithic vc Brxx. Intense silica-ser-py alt. Ccv 506.9 Massive, Polymict, matrix supported vc Brxx. Dacitic. strong silica-chl alt. CO_3 clots & spot-gal replacement. Disem py. Ccv	IRQC VOVA VOLB	Q9 Q9 Q9 Q7
510						512.9 Puggy fault. 513.2 Dacitic lithic vc Brxx. Intense silica-py alt. 710-15% Py Ccv	FALT VOLB	Q7
						517. Dacitic lithic vc Brxx. chl alt. clasts. CO_3-ser alt matrix. Py clots & chl bands. Ccv 519 Qtz porphyry ep	VOLB IRQC	C81 Q9
520								

REMARKS

5 cm

675167

RGC EXPLORATION PTY LTD

DRILL HOLE No 5320

SHEET OF

PROJECT : 5th Hanky

PROSPECT :

DATE :

LOGGED BY : T. Callaghan

6751688

— Bedding
⌴ Cleavage
⌴ Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY
520						Intrusive / porphyritic contact ⊂ Dacitic lithic vc breccia. large Qtz phenos Pervasive silica - to - py alt.	
530						530-7 Buggy brittle fault. 532.6 Massive, dacitic lithic vc breccia strong CO_3 - chl alt ⊃ set veins and <1% disem py.	FAULT ROCK ALTERATION
						538 buggy brittle fault. 539 Dacitic lithic vc breccia Pervasive CO_3 - silica alt. ⊃ domainal chl. alt. <1% disem py. set veins. Minor Qtz porphyry intrusive. large (1-2cm clots of CO_3 and minor sphal - galena)	
540							
550							
560							

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No 5910c

SHEET OF

PROJECT : 5th Hunter

PROSPECT :

DATE :

LOGGED BY : T. Callaghan

675169

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION (SIL. SER. PY. CHL.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
560								
570						567.6 Intense, texture destructive silica-ser-py alteration, probably Possibly dacitic lithic breccia protolith?? Ccv VOLC Q9		
580						578.3 Dacitic-lithic VC sst & clasts to 1cm. Intense ser-py alt. Some MP. Ccv VOLC-M Sa 580.6 Intensely silicified, py veined (disseminated (5-10%) Dacitic lithic VC brxx. Ccv VOLC Q9f		
590						588.8 Clast supported dacitic lithic VC brxx. rounded clasts & fdd phyric dacite. Ccv VOLC Q8 ser-py alt. 590.7 Massive, graded, dacitic lithic flow brxx. Dacitic lithic clasts. Intense silica-ser-py alt. Coarser base most silicified. Top more ser-py alt. Ccv VOLC Q8		
600								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SHO22

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌴ Cleavage
— Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6755170

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/8, 1/4, 1, 4, 16, 32)	ALTERATION (SIL., SER., PY., CO3)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
600						602.1 massive graded dacitic mass flow. Inplace silica-ser-py alt. More silica alt base. Cav	VLC	B
						606.4 Massive graded dacitic lithic VC brxx. Inplace silica-ser-py alt. Cav	VOLC	B
610						609.7 Massive, graded, dacitic lithic VC brxx. less intense silica, ser-py alt. Minor Qtz porphyry intrusion. Minor, localised CO_3 spotting. Cav	VOLC	B
						EOH = 616		
620								

REMARKS

5 cm

Hole_Id	AMG East	AMG North	AMG RL	Total Depth	Geologist
SHD25	381168.00	5357931.00	525.00	367.00	TC

Hole_Id	Depth	Local Azimuth	al (AMG) A	Dip	
SHD25	0.00	273.00	273.00	-61.2	
SHD25	31.00	273.00	273.00	-61.2	
SHD25	61.00	271.00	271.00	-60	
SHD25	91.00	272.00	272.00	-59	
SHD25	121.00	274.00	274.00	-58	
SHD25	151.00	274.00	274.00	-57	
SHD25	181.00	269.00	269.00	-54.5	
SHD25	211.00	270.00	270.00	-53.1	
SHD25	241.00	270.00	270.00	-52	
SHD25	271.00	273.00	273.00	-51	
SHD25	301.00	271.00	271.00	-48.8	
SHD25	331.00	273.00	273.00	-47	
SHD25	361.00	276.00	276.00	-46	

Hole_Id	Sample No	From	To	AG_A	AS_A	AU_G	CU_A	P_X	PB_A	TI_X	V_X	ZN_A	ZR_X
SHD25	1081877	182.00	185.00	2	-50	-0.01	96		599			140	
SHD25	1081878	185.00	187.00	1	-50	-0.01	16		3			210	
SHD25	1081879	187.00	189.00	-1	-50	-0.01	10		8			189	
SHD25	1081881	201.00	203.00	1	-50	-0.01	4		28			188	
SHD25	1081882	203.00	205.00	1	-50	-0.01	6		25			156	
SHD25	1081883	205.00	207.00	1	-50	-0.01	56		26			127	
SHD25	1081884	207.00	209.00	-1	-50	-0.01	49		29			68	
SHD25	1081885	209.00	211.00	-1	-50	-0.01	12		27			87	
SHD25	1081886	220.00	222.00	-1	-50	-0.01	63		18			87	
SHD25	1081887	254.00	256.00	1	-50	-0.01	10		14			69	
SHD25	1081888	256.00	258.00	1	-50	-0.01	62		10			76	
SHD25	1081889	258.00	260.00	1	-50	-0.01	56		-3			65	
SHD25	1081890	260.00	262.00	1	-50	-0.01	17		6			54	
SHD25	1081891	262.00	264.00	-1	-50	-0.01	23		8			56	
SHD25	1081892	275.00	277.00	-1	-50	-0.01	38		10			94	
SHD25	1081893	322.00	324.00	1	-50	-0.01	6		12			80	
SHD25	1081894	324.00	326.00	1	-50	-0.01	5		3			69	

675173

RGC EXPLORATION PTY LTD

DRILL HOLE No : 5H025

SHEET _____ OF _____

— Bedding	Disseminated
⌊ Cleavage	Massive
▲ Foliation	Pervasive
~~ Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT	: 5th Heaty
PROSPECT	:
DATE	: 18-1-00
LOGGED BY	: T. Callaghan

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION (SIL. SER. PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
0			No core.			No core recovery.		
			very poor core recovery to 13m			4.2 Weathered and broken feld-qtz xtal lithic vc Breccia. Dominant pink albitic alteration ± chloritised bands + lithics. Comstock tuff ∈tt	VR	xB A7
10						13.0m Massive, matrix supported feld-qtz xtal-lithic vc Brxx. Large, fine grained cherty lithics. Dominant Alb-chl alt. Alb halo around chl alt. lithics. comstock tuff. ∈tt	VR	LB A7c
20						19.3m Massive, feld xtal rich - lithic vc Brxx. Pervasive chl alt. ± chl alt lithics + minor mafic xtals. Alb halos around lithics. ∈tl Lynchford Member	VA	xB O6
						24.9 Dark green, feld xtal rich vc sst. Minor lithics and 5% chl altered mafics. Pervasive chloritic alteration. ∈tl	VA	xM O6
30								
40								

REMARKS

5 cm

6751174

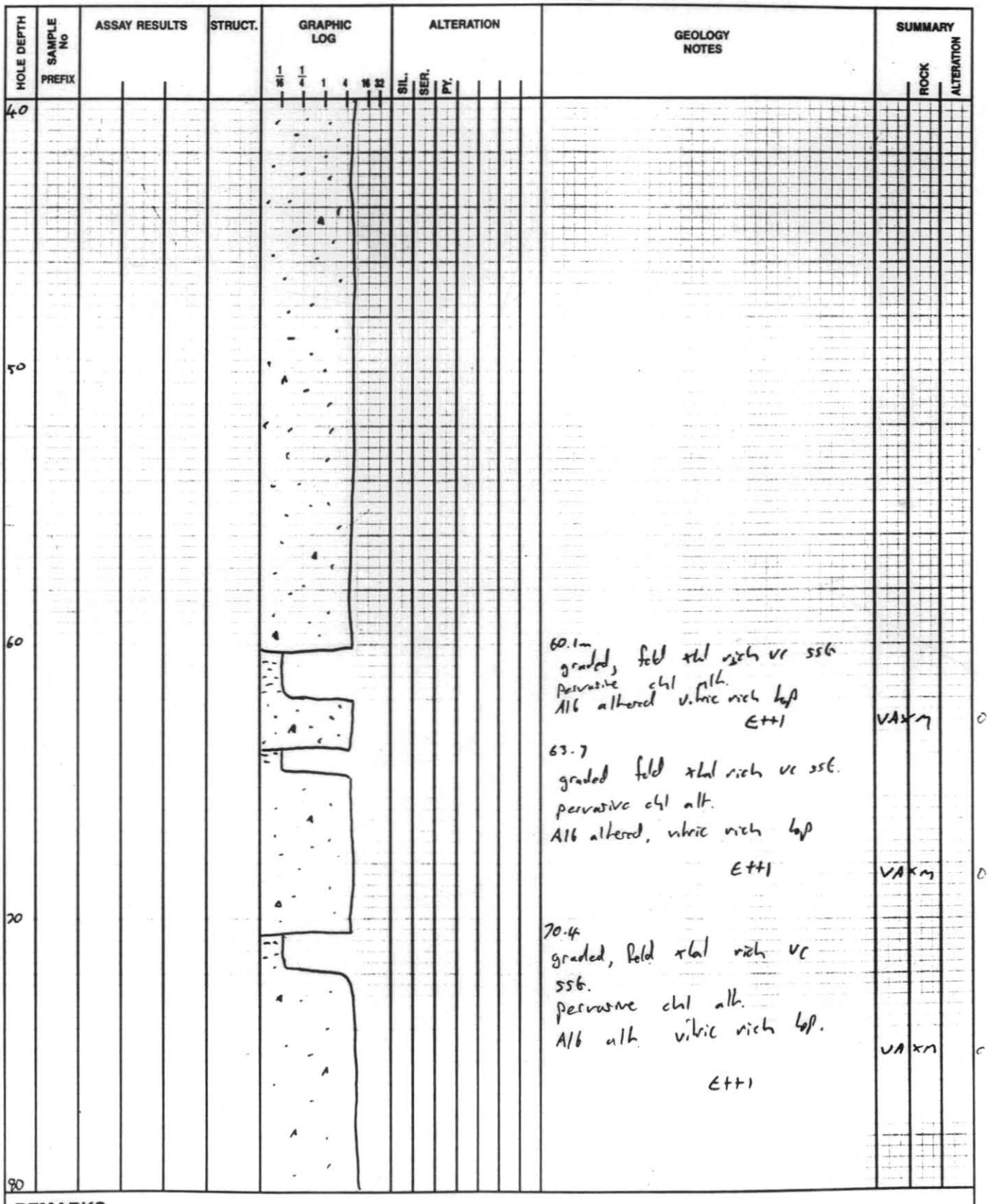
RGC EXPLORATION PTY LTD

DRILL HOLE No SH026

SHEET _____ OF _____

PROJECT	: 5th Henty
PROSPECT	:
DATE	: 18-1-00
LOGGED BY	: T. Callaghan

- Bedding
- Cleavage
- Foliation
- Fault, Shear
- Breccia
- Broken core
- Disseminated
- Massive
- Pervasive
- Narrow vein
- * Visible gold



REMARKS

5 cm

675175

RGC EXPLORATION PTY LTD

DRILL HOLE No SH025

SHEET OF

Bedding | Cleavage | Foliation | Fault, Shear | Breccia | Broken core

Disseminated | Massive | Pervasive | Narrow vein | * Visible gold

PROJECT	: 5th Hourly
PROSPECT	:
DATE	: 18-1-00
LOGGED BY	: T. Cullyk

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION
80			Broken core.					80.2 Feld xtal rich VC 55t. Pervasive chl alt. Broken core. Large albite altered rhyolite clasts at base.		
90								93.4 fine grained v.lithic rich VC siltstone / 55t. ETS	VA VM	01
			Core loss.					96.0 Feld xtal rich VC 55t. Very poor core recovery ETH1	VA M	01
100								99.0 massive, feld xtal rich VC 55t. Alb+ -chl banding. ETH1	VA M	01
								103.6 graded, feld xtal rich VC 55t Alb-chl banding ETH1	VA M	01
								109.6 graded feld xtal rich VC 55t. ETH1	VA M	01
120								110.2 Massive, graded, feldspar xtal rich VC 55t. Lithic rich base. Alb-chl banding. Alb halos around lithics. ETH1	VA M	01

REMARKS

5 cm

675176

RGC EXPLORATION PTY LTD

DRILL HOLE No SH025

SHEET _____ OF _____

PROJECT :	5th Henry
PROSPECT :	
DATE :	
LOGGED BY :	T. Callaghan

— Bedding
⌊ Cleavage
▲ Foliation
~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION	
120											
130								132.3 Massive, graded, feld xtal-lithic vc ss/Brxx. matrix supported, clast rich base. Albite-chlorite bleaching at top. Albite halos around clasts.	Chl	VALB	DL
140								143.0 Massive, fel xtal rich vc Brxx. Alb-chl alt.	Chl	VAlm	AG
150								147.6 Massive, feld xtal-lithic Breccia. graded. Albite-chlorite alteration.	Chl	VALB	OS
160											

REMARKS

5 cm

675177

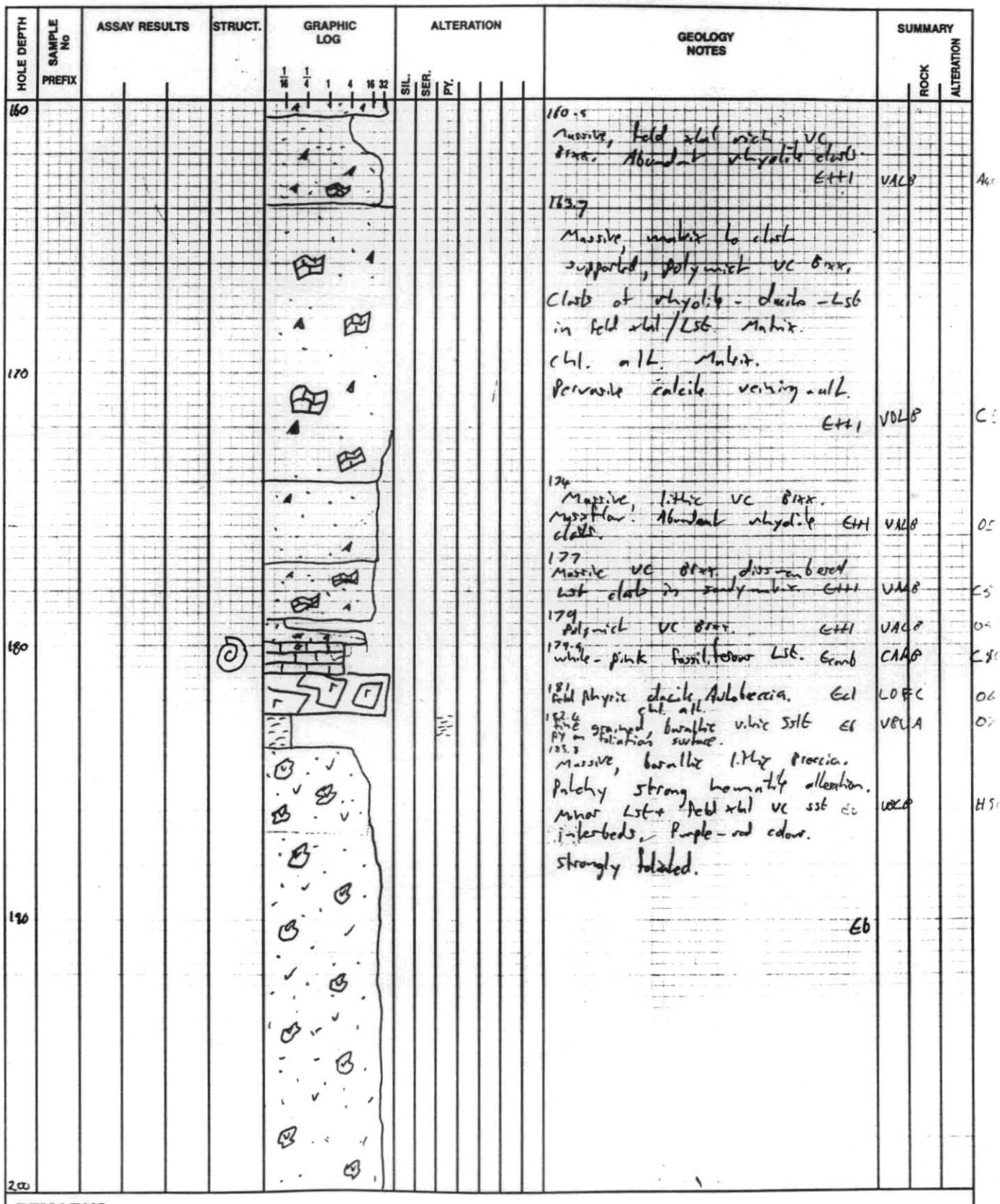
RGC EXPLORATION PTY LTD

DRILL HOLE No SH025

SHEET _____ OF _____

Bedding	Disseminated
Cleavage	Massive
Foliation	Pervasive
Fault, Shear	Narrow vein
Breccia	* Visible gold
Broken core	

PROJECT :	5th Hourly
PROSPECT :	
DATE :	
LOGGED BY :	T. Callaghan



REMARKS

5 cm

675178

RGC EXPLORATION PTY LTD

DRILL HOLE No SH025

SHEET _____ OF _____

PROJECT :	5th Henty
PROSPECT :	
DATE :	
LOGGED BY :	T. Callaghan.

— Bedding
└ Cleavage
— Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 32)	ALTERATION SIL.	SER.	PY.	GEOLOGY NOTES	SUMMARY ROCK	ALTERATION	
200								Eb	VBLB		HSC
								204.0 Carbonate - basaltic lithic breccia + Lst. Dominantly Carbonate clasts. Pink, purple white. Hematite - calcite altered. Some fossiliferous clasts. Possibly some Basic veins ??			
210								Ecarb	CBBx		H7
			Core loss.					215.4 Broken core. Core loss.	FAGT		
								217.1 Massive, purple basaltic lithic breccia ± white Lst clasts and bands. Hematite alt. Eb	VBLB		HSC
220								222 / 222.8 Lst/basaltic SSb. Ecarb	CARB		C
								Massive basaltic lithic Brec ± CO_3 clasts. Hematite alt Eb	VBLB		
								224.8 white sty/gl.lic limestone. Minor hematitised basalt. Ecarb	CARB		C/
								226.4 Purple + green basaltic lithic VC Breccia. Occasional Lst clasts. Hematite + chl. alteration. Eb	VBLB		HSC
230								233.2 Calcareous volcaniclastic SSb. Lst. impregnated. basaltic VC. Ecarb	CARB		C
								234.8 Massive purple and green basaltic lithic VC Brec. 5% calcite veins + Impregnations. Hematite alteration Eb	VBLB		H7
240											

REMARKS

5 cm
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6751.9

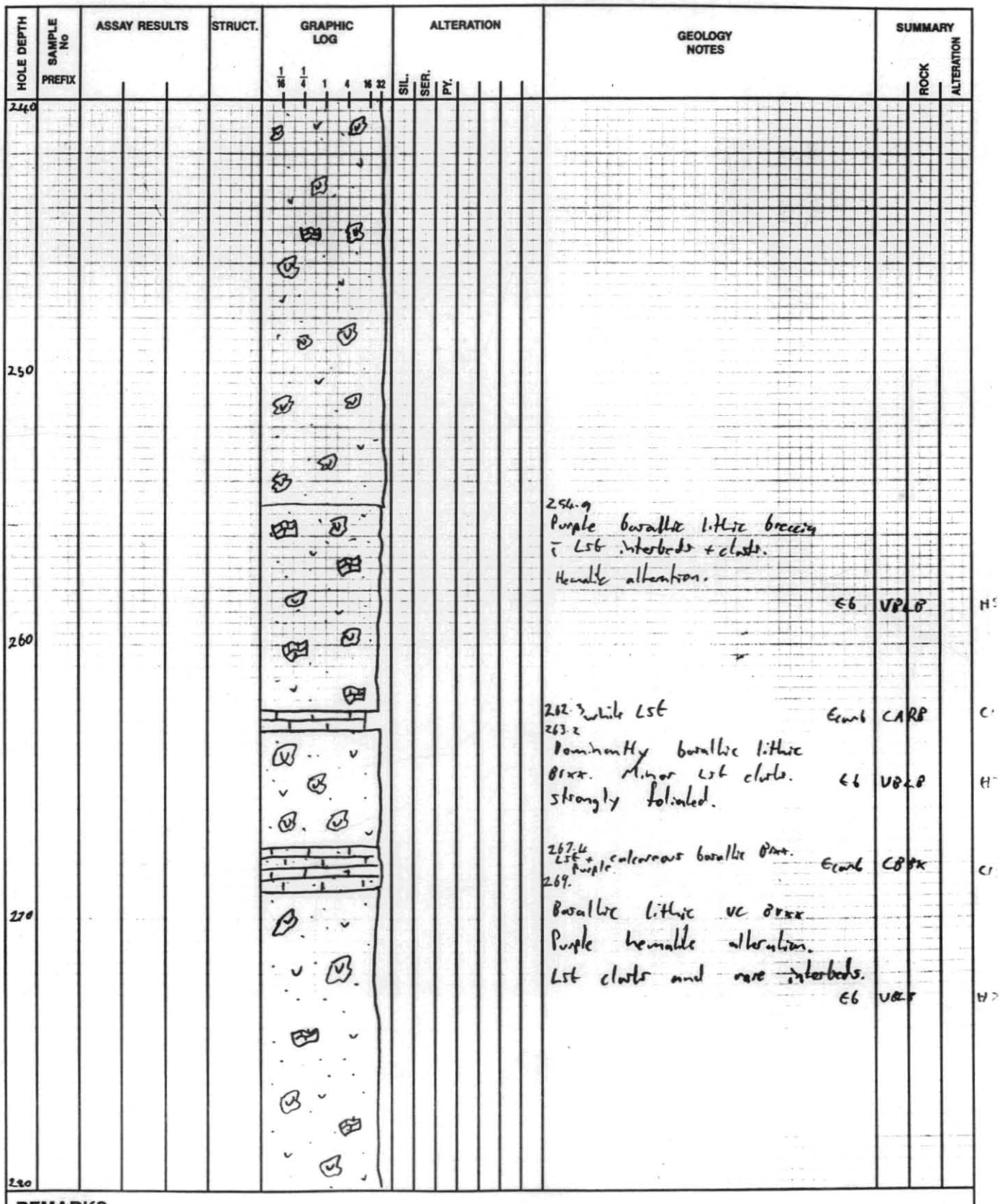
RGC EXPLORATION PTY LTD

DRILL HOLE No SH025

SHEET ____ OF ____

PROJECT :	5th Henty
PROSPECT :	
DATE :	
LOGGED BY :	T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold



REMARKS

5 cm

675180

RGC EXPLORATION PTY LTD

DRILL HOLE No SH026

SHEET _____ OF _____

PROJECT	: Sth Henty
PROSPECT	:
DATE	:
LOGGED BY	: T. Callaghan

— Bedding
⌊ Cleavage
— Foliation
~~~ Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1/16, 1/4, 1, 4, 16, 22)	ALTERATION (SIL. SER. PY.)	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
280						286.8 Basaltic lithic vc tst/lapp. Banded chl-hematite alteration. Foliated. Minor CO_3.		
290								
							E6	VOLM
						297 Massive, basaltic lithic breccia ± LSt clasts and minor LSt bands. Pervasive, purple hematite alteration.		
							E6	VOLM
300								
310								
			~~			314 Ab-epidote-hematite vein. 319-4 Fels phyric Andesite breccia. Hematite altered ferromags. Mylonitic tst breccia. Possibly some Peperite ± basalt breccia??	VEIN E4	IA FL
320								

REMARKS

5 cm
~~~

RGC EXPLORATION PTY LTD

DRILL HOLE No 1SH025

SHEET OF

PROJECT : Stt Healy

PROSPECT :

DATE :

LOGGED BY : T. Callaghan

Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

6751181

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG	ALTERATION	GEOLOGY NOTES	SUMMARY ROCK	SUMMARY ALTERATION
330						333 Massive foliated with carbonate and pyrite breccia. Zoned calcite filling vughs!! 335.2 Dominantly feldspar phyric Andesite. Purple groundmass & purple hematite altered feldspars. Abundant calcite veins, carbonate breccia 10-20% Peperitic inclusion of LSB, basally clastic volcaniclastic and intrusive sills/dykes. ← Epidote veins.		
340								
350								
360								

REMARKS

5 cm

RGC EXPLORATION PTY LTD

DRILL HOLE No SH025

SHEET OF

PROJECT

PROSPECT

DATE

LOGGED BY : T. Callaghan

— Bedding
Cleavage
Foliation
Fault, Shear
Breccia
Broken core
Disseminated
Massive
Pervasive
Narrow vein
* Visible gold

HOLE DEPTH	SAMPLE No PREFIX	ASSAY RESULTS	STRUCT.	GRAPHIC LOG (1M, 1/4, 1, 4, M 22)	ALTERATION (SIL, SER, PY.)	GEOLOGY NOTES	SUMMARY (ROCK, ALTERATION)
360							
						337.0 EOH	
350							

REMARKS

5 cm

675182

Appendix 2

01-4575A

675183

Flagstaff GeoConsultants

Hugh Rutter	Geophysicist
Geof Fethers	Geologist
Nigel Hungerford	Geophysicist
Paul Hamlyn	Geologist
Michael Asten	Geophysicist
Ross Caughey	Geologist
Alaster Edwards	Geologist

Report 0004/1 for

GOLDFIELDS EXPLORATION

CSAMT Surveys and Re-interpretation of IP profiles, South Henty (W. Tas) EL 8/96

Michael W Asten
Flagstaff GeoConsultants Pty Ltd

26 April 2000

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APPENDIX 2 - CONTENTS

DATA SUPPLIED

INTRODUCTION

PLOTS PRESENTED

INTERPRETATION

RE-INTERPRETATION OF McPHAR (1967) DIPOLE – DIPOLE IP DATA

COMMENTS ON LINE DATA

Line 5356200N & IP Line 14N
Line 5356600N & IP Lines 14N, 16N
Line 5357000N & IP Lines 16N – 18N
Line 5357400N & IP Lines 18N – 20N
Line 5357800N & IP Lines 20N – 22N
Line 5358200N & IP Lines 22N – 24N
Line 5358600N & IP Lines 24N – 26N
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RECOMMENDATION FOR FURTHER GEOPHYSICAL SURVEYS

DRILL RECOMMENDATIONS

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1. Set of plots of CSAMT Cagniard resistivites vs. frequency, and Bostick resistivity vs. Depth, for each Line surveyed.
2. Set of plots of ID inversion of resistivity vs. depth, for each Line surveyed. (By Zonge Engineering)
   Sub-set of plots of 2D inversion of resistivity vs. depth, for Lines 5358200N to 5359800N. (by Zonge Engineering)
3. Set of plots of dipole-dipole resistivity and IP field data, and 2D inversion to depth, For each IP Line surveyed by McPhar, 1967.

675185

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LIST OF PLATES

1. South Henty EL 8/96 – Depth Slice top 50m, draped on topography
2. Frequency Slice 2048 Hz
3. Frequency Slice 1024 Hz
4. Frequency Slice 512 Hz
5. Depth Slice 200m below topographic maximum ie at RL = + 360M
6. Depth Slice 300m below topographic maximum ie at RL = + 360M
7. South Henty EL 8/96 – Conductive trends interpreted from CSAMT surveys
8. South Henty EL 8/96 – Conductive & IP basement anomalies and trends, interpreted from the inversion of dipole-dipole IP data.
9. South Henty EL 8/96 – Conductive trends interpreted from CSAMT surveys, with conductive and IP trends from dipole-dipole IP surveys, superimposed.

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DATA SUPPLIED

CSAMT data was acquired on EL 8/96 by Zonge Engineering as contractors to Goldfields Ltd, in 1999. This CSAMT data complements surveys covering the Basin Lake area (EL 19/98) to the south, reported in Asten (1999) and Hill and Vicary (1999). Data was supplied by the contractor as digital AVG files, and digital files of 1D inversions.

The re-interpretation of dipole-dipole resistivity and chargeability data uses information from surveys conducted by McPhar Geophysics (1967). The data were digitised from original pseudo-sections provided by McPhar in 1967. The resistivity and IP data was inverted using the University of British Columbia 2D inversion software (Oldenburg et al, 1994). A base map at scale 1:5000, showing locations of the Lines on the Mt Tyndall East grid, as drawn by the MLM&R in 1982, was used as the primary geographic reference.

Sketches of for selected boreholes were provided by T. Callaghan, and are included in Figures 1-8 of this report.

INTRODUCTION

The historical data and known geology is described by Dauth (1999). The new CSAMT survey (Zonge Job 426) was commissioned by Goldfields Ltd and covered 14 east-west lines, from 5356200N to 5362000N (spacing 400 m). The lines averaged 1500 m length and used 50 m receiver electric dipoles. The transmitter bipole was east-west, length 1875 m, with centre located at 380038E, 5350600N. At the southern end, the data partially overlaps earlier data acquired by Billiton on Lines 5356200N and 5357000N. Transmitter frequencies from 8192 Hz to 32 Hz were used; lower frequencies used in the earlier Billiton survey were judged to add no useful information, being clearly in the "near-field" in this resistive terrain.

Data was supplied by the contractor as AVG files, ie as Cagniard resistivities averaged in time but with no spatial filtering. The data was then converted to full AMG coordinates and filtered using the EMAP process (Torres-Verdin and Bostick, 1992) by this author. The EMAP filtering process gives a dramatic reduction in magneto-telluric static effects, which makes interpretation of the data via resistivity-frequency pseudo-sections significantly more reliable (Asten 1999).

The EMAP filtered data was then transformed to resistivity-depth parasections, using the Bostick transform (Jones, 1983). While the Bostick transform is a one-dimensional (layered-earth) transform, when coupled with EMAP filtering it gives results close to two dimensional inversion (Torres-Verdin and Bostick, 1992).

A significant constraint on interpretation of this data is that the transisition zone for the controlled source occurs at 1024Hz or 512Hz, and much of the data acquired at

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frequencies 256 Hz and below is in the near field. This means that the intrinsic depth sensitivity of the CSAMT data is lost at these lower frequencies, and the Bostick transform becomes a weaker approximation for the purpose of extracting resistivity and depth data.

The CSAMT data also suffers from significant noise problems particularly (but not only) in the vicinity of a high-tension power line crossing the entire EL (north to south). Such noise sources make it necessary to delete selected frequency points from the data (via the "skip-flag" with Zonge file format). Some time was spent in discussion with Zonge personnel in order to exclude such data prior to EMAP filtering.

In addition to Bostick transformation, the EMAP-filtered data was inverted to resistivity-depth parasections by Zonge, using their proprietary 1D smooth-model inversion algorithm. This process has the advantage of retaining validity for transition-zone and near-field data, and it produces more stable resistivity estimates than the Bostick transformation. However the method appears to be poorer than the Bostick method in imaging up dipping conductors. Thus the optimum interpretation process is to view the data via both Bostick and smooth-model inversions.

Selected profiles (Lines 5358200N to 5359800N) have also been processed by Zonge using a proprietary 2D smooth-model inversion algorithm. The results of 2D inversion are limited by the fact that the 2D algorithm (like the Bostick transform) cannot process near-field data.

Plots of pseudo-sections of Cagniard resistivities, plus parasections of Bostick resistivities,were produced for each surveyed line, at scale 1:5000. These plots, reduced to A3 size, are included in this report as APPENDIX 1. Plots of 1D inversions and 2D inversions produced by the Contractor, are included in APPENDIX 2.

PLOTS PRESENTED

For each survey line, plots of EMAP-filtered resistivities, raw Bostick resistivities and depths, and Bostick resistivities interpolated over depth are presented. These are at scale 1:5000, and are included in this report as a PowerPoint file (Office 97 format). The plots are also included as hardcopy prints, reduced to A3 pages, in APPENDIX 1.

The 1D inversions produced by the contractor are also included at scale 1:5000 (digital files) and reduced to A3 pages in this report, in APPENDIX 2.

Parasections of raw Bostick resistivities show symbols giving depth estimates of resistivity solutions at each frequency. These symbols are colour-coded for resistivity using the same scale as that used for the contoured resistivity in the plots of interpolated Bostick resistivity. Some Bostick resistivities have poor confidence due to the apparent resistivity-frequency curve violating alowable slopes (+-1). This

phenomenon is usually due to noisy data; such Bostick solutions are identified on the plots by crosses or + symbols within the raw Bostick resistivity box symbol.

Two types of plan-view presentations of the data are included. Frequency slices of EMAP-filtered resistivities are a useful stable method of showing resistivities at near surface (using 8192 or 4096 Hz) or at depths in the range 300-500m (using 1024 or 512 Hz).

Depth slices of Bostick resistivities give better resolution of variation of resistivity with depth, but these products tend to be noisy, since "bad" resistivity estimates corrupted by noise give "bulls-eyes" of high or low resistivity estimates, especially in the vicinity of power lines. Depth slices are presented for depths corrected for topographic variations referred to the maximum elevation of 560 m, hence depth slices 200, 300, and 400m correspond to RLs of +360, +260, and +160m RL. (NB the maximum elevation of 560 m for this survey, differs from the maximum elevation of 660m which was used as a reference in re-processing the earlier Billiton CSASMT data, as reported in Asten, 1999).

All plan-view images and maps are presented at scale 1:10,000, as PLATES 1-9.

INTERPRETATION

The most useful map product for interpretation of near-surface geology is the top-most "depth-slice" draped on topography (PLATE 1). This is essentially the same as a frequency-slice of resistivities at 8192 Hz, with fill in from lower frequencies where 8192 Hz data does not exist.

Note that the lateral resolution of the CSAMT method is limited by the wavelength of EM radiation measured. Lateral resolution is of similar order to depth penetration; for rocks of 1000 ohm.m resistivity, such resolution is of order 120 m, 250 m and 500 m, for frequencies 8192 Hz, 2048 Hz and 512 Hz respectively. Thus we cannot expect to literally outline the margins of outcropping siltstones with tens of metres of thickness. Rather we expect the CSAMT method to show a thin good conductor as a broad zone of moderate conductivity.

Near-surface conductive trends can be identified from high-frequency CSAMT images of Cagniard resistivities, or equivalently from a depth-slice at 50 m of the Bostick resistivities – see Plate 1. These near-surface zones are marked in red on PLATE 7, and probably represent sub-cropping zones of conductive alteration or black siltstones.

Seven zones of conductors extending to depths greater than 100 m are identified.

Zones 1 and 2: This is the major geophysical feature of the prospect, being dominant on both CSAMT and IP images. The zone correlates with mapped andesitic to basaltic lavas, frequently containing significant sericite-pyrite alteration. In particular

the zone of active drilling bounded by holes SHD1, SHD2, SHD20 and SHD22 lies within this zone.

In Zone 2, there is a 400x400 m area showing consistent anomalous conductivity which extends from surface to the limit of the survey (order 500m); this zone is north of SHD2 and has been drilled by SHD16, which returned the most intense alteration and trace mineralization of any hole to date.

In the north of Zone 1, there is a very similar conductive zone which appears un-tested by drilling; this zone is centred 300 m south of the collar of SHD22.

Zone 3: Interpretation of depth slices and parasections of Bostick resistivity requires some caution, since the algorithm is affected significantly by noise (a problem with this survey, especially from power-lines) and by the transition from far to near field in CSAMT wave propagation (also a problem here, due to the high background resistivities). "Bulls eyes" are unlikely to be significant (since they are often caused by noise in the data affecting the transform maths) but conductive trends with consistency from line to line are of interest. Reference to parasections is also necessary, due to the fact that the "transition-zone notch" gives low apparent resistivities when the CSAMT data lies in the transition-zone; the presence of this notch can be misleading when interpreting conductors at depth.

Subject to this cautionary comment, it is interesting that depth slices show the zone 1 conductor displaced to the west in the vicinity of line 5357800N, marked on PLATE 7 as Zone 3. This zone has not been drill tested (other than by short holes SHD3,4,5 and 7, which encountered volcanics with weak disseminated pyrite in foliated sericitic alteration.

Zone 4: This is imaged best in depth slices of Bostick resistivity. The same cautionary note applies as with Zone 3, but the zone is significant because it may represent a conductive alteration system at 200+ m depth. The north end of this zone has been tested by hole YNC12, which showed weakly disseminated pyritic alteration. Further study of the geophysics of this zone, and a further drill testing, is recommended.

Zone 5: This zone lies at the eastern end of lines 5357800N-5358600N, and is in the vicinity of a power line. While efforts have been made in re-processing the data to remove points affected by powerline noise, it is likely that noise is still affecting this data. Given the lack of line-to-line continuity of this zone, it requires verification with further geophysics using new noise-reduction technology, before a drill target can be sited with confidence.

Zone 6: This zone is at the west end of line 5360600N, and probably off the west end of line 5361000N. The position correlates with the South Henty Fault, and with a clearly-defined conductor and basement IP response seen in inversions of the dipole-

dipole IP data. The zone is tested by holes YNC14 and YNC15; YNC14 showed strong to intense pyrite-sericite alteration on the eastern side of the fault.

Zone 7: This zone has a strike length of 1200 m and is best seen on Line 5359800N in depth slices at 200-300 m depth. The trend suffers from high noise (it runs parallel to, but 200 m distant from, a power line) which down-grades it. It has a weak, coincident IP trend, and is close to a mapped E-W fault. This locality is therefore a target for drilling and further study.

RE-INTERPRETATION OF McPHAR (1967) DIPOLE-DIPOLE IP DATA

The re-interpretation of dipole-dipole resistivity and chargeability data uses information from surveys conducted by McPhar Geophysics (1967). The data were digitised from original pseudo-sections provided by McPhar in 1967. All profiles studied used electrode spacings of a=300 ft (90 meters) and transmitter-receiver spacings in the range n=1 to n=4. The resistivity and IP data was inverted using the University of British Columbia 2D inversion software (Oldenburg et al, 1994).

The IP survey used the frequency-domain method, with the unit of IP being percent frequency effect (PFE). Conversion from PFE to chargeability (in millivolts/volt) is of order

chargeabilty = PFE*4 (Asten 1999, Appendix 1).

A base map at scale 1:5000, showing locations of the Lines on the Mt Tyndall East grid, as drawn by the MLM&R in 1982, was used as the primary geographic reference.

Pseudo-sections of field data, plus inversion sections for resistivity and IP were produced at a scale of 1:5000. The plots are included in this report in Appendix 3, reduced to A3 sheets. Note that the unit of distance in all these plots is feet.

The tracks used for the IP survey in 1967 used a highly irregular grid, in feet. The location of endpoints and the coordinate origin for each of the profile lines is shown on PLATE 8.

The lateral position and extent of all basement resistivity lows (ie conductors) and basement IP highs is shown in plan view in PLATE 8, and shown superimposed on CSAMT conductive trends, in PLATE 9. The trends of six polarisable zones, labelled P1 to P6, are identified for further discussion.

Zone P1: This is the zone of greatest interest, and is tested with holes SHD16, SHD21 and others, associated with the best drilling results on the prospect, so far.

Closely follows CSAMT Zone 1 and 2, and is widest (500 m) on 5359000N (IP Line 26N) at the locality of holes SHD1 and SHD2.

Zone P2: A northern extension of P1, along the western edge of CSAMT conductor 1.

Zone P3: A trend displaced to the east of Zone P1; seems associated with occurrences of siltstones Cts in the northern half, but may be associated with the volcaniclastics and tuffaceous unit Cttle in the south.

Zone P4: a weak IP trend, but has some significance being coincident with the CSAMT Zone 4. The IP trend does not extend north to YNC12 (whereas the CSAMT trend does).

Zone P5: This is both conductive and an IP response, and appears to be associated with Ordovician siltstones Coonsh. It is therefore not prospective.

Zone P6: This is both conductive and an IP response, and follows the South Henty Fault. It defines the fault position better than the (insufficient) CSAMT data. The zone is tested by holes YNC14 and YNC15; YNC14 showed strong to intense pyrite-sericite alteration on the eastern side of the fault.

Four drill targets are shown on PLATE 9; detailed discussion follows in discussion of results on a line by line basis.

COMMENTS ON LINE DATA

Line 5356200N and IP Line 14N

A surficial conductor exists east of 380300, to end of CSAMT line at 380600N, but conductivity in the basement is poor. The CSAMT data is noisy (due to power lines?) in this locality. The IP data also shows a surficial conductor, but without IP targets.

Line 5356600N and IP Lines 14N, 16N

CSAMT data is as for line 5356200N. There is an IP target (PFE 5) in the basement, at 380100E, depth 50 –150 m

Line 5357000N and IP Lines 16N-18N

CSAMT data has a similar character to 5356600N. IP data on 18N shows a basement target at 379950E, depth 50-200m, weaker (PFE 4) than the corresponding anomaly to the south. This IP feature represents the northern extent of the IP Zone P4; it does not extend north into any recognisable basement feature on line 20N, but hole YNC12 on line 20N is the nearest hole representing drill-testing of the trend.

This hole intersected weakly disseminated pyritic alteration. A further hole on this trend (to the south) is recommended, since it is probable that the alteration noted in YNC12 increases to the south.

Line 5357400N and IP Lines 18N-20N

The CSAMT data shows a conductive feature at 380600-381000E, depth 300-400m, dipping shallowly east. It is seen on 2048 and 1024 Hz data, and on Bostick resistivities, although the latter are broken up by noise in the data.

The CSAMT conductor coincides with a pair of IP basement conductors at 380600E-381000E (on Line 20N) and 380800E-381200E (Line 18N) forming trends labelled as Zone P1 (west) and Zone P3 (east) on Plate 8. These zones trend NNW and are consistent with geological strike.

Hole HA2 collared at 5357440N 380790E angled west, appears to have tested the Zone P1 IP anomaly exactly; the hole intersected sericite-pyrite alteration in andesitic lavas over its 259 m length (Figure 1a).

Hole HA004 collared at 5357530N 380910E angled east is too far east to test the eastern Zone P3 IP anomaly; the IP target lies vertically below the collar, and may be associated with the fault zone (intersected at 40 m depth in the hole – see Figure 1b). The hole has length of order 400 m and intersected basaltic volcaniclastics from 170 m and below. This hole is deep enough to have tested the deep CSAMT conductor labelled Zone 5 in PLATE 7.

Hole HA5 collared at 5357180N 381040E angled west, appears to have tested the Zone P2 IP anomaly ; the hole intersected volcaniclastic shale at 140 m and a fault in basaltic volcaniclastics at 200 m depth (Figure 2). The hole lies mid-way between the two IP lines 18N and 20N and thus requires about 200 m lateral projection, but it appears that either the intersected shales or the fault zone (the same fault as intersected by HA004) explain the IP response. Laboratory testing of core would be useful here, in order to determine whether the IP response is associated with shale or alteration.

Line 5357800N and IP Lines 20N-22N

As with the previous line, the CSAMT parasection data suggests presence of a deep conductor (300+ m deep) although the noisy nature of the Bostick resistivities means this conclusion cannot be definitive. The IP data again shows two anomalous zones which are interpreted as continuations of zones P1 and P3. Hole HA6 collared at 5357770N 381040E angled west, appears to have tested the Zone P2 IP anomaly ; the hole intersected basaltic volcaniclastics at 60-120 m. (Figure 3). Given the strength of the IP anomaly (PFE >=6) it is surprising that no shale or pyrite alteration was logged for the hole. The hole lies mid-way between the two IP lines 20N and 22N and thus requires about 200 m lateral projection, which leaves some uncertainty in location.

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The hole stops at 250 m, which leaves the model of a deep conductor at 300+ m untested.

Line 5358200N and IP Lines 22N-24N

The strongest CSAMT conductor is at 380600E-380700E, labelled Zone 1. It is the most prominent conductive trend on the prospect, but has not been drill tested at this latitude (hole SHD22 collared 200 m further north, is the nearest. Hole SHD 12 is clearly too far west to test this zone. The IP data shows an anomalous zone (Zone P1) in the same location, depth 50-150 m. In view of results from hole SHD22, this zone is a drilling target; intersection at 5358020N, 380590E, depth 100 m is recommended.

The CSAMT data also indicates a basement weak conductor of interest below 380900E-381100E. The conductor is imaged on all of the frequency pseudosection, Bostick resistivity parasection, 1D smooth model inversion, and 2D smooth model inversion, although the loss of several data points through noise means the shape is unclear. This weak target is at depth 200-300m and is barely evident on the Bostick resistivity depth slice.

The IP data again shows the two zones P1 and P3 of anomalous IP in the basement.

Hole HA003 collared at 380000E appears to have been drilled above both the CSAMT conductor, and the eastern IP target. Thus all the geophysical evidence indicates the need to drill a deep hole under the collar of HA003. This was done and is reported as hole SHD25. Unfortunately hole SHD25 (Figure 5) did not intersect significant alteration, a result which is difficult to explain.

Line 5358600N and IP Lines 24N-26N

CSAMT data is absent for most of this line due to existence of a hydro-power lake. In the east, the CSAMT data shows a conductive zone at depth (200+m) which is the northern-most extent of the Zone 5 conductor. As noted previously, this conductor is poorly defined due to noise problems from power lines, hence the Bostick resistivities are very noisy. Smooth model inversions (both 1D and 2D) show a conductive zone between 381300E and 381400E. The only hole penetrating the zone (HA4 1000 m to the south) failed to find alteration of interest.

IP data (pre-dating the construction of the lake) shows clear anomalies as part of Zones P1 and P3. Zone P1 is tested by SHD22 which confirms existence of a significant alteration system. Zone P3 to the east, and extending to the NNE, corresponds with the location of siltstone units Cts, which may be the source of the IP anomaly.

Line 5359000N and IP Line 26N

The CSAMT data outlines a basement conductor (Zone 1) located between holes SHD2 and SHD1. IP inversions show a coincident IP target (Zone P1), which is the strongest and laterally broadest IP target on the prospect. Drilling and borehole EM surveys show this zone to be a zone which contains sericite-pyrite alteration, and also contains significant offhole conductors which are the target of further drilling. Details are given in Asten (2000).

The CSAMT depth slice at RL 260 m (300m below ground) also suggests a deep conductor at 380800E-381000E (Zone 7). This zone is seen most clearly on lines 5359400N and 5359800N, but it is a poorly defined zone due to high noise levels and possible confusion with transition-zone effects on Bostick resistivities. This conductor is not seen at all on the 1D inversion, but it is strongly imaged on the 2D inversion, hence it cannot be disregarded since it is part of the NNW-trending Zone 7 seen to the north.

Line 5359400N and IP Line 28N

The CSAMT data images show the Zone 1 conductor on frequency slices and depth slices, at 380100E-380300E. The IP zone P1 is reduced relative to line 5359000N, and appears to have split into two discrete anomalous zones at either side of the CSAMT conductor. Holes SHD8 and SHD9 test this anomaly at shallow depths (to 50 m); both holes recorded weakly disseminated pyrite alteration. This target is tested at depth with holes SHD20 and SHD16, as discussed in more detail in borehole EM results in Asten (2000).

The CSAMT data also shows a conductor (Zone 7) between 380700E-380850E. The data is clearly noisy, but the persistence of Zone 7 from line to line gives added credence to Zone 7 as a subject for further investigation.

The eastern IP anomaly on this line at 381000E (Zone P3) does not correspond to the CSAMT anomaly; it appears to correspond in position with mapped siltstones.

Line 5359800N and IP Line 30N

This line marks the northern extent of the CSAMT conductor Zone 2. The inversions show the conductor to be thinner and surficial compared with lines further south. There is some suggestion on the 2D inversion of extension to depth at 379750-379850E. This location corresponds with mapped felsic pyroclastics drilled by holes YNC4, 7, 8, and 11. Hole YNC4 appears to have tested the zone, and found sericite-pyrite-chlorite alteration in felsic volcanics Ccvi, over an interval of 30 m (Figure 6).

The IP zone P2 is weak, outcrops at 380000E, and hence appears to correlate with a different rock unit, possibly basaltic volcanics. **This IP zone P2 remains untested by drilling.**

The most interesting anomaly on this line is a deep anomaly (200-300 m deep) extending from 380400E to 380700+E as CSAMT Zone 7. It is imaged by all of the Bostick, 1D and 2D inversions, and is the best expression on the prospect of Zone 7. It does not have an IP expression on line 30N to the north, but aligns with a significant northward extension of Zone P1 seen on line 28N to the south. Given the presence of mapped E-W faults with a sinistral displacement (possible plumbing) in the vicinity of this line 5359800N, this Zone 7 CSAMT anomaly (and the north arm of IP Zone P1 to the south) require drill-testing. This locality is the best possibility for a repetition of the conductive alteration/mineralization existing between holes SHD1 and 2.

Hole SHD6 (length 250 m, dip 40-30degrees) passes over the top of this conductor; the hole ended in basaltic volcanoclastics which leaves the possibility of favourable felsic volcanics being located nearby at greater depth (Vicary, personal communication). A new hole under hole SHD6 is recommended.

Line 5360200N and IP Lines 30N-32N

The CSAMT data suffers badly from noise at three locations on this line. There is evidence in the depth slices for continuation of the Zone 7 conductor at depths 200-300 m (380300E-380500E on a NNW trend from the drill target identified to the south).

IP data shows two anomalous zones – P2 at 380000E and P5 at 380800N. The IP zone P2 is weak (PFE 3.5) but distinct, and it lies east of the collar of hole YNC4 (Figure 6). This zone is untested by drilling, and a hole under YNC7 is recommended. Note that this line lies on the northern side of a mapped east-west fault, whereas the IP Zone P2 and drill target are on the south side of this fault.

The IP Zone P5 follows mapped Ordovian siltstones and, while strong (PFE >5.5 on Line 32N) it is not regarded as prospective.

Lines 53560600N, 5361000N, 53562000N and IP Lines 34N-36N-38N

These are short lines for the CSAMT survey, designed to look for geophysical evidence for the Mt Julia mineralization. The data quality is limited by noise, and hence no inducation of the deep Mt Julia mineralization can be seen. However the data does map the South Henty fault (at the extreme west of line 5360600N and beyond the end of 5361000N) as a surficial conductor with the high frequencies, see Plate 1.

The IP data maps the South Henty fault as a strong IP target (Zone 6) with PFE 4 to 6+, and also as a conductor. The IP response is greatest on Line 34N where basaltic

and felsic volcanics are mapped. The zone is tested with holes YNC15 and YNC14 (Figure 7) which intersected a thick shear zone corresponding to the fault, with intense sericite-pyrite alteration in volcanics on the eastern side of the fault.

RECOMMENDATION FOR FURTHER GEOPHYSICAL SURVEYS

Laboratory measurements are required on core samples from hole HA005, in order to determine whether the IP response is attributable to shales or alteration in the vicinity of the fault.

Detailed IP surveys, using new technology for the reduction of power-line noise, are recommended over the following four target areas, after drilling has tested for the presence of an alteration system.

Holes drilled should be lined with PVC pipe and surveyed with borehole EM methods.

Hole SHD25 corresponds to a recommended hole based on the geophysics in this report. The hole failed to intersect mineralization, but borehole EM surveys in SHD25 (and HA3 if accessible) are recommended as follow-up.

DRILL RECOMMENDATIONS

Zone 1/Zone P1 should be tested south of hole SHD22 with intersection at 5358020N, 380590E, depth 100 m.

Zone P4 (a trend of IP anomalies at 50-200 m depth) should be tested with a hole targetted at at 380100E, 5356700N, depth 100 m.

Zone 7 should be tested with a deep hole targetted at 5359750N, 380650E, depth 250 m (under the collar of SHD6). A collar at 380750E, angled west, dip 60 deg, and of length 400+ m would adequately test the CSAMT conductor.

Zone P2 should be tested with a hole under YNC7. The target location is 5359660N, 380060E depth 100 m. The recommended collar is at 380100E, angled west, dip 60 deg, length 200 m.

These four recommended drill targets are shown on PLATE 9.

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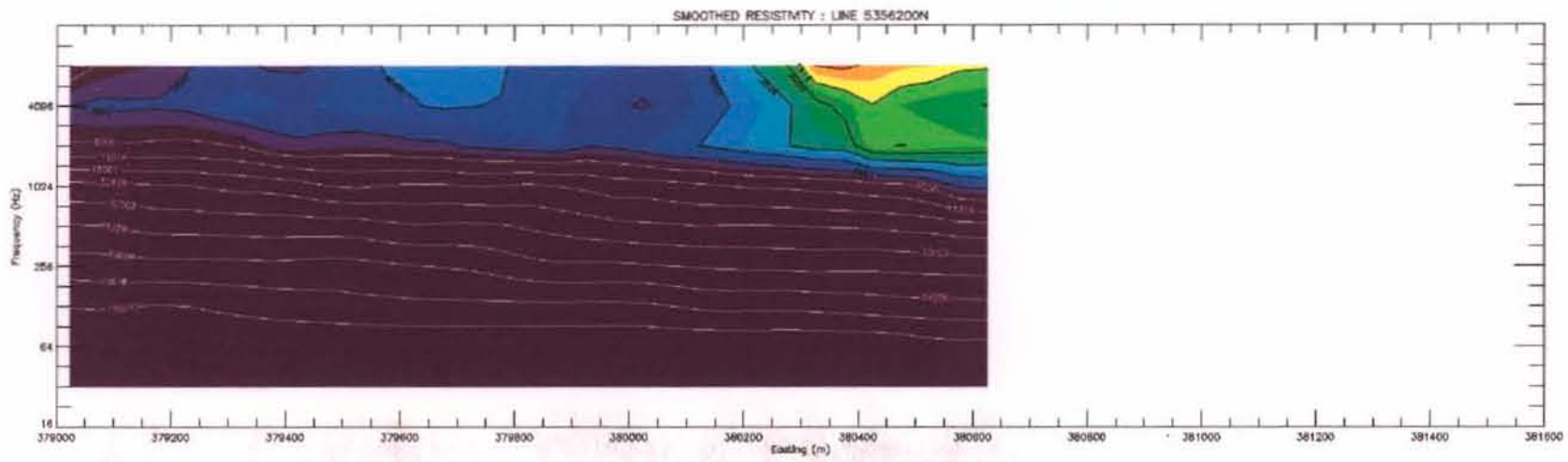
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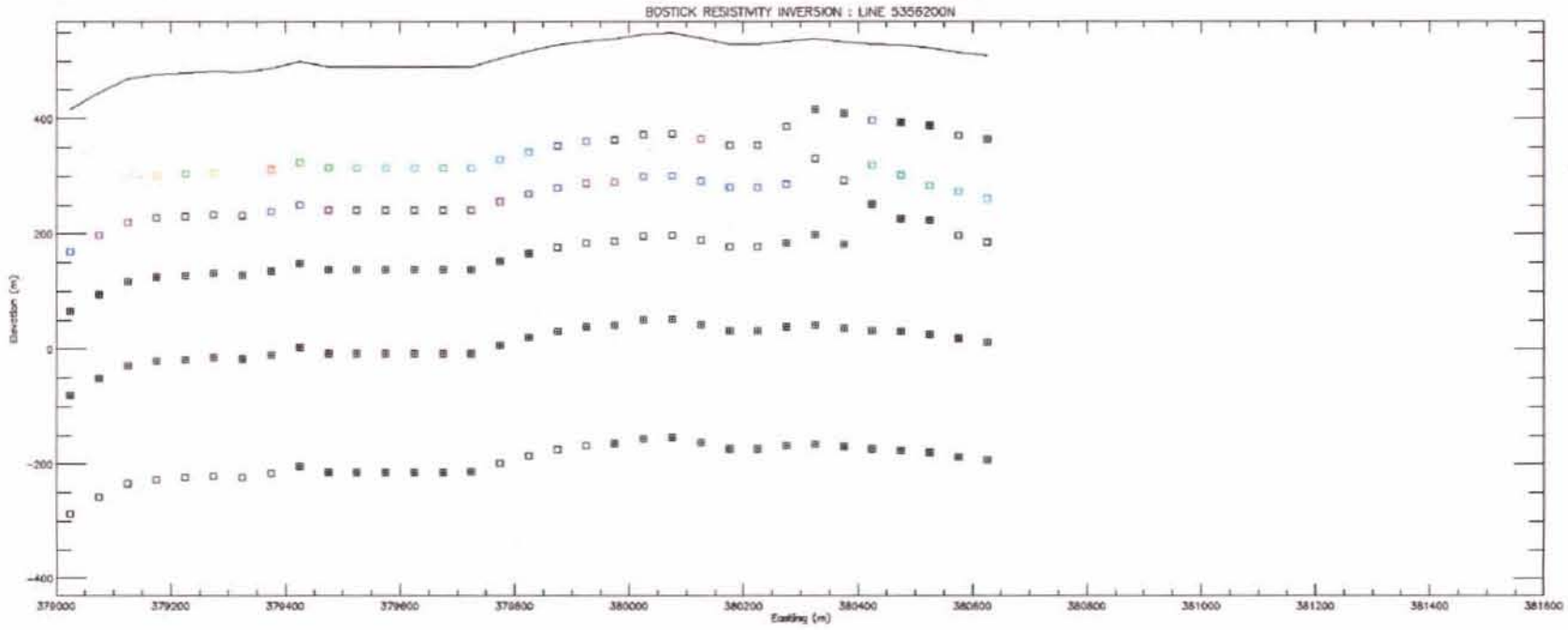
APPENDIX 1

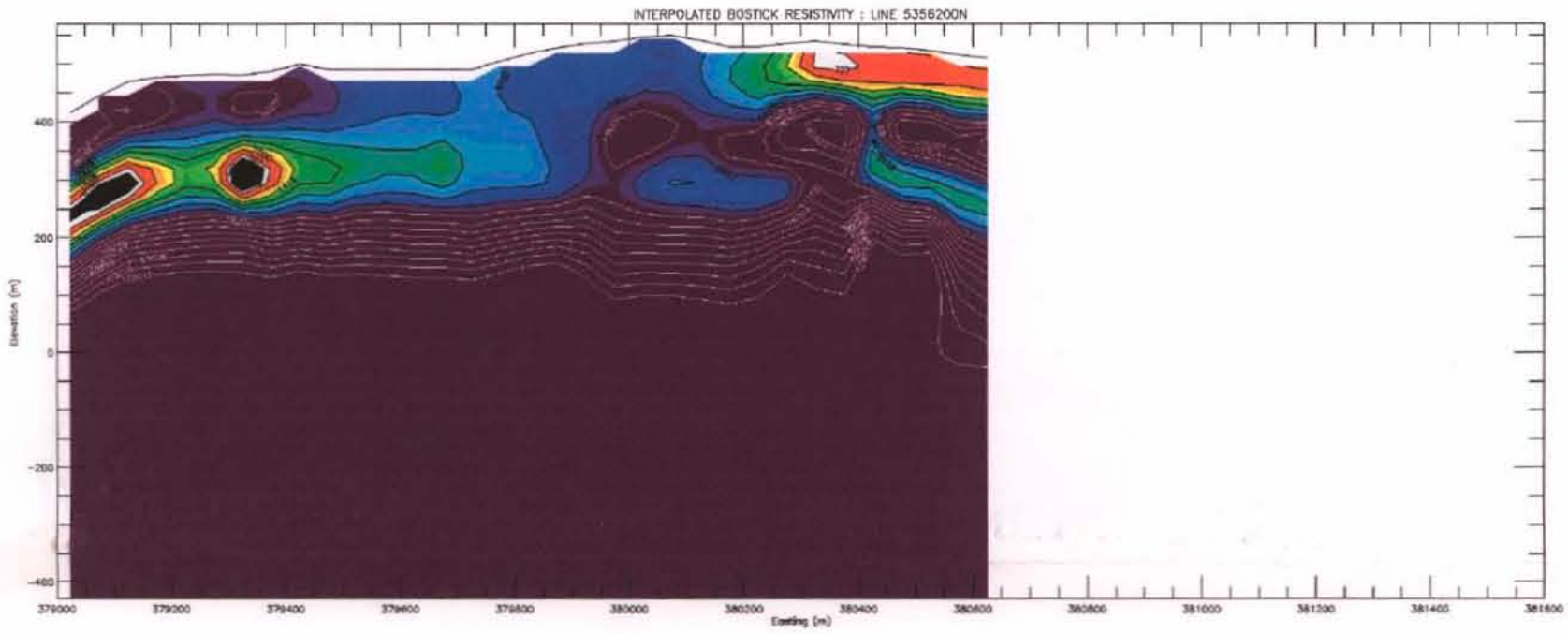
Set of plots of CSAMT Cagniard resitivities vs frequency, and Bostick resistivity vs depth, for each Line surveyed.

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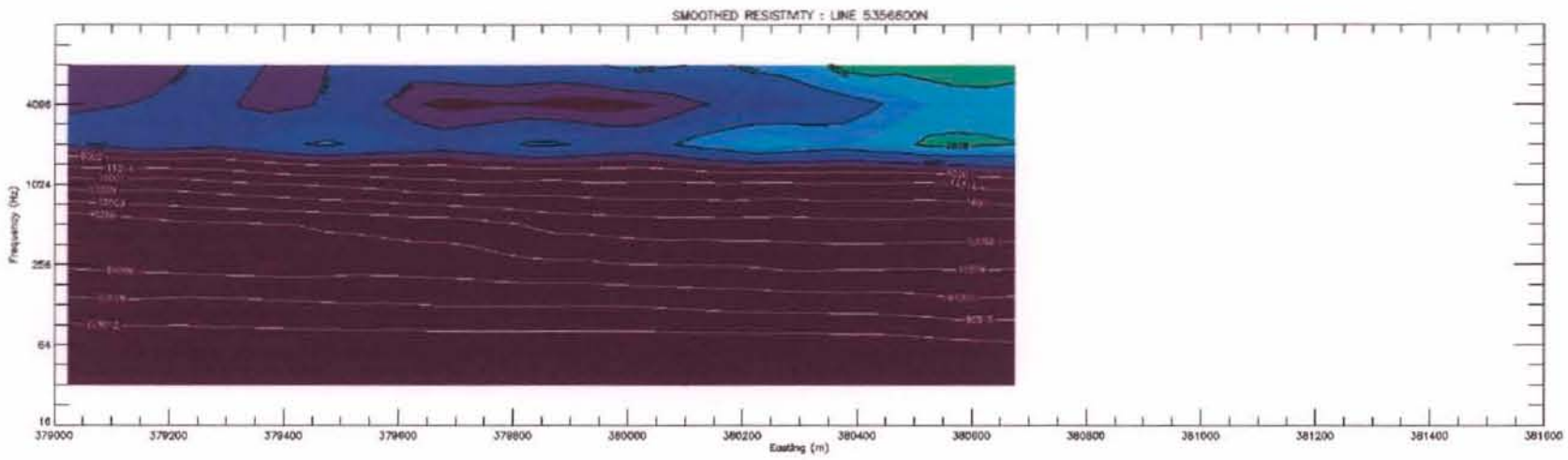


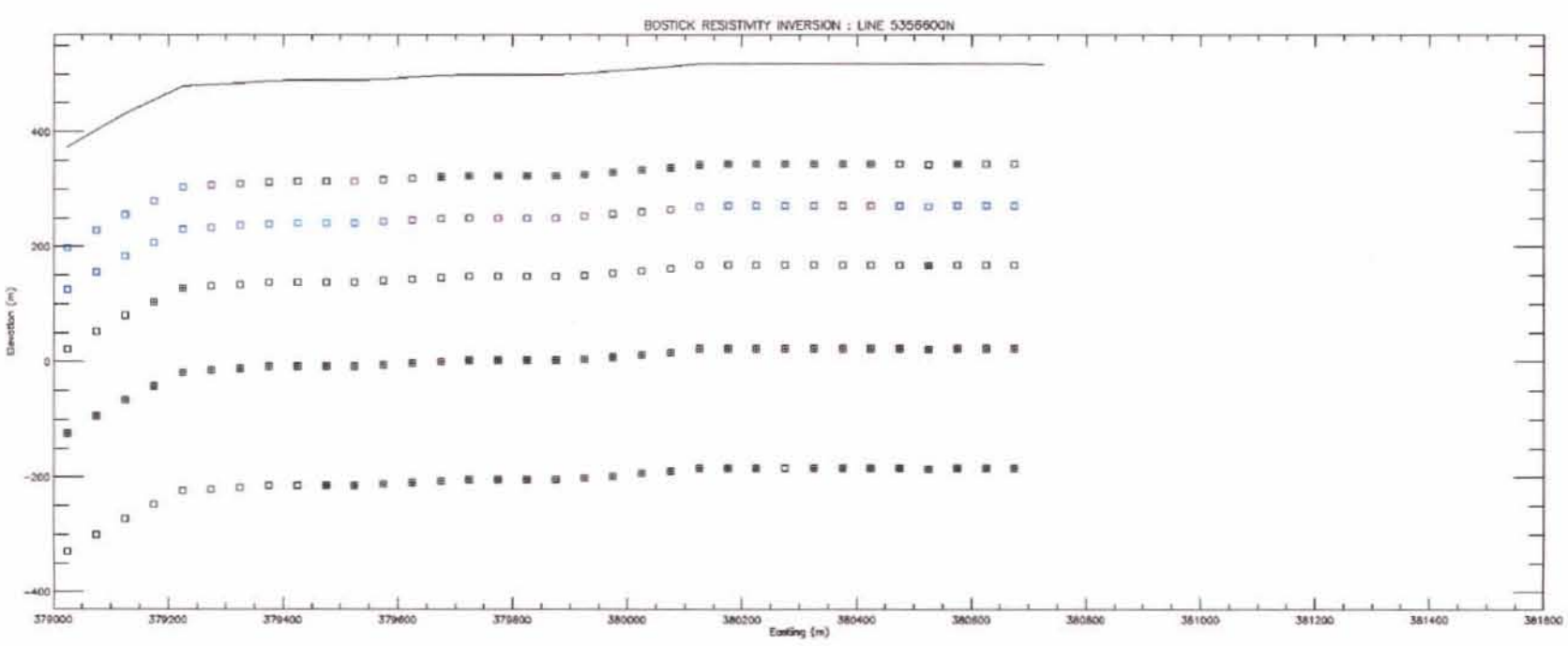
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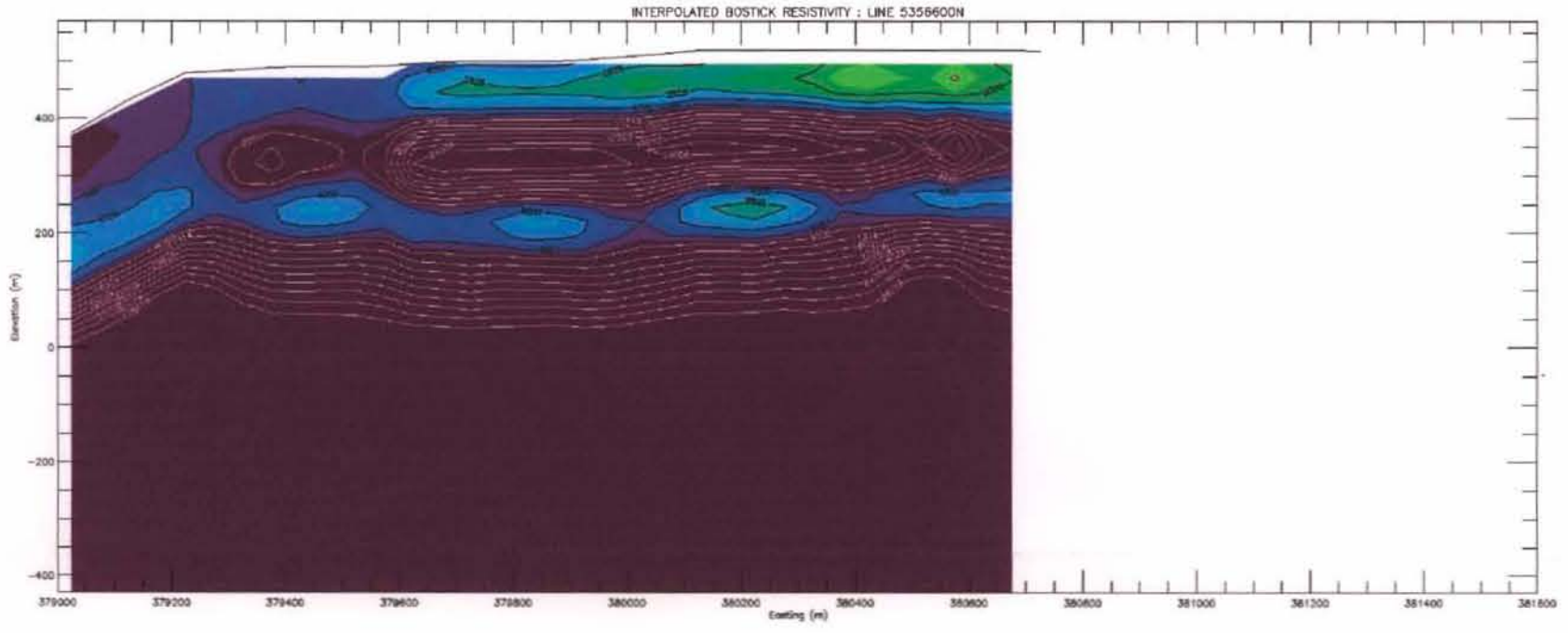
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Drawn by: Flagstaff Geo-Consultants 21/6/99

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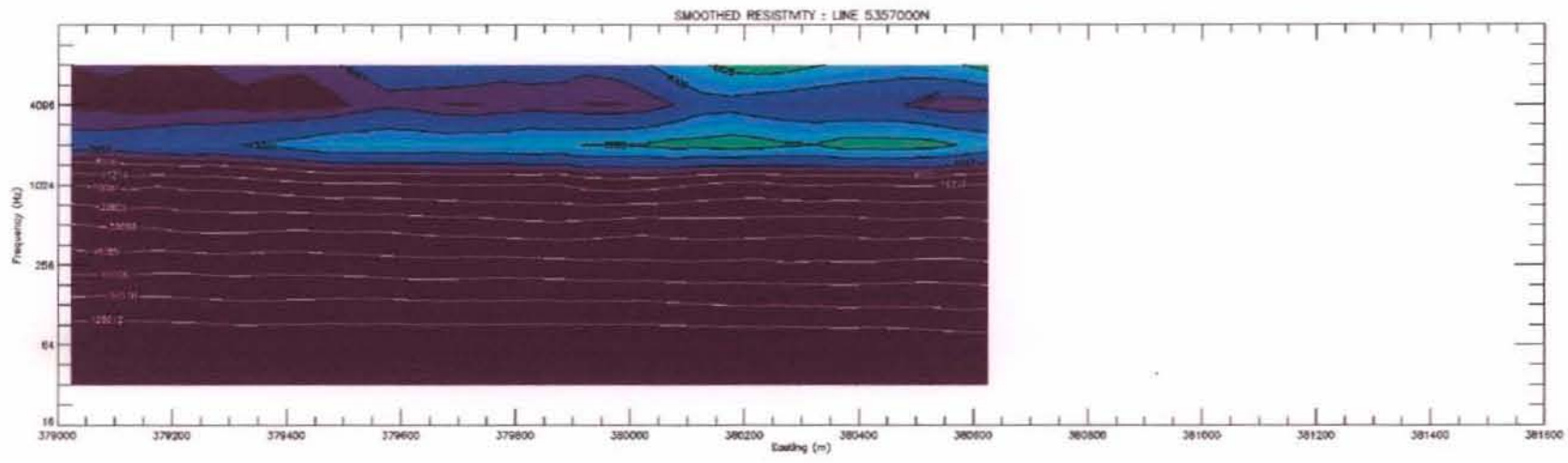


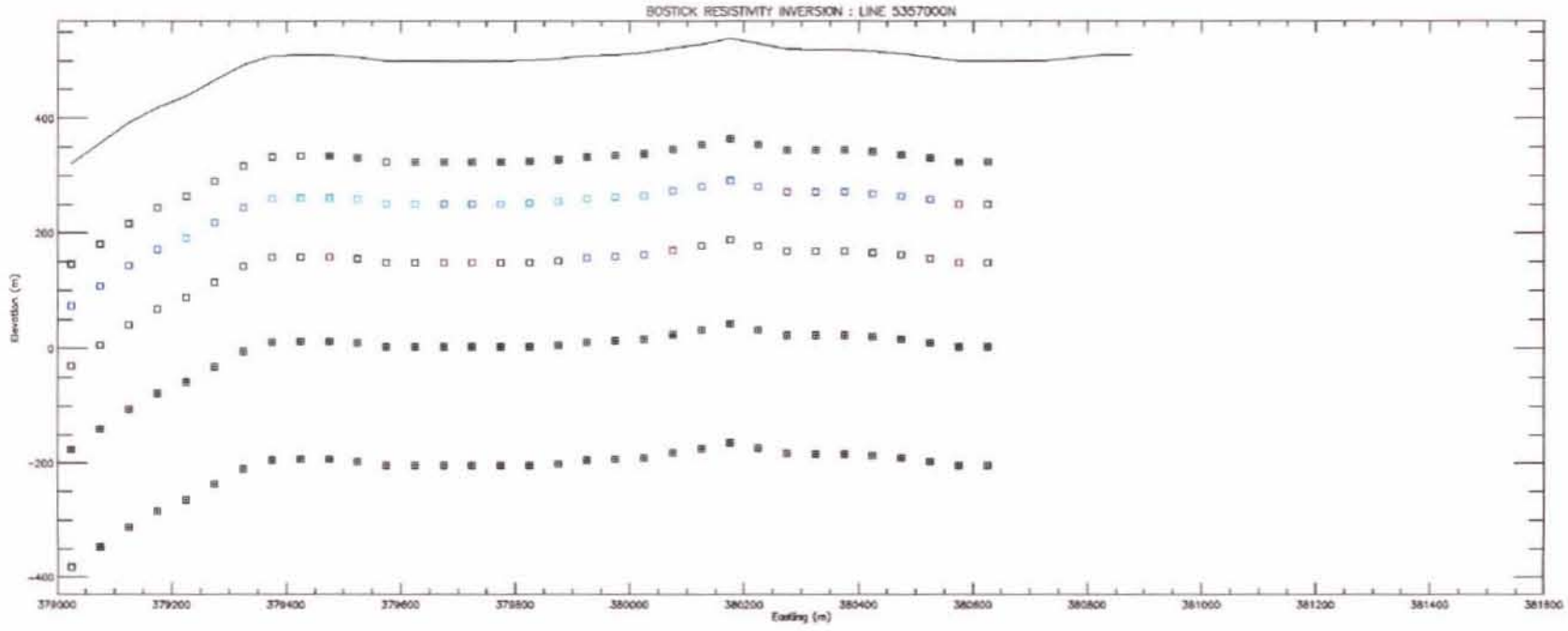
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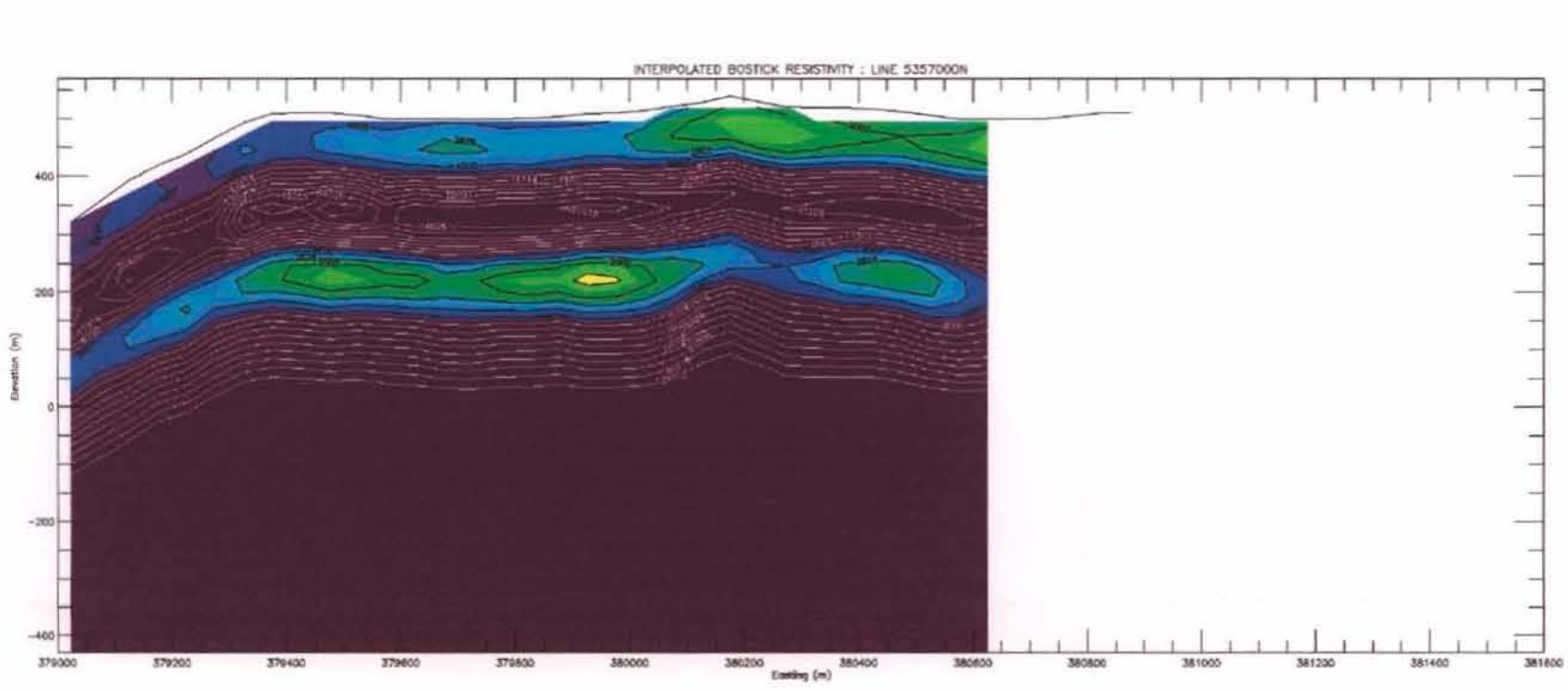
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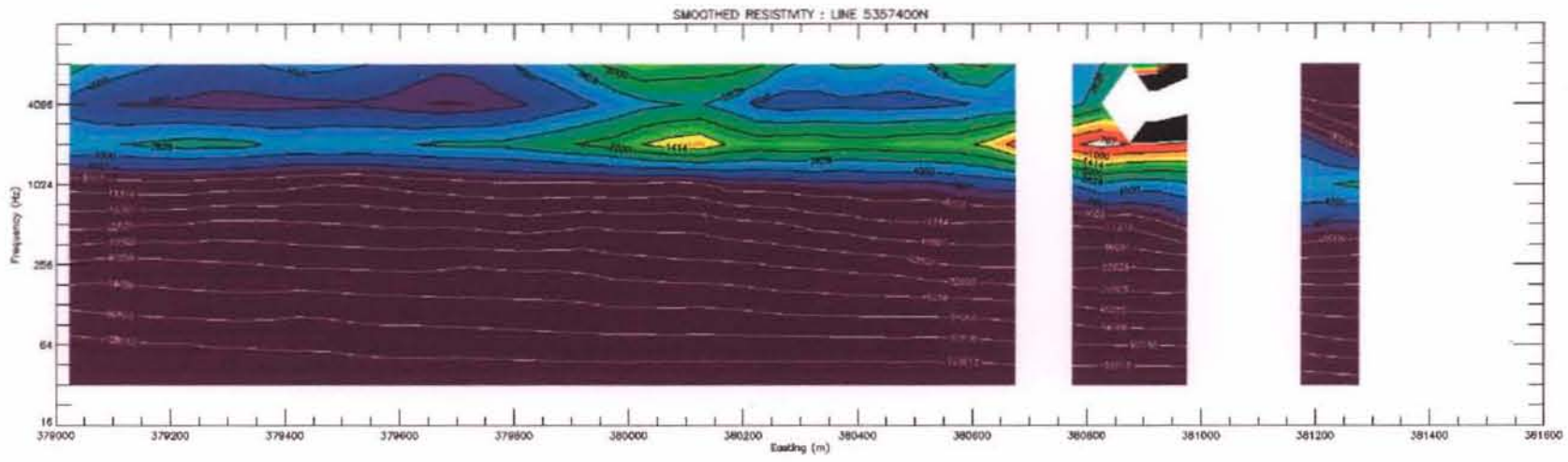


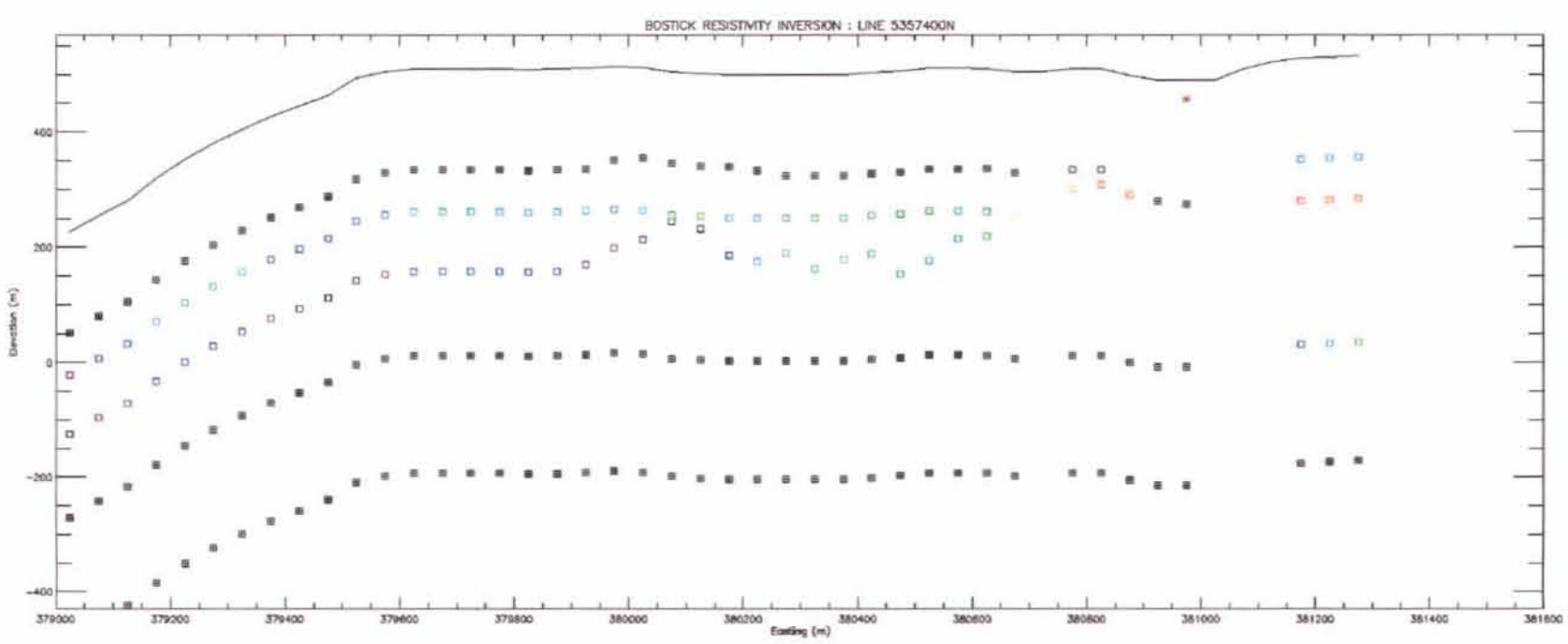
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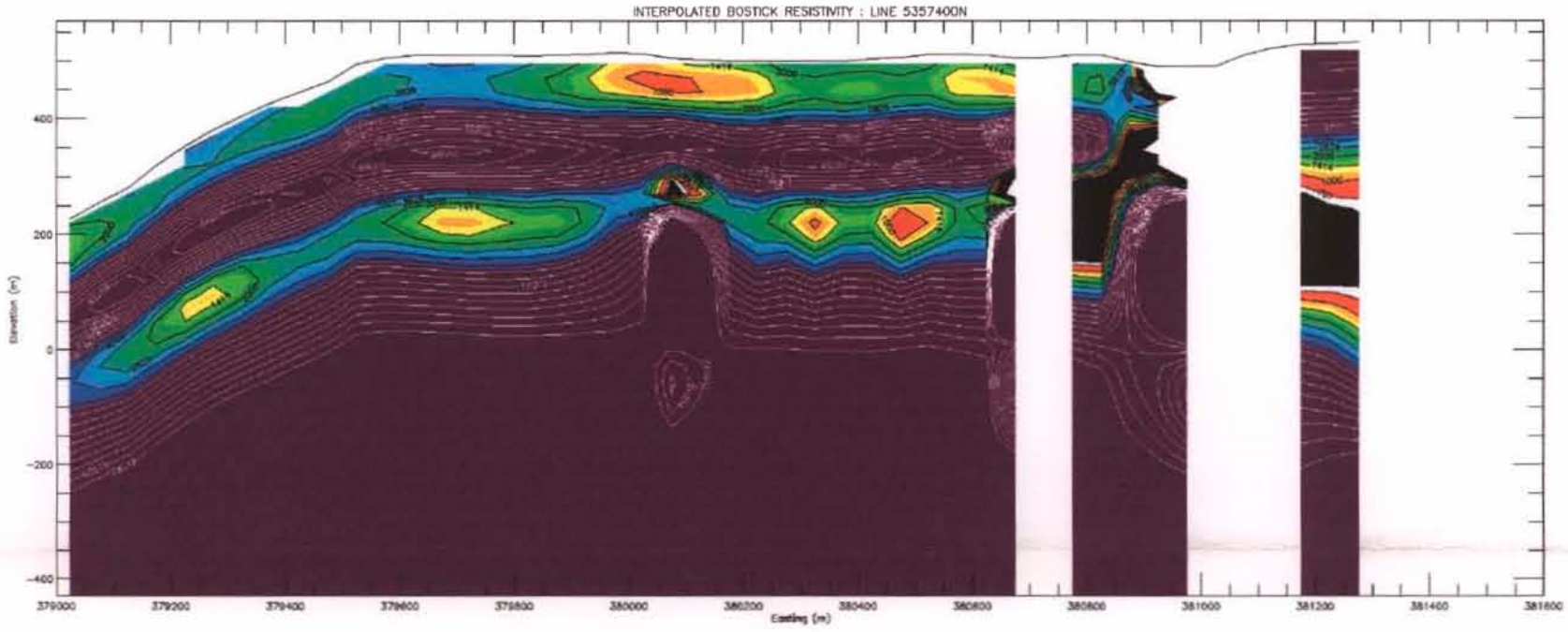
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Written by: Fitzgerald Geo-Consultants 31/8/99

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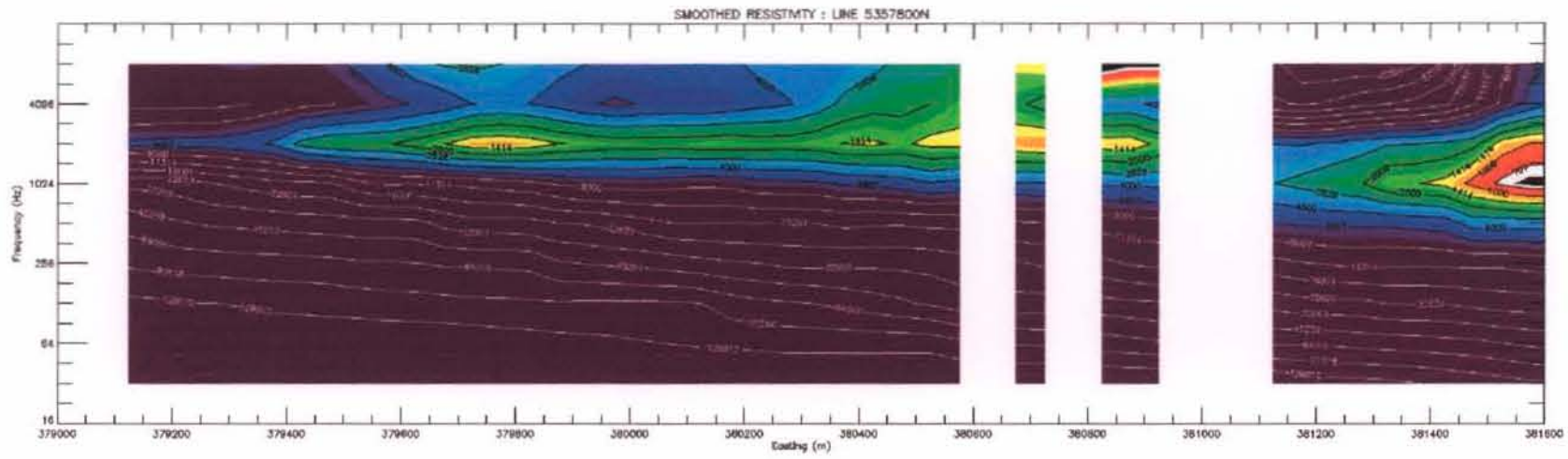


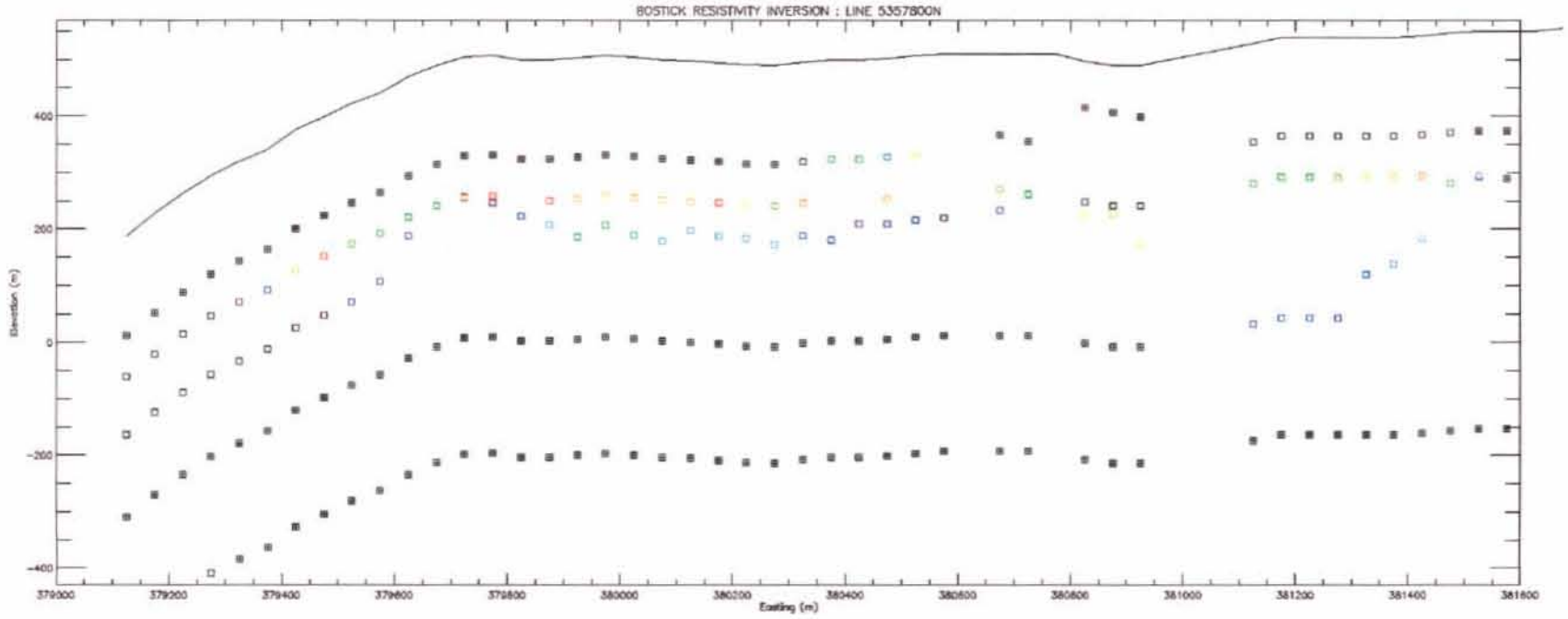
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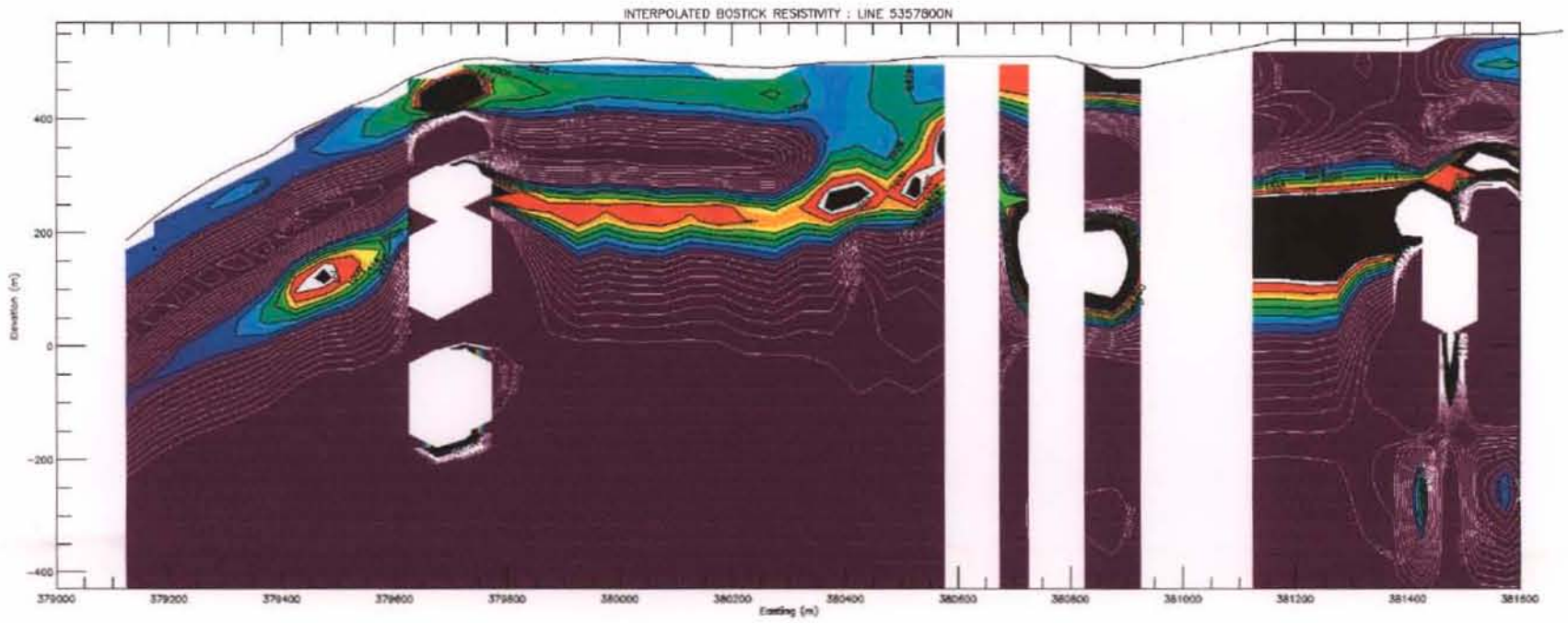
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GOLDFIELDS EXPLORATION
South Henty CSAMT Data 1999. Line 5357800N. Re-Processed with EMAP filter and Bostick inversion June 1999.
Drawn by: Fitzgerald Geoconsultants. 23/6/99

675203





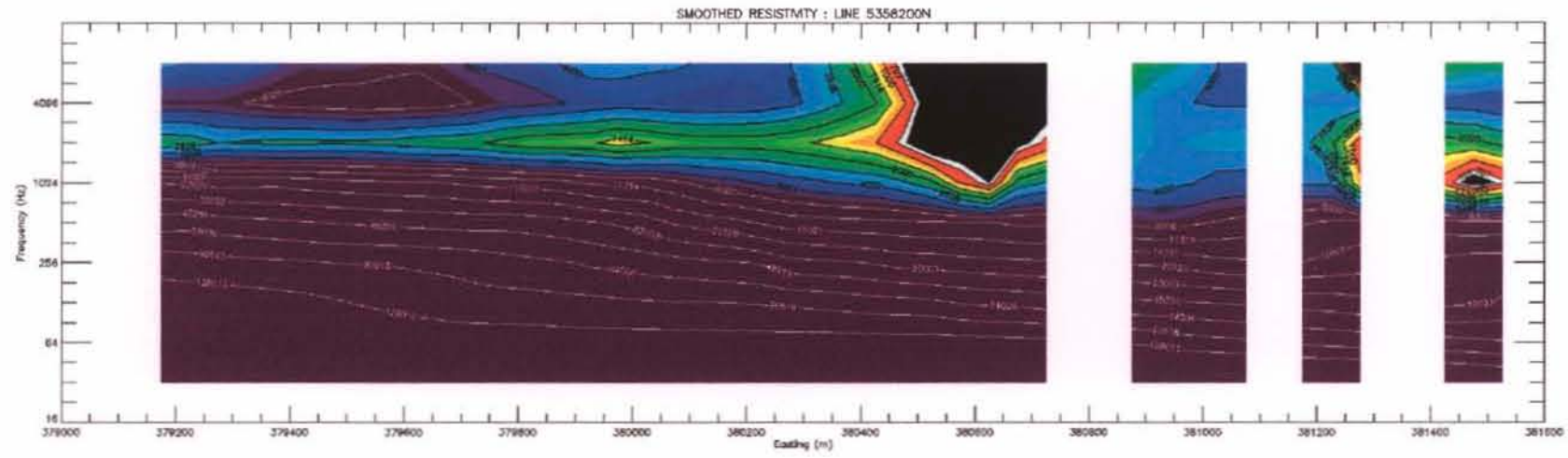


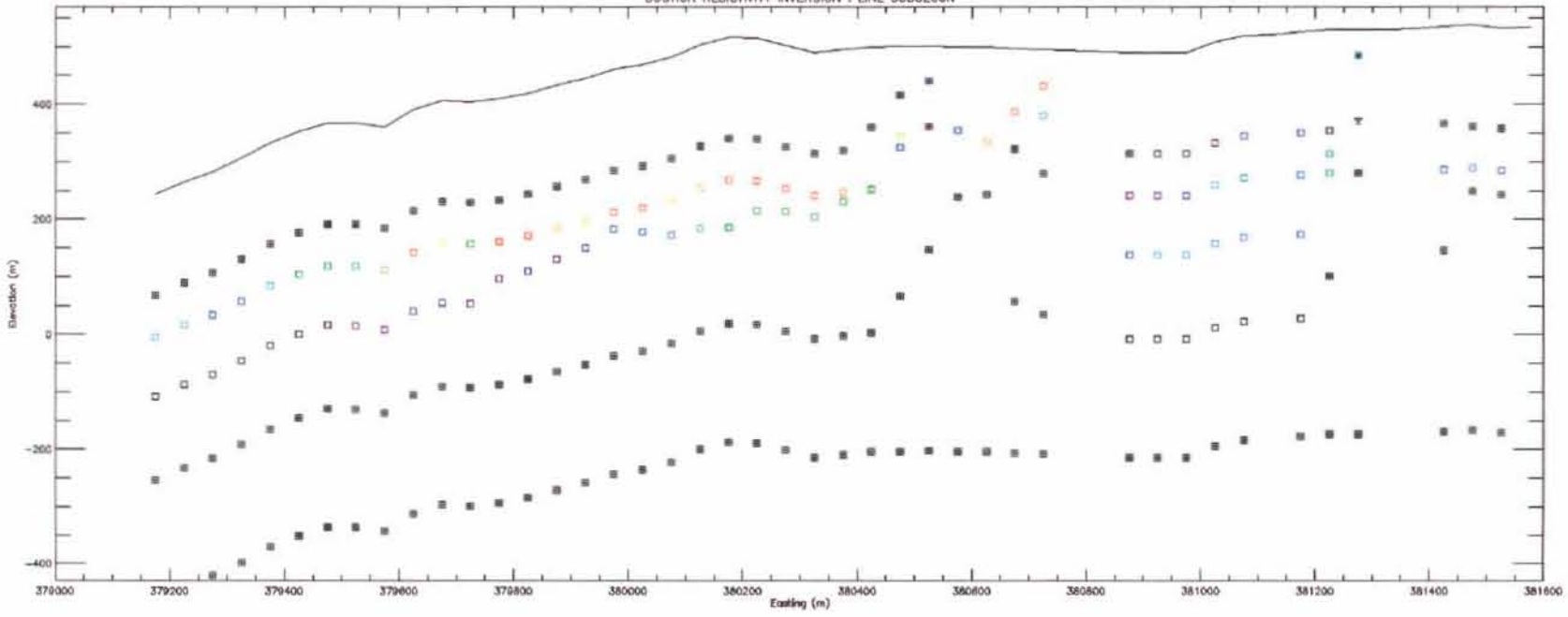
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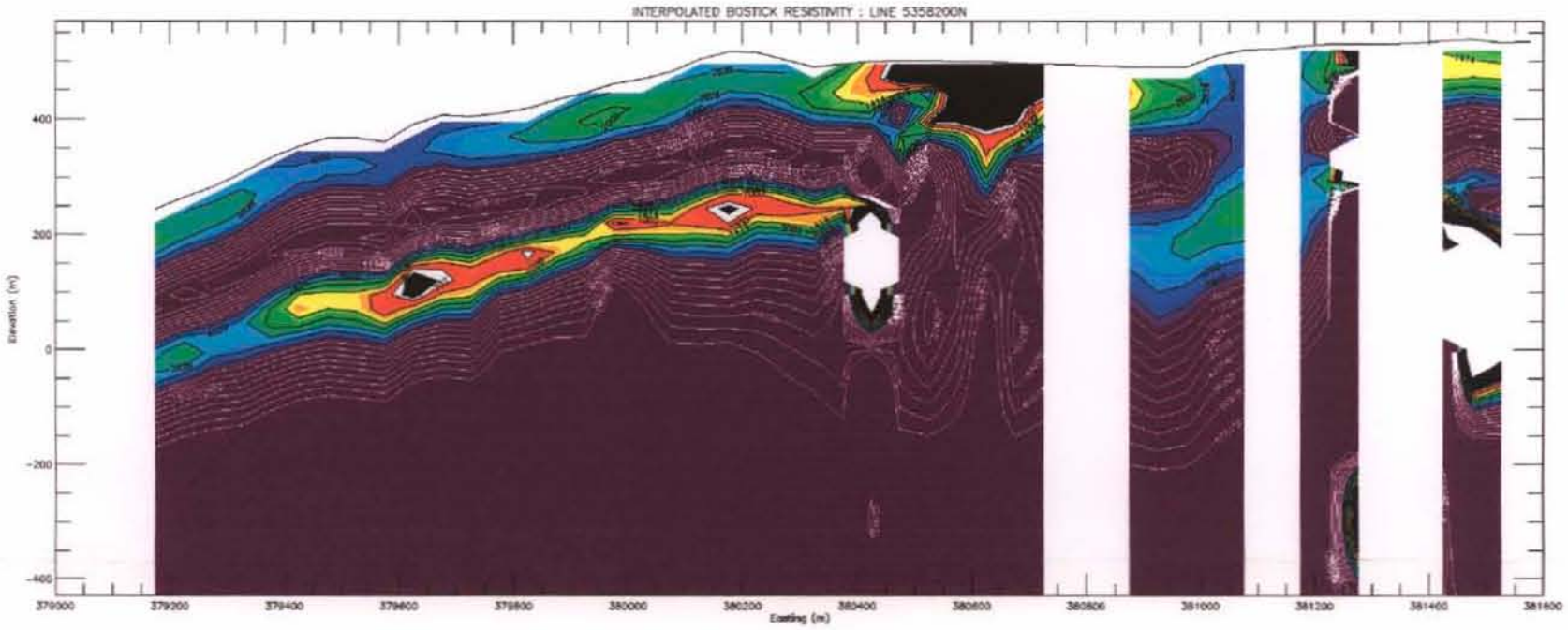
5357800N

GOLDFIELDS EXPLORATION
South Henty CSAMT Data 1999. Line 5357800N Re-Processed with EMAP filter and Bostick inversion June 1999
Drawn by: Pitgeoff Geo-Consultants 31/8/99

675204







5 cm

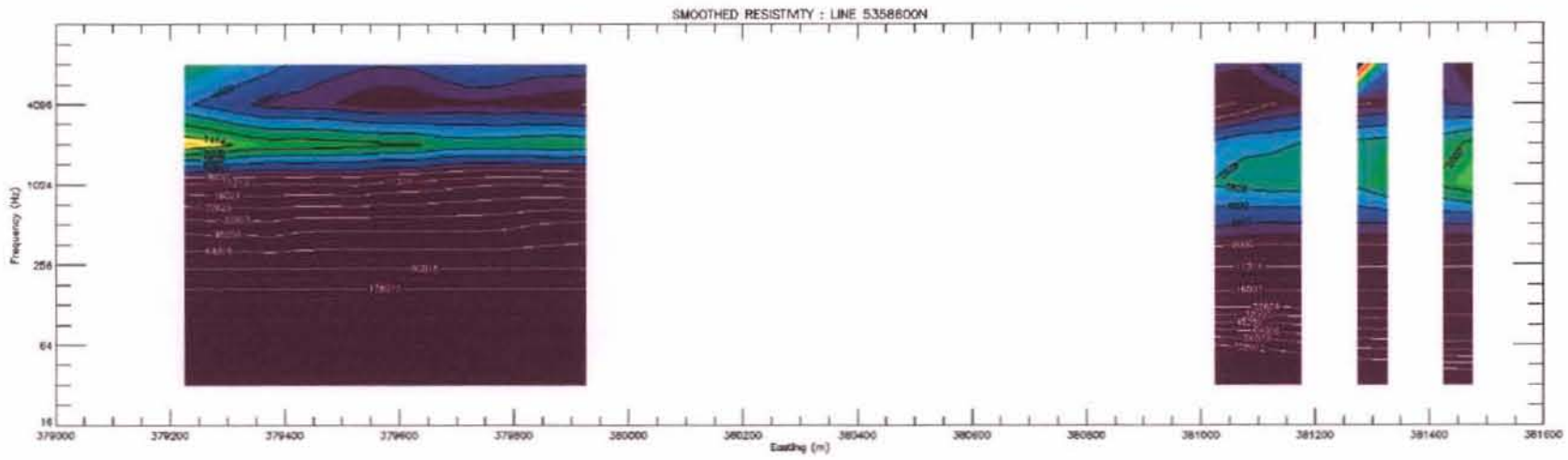
5358200N

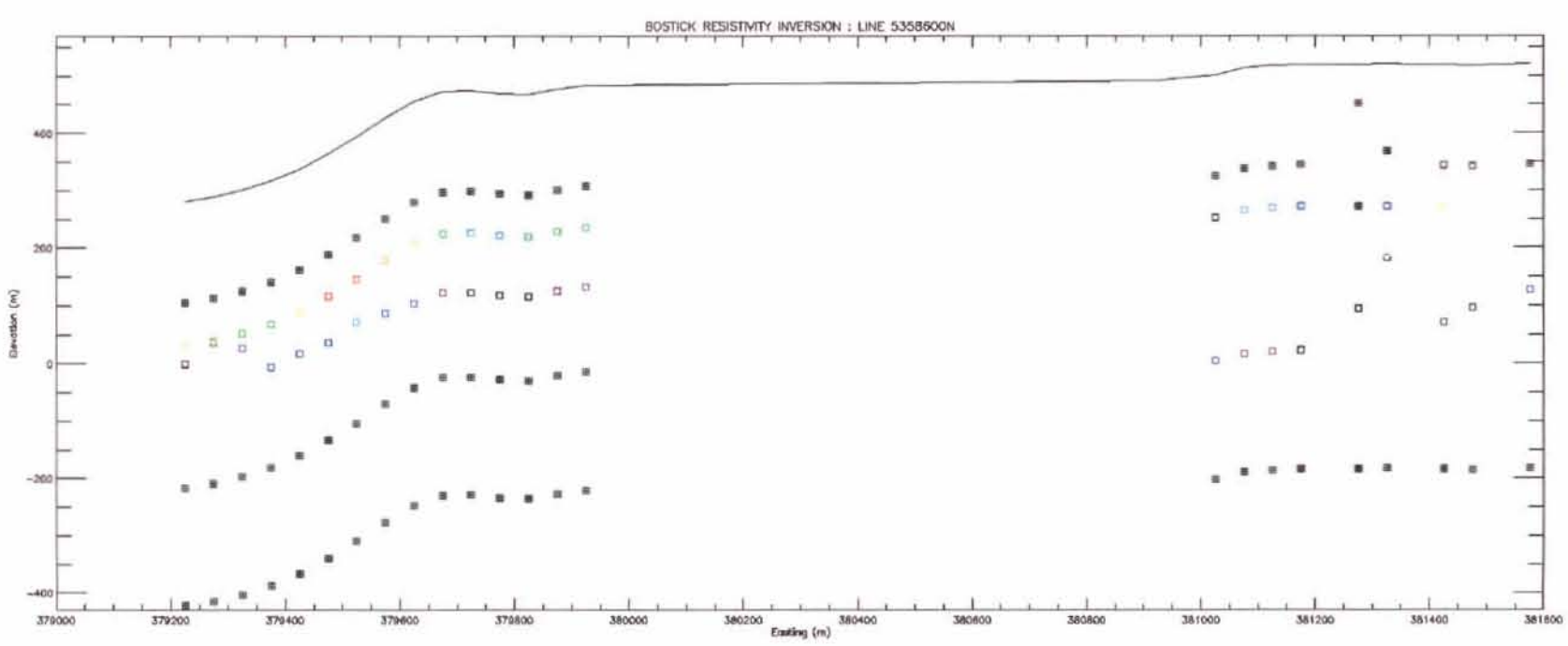
GOLDFIELDS EXPLORATION

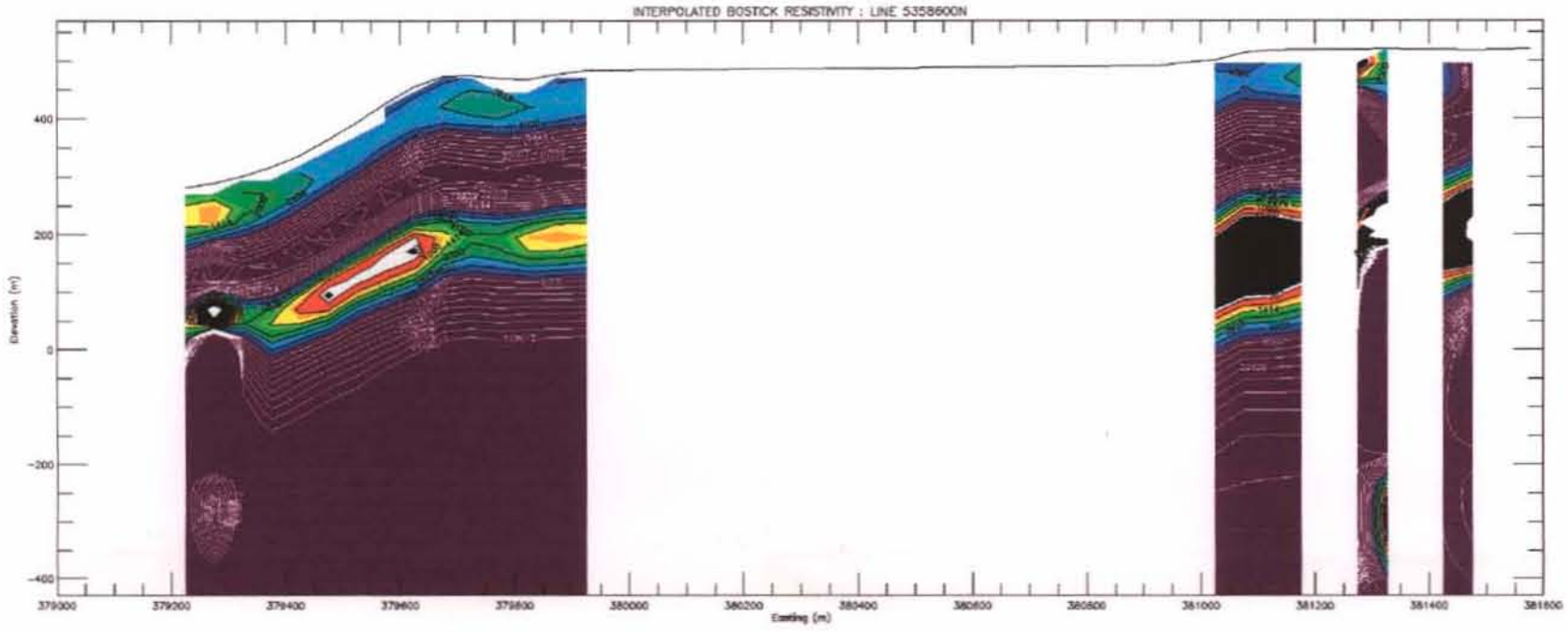
South Henty CSAMT Data 1999. Line 5358200N.
Re-Processed with EMAP filter and Bostick inversion
June 1999

Drawn by: Fitzgerald Geo-Consultants
23-6-99

675205





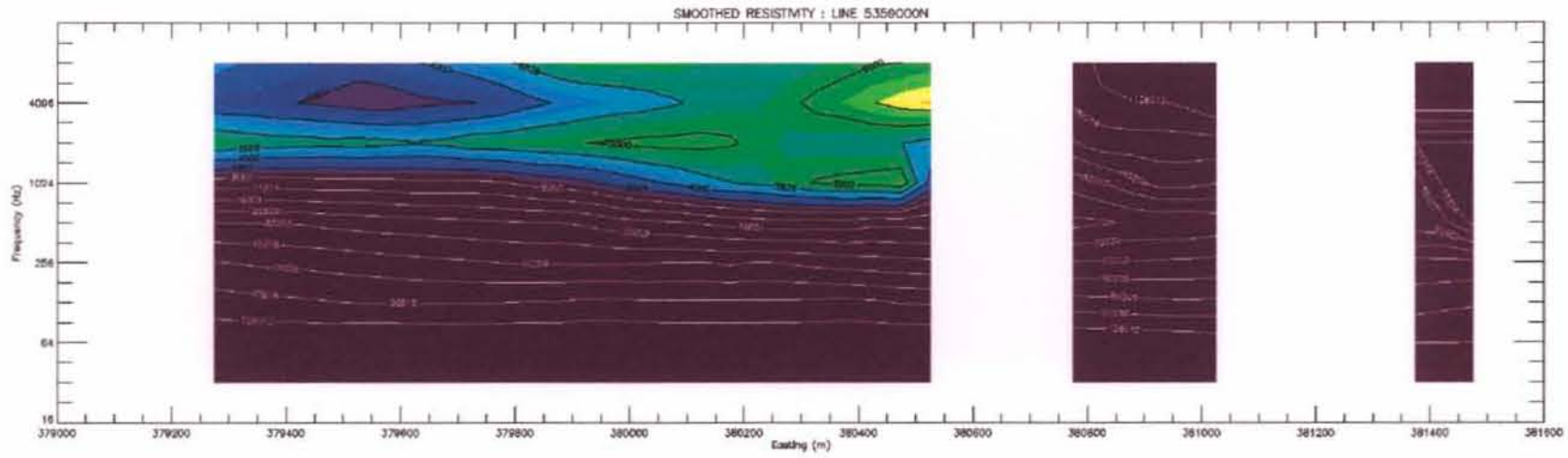


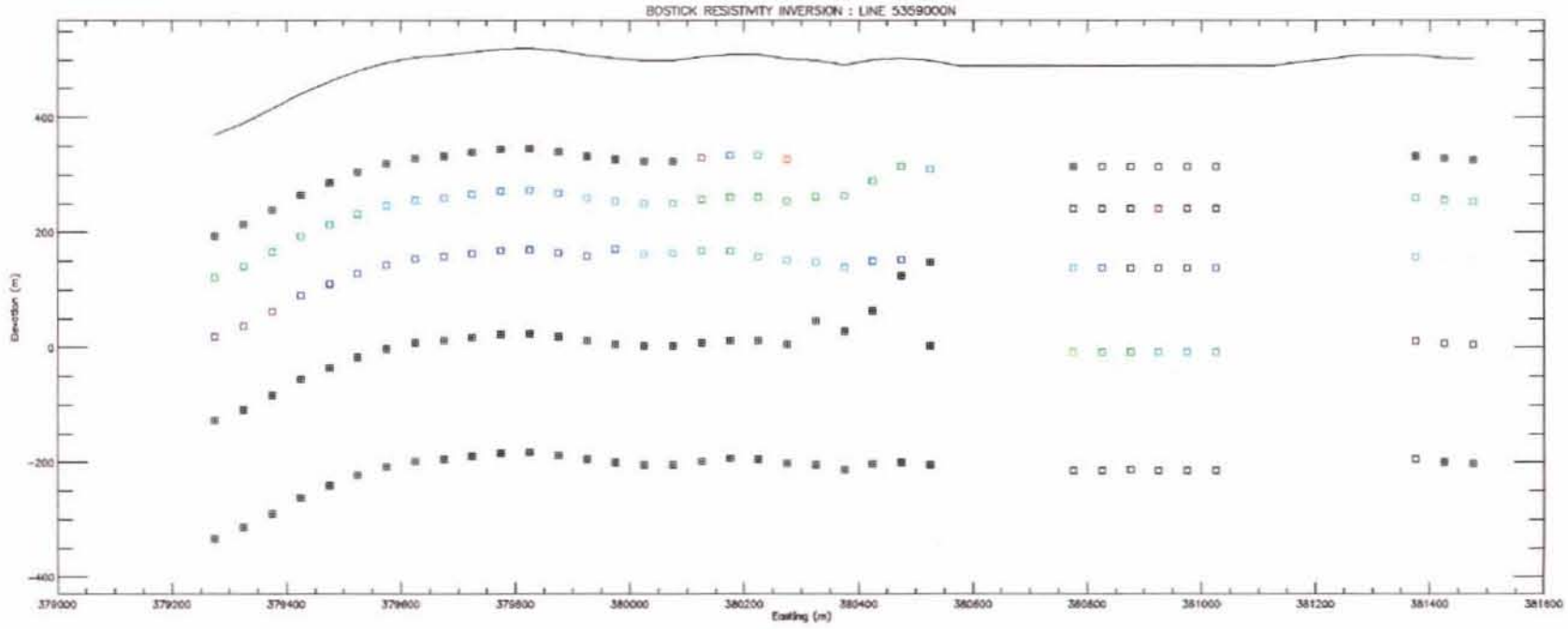
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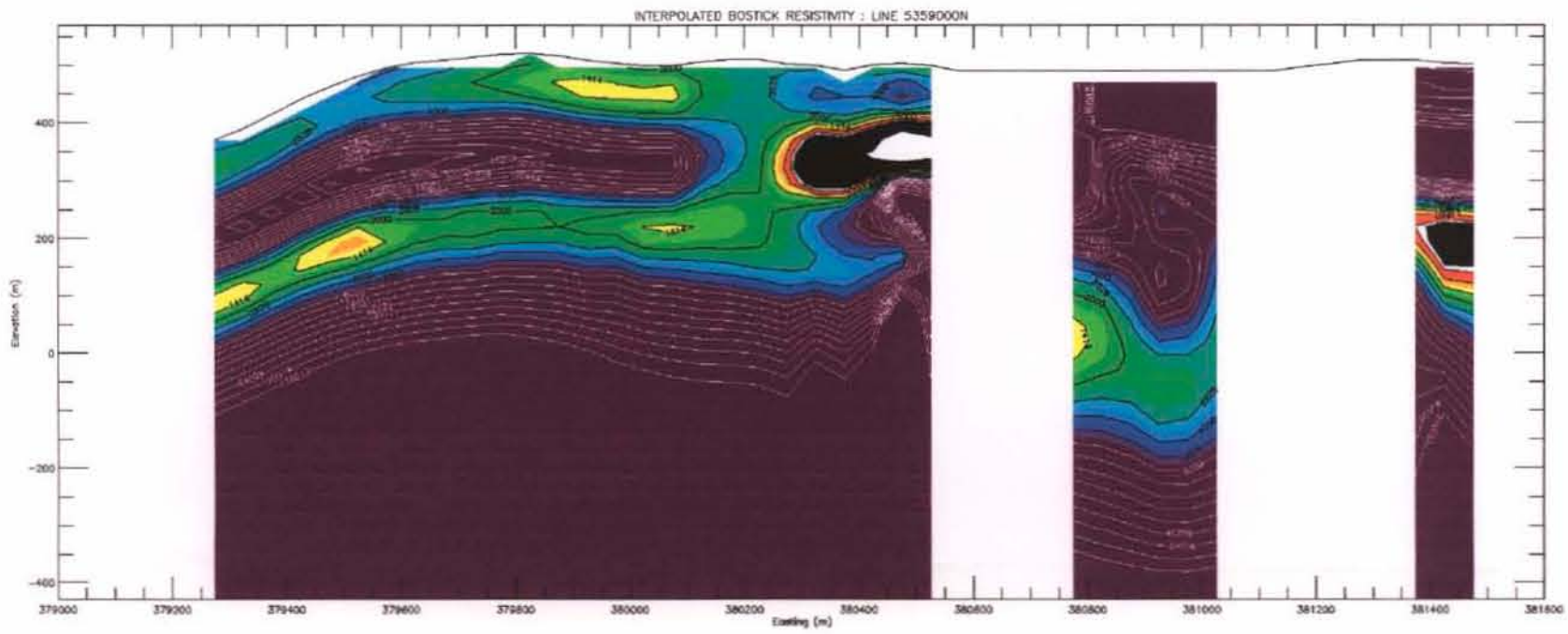
5358600N

GOLDFIELDS EXPLORATION
South Henty CSAMT Data 1999. Line 5358600N. Re-Processed with EMAP filter and Bostick inversion June 1999
Drawn by: Fitzgerald Geo-Consultants 23/6/99

675206







5 cm

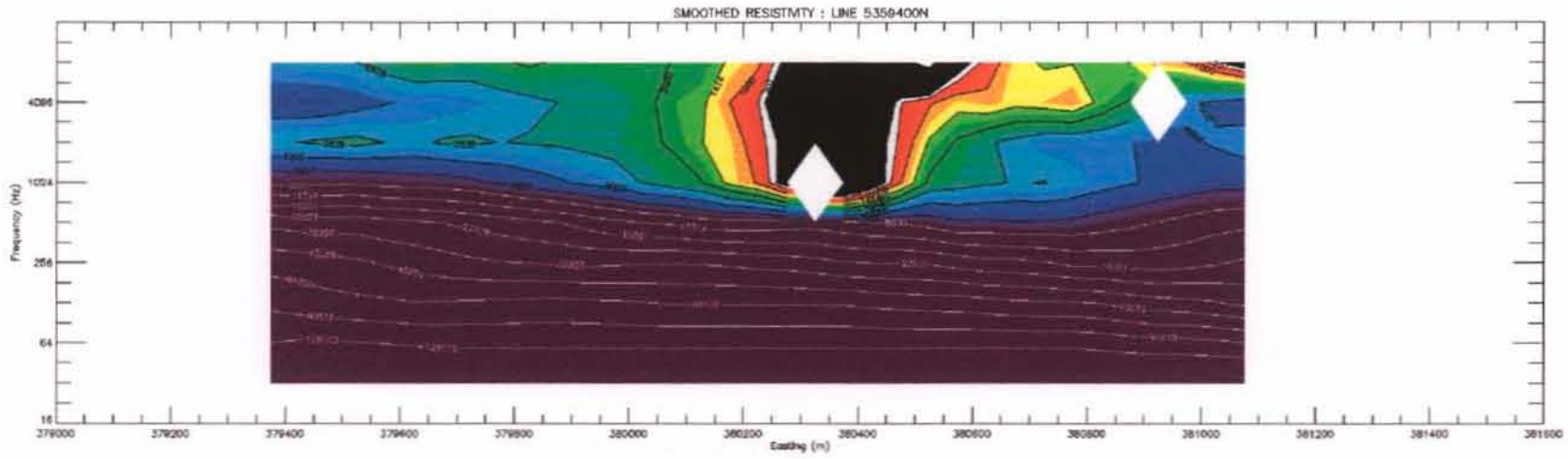
5359000N

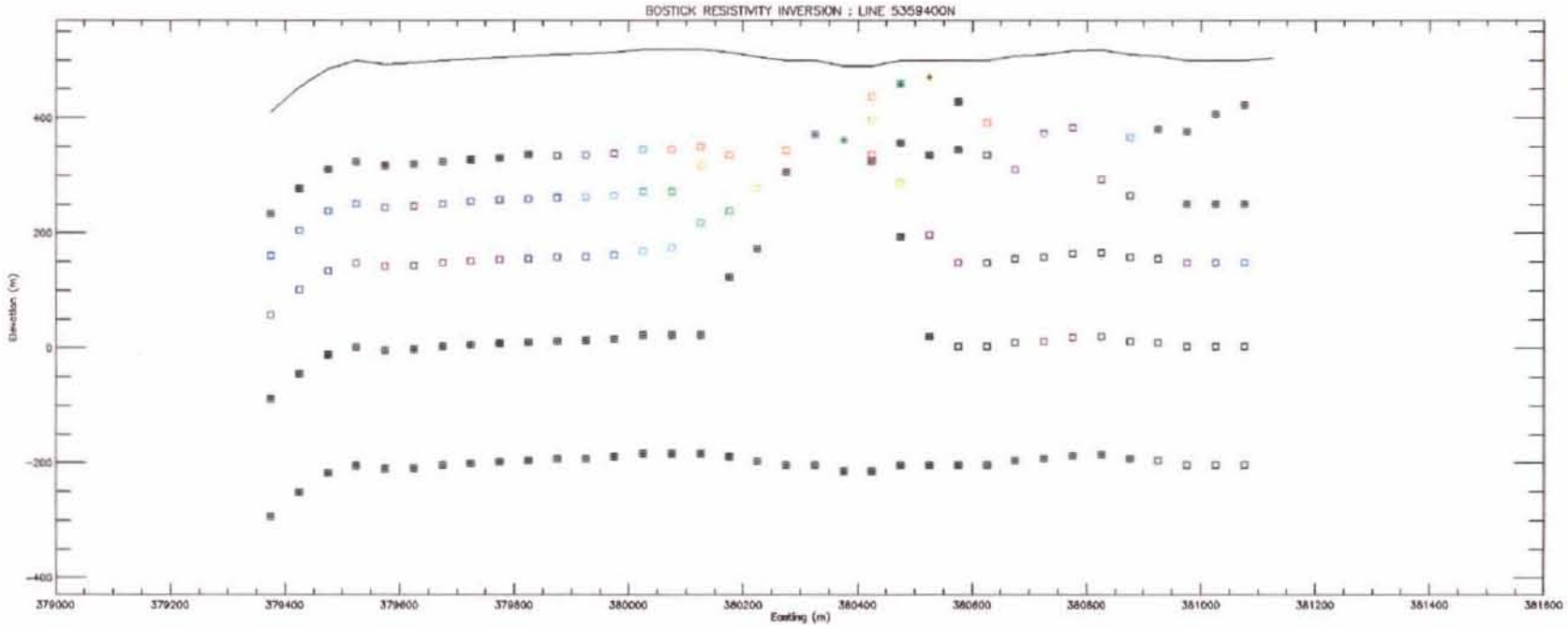
GOLDFIELDS EXPLORATION

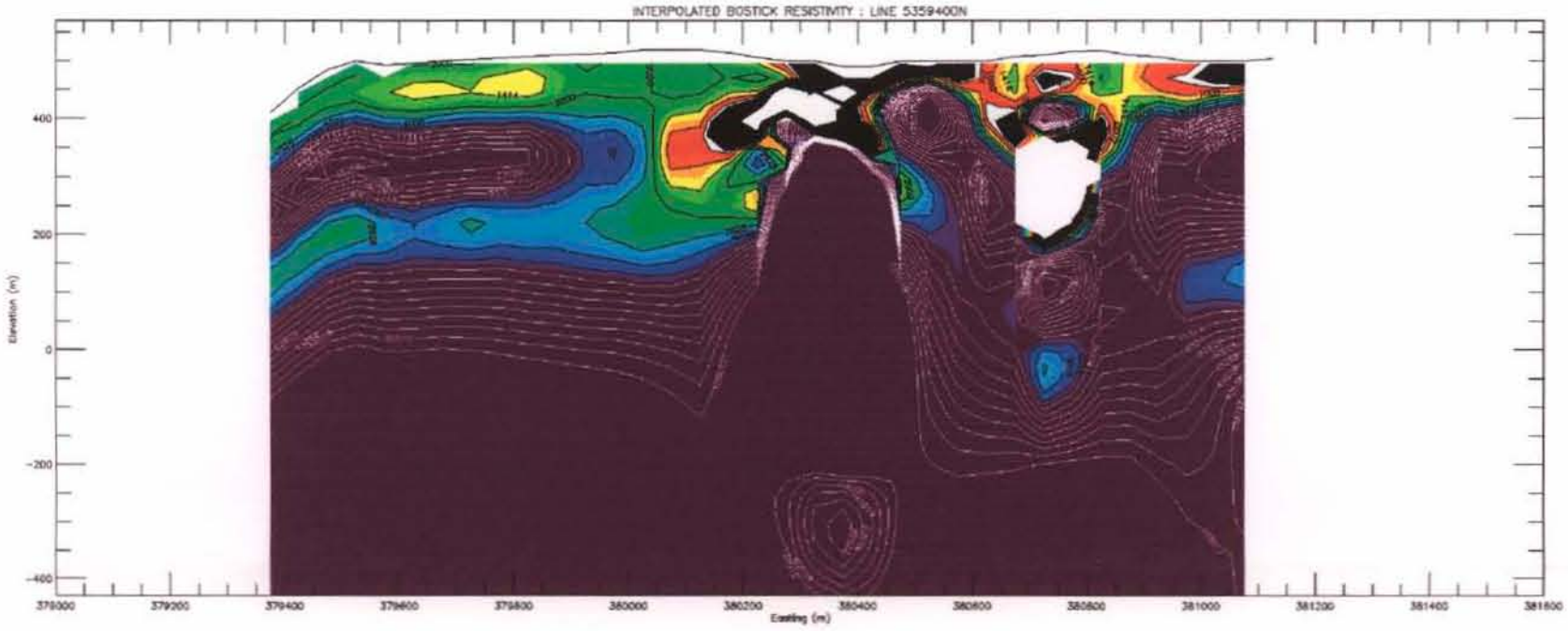
South Henty CSAMT Data 1999. Line 5359000N.
Re-Processed with EMAP filter and Bostick inversion
June 1999

Drawn by: Flagstaff Geo-Consultants
23/6/99

675207





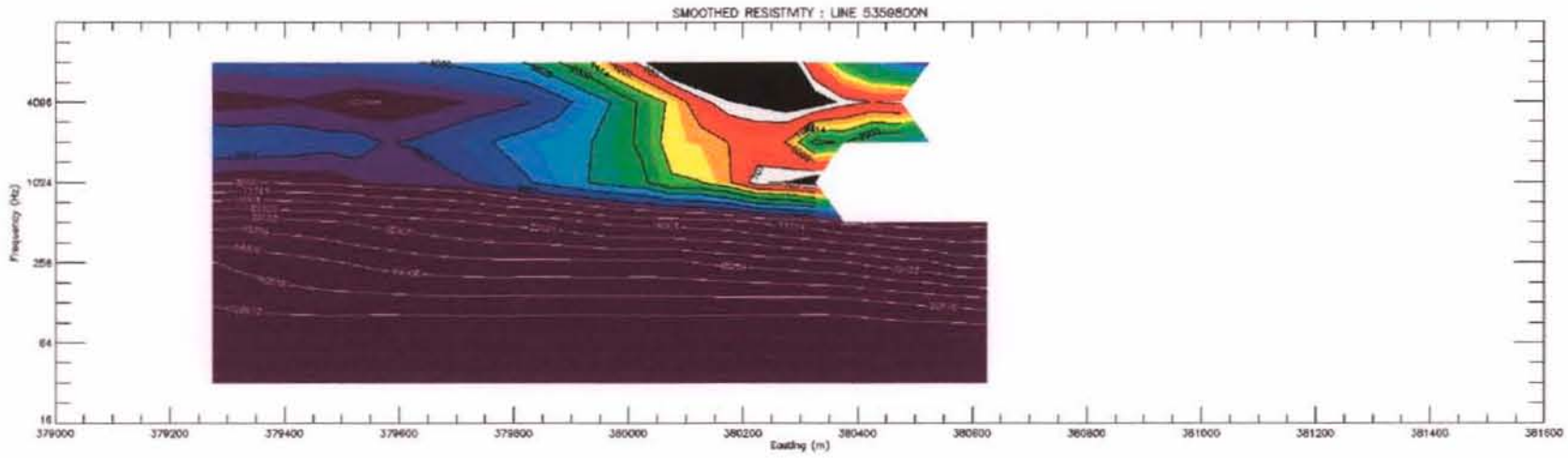


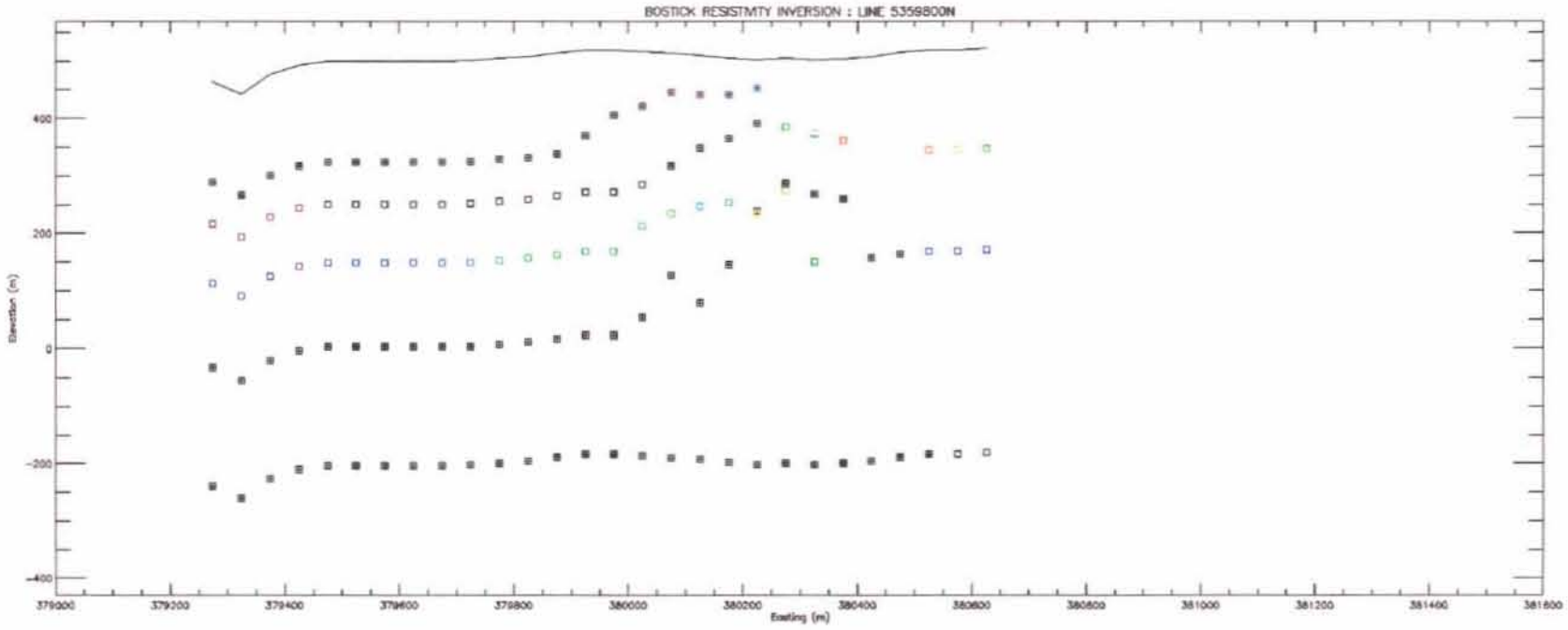
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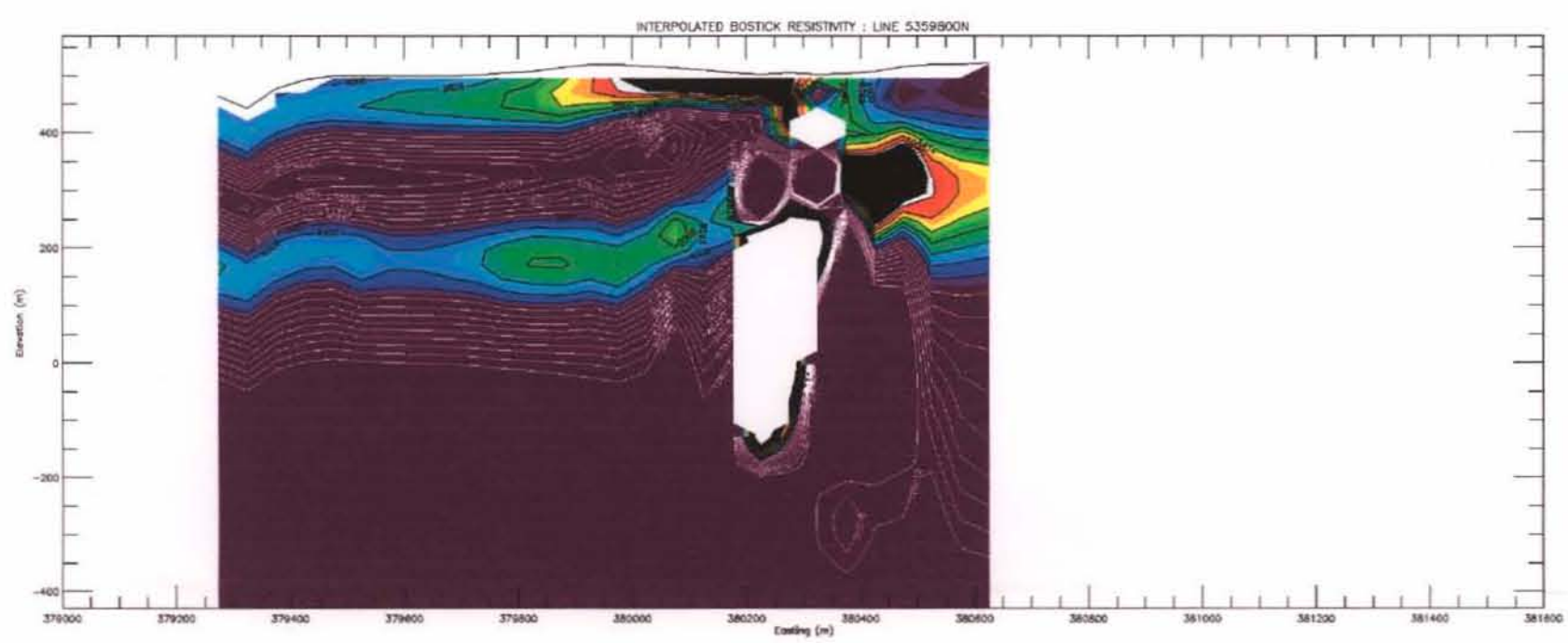
5359400N

GOLDFIELDS EXPLORATION
South Hemty CSAMT Data 1999. Line 5359400N. Re-Processed with EMAP filter and Bostick inversion June 1999
Drawn by: Fitzgerald Geo-Consultants 23/8/99

675208





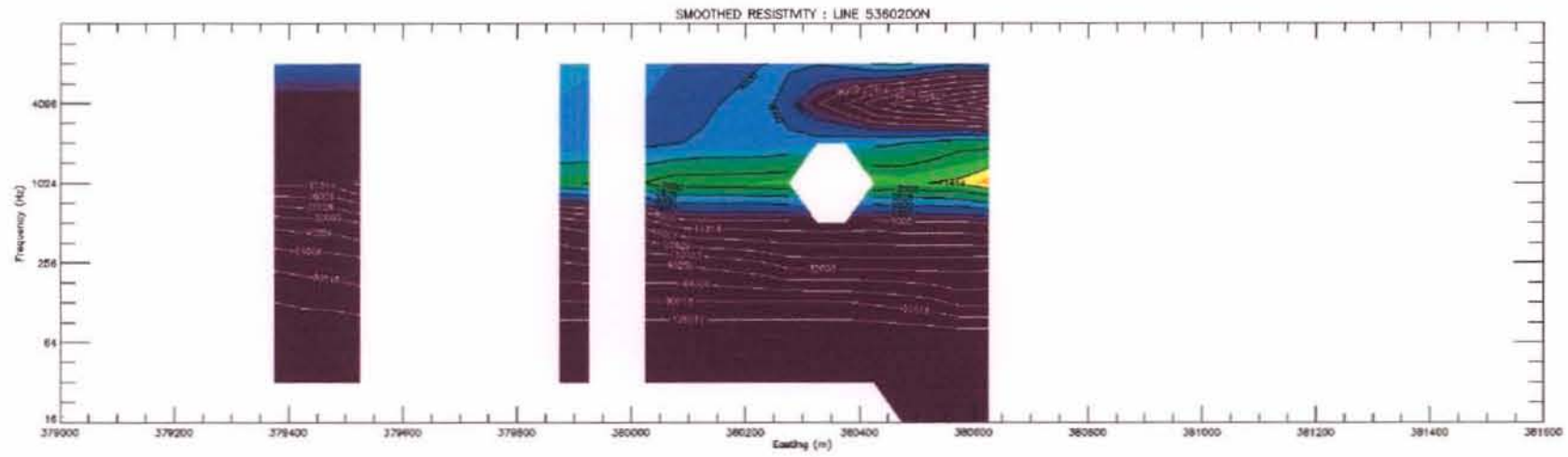


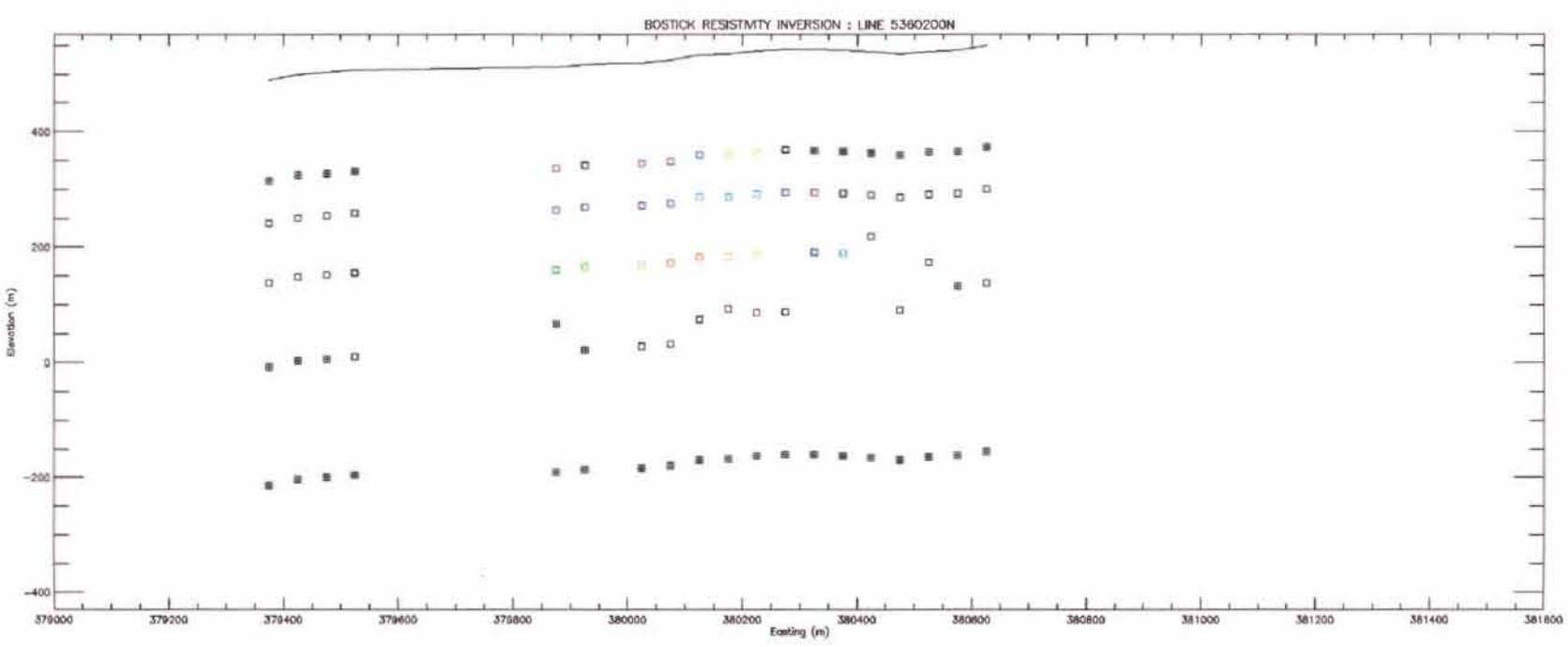
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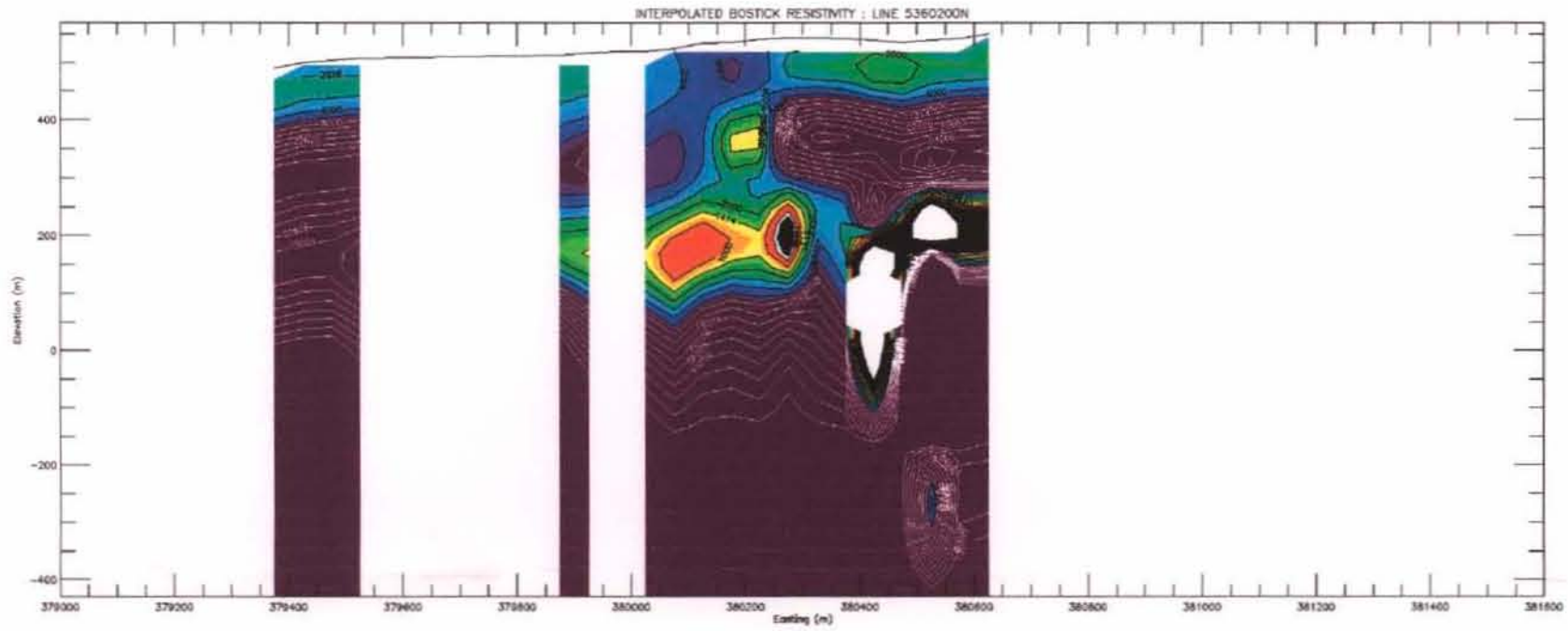
5359800N

GOLDFIELDS EXPLORATION
South Henty CSAMT Data 1999. Line 5359800N Re-Processed with EMAP filter and Bostick inversion June 1999
Drawn by: Flagstaff Geo-Consultants 23/6/99

675209





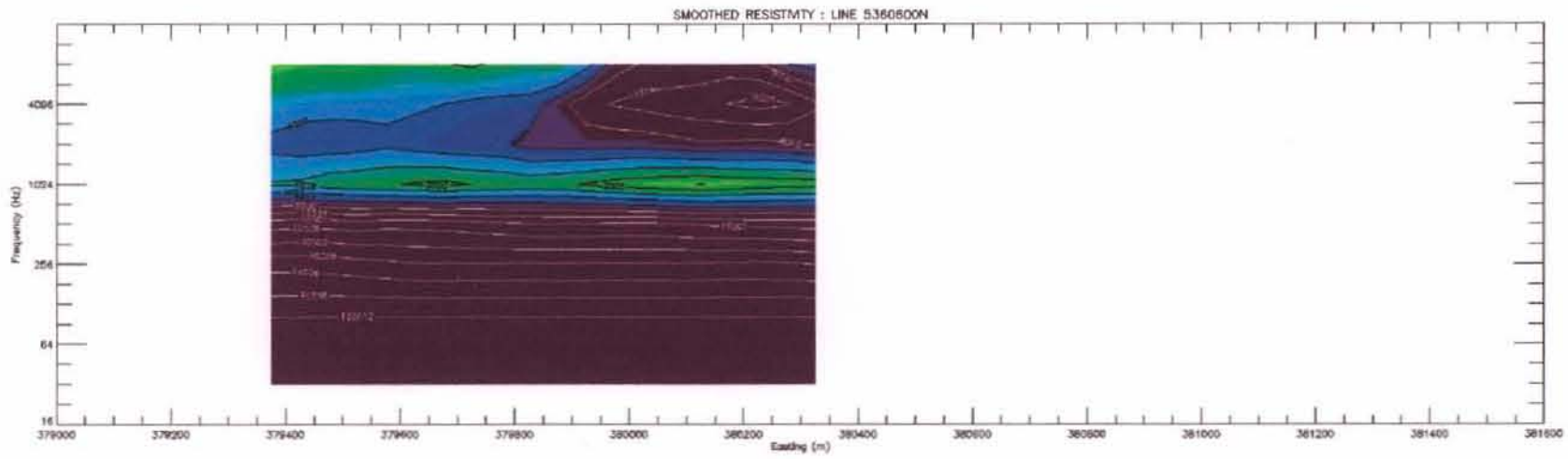


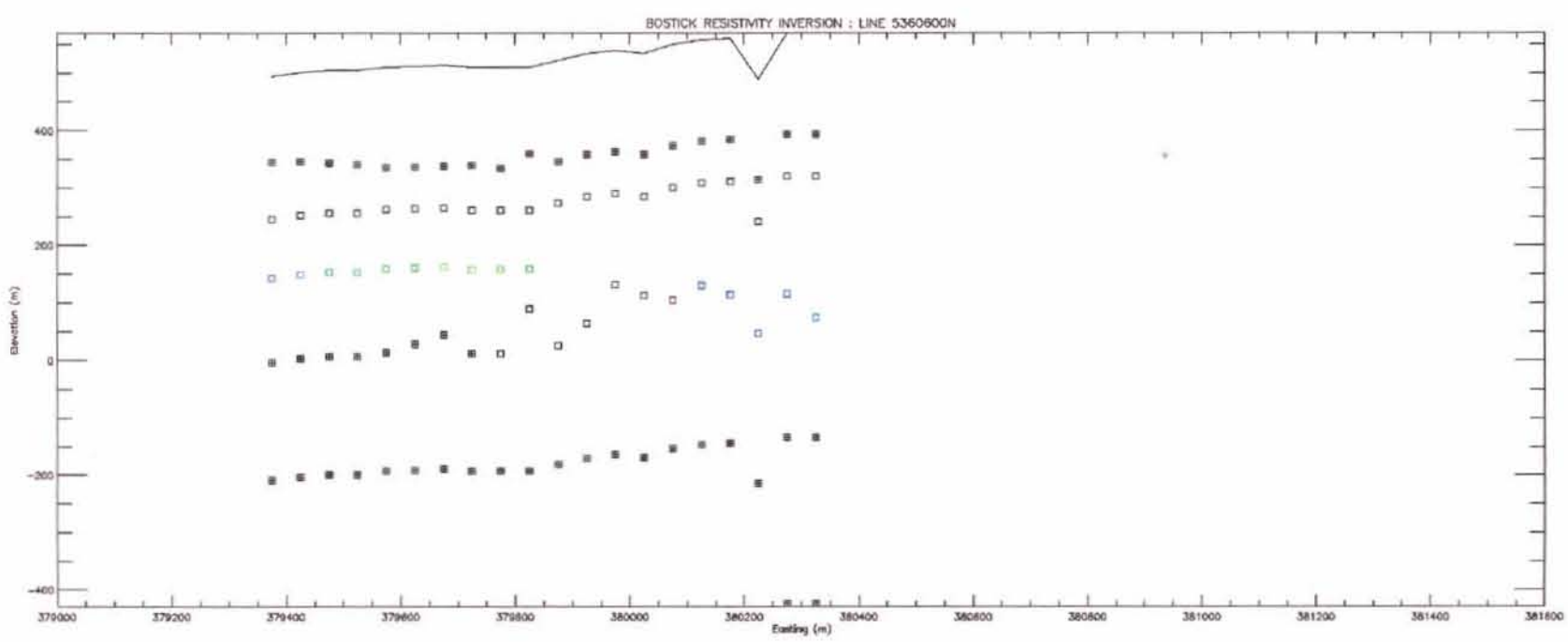
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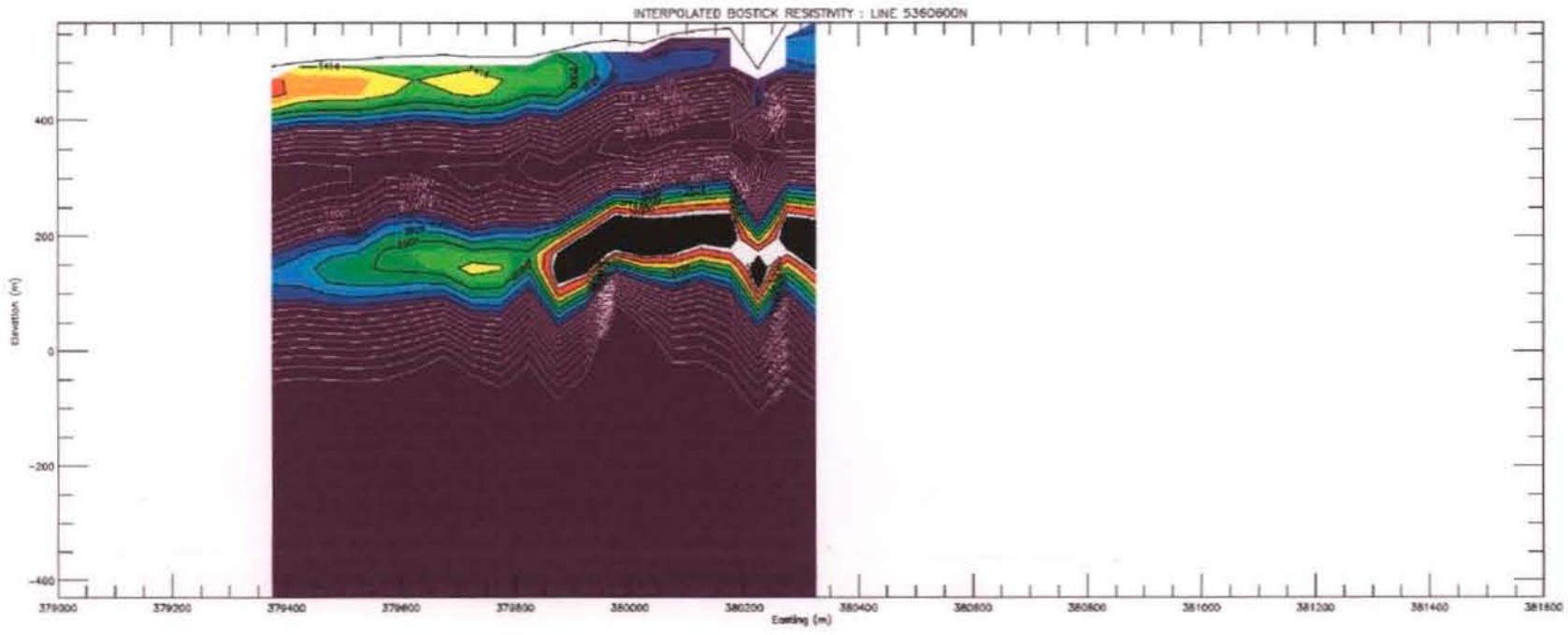
5360200N

GOLDFIELDS EXPLORATION
South Henty CSAMT Data 1999. Line 5360200N. Re-Processed with EMAP filter and Bostick inversion June 1999
Drawn by : Flagstaff Geo-Consultants 21-6-99

675210





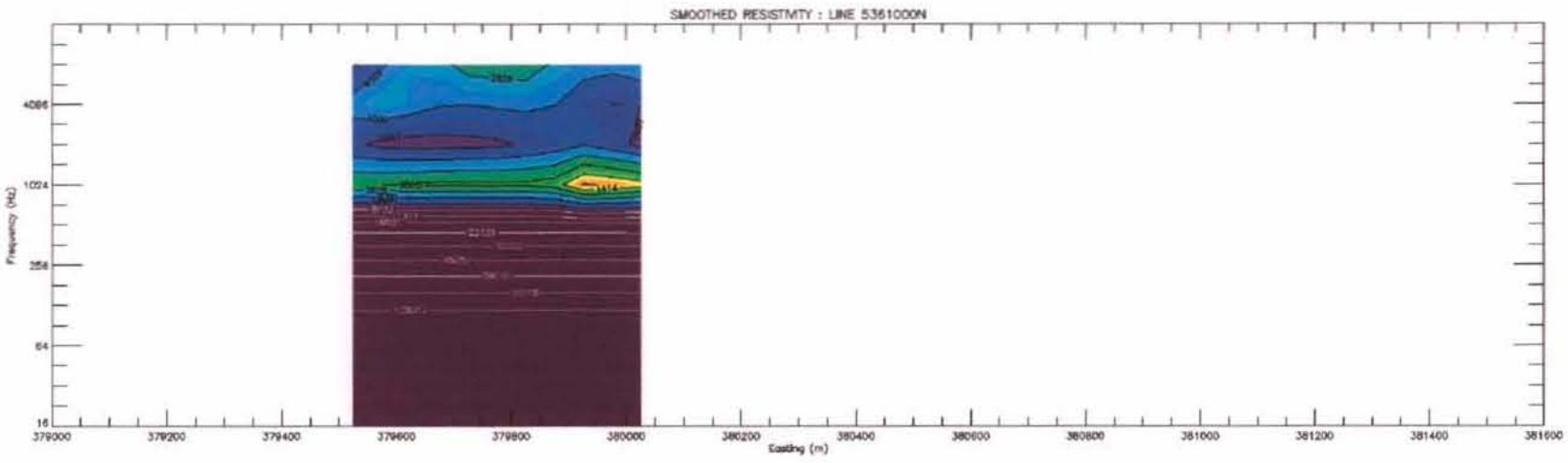


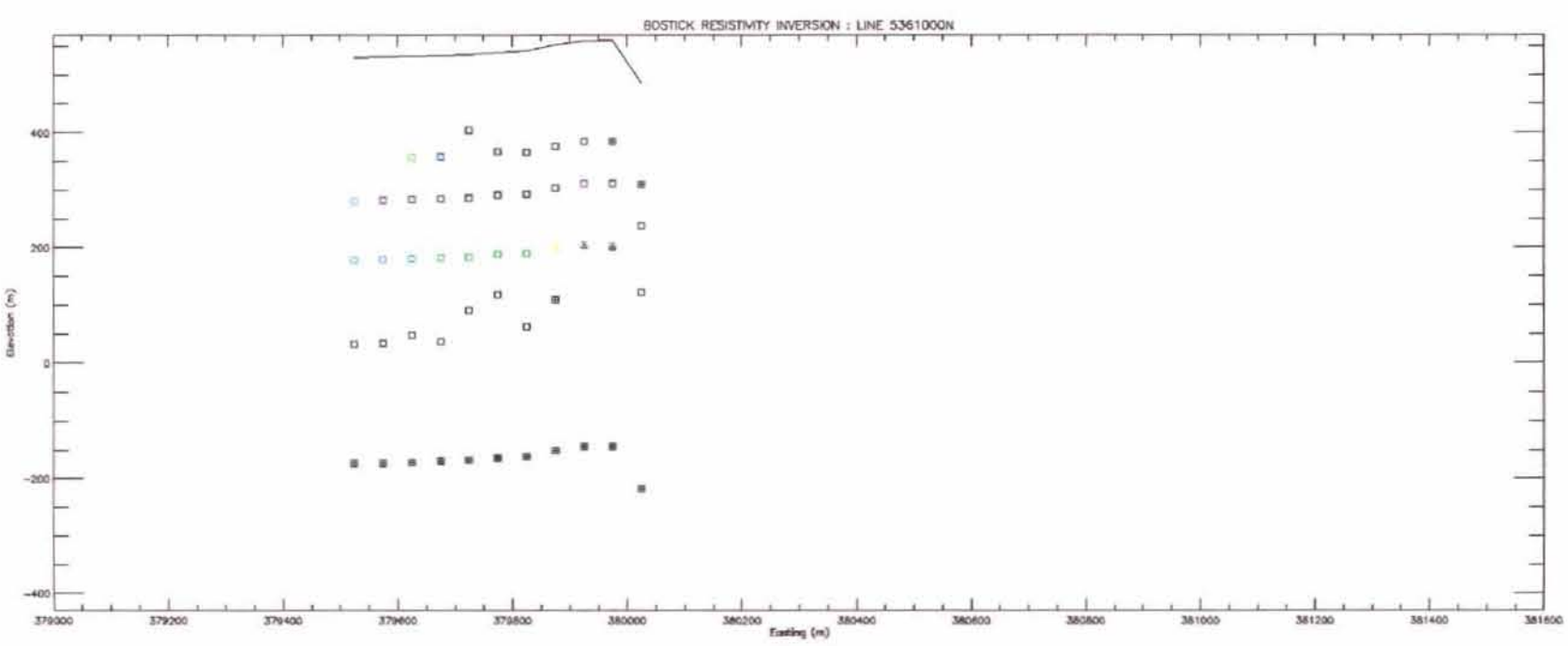
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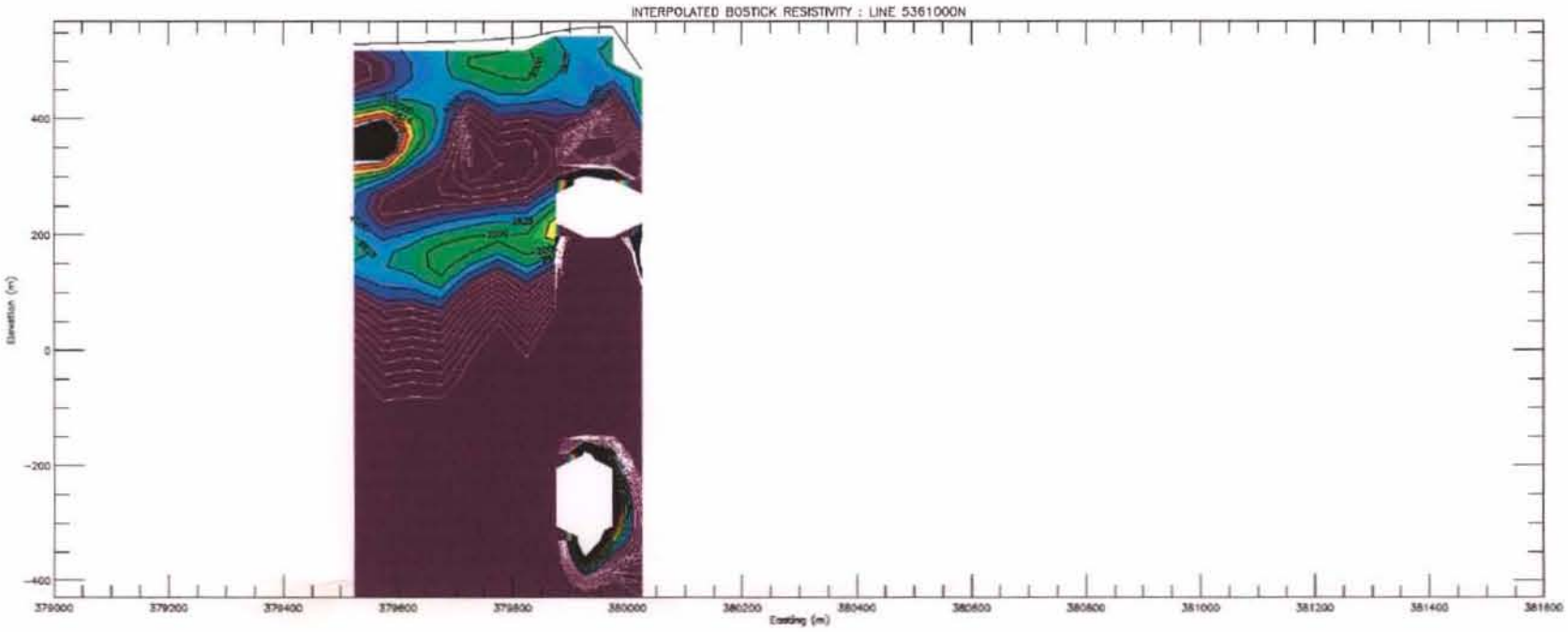
5360600N

GOLDFIELDS EXPLORATION
South Henty CSAMT Data 1999. Line 5360600N. Re-Processed with EMAP filter and Bostick inversion June 1999
Drawn by: Fitzgerald Geo-Consultants 23/6/99

675211





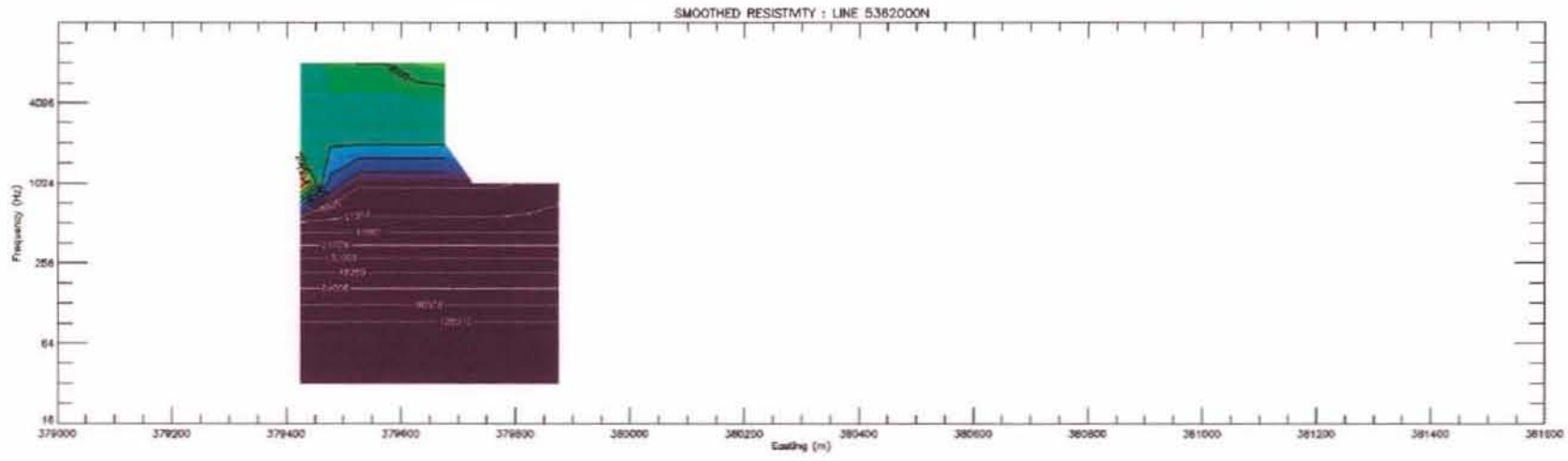


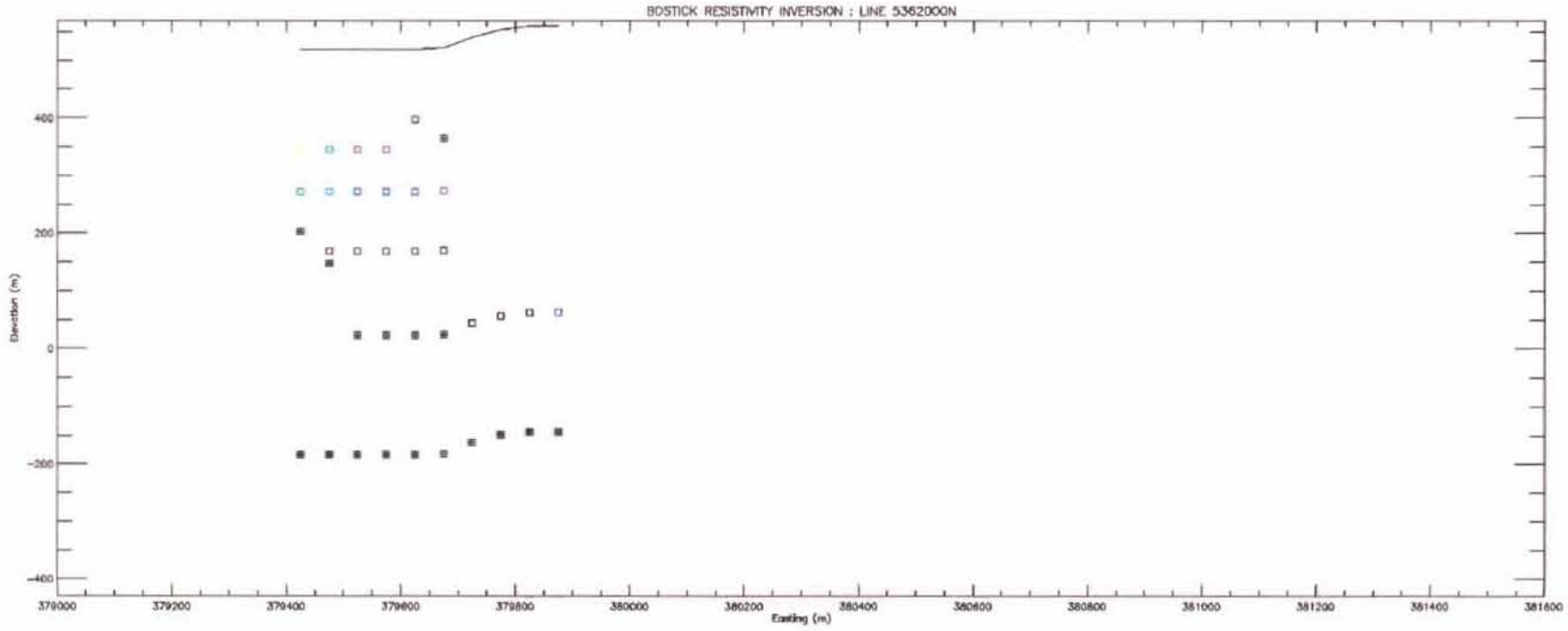
5 cm

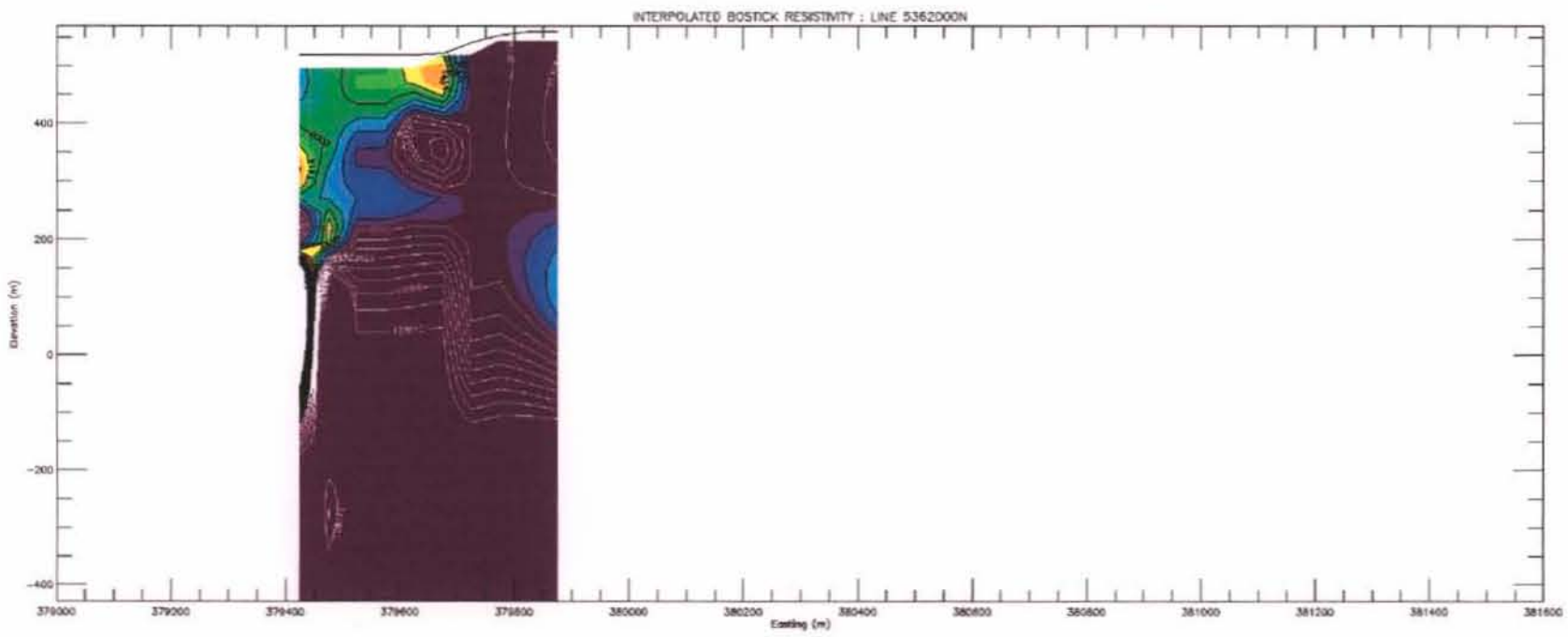
5361000N

GOLDFIELDS EXPLORATION
South Henty CSAMT Data 1999. Line 5361000N. Re-Processed with EMAP filter and Bostick inversion June 1999
Drawn by: Fitzgerald Geo-Consultants

675212







5 cm

5362000N

GOLDFIELDS EXPLORATION
South Henty CSAMT Data. 1999. Line 5362000N. Re-Processed with EMAP filter and Bostick inversion June. 1999
Drawn by: Flagstaff GeoConsultants 23/6/99

Flagstaff GeoConsultants

APPENDIX 2

Set of plots of 1D inversion of resistivity vs depth, for each Line surveyed (by Zonge Engineering).

Sub-set of plots of 2D inversion of resistivity vs depth, for Lines 5358200N to 5359800N (by Zonge Engineering).

Appendix 2 – List of Figures

1a. Cross-section for hole HA002

1b. Cross-section for hole HA004

2. Cross-section for hole HA005

3. Cross-section for hole HA006

4. Cross-section for hole HA003

5. Cross-section for hole SHD25

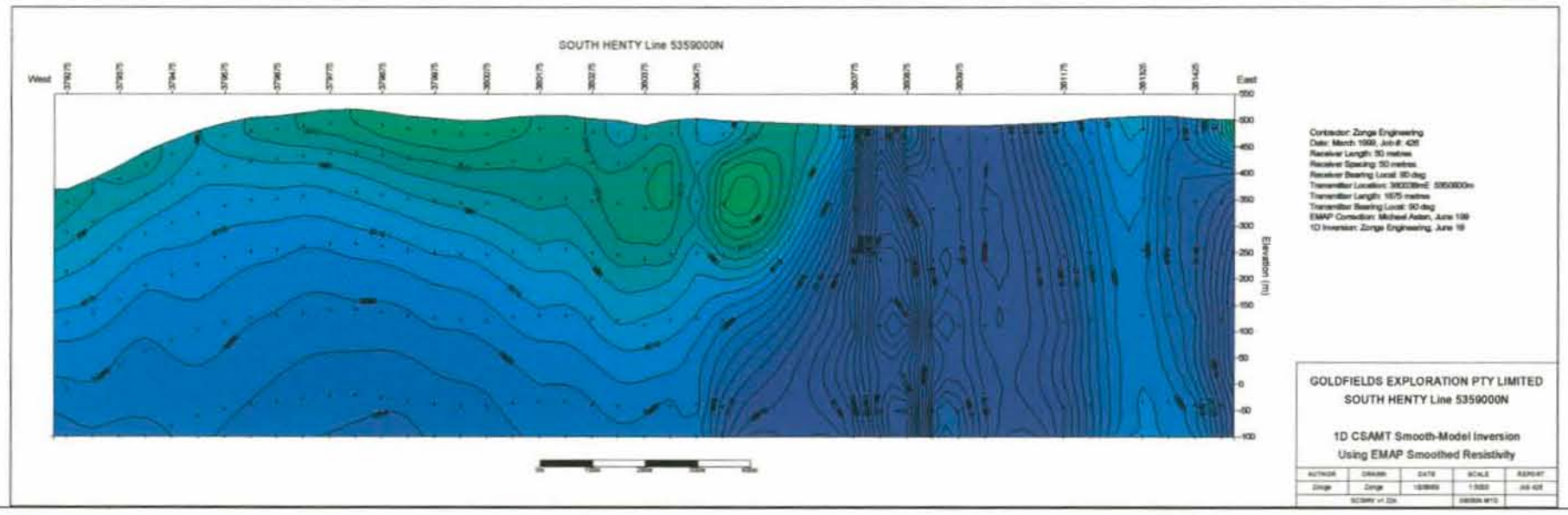
6. Cross-section for hole YNC4

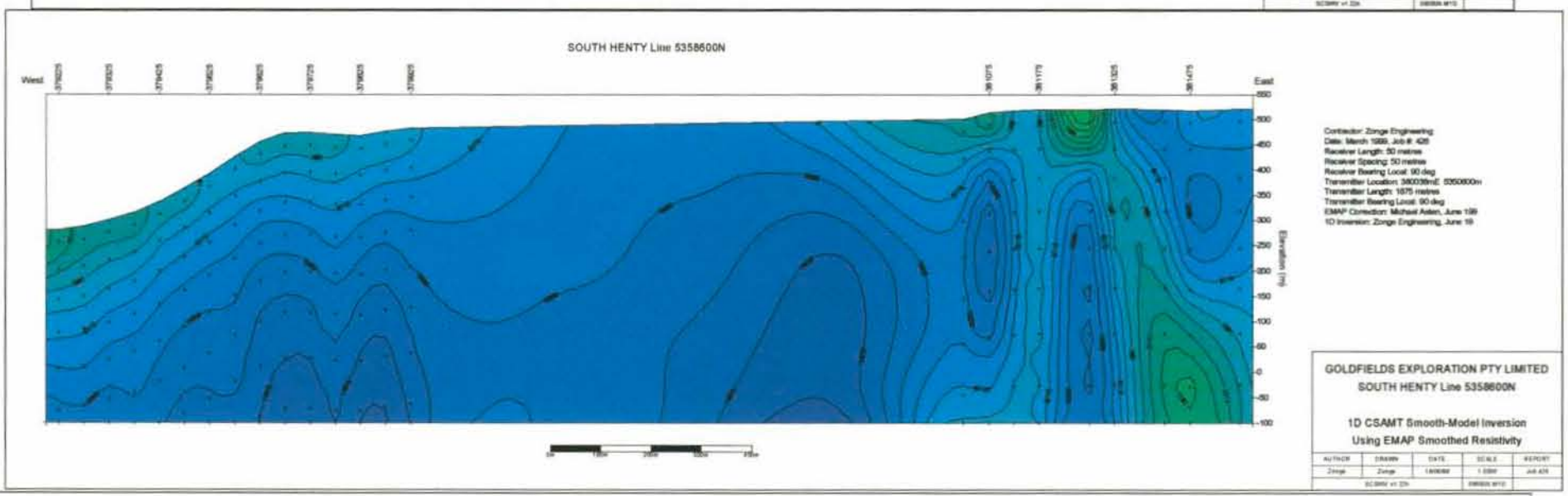
7. Cross-section for hole YNC14 & YNC15

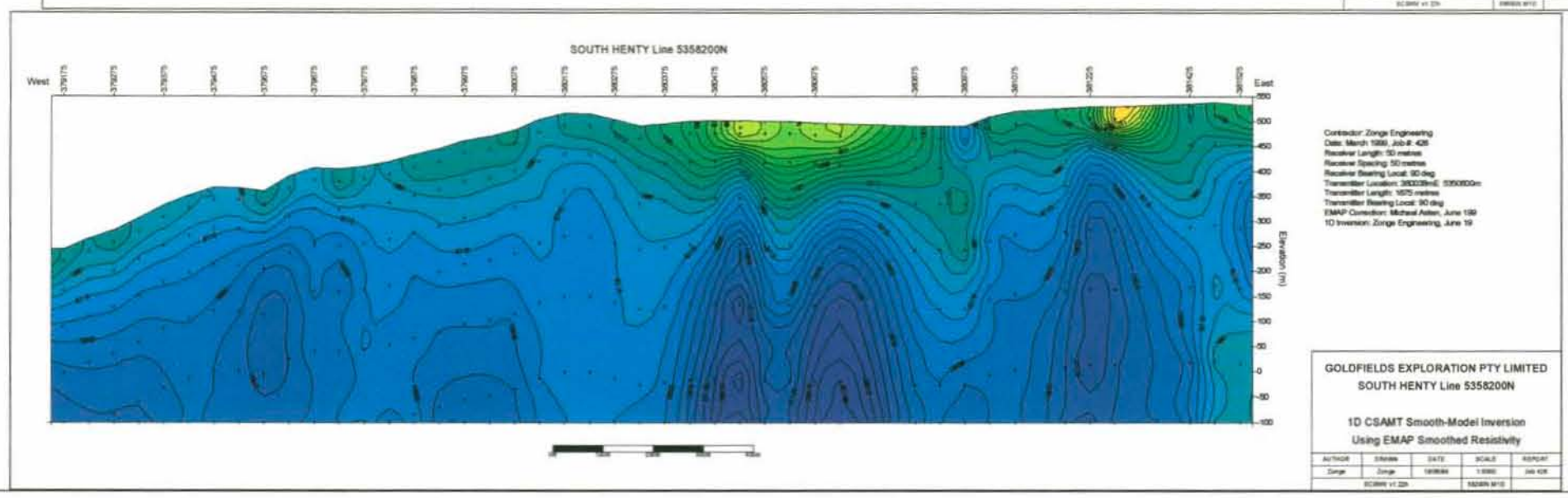
Flagstaff GeoConsultants Pty. Ltd. (ACN 074 693 637)
Suite 2, 337A Lennox Street, (PO Box 2236) Richmond South, Victoria. 3121 Australia
Phone: +61 3 9421 1000 Fax +61 3 9421 1099
Email: postman@flagstaff-geoconsultants.com.au WebSite: www.flagstaff-geoconsultants.com.au

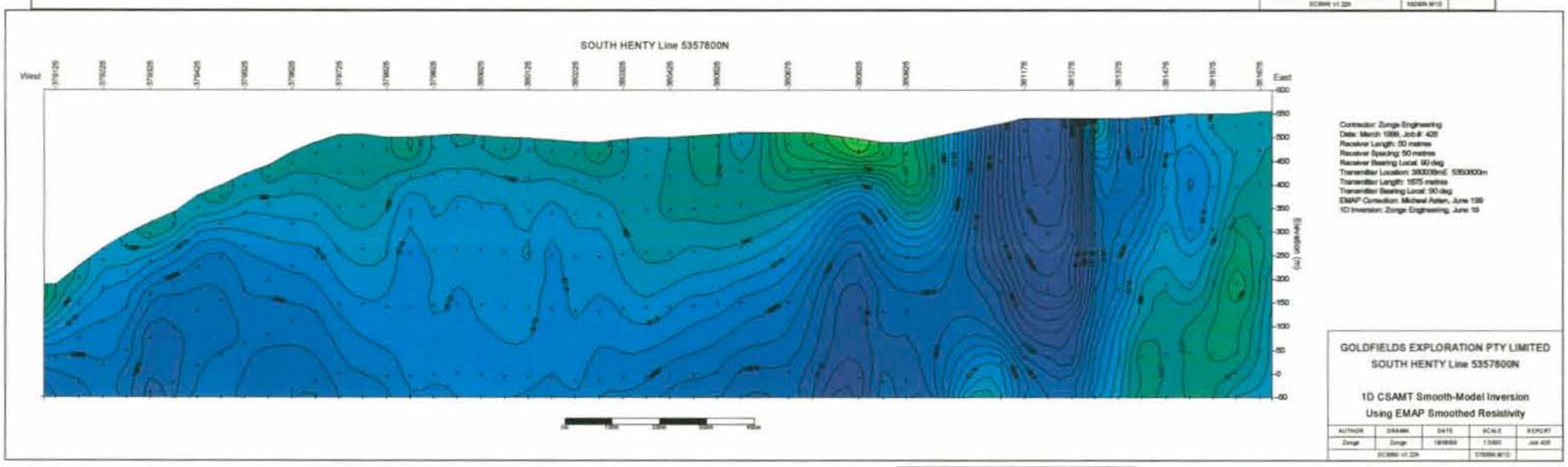
SOUTH HENTY Line 5357400N
West
East
Elevation (m)
Contractor: Zonge Engineering
Date: March 1999, Job #: 426
Receiver Length: 50 metres
Receiver Spacing: 50 metres
Receiver Bearing Local: 90 deg
Transmitter Location: 380036mE 5356800m
Transmitter Length: 1875 metres
Transmitter Bearing Local: 90 deg
EMAP Correction: Michael Asten, June 199
1D Inversion: Zonge Engineering, June 19
GOLDFIELDS EXPLORATION PTY LIMITED
SOUTH HENTY Line 5357400N
1D CSAMT Smooth-Model Inversion
Using EMAP Smoothed Resistivity
SOUTH HENTY Line 5357000N
Contractor: Zonge Engineering
Date: March 1999, Job #: 426
Receiver Length: 50 metres
Receiver Spacing: 50 metres
Receiver Bearing Local: 90 deg
Transmitter Location: 380036mE 5356800m
Transmitter Length: 1875 metres
Transmitter Bearing Local: 90 deg
EMAP Correction: Michael Asten, April 19
1D Inversion: Zonge Engineering, June 19
GOLDFIELDS EXPLORATION PTY LIMITED
SOUTH HENTY Line 5357000N
1D CSAMT Smooth-Model Inversion
Using EMAP Smoothed Resistivity
SOUTH HENTY Line 5356600N
Contractor: Zonge Engineering
Date: March 1999, Job #: 426
Receiver Length: 50 metres
Receiver Spacing: 50 metres
Receiver Bearing Local: 90 deg
Transmitter Location: 380036mE 5356800m
Transmitter Length: 1875 metres
Transmitter Bearing Local: 90 deg
EMAP Correction: Michael Asten, April 19
1D Inversion: Zonge Engineering, June 19
GOLDFIELDS EXPLORATION PTY LIMITED
SOUTH HENTY Line 5356600N
1D CSAMT Smooth-Model Inversion
Using EMAP Smoothed Resistivity
SOUTH HENTY Line 5356200N
Contractor: Zonge Engineering
Date: March 1999, Job #: 426
Receiver Length: 50 metres
Receiver Spacing: 50 metres
Receiver Bearing Local: 90 deg
Transmitter Location: 380036mE 5356800m
Transmitter Length: 1875 metres
Transmitter Bearing Local: 90 deg
EMAP Correction: Michael Asten, April 19
1D Inversion: Zonge Engineering, June 19
GOLDFIELDS EXPLORATION PTY LIMITED
SOUTH HENTY Line 5356200N
1D CSAMT Smooth-Model Inversion
Using EMAP Smoothed Resistivity
GOLDFIELDS EXPLORATION
SOUTH HENTY (TAS) - EL 6/96
CSAMT INTERPRETATION
1D Inversions by Zonge
5 cm

675215





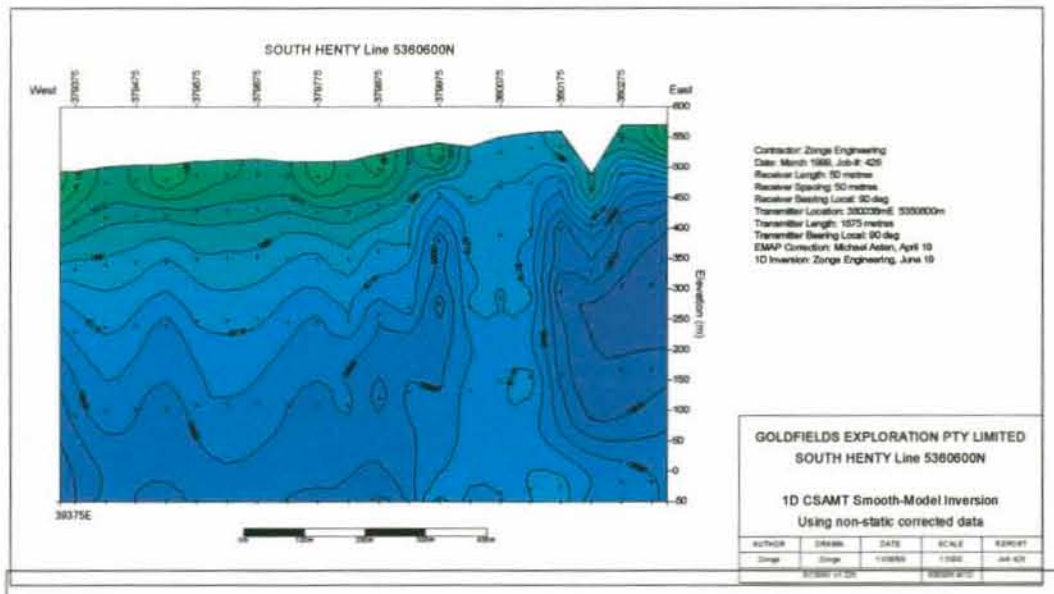




5 cm

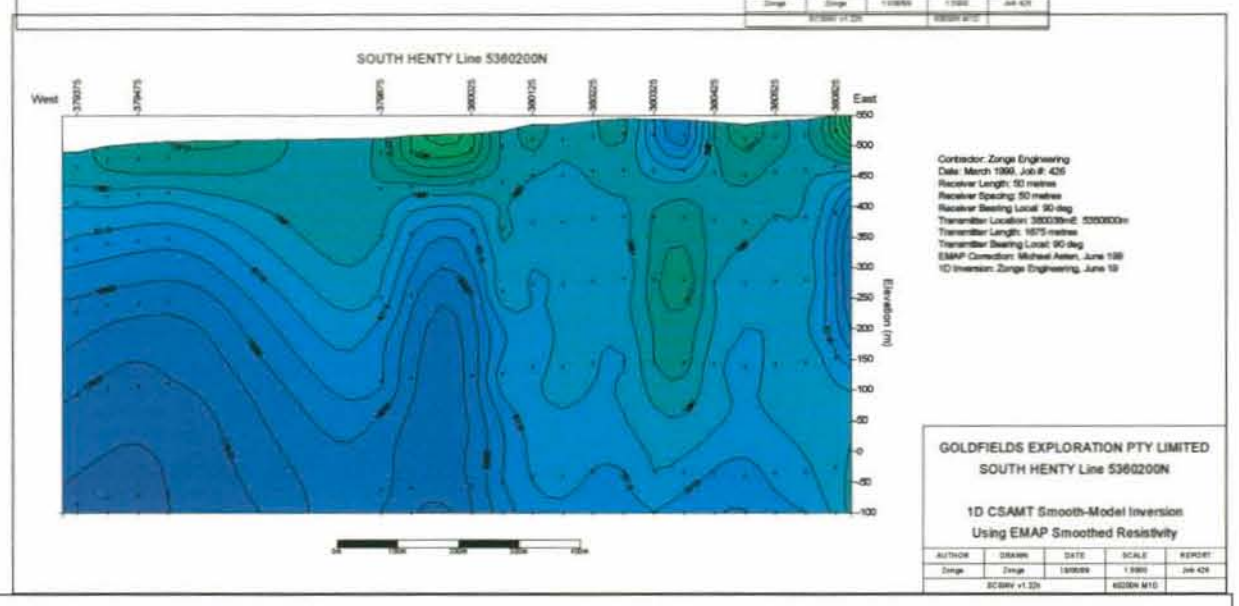
GOLDFIELDS EXPLORATION

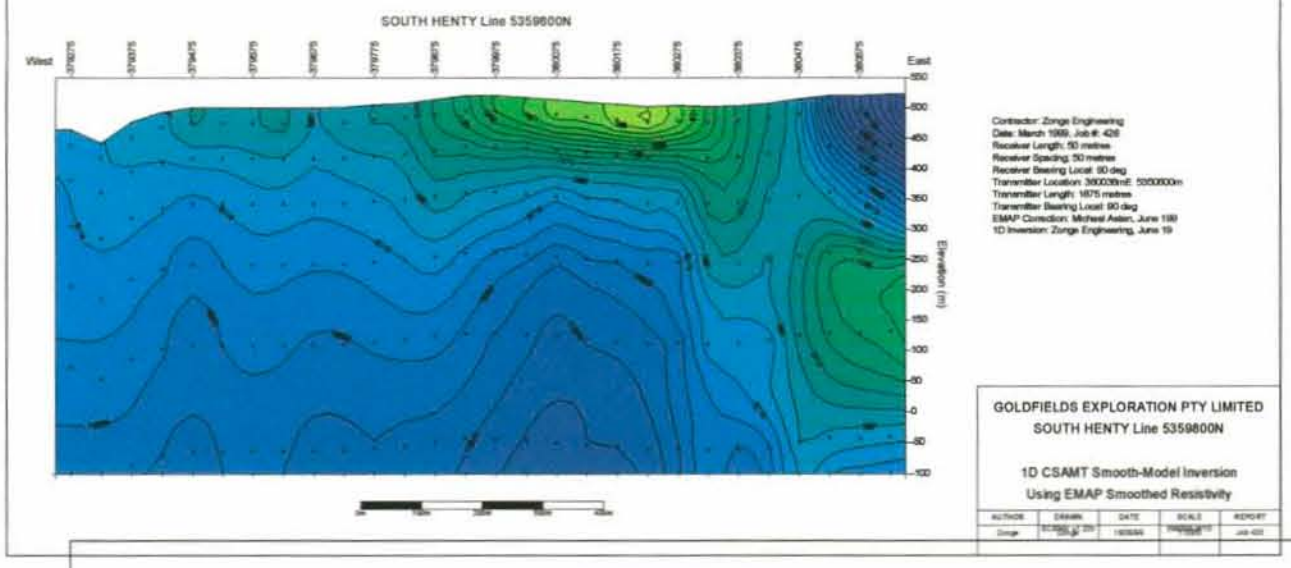
SOUTH HENTY (TAS) - EL 5/96
CSAMT INTERPRETATION
1D Inversions by Zonge

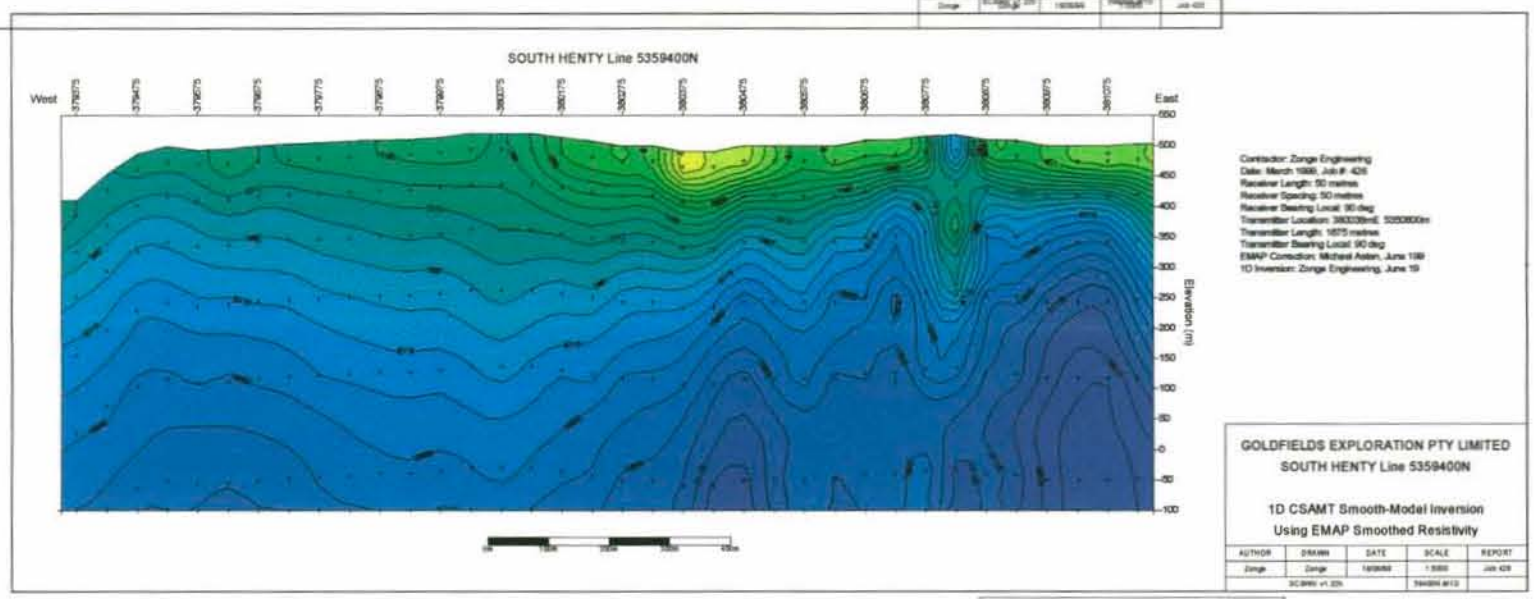


NOTES:

Line 53561000N and
Line 53562000N have too few
usuable data to permit a
1D inversion.





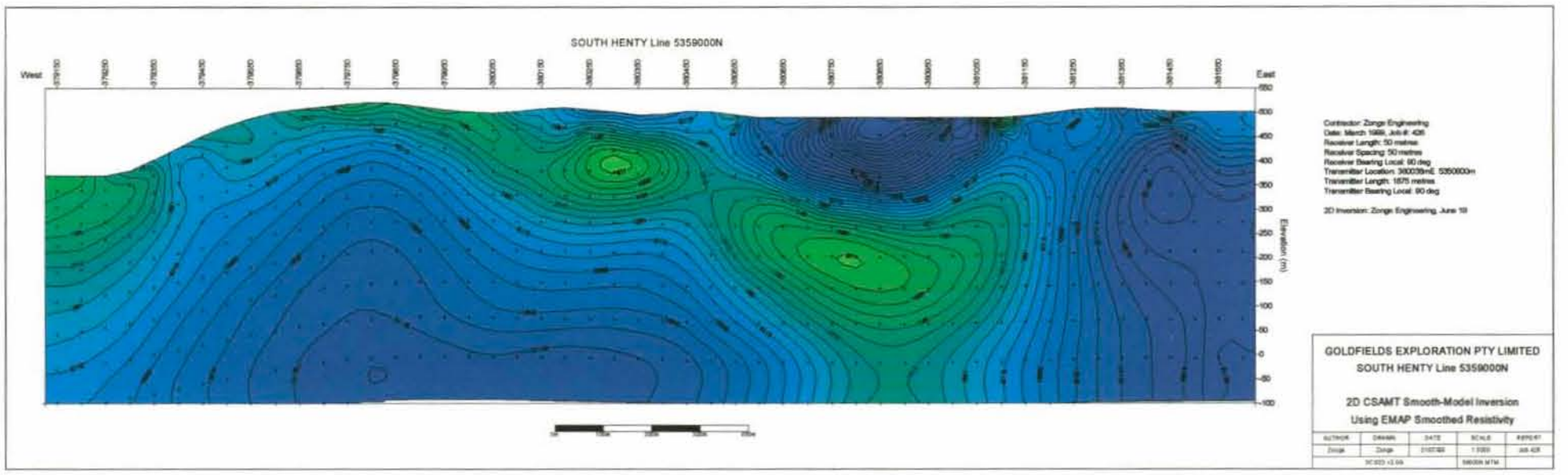


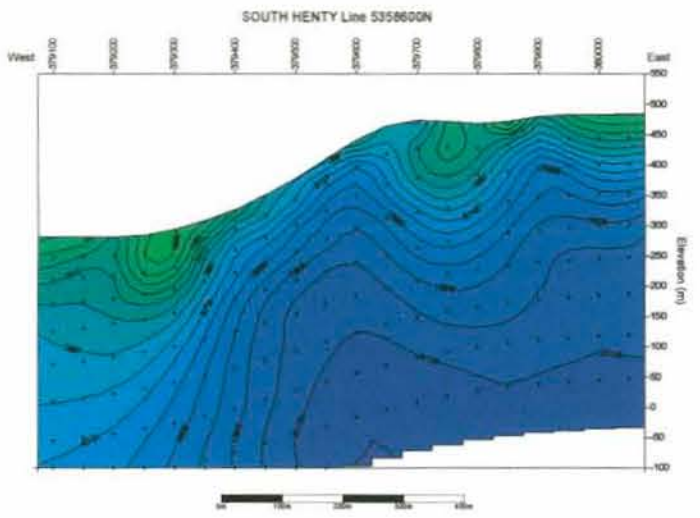
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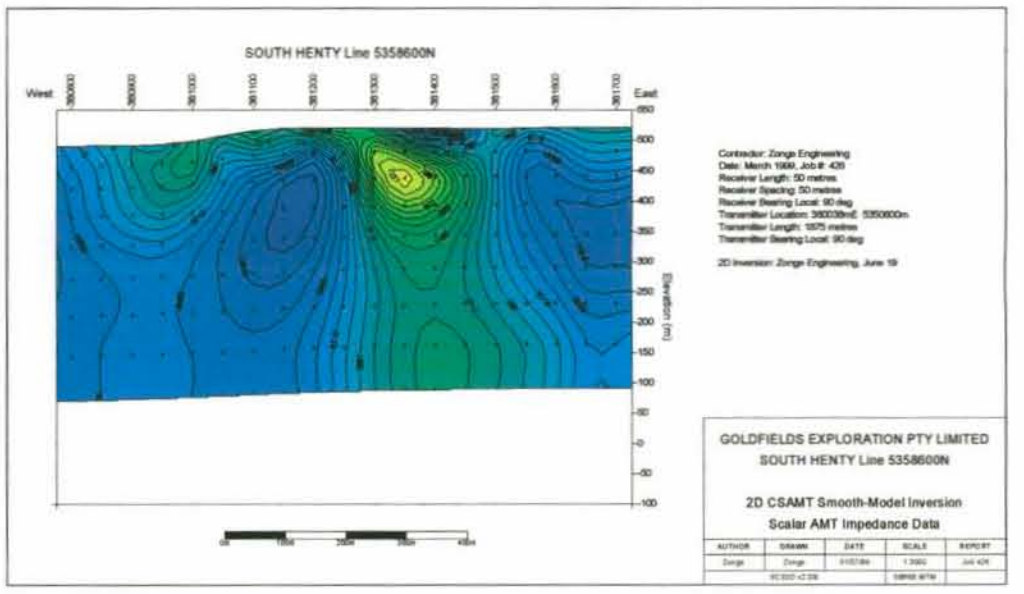
GOLDFIELDS EXPLORATION

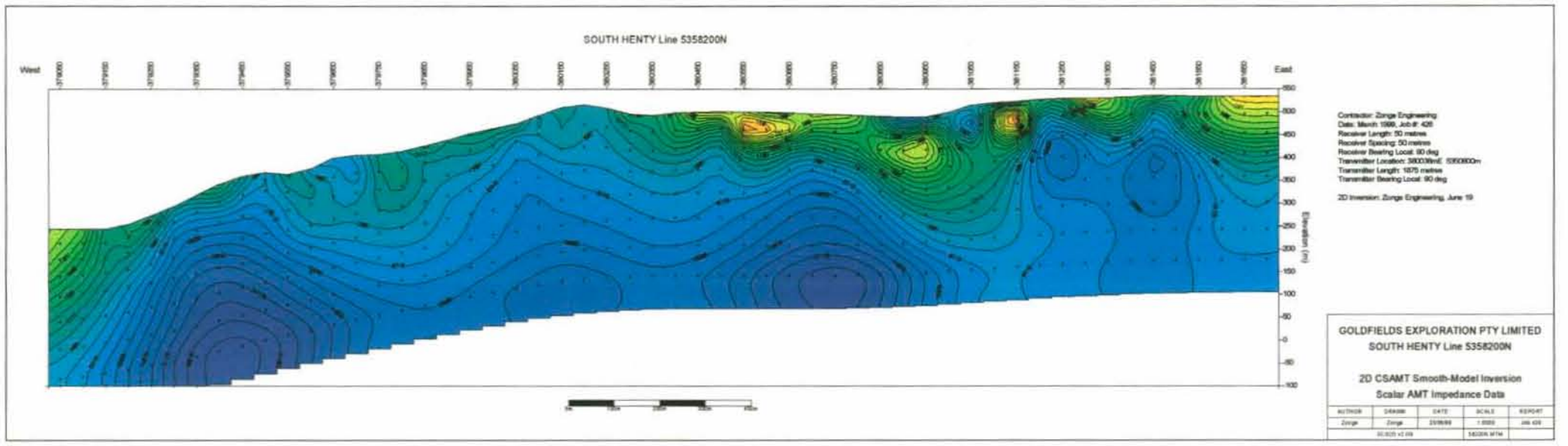
SOUTH HENTY (TAS) - EL 8/96
CSAMT INTERPRETATION
1D Inversions by Zonge

675217







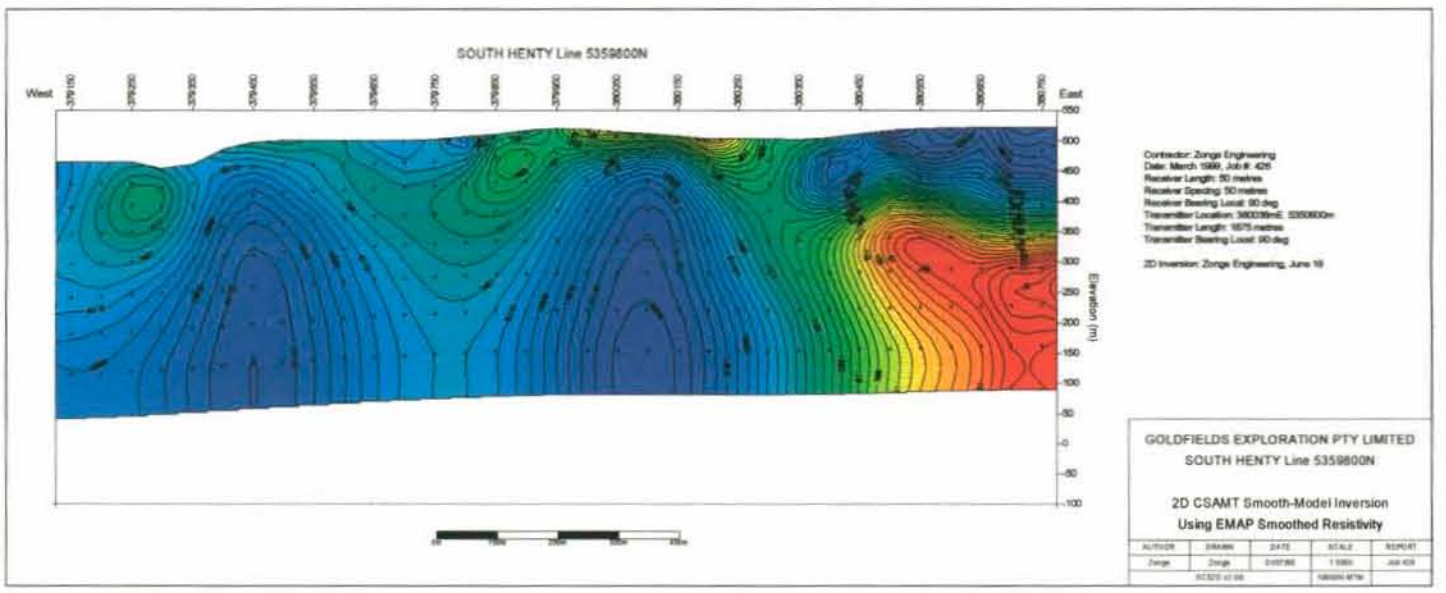


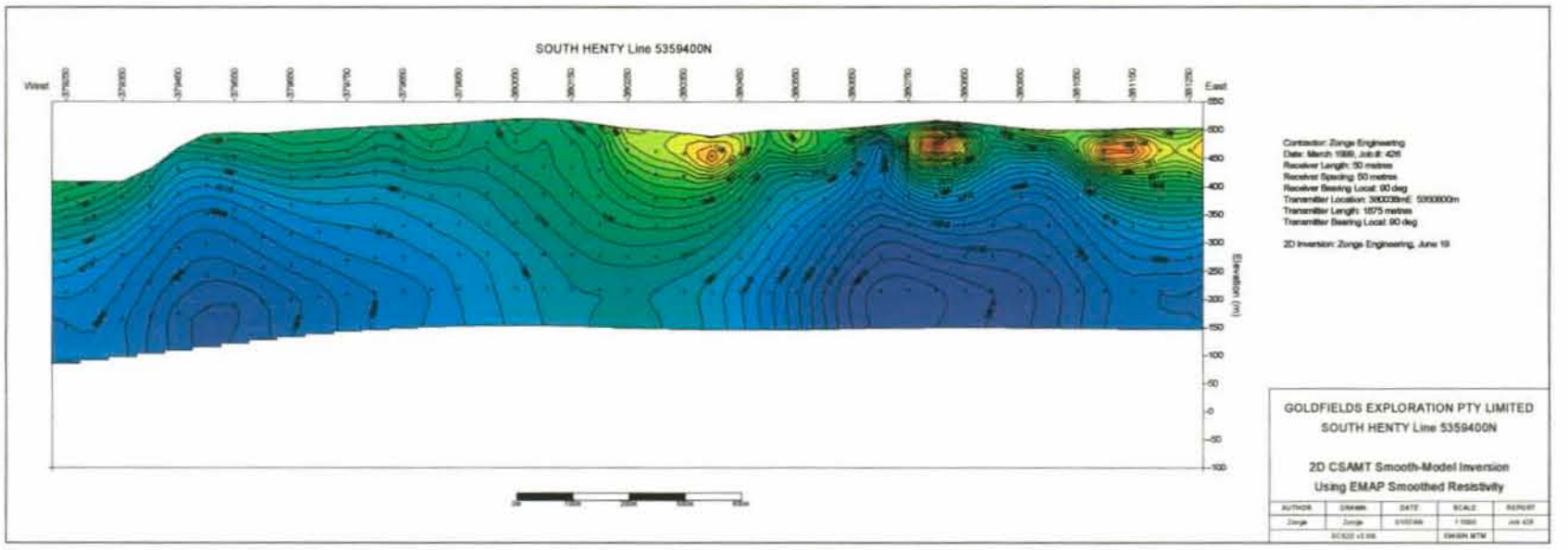
5 cm

GOLDFIELDS EXPLORATION

SOUTH HENTY (TAS) - EL 8/98
CSAMT INTERPRETATION
2D Inversions by Zonge

675218





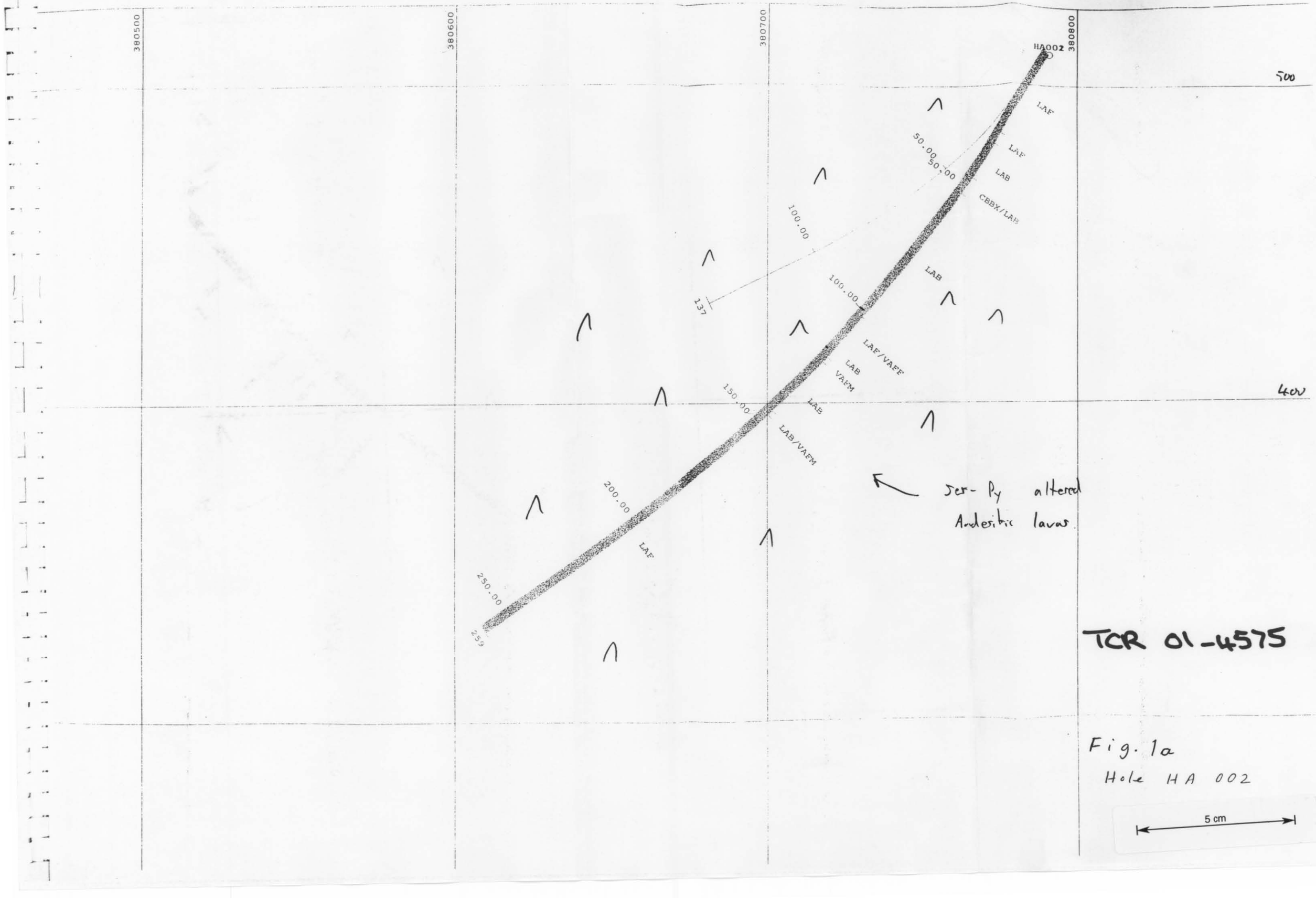
5 cm

GOLDFIELDS EXPLORATION

SOUTH HENTY (TAS) - EL 8/96
CSAMT INTERPRETATION
2D Inversions by Zonge

HA2

675219



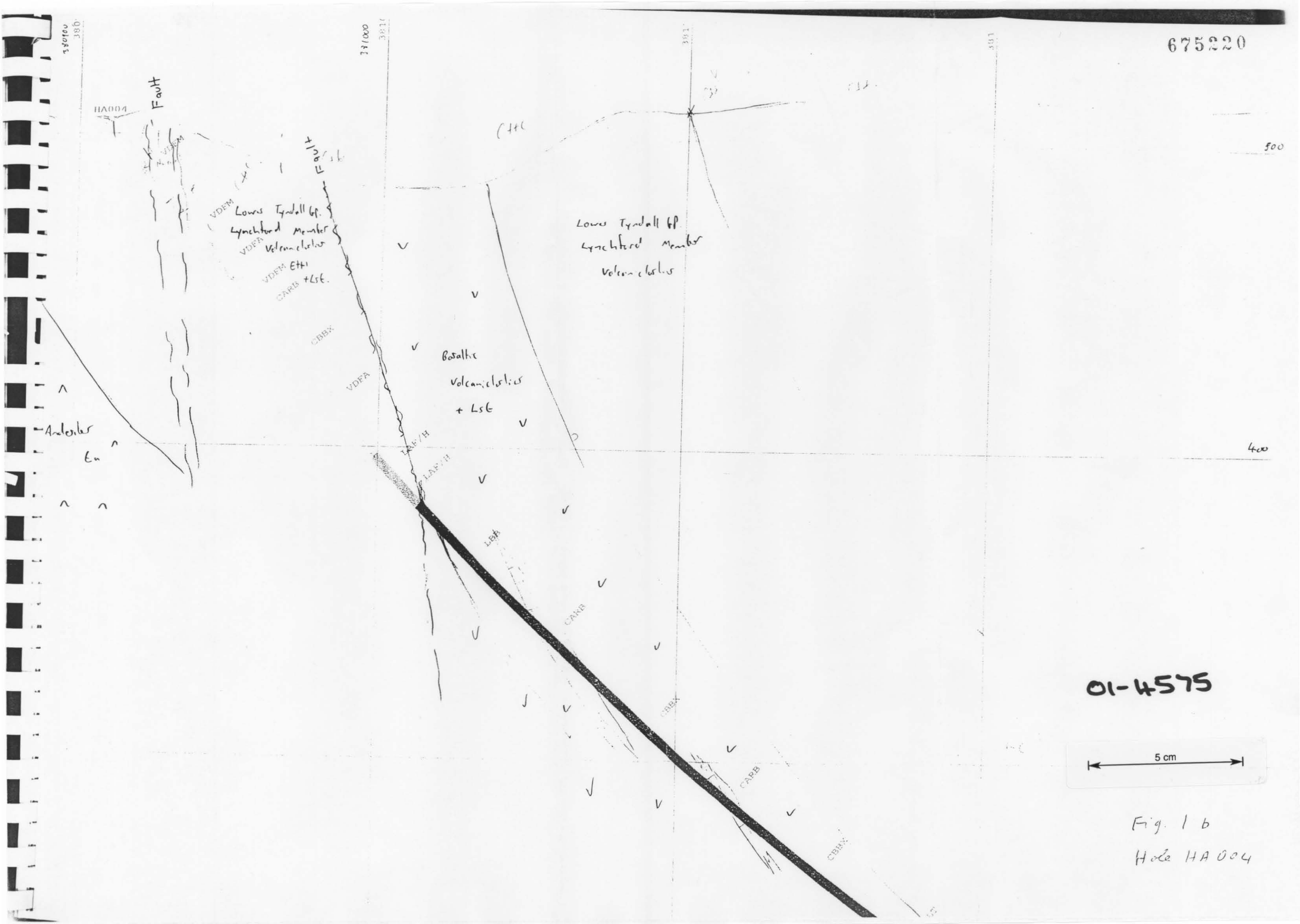
Ser- Py altered Andesitic lavas.

TCR 01-4575

Fig. 1a
Hole HA 002

5 cm

675220



01-4575

Fig. 1 b
Hole HA 004

675221

380100

381000

HA005

FILL

FAULT

500

Lower Tyndall GP
Lynchford Member
?

VDFF
VR<C-M
VDFF
VR<C-M
VREF
VR<M
VR<C-M
FALT
VR<M
VR<M
VR<M-F
VR<C-M
VDFM

50.00

100.00

VR<C-M

VDFM

150.00

VDFF

volcaniclastic siltstone

VDFM

200.00

FALT

VAFM

VAFM/FALT
?

250.00

296

Andesites
Ea

Basaltic volcaniclastics

Lower Tyndall GP.
Lynchford Member Volcaniclastics

C4t1

C4t1

C4d

01-4575

Fig 2.
Hole HA5

5 cm

675222

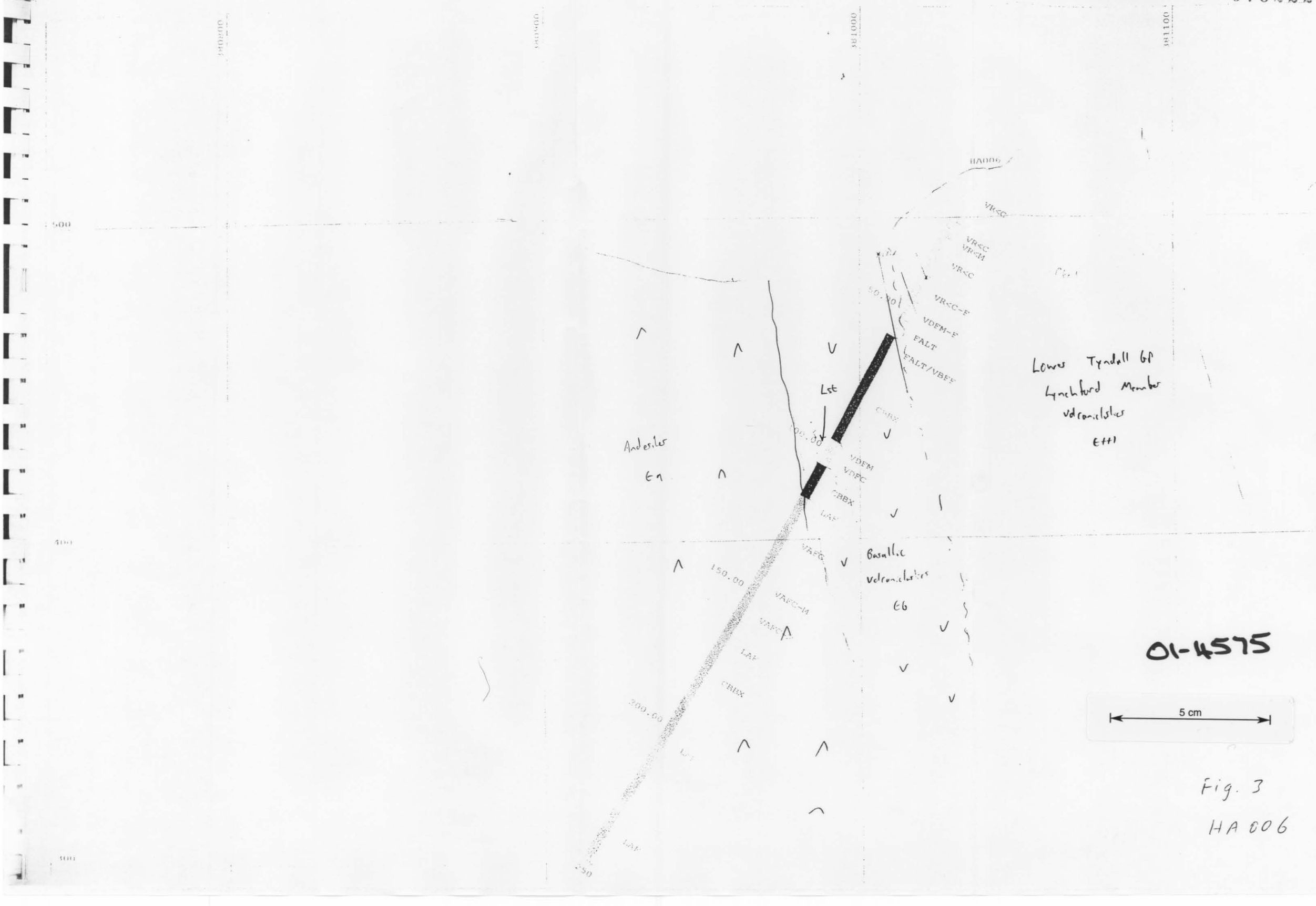


Fig. 3
HA 006

675323

HA003

380700 380800 380900 381000

500

HA003

VDEM-C
VDEM-M
VDEM-C
CBBX
VDEM-C
SILT
VDFM
Lower Tyndall Gp. Volcaniclastics
(Lynchford Member Eth1)
LBB
VDFF-M
LBB
Basaltic Volcaniclastics
Eb1

400

CBBX
SAND/CARB
CARB
CBBX
CARB
CARB/SAND

Calcareous basaltic
volcaniclastics. + Lst.

Andesites
Eu

01-4575

Fig 4.
Hole
HA003

5 cm

Fig. 5
Hole SHD25

5 cm

675224

01-4575

675225

YNC 4

5 cm

3797

379800

379900

500

400

300

TILL

YNC 4

ser- Py -chl alteration

rhyolite

VDF1

LDFB

SILT LDFB ERAC

VDFM

VDLB

LDF

LDF/

SILT LDF/ ERAC SILT ARGIL

Ccvi

Ccv

ZN_A 1156.0

Na2O

MN

272

01-4575

Fig. 6
Hole YNC 4

675226

379

379 400

379 500mE

379 600mE

Henty Canal

YNC15

YNC14

S1

S1

HENTY FAULT

SOUTH

560

400

dacite derived sandstone

massive to autoclastic dacite feldspar phyric

dacite derived sediment

massive dacite

dacite derived sediment

monomict/conglomerate

autobrecciated dacite to monomict conglomerate (may be alteration effect)

massive to autobrecciated dacite minor volcaniclastic component prominant 2mm feldspar

intermediate lava grey green porphyritic foliated amygdaloidals

deformed shear-altered green yellow foliated. qtz sericite rock with interbeds of graphitic shale

intermediate lava grey green porphyritic foliated amygdaloidals

deformed shear-altered green yellow foliated. qtz sericite rock with interbeds of graphitic shale

Fault - grey yellow sericitic pug

lava or lava breccia sil-ser-py alt

Altered dacites

Zone of strong to intense sericite-silica-pyrite with carbonate alteration

zone
-pyrite
ediate lavas
iclastics and
shales

5 cm

01-4575

Fig. 7.

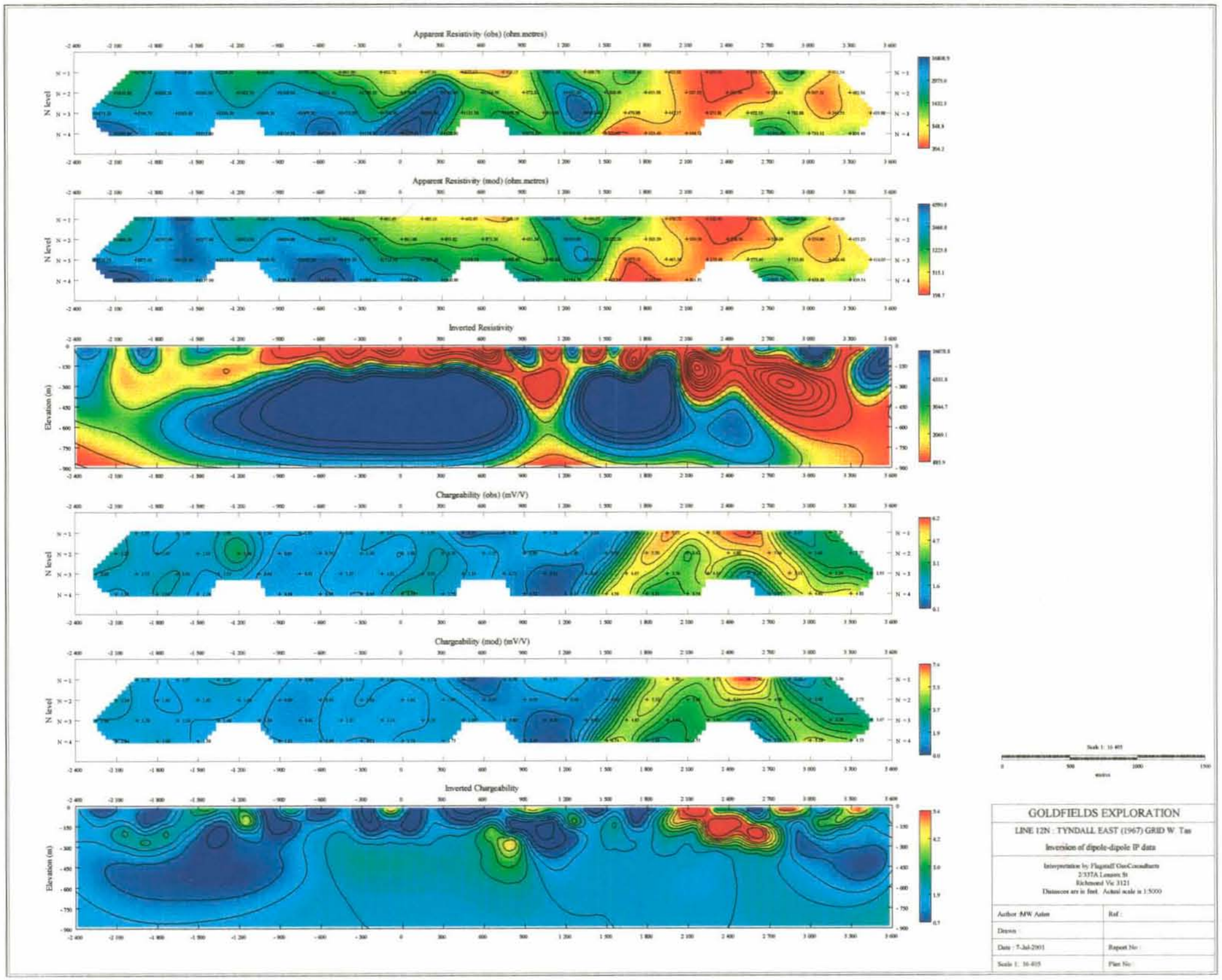
Hole YNC 15, YNC 14.

675227

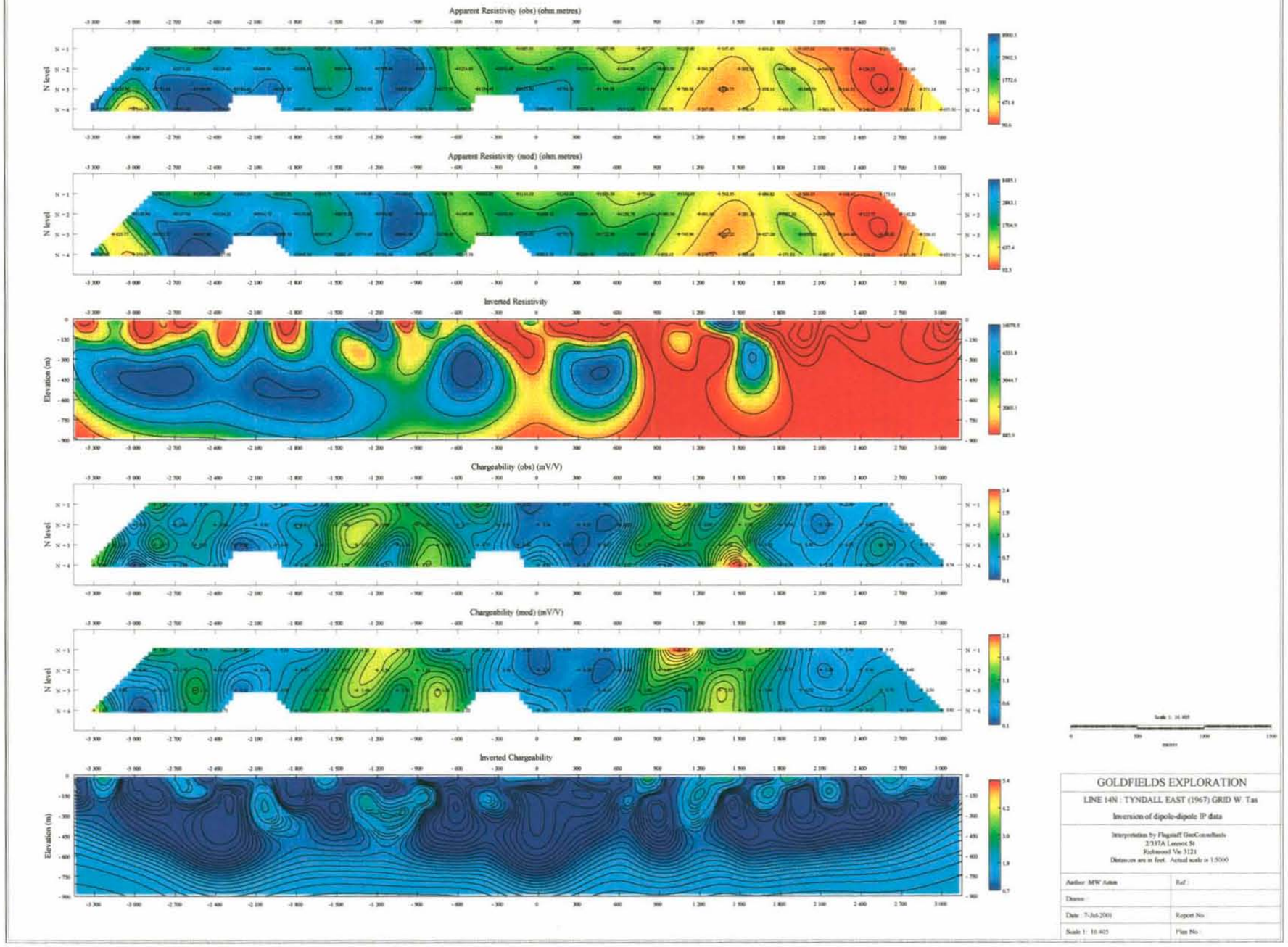
APPENDIX 3

Set of plots of dipole-dipole resistivity and IP field data, and 2D inversion to depth, for each IP line surveyed by McPhar, 1967.

Flagstaff GeoConsultants Pty. Ltd. (ACN 074 693 637)
Suite 2, 337A Lennox Street, (PO Box 2236) Richmond South, Victoria, 3121 Australia
Phone: +61 3 9421 1000 Fax +61 3 9421 1099
Email: postman@flagstaff-geoconsultants.com.au WebSite: www.flagstaff-geoconsultants.com.au

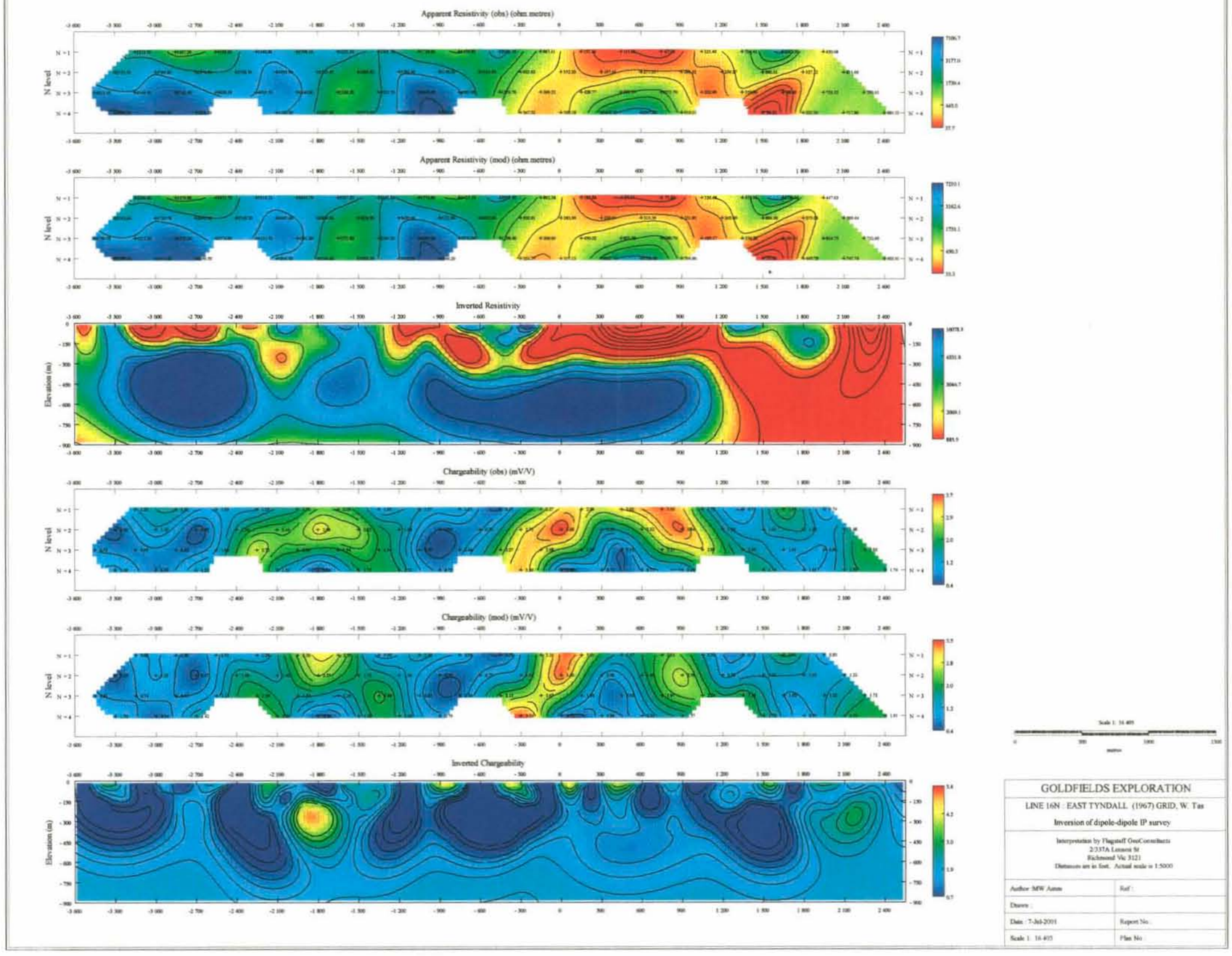

Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
Scale 1: 10 405
metres
GOLDFIELDS EXPLORATION
LINE 12N : TYNDALL EAST (1967) GRID W Tas
Inversion of dipole-dipole IP data
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000
Author :MW Aiden
Ref :
Drawn :
Date : 7-Jul-2003
Report No :
Scale 1: 10 405
Plan No :

5 cm


Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 14N : TYNDALL EAST (1967) GRID W. Tas
Inversion of dipole-dipole IP data
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000
Author: MW Acton
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1: 10 405
Plan No :

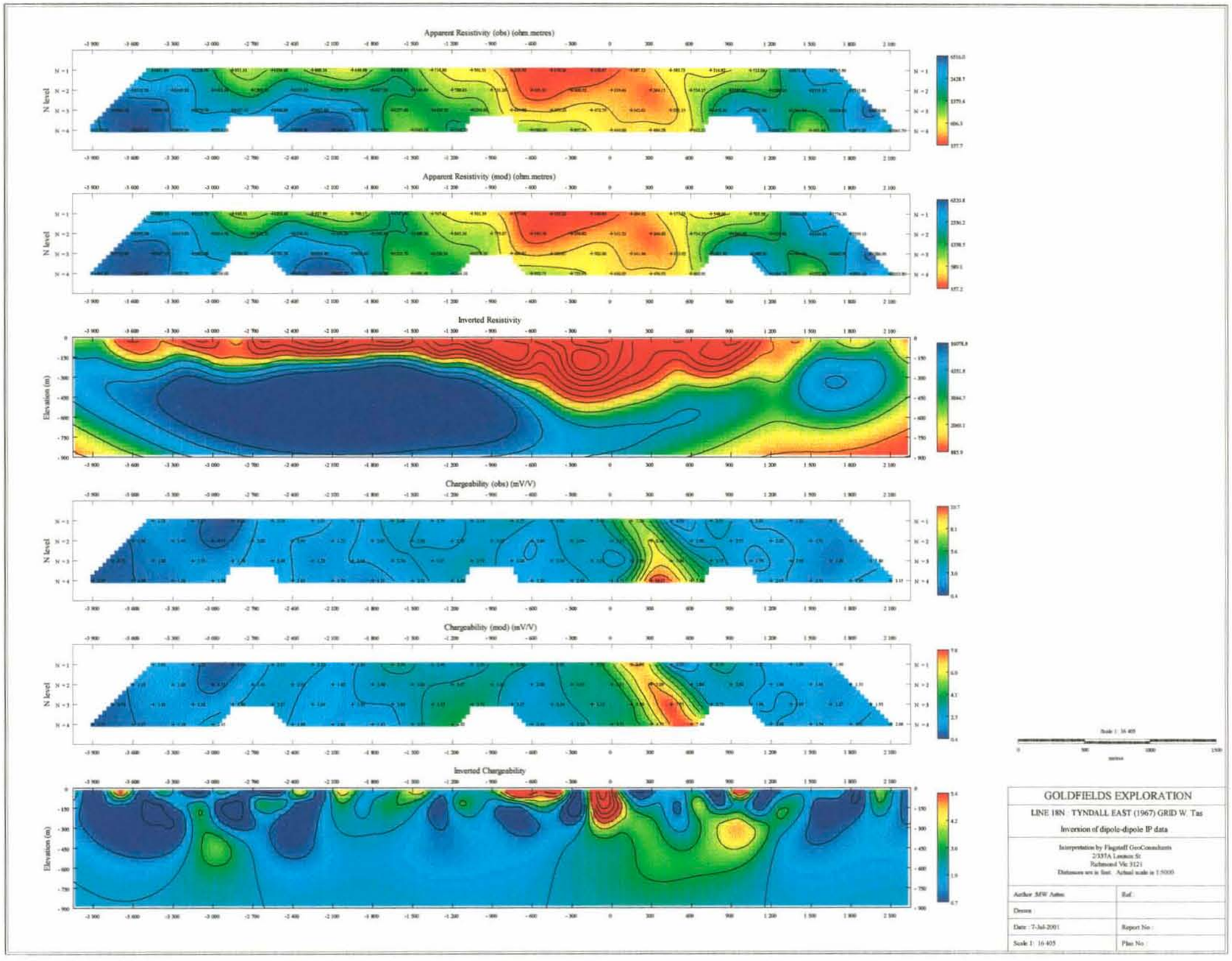
5 cm

675230

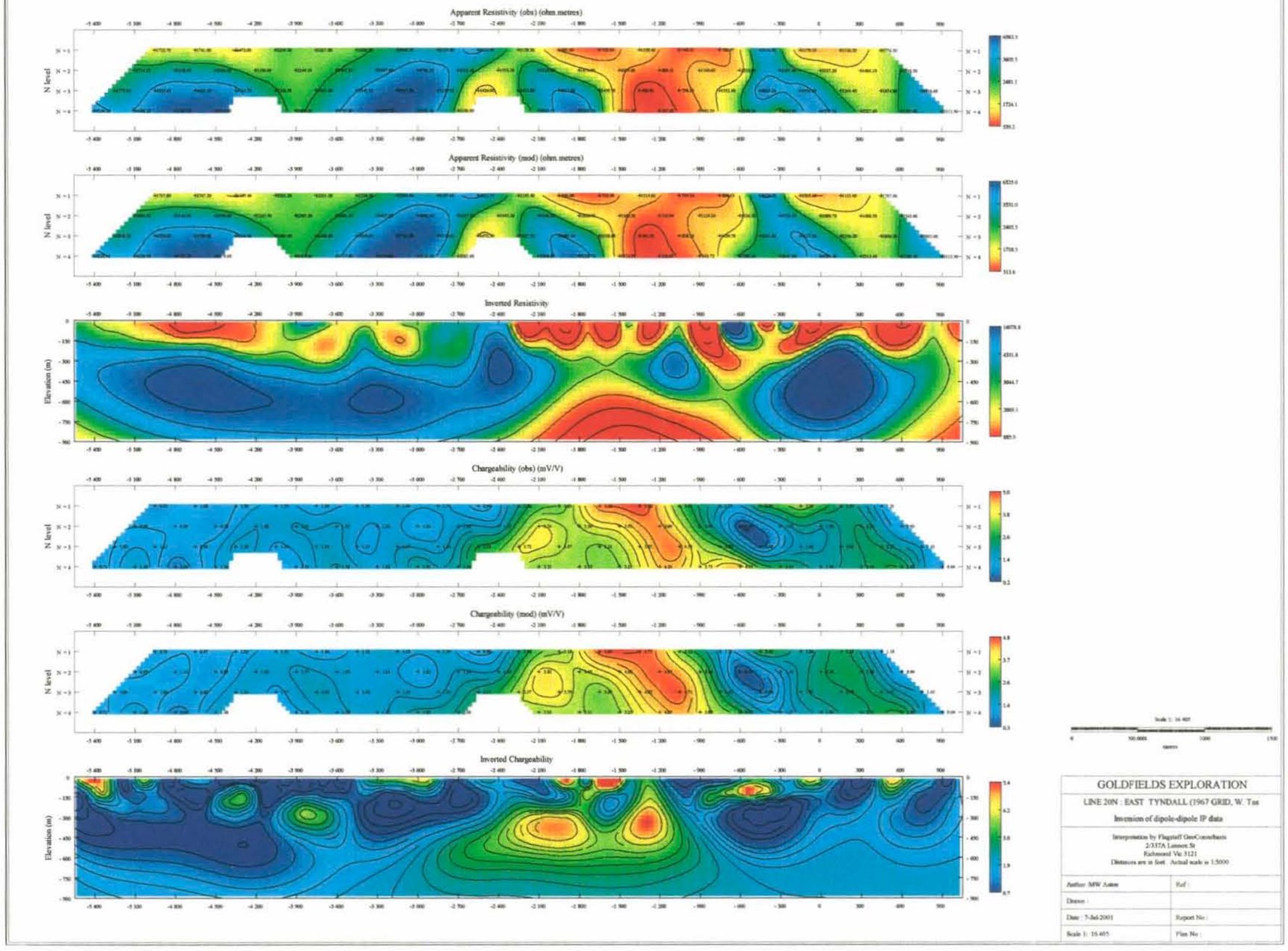

Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
Scale 1: 16 405
metres
GOLDFIELDS EXPLORATION
LINE 16N : EAST TYNDALL (1967) GRID, W. Tas
Inversion of dipole-dipole IP survey
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000
Author :MW Annis
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1: 16 405
Plan No :

5 cm

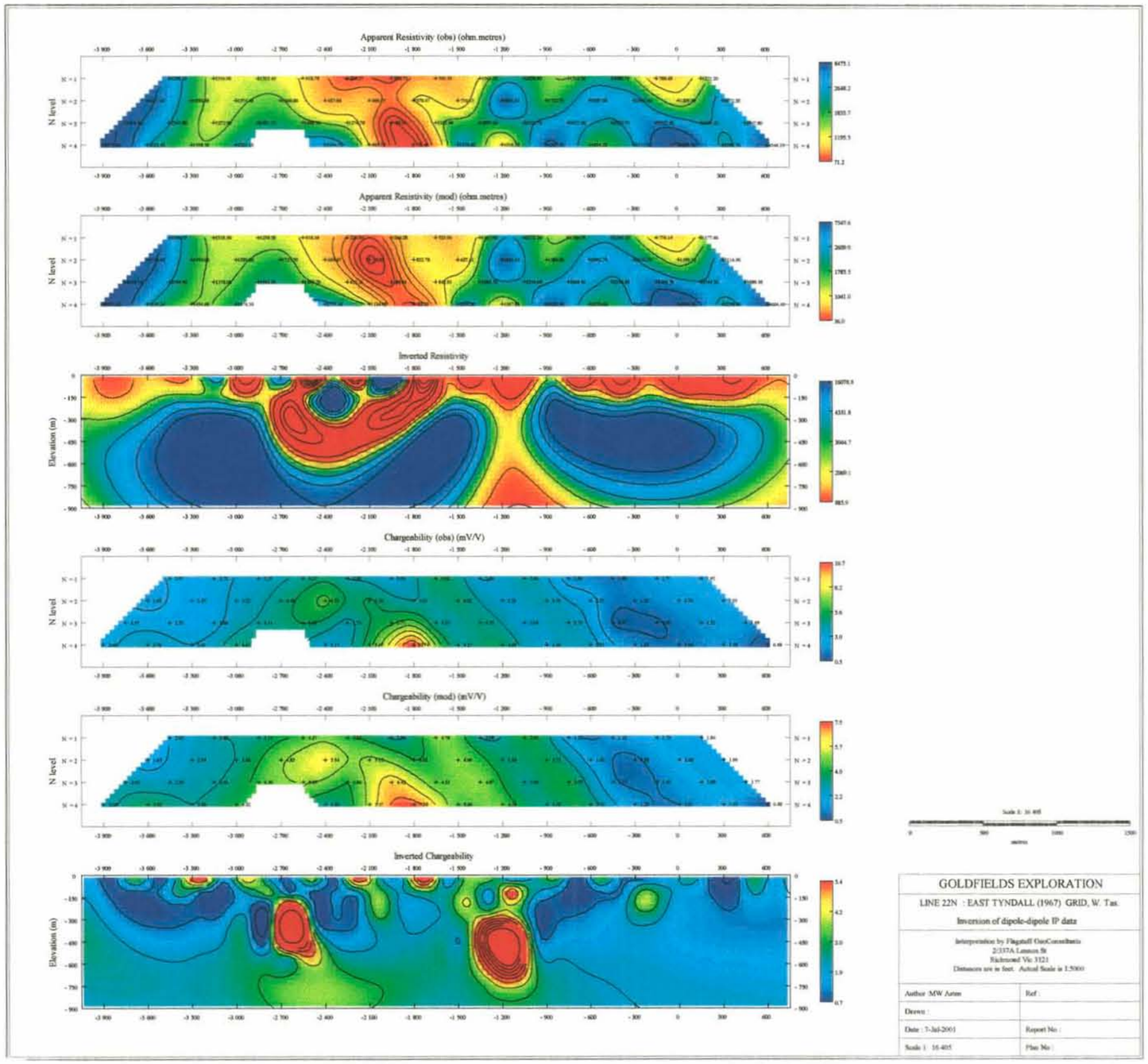
675231


Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 18N : TYNDALL EAST (1967) GRID W. Tas
Inversion of dipole-dipole IP data
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000
Author: MW Ashton
Ref:
Drawn:
Date: 7-Jul-2001
Report No:
Scale 1: 16 405
Plan No:

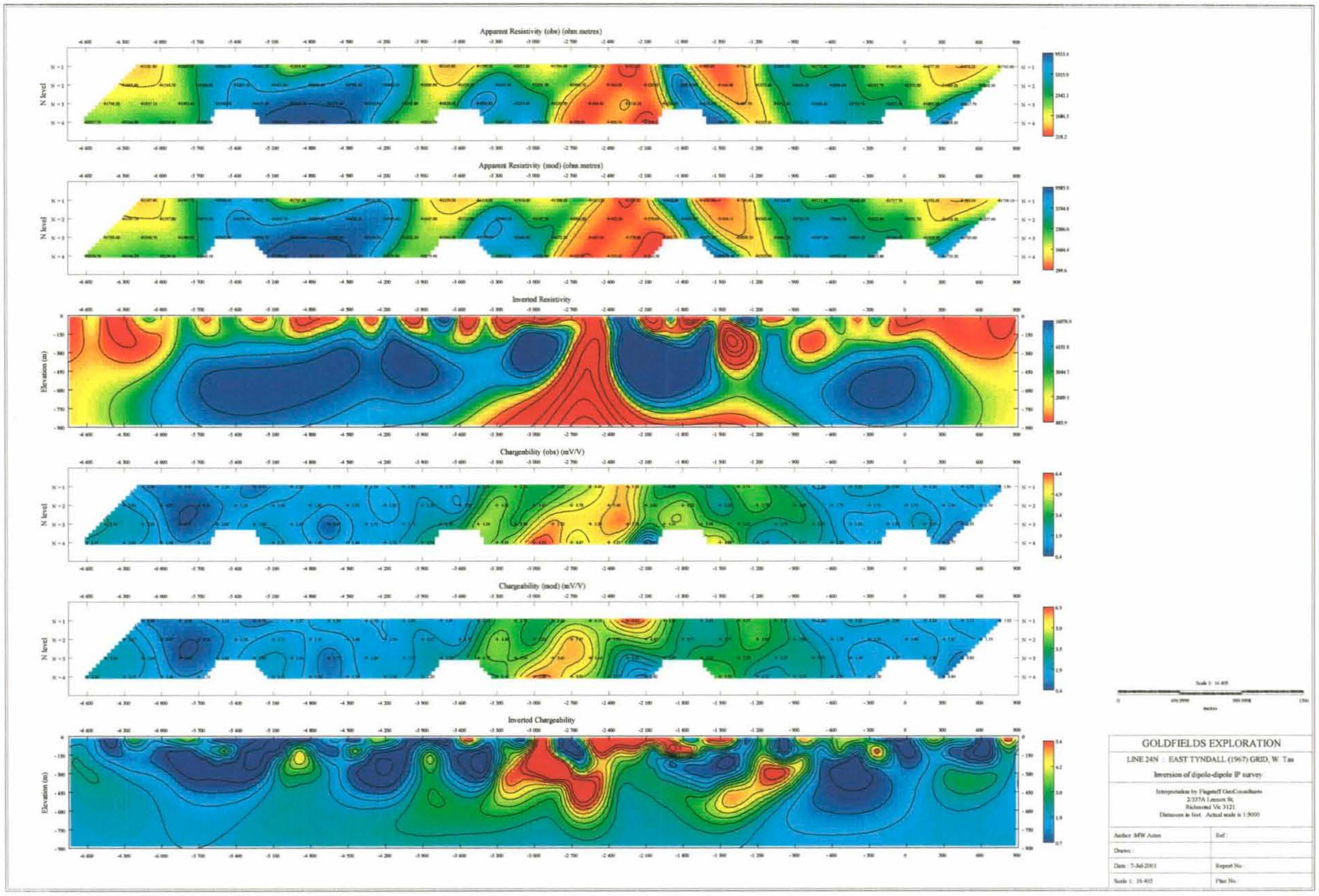
5 cm


Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 20N : EAST TYNDALL (1967 GRID, W. Tas
Inversion of dipole-dipole IP data
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet . Actual scale is 1:5000
Author: MW Asten
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1: 10,405
Plan No :

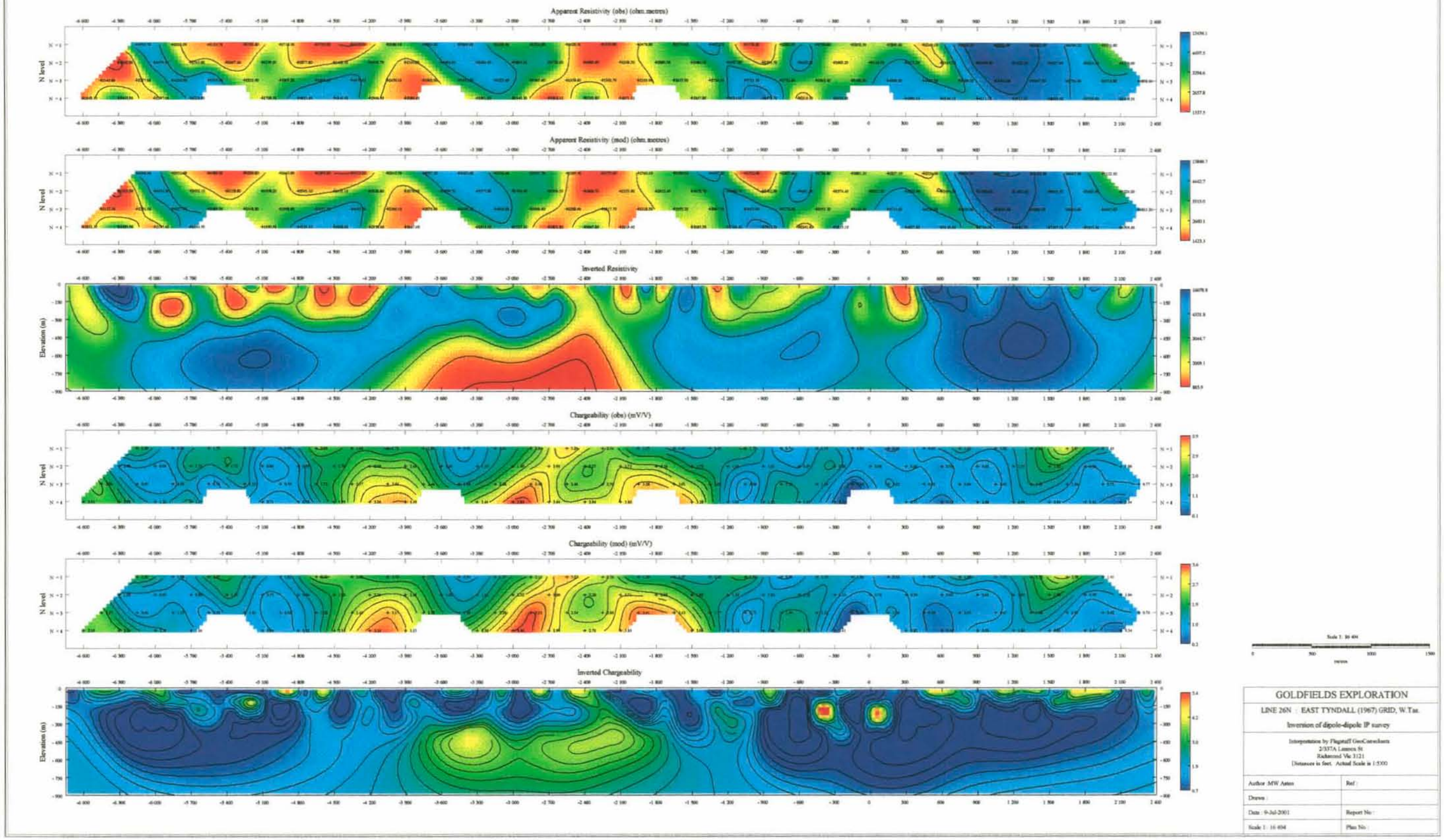
5 cm


Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 22N : EAST TYNDALL (1967) GRID, W. Tas.
Inversion of dipole-dipole IP data
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual Scale is 1:5000
Author :MW Asten
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1 : 10,405
Plan No :

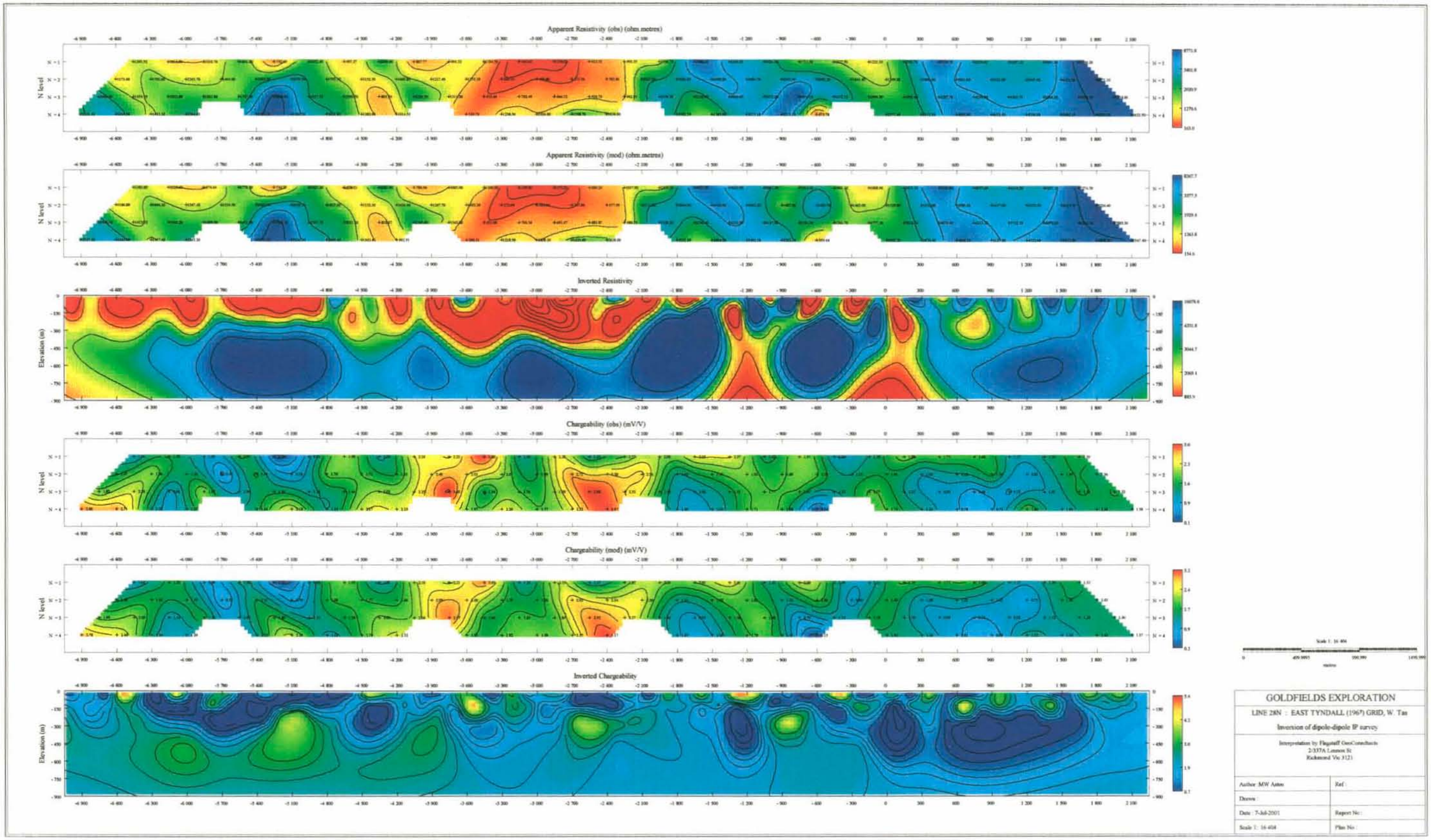
5 cm


Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 24N : EAST TYNDALL (1967) GRID, W. Tas
Inversion of dipole-dipole IP survey
Interpretation by HagstedT GeoConsultants
2/337A Lennox St,
Richmond Vic 3121
Distances in feet. Actual scale is 1:5000
Author: MW Asten
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1: 10 405
Plan No :

5 cm

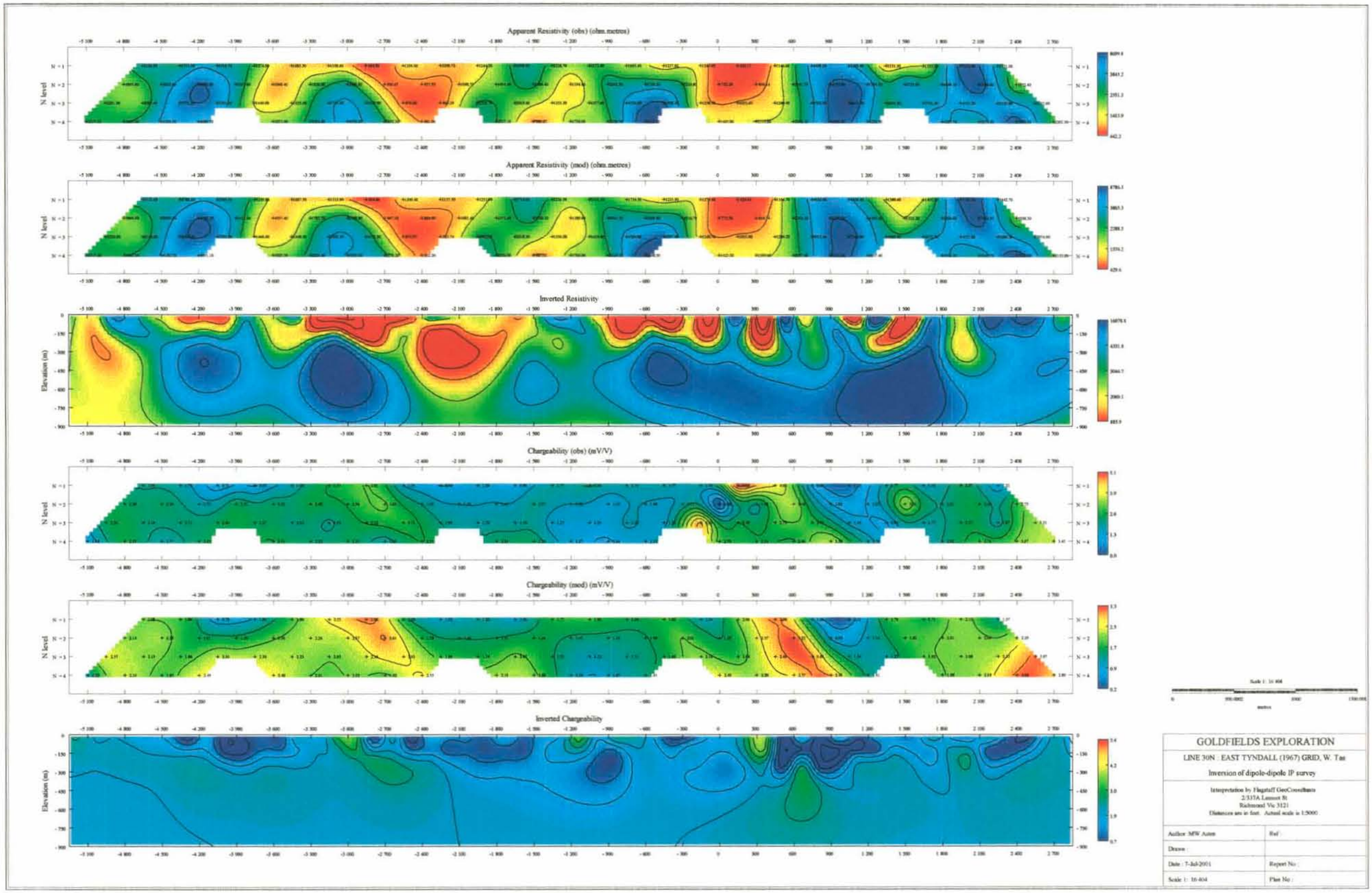

Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 26N : EAST TYNDALL (1967) GRID, W.Tas.
Inversion of dipole-dipole IP survey
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances in feet. Actual Scale is 1:5000
Author :MW Ames
Ref :
Drawn :
Date : 9-Jul-2001
Report No :
Scale 1 : 10 404
Plan No :

5 cm

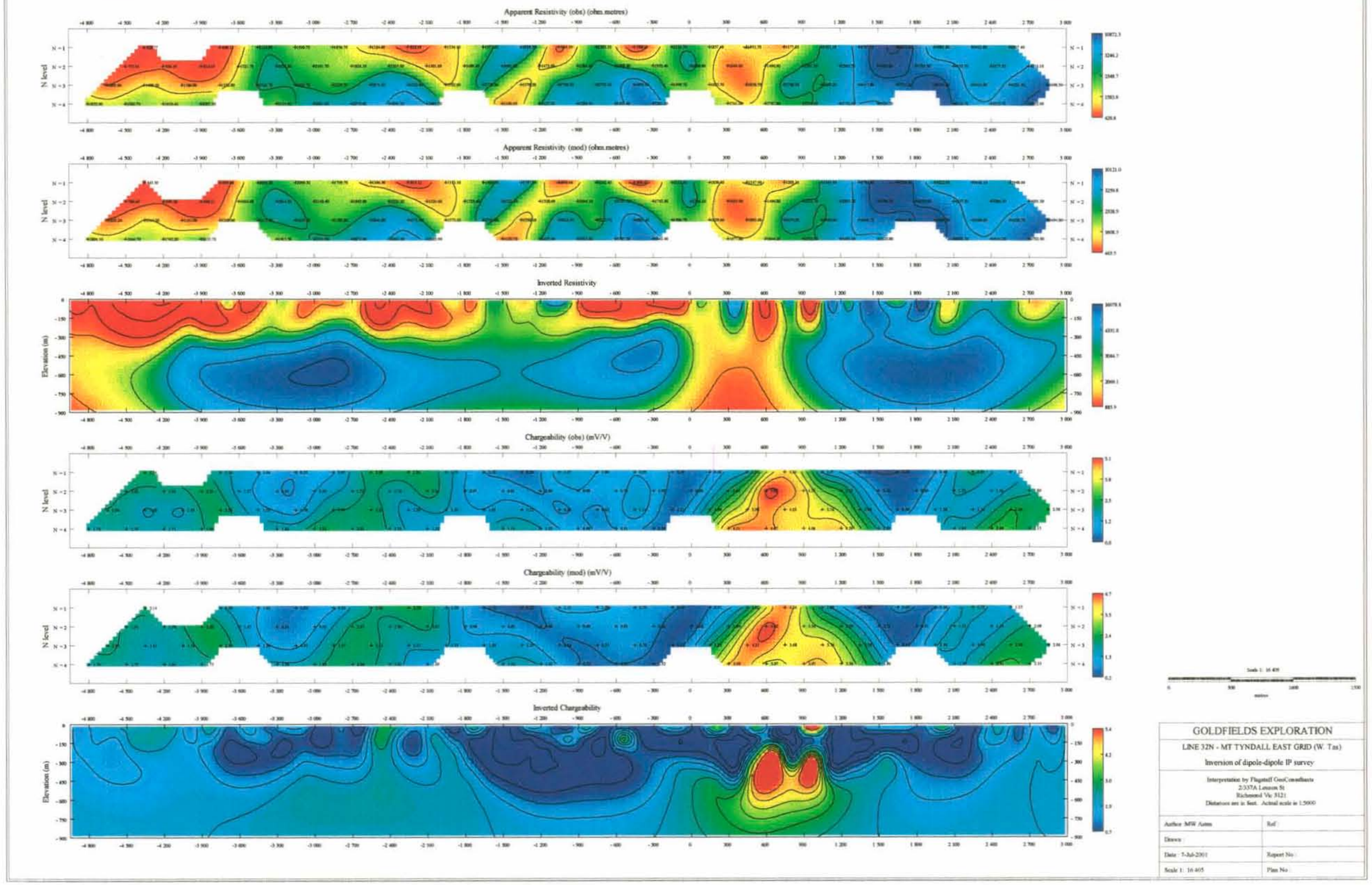

Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 28N : EAST TYNDALL (1967) GRID, W. Tas
Inversion of dipole-dipole IP survey
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Author :MW Aitken
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1: 16 404
Plan No :

5 cm

675237

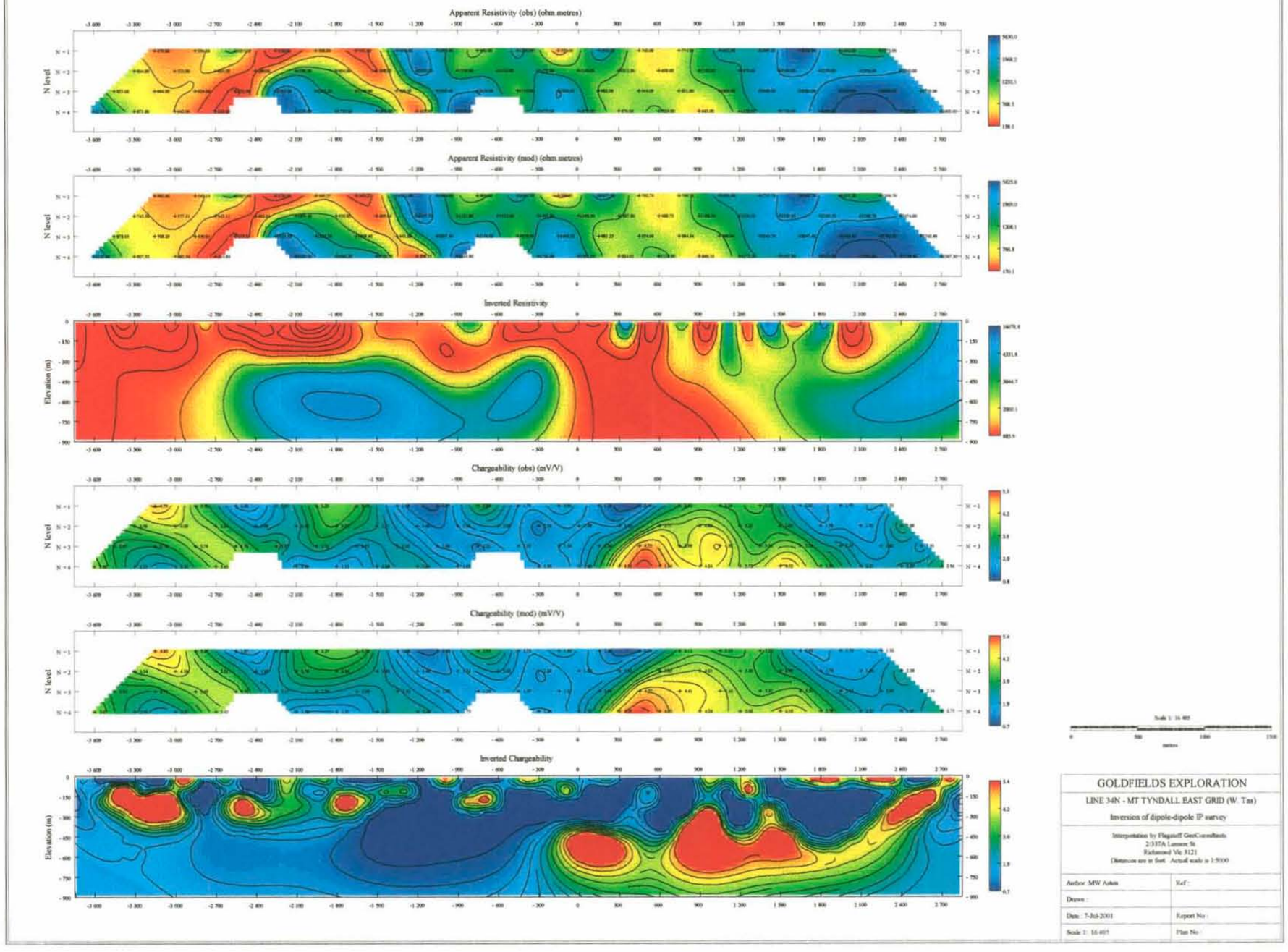

Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 30N : EAST TYNDALL (1967) GRID, W. Tan
Inversion of dipole-dipole IP survey
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000
Author :MW Aaen
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1: 10 404
Plot No :

5 cm


Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 32N - MT TYNDALL EAST GRID (W. Tas)
Inversion of dipole-dipole IP survey
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000
Author: MW Asms
Ref:
Drawn:
Date: 7-Jul-2001
Report No:
Scale 1: 10 405
Plan No:

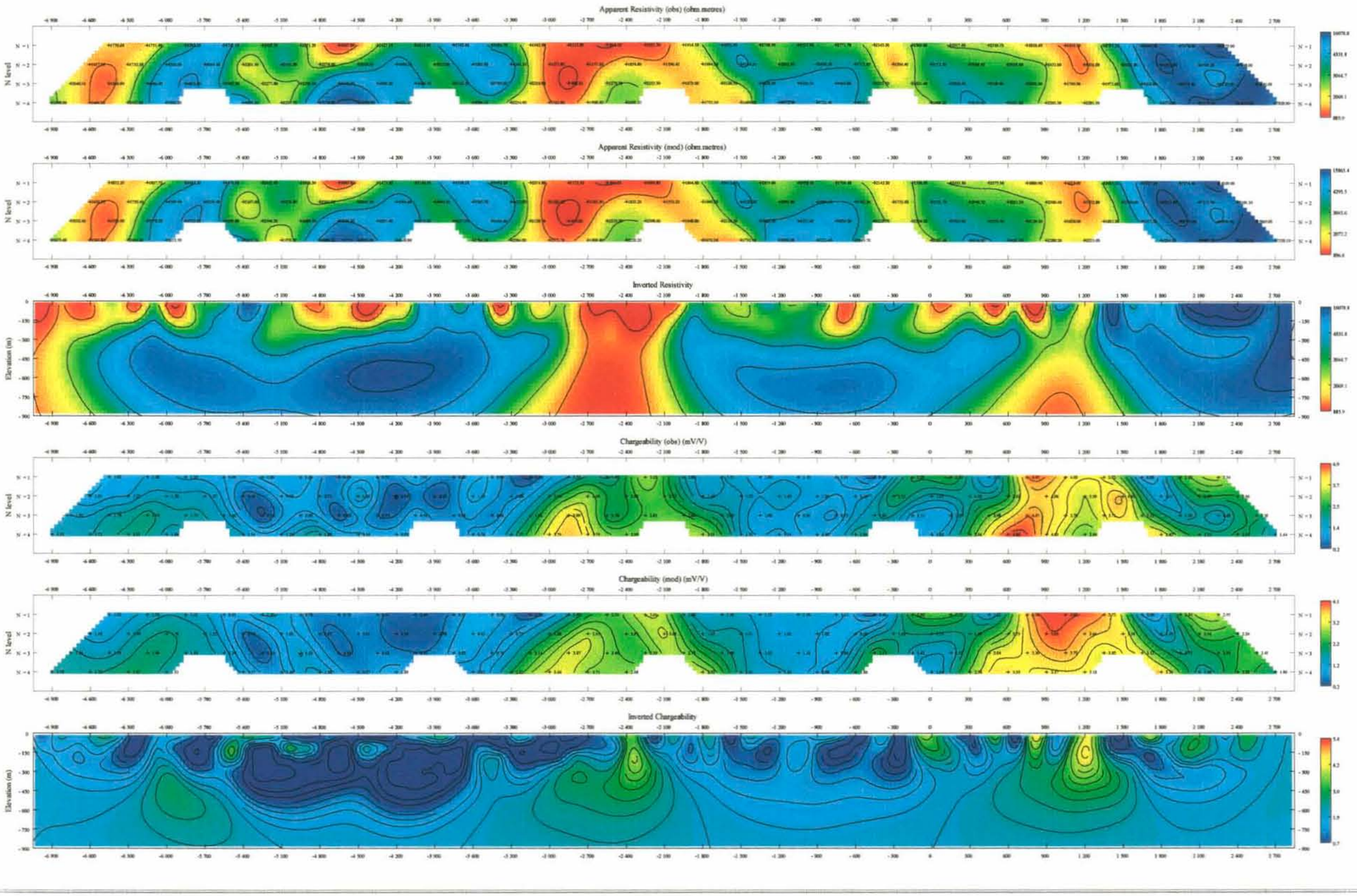
5 cm

675239


Apparent Resistivity (obs) (ohm.metres)
Apparent Resistivity (mod) (ohm.metres)
Inverted Resistivity
Chargeability (obs) (mV/V)
Chargeability (mod) (mV/V)
Inverted Chargeability
N level
Elevation (m)
GOLDFIELDS EXPLORATION
LINE 34N - MT TYNDALL EAST GRID (W. Tas)
Inversion of dipole-dipole IP survey
Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000
Author: MW Aston
Ref :
Drawn :
Date : 7-Jul-2001
Report No :
Scale 1: 16 405
Plan No :

5 cm

675240



GOLDFIELDS EXPLORATION

LINE 36N - MT TYNDALL EAST GRID (W. Tas)

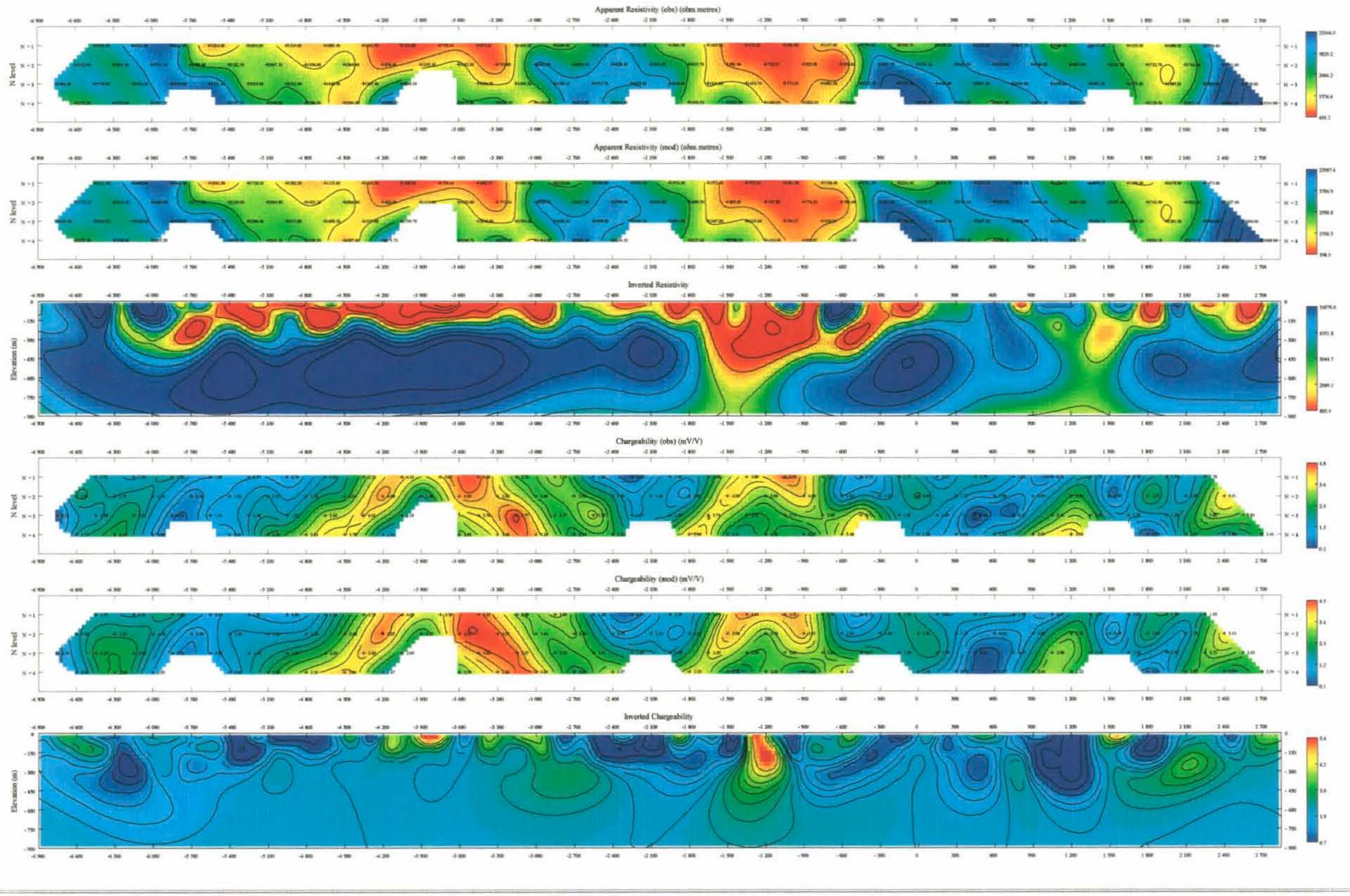
Inversion of dipole-dipole IP survey

Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond Vic 3121
Distances are in feet. Actual scale is 1:5000

Author: MW Aitken	Ref:
Drawn:	
Date: 7-Jul-2001	Report No:
Scale 1: 16 404	Plan No:

5 cm

675241



Scale 1: 0-405

GOLDFIELDS EXPLORATION

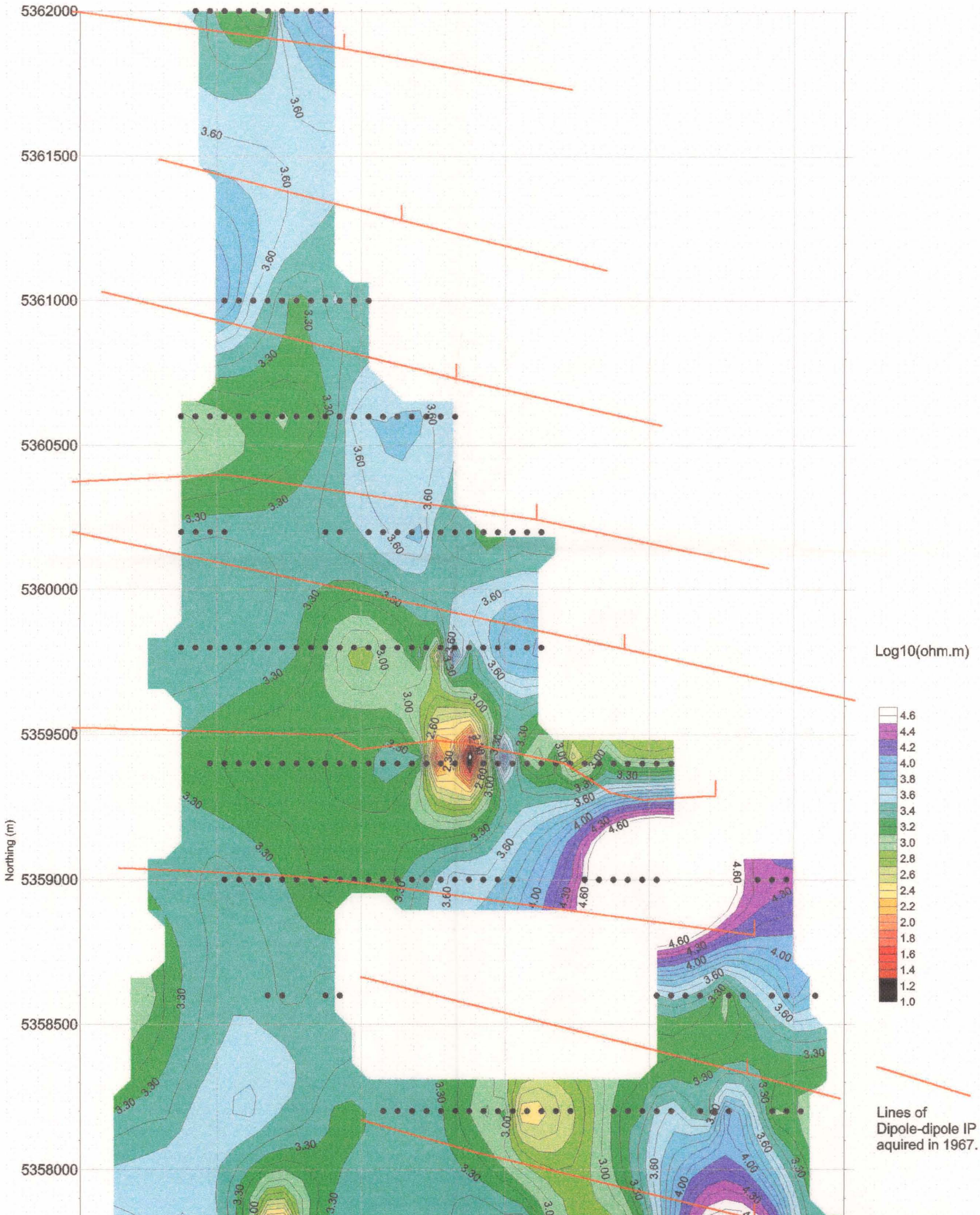
LINE 38N - MT TYNDALL EAST GRID (W. Tas)

Inversion of dipole-dipole IP survey

Interpretation by Flagstaff GeoConsultants
2/337A Lennox St
Richmond 7le 3121
Distances are in feet. Actual scale is 1:5000

Author :MW Ashes	Ref :
Drawn :	
Date : 7-Jul-2001	Report No :
Scale 1: 10 405	Plan No :

5 cm



01_4575A

CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

GOLDFIELDS EXPLORATION

SOUTH HENTY - CSAMT INTERPRETATION
Bostick Resistivity
Depth Slice 50 m draped on topography

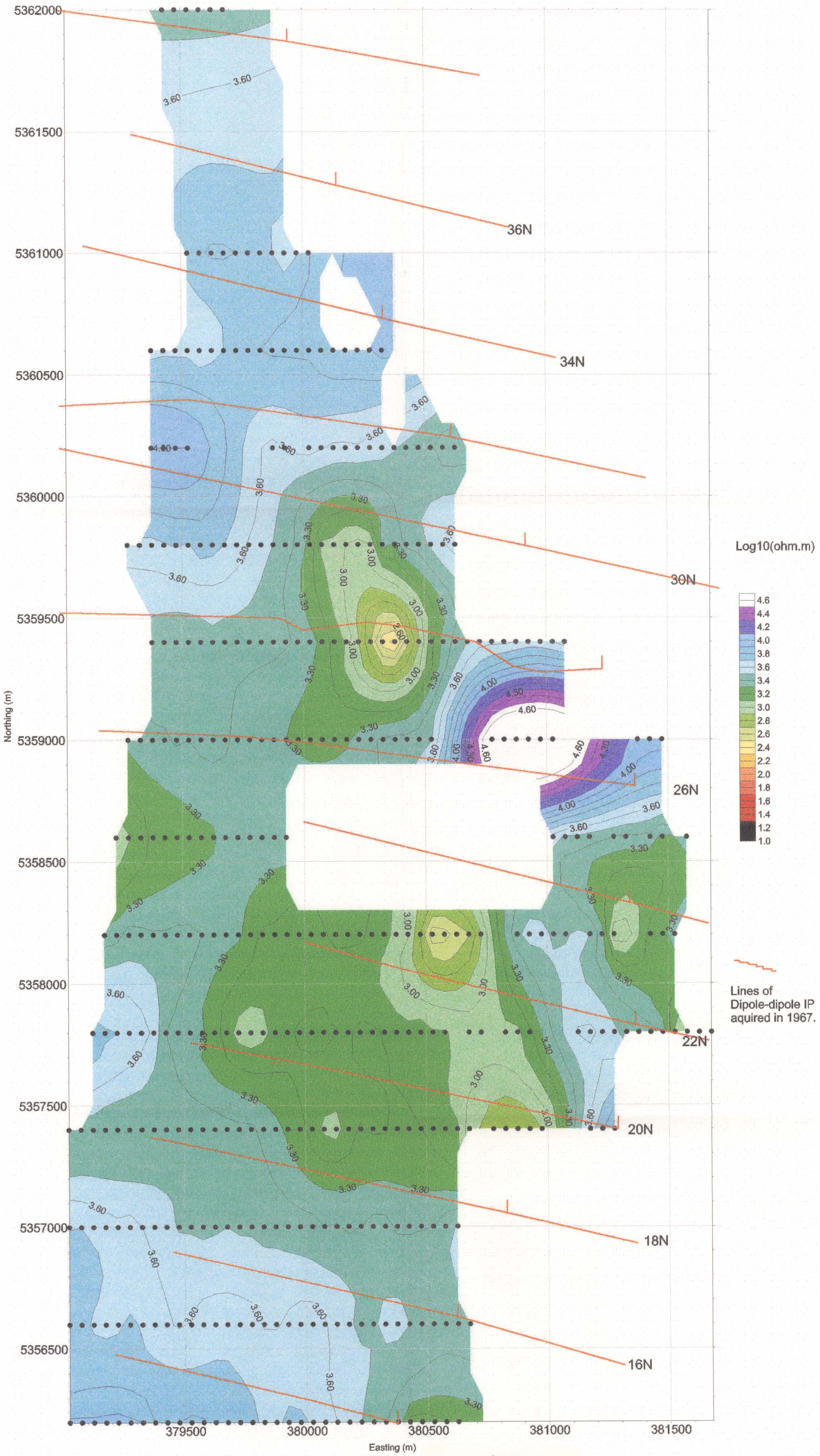
Drawn by: Flagstaff Geo-Consultants
10/4/2000

675342

PLATE 1

TCR: 01_4575

Flagstaff Geo-consultants



01_4575A

CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

GOLDFIELDS EXPLORATION

SOUTH HENTY - CSAMT INTERPRETATION
EMAP FILTERED CAGNIARD RESISTIVITY 2048 Hz
(100-300 m Depth range)

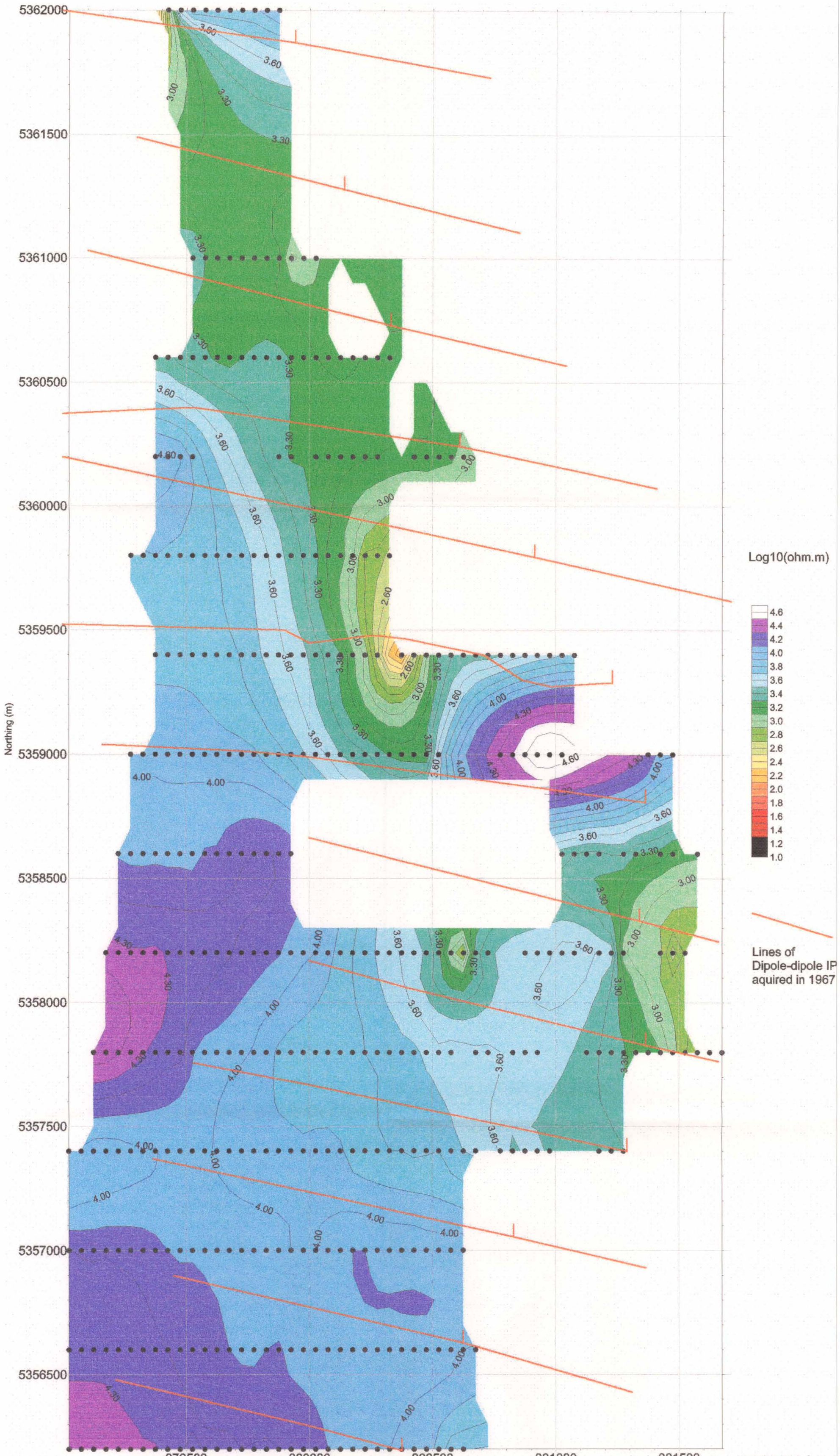
Drawn by: Flagstaff Geo-Consultants
7/4/2000

PLATE 2

675243

TCR : 01-4575

Flagstaff
Geo-consultants



675244

PLATE 3

TCR: 01-4575

01_4575A

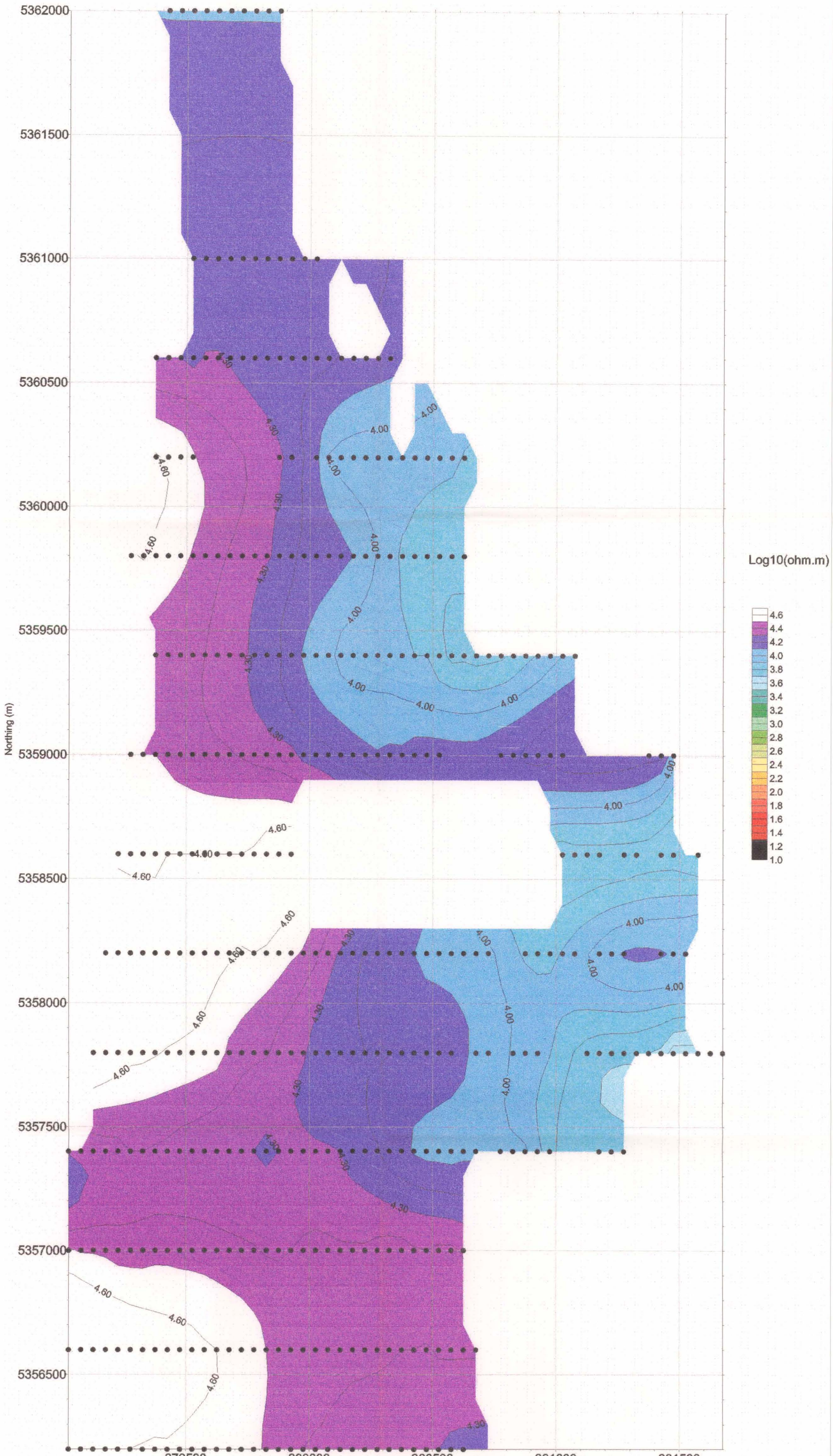
CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

GOLDFIELDS EXPLORATION

SOUTH HENTY - CSAMT INTERPRETATION
EMAP FILTERED CAGNIARD RESISTIVITY 1024Hz
(depths to 500 m)

Drawn by: Flagstaff Geo-Consultants
21/6/99

Flagstaff
Geo-consultants



675245

PLATE 4

TCR: 01-4575

01_4575A

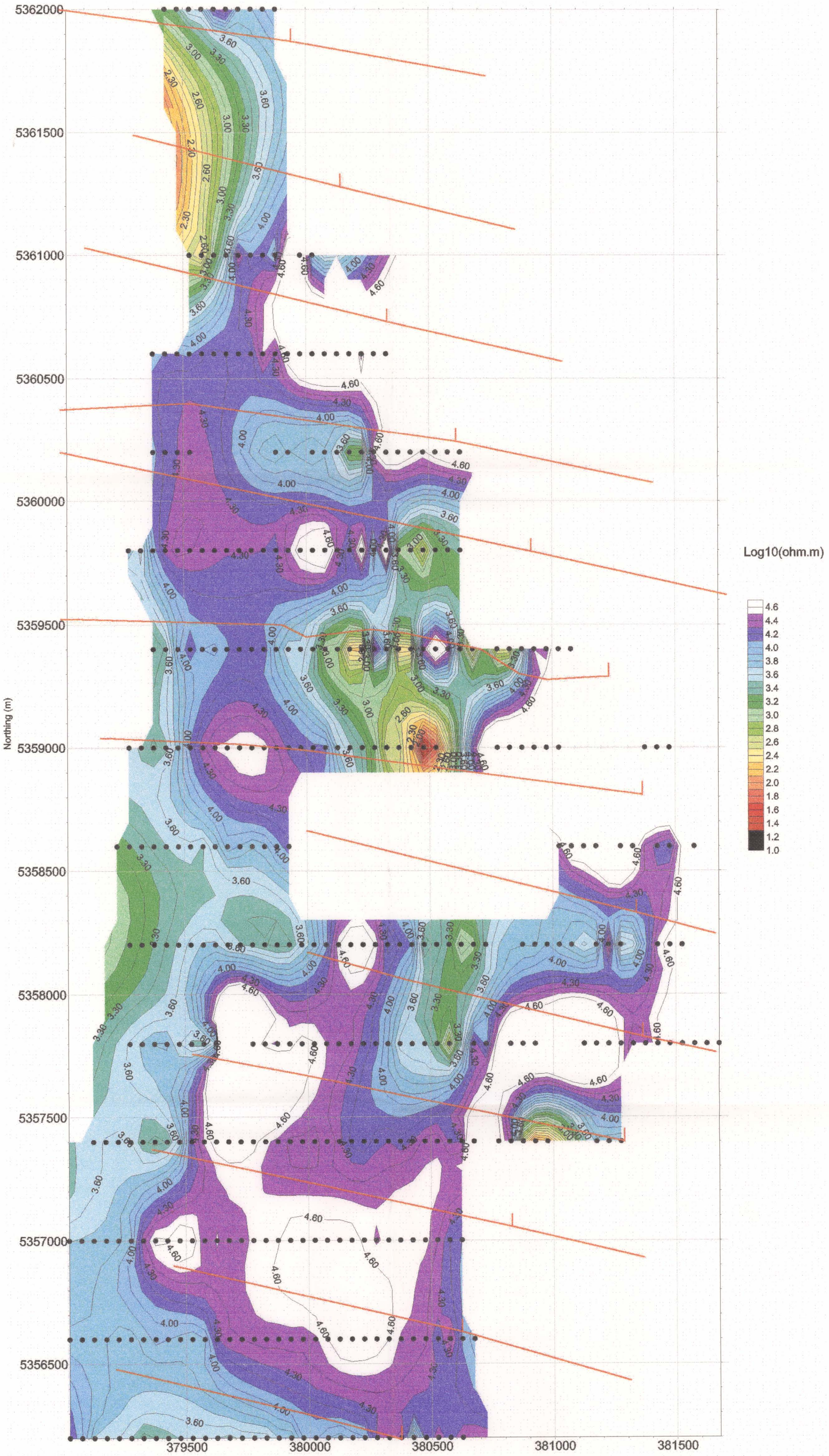
CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

GOLDFIELDS EXPLORATION

SOUTH HENTY - CSAMT INTERPRETATION
EMAP FILTERED CAGNIARD RESISTIVITY 512 Hz
(deep)

Drawn by: Flagstaff Geo-Consultants
21/6/99

Flagstaff Geo-Consultants



675246

PLATE 5

TQR: 01-4575

01_4575A

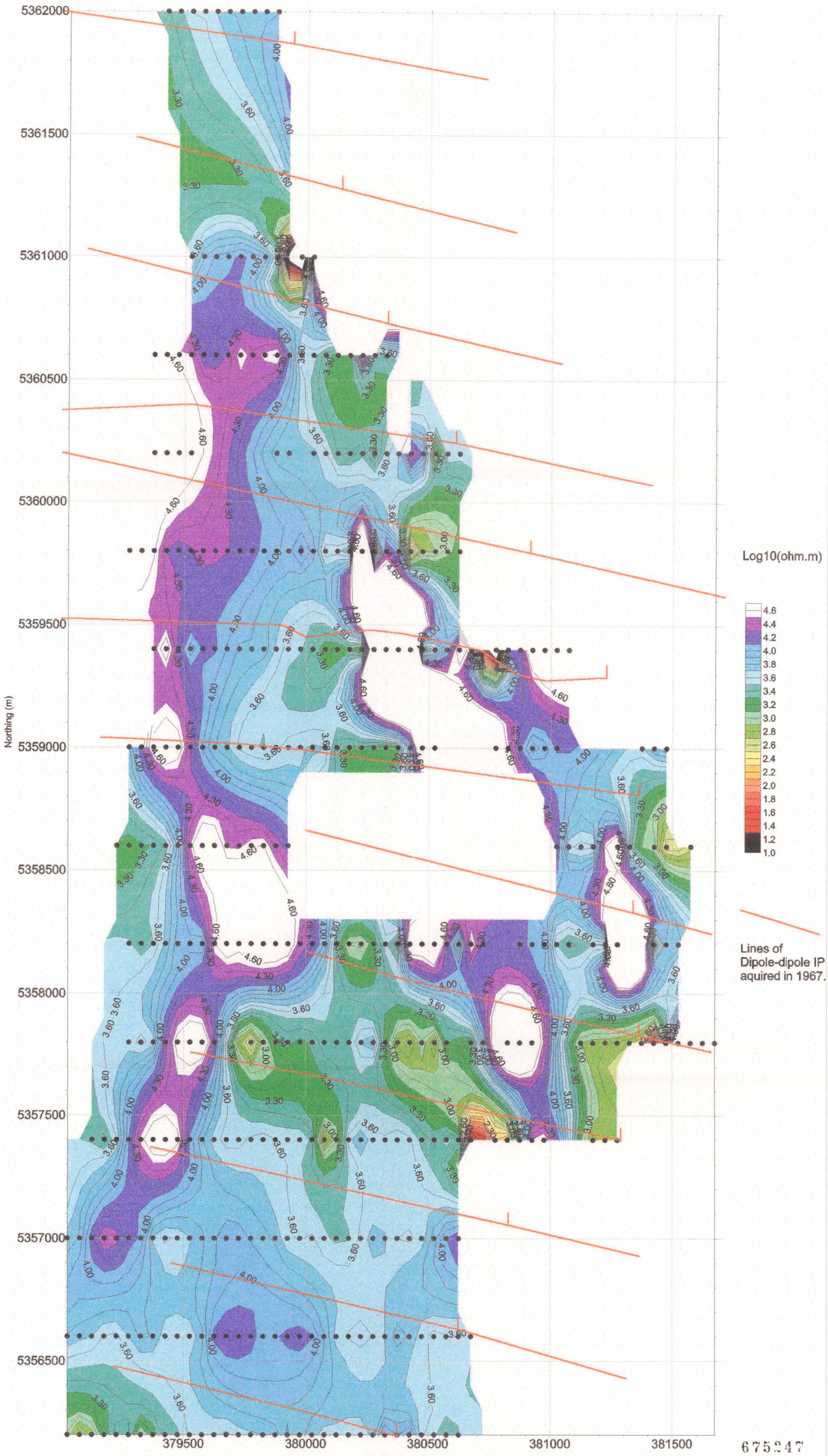
CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

GOLDFIELDS EXPLORATION

SOUTH HENTY - CSAMT INTERPRETATION
Bostick Resistivity
Depth Slice 200 m below maximum, ie RL=360 m

Drawn by: Flagstaff Geo-Consultants
14/4/2000

Flagstaff Geo-consultants



675247

PLATE 6

TCR: 01-4575

01_4575A

CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

GOLDFIELDS EXPLORATION

SOUTH HENTY - CSAMT INTERPRETATION
Bostick Resistivity
Depth Slice 300 m below maximum, ie RL=260 m

Drawn by: Flagstaff Geo-Consultants
7/4/2000

Flagstaff
Geo-consultants

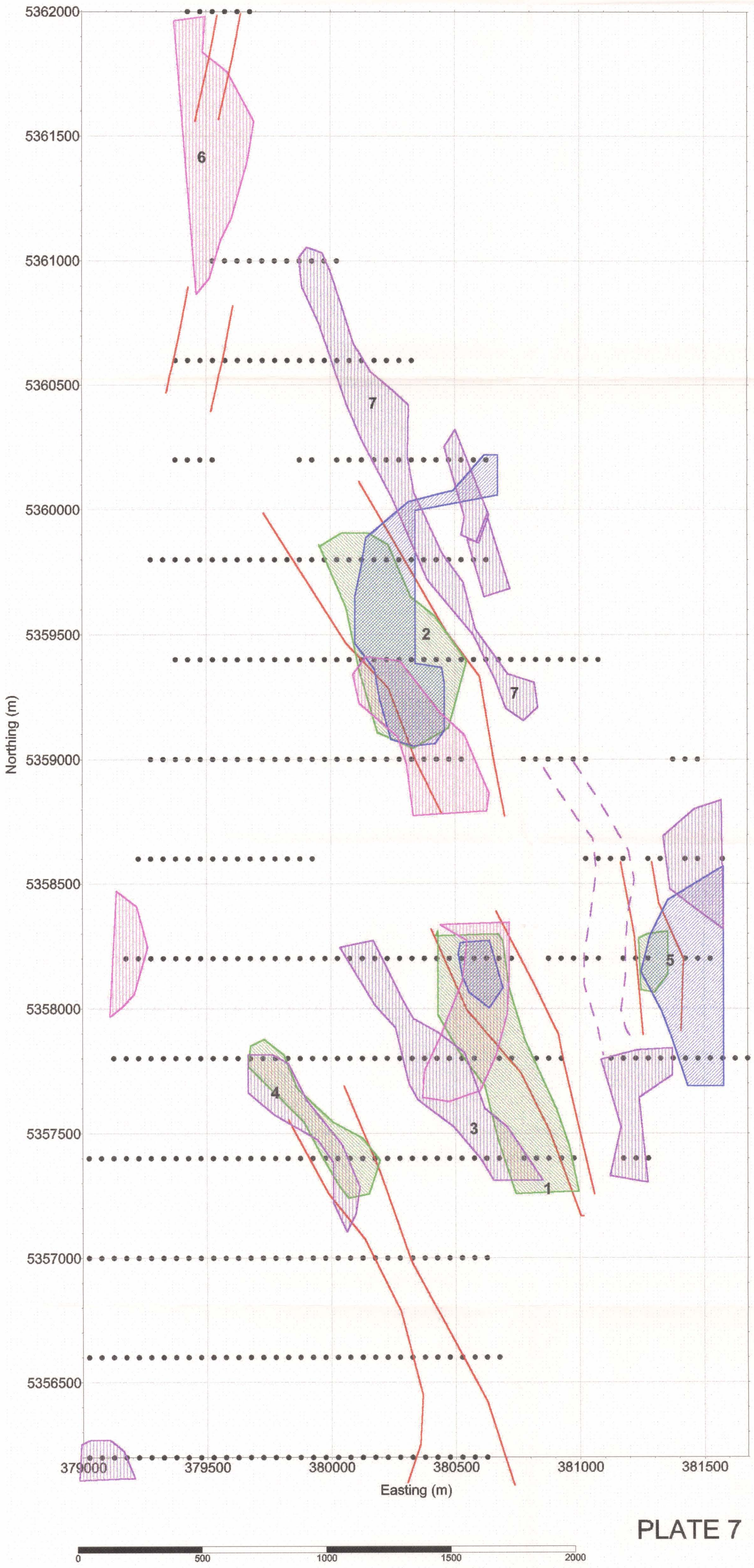


PLATE 7

KEY

- CSAMT Receiver sites 1999
- Edges of surficial conductors (top 100 m)
- Conductor at depth 100-200 m (from 2048 Hz data)
- Conductor at depth 200-400 m (from 1024 Hz data)
- Conductor from depthslice at RL +360 m
- Conductor from depth slice at RL +260 to 160 m
- 1B — Zone number (see text of report)

675248

PLATE 7

5 cm

GOLDFIELDS EXPLORATION

SOUTH HENTY (Tas) EL 8/96
CSAMT INTERPRETATION

Drawn by: Flagstaff Geo-Consultants
21/4/2000

Flagstaff Geo-consultants

01_4575A

CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

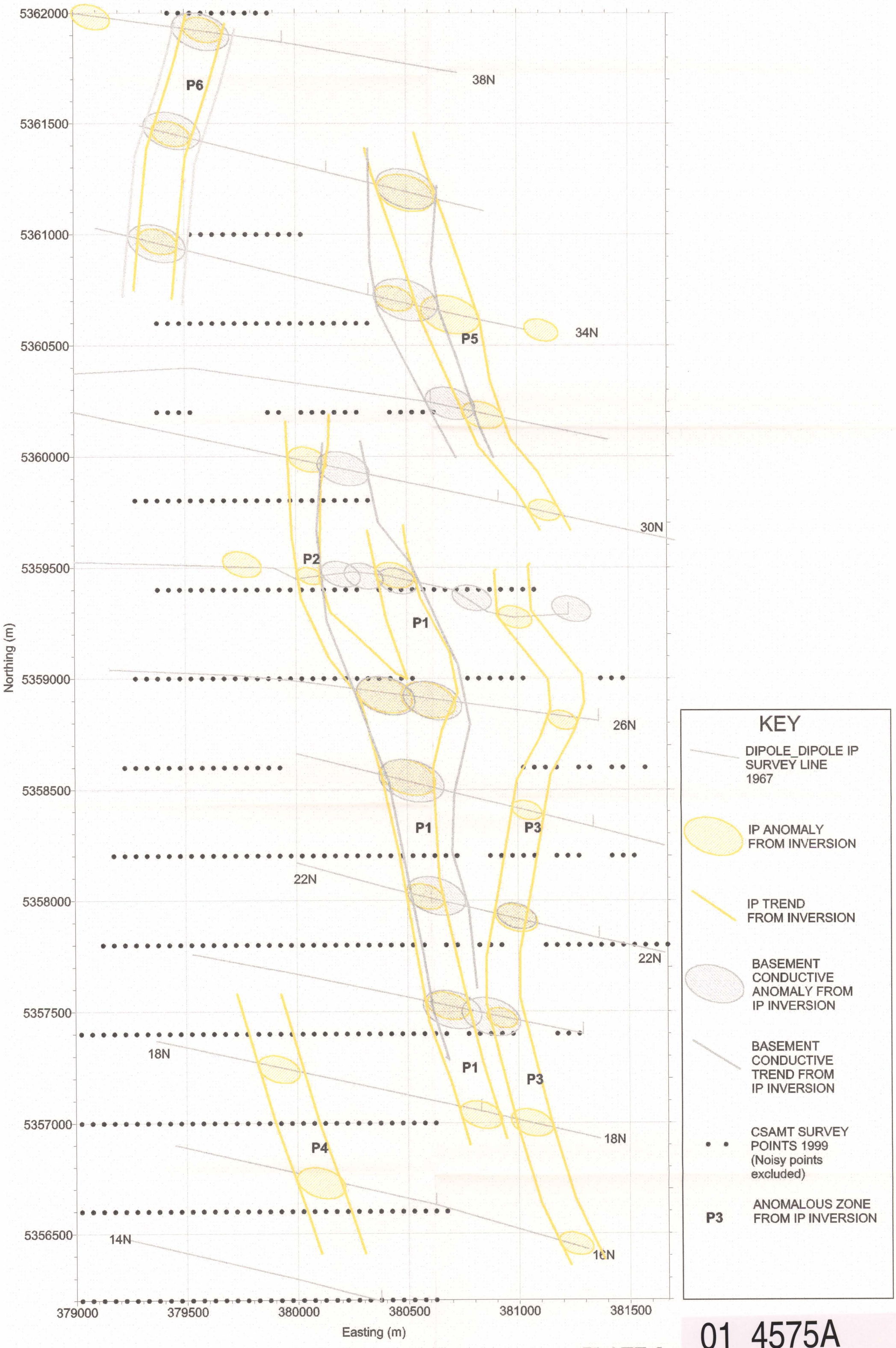


PLATE 8

01_4575A

CSAMT Surveys and Re-interpretation of IP profiles, South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1995

GOLDFIELDS EXPLORATION

SOUTH HENTY (TAS) EL 8/96
IP 1967 DATA INVERSION AND RE-INTERPRETATION

Drawn by: Flagstaff Geo-Consultants
21/4/2000

Flagstaff Geo-consultants

5 cm

675249

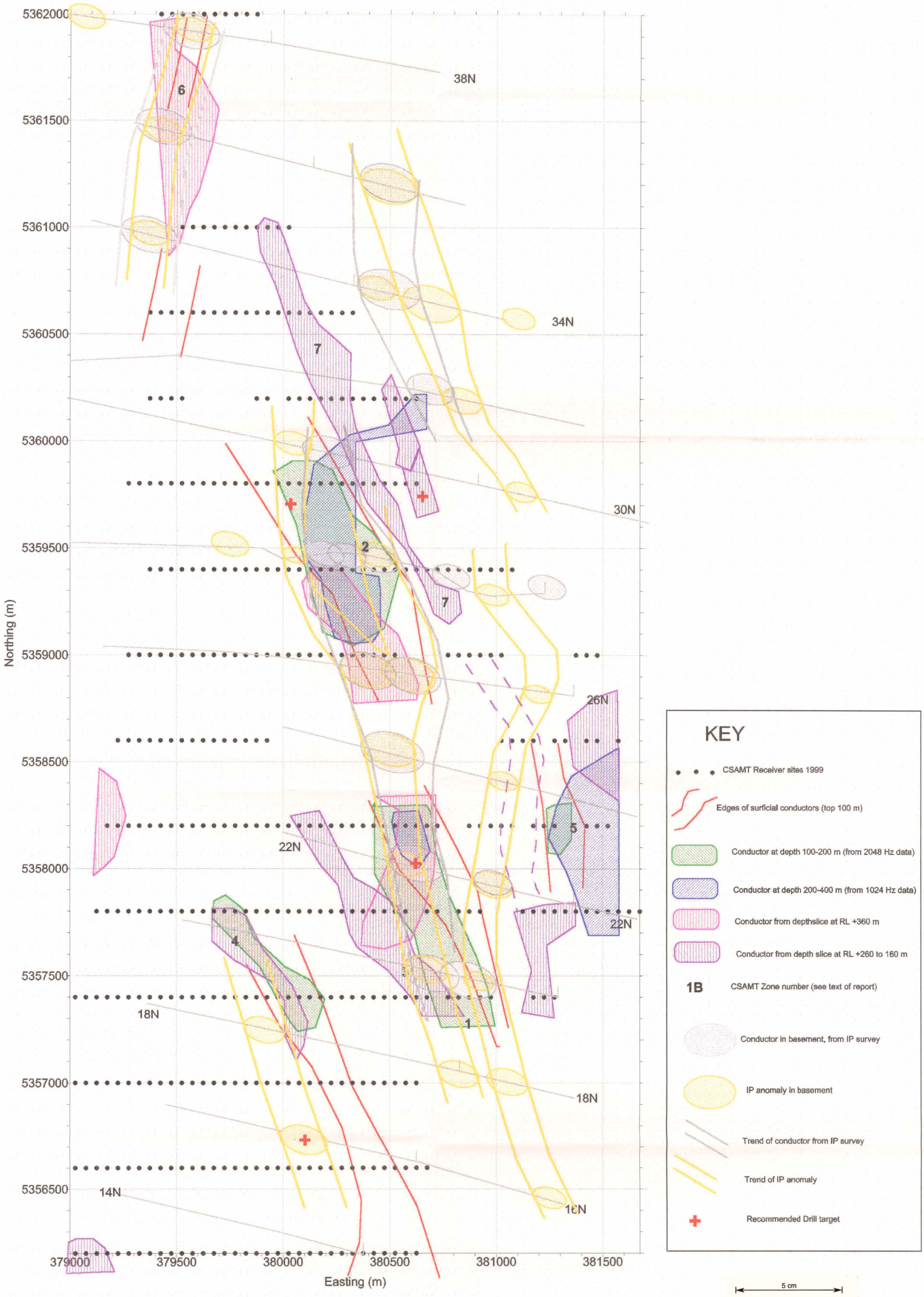


PLATE 9

675250

GOLDFIELDS EXPLORATION

SOUTH HENTY (Tas) - EL 8/96
CSAMT INTERPRETATION PLUS
IP INTERPRETATION

Drawn by: Flagstaff Geo-Consultants
21/4/2000

Flagstaff Geo-consultants

01_4575A

CSAMT Surveys and Re-interpretation of IP profiles,
South Henty (W. Tas) EL8/96
Flagstaff Geo-Consultants; Goldfields Exploration Prop
Asten, M.W. EL8/1996

TCR 01-4575B
675251

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Report 0003/3 for

GOLDFIELDS EXPLORATION
Interpretation of Borehole EM Data
South Henty
EL 8/96

Michael W Asten
Flagstaff GeoConsultants Pty Ltd

27 Mar 2000

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INTERPRETATION OF BOREHOLE EM DATA, SOUTH HENTY (W. TAS)

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EM coupling is best with Loop2.

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Fig. 11. Anomaly signature of Body 1 at hole SHD22.

Fig. 12. TEM decay for Body 1 at hole SHD22.

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DATA SUPPLIED

Logging in the period Dec 99 to Feb 2000 included the following:

Hole NC04:	Loop 9	A,U and V components
	Loop 13	A,U and V components

(This hole is a historical hole which pre-dates the joint-venture, but it was only logged with borehole EM in 1999)

Hole SHD20:	Loop 14	A-component only
	Loop 12	A-component only
	Loop 11	A,U and V components
Hole SHD21:	Loop 1	A-component only
	Loop 2	A,U and V components
	Loop 9	A,U and V components
Hole SHD22	Loop 13	A-component only
	Loop 9	A,U and V components

(Existence of a lake directly over the trace of this borehole made use of a central loop logistically difficult).

All surveys used a timebase of 20 msec, transmitter frequency 12.5 Hz, and 31 time channels (Crone PulsEM). Hole SHD20 used a 1 msec transmitter ramp. Holes SHD21 and 22 used a 0.5 msec ramp.

The Contractor was Outer Rim Exploration Services, using a Crone PEM transmitter and receiver, with an axial borehole probe (all holes), and an XY borehole probe (selected holes).

Goldfields Exploration provided interpreted geological sections for each borehole.

HISTORICAL DATA

This interpretation also includes some re-interpretation of data acquired in 1999, and acquired in earlier years (Dauth, 1999; Asten, 1999a; Asten, 1999b). Asten (1999a) summarises the historical data and gives a first-pass interpretation of a conductor located between holes SHD1 and SHD2. Asten (1999b) gives a more detailed interpretation of this conductor, plus other anomalies visible in the historical holes up to SHD19.

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PROCESSING OF DATA

Plotted data presented here has been smoothed with a two-dimensional filter (Asten, 1999a) due to the subtle nature of anomalies, and the difficulty of identifying these anomalies against background noise.

SUMMARY OF INTERPRETATION

Figures for this summary of interpretation are provided as two PowerPoint presentation files enclosed with this report. The most important results are obtained from interpretation of data from SHD21.

SHD21

This hole did not intersect the conductors A,B,C predicted in Asten (1999b) to lie between holes SHD1 and SHD2, but it provides vital new data which allows much improved resolution of the two predicted conductors. The hole was sited in part to investigate existence of conductors previously interpreted to lie between holes SHD1 and SHD2. The hole intersected a thick zone of sericite-pyrite alteration, with sub-economic levels of Cu, Au, Pb and Zn geochemistry.

SHD22

EM data from this hole shows a weak conductor intersected at depth 400 m, with a significant off-hole anomaly at the base of the hole. There is no obvious correlation between the EM data and the logged alteration type. The off-hole anomaly at the base of the hole is incomplete (extends beyond the base of hole).

The character of the anomaly is very similar to that for Body 1 as seen from SHD21, and its location is consistent with the strike direction inferred from SHD21. Accordingly, this anomaly is interpreted to be a southerly extension of Body 1.

Note added in proof: The SHD22 anomaly is similar (but opposite sign) to that observed for hole SHD12, reported in Asten, 1999a. It is probable that the same conductor (Body 1) located between hole SHD12 and SHD22 accounts for anomalies in both holes.

Findings from the borehole EM interpretation are as follows.

Two distinct conductors are identified, labelled Body 1 and Body 2.

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Body 1

- lies above hole 21, between SHD21 and SHD2.
- top is at RL –50m, or 550 m below ground level in the vicinity of holes SHD21, SHD2
- has a long strike length (up to 800 m) probably extending from hole SHD16 (north) to SHD22 (south).
- strikes NW-SE in vicinity of hole SHD21
- has width of order 150 m and near-horizontal dip
- thickness is not well resolved but may be of order 50 m
- by assuming connection to alteration logged in SHD16, and to EM anomalies logged at base of SHD22 and SHD12, a plunge of 25 degrees south is obtained.

Body 2

- lies below and beyond the end of holes SHD21 and SHD1
- top is at RL -270 m, or 770 m below ground level
- is the best conductor identified on the prospect (time constant of 0.6 msec is small by standards of massive sulfide bodies – Hellyer is 3 msec) but could still be very significant in the context of Cu-Au Mt Lyell or Henty-style mineralisation.
- strikes 330 degrees
- probably dips steeply east, order 75 degrees, but interpretation is limited by an incomplete EM profile which would extend beyond the end of the hole
- size is difficult to constrain but a minimum of 300 m strike by 200 m vertical extent is likely.

SHD20

An off-hole EM anomaly is detected at the base of the hole, when using the western transmitter loop. The conductor is weak (time-constant of 0.05 msec) but still distinct in this resistive environment. The modelled conductor is labelled Body 3.

Body 3

The characteristics are

- consistent with large areal extent of 400 m by 200 m.
- dips shallowly, eg up to15 degrees east or west
- strikes NE-SW or north-south (not well resolved)
- located east of hole SHD20
- at depth RL –336 m, ie similar depth to Body 2
- the weakest conductor on the prospect – possibly important for its large surface area rather than its conductivity.

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SOUTH HENTY TEM INTERPRETATION

Body 1 and Body 2

28 Feb 2000

Michael Asten
Flagstaff GeoConsultants

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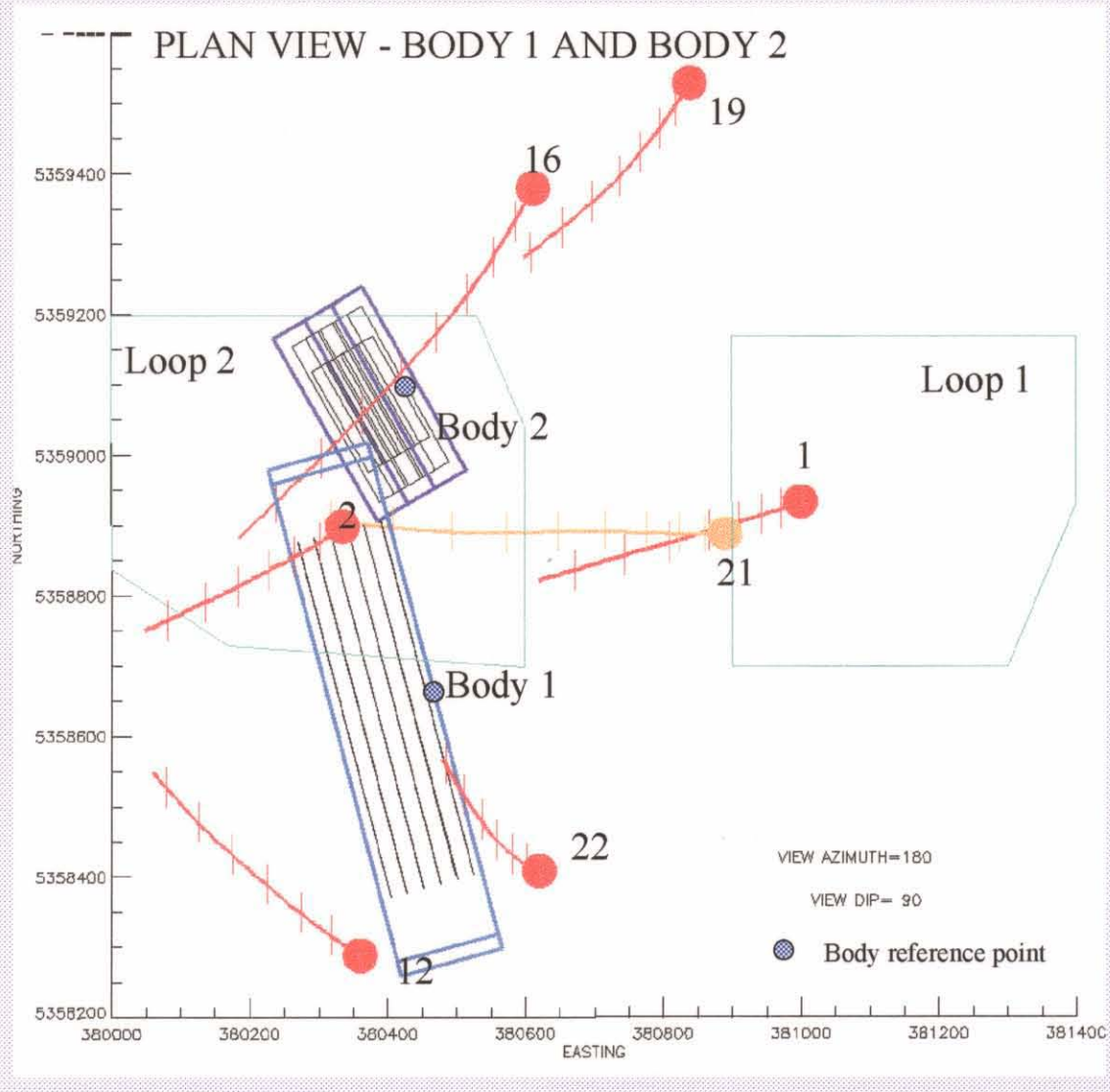
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Y_REF POINT = 5359060.
Z_REF POINT = -270.

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STRIKE = 45.0000
DIP = -15.0000
PLUNGE = 0.000000
LENGTH = 400.000
DIP-WIDTH = 200.000
THICKNESS = 25.0000
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Z_REF POINT = -336.000

675260

SOUTH HENTY BOREHOLE EM INTERPRETATION : FEB 2000

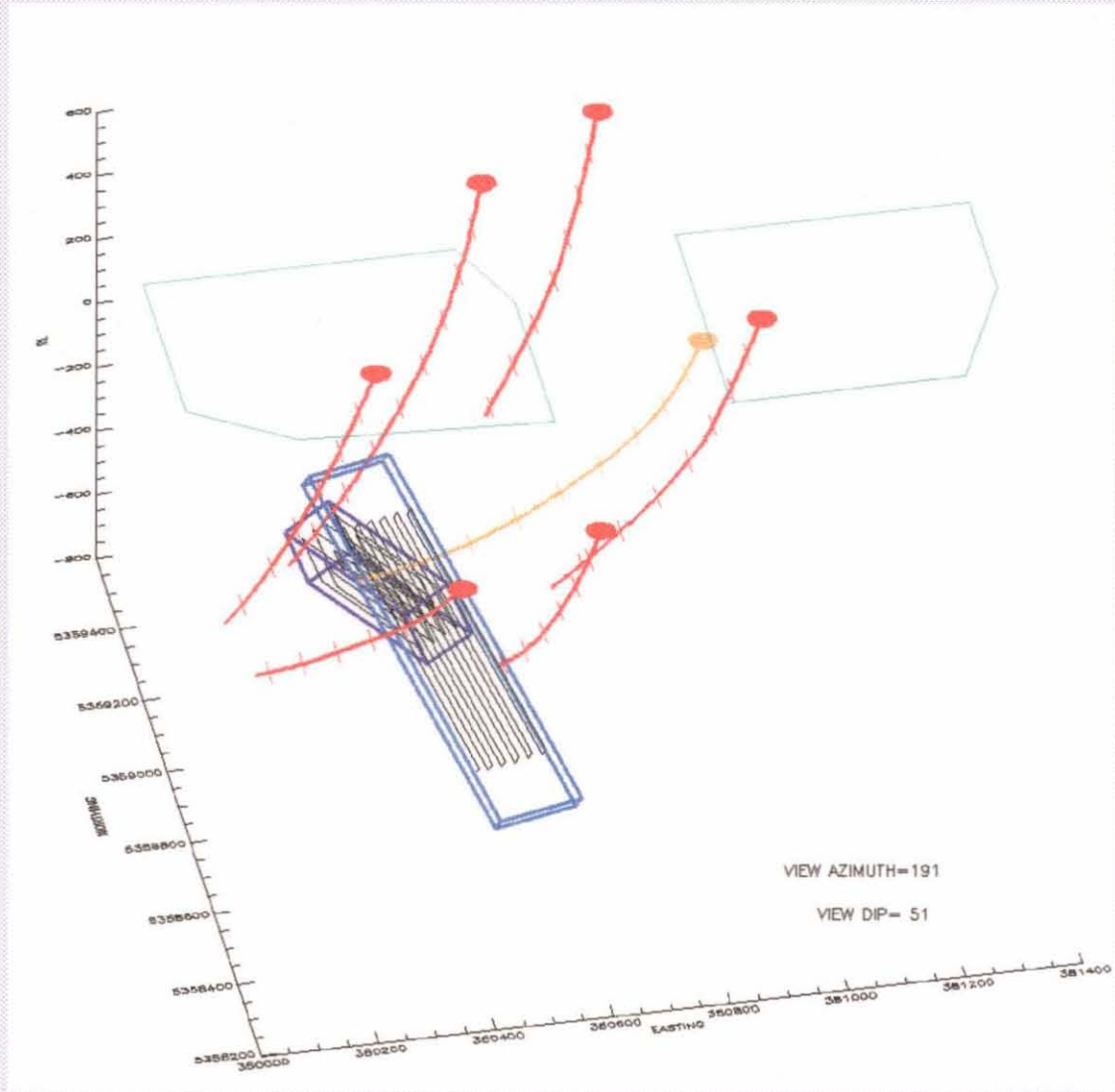


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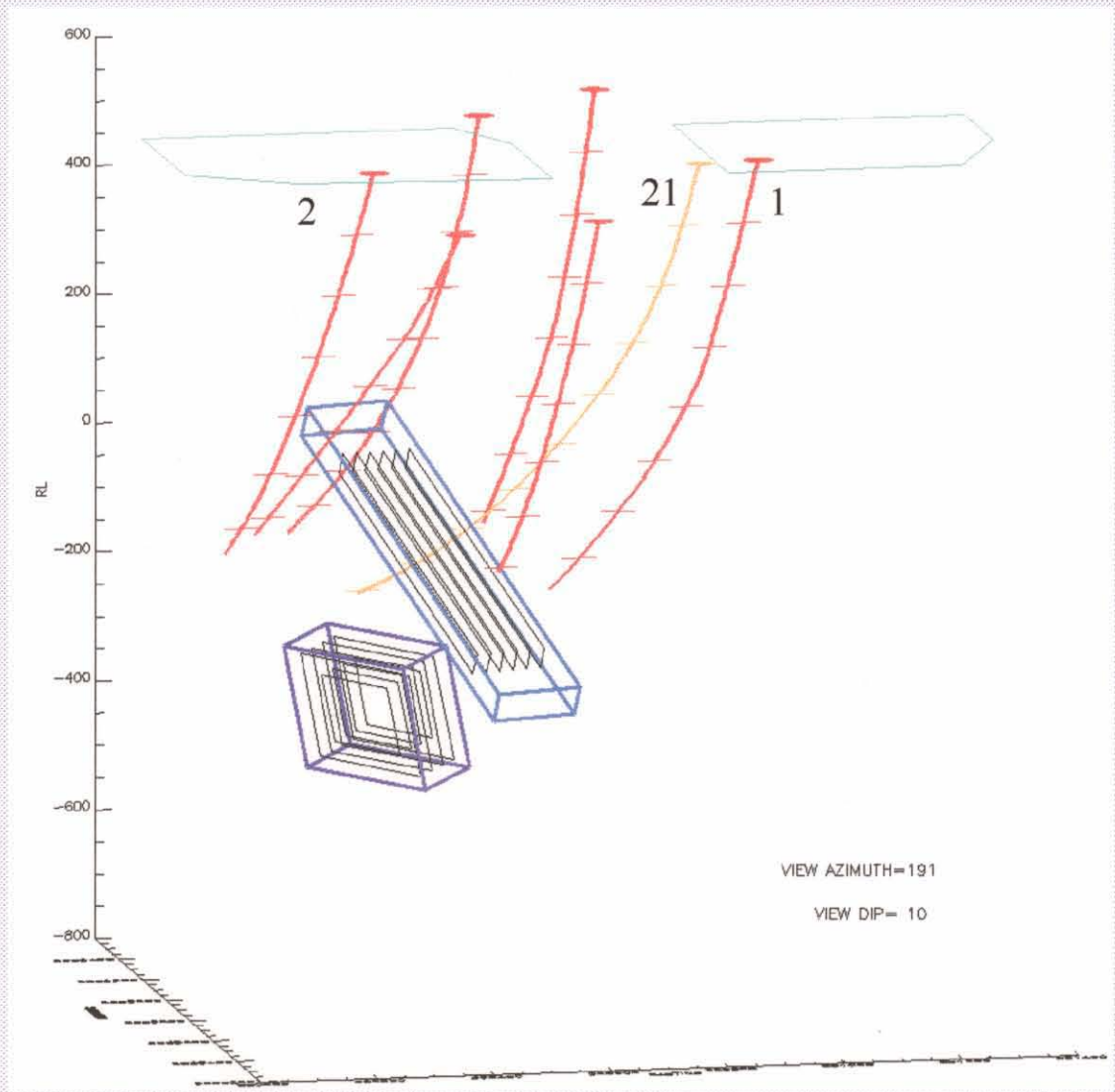


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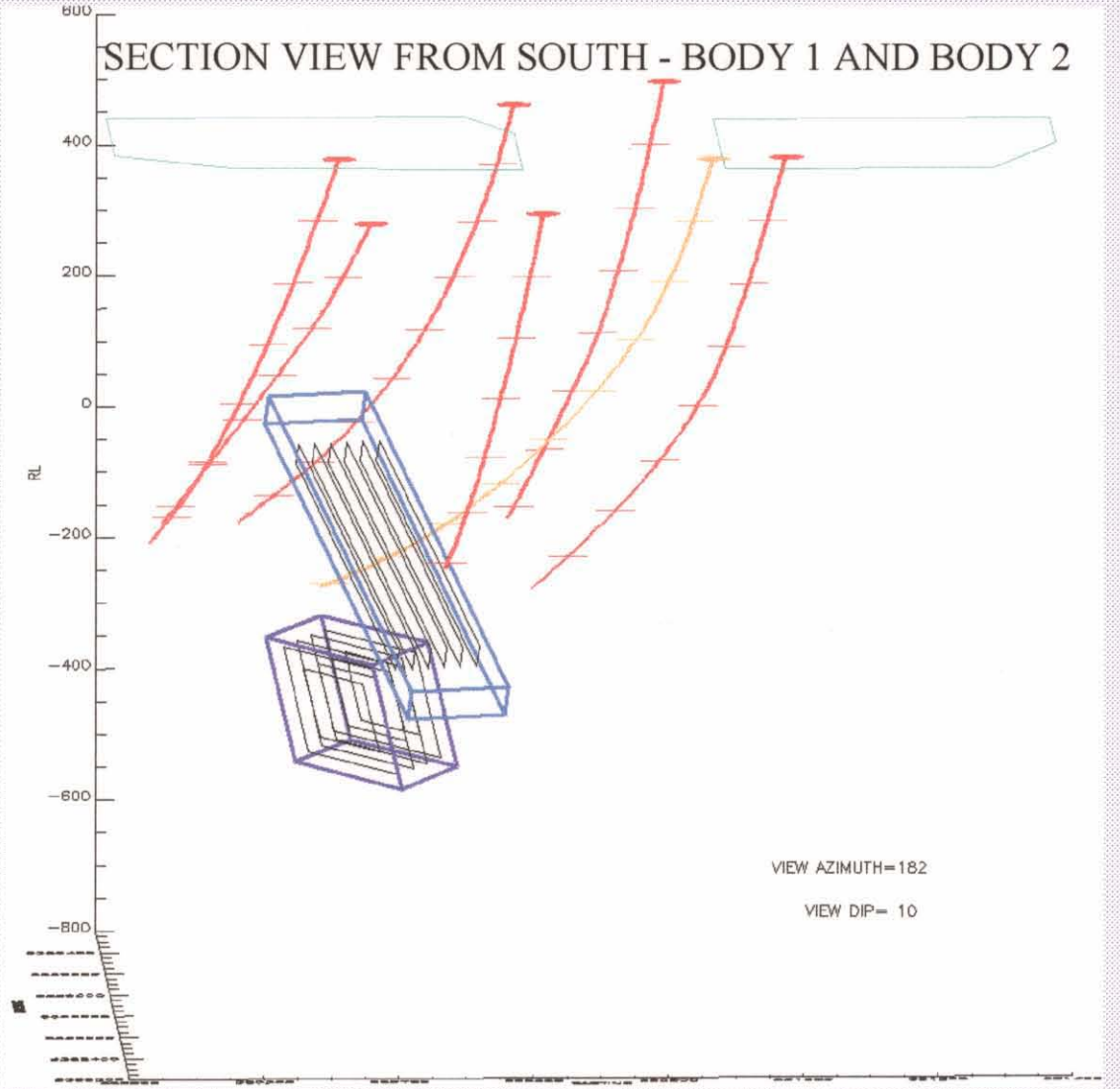


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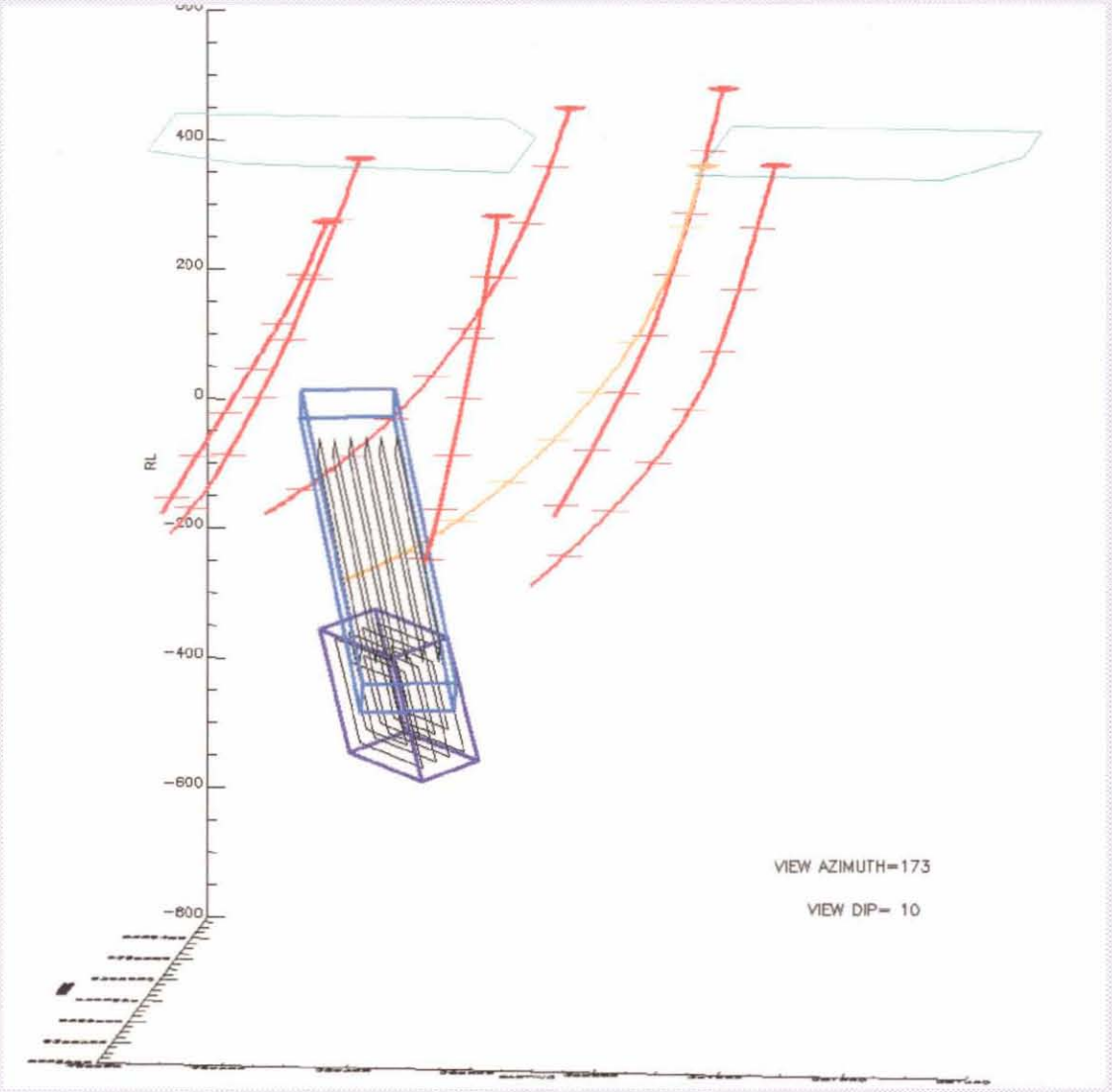


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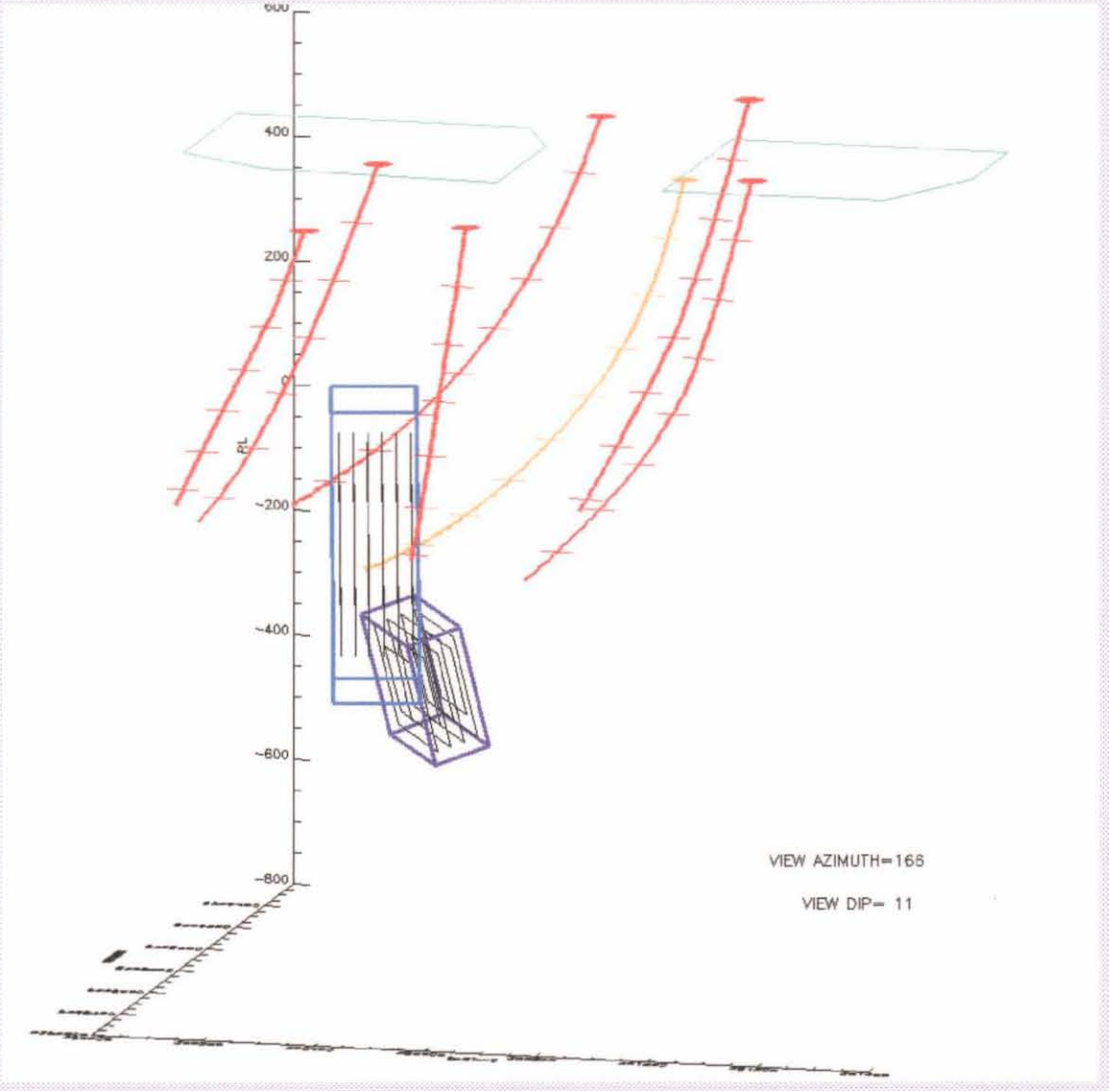


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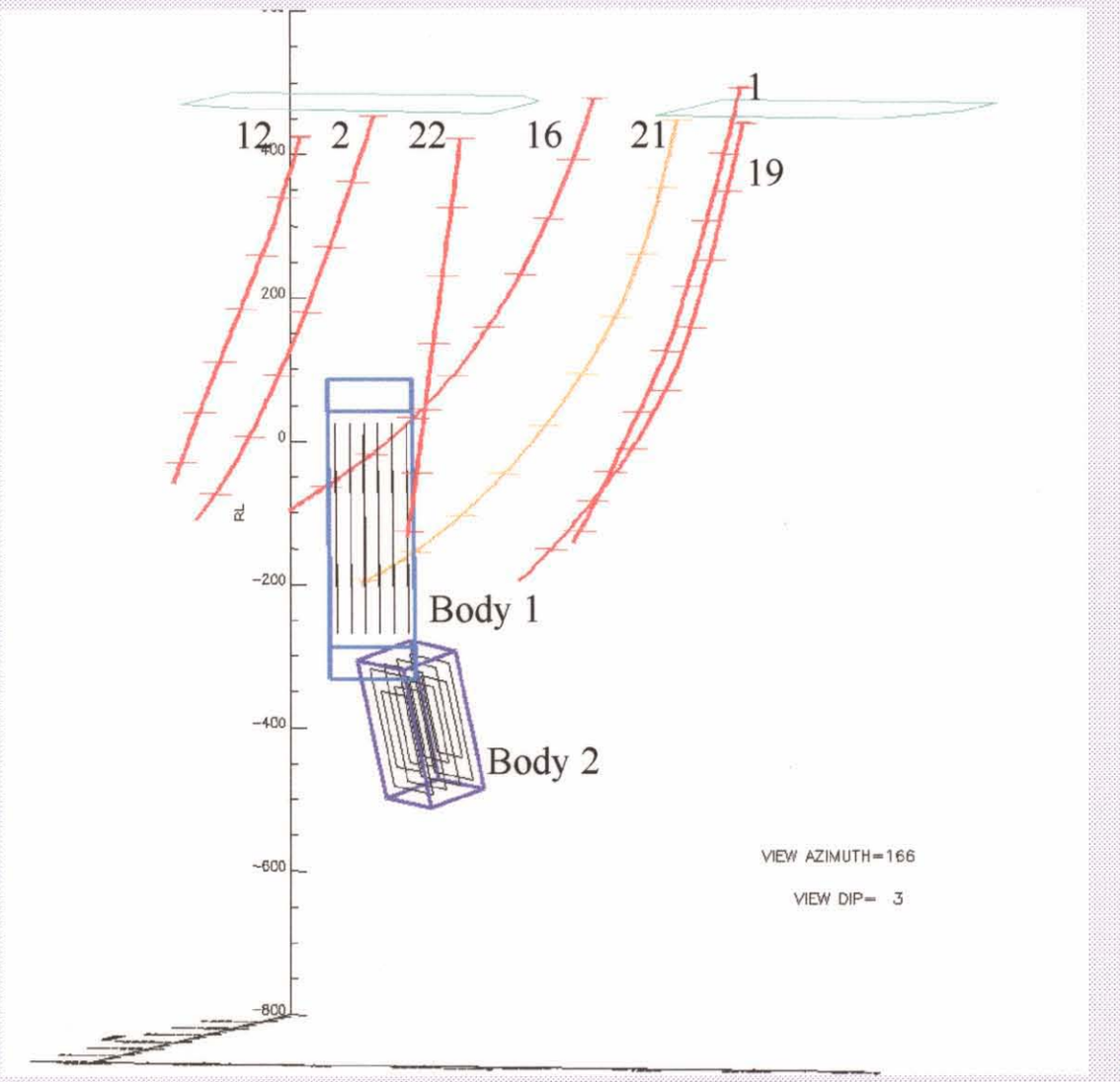


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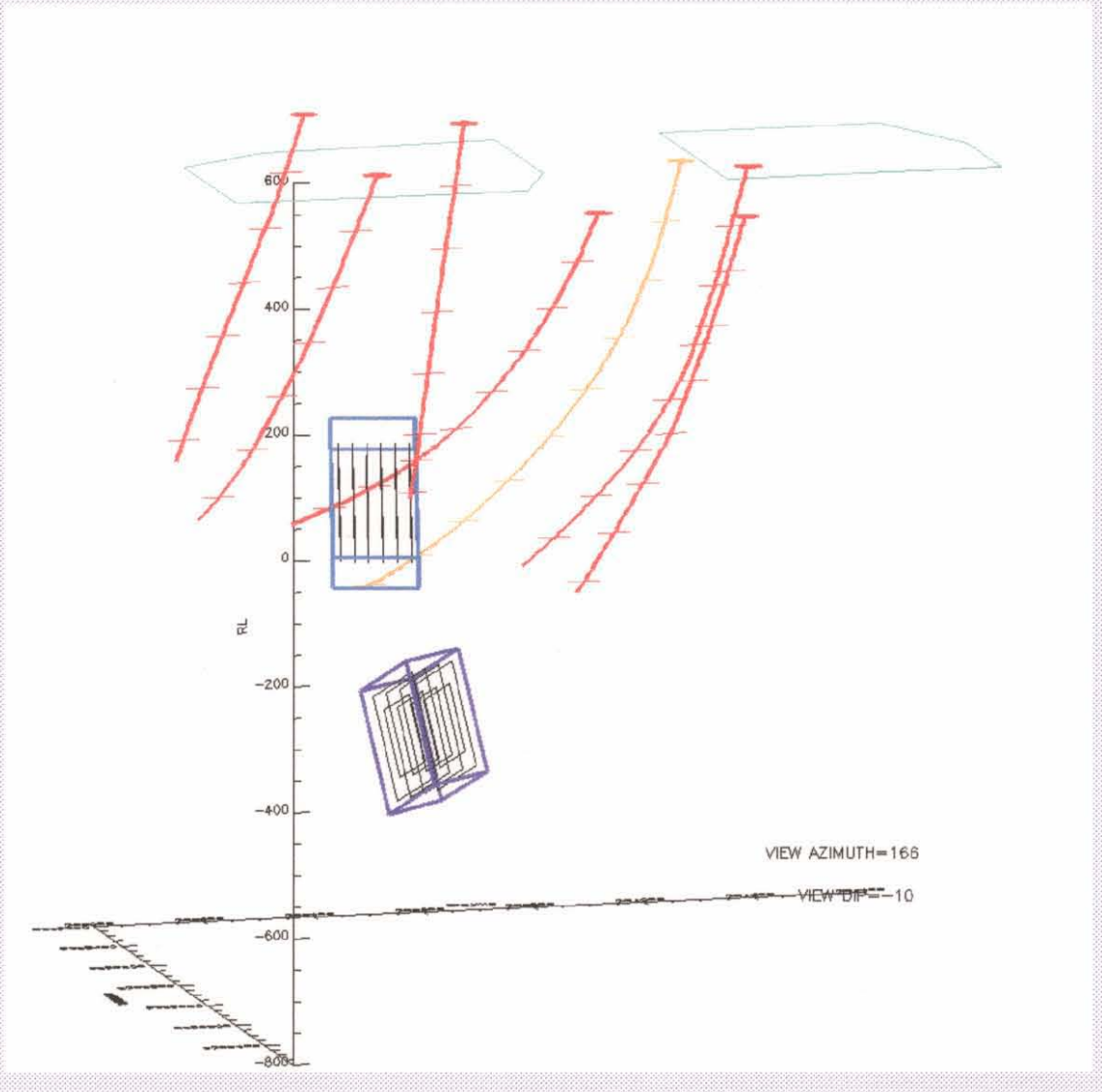


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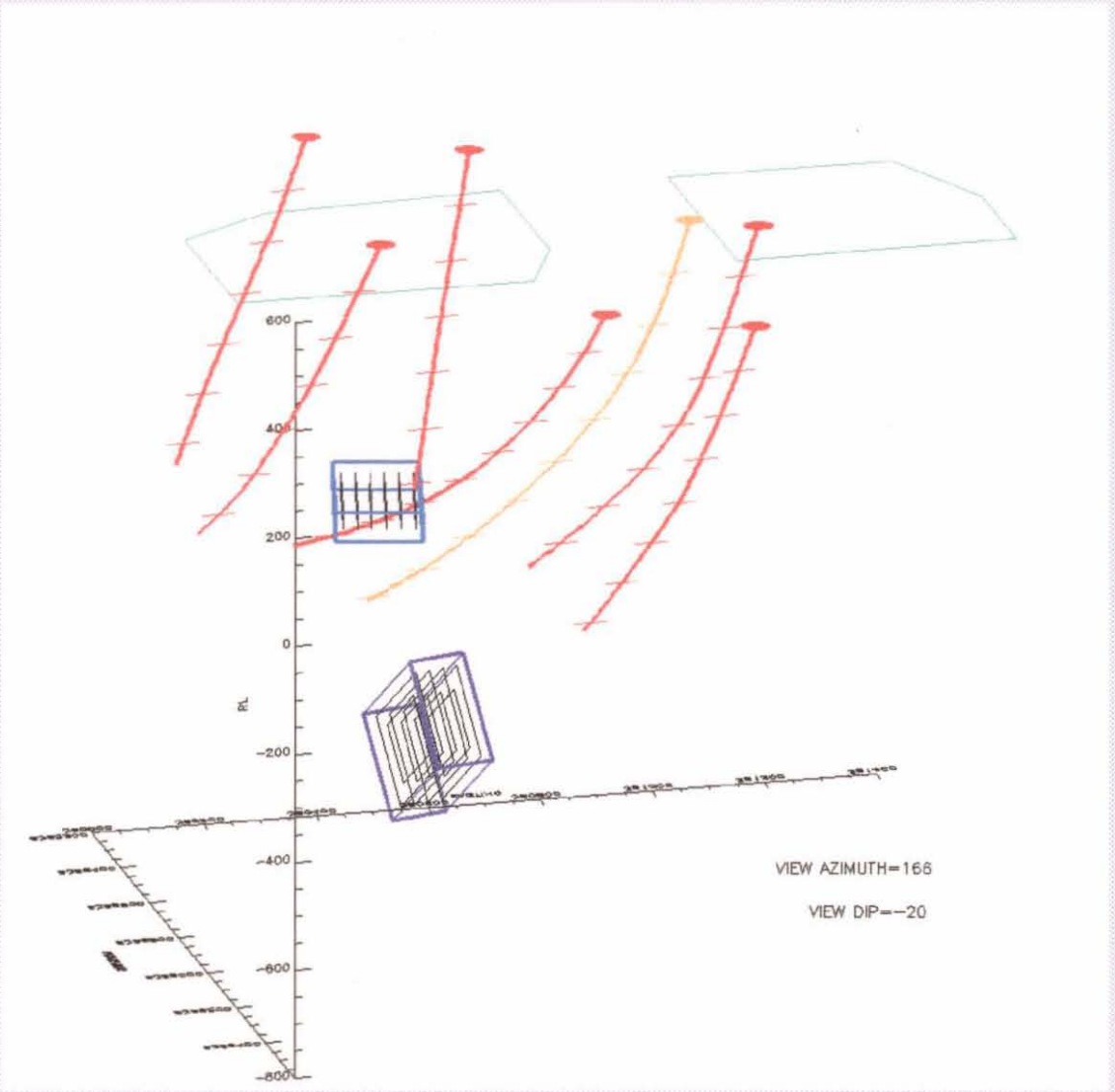


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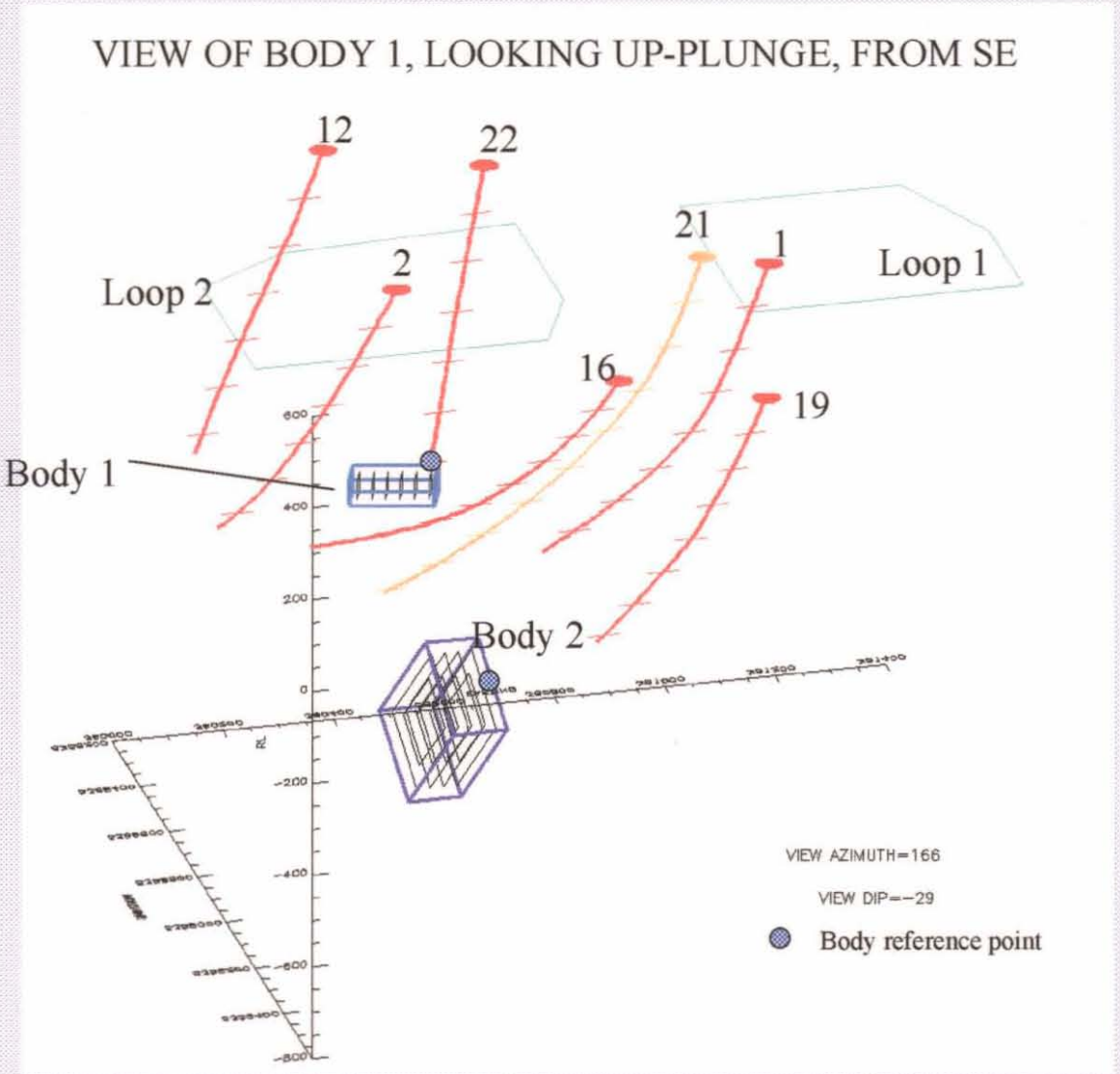


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SOUTH HENTY BOREHOLE EM INTERPRETATION : FEB 2000



5 cm

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SOUTH HENTY TEM INTERPRETATION

Body 2 and Body 3

28 Feb 2000

Michael Asten
Flagstaff GeoConsultants

Flagstaff
Geo-consultants

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SOUTH HENTY BOREHOLE EM INTERPRETATION : FEB 2000

Body Type:Body 1
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STRIKE = -15.0
DIP = 90.0
PLUNGE = 25.0
LENGTH = 800.
DIP-WIDTH = 50.
THICKNESS = 150.
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Y_REF POINT = 5358630.
Z_REF POINT = -50.

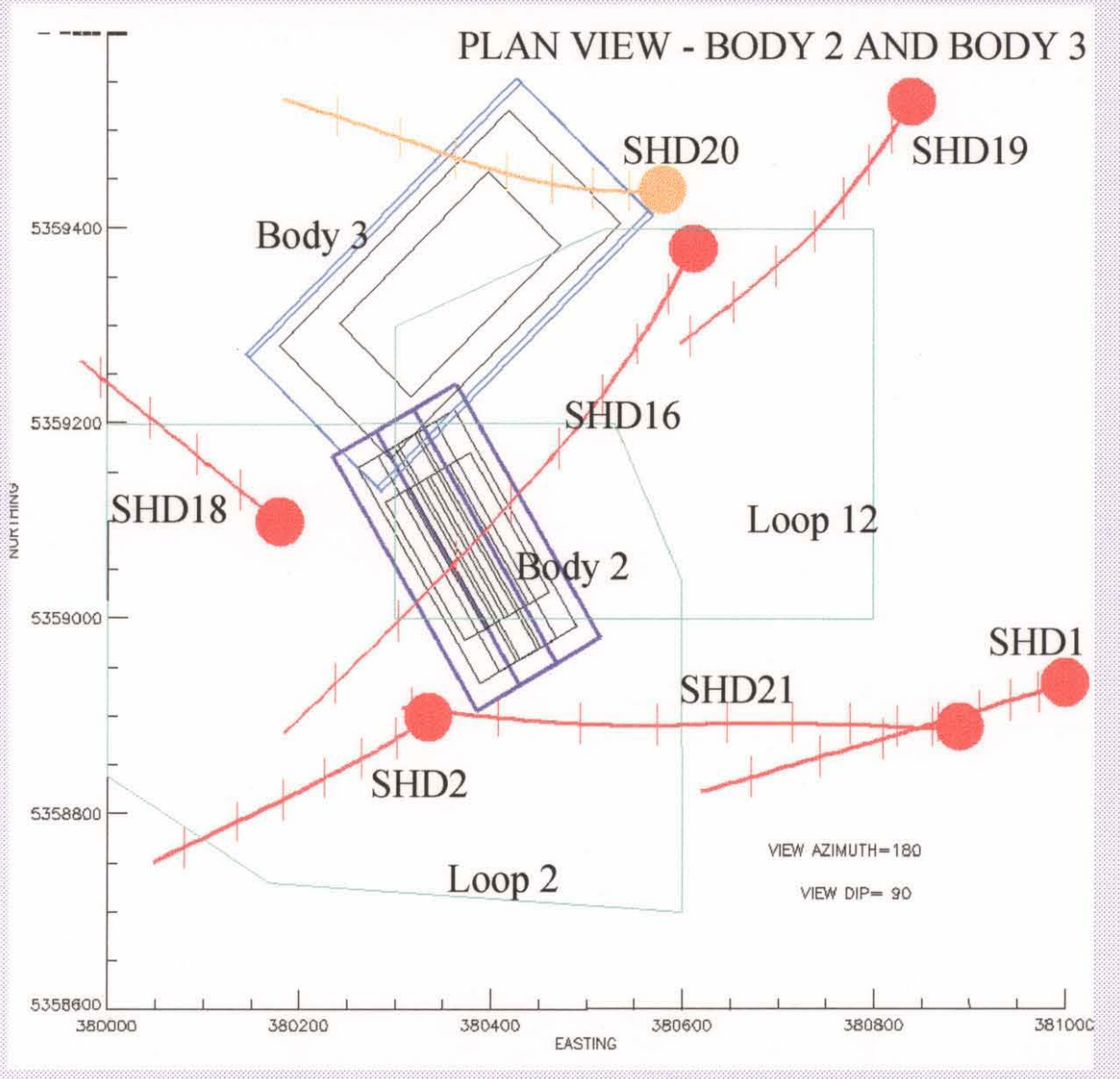
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DIP = 75.
PLUNGE = 0.0
LENGTH = 300.
DIP-WIDTH = 200.
THICKNESS = 50.
X_REF POINT = 380353.
Y_REF POINT = 5359060.
Z_REF POINT = -270.

Body Type:Body 3
CURR DENSITY=
STRIKE = 45.0000
DIP = -15.0000
PLUNGE = 0.000000
LENGTH = 400.000
DIP-WIDTH = 200.000
THICKNESS = 25.0000
X_REF POINT = 380289.
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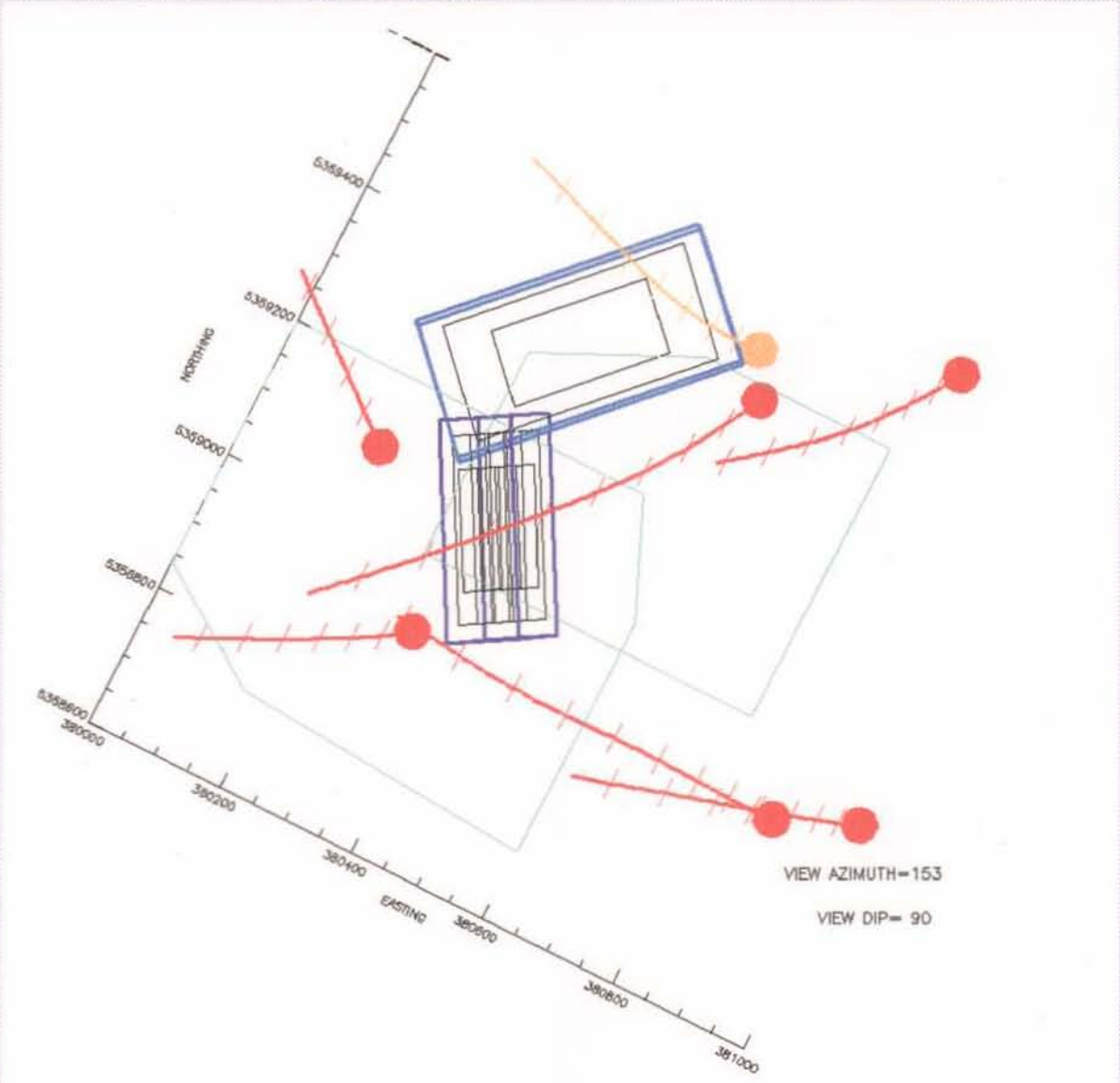


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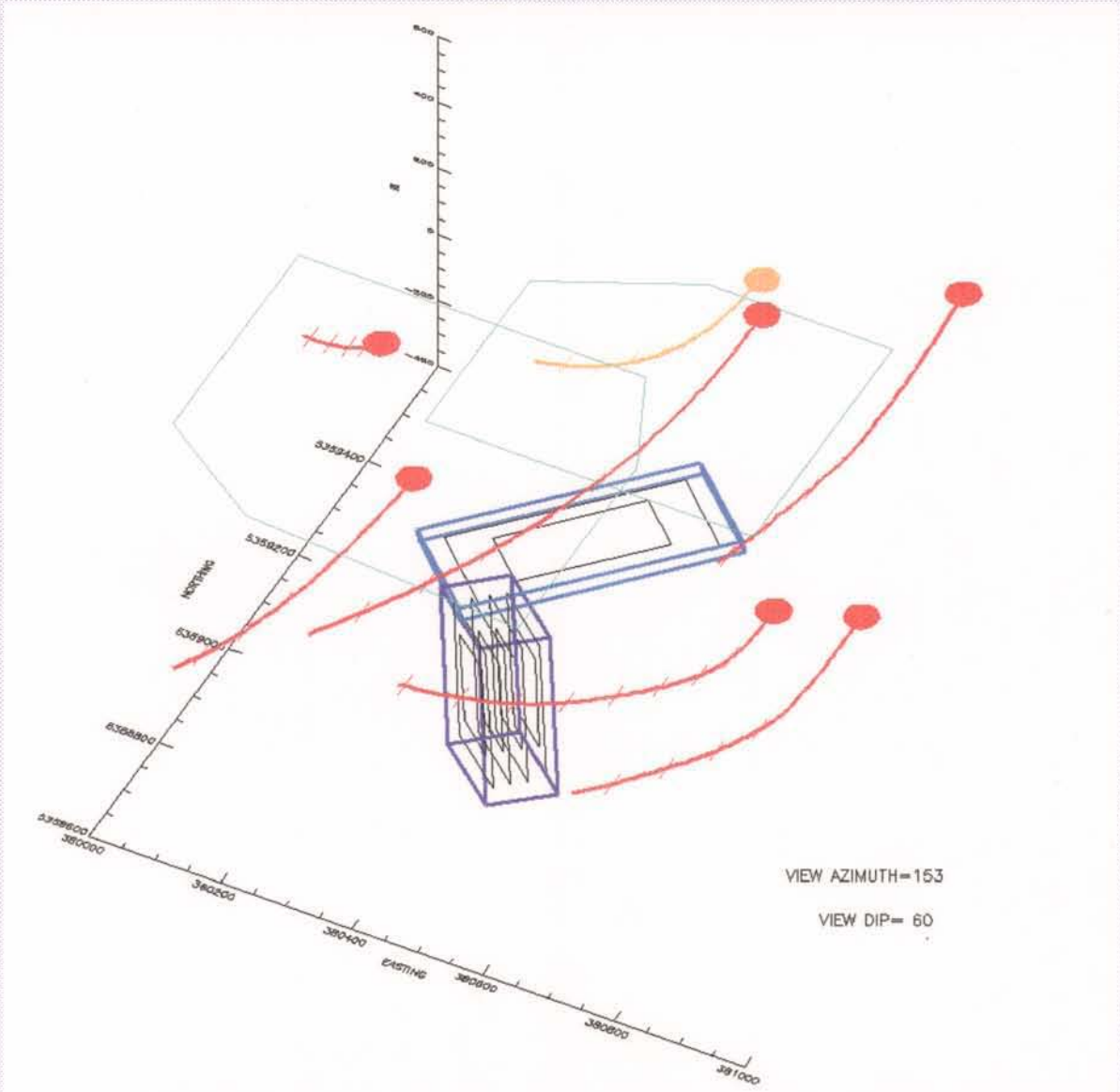


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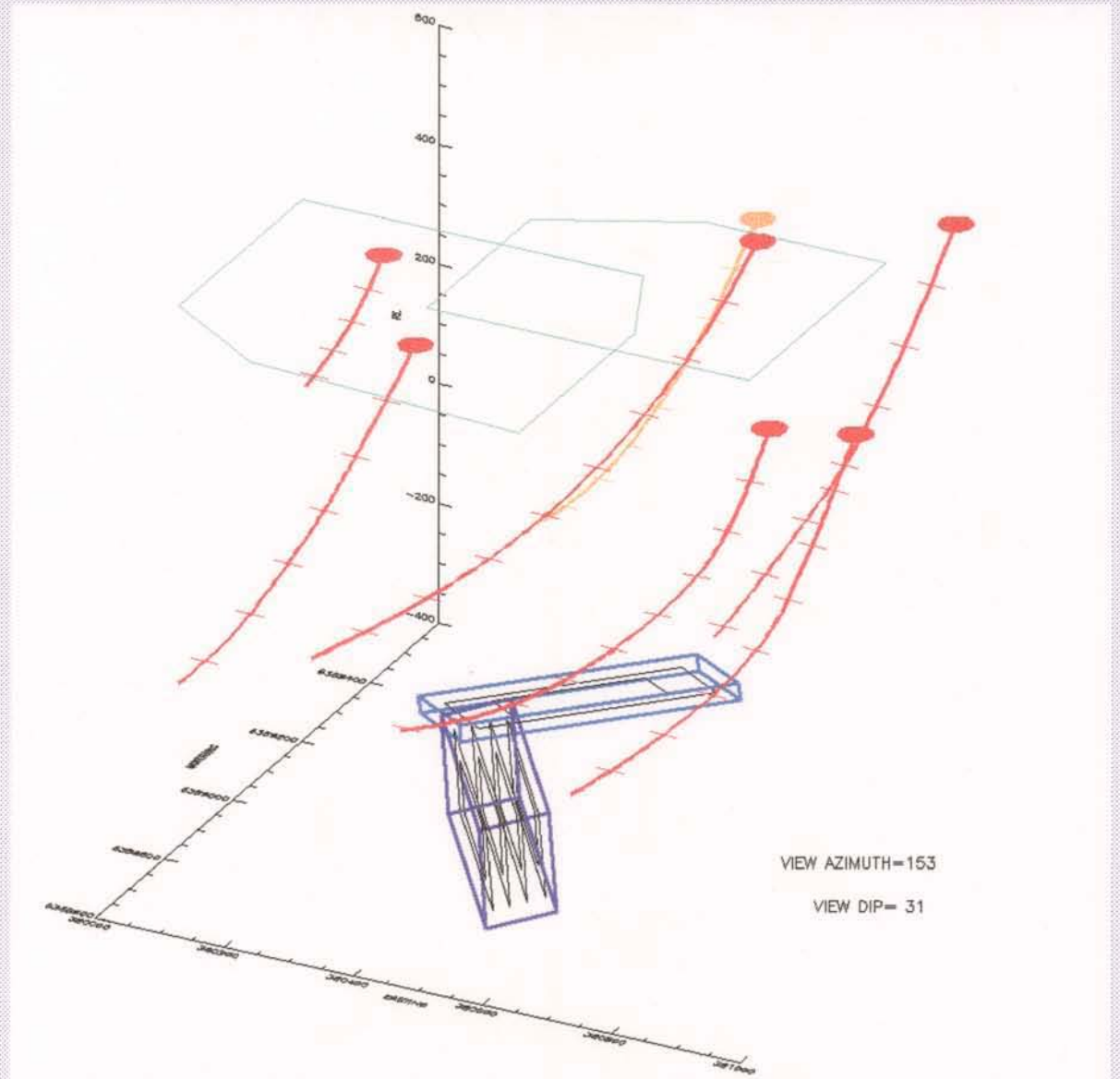


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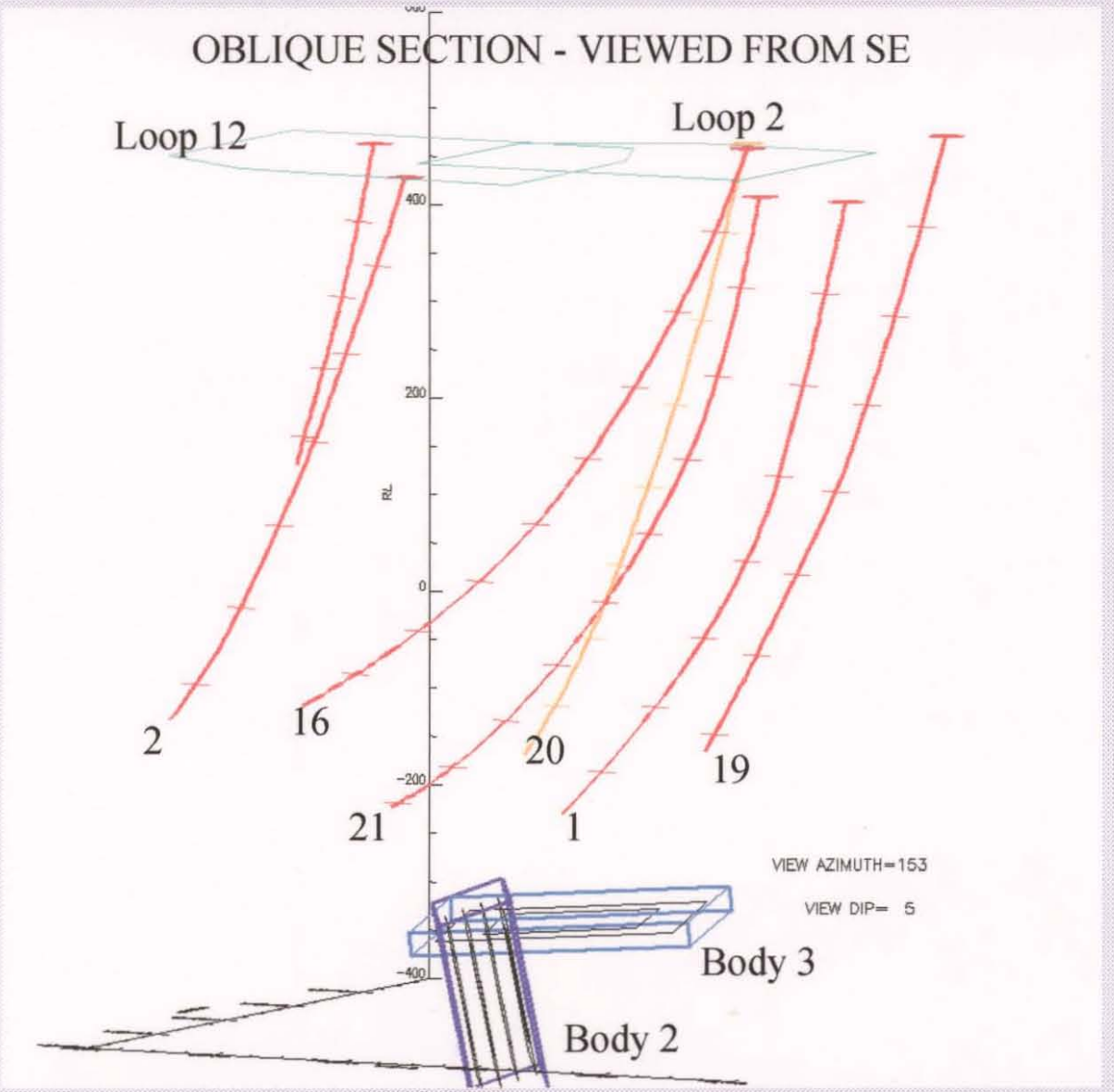


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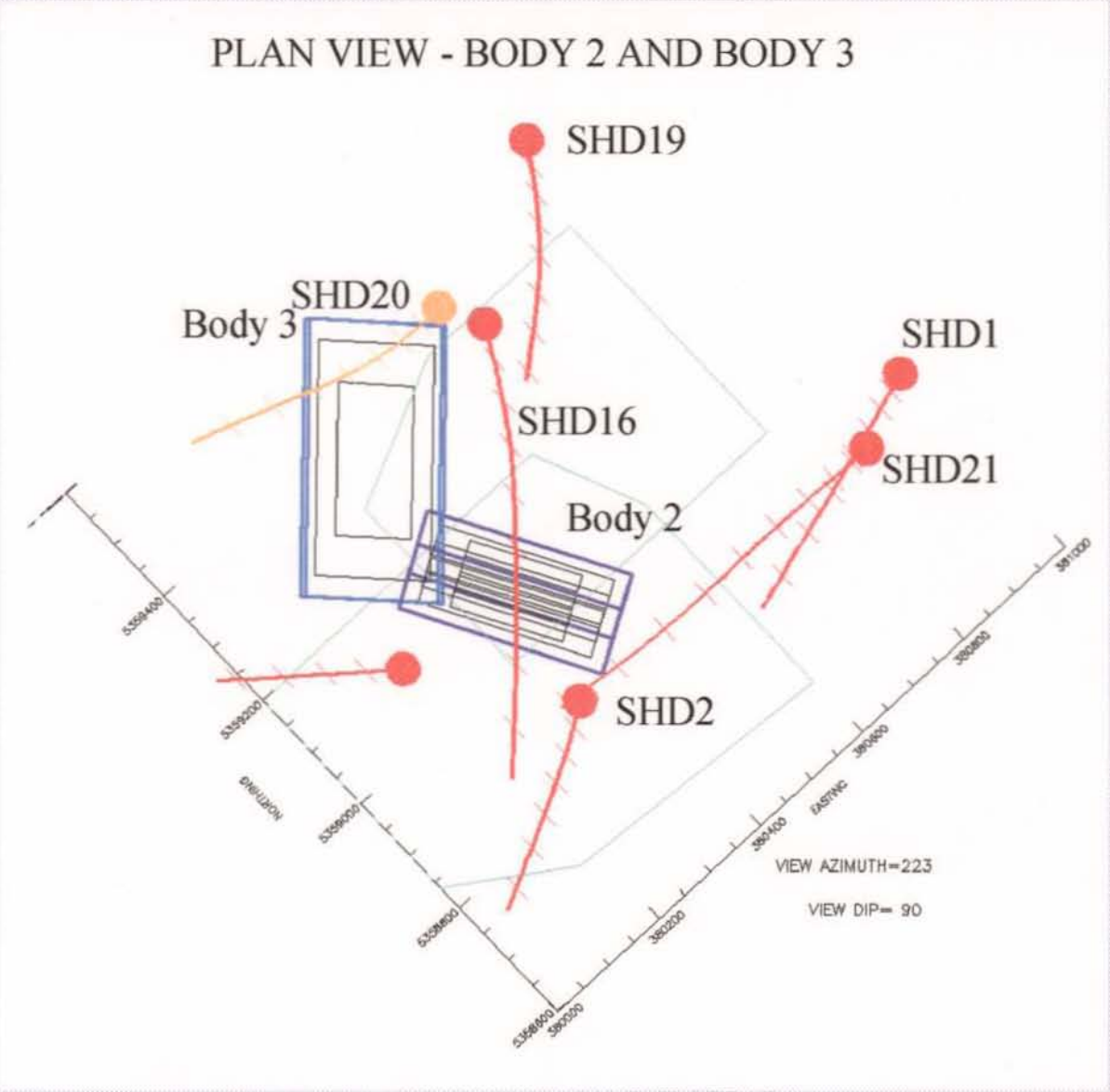
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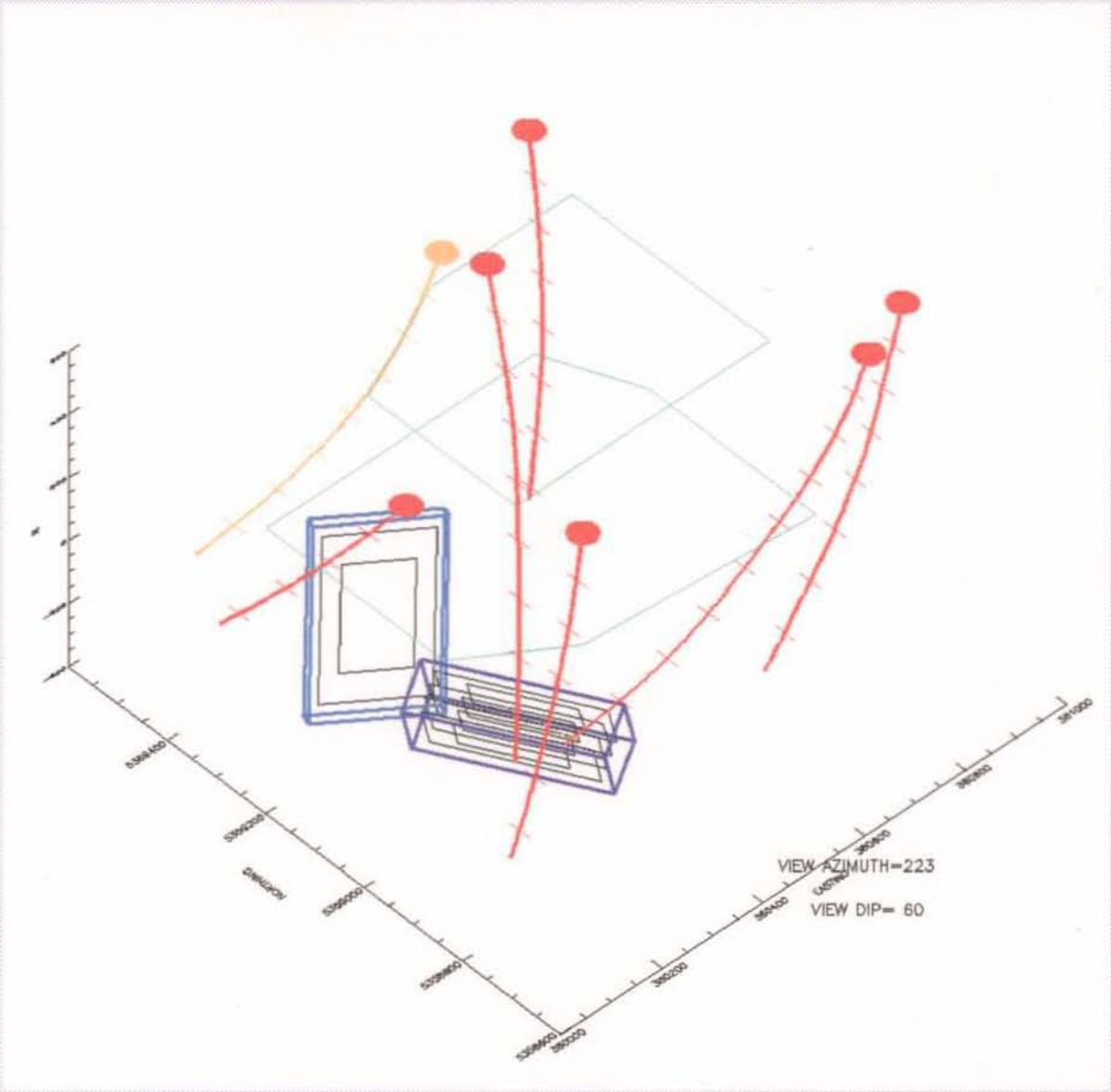
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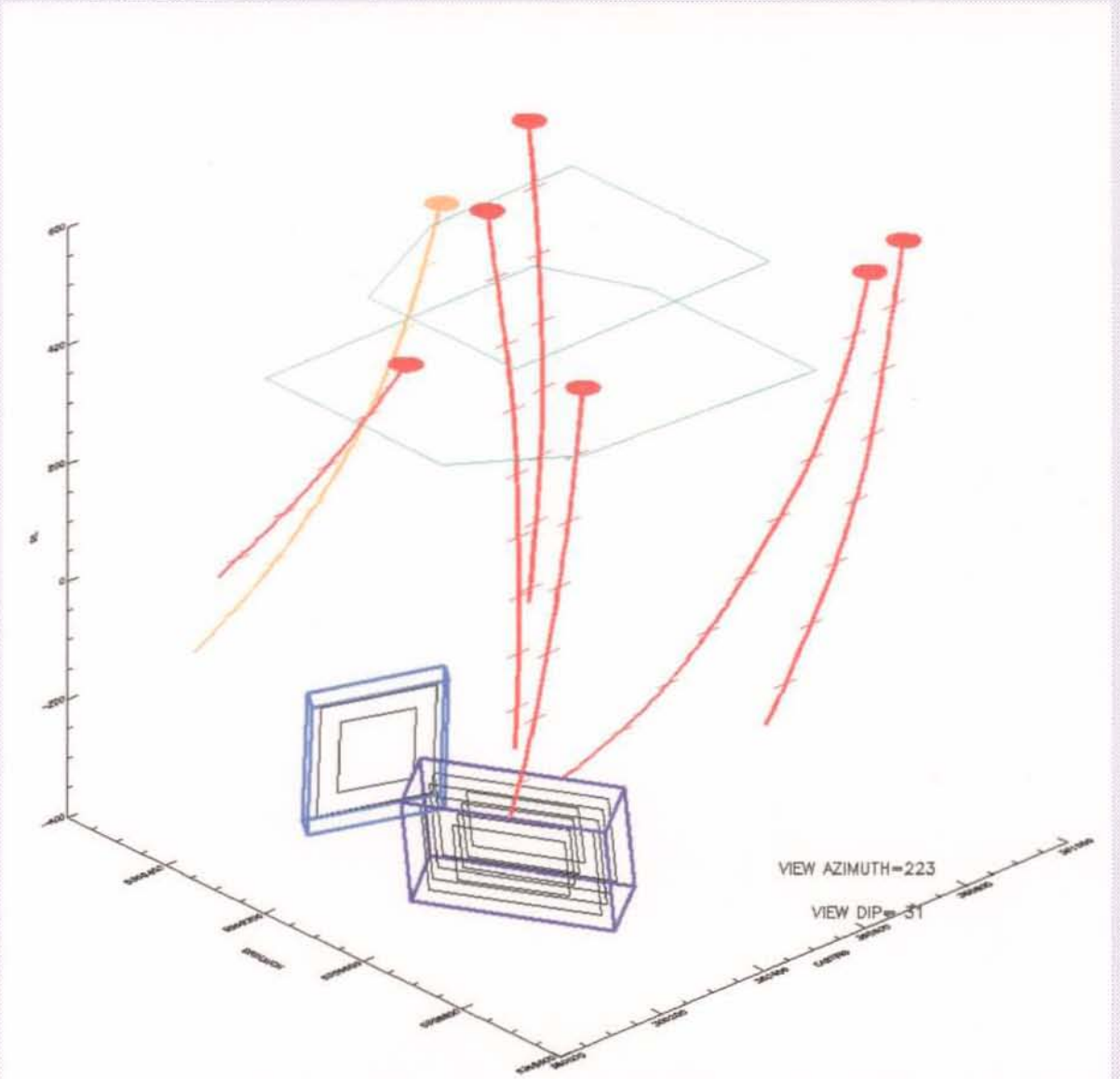


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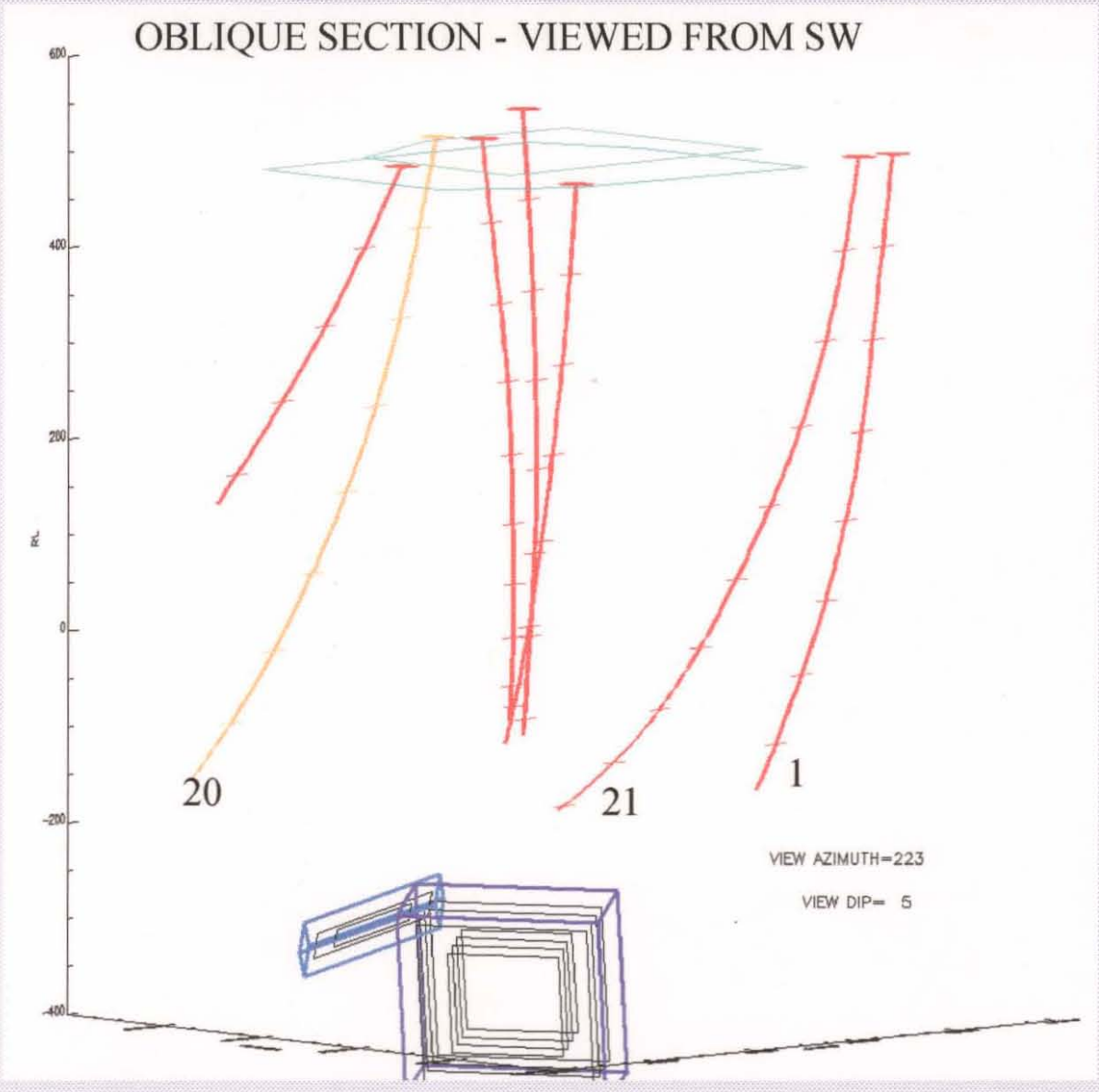
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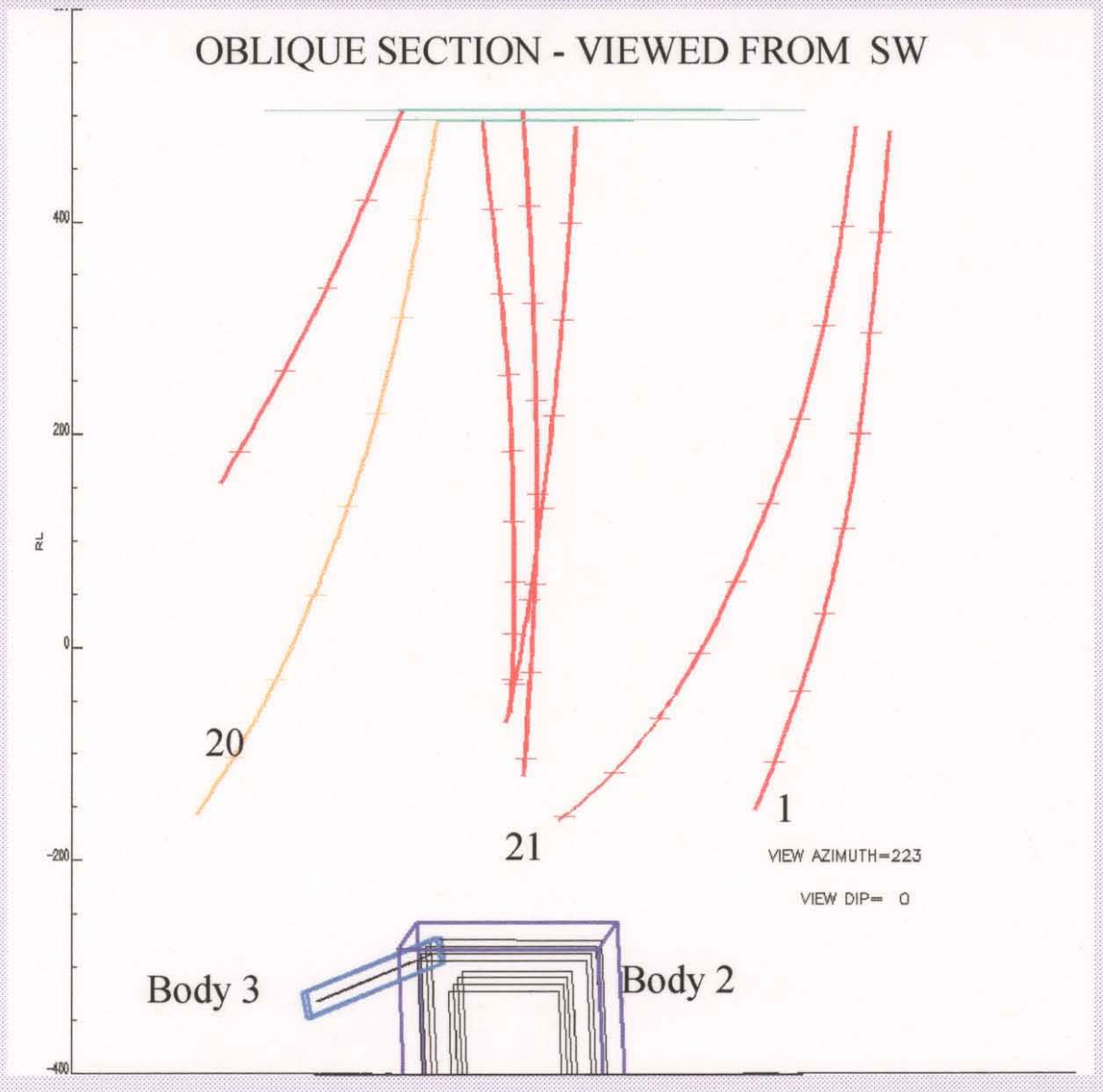
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SOUTH HENTY BOREHOLE EM INTERPRETATION : FEB 2000

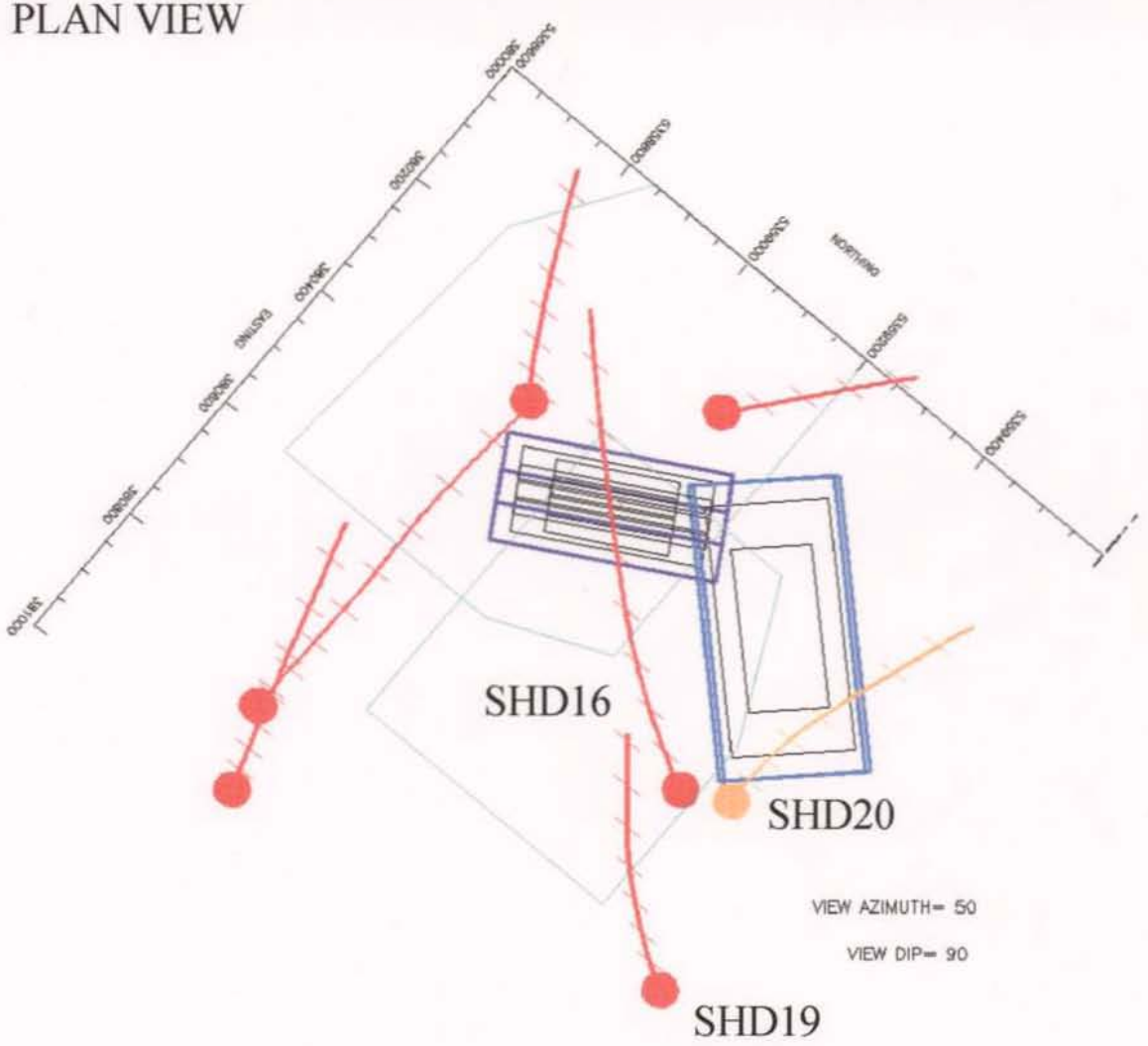


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PLAN VIEW



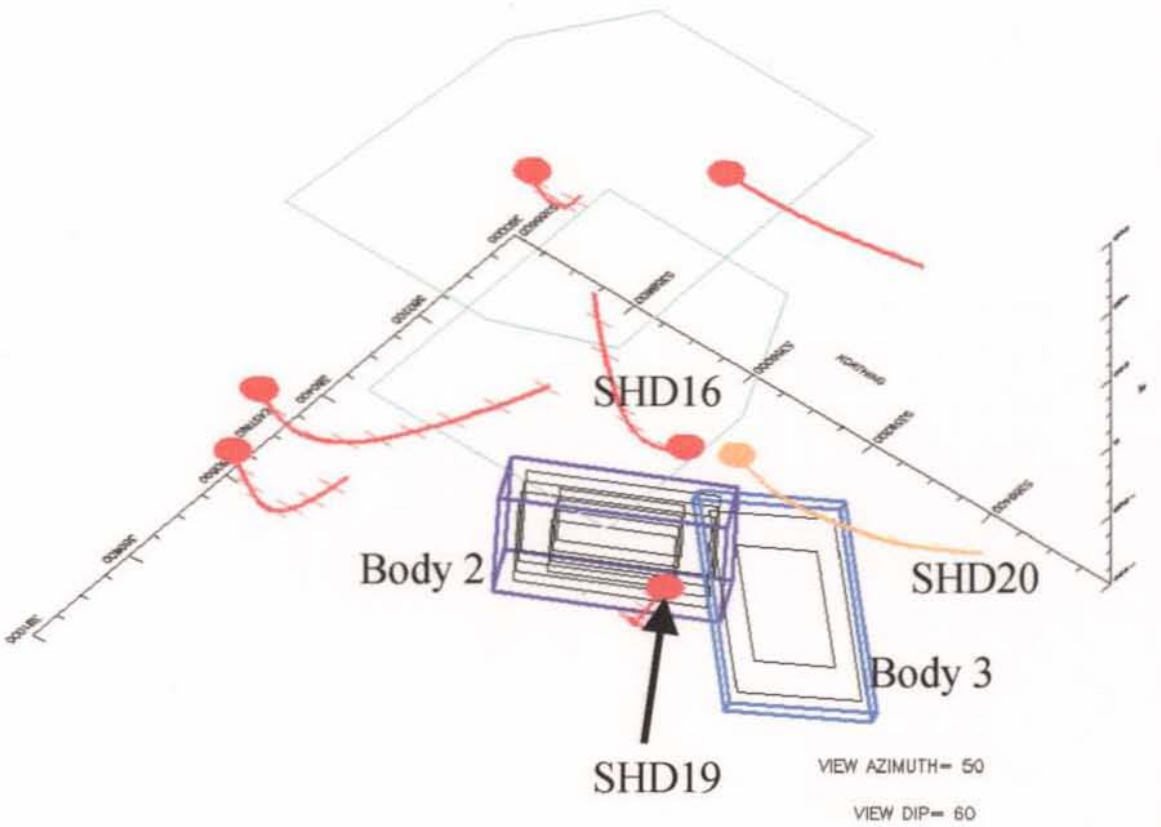
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BODY 2 VIEWED DOWN THE CORE OF HOLE
SHD19



5 cm

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DISCUSSION ON CONDUCTORS AS DRILL TARGETS

Body 1 is an attractive target due to its large strike length, and its depth range, which is within that of current drilling. The geometry of the target invites comparison with the Henty zone of Au-Cu mineralisation. Body 1 is a well-defined target between holes SHD21 and SHD2 and I regard it as the first priority for further drilling.

Body 2 is the strongest conductor, and is an attractive target except for its depth (below depths achieved by exploration drill-holes to date, on this prospect). Hole SHD19 is on target to intersect this conductor; if the PVC pipe in hole SHD19 can be removed (not a trivial task) then an additional 400 m drilling will intersect the best conductor yet detected on the prospect.

The weakness of Body 3 as a conductor makes it likely to be a zone of alteration rather than sulfide mineralisation. Since this body is the weakest conductor of the three, and is located at a depth beyond current drill-holes, it is ranked as the lowest priority for further investigations.

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EM INTERPRETATION – SHD21 – Body 1 and Body 2

A previous borehole EM interpretation (Asten,1999) suggested that a conductor lies between holes SHD1 and SHD2. Hole SHD21 was sited to test for this conductor. Three transmitter loops were used in conjunction with this hole (Loops 1,2 and 9, shown on Plate 1), and the conclusion drawn from the data is that ther are in fact two separate conductors in the vicinity of this hole, labelled Body 1 and Body 2 in the previous section.

Evidence for Body 1 is best shown on profiles for holes SHD2, Loop 9, and SHD21, Loop 9 (Figures 1 and 2). The signature of an offhole conductor is clear, about 100m offhole from 670m downhole in SHD21, and 50 to 80 m offhole from 470m downhole in SHD2. The decay rate of this anomaly is shown in Figure 3; it is close to a t^-3.6 decay consistent with a current channelling response. This type of response is expected in view of the large offset of loop 9 from the holes.

Body 1 may have connection with a small electrical conductor which intersects SHD21 at 780m. However the bulk of the conductor is clearly offhole, and has a cross-section geometry constrained by the estimated distances from the two boreholes.

The strike direction of Body 1 is estimated from the U and V components of SHD21, Loop 9. The minimum in U and maximum in V at ~800m implies strike towards north-west with Body 1 located south-west of hole SHD21. Interpretation is complicated by the fact that the signature of Body 2 overlaps the signature of Body 1, over the interval 750m to 900m.

Evidence for Body 2 is best shown on profiles for hole SHD21 Loop1 (Figure 4) , but it is also visible on SHD21 Loop2 (reduced amplitude) and SHD1 Loops 1 and 2. Modelling SHD21 Loops 1 and 2 with an inductive plate target indicates that the body must dip steeply east in order to decouple with Loop2 and thus show the x2 reduction in amplitude observed in field data. The smooth slopes on the anomaly profile, the rate of decay place constraints on size, conductance and distance to the body. Figures 5 and 6 show field and model data for SHD21 Loops 1 and 2, where the model is a plate below the hole, dipping 75 deg east, size 300m (strike) by 200 m, and conductance 25 Siemens. This is an acceptable match in the A-component, but is not satisfactory in the U and V components. Unfortunately, U and V components were not acquired for the better-coupled Loop 1 since the existence of Body 2 was not recognised until later. U and V data for the poorly-coupled Loop 2 are ambiguous and noisy. The U and V components on the older SHD1 Loop 1 and 2 data are not helpful either, since they are excessively noisy. Without U and V data for SHD21 Loop1, the strike angle and strike length of Body 2 are poorly constrained, but the independent knowledge of geological strike, and the existence of significant alteration and mineralisation in hole SHD16 to the north-west, favour the model of a strike to 330 deg. This strike direction produces the geometry for Body 2 as described in the Summary of Interpretation above.

Body 2 is the strongest conductor located so far on the prospect; it has a TEM decay constant of 0.6 msec (Figure 7).

EM INTERPRETATION – SHD20 – Body 3

The signature of Body 3 is best observed on the profiles for SHD20 Loop 14 (west loop) shown in Figure 8. The anomaly is broad, indicating a large conductor at the base of the hole, at a distance offhole of order 100 to 150 m, and it decays to background by Channel 12, indicating a weak conductor.

The decay of the anomaly at depth 790 m is shown in Figure 9. The time constant is very small (.046 msec), but the sign of the anomaly indicates that an inductive response is the correct interpretation (a current-channelling response would give a positive anomaly).

The anomaly profile is difficult to see on SHD20 with Loop 12 because it is masked by a larger background response. This background response is probably due to the fact that loop 12 was laid on more conductive sediment cover near the lake, whereas loop 14 was laid over hills west of the lake. When the data for the 2 loops are plotted on enlarged and similar scales (Figure 10) it is seen that the anomaly on Loop 12 is similar to, or possibly 30% larger in amplitude than that on Loop 14 (depending on where the background trend is drawn). Modelling to compare coupling between loops 12 and 14 for varying dips, indicates that the dip of Body 3 is in the range zero to 15 deg either direction (ie dipping shallowly north-west or south-east).

Figures 10a,10b show comparisons of field and model data for SHD20 Loop 14, and SHD20, Loop12. The modelled conductor is a 400x200m rectangular plate of 2.4S conductance, striking NE-SW, located east of and below hole SHD20 (see previous Section).

Loop 11 (east) also produces an anomaly indicating existence of a weakly conducting target off the end of the hole. Three-component data is available, but since the anomaly signature is both weak and extending beyond the end of the hole, it is not possible to deduce clear strike information. There is a suggestion in the V-component data that a NE-SW strike may be indicated, but a north-south strike direction is also possible within the ambiguities of the U-V component data at the low-signal levels which apply here.

The most important point about Body 3 is that it is a large flat-lying weak conductor, with sufficient area to allow inductive current circulation, as distinct from the linear pencil-like conductor described for Body 1.

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EM INTERPRETATION – SHD22 – Body 1 down-plunge?

EM data from this hole shows a weak conductor intersected at depth 400 m, with a significant off-hole anomaly at the base of the hole. The intersection at 400 m has a small expression extending off-hole at 425 m depth, consistent with minor mineralisation, flat-lying, extending west from the hole a few tens of meters. There is no obvious correlation between this EM data and the logged alteration type.
The more-significant anomaly, off-hole beyond the base of the hole, is incomplete (extends beyond the base of hole). The character of the anomaly is very similar to that for Body 1 as seen from SHD21, and its location is consistent with the strike direction inferred from SHD21. Figures 11 and 12 show the profile and decay curve for SHD22, Loop 9. The decay has a fitted t^-3.5 decay consistent with current-channelling excitation as deduced for Body 1, seen from hole SHD21 (Figures 2,3). Accordingly, this anomaly is interpreted from axial-component data to be a southerly extension of Body 1, where Body 1 is at depth of order 700 m, at a distance (very roughly) of order 100 m west of the hole; these estimates are very approximate, since we are dealing with an incomplete anomaly extending below the base of the logged hole. This interpretation is supported by the fact that Loop 13 (east) gives corresponding but opposite-sign and lower-amplitude anomalies compared with Loop 9.

The conclusions re SHD22 are however additionally uncertain, since I cannot reconcile the sign of the U and V components acquired with Loop9, with this model. What is clear however is that there is a weak conductor off-hole, beyond the base of the hole. I cannot devise any credible model which does give consistency with signs of the observed partial U and V-component anomalies. In view of the incomplete nature of these anomalies I believe it is not cost-effective to strive further with interpretation of this off-hole anomaly. However if Body 1 is drilled between holes SHD21 and SHD2, and proves of sufficient interest to justify further drilling along strike, then further borehole EM in Hole SHD22, using a central loop over the lake and double-checking of borehole probe sign conventions, would be advisable.

Note added in proof: The anomalies observed for Hole SHD12 Loops 4 and 10, are similar (but opposite in sign) to those observed for SHD22. It is probable that Body 1 as a long linear conductor extends further west (towards the base of Hole SHD12, within 100-200 m of the hole) than is shown in the models in the Summary above. The information from SHD12 reinforces the view that the Body 1 conductor lies west of SHD22, despite the conflicting information apparently given by the U-V components for hole SHD22.

EM INTERPRETATION – NC4 – Body 2 along strike?

EM data from this hole (reported in Asten 1999b) shows a hint of an anomaly signature at the base of the hole, which is similar to that obtained for SHD21 Loop1 (Figure 4), and SHD1 Loop1. The anomaly is incomplete, and one must resist

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temptation to model in detail the non-existent parts of the anomaly. This partial anomaly might be consistent with a conductor along strike (south) from Body 2. However the dubious anomaly could also be explainable by EM diffusion effects in a (slightly) conductive half-space, hence any further investigation of Body 2 should be confined to the vicinity of holes SHD19 and 21.

However the likely location of a conductor off-hole and below/beyond the end of the hole, does lie along strike from the plotted position of Body 2. It is possible therefore that Body 2 has strike extent to the south, although study of (poor) U and V-component data on SHD21 suggested that the body extends north rather than south of hole 21.

RECOMMENDATIONS

1) Drill Body 1 between holes SHD21 and SHD2, at location shown on Summary Interpretation, Section 5359400N.
2) Log SHD21 with Loop 2, 3-component, using a Geonics DHEM system, in order to tie down location of Body 2 more precisely.
3) Re-Log SHD22 Loop9 with the Geonics DHEM 3-component system, in order to resolve ambiguities which appear to exist in the 3-component data acquired with the Crone system.
4) Drill Body 1 at 200 m intervals along strike (two additional holes) on Sections 5359200N and 5359000N.
5) Drill Body 2 via an extension of hole SHD19.

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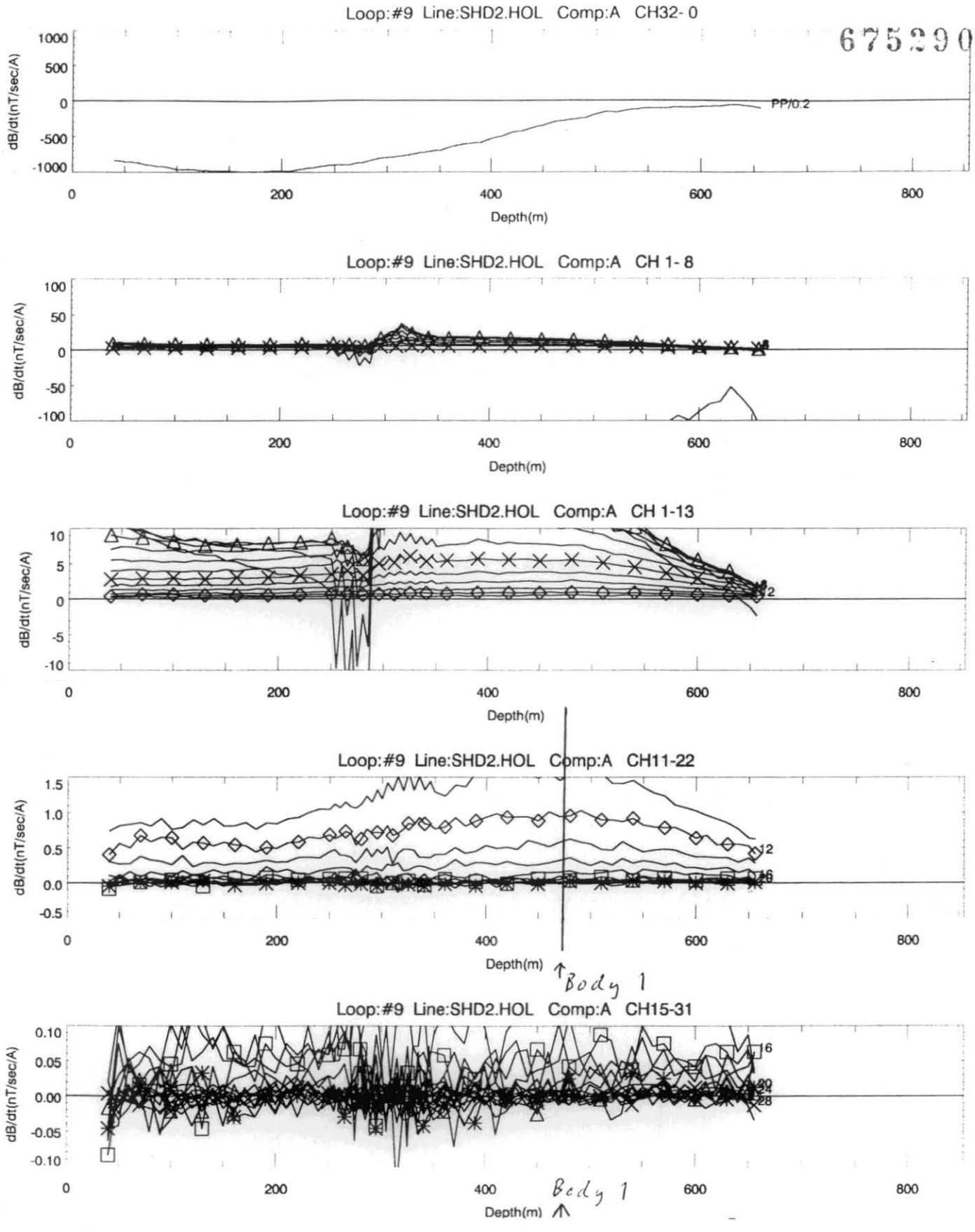


Fig. 1. Anomaly signature of Body 1.

Goldfields Ltd	
South Henty. Borehole EM	
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FLAGSTAFF GEOCONSULTANTS	
Drawn 26/ 6/1999	

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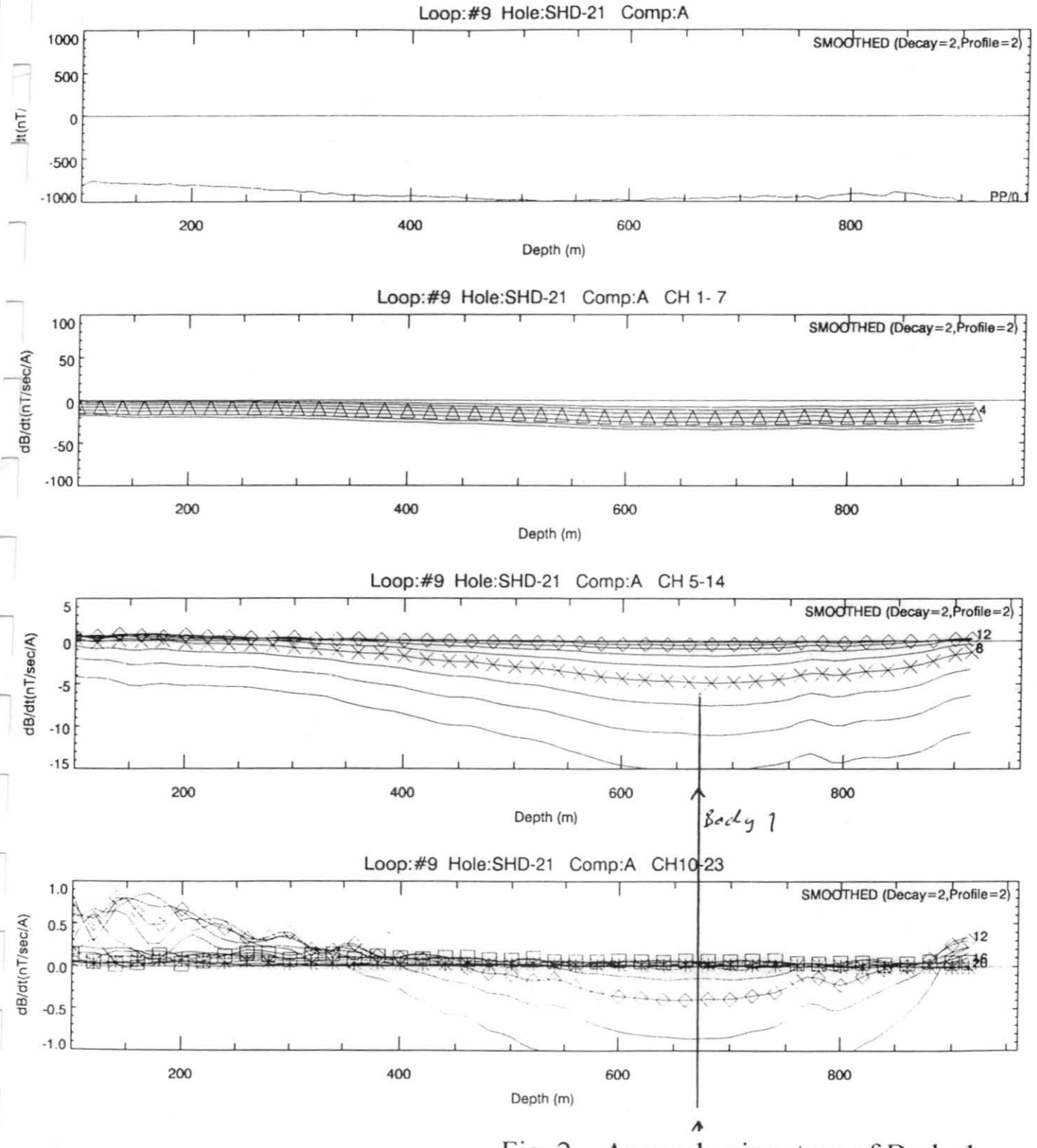


Fig. 2. Anomaly signature of Body 1.

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Drawn 2/ 2/2000

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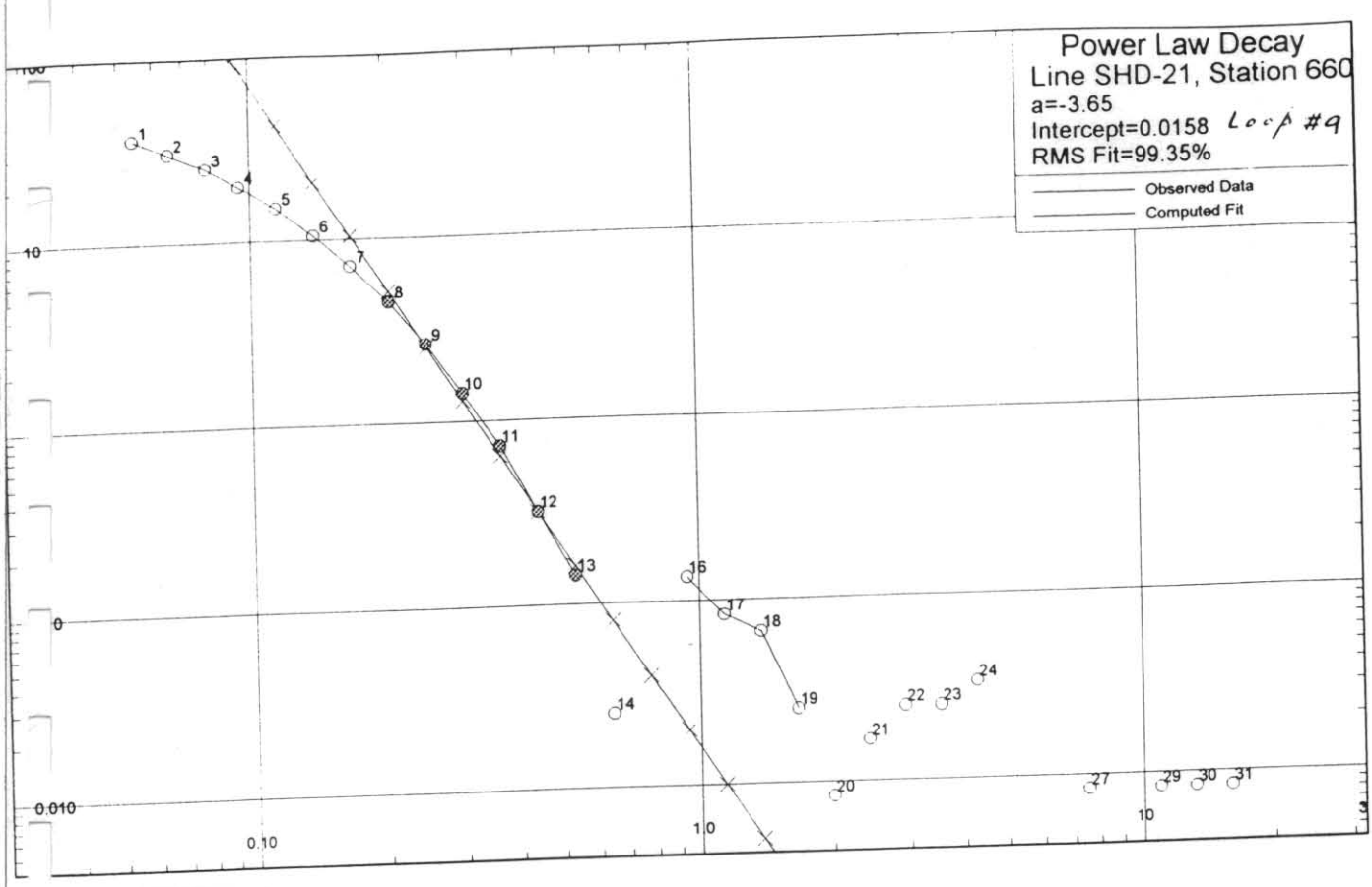


Fig. 3. TEM decay for Body 1.

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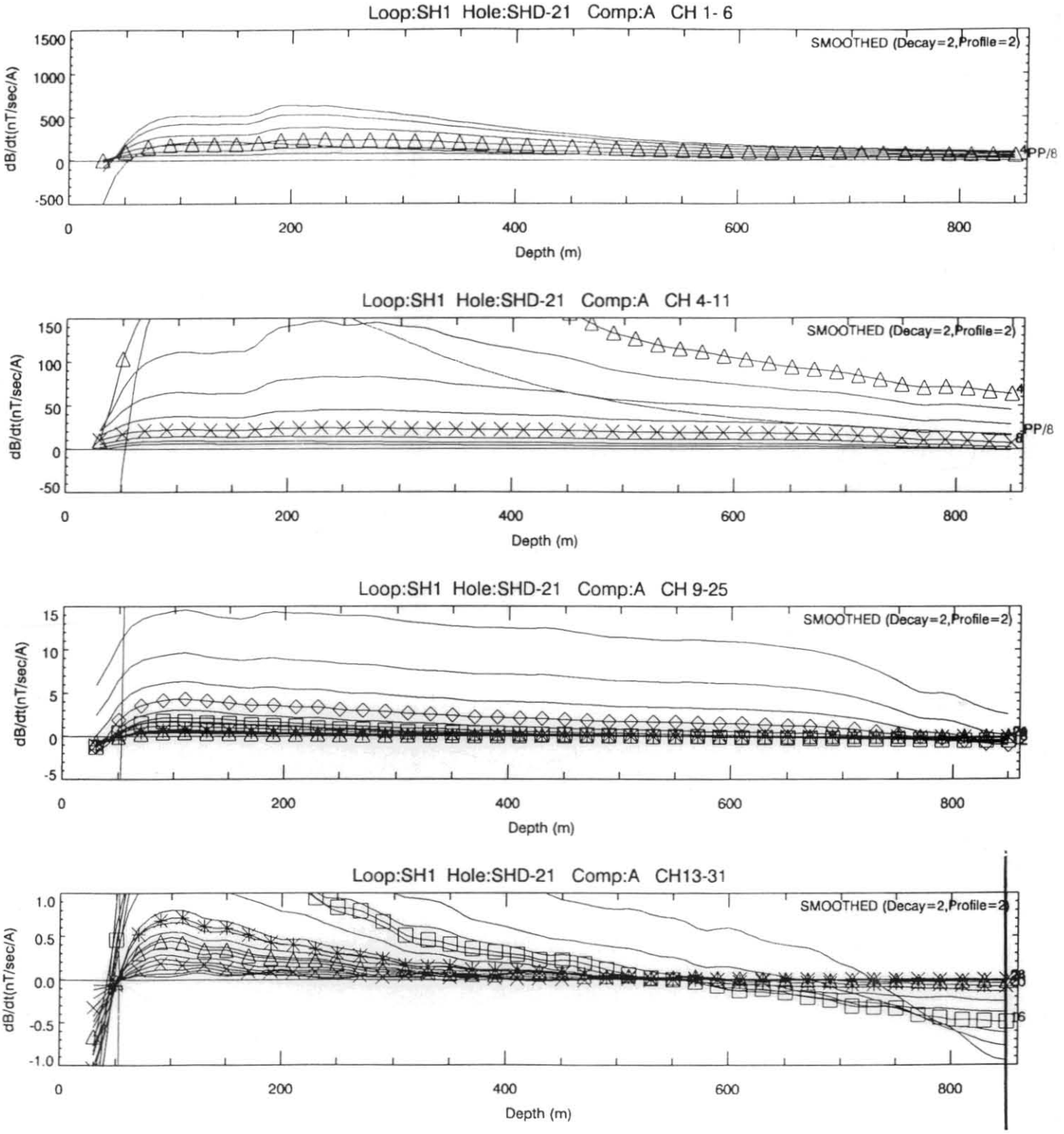


Fig. 4. Anomaly signature of Body 2

Body 2

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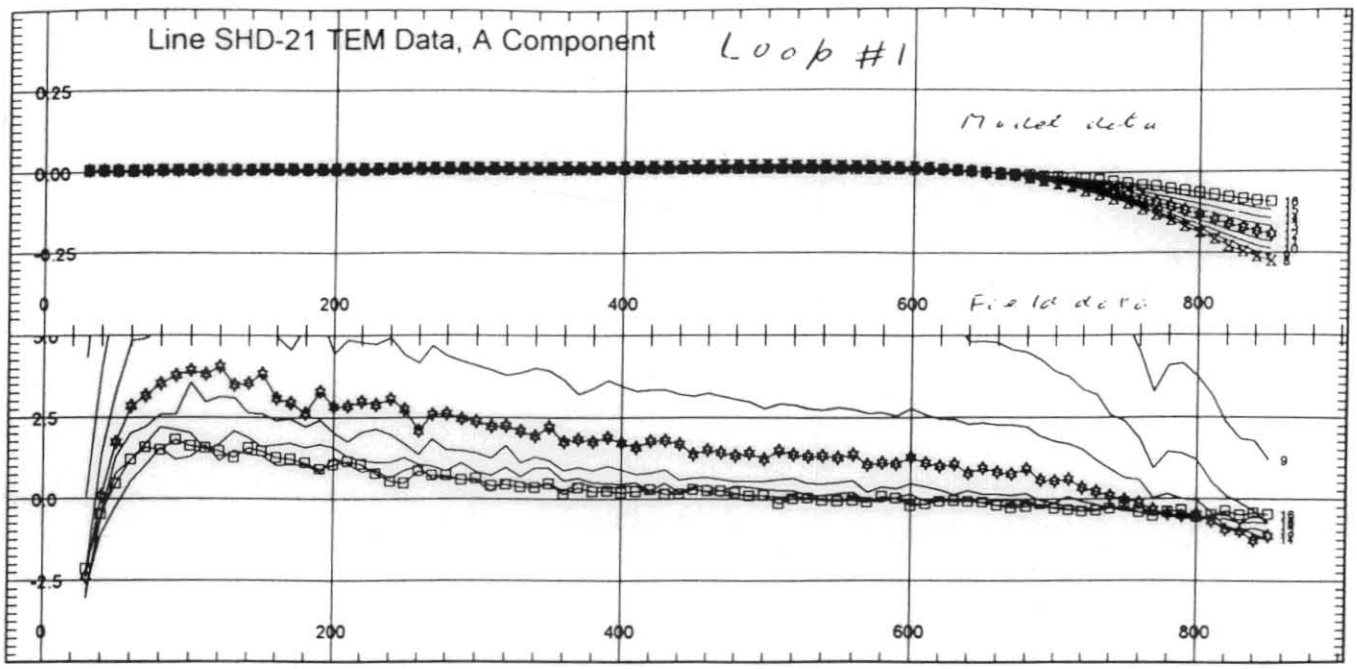
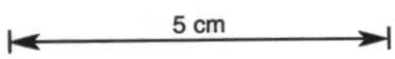


Fig. 5. Field and A-component model data for Body 2, Loop 2. EM coupling is best with Loop2.



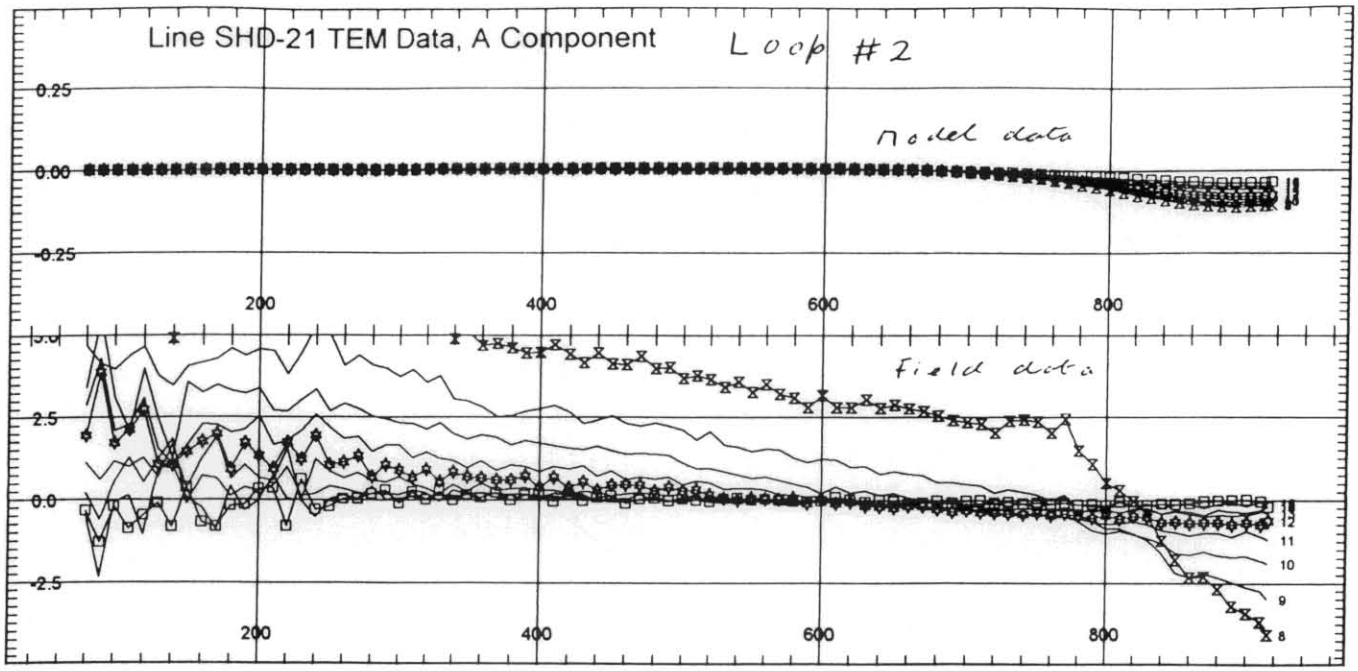
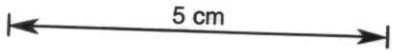
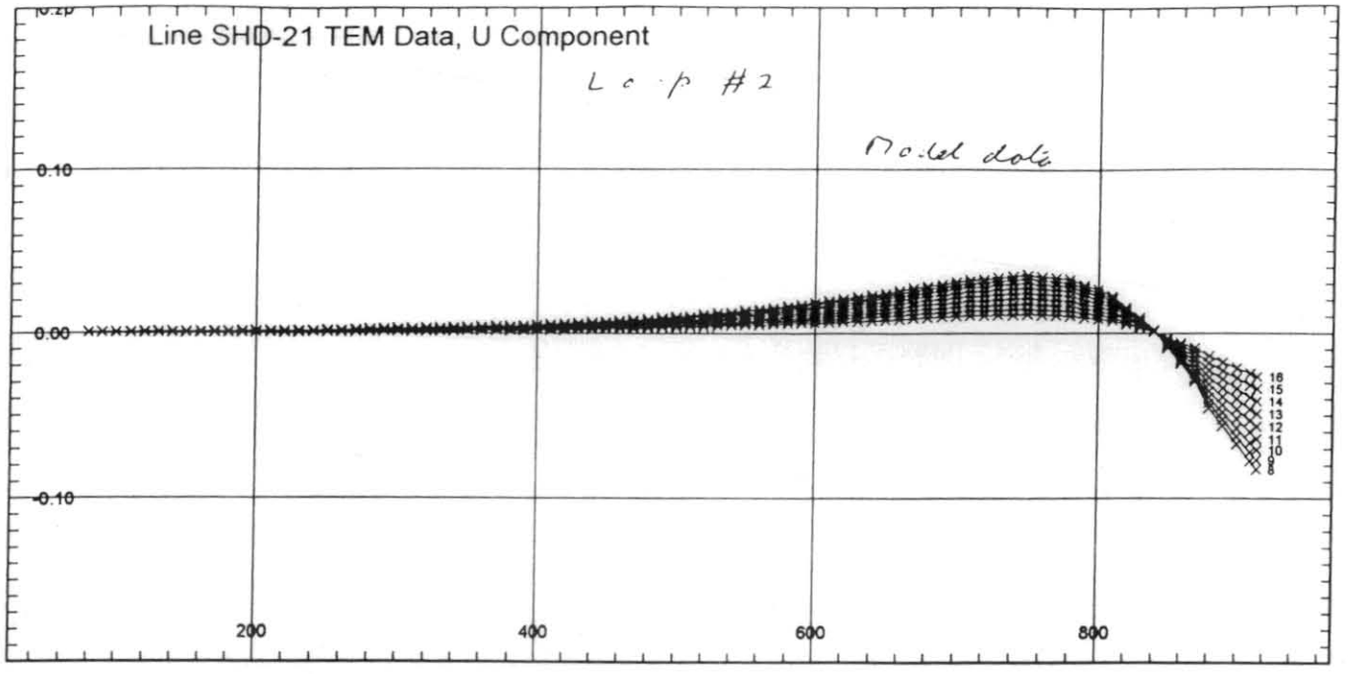


Fig. 6a. Field and A-component model data for Body 2, Loop1.





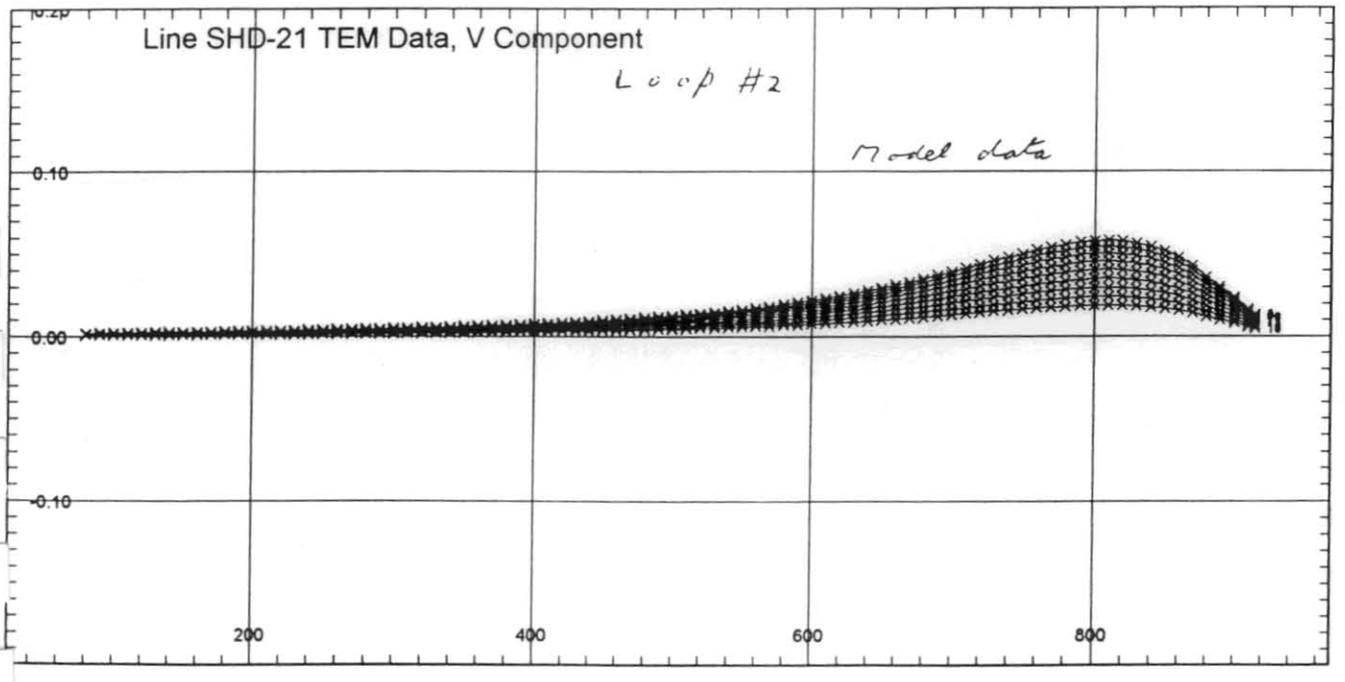
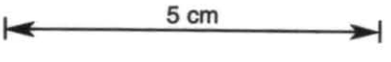


Fig. 6b. U-V components of model data for Body 2, Loop1.



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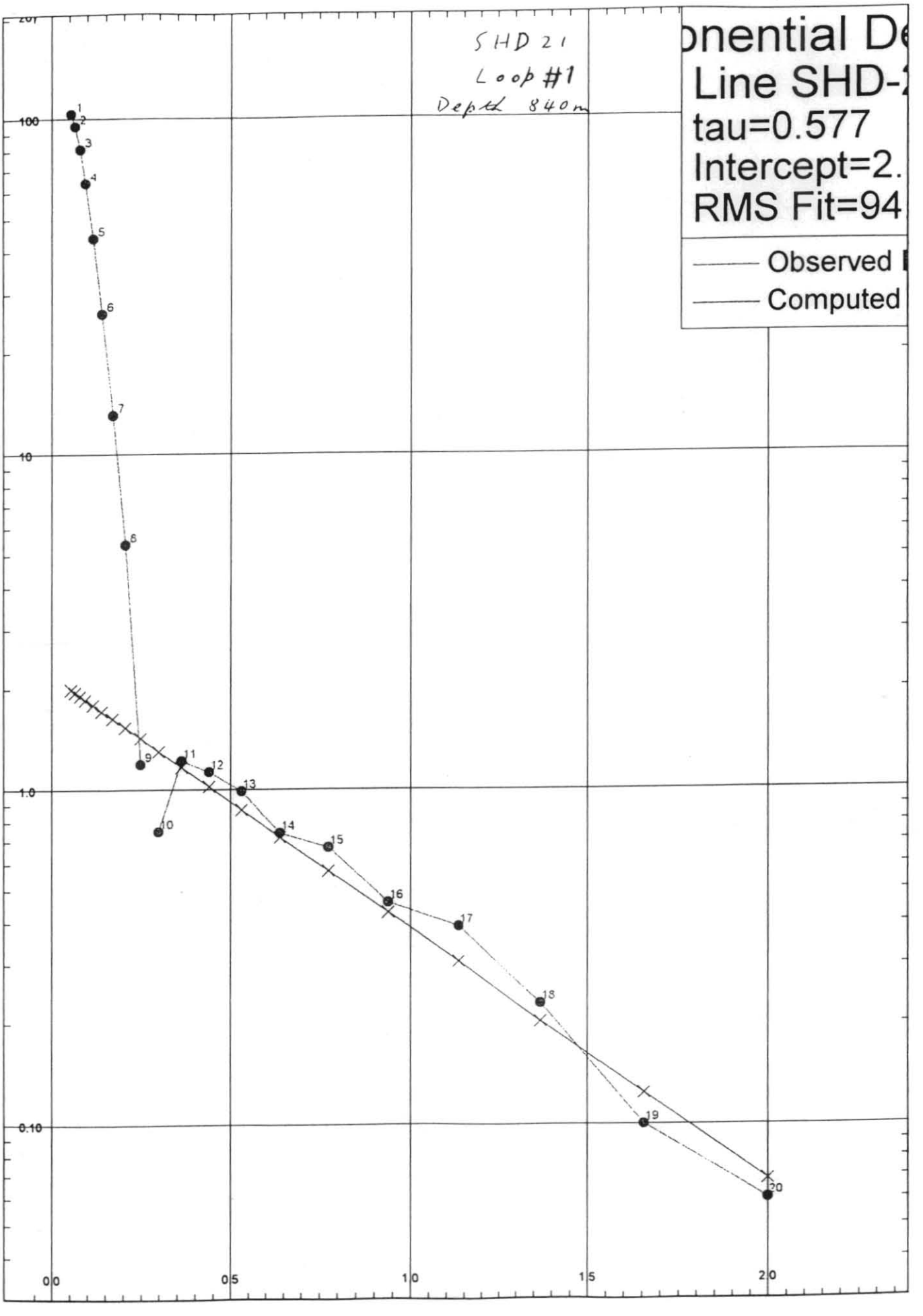


Fig. 7. TEM decay for Body 2.

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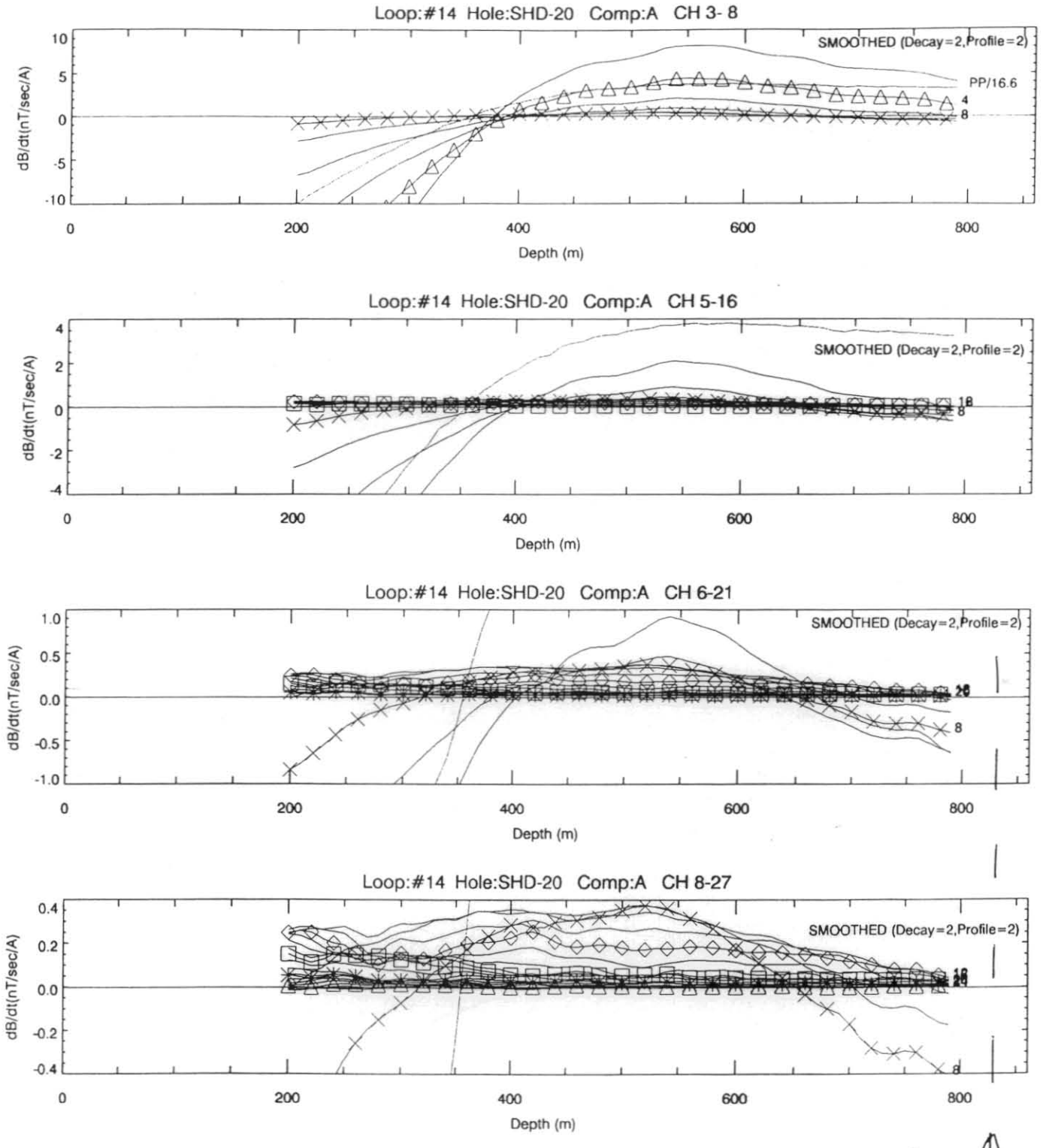


Fig. 8. Anomaly signature of Body 3.

Body 3

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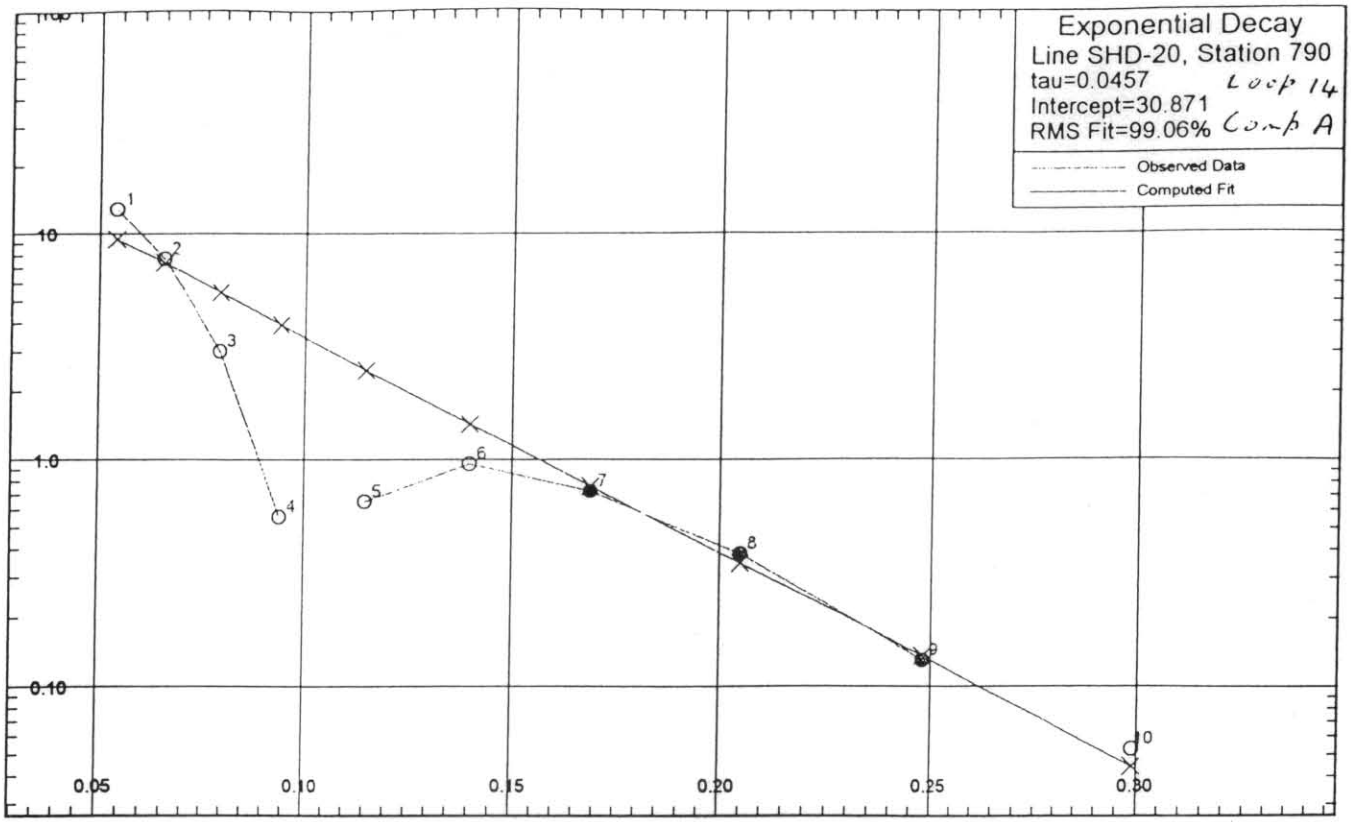
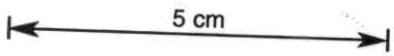


Fig. 9. TEM decay for Body 3.



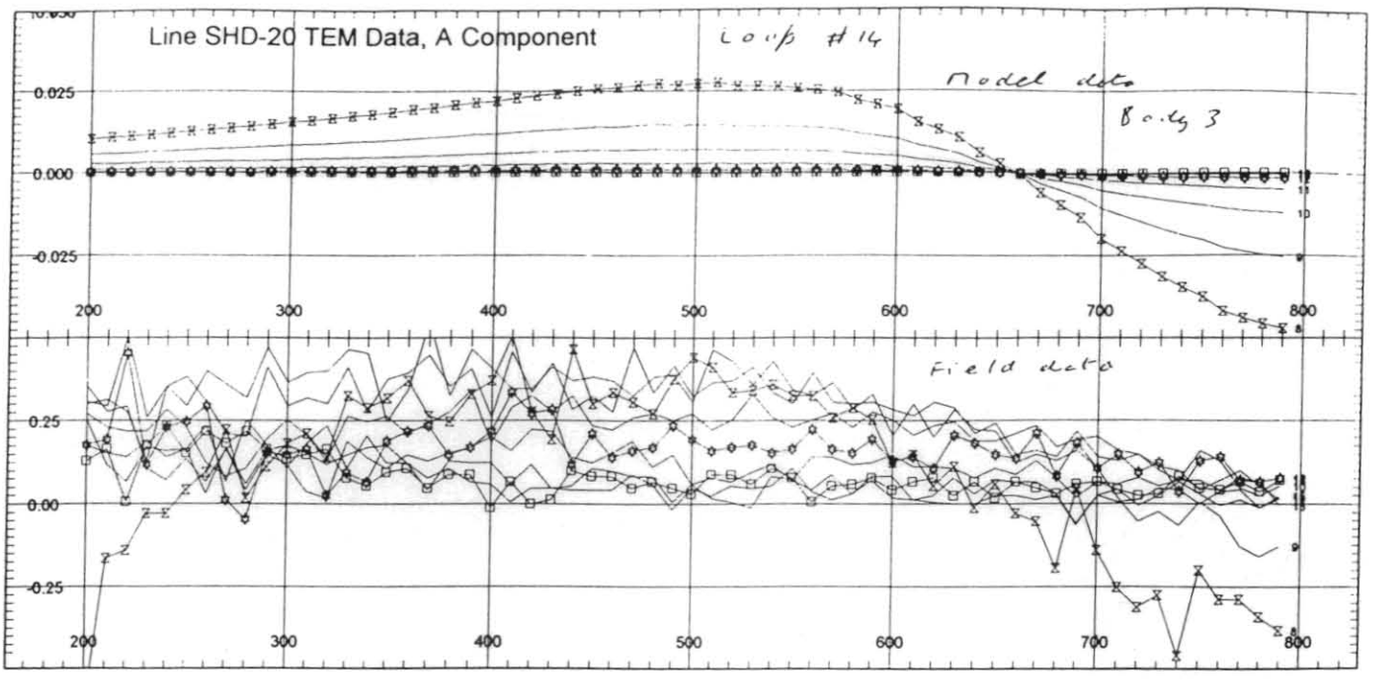
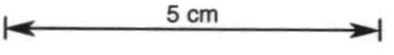


Fig. 10a. Field and A-component model data for Body 3, Loop 14. EM coupling is best with Loop 12.



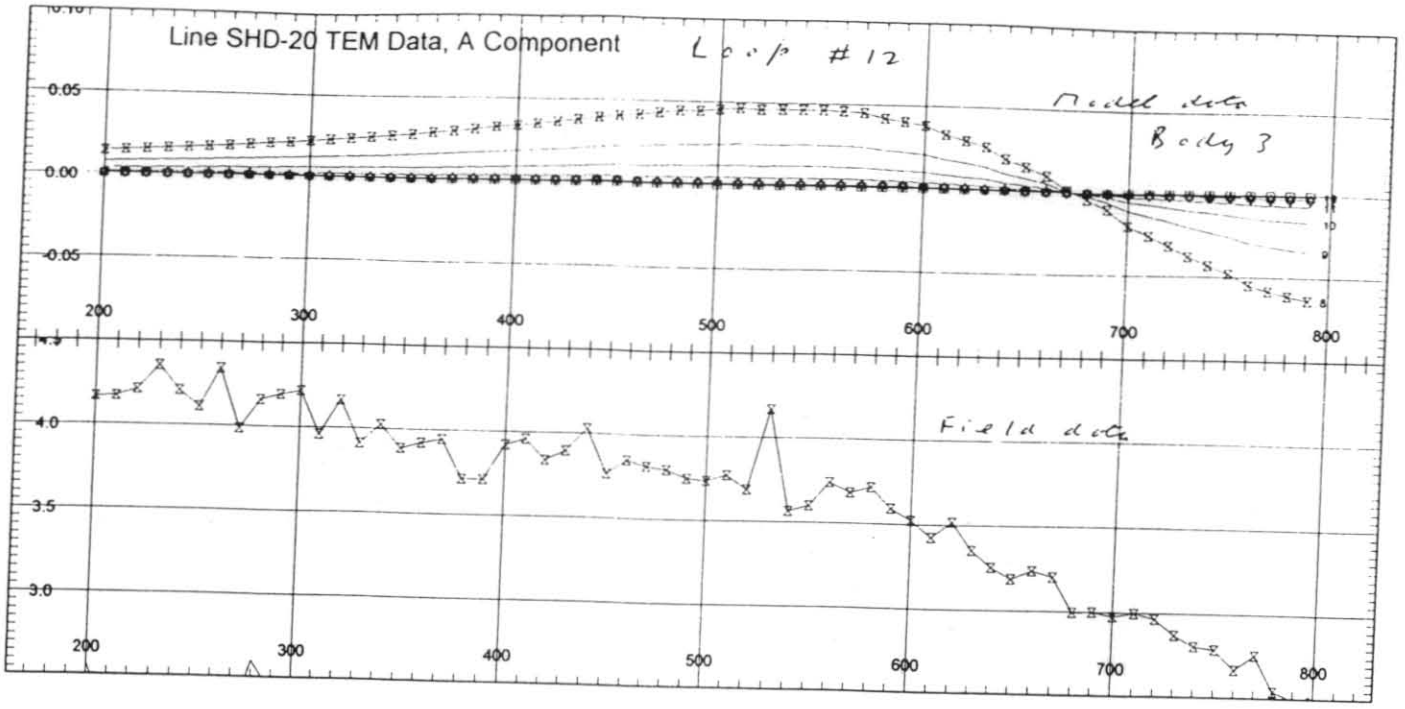


Fig. 10b. Field and A-component model data for Body 3, Loop 12.

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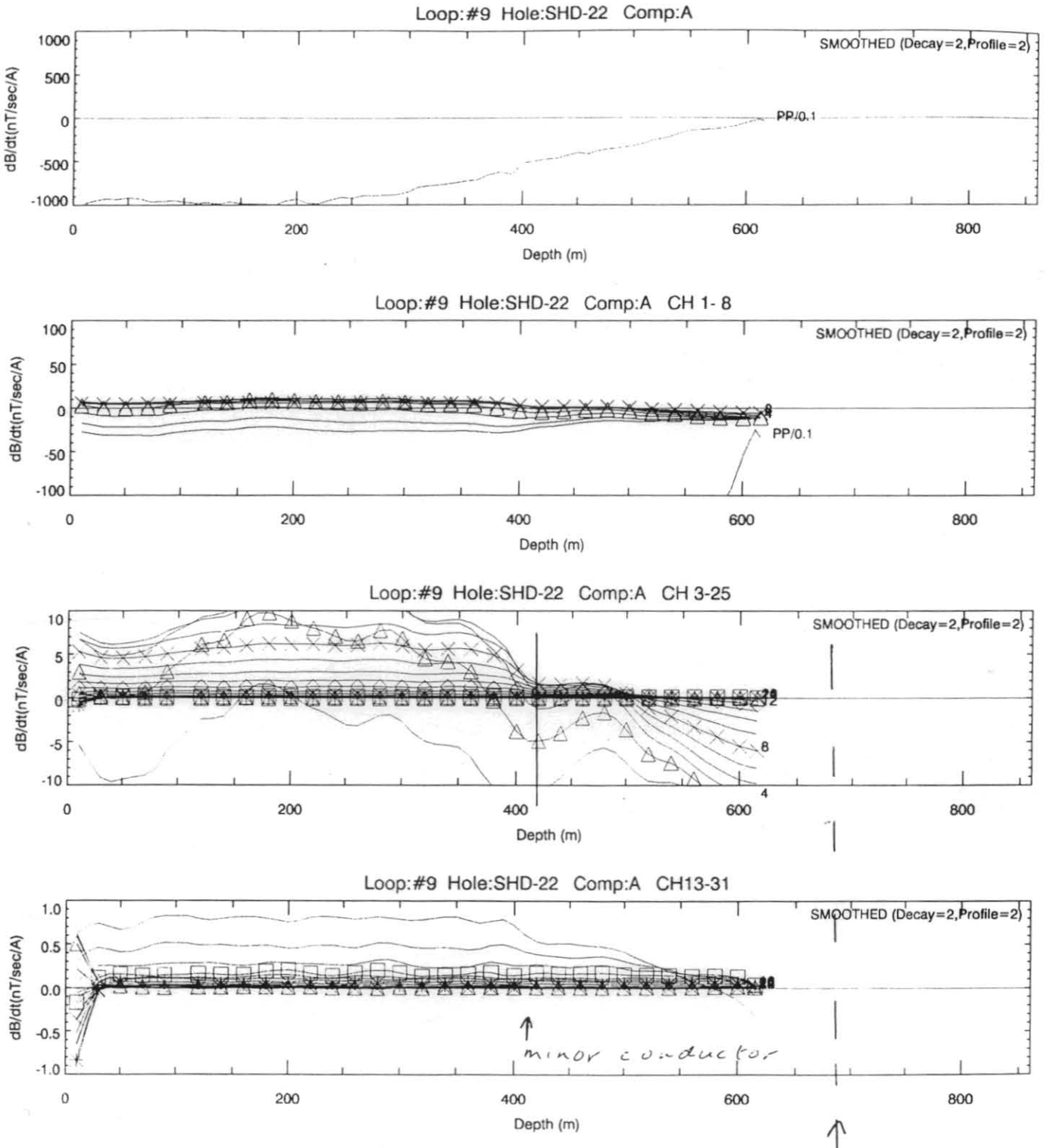


Fig. 11. Anomaly signature of Body 1 at hole SHD22.

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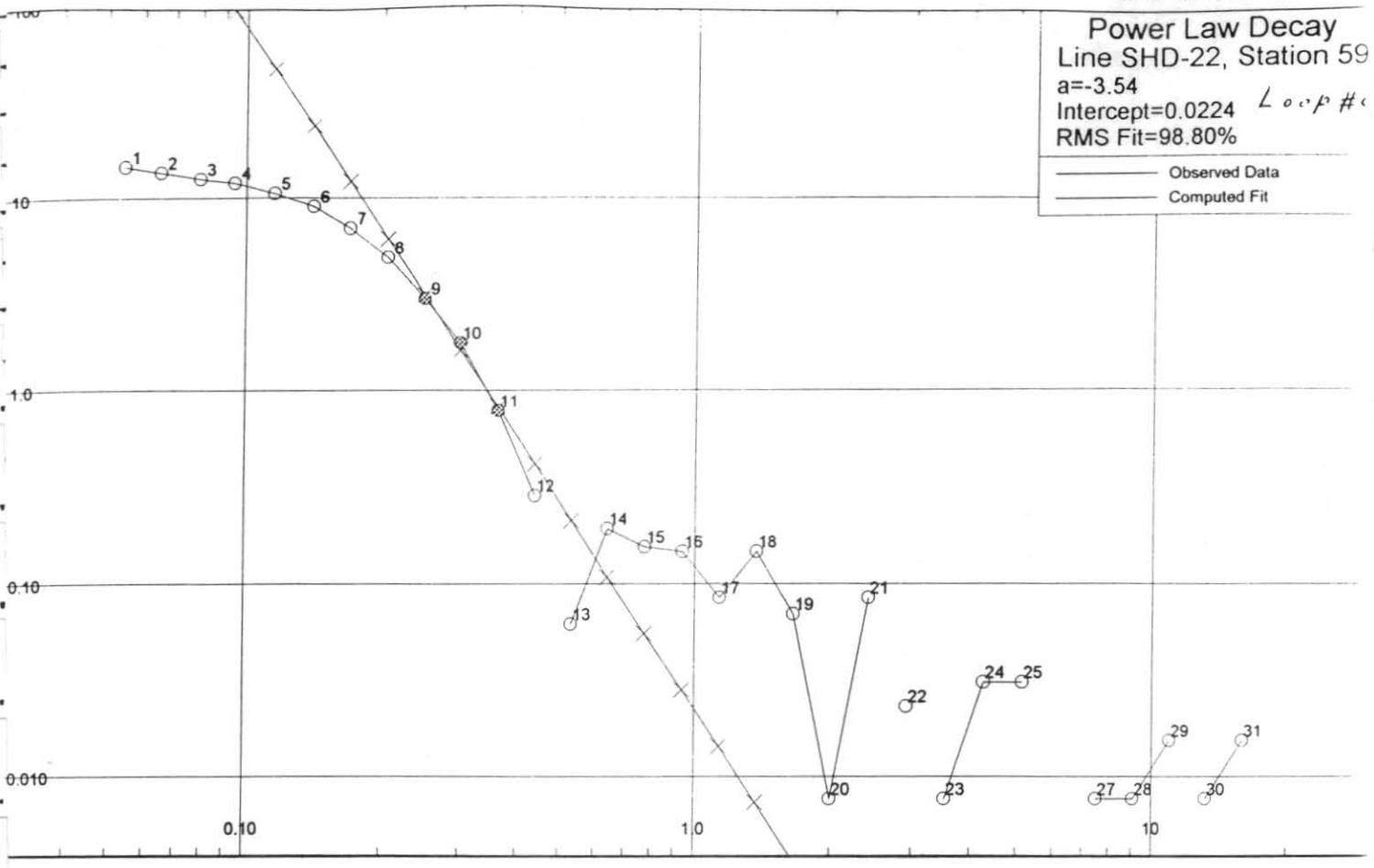
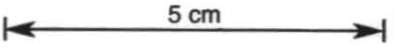


Fig. 12. TEM decay for Body 1 at hole SHD22.



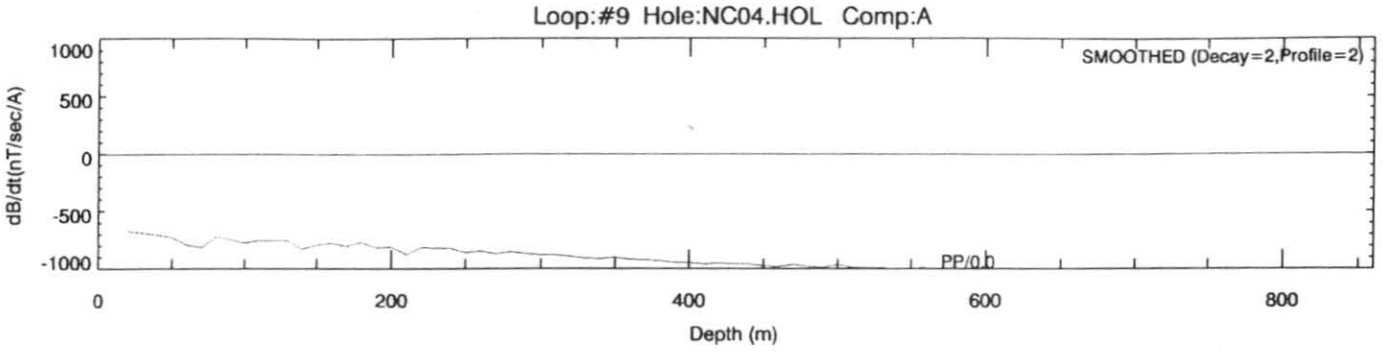
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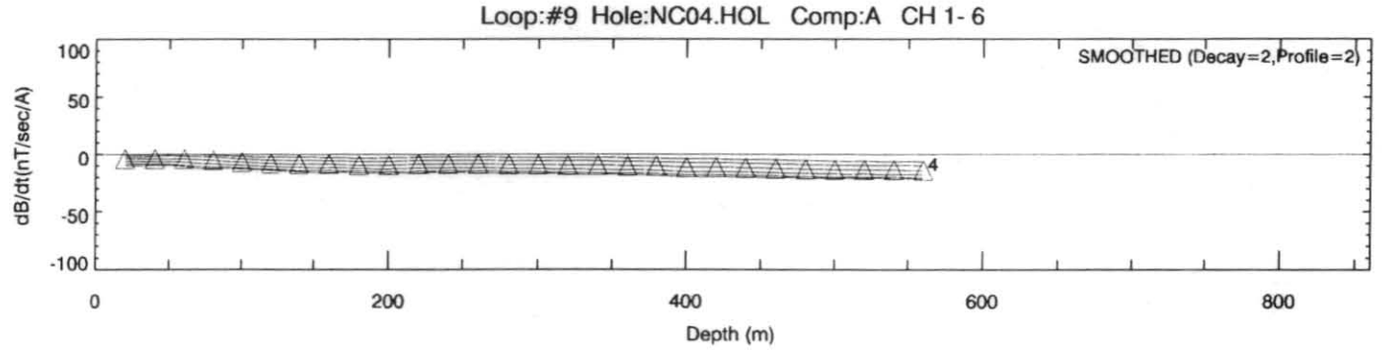
APPENDIX

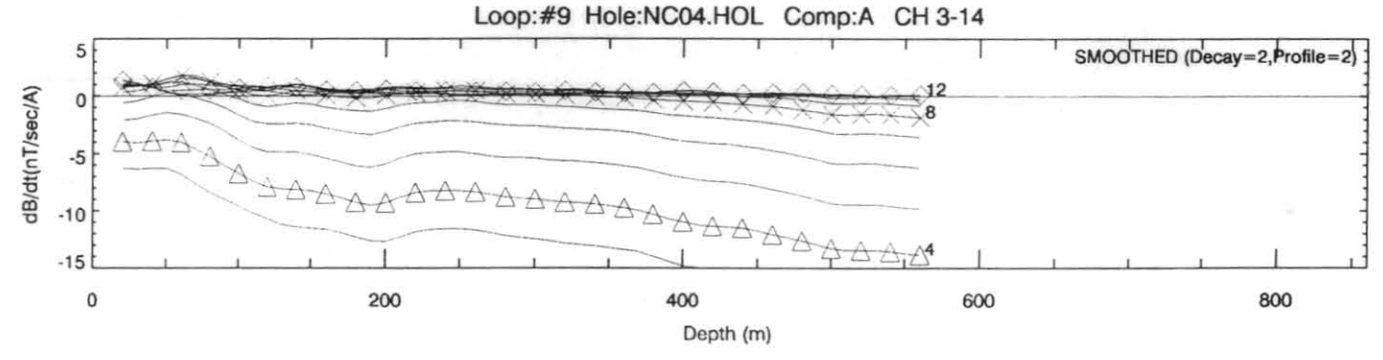
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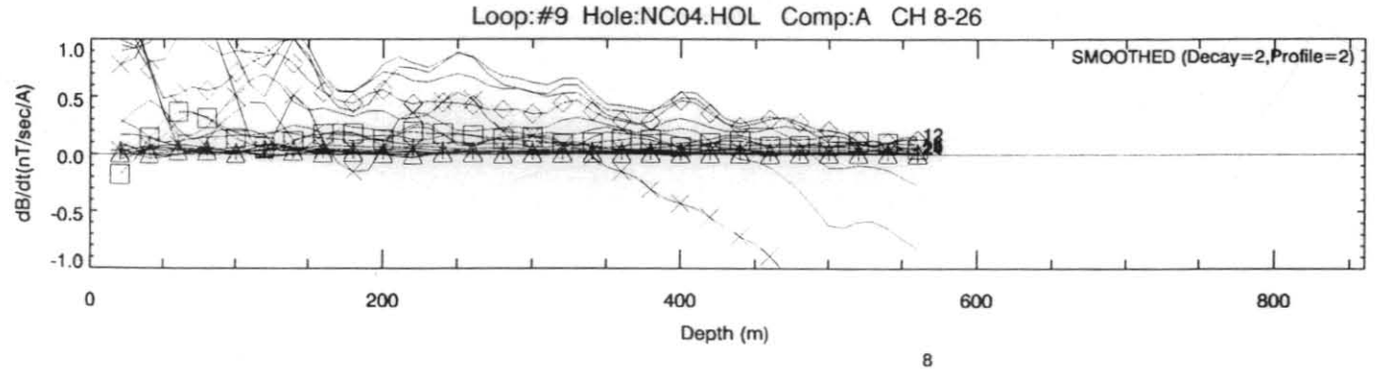
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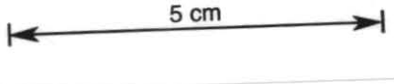






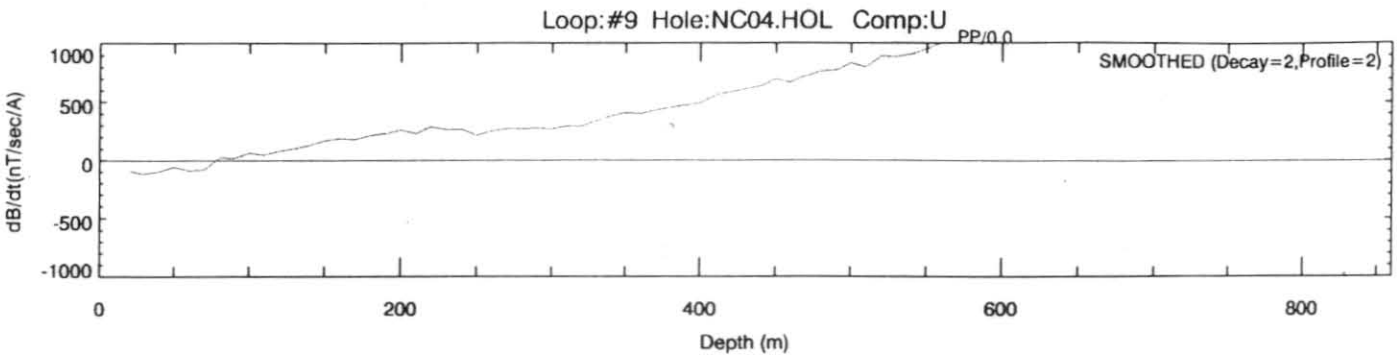


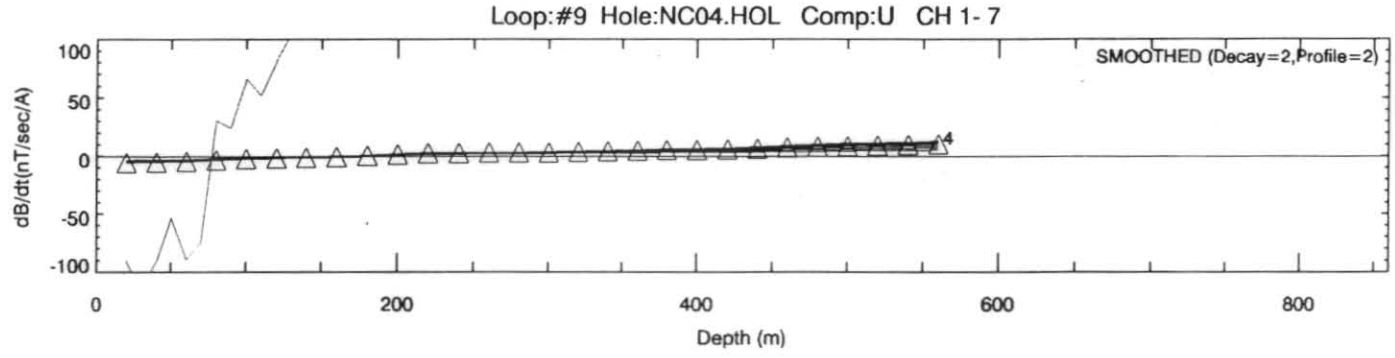
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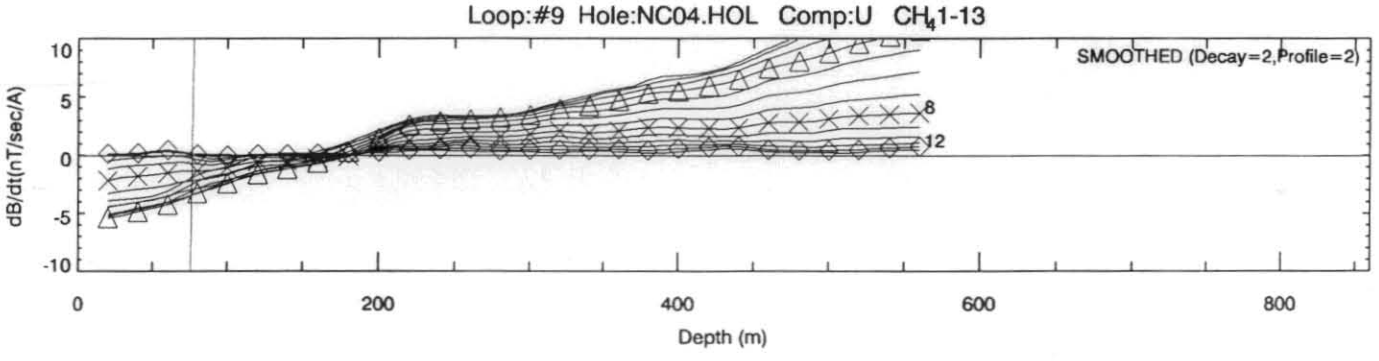


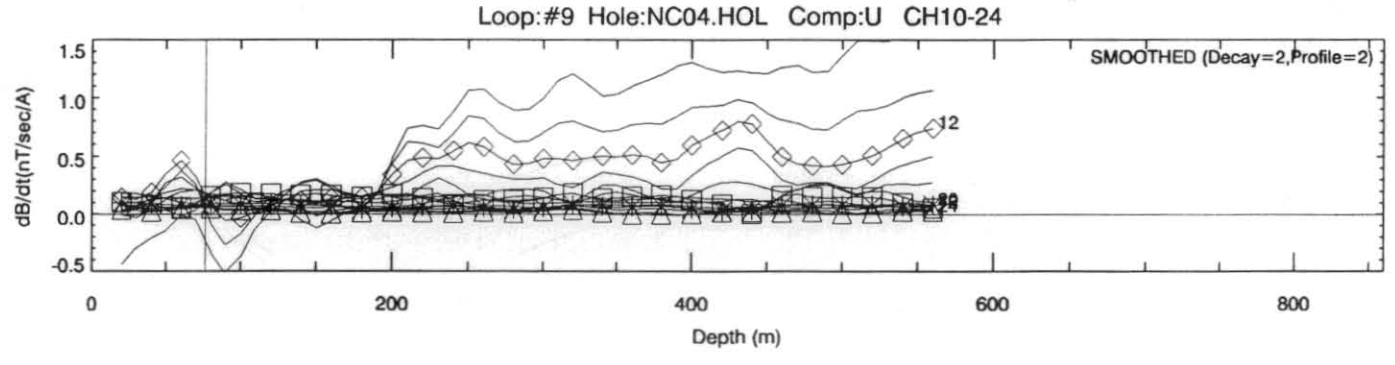
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 4-Apr-2000	

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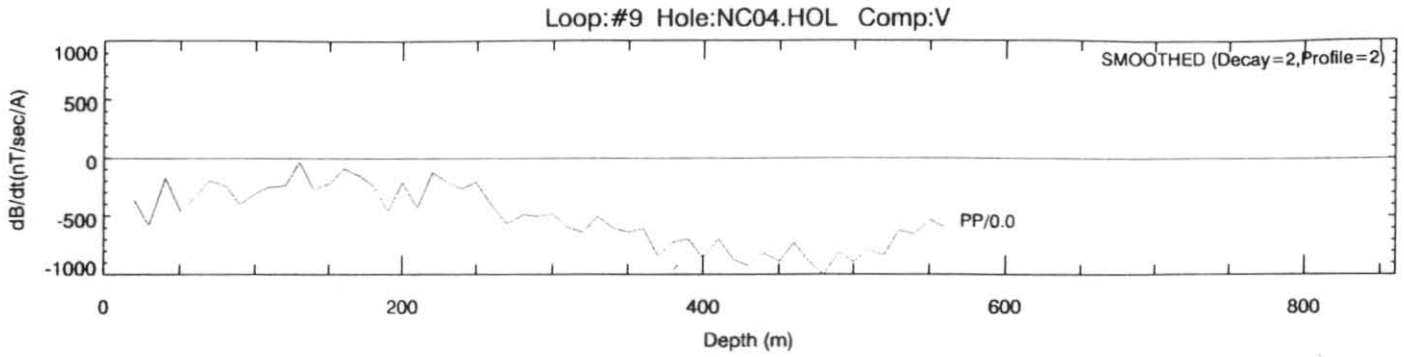


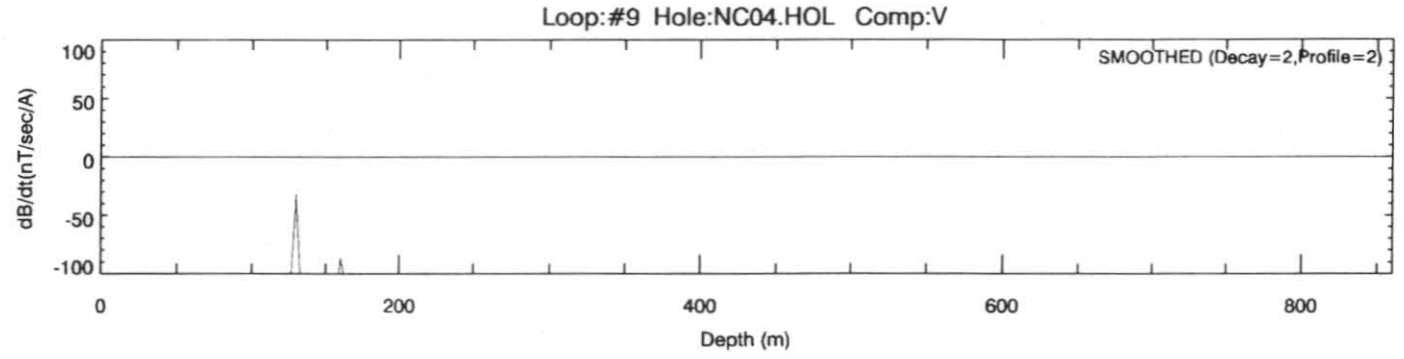


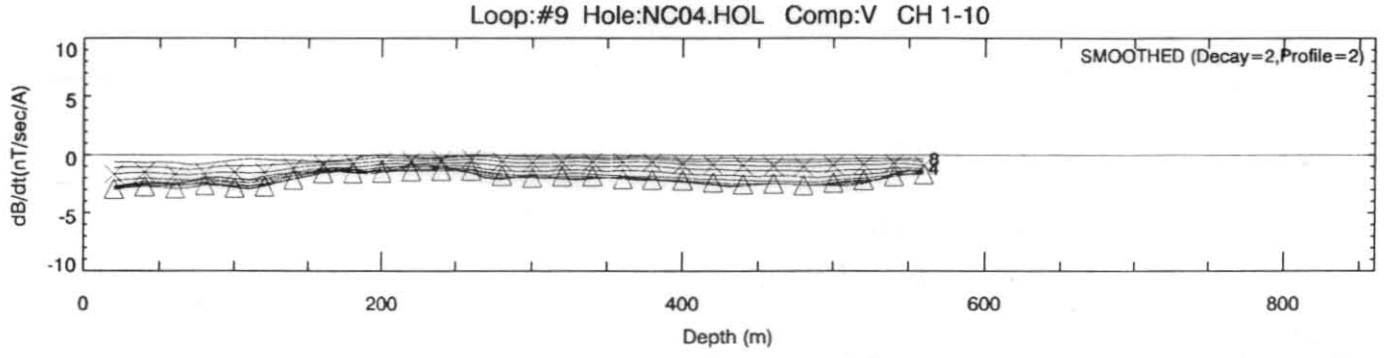
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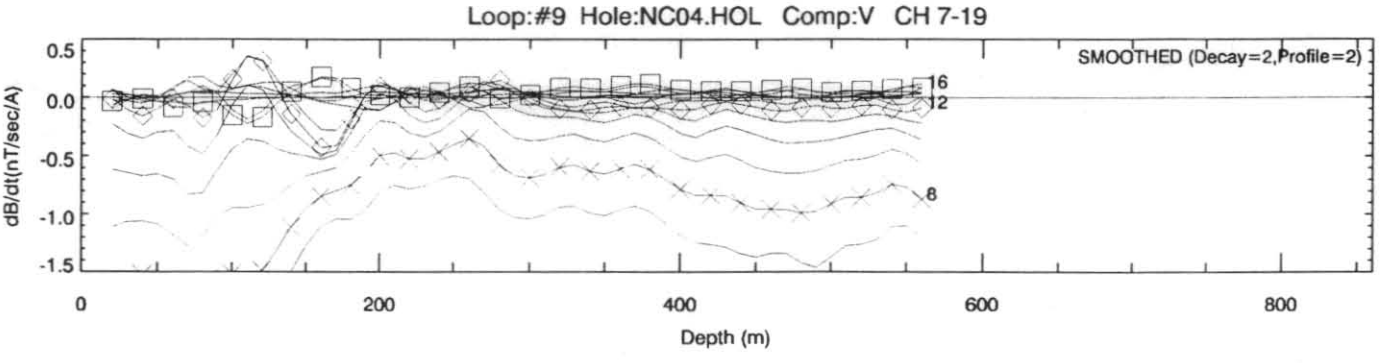
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 4-Apr-2000	

675307





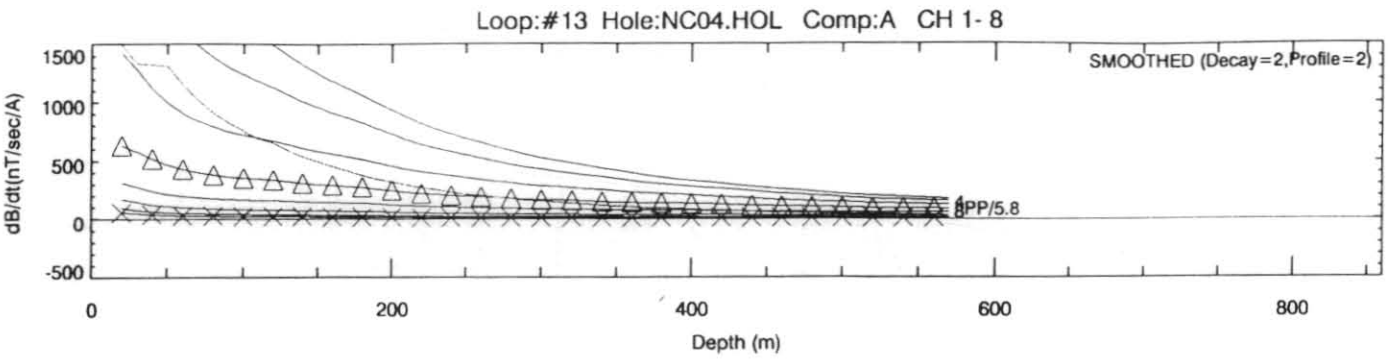


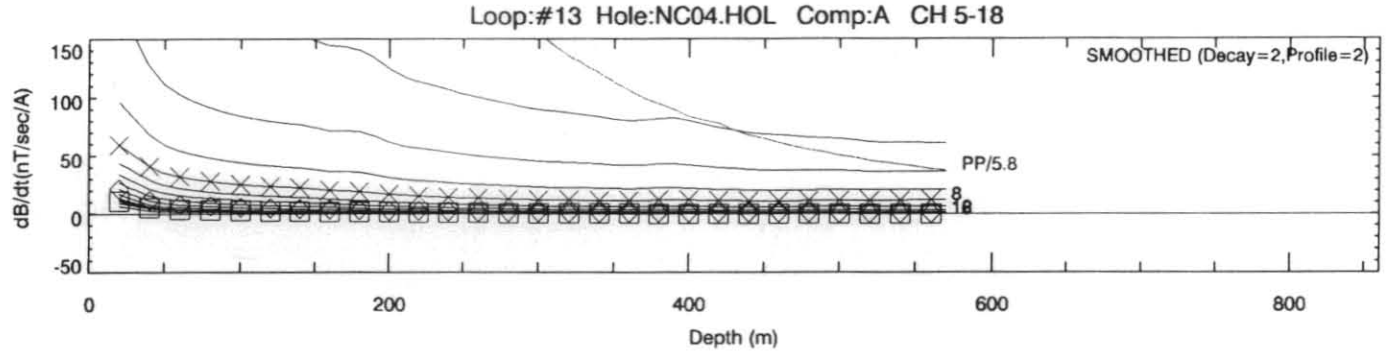


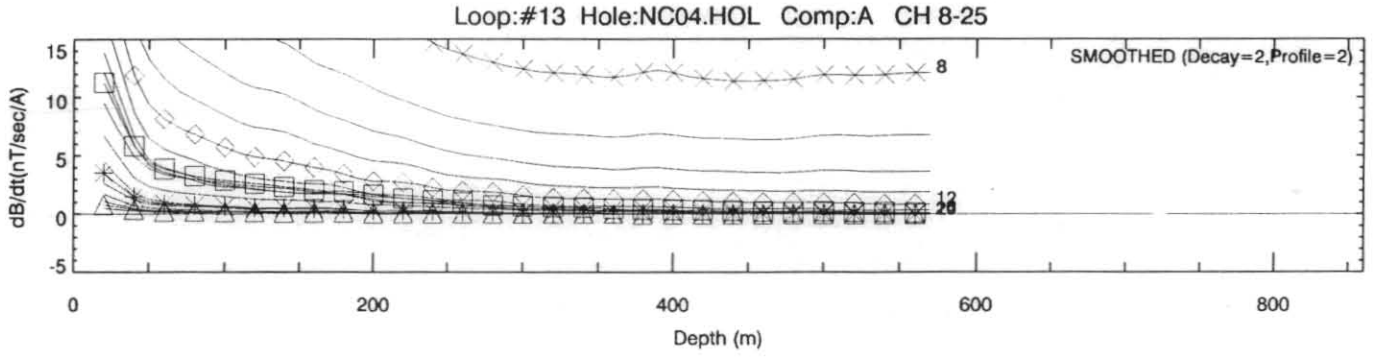
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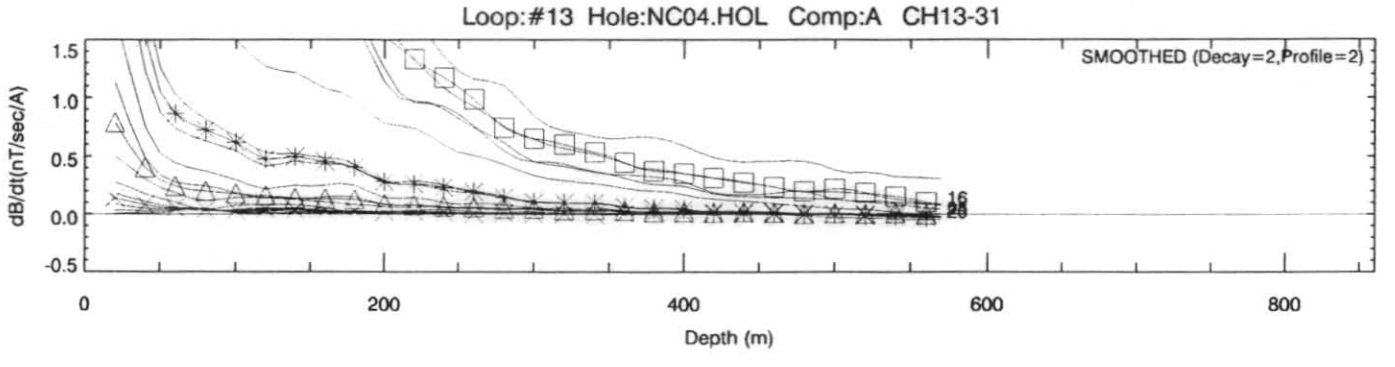
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 4-Apr-2000	

675308

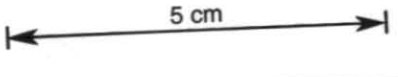




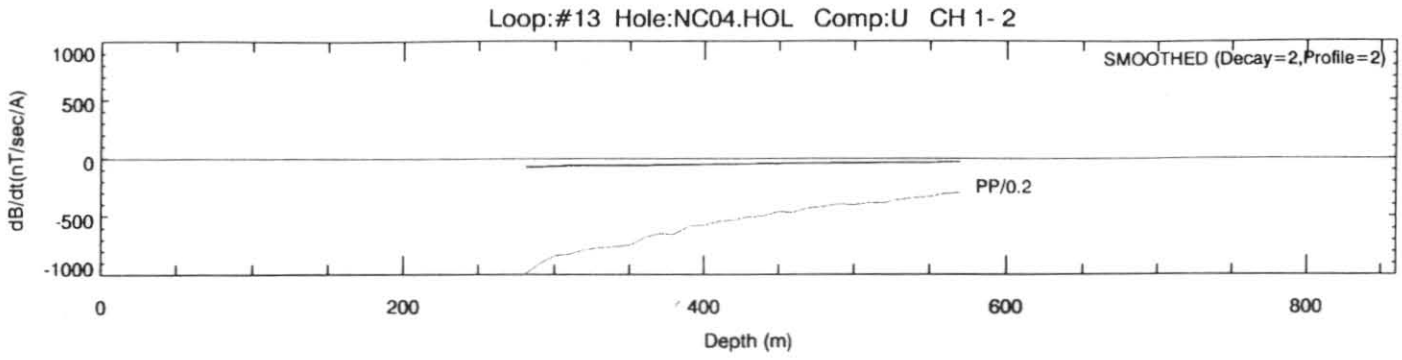


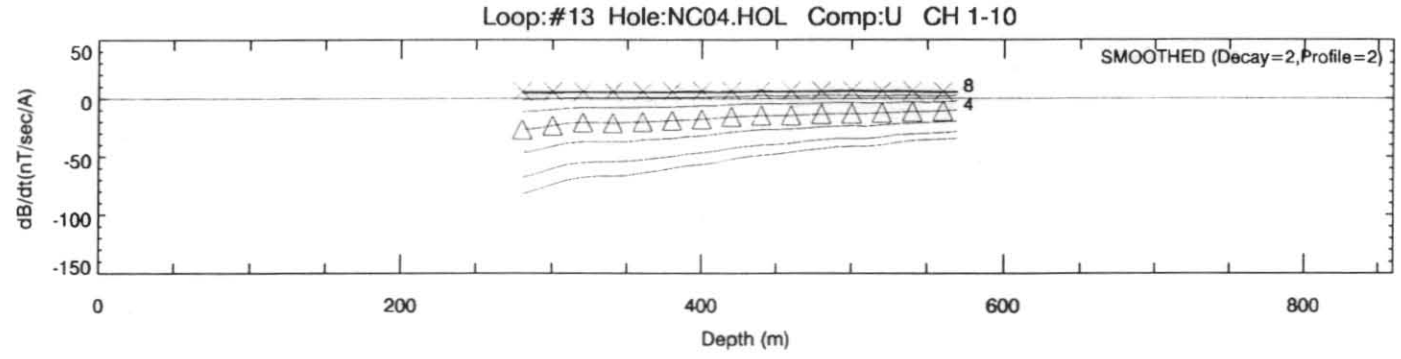


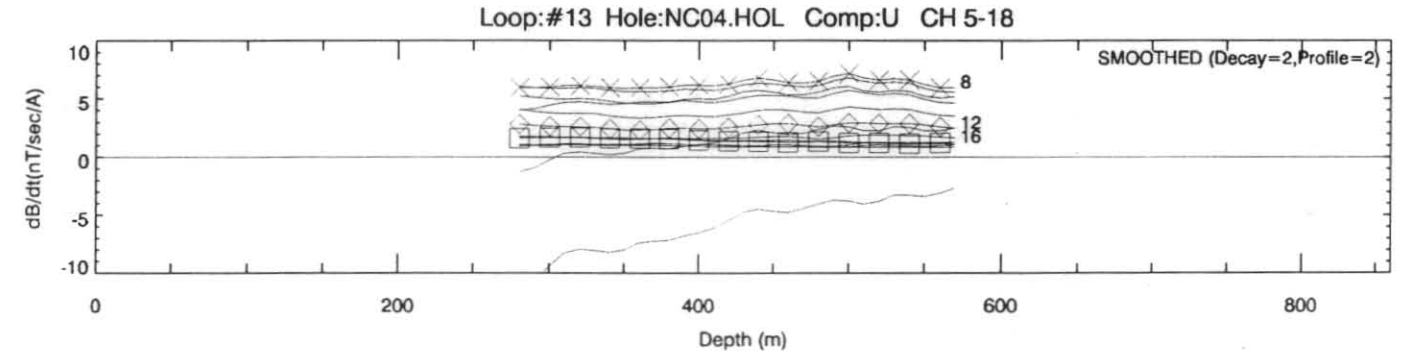
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 4-Apr-2000	

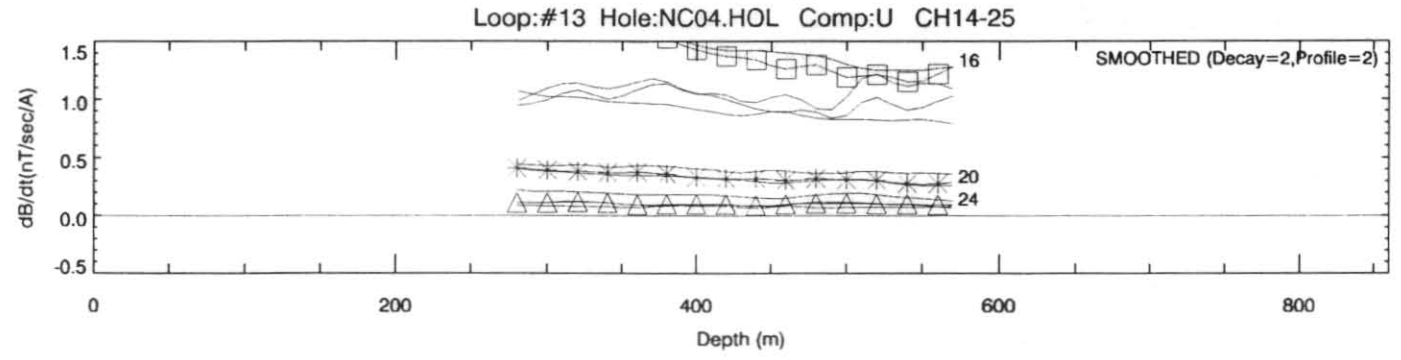


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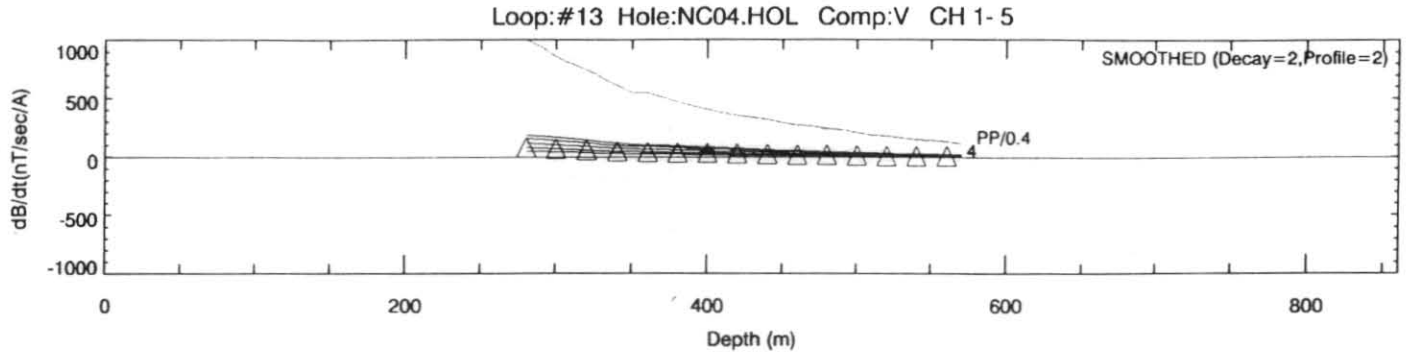


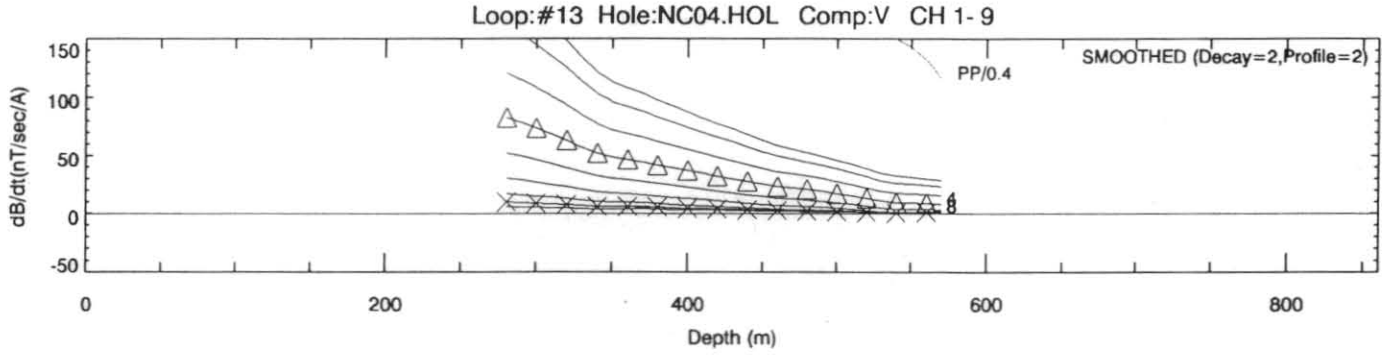


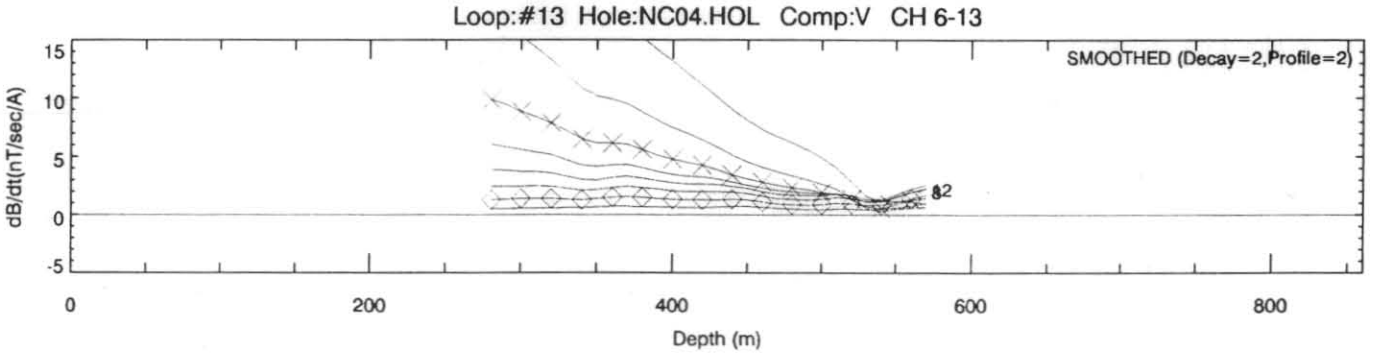
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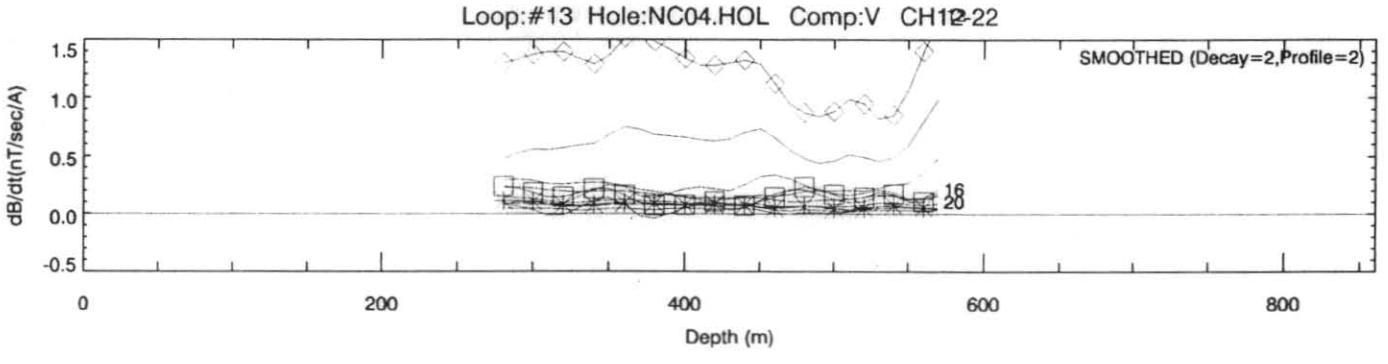
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 4-Apr-2000	

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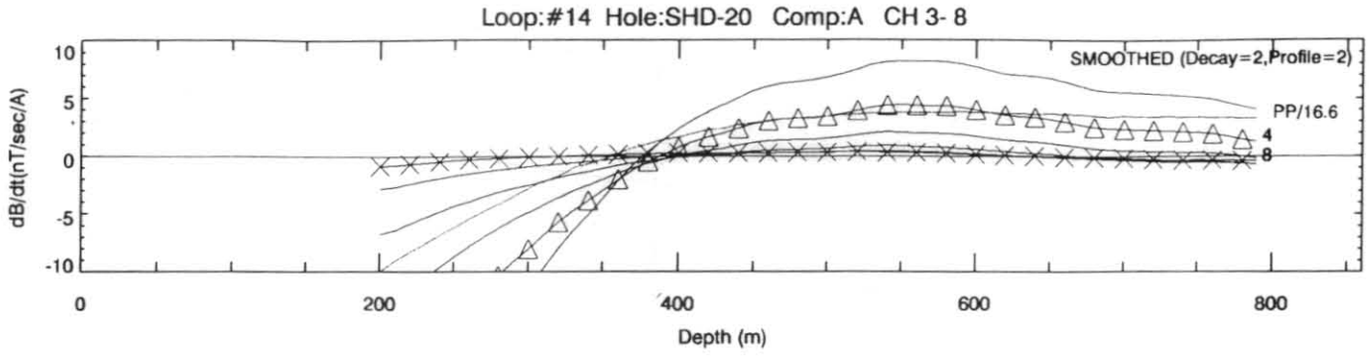


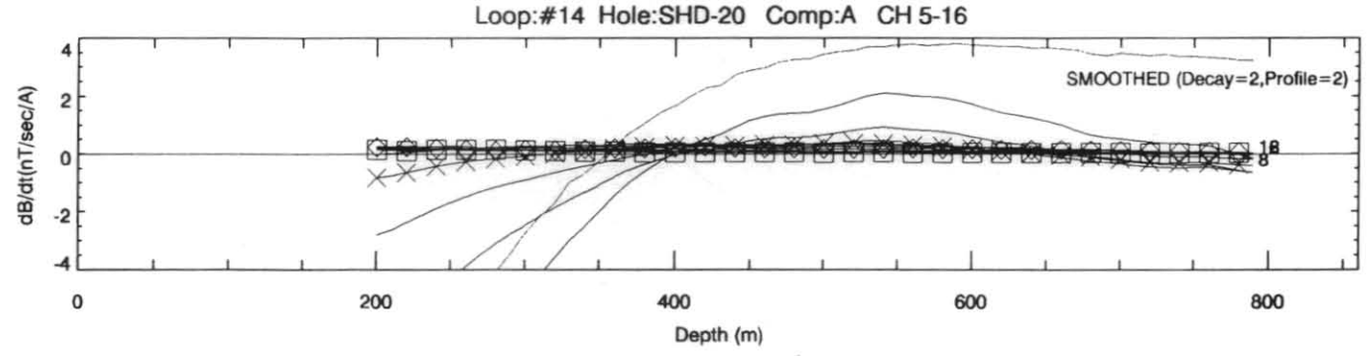


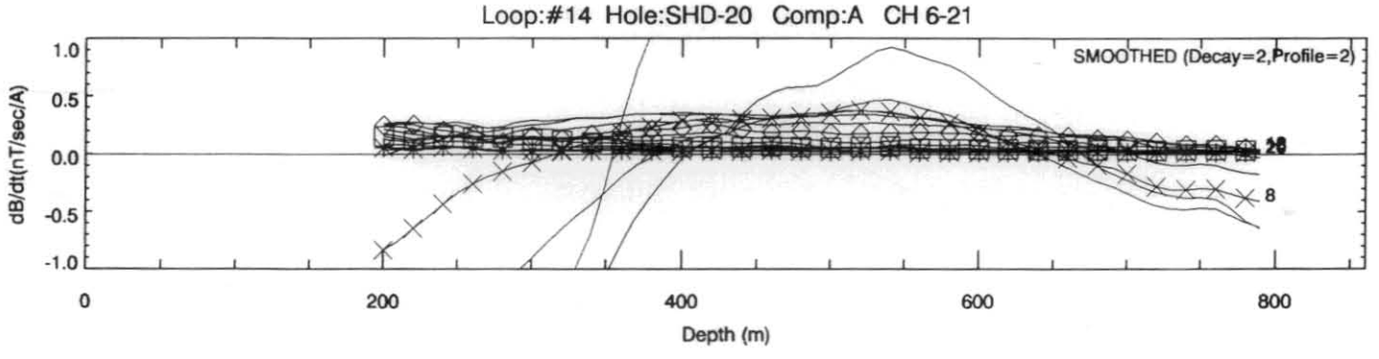
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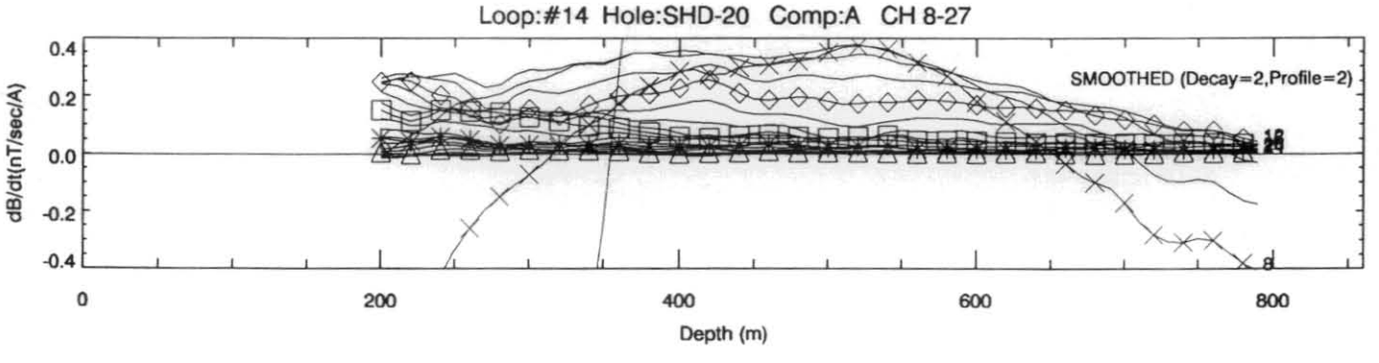
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 4-Apr-2000	

675311





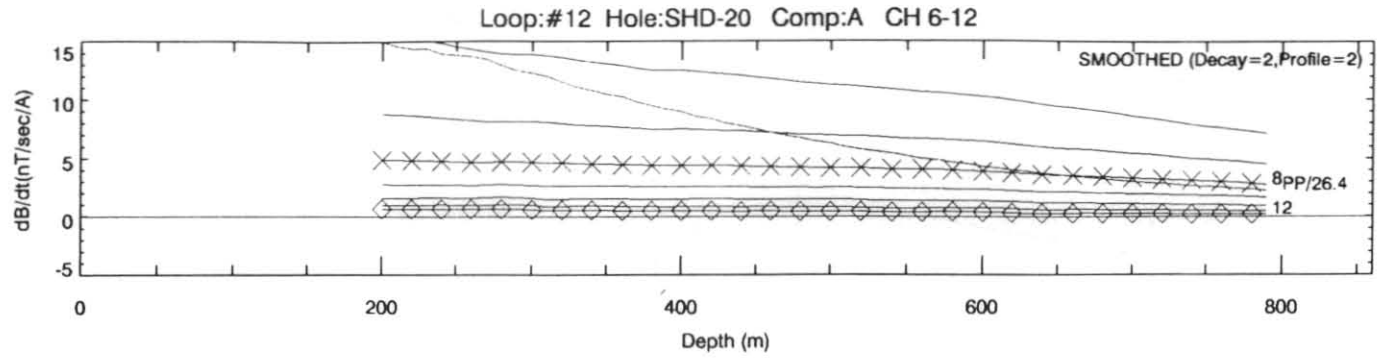


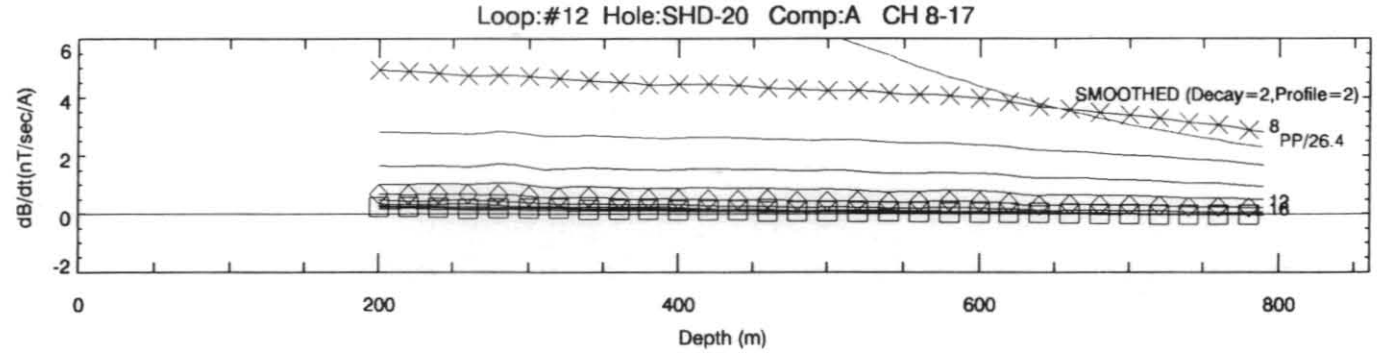


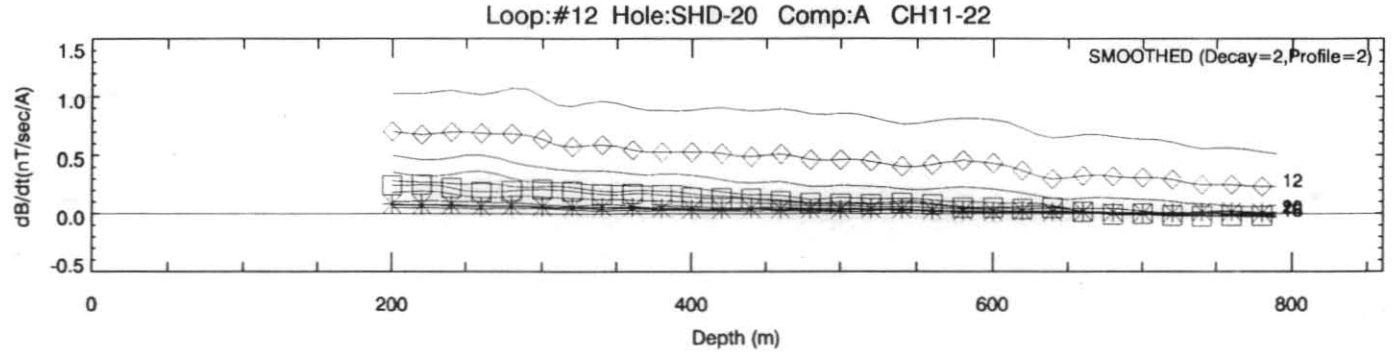
Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 30-Mar-2000	

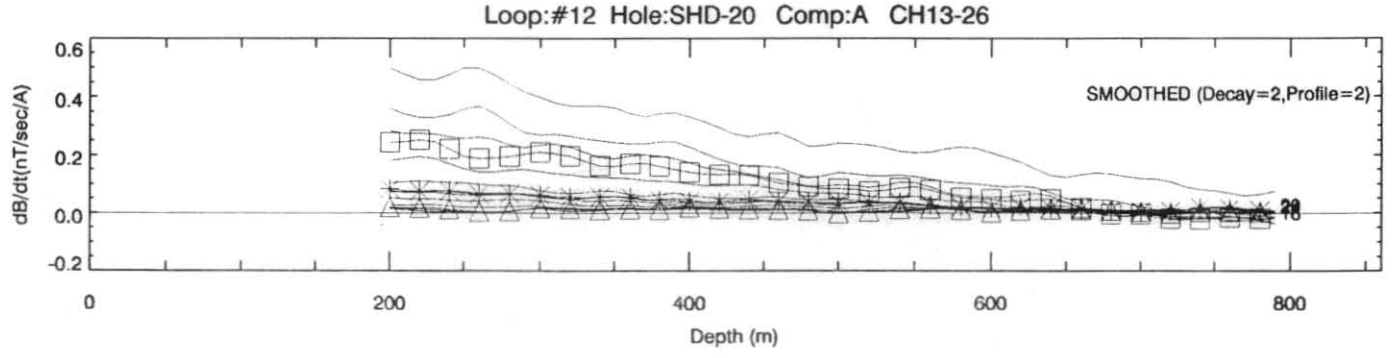
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675312





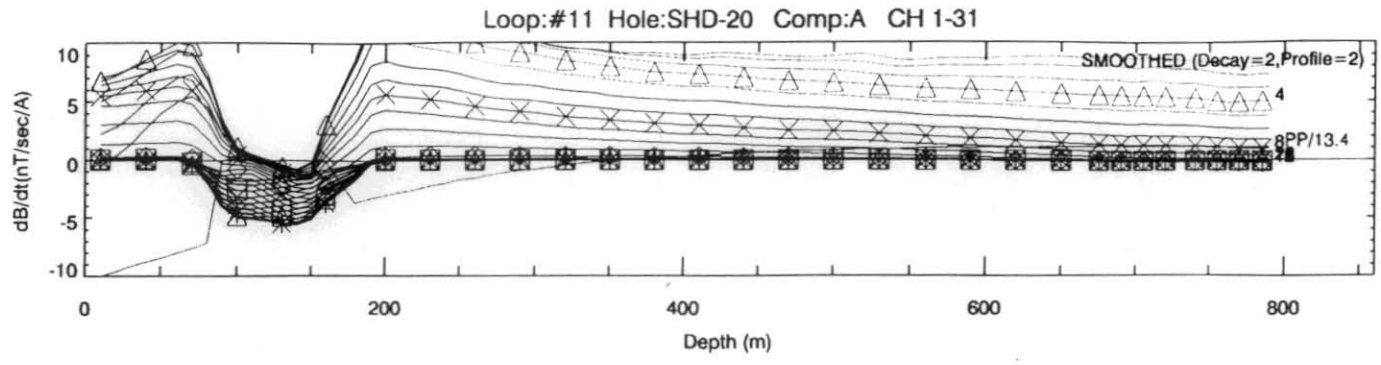


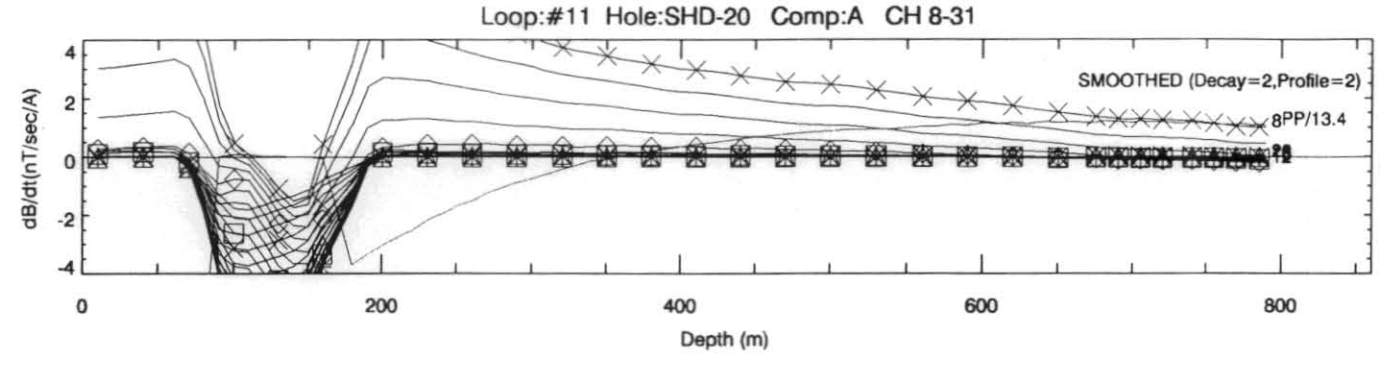


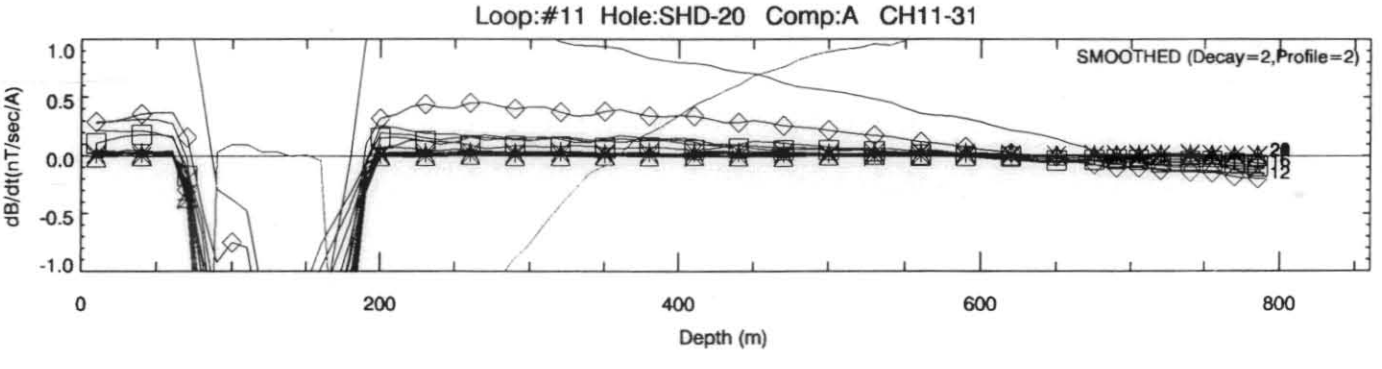
Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 30-Mar-2000	

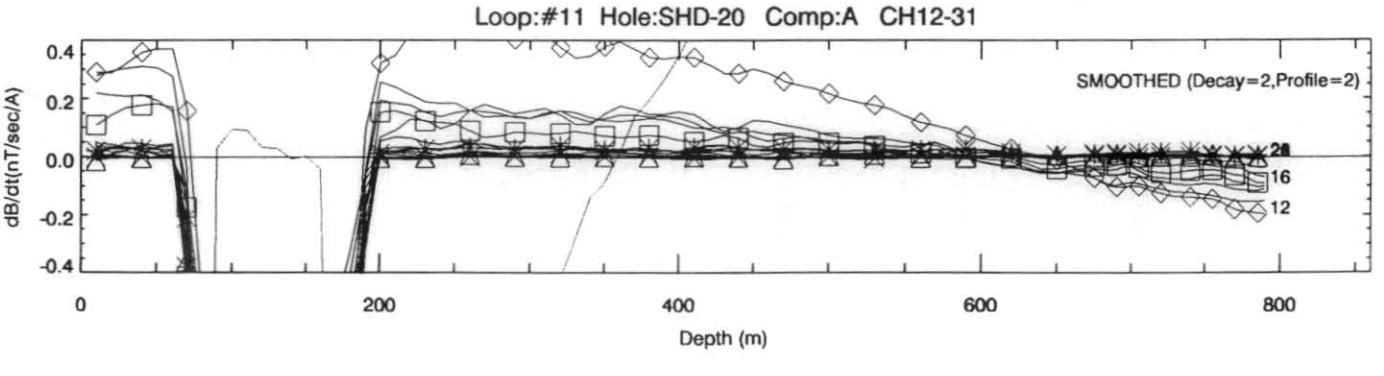
5 cm

675313





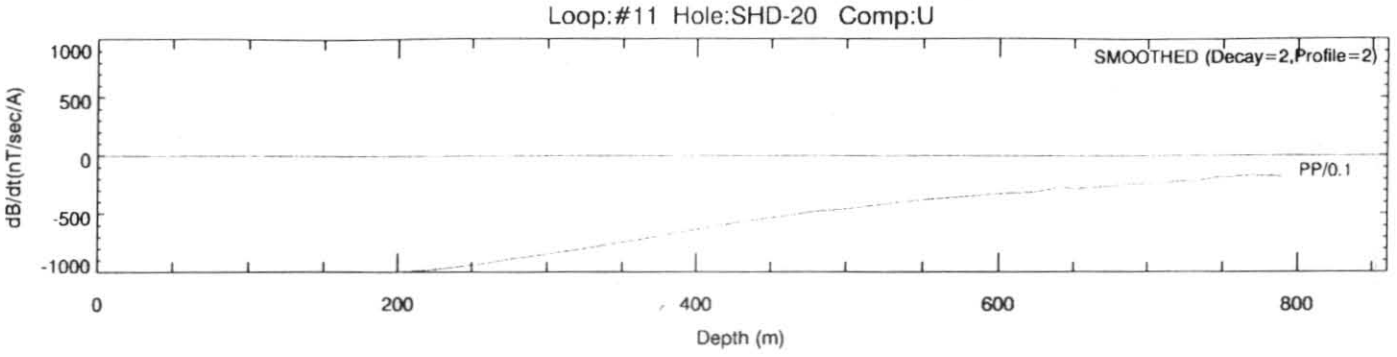


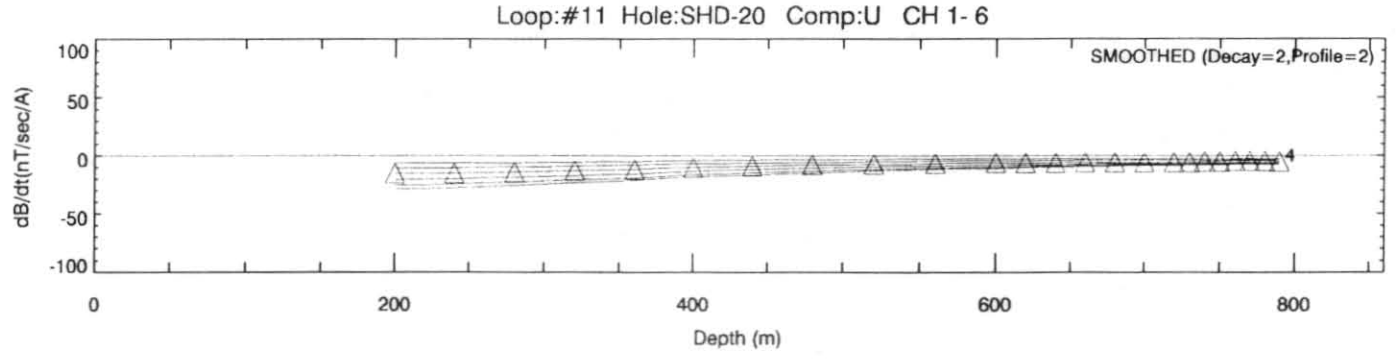


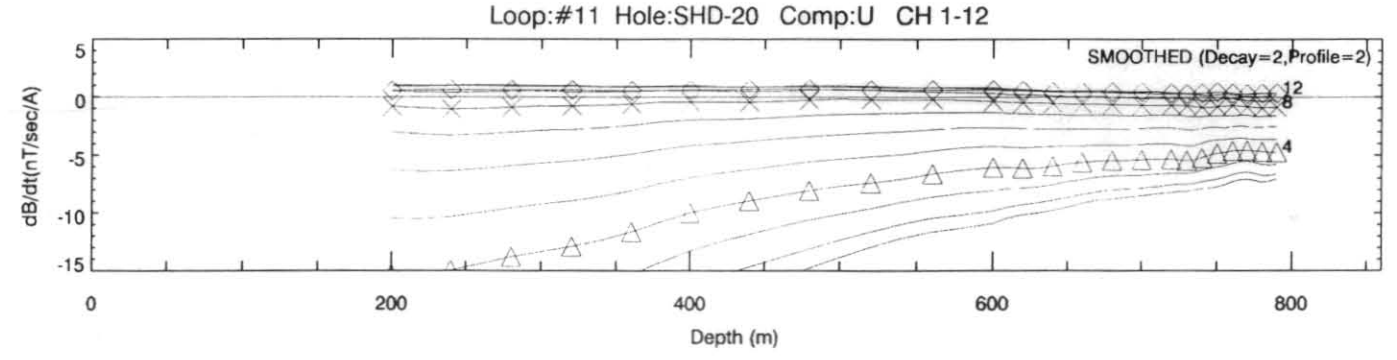
Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 30-Mar-2000	

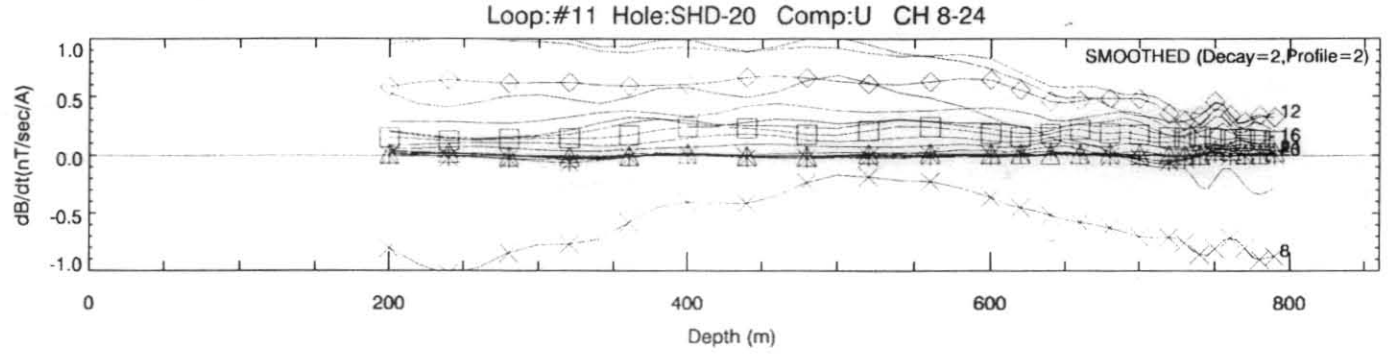
5 cm

675314





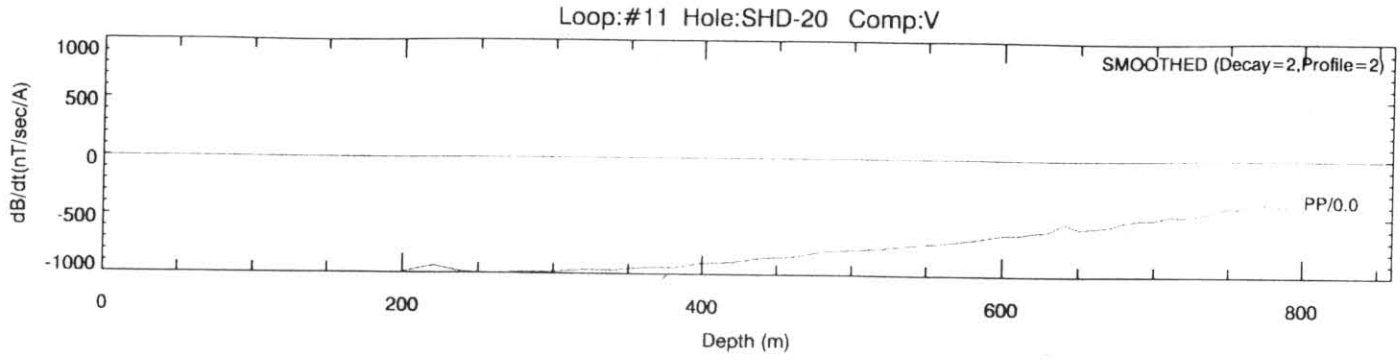


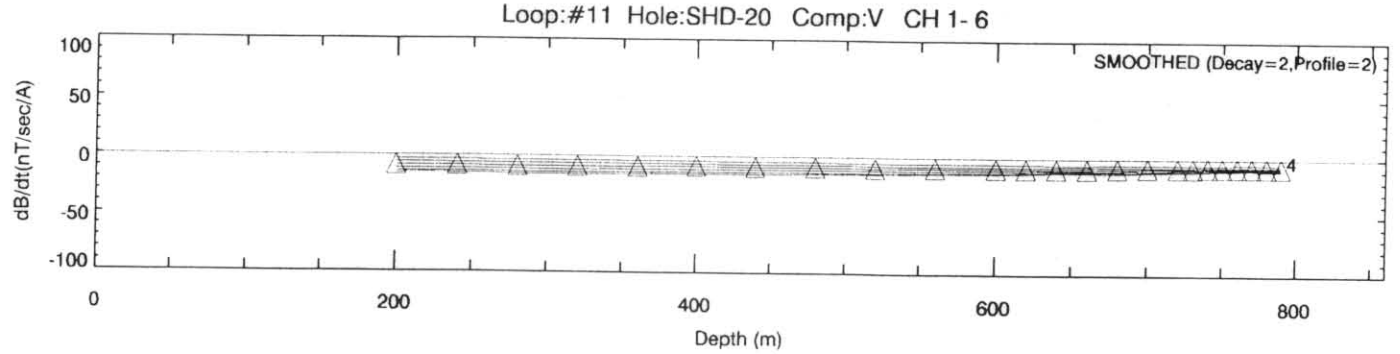


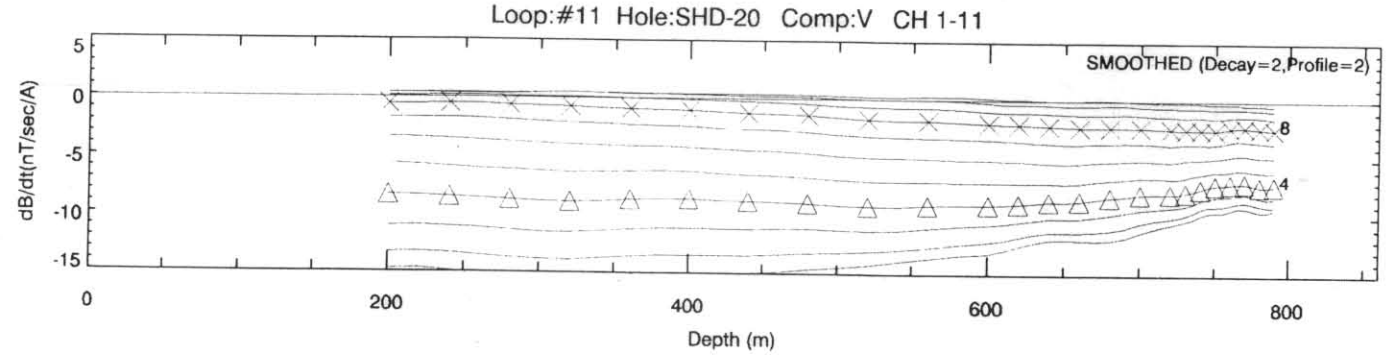
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 21-Feb-2000	

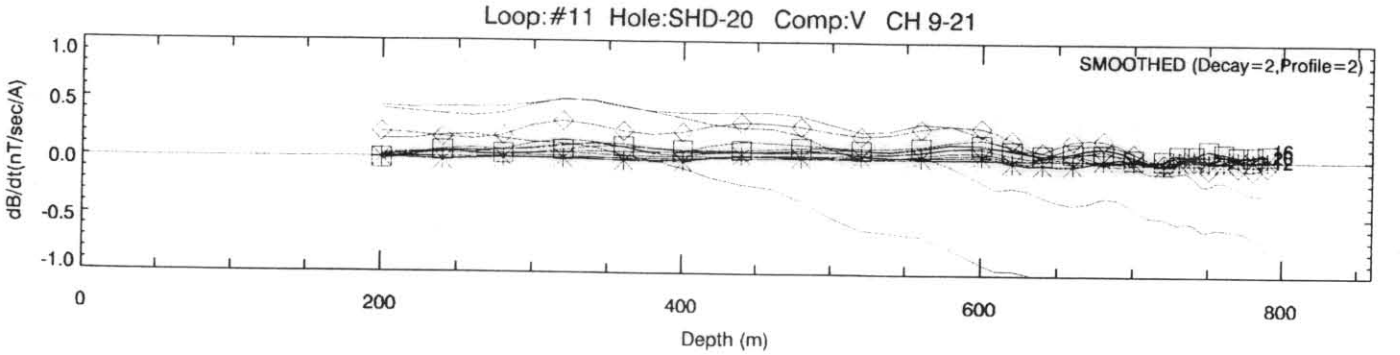
5 cm

675315





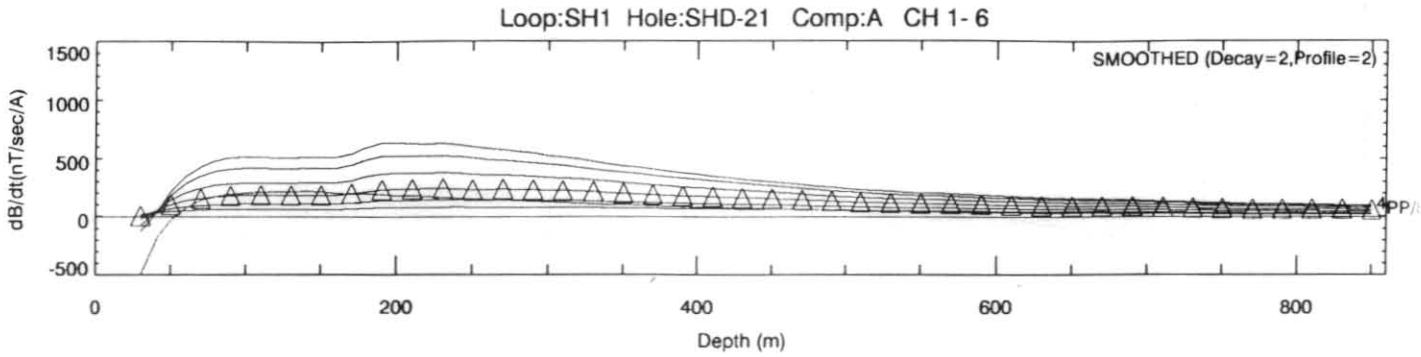


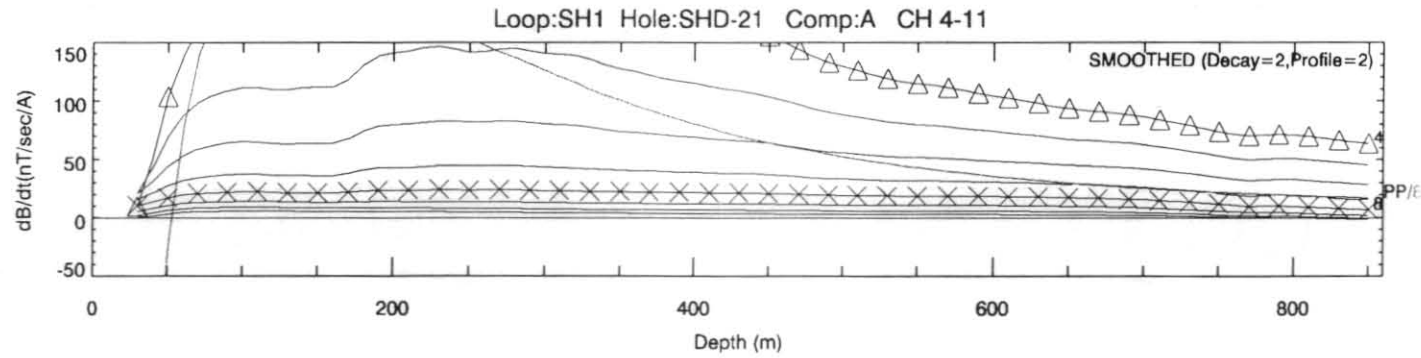


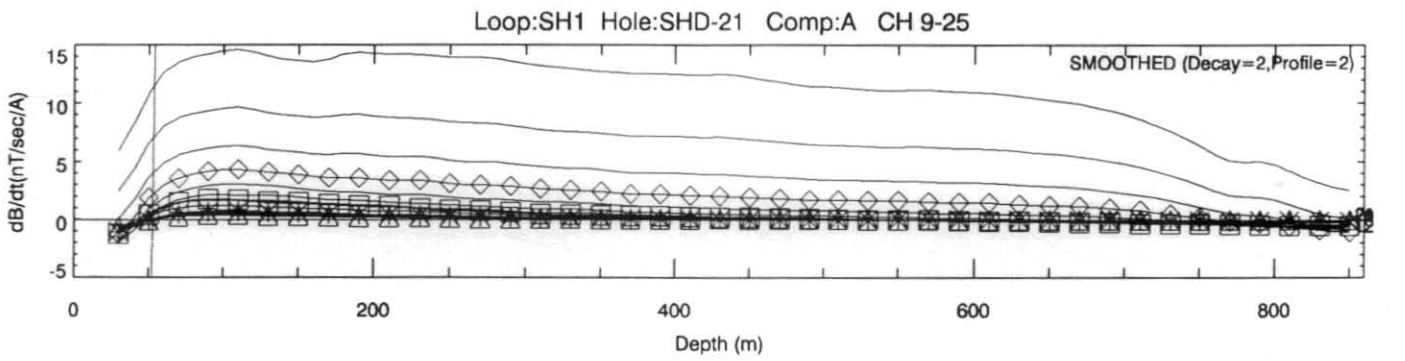
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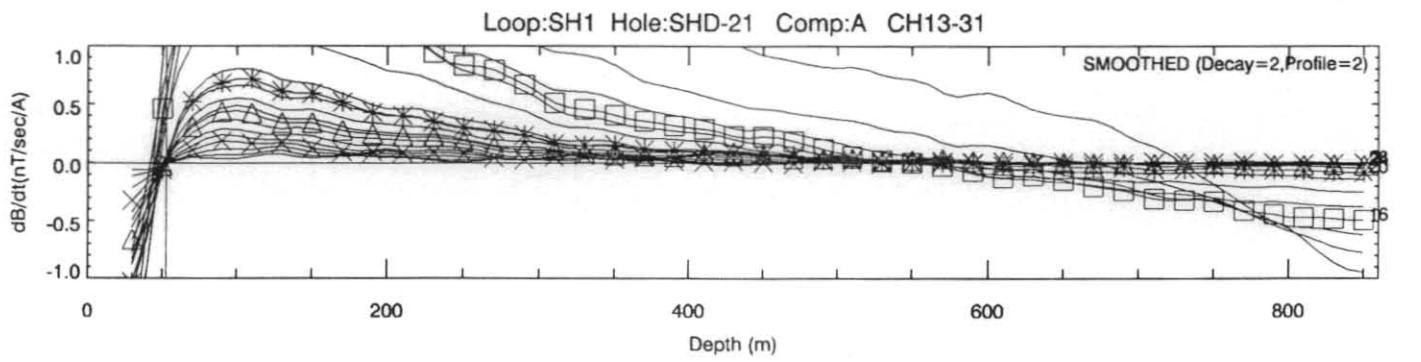
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 21-Feb-2000	

675316





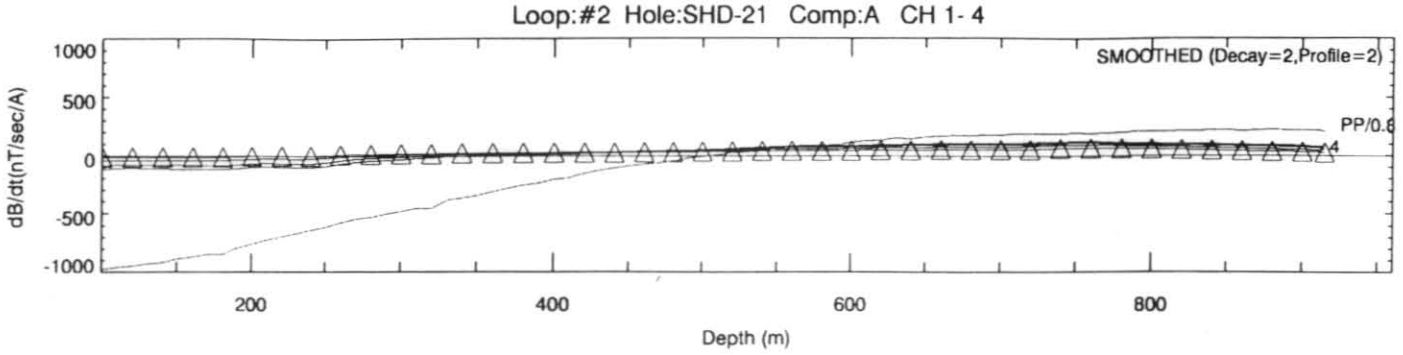


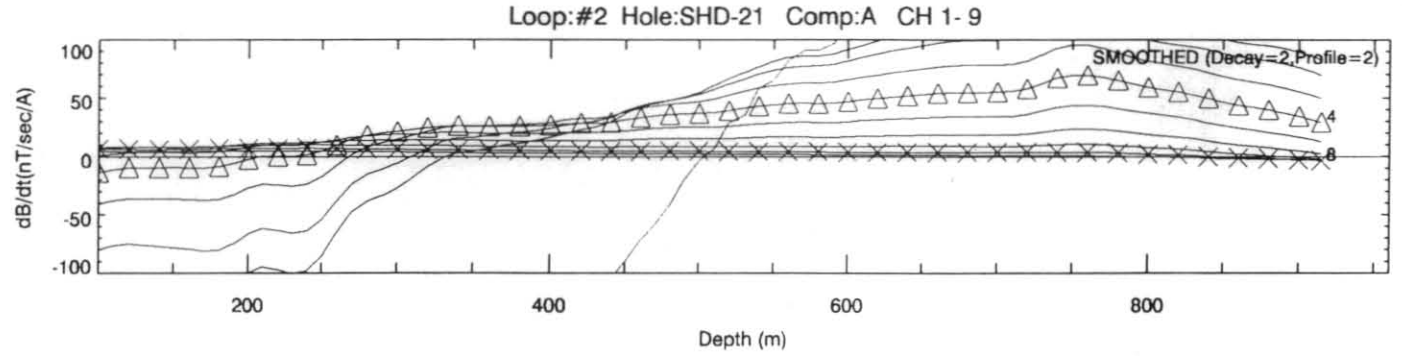


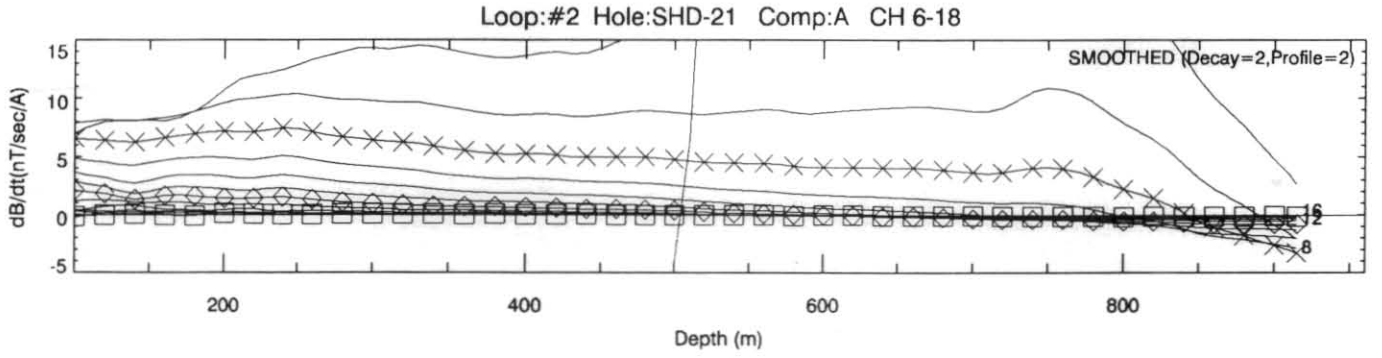
Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 2/ 2/2000	

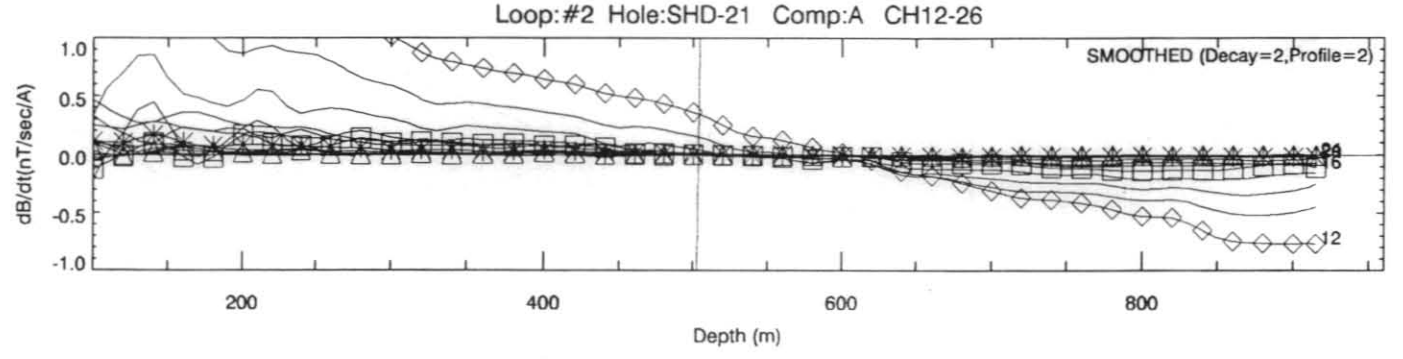
5 cm

675317





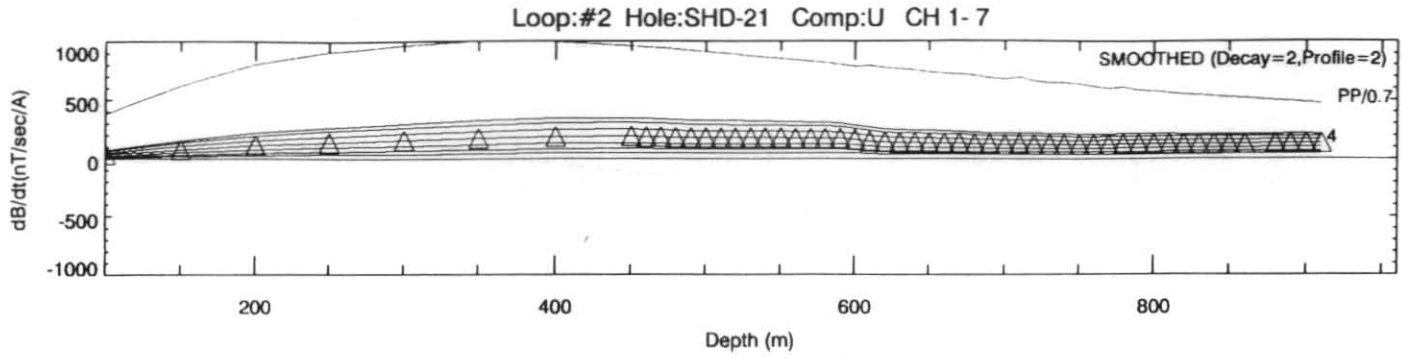


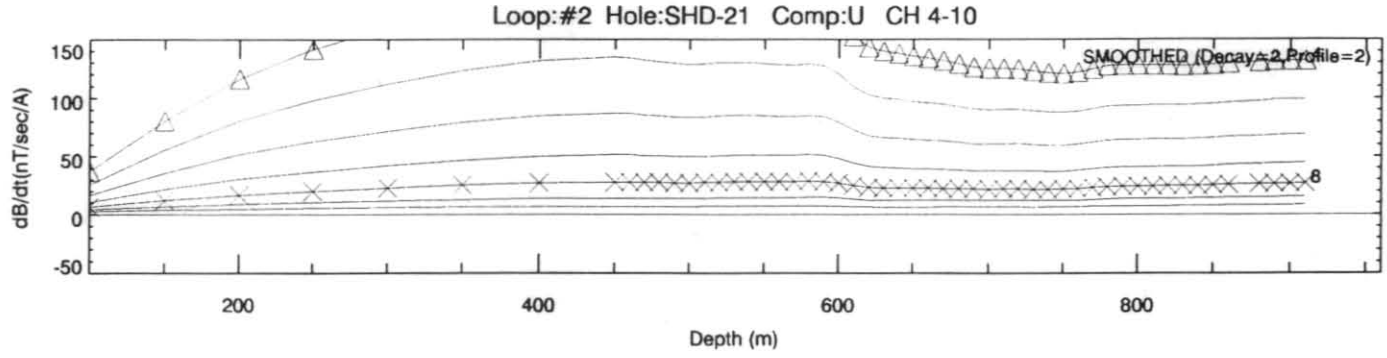


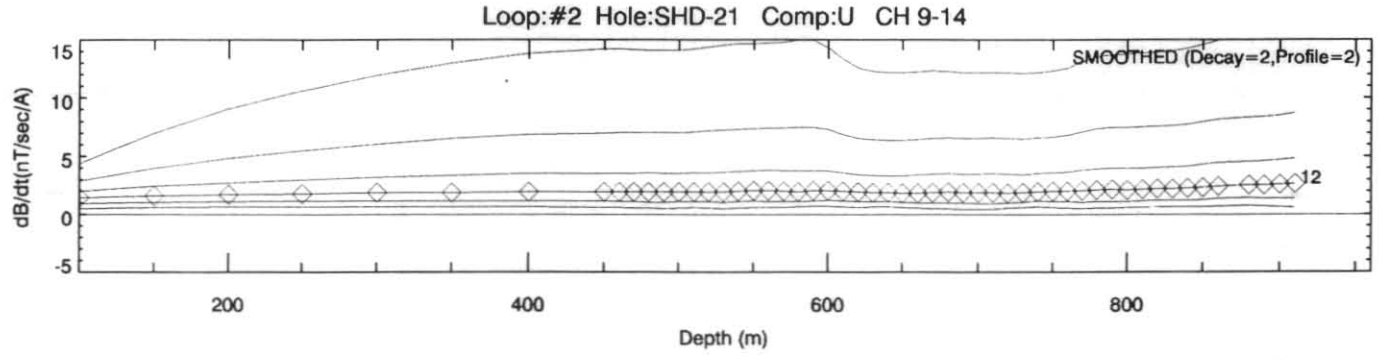
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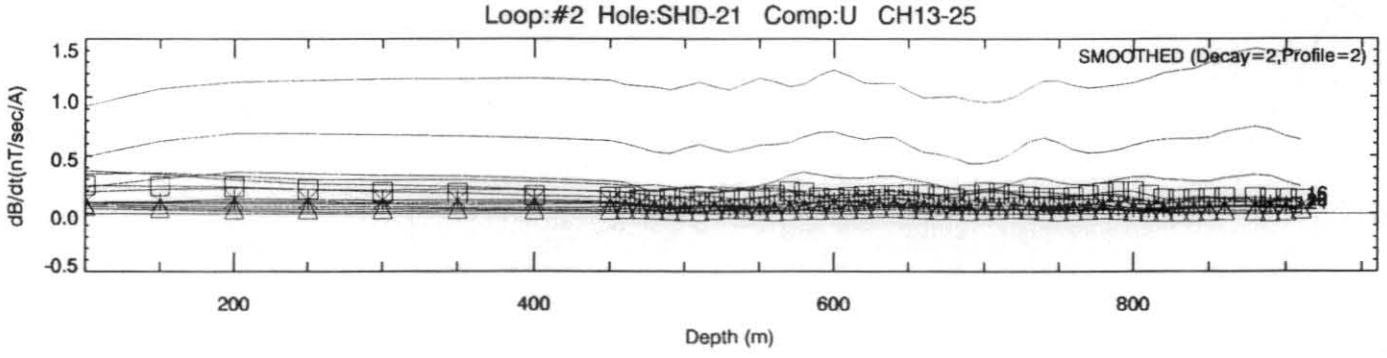
Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 2/ 2/2000	

675318





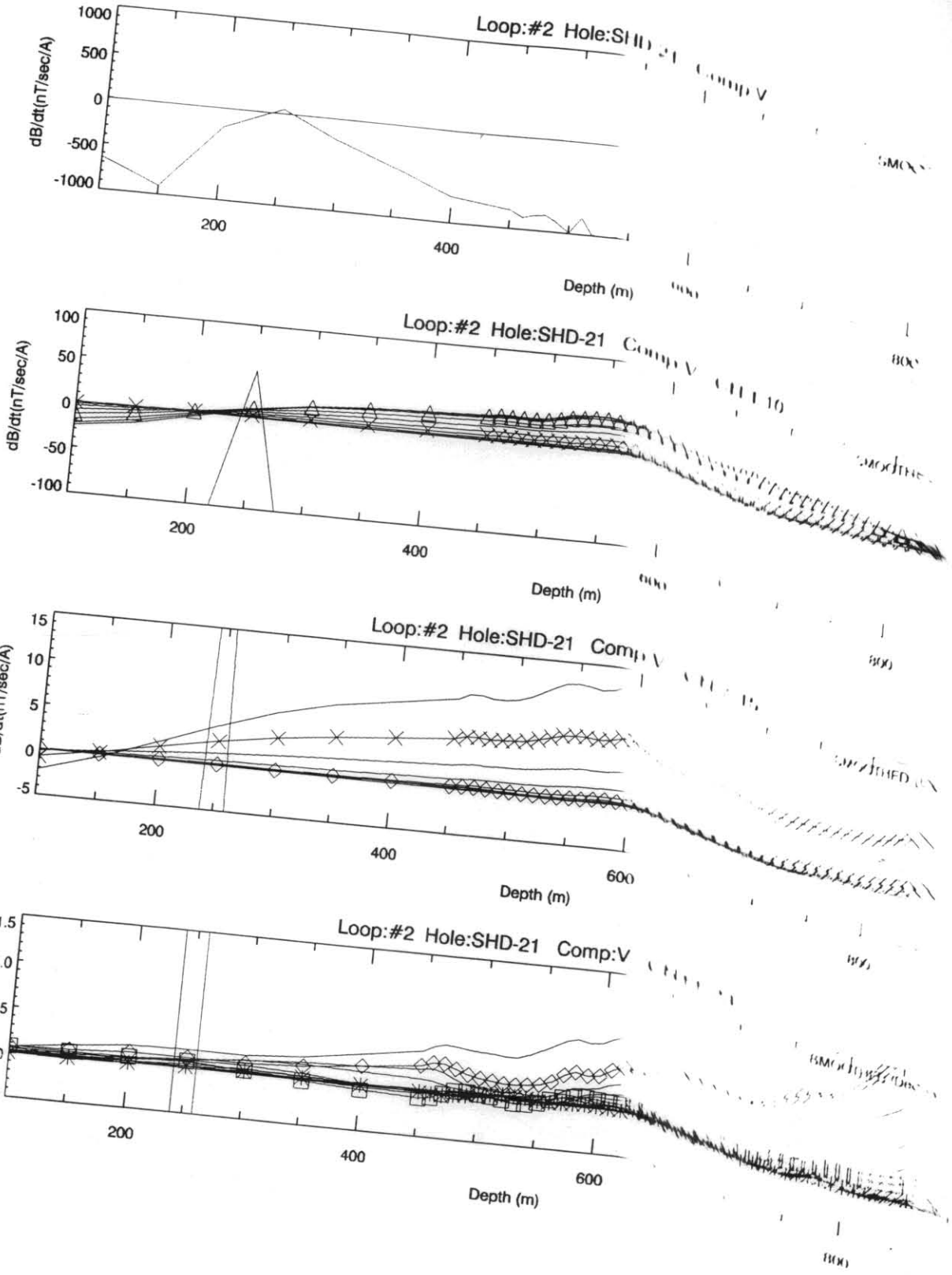




5 cm

Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 29-Mar-2000	

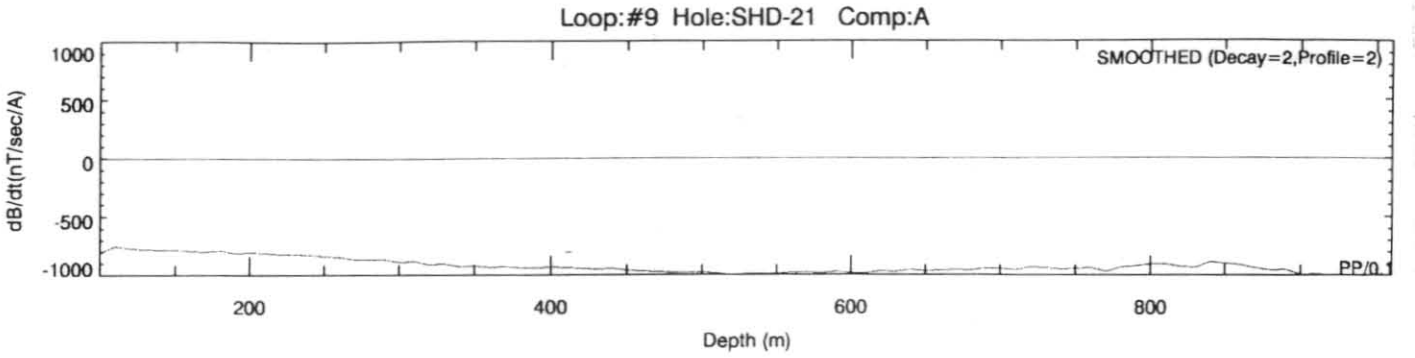
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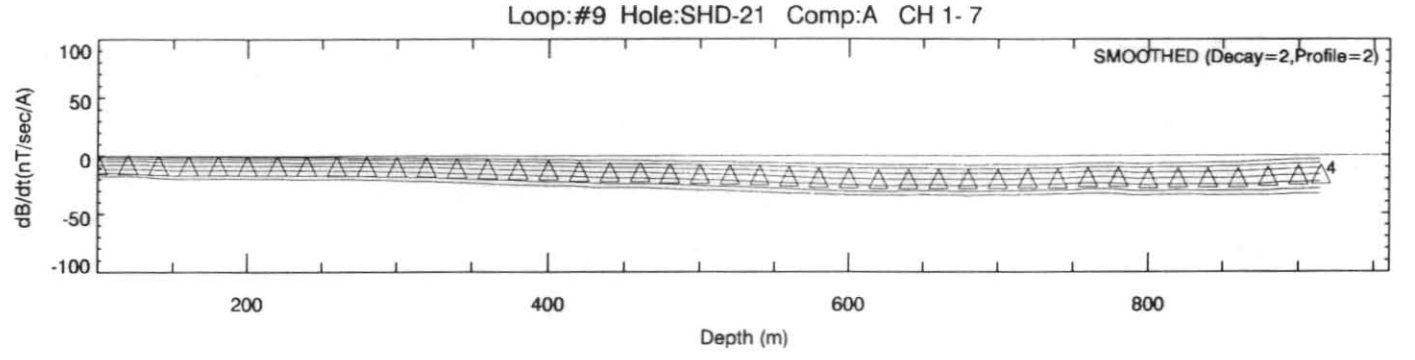


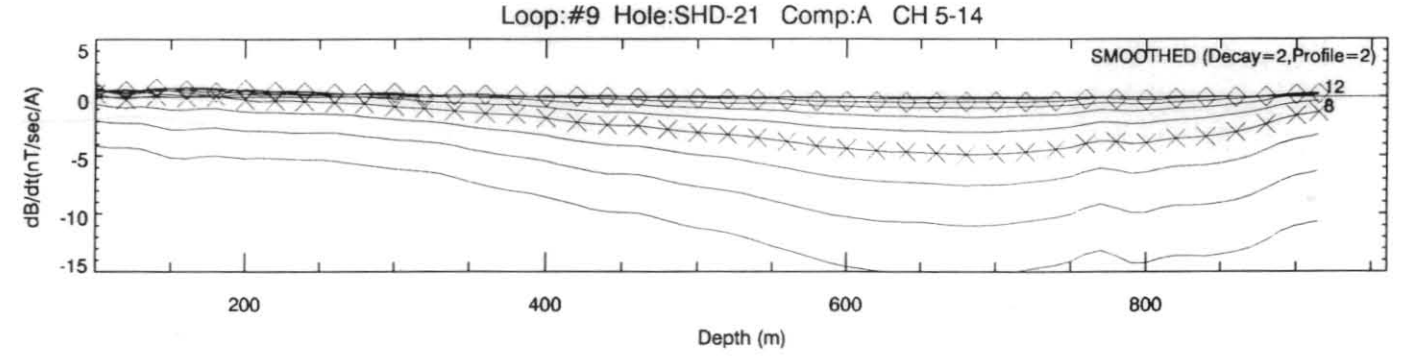
Goldfields Ltd	
South Henty. Borehole EM Jan 2000	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
Drawn 29-Mar-2000	FLAGSTAFF GEOCONSULTANTS

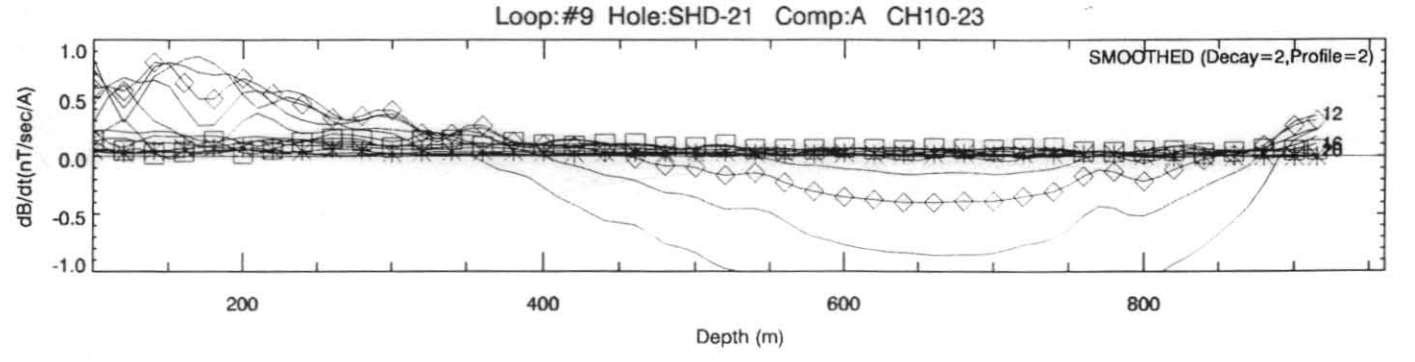
5 cm

675320





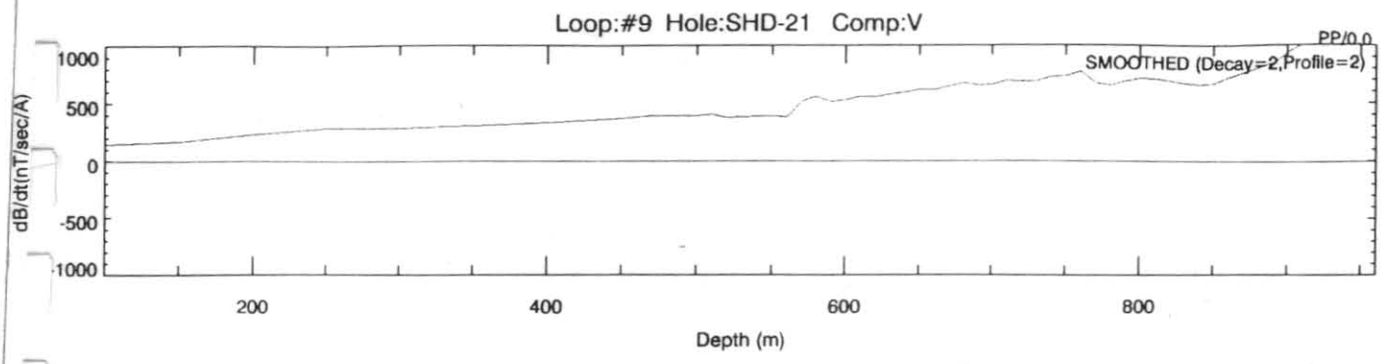


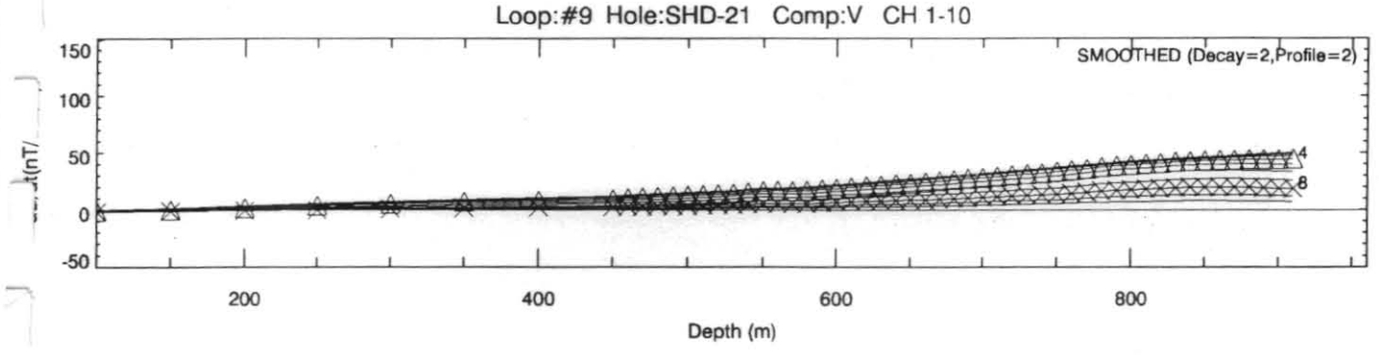


Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 2/ 2/2000	

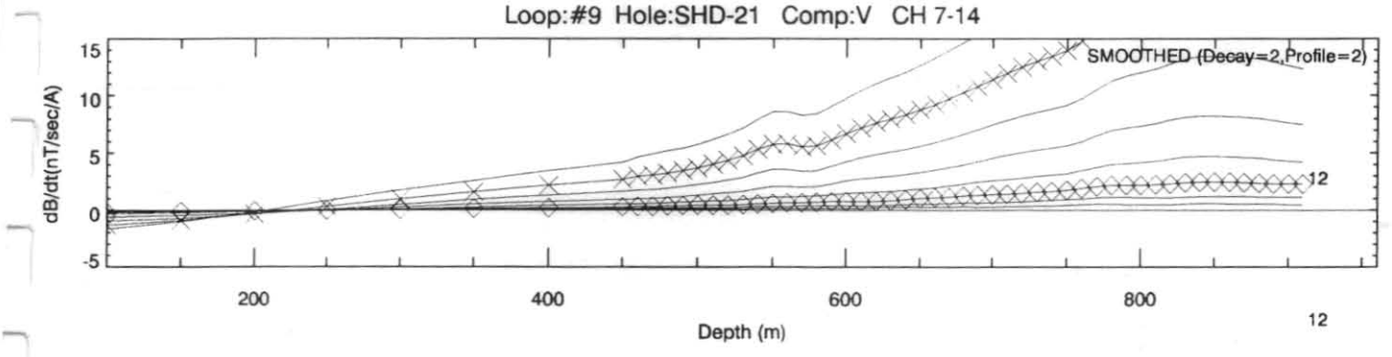
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675321

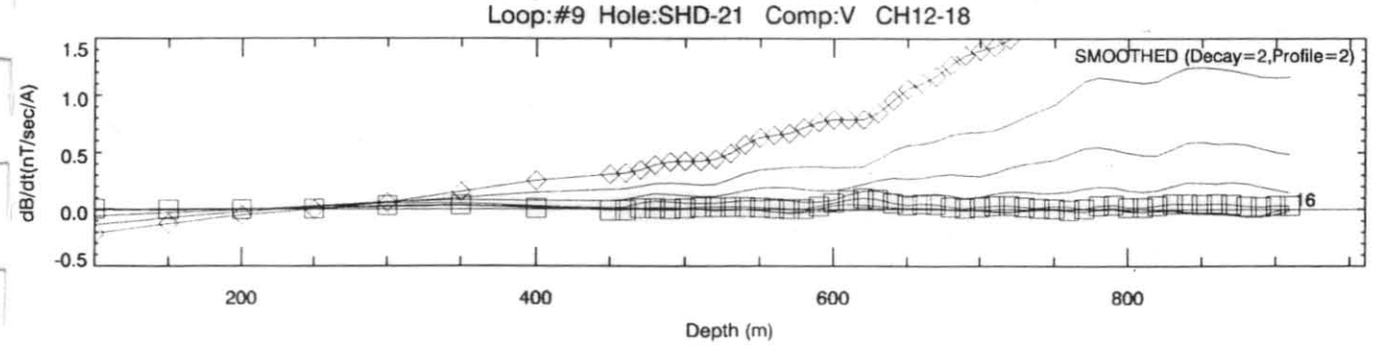




8



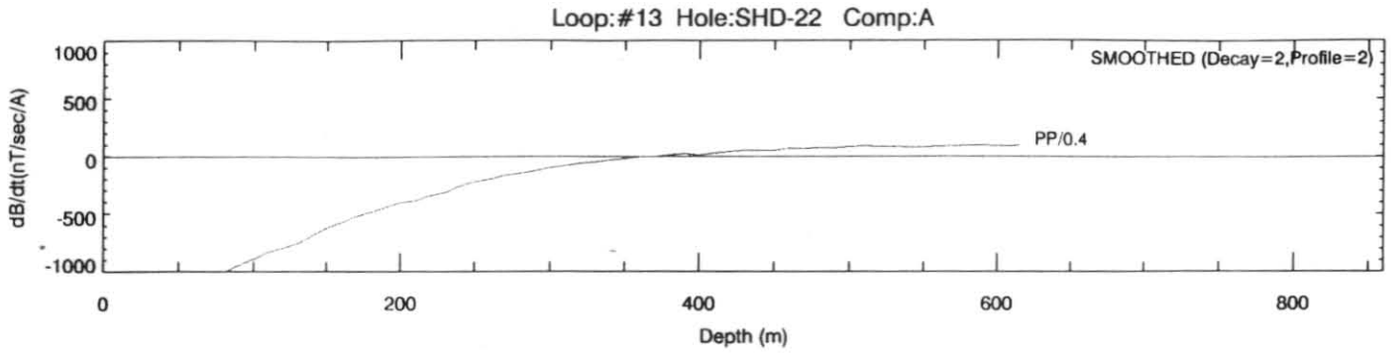
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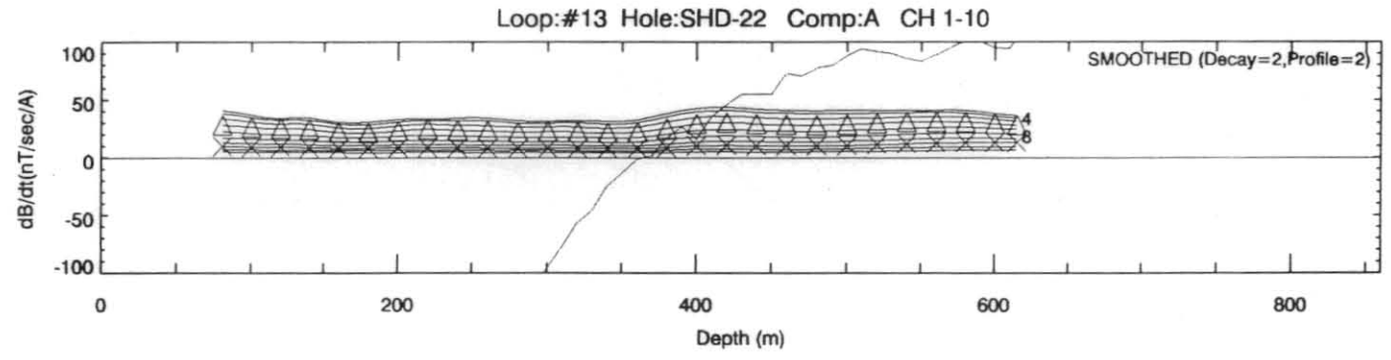


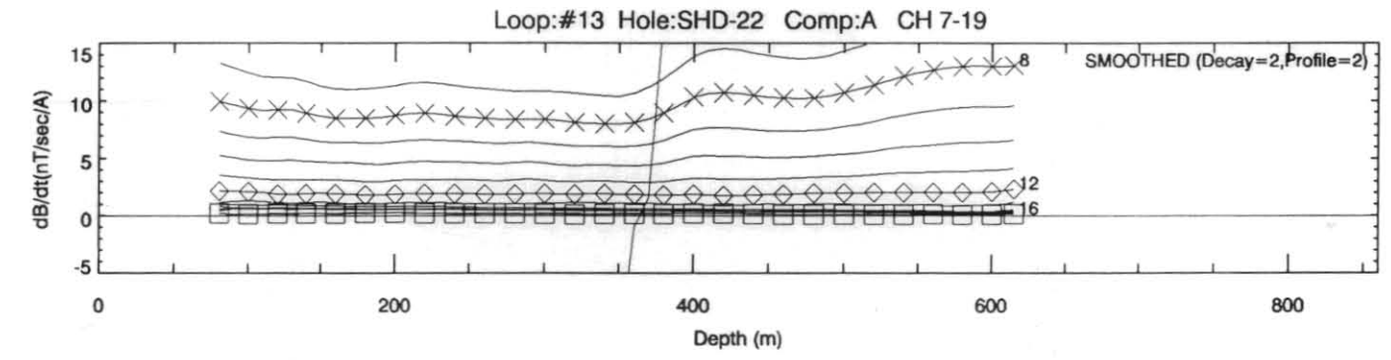
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3/ 2/2000	

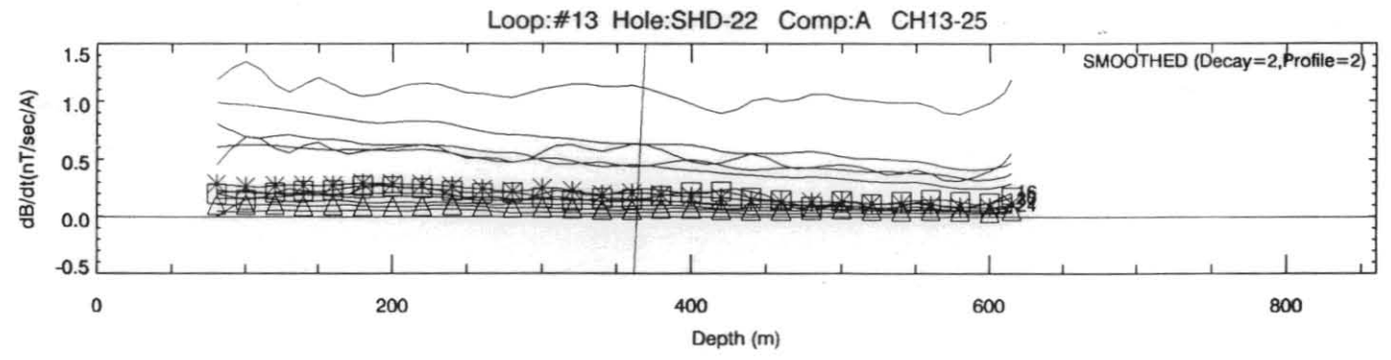
5 cm

675322





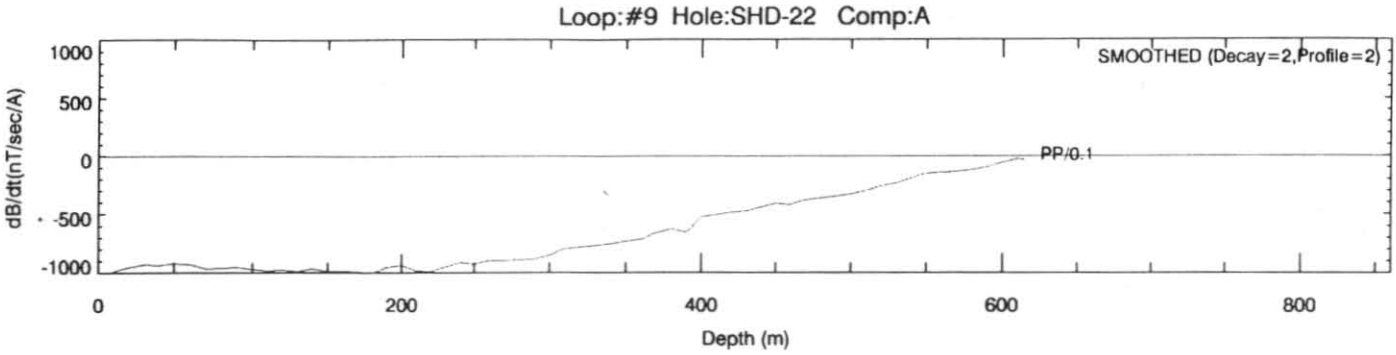


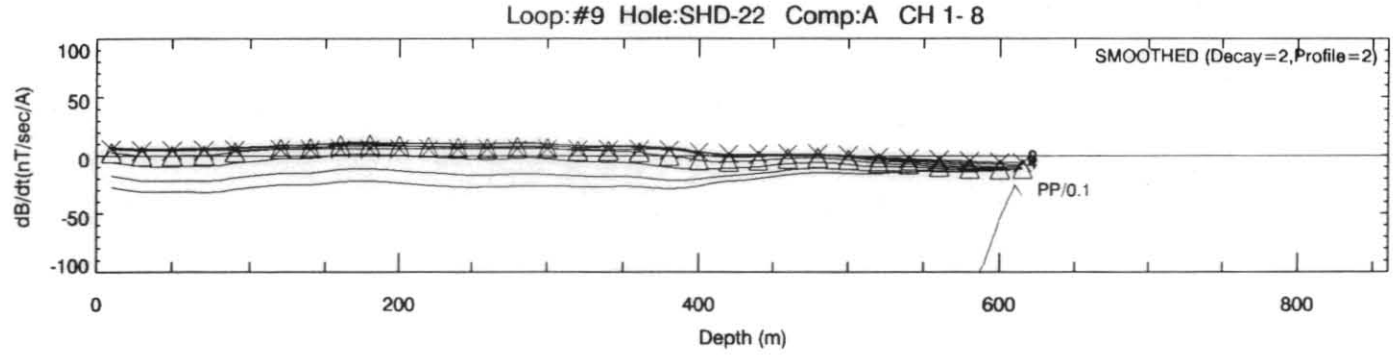


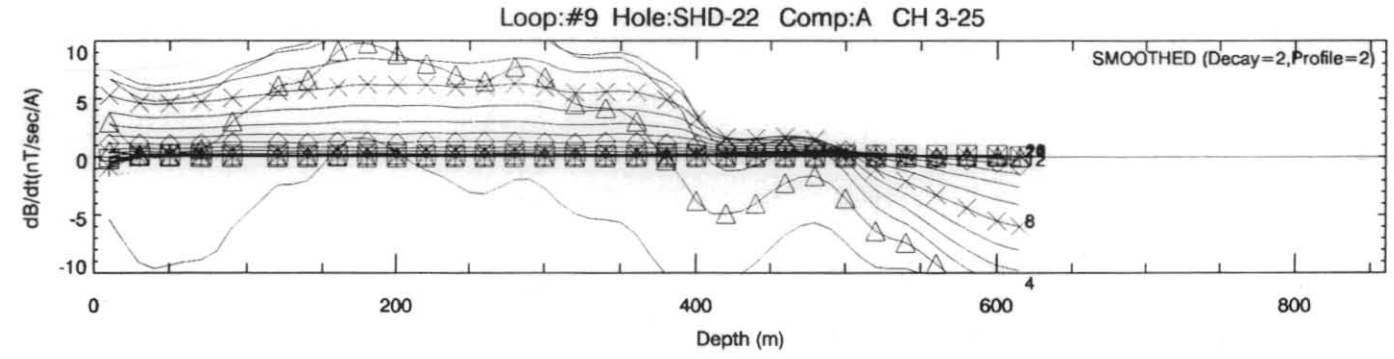
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

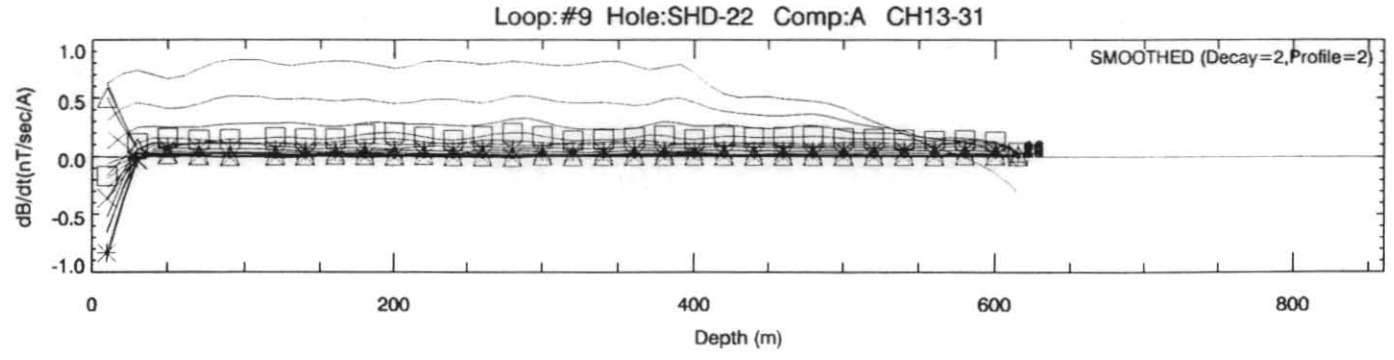
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675323





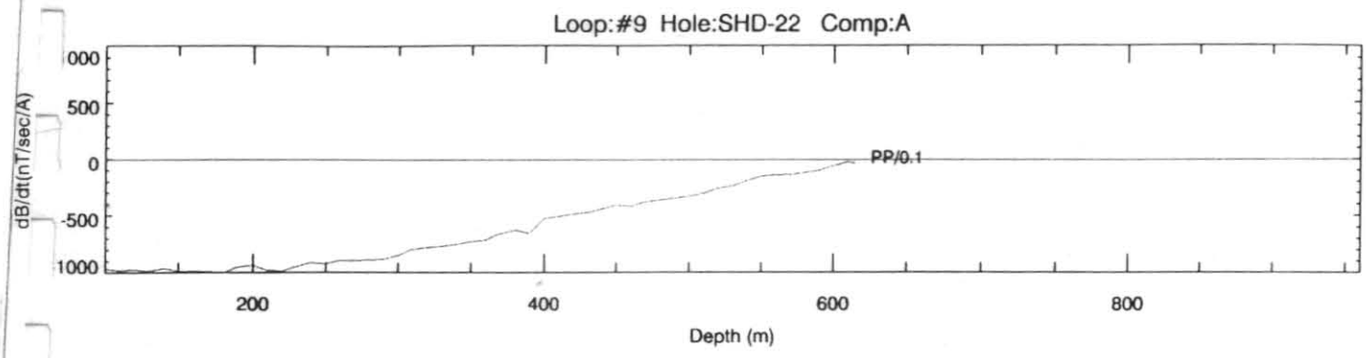


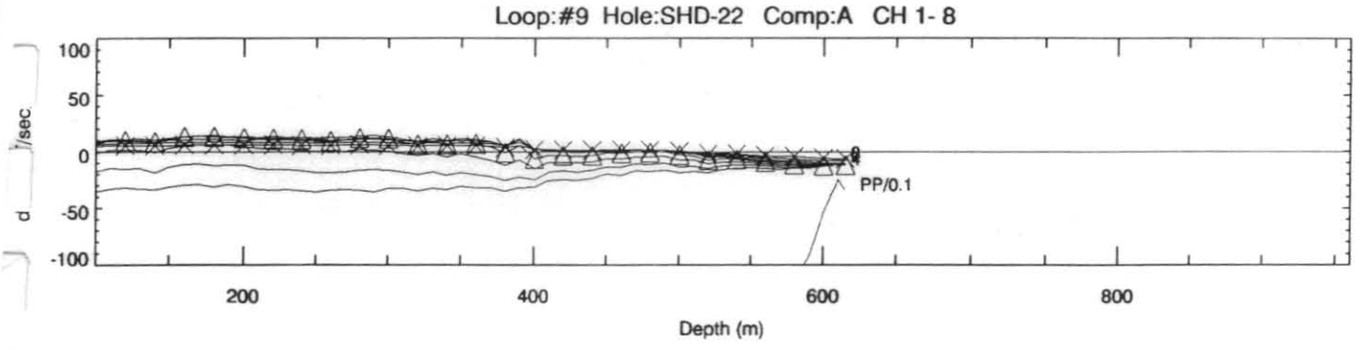


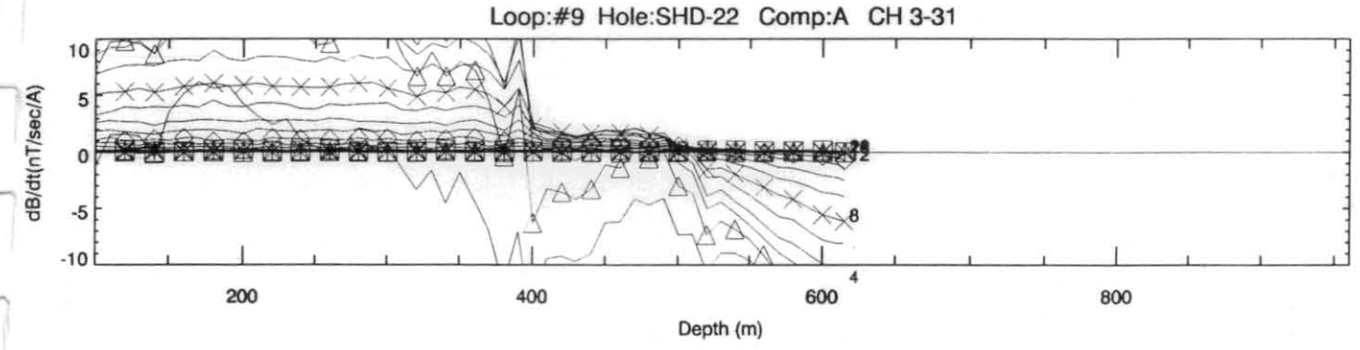
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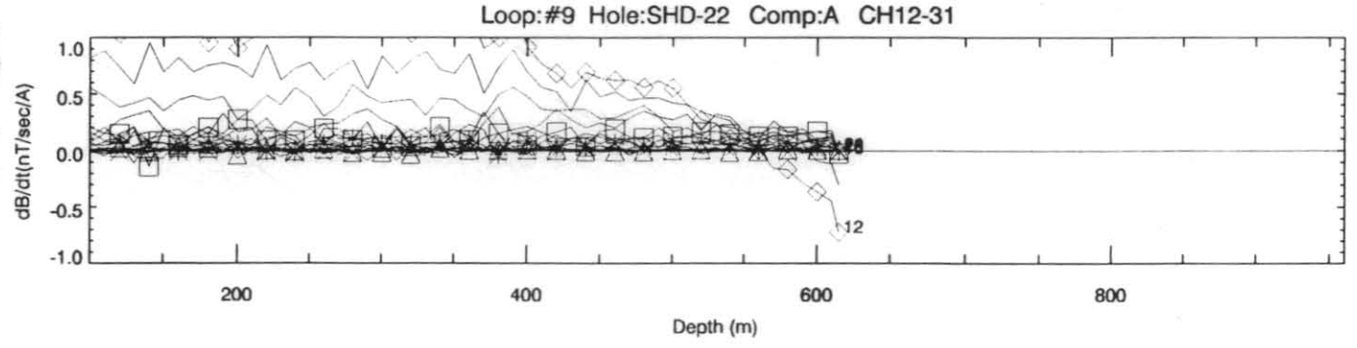
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

675324





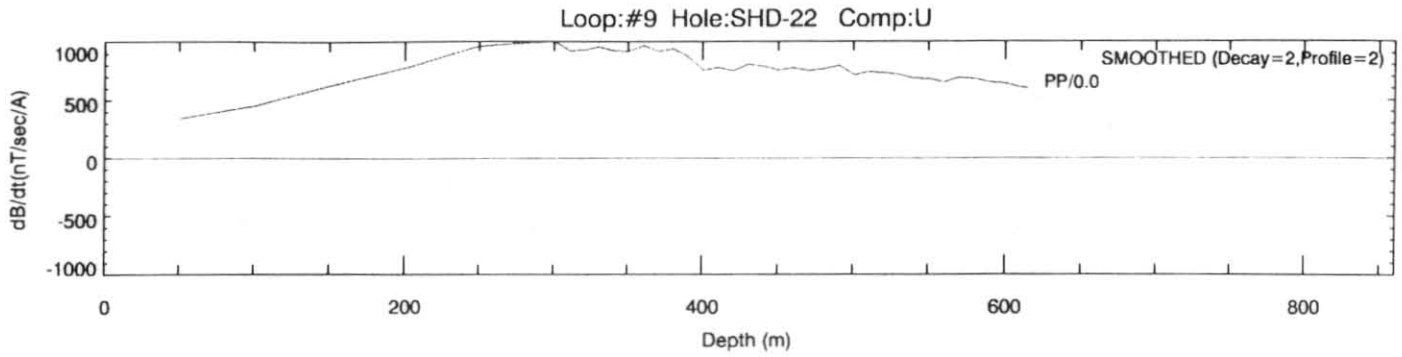


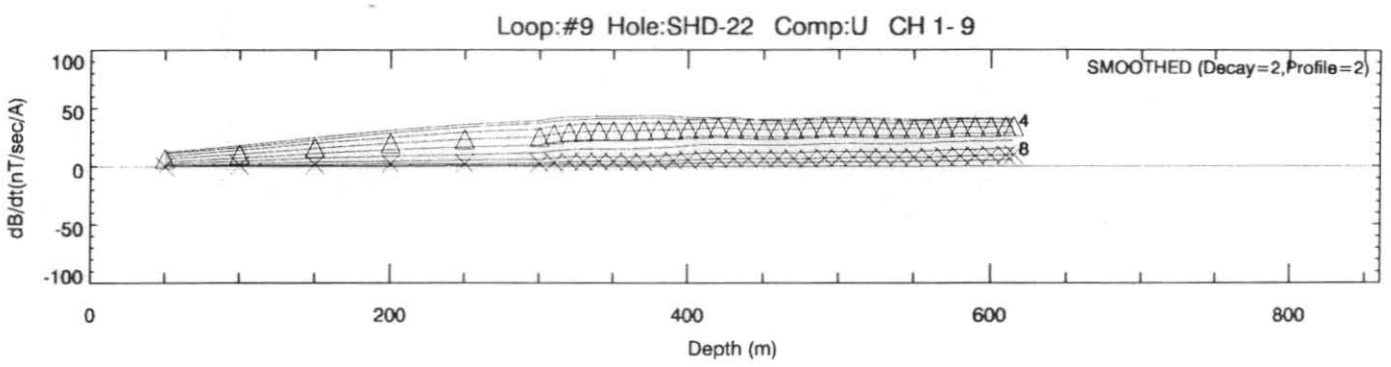


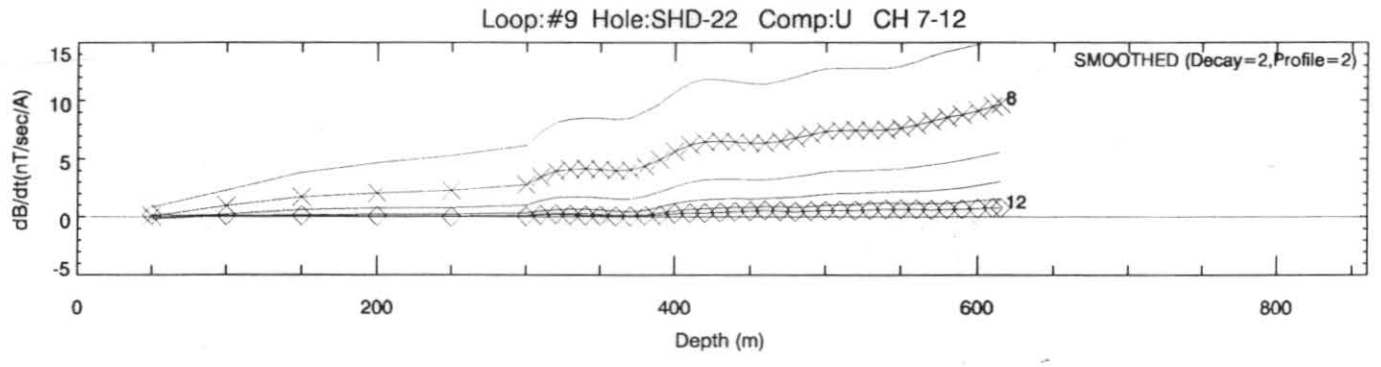
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

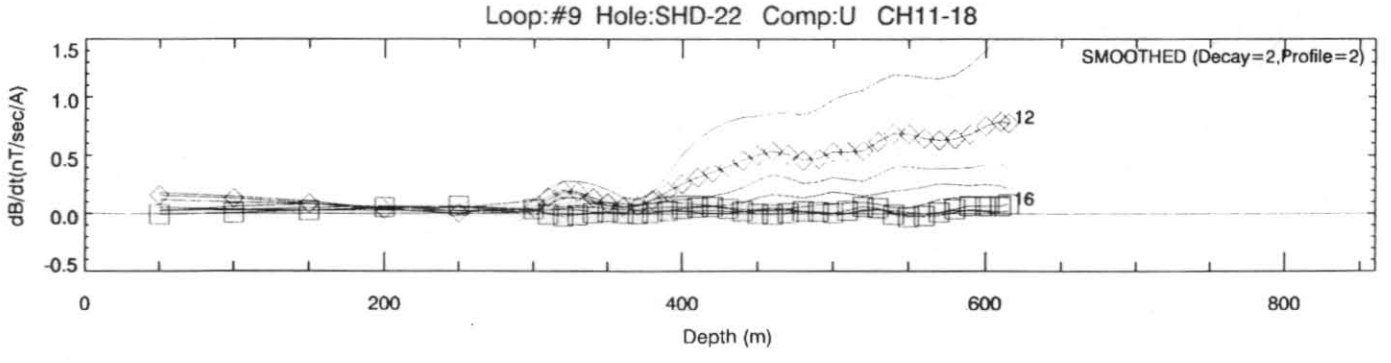
5 cm

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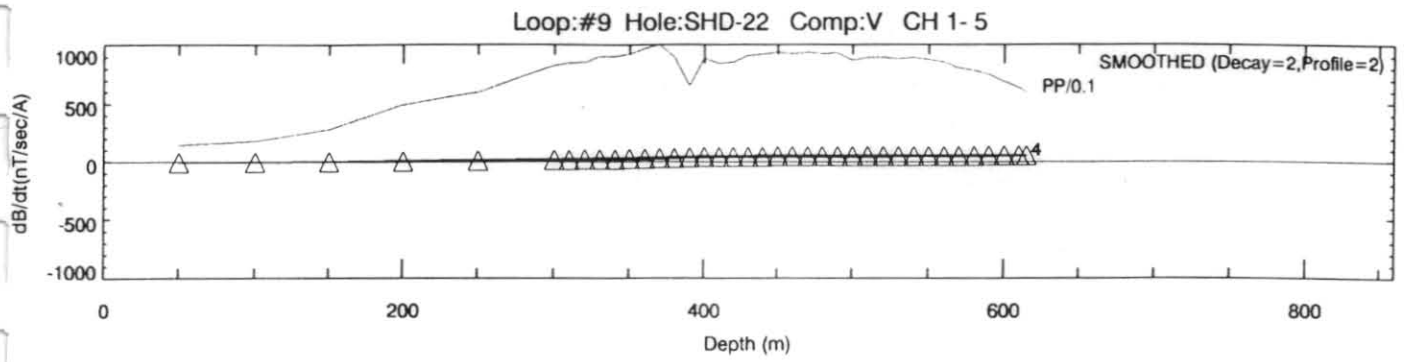


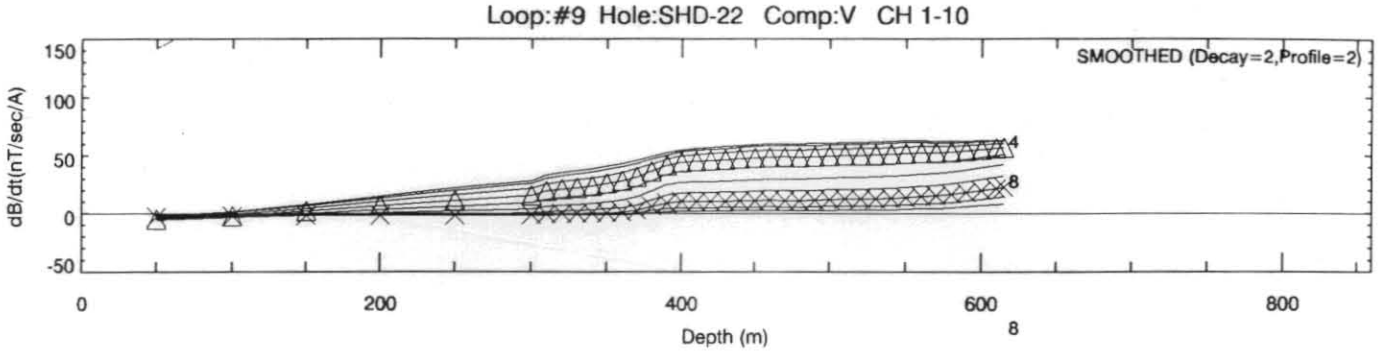


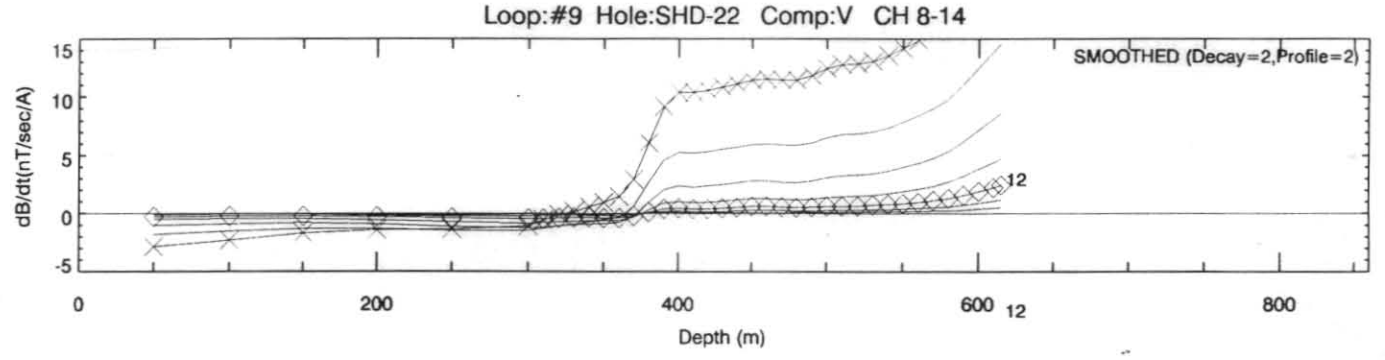
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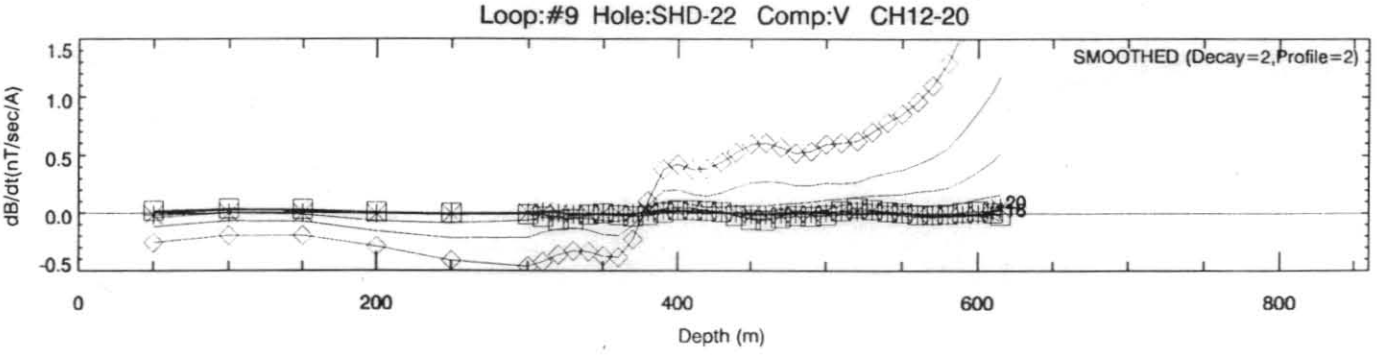
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
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Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 11-Feb-2000	

675326





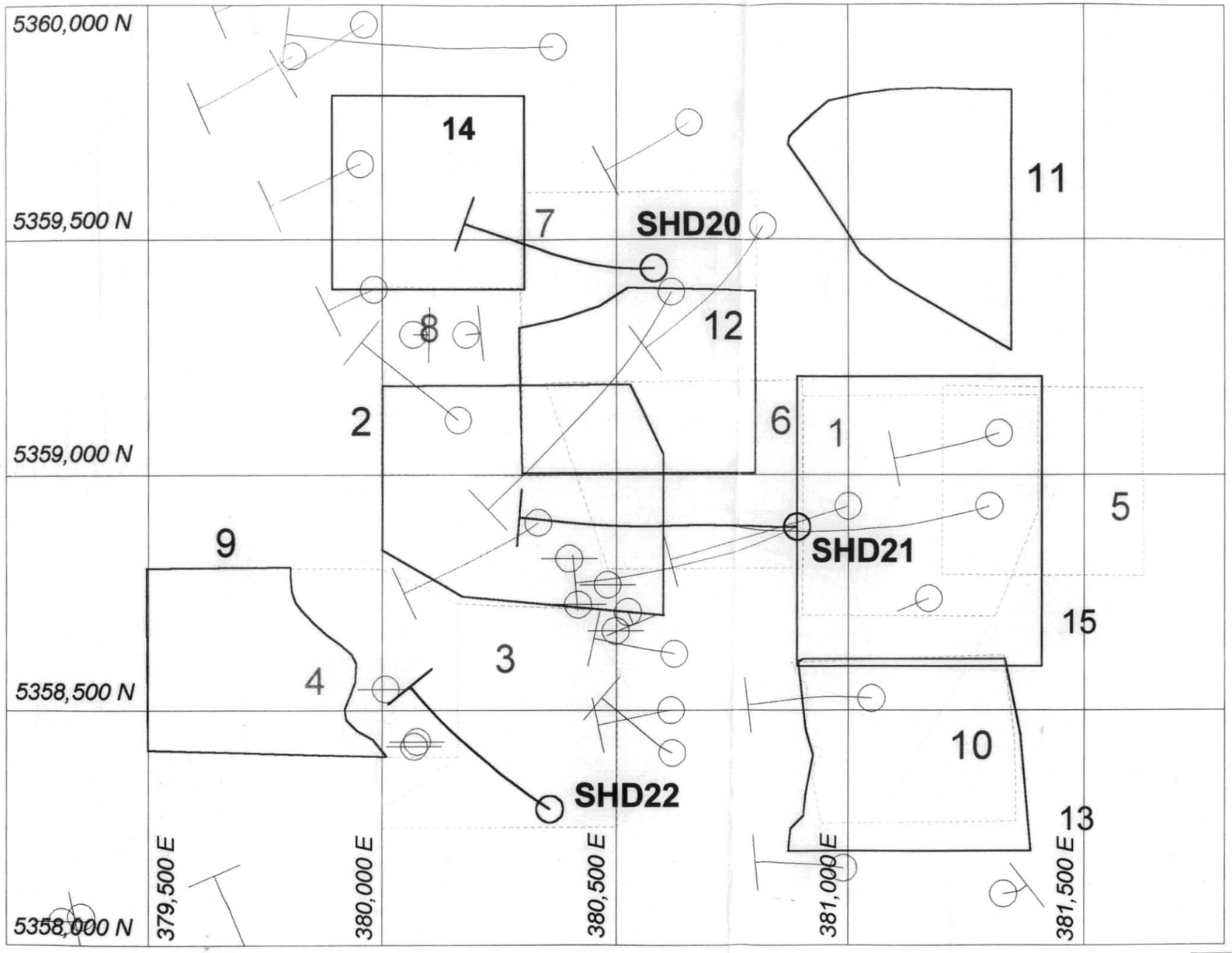




Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

5 cm

675327



5 cm

0 0.25 0.5
Kilometers

GOLDFIELDS EXPLORATION

EL 8/96

DHEM SURVEYS 2000
TRANSMITTER LOOP POSITIONS
(WITH DRILLHOLES)

File:	goldex-1.wor	Date:	May 2000
Plot File:	goldex-1.prn	Scale:	1:10,000
M. ASTEN		Drawn:	ARC

675328

OUTER-RIM EXPLORATION SERVICES

ACN 059 220 192

Geophysical Contracting Services

100% Australian Owned

26 Leopold Street,
(P.O. Box 1754)
AITKENVALE, QLD. 4814

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Email: oreserv@ozemail.com.au

Volume 1 of 1

Client	:	Goldfields Exploration Pty Ltd
Prospect	:	South Henty.
Area	:	Queenstown, Tas.
Survey	:	Borehole PEM Surveys
Survey Period	:	7th December, 1999 to 3rd February, 2000
Operator	:	Brett Rankin/Kent Honner.

DAILY LOG: Goldfields Exploration Pty Ltd - December, 1999/January, 2000

DATE	COMMENTS	CHARGES

7-12-99 Went to the Goldfields office at 8.00am, then went out to the site, laid out loop #11 and dummied SHD-20. Started to survey SHD-20 and the data looked quite noisy. I decided to take two readings at 1024 stacks to try and clean the data up and I made the client aware that it would take a little extra time - he seemed OK with this. The guys then set out loop #12 whilst I was surveying. We finished the day at 5.30pm.

SURVEY PARAMETERS:

Loop#11 :600 x 500m
381350E; 5359250N: 381350E; 5359780N:
381000E; 5359780N: 380850E; 5359700N:
Current :13Amps
Time Base :20.0 ms
Ramp Time :1.0ms
Sync :Cable

Hole No. **:SHD-20**
380580E; 5359440N
Depth :600m
Channels :31
Components :Z

1 Survey day $1250.00
1 Field Assist. day $ 180.00

8-12-99 Returned to the site by around 7.30am and completed the Z component on SHD-20 loop #11. We then read the X-Y components and finished the hole late afternoon, around 5.30pm.

SURVEY PARAMETERS:

Loop#11 :600 x 500m
381350E; 5359250N: 381350E; 5359780N:
381000E; 5359780N: 380850E; 5359700N:
Current :13Amps
Time Base :20.0 ms
Ramp Time :1.0ms
Sync :Cable

Hole No. **:SHD-20**
380580E; 5359440N
Depth :790m
Channels :31
Components :Z,X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

9-12-99 Returned to the site around 7.30am, set up on loop #12, SHD-20 and read the Z component. Had problems with the transmitter in the rain and the survey took a lot longer than usual, so was not completed. Finished the day around 5.00pm not a very successful day.

SURVEY PARAMETERS:

Loop#12 :600 x 500m
380300E; 5359300N: 380300E; 5359000N:
380800E; 5359000N: 380800E; 5359400N:
380520E; 5359400N.
Current :13Amps
Time Base :20.0 ms
Ramp Time :1.0ms
Sync :Cable

Hole No. **:SHD-20**
380580E; 5359440N
Depth :450m
Channels :31
Components :Z

1 Survey day $1250.00
1 Field Assist. day $ 180.00

10-12-99 Returned to the site and completed the Z on SHD-20 on loop #12 - the rain was still persisting. We then moved on to loop #14, SHD-20. We had to make a decision on pulling up loop#12 but we're unsure if the X-Y was required. Finished the day around 5.30pm.

SURVEY PARAMETERS:

Loop#12 :500 x 400m
380300E; 5359300N: 380300E; 5359000N:
380800E; 5359000N: 380800E; 5359400N:
380520E; 5359400N.
Current :17Amps
Time Base :20.0 ms
Ramp Time :1.0ms
Sync :Cable

Hole No. **:SHD-20**
380580E; 5359440N
Depth :790m
Channels :31
Components :Z

Loop#14 :400 x 400m
379900E; 5359800N: 379900E; 5359400N:
380300E; 5359400N: 380300E; 5359800N
Current :17Amps

1 Survey day $1250.00
1 Field Assist day $ 180.00

12-12-99 Returned to the site and continued reading the Z component [illegible] We finished the X by 3.00pm and [illegible] by 5.30pm.

SURVEY PARAMETERS:

Loop#1 :600 x 500m
380900E, 5359170N, 380900E, 5358700N,
381300E, 5358700N, 381400E, 5359170N
Current :13Amps
Time Base :20.0 ms
Ramp Time :1.0ms
Sync :Cable

Hole No. :SHD-21
380890E, 5358890N
Depth :850m
Channels :31
Components :Z

1 Survey day $1250.00
1 Field Assist day $ 180.00

13-12-99 Completed reading the X-Y on loop #1, packed up the gear and returned to Leonora by 2.30pm. (Goldfields have kindly given permission for us to go to another client to complete some urgent work and return later).

SURVEY PARAMETERS:

Loop#1 :600 x 500m
380900E, 5359170N, 380900E, 5358700N,
381300E, 5358700N, 381400E, 5359170N
Current :13Amps
Time Base :20.0 ms
Ramp Time :1.0ms
Sync :Cable

Hole No. :SHD-21
380890E, 5358890N
Depth :850m
Channels :31
Components :Z

½ Survey day $ 625.00
½ Field Assist day $ 90.00
½ Mob. day N/C

22-1-00 Met up with Scott and Dale at 7:30am and drove out to South Henry. The weather today was particularly bad and we had to cal. it a

Channels :31
Components :Z

½ Breakdown day N/C
½ Survey day $ 625.00
½ Field Assist. day $ 90.00

25-1-00 Returned to the site and completed surveying SHD-21, loop #2, and surveyed the same hole using loop #9. The data is still non-repeatable in the top section but cleaned up down the hole. We confirmed that the nearby transformer (power station) was on. We then moved to SHD-22, dummied the hole (open), and unpacked the gear ready for tomorrow. Long day.

SURVEY PARAMETERS:

Loop #2 :500 x 600m
380000E; 5359200N: 380170E; 5358750N
380600E; 5358700N: 380600E; 5359050N:
380515E; 5359200N: 380000E; 5359200N
Current :13 Amps
Time Base :20ms
Ramp Time :0.5ms
Sync :Clock

Hole No. **:SHD-021**
380890E, 5358890N
Depth :700 to 914m
Channels :31
Components :Z

Loop #9 :500 x 600m
379500E; 5358400N: 380010E; 5358400N:
379820E; 5358800N: 379500E; 5358800N
Current :13 Amps
Time Base :20ms
Ramp Time :0.5ms
Sync :Clock

Hole No. **:SHD-021**
380890E, 5358890N
Depth :914m
Channels :31
Components :Z

1 Survey day $1250.00
1 Field Assist. day $ 180.00

26-1-00 Up at 6.00am, to the airport and flew to Burnie to changeover with Brett. Drove to Zeehan and checked into the room. Grabbed some warm clothes and went to the Goldfields office. Met Bruce and discussed the programme. Spoke to Mike Asten about the X-Y

requirements, then drove out to the site and met Heath and Scott. Continue reading the Z component for SHD-22, Loop #9. There was lots of double stacking with multiple readings. The noise was due to a pump station and powerlines in the vicinity. Packed up and returned to Zeehan by 6.00pm. Dumped and processed the data.

SURVEY PARAMETERS:

Loop #9	:500 x 600m 379500E; 5358400N: 380010E; 5358400N: 379820E; 5358800N: 379500E; 5358800N
Current	:13 Amps
Time Base	:20ms
Ramp Time	:0.5ms
Sync	:Clock
Hole No.	**:SHD-022** 380620E, 5358410N
Depth	:80-400m
Channels	:31
Components	:Z

1 Survey day $1250.00
1 Field Assist. day $ 180.00

27-1-00 Up at 6.30am, had breakfast and emailed the data. Grabbed some lunch, went to the office to discuss programme, regarding the X-Y with Tim and Bruce. Refuelled, fixed a tyre and returned to the office to await a decision from Mike Asten. Loaded the gear and drove to Queenstown for work clothes and boots. Drove to the site by 10.00am, set up the clock and transmitter and drove to the hole. Took the gear down to the site 4W motorbike. Completed the Z component on SHD-22 by 1.50pm and moved to SHD-21. Began the X-Y for loop #9. Lots of stacking etc. again today. Returned to Zeehan by 6.00pm, dumped and processed the data.

SURVEY PARAMETERS:

Loop #9	:500 x 600m 379500E; 5358400N: 380010E; 5358400N: 379820E; 5358800N: 379500E; 5358800N
Current	:13 Amps
Time Base	:20ms
Ramp Time	:0.5ms
Sync	:Clock
Hole No.	**:SHD-022** 380620E, 5358410N
Depth	:400-615m
Channels	:31
Components	:Z

Hole No. :**SHD-021**
380890E, 5358890N
Depth :50-200m
Channels :31
Components :X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

28-1-00 Up, had breakfast, drove out to site and continued the X-Y for SHD-21, loop #9. Once again, very noisy data, requiring lots of stacking etc. Wet and windy all day. Heath had an ear infection, so I organised a doctor's appointment and return to Zeehan by 4.30pm. Dumped, processed and transmitted the data.

SURVEY PARAMETERS:
Loop #9 :500 x 600m
379500E; 5358400N: 380010E; 5358400N:
379820E; 5358800N: 379500E; 5358800N
Current :13 Amps
Time Base :20ms
Ramp Time :0.5ms
Sync :Clock

Hole No. :**SHD-021**
380890E, 5358890N
Depth :250-560m
Channels :31
Components :X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

29-1-00 Up at 6.45am, had breakfast and drove out to the site. Set up and completed the X-Y on SHD-21, loop #9. Another terrible weather day. Returned to Zeehan by 5.30pm, dumped, processed and transmitted the data.

SURVEY PARAMETERS:
Loop #9 :500 x 600m
379500E; 5358400N: 380010E; 5358400N:
379820E; 5358800N: 379500E; 5358800N
Current :13 Amps
Time Base :20ms
Ramp Time :0.5ms
Sync :Clock

Hole No. :**SHD-021**
380890E, 5358890N
Depth :570-910m
Channels :31

Components :X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

30-1-00 Up and out to the site. Moved the transmitter to loop #2, set up and started reading the X-Y on SHD-21. Lots of stacking etc. Packed up and returned to Zeehan by 6.00pm.

SURVEY PARAMETERS:

Loop #2 :500 x 600m
380000E; 5359200N: 380170E; 5358750N
380600E; 5358700N: 380600E; 5359050N:
380515E; 5359200N: 380000E; 5359200N
Current :13 Amps
Time Base :20ms
Ramp Time :0.5ms
Sync :Clock

Hole No. **:SHD-021**
380890E, 5358890N
Depth :50-600m
Channels :31
Components :X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

31-1-00 Up and send the data to Townsville. Drove out to the site, set up and completed the X-Y on SHD-21, loop #2. Still waiting to hear about the possible X-Y for SHD-22. Finished, packed up and returned to Zeehan by 6.20pm. Dumped and processed the data.

SURVEY PARAMETERS:

Loop #2 :500 x 600m
380000E; 5359200N: 380170E; 5358750N
380600E; 5358700N: 380600E; 5359050N:
380515E; 5359200N: 380000E; 5359200N
Current :13 Amps
Time Base :20ms
Ramp Time :0.5ms
Sync :Clock

Hole No. **:SHD-021**
380890E, 5358890N
Depth :610-910m
Channels :31
Components :X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

1-2-00 Up and out to the site. (Mike Asten requested that the Z be surveyed for SHD-22, loop #13, before he decides on the X-Y). Moved the borehole gear to SHD-22. Scott and Dale assisted in recovering loop #2 and laying out loop #13. Set up and read the Z component on SHD-22, loop #13. Packed up and returned to Zeehan by 7.45pm.

SURVEY PARAMETERS:

Loop #13	:500 x 600m
	380900E; 5358100N: 381380E; 5358100N
	381300E; 5358500N: 380900E; 5358500N:
Current	:12 Amps
Time Base	:20ms
Ramp Time	:0.5ms
Sync	:Clock
Hole No.	**:SHD-022**
	380620E, 5358410N
Depth	:80-615m
Channels	:31
Components	:Z

1 Survey day $1250.00
1 Field Assist. day $ 180.00

2-2-00 Up, had breakfast and drove to the office for the decision on what X-Y's need to be surveyed. Waited until 10.30am for the decision, then drove out to the site (X-Y on SHD-22, loop #9 only). Set up on loop #9 and read the X-Y for SHD-22. Again lots of noise and stacking etc. Packed up and returned to town by 6.00pm.

SURVEY PARAMETERS:

Loop #9	:500 x 600m
	379500E; 5358400N: 380010E; 5358400N:
	379820E; 5358800N: 379500E; 5358800N
Current	:13 Amps
Time Base	:20ms
Ramp Time	:0.5ms
Sync	:Clock
Hole No.	**:SHD-022**
	380620E, 5358410N
Depth	:50-420m
Channels	:31
Components	:X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

3-2-00 Up and out to site, set up and completed the X-Y for SHD-22. Loaded up all borehole gear and moved it to the staging area.

Recovered loop #9, packed all the gear onto vehicle and returned to Zeehan. Dumped and processed the data, gave the plots to Scott and emailed the data. Job completed at long last.

SURVEY PARAMETERS:

Loop #9	:500 x 600m 379500E; 5358400N: 380010E; 5358400N: 379820E; 5358800N: 379500E; 5358800N
Current	:13 Amps
Time Base	:20ms
Ramp Time	:0.5ms
Sync	:Clock
Hole No.	**:SHD-022** 380620E, 5358410N
Depth	:430-615m
Channels	:31
Components	:X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

Appendix

675338

CRONE PULSE EM SYSTEM

SYSTEM DESCRIPTION

The Crone Pulse EM system is a time domain electromagnetic method (TDEM) that utilizes an alternating pulsed primary current with a controlled shut-off and measures the rate of decay of the induced secondary field across a series of time windows during the off-time. The system uses a transmit loop of any size or shape. A portable power source feeds a transmitter which provides a precise current waveform through the loop. The receiver apparatus is moved along surface lines or down boreholes.

The transmitter cycle consists of slowly increasing the current over a few milliseconds, a constant current, abrupt linear termination of the current, and finally zero current for a selected length of time in milliseconds. The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic field will decay with time. The amplitude of the secondary field and the decay rate are dependent on the quality and size of the conductor. The receiver, which is synchronized to the off-time of the transmitter, measures this transient magnetic field where it cuts the surface coil or borehole probe. These readings are across fixed time windows or "channels".

SYSTEM TERMINOLOGY

Ramp Time

"Ramp time" refers to the controlled shut-off of the transmitter current. Three ramp times are selectable by the operator; 0.5ms, 1.0ms, and 1.5ms. By controlling the shut-off rather than having it depend on the loop size and current ensures that the same waveform is maintained for different loops so data can be properly compared.

The 1.5ms ramp is the normally used setting for good conductors. It keeps the early channel responses on scale and decreases the chance of overload. The faster ramp times of 1.0ms and 0.5ms will enhance the early time responses. This can be useful for weak conductors when data from the higher end of the frequency spectrum is desired.

Time Base

Time base is the length of time the transmitter current is off (it includes the ramp time). This also equals the on time of the current. Eight time bases are selectable by the operator. They include the original time bases used in the analog system as well as time bases to eliminate the effects of powerline interference. The eight time bases are as follows: compatible to analog Rx: 10.89ms, 21.79ms; 60hz powerline noise reduction: 8.33ms, 16.66ms, & 33.33ms; 50hz powerline noise reduction: 10.00ms, 20.00ms, 50.00ms and 150ms.

Since readings are taken during the off cycles, the time base will have an effect on the receiver channels. Normally, a standard time base is selected for the type of system and survey being used, but this can be changed to suit a particular situation. A longer time base is preferred for conductors of greater time constants, and in surveys such as resistive soundings where more channels are desired.

Zero Time Set

The term "zero time set" or "ZTS" refers to the starting point for the receiver channel measurements. It is manually set on the receiver by the operator thus allowing adjustments for the ramp times and fine tuning for any fluctuations in the transmitter signal.

Receiver Channels

The rate of decay of the secondary field is measured across fixed time windows which occupy most of the off-time of the transmitter. These time windows are referred to as "channels". These channels are numbered in sequence with "1" being the earliest. The analog and datalogger receivers measured eight fixed channels. The digital receiver, being under software control, offers more flexibility in the channel positioning, channel width, and number of channels.

PP Channel

The PEM system monitors the primary field by taking a measurement during the current ramp and storing this information in a "PP channel". This means that data can be presented in either normalized or unnormalized formats, and additional information is available during interpretation. The PP channel data can provide useful diagnostic information and helps avoid critical errors in field polarity.

Synchronization

Since the PEM system measures the secondary field in the absence of the primary field, the receiver must be in

"sync" with the transmitter to read during the off-time. There are three synchronization methods available: cable connection, radio telemetry, and crystal clock. This flexibility enhances the operational capabilities of the system.

SURVEY METHODS

The wide frequency spectrum of data produced by a Pulse EM survey can be used to provide structural geological information as well as the direct detection of conductive or conductive associated ore deposits. The various types of survey methods, from surface and borehole, have greatly improved the chances of success in deep exploration programs. There are eight basic profiling methods as well as a resistivity sounding mode.

Moving Coil

A small, multi-turn transmitter loop (13.7m diameter) is moved for each reading while the receiver remains a fixed distance away. This method is ideal for quick reconnaissance in areas of high background conductivity.

Moving Loop

Same as Moving Coil method, but with a larger transmit loop (100 to 300 meters square). This method provides deeper penetration in areas of high background conductivity, and works best for near-vertical conductors. This method can be used in conjunction with the Moving In-loop survey for increased sensitivity to horizontal conductors.

Moving In-Loop

A transmit loop of size 100 to 300 meters square is moved for each reading while the receiver remains at the center of the loop. This method provides deep penetration in areas of very high background conductivity, and works best for near-horizontal conductors. It can be used in conjunction with the Moving Loop survey.

Large In-Loop

A very large, stationary transmit loop (800m square or more) is used, and survey lines are run inside the loop. This mode provides very deep penetration (700m or more) and couples best with shallow dip conductors (<45 deg.) under the loop.

Deepem

A large, stationary transmit loop is used, and survey lines are run outside the loop. This mode provides very deep penetration, and couples best with steeply dipping conductors (>45 deg.) outside the loop.

Borehole (Z Component only)

Isolated Borehole: A drill hole is surveyed by lowering a probe down a hole and surveying it with a number of transmit loops laid out on surface. The data from multiple loops gives directional information on the conductors.

Multiple Boreholes: One large transmit loop is used to survey a number of closely spaced holes. The change in anomaly from hole to hole provides directional information.

These methods have detected conductors to depths of 2500m from surface and up to 200m from the hole.

3-D Borehole

Drill holes are surveyed with both the Z and the XY borehole probes. The X and Y components provide accurate direction information using just one transmit loop.

Since the probe rotates as it moves down the hole a correction is required for the X-Y data. This is accomplished in one of two ways. The standard approach is to use the measurement of the primary field from the "PP" channel, apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation device for the X-Y probe which is produced in cooperation with IFG Corp. This attachment uses dipmeters to calculate the probe rotation.

Underground Borehole

Underground drill holes can be surveyed in any of the above mentioned borehole methods with one or more transmit loops on the surface. Near-horizontal holes can be surveyed using a push-rod system.

Resistivity Soundings

By reading a large number of channels in the centre of a transmit loop it is possible to preform a decay curve analysis giving a best-fit layer earth model using programs such as ARRTI or TEMIX.

EQUIPMENT

Transmit Loops

The PEM system can operate with practically any size of transmit loop, from a multi-turn circular loop 13.7m in diameter, to a 1 or 2 turn loop of any shape up to 1 or 2 kilometers square using standard insulated copper wire of 10 or 12 gauge. The multi-turn loop is made in two sections with screw connectors. The 10 or 12 gauge loop wire comes on spools in either 300m or 400m lengths.

Power Supply

The PEM system normally operates with an input voltage from 24v to 120v. The maximum current is 20 amps in a single loop but the effective current can be increased by doubling the loop wire in series. For low power surveys a 20amp/hr 24v battery can be used. The power supply requires a motor generator and a voltage regulator to control and filter the input voltage to the transmitter.

Specifications: PEM Motor Generator

- 4.5 hp Wisconsin, (2 kw)
- belt drive to D.C. alternator
- cable output to regulator
- maximum output: 120v, 20amp (2 kw);
- fuse type overload protection
- steel frame
- external gas tank
- unit weight: 33kg (2 kw); 52kg (4 kw)

Specifications: PEM Variable Voltage Regulator

- selectable voltage between 24v and 120v or 48v and 240v
- 20amp maximum current
- fuse and internal circuit breaker protection

Transmitter

The transmitter controls the bi-polar on-off waveform and linear current shut-off ramp. The latest 2000w PEM Transmitter has the following specifications:

Specifications: PEM Transmitter

- time bases: 10.89ms, 21.79ms, 8.88ms, 16.66ms, 33.33ms, 10ms, 20ms, 50ms 150ms.
- ramp times: 0.5ms, 1.0ms, 1.5ms
- operating voltage: 24v to 120v (2 kw); 48v to 240v (4 kw)
- output current: 5amp to 20amp
- monitors for input voltage, output current, shut-off ramp, tx loop continuity, instrument temperature, and overload output current
- automatic shut-off for open loop, high instrument temperature, and overload
- fuse and circuit breaker overload protection
- three sync modes: 1) built-in radio and antenna
  2) cable sync output for direct wire link to receiver or remote radio
  3) connectors for the crystal clock

Receiver

The receivers measure the rate of decay of the secondary field across several time channels. Three types of receivers are available with the PEM system: Analog Rx, Datalogger Rx, and Digital Rx. The Analog Rx and Datalogger Rx read eight fixed time channels while the Digital Rx, under software control, offers a variety of channel configurations. The Digital Rx has been used in the field for contract surveys since 1987.

Specifications: Digital PEM Receiver

- operating temperature -40°C to 50°C
- unit weight 15kg; shipping weight 25.5kg

Hardware:

- 24v rechargeable gel cell battery supply
- two CMOS microprocessors (NSC800)
- alphanumeric keyboard

- 2 x 16 character cold weather display
- 16 x 40 character (256 x 128 pixels graphic) display
- 64k byte solid state memory storage
- cable, radio or crystal clock synchronization
- RS-232 serial I/O

Sampling process features:
- 16 bit A/D conversion
- digital recording of data in nano-tesla/sec
- rejection of atmospheric noise samples based on digital threshold detection
- automatic gain control to optimize receiver signal to noise ratio

Menu driven operating software system offering the following functions:
- controls channel positions, channel widths, and number of channels using a basic slice of 4.5µsec
- time bases: 10.89ms, 21.79ms, 8.88ms, 16.66ms, 33.33ms, 10ms, 20ms, 50ms and 150ms
- ramp time selectable in 4.5µsec steps
- sample stacking from 512 to 65536
- scrolling routines for viewing data
- graphic display of decay curve and profile with various plotting options
- routines for memory management
- control of data transmission
- provides information on instrument and operating status

Sync Equipment

There are three modes of synchronization available; radio, cable, and crystal clock. The radio sync signal can be transmitted through a booster antenna from either the PEM Transmitter internal radio or through a Remote Radio.

Specifications: Sync Cable
- 2 conductor, 24awg, teflon coated
- approx. 900m per aluminum spool with connectors

Specifications: Remote Radio
- operating frequency 27.12mhz
- 12v rechargeable gel cell battery supply
- fuse protection
- sync wire link to transmitter
- coaxial link to booster antenna

Specifications: Booster Antenna
- 8m, 4 section aluminum mast
- guide rope support
- ¼ wave CB fiberglass antenna
- range up to 2km
- coaxial connection to transmitter or remote radio

Specification: Crystal Clocks
- heat stabilized crystals
- 24v rechargeable gel cell battery supply
- rx unit can be separate or housed in the receiver
- outlet for external supplementary battery supply

Surface PEM Receive Coil

The Surface PEM Receive Coil picks up the EM field to be measured by the receiver. The coil is mounted on a tripod that can be positioned to take readings of any component of the field.

Specifications: Surface PEM Receive Coil
- ferrite core antenna
- built-in preamplifier
- VLF filter
- 10khz bandwidth
- 23:1 amplifier gain
- two 9v transistor battery supply
- tripod adjustable to all planes

Borehole PEM Z Component Probe

The Z component probe measures the axial component of the EM field. The Z component data is not affected

by probe rotation so no correction are required.

Specifications: Borehole PEM Z Component Probe

- ferrite core
- built-in preamplifier
- dimensions: length - 1.6m; dia - 3.02cm (3.15cm for high pressure tested probes)
- internal rechargeable ni-cad battery supply
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths 2800m

Borehole PEM XY Component Probe

The XY probe measures two orthogonal components of the EM field perpendicular to the axis of the hole. Correction for probe rotation can be achieved by two methods. The standard approach is to use the measurement of the primary field from the "PP" channel, apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation device for the X-Y probe that uses dipmeters to calculate the probe rotation.

Specifications: Borehole PEM XY Component Probe

- ferrite core
- built-in preamplifier
- dimensions: length - 2.01m; dia - 3.02cm
- internal rechargeable ni-cad battery supply
- selection of X or Y coils by means of a swich box on surface or automatic switching with Digital receiver
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths to 2800m

Orientation Device

The orientation device is an optional attachment for the XY probe which measures the rotation of the probe using two dipmeters.

Specifications: Orientation Device

- 2 axis tilt sensors
- sensitivity +/- 0.1 deg.
- operating range -89.5 to -10 deg.
- dimensions: length - 0.94m; dia - 28.5cm

Borehole Equipment

To lower the probe down a drill hole requires a cable and spool, winch assembly frame and cable counter. Borehole surveys also require equipment to "dummy probe" the hole before doing the survey.

Specifications: Borehole Cable

- two conductor shielded cable
- kevlar strengthened
- currently 1500m but will shortly have cabability of surveying to depths of 3000m.

Specifications: Slip Ring

- attaches to side of borehole cable spool providing a connection to the receiver while allowing the spool to turn.
- VLF filter
- pure silver contacts

Specifications: Borehole Counter

- attaches to the drill hole casing
- calibrated in meters

Specifications: Dummy Probe and Cable

- solid steel or steel pipe
- same dimensions as borehole probe
- shear pin connection to dummy cable

675343

PLOTS

675344

CONTENTS

Plan No.	Plan Type	ID.	Description	Scale
1	Plan	SHD-20/22	Drillhole Location plan	1:15000
2	Section	SHD-20	Primary Field plot	1:10000
3			Primary Field plot	1:10000
4			Primary Field plot	1:10000
5		SHD-21	Primary Field plot	1:10000
6			Primary Field plot	1:10000
7			Primary Field plot	1:10000
8		SHD-22	Primary Field plot	1:10000
9			Primary Field plot	1:10000
10	Header	SHD-20	Header information	N/A
11	Profile	(SH11)	Z - Log plot	1:4000
12			- Linear, Ch1-10, 1:25	1:4000
13			- Linear, Ch10-20, 1:10	1:4000
14			- Linear, Ch20-31, 1:2	1:4000
15			X - Log plot	1:4000
16			- Linear, Ch1-10, 1:50	1:4000
17			- Linear, Ch10-20, 1:5	1:4000
18			- Linear, Ch20-31, 1:2	1:4000
19			Y - Log plot	1:4000
20			- Linear, Ch1-10, 1:50	1:4000
21			- Linear, Ch10-20, 1:5	1:4000
22			- Linear, Ch20-31, 1:2	1:4000
23			Total Field plot	1:4000
24	Header	SHD-20	Header information	N/A
25	Profile	(SH12)	Z - Log plot	1:4000
26			- Linear, Ch1-10, 1:250	1:4000
27			- Linear, Ch10-20, 1:5	1:4000
28			- Linear, Ch20-31, 1:2	1:4000
29	Header	SHD-20	Header information	N/A
30	Profile	(SH14)	Z - Log plot	1:4000
31			- Linear, Ch1-10, 1:100	1:4000
32			- Linear, Ch10-20, 1:5	1:4000
33			- Linear, Ch20-31, 1:2	1:4000
34	Header	SHD-21	Header information	N/A
35	Profile	(SH1)	Z - Log plot	1:4000
36			- Linear, Ch1-10, 1:1000	1:4000
37			- Linear, Ch10-20, 1:10	1:4000
38			- Linear, Ch20-31, 1:2	1:4000
39			X - Log plot	1:4000
40			- Linear, Ch1-10, 1:1000	1:4000
41			- Linear, Ch10-20, 1:20	1:4000
42			- Linear, Ch20-31, 1:5	1:4000
43			Y - Log plot	1:4000
44			- Linear, Ch1-10, 1:1000	1:4000
45			- Linear, Ch10-20, 1:20	1:4000

675345

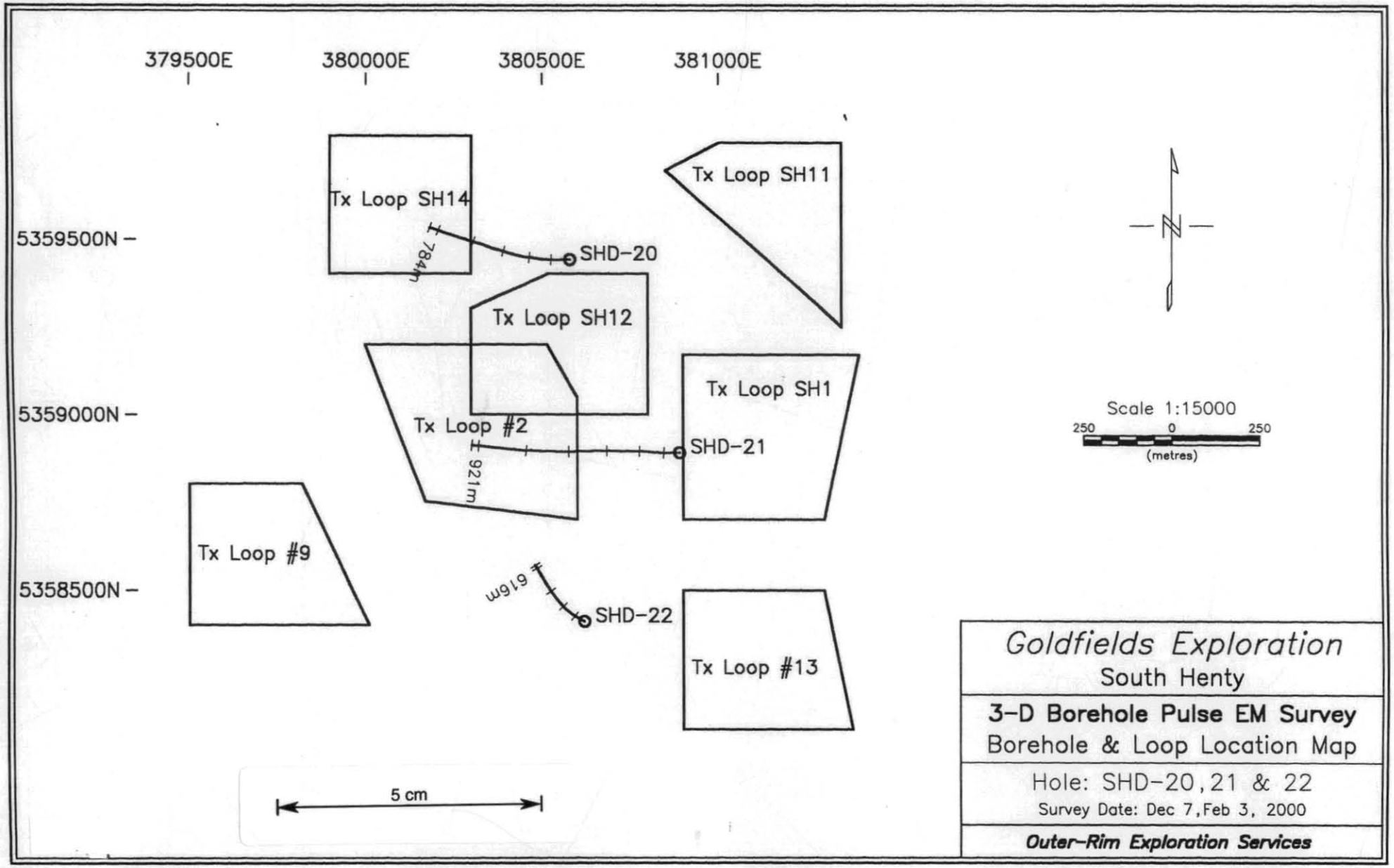
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Plan No.	Plan Type	ID.	Description	Scale
46	Profile	SHD-21	Y - Linear, Ch20-31, 1:5	1:4000
47		(SH1)	Total Field plot	1:4000
48	Header	SHD-21	Header information	N/A
49	Profile	(SH2)	Z - Log plot	1:4000
50			- Linear, Ch1-10, 1:250	1:4000
51			- Linear, Ch10-20, 1:10	1:4000
52			- Linear, Ch20-31, 1:2	1:4000
53			X - Log plot	1:4000
54			- Linear, Ch1-10, 1:500	1:4000
55			- Linear, Ch10-20, 1:10	1:4000
56			- Linear, Ch20-31, 1:2	1:4000
57			Y - Log plot	1:4000
58			- Linear, Ch1-10, 1:500	1:4000
59			- Linear, Ch10-20, 1:10	1:4000
60			- Linear, Ch20-31, 1:2	1:4000
61			Total Field plot	1:4000
62	Header	SHD-21	Header information	N/A
63	Profile	(SH9)	Z - Log plot	1:4000
64			- Linear, Ch1-10, 1:100	1:4000
65			- Linear, Ch10-20, 1:5	1:4000
66			- Linear, Ch20-31, 1:2	1:4000
67			X - Log plot	1:4000
68			- Linear, Ch1-10, 1:100	1:4000
69			- Linear, Ch10-20, 1:15	1:4000
70			- Linear, Ch20-31, 1:2	1:4000
71			Y - Log plot	1:4000
72			- Linear, Ch1-10, 1:100	1:4000
73			- Linear, Ch10-20, 1:15	1:4000
74			- Linear, Ch20-31, 1:2	1:4000
75			Total Field plot	1:4000
76	Header	SHD-22	Header information	N/A
77	Profile	(SH9)	Z - Log plot	1:4000
78			- Linear, Ch1-10, 1:100	1:4000
79			- Linear, Ch10-20, 1:5	1:4000
80			- Linear, Ch20-31, 1:2	1:4000
81			X - Log plot	1:4000
82			- Linear, Ch1-10, 1:100	1:4000
83			- Linear, Ch10-20, 1:10	1:4000
84			- Linear, Ch20-31, 1:2	1:4000
85			Y - Log plot	1:4000
86			- Linear, Ch1-10, 1:100	1:4000
87			- Linear, Ch10-20, 1:10	1:4000
88			- Linear, Ch20-31, 1:2	1:4000
89			Total Field plot	1:4000
90	Header	SHD-22	Header information	N/A

675346

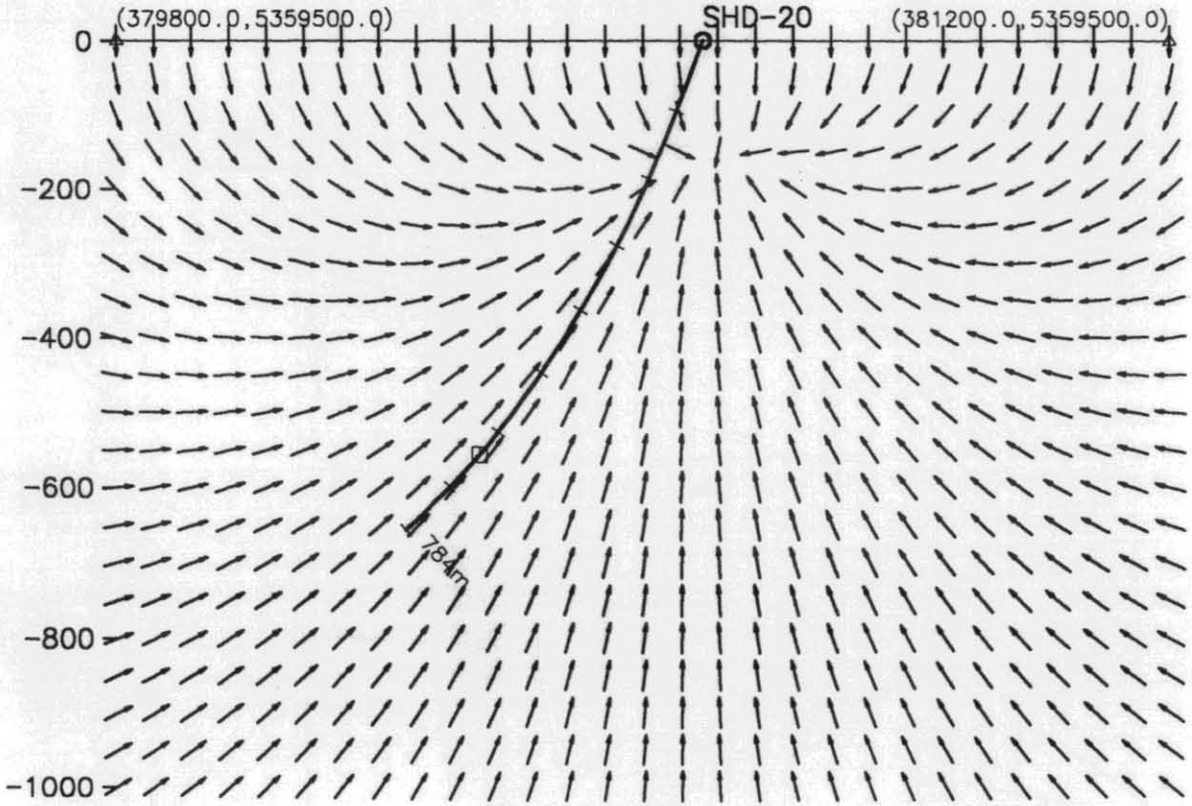
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Plan No.	Plan Type	ID.		Description	Scale
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92		(SH13)		- Linear, Ch1-10, 1:100	1:4000
93				- Linear, Ch10-20, 1:10	1:4000
94				- Linear, Ch20-31, 1:2	1:4000


379500E
380000E
380500E
381000E
5359500N
5359000N
5358500N
Tx Loop SH14
784m
SHD-20
Tx Loop SH11
Tx Loop SH12
Tx Loop SH1
Tx Loop #2
921m
SHD-21
Tx Loop #9
618m
SHD-22
Tx Loop #13
N
Scale 1:15000
250 0 250
(metres)
5 cm
Goldfields Exploration
South Henty
3-D Borehole Pulse EM Survey
Borehole & Loop Location Map
Hole: SHD-20, 21 & 22
Survey Date: Dec 7, Feb 3, 2000
Outer-Rim Exploration Services

675341

Loop SH12



Scale 1:10000

100 0 100 200

(metres)

5 cm

Goldfield Exploration

South Henty

3-D Borehole Pulse EM Survey

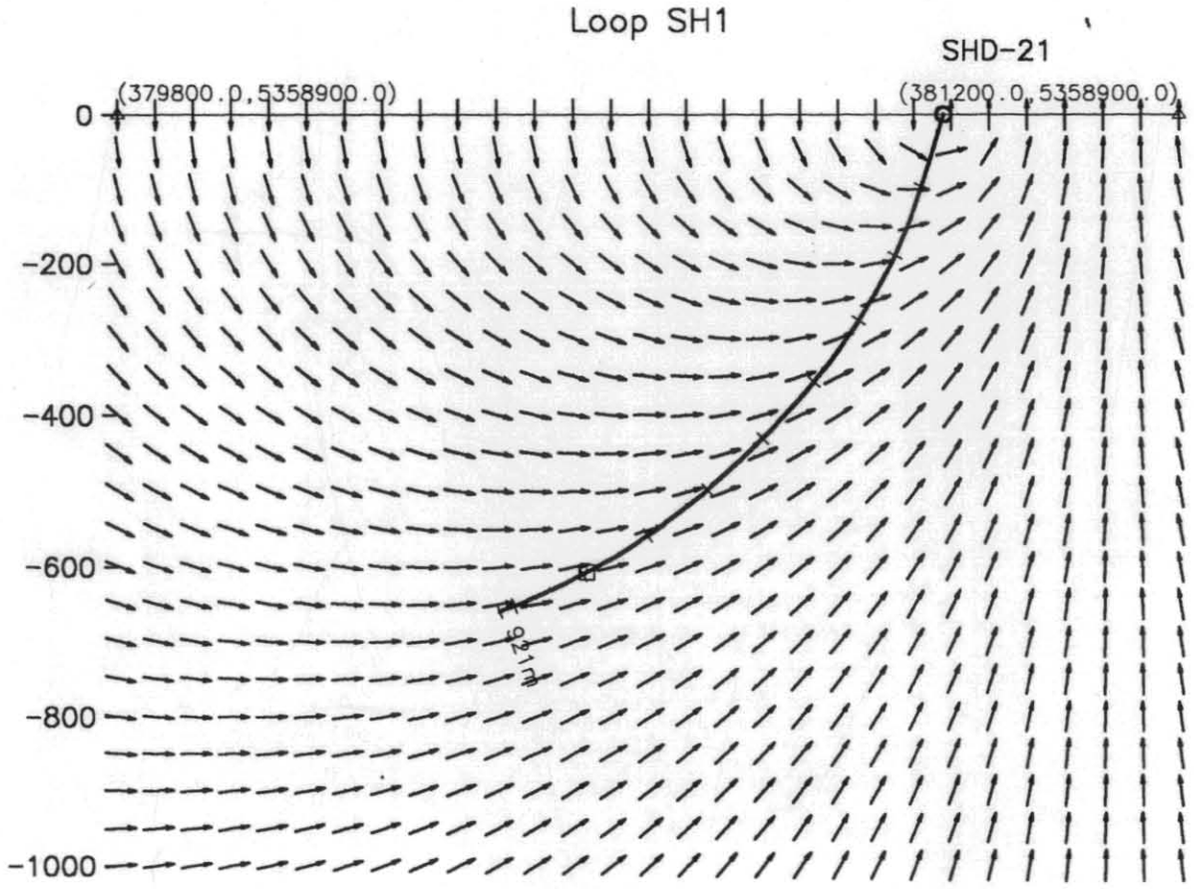
Hole Section with Primary Field

Hole: SHD-20

Survey Date: Dec 8, 1999

Outer-Rim Exploration Services

625348



Scale 1:10000

100 0 100 200

(metres)

5 cm

Goldfields Exploration

South Henty

3-D Borehole Pulse EM Survey

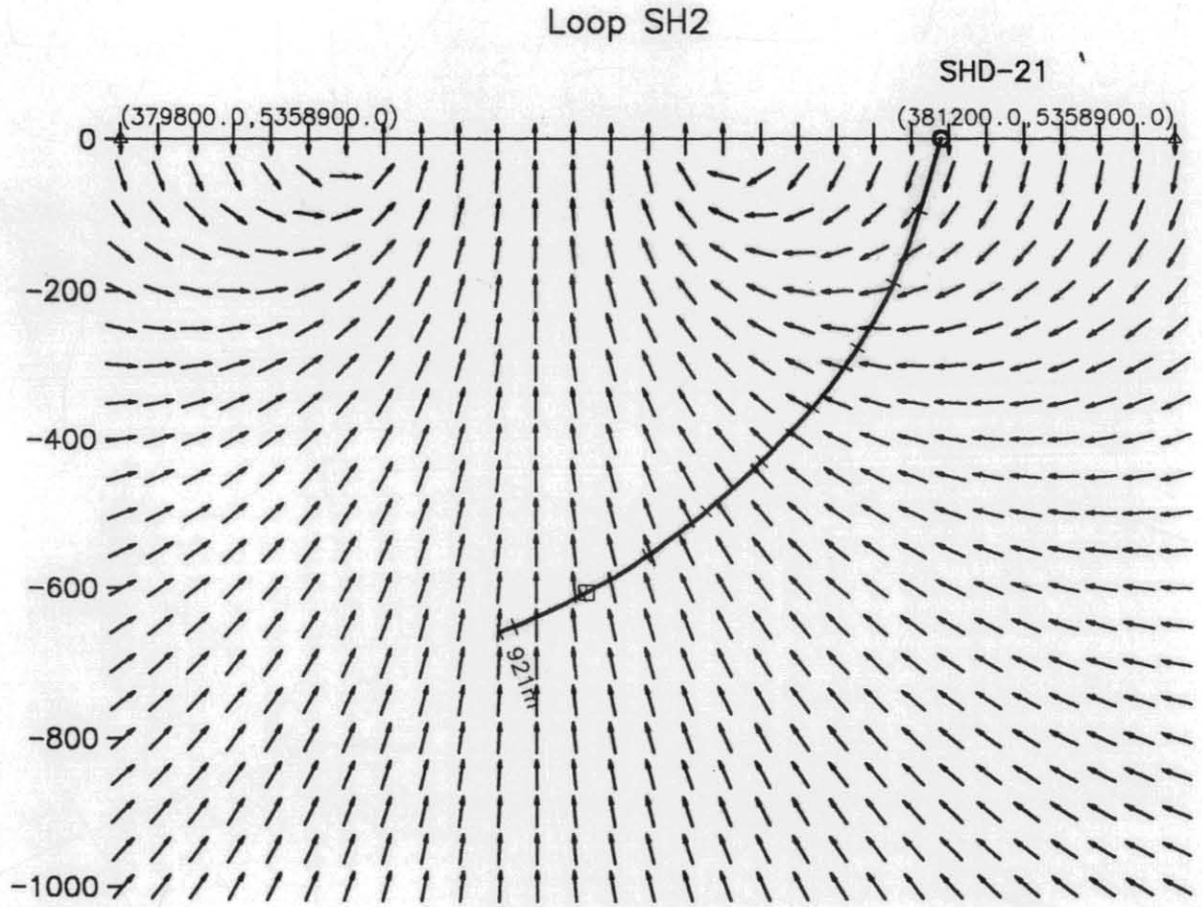
Hole Section with Primary Field

Hole: SHD-21

Survey Date: Dec 11, 1999

Outer-Rim Exploration Services

675349



Scale 1:10000

100 0 100 200

(metres)

5 cm

Goldfields Exploration

South Henty

3-D Borehole Pulse EM Survey

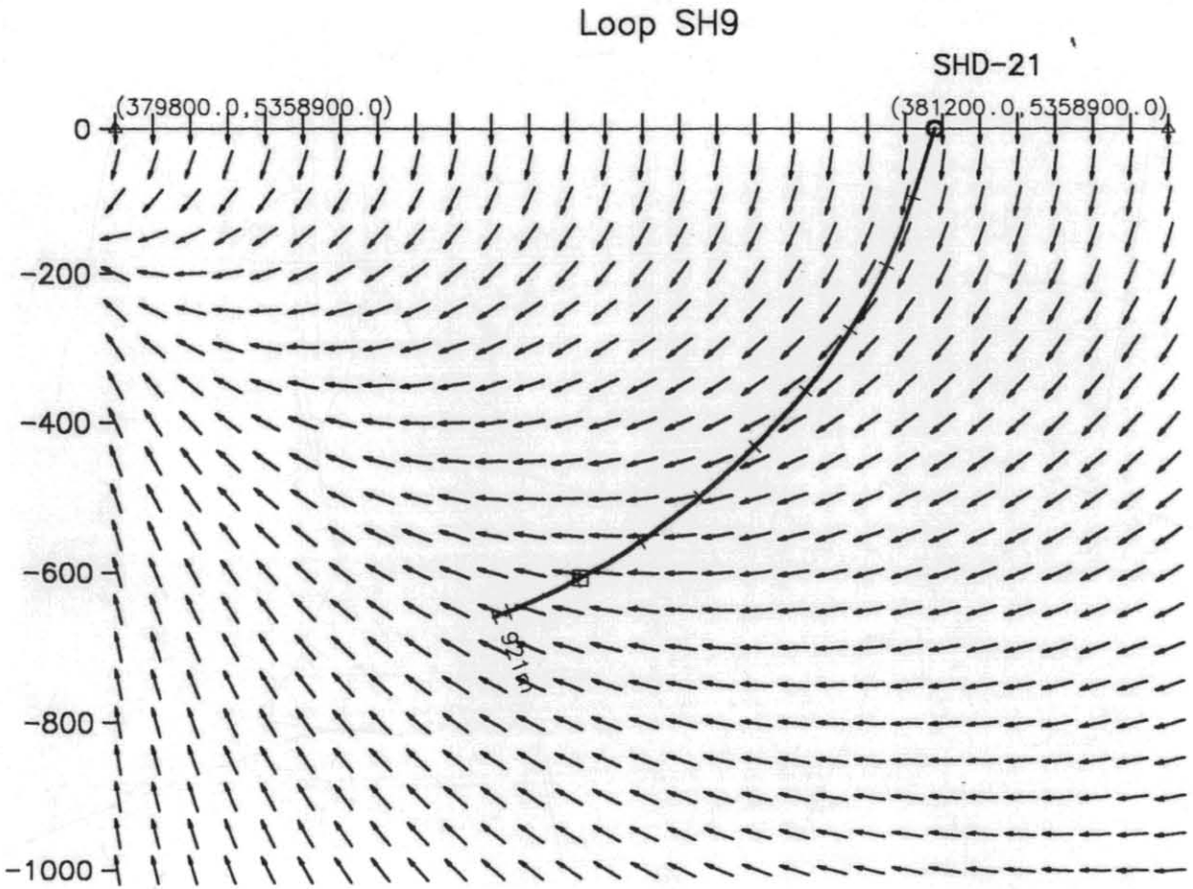
Hole Section with Primary Field

Hole: SHD-21

Survey Date: Jan 26, 2000

Outer-Rim Exploration Services

675350



Scale 1:10000

100 0 100 200

(metres)

5 cm

Goldfields Exploration

South Henty

3-D Borehole Pulse EM Survey

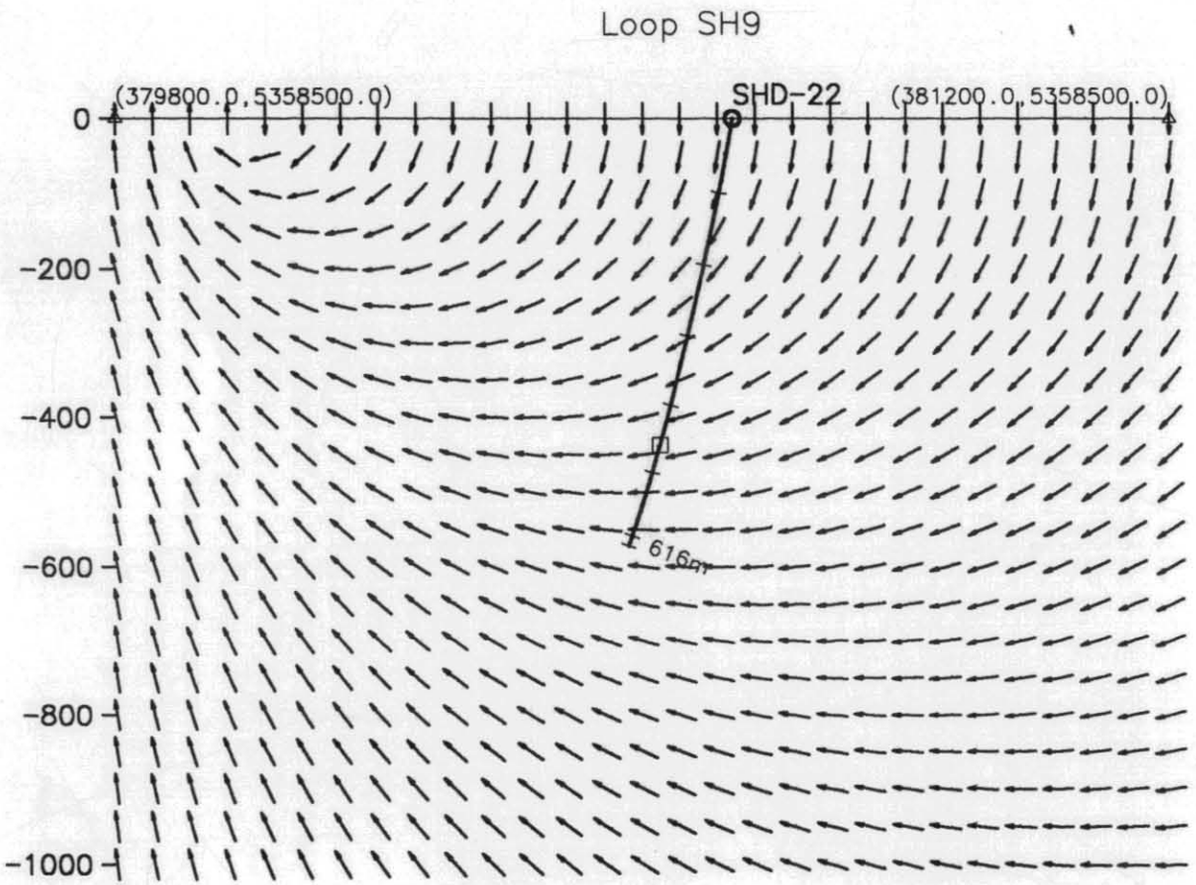
Hole Section with Primary Field

Hole: SHD-21

Survey Date: Jan 26, 2000

Outer-Rim Exploration Services

675351



Scale 1:10000

100 0 100 200

(metres)

5 cm

Goldfields Exploration

South Henty

3-D Borehole Pulse EM Survey

Hole Section with Primary Field

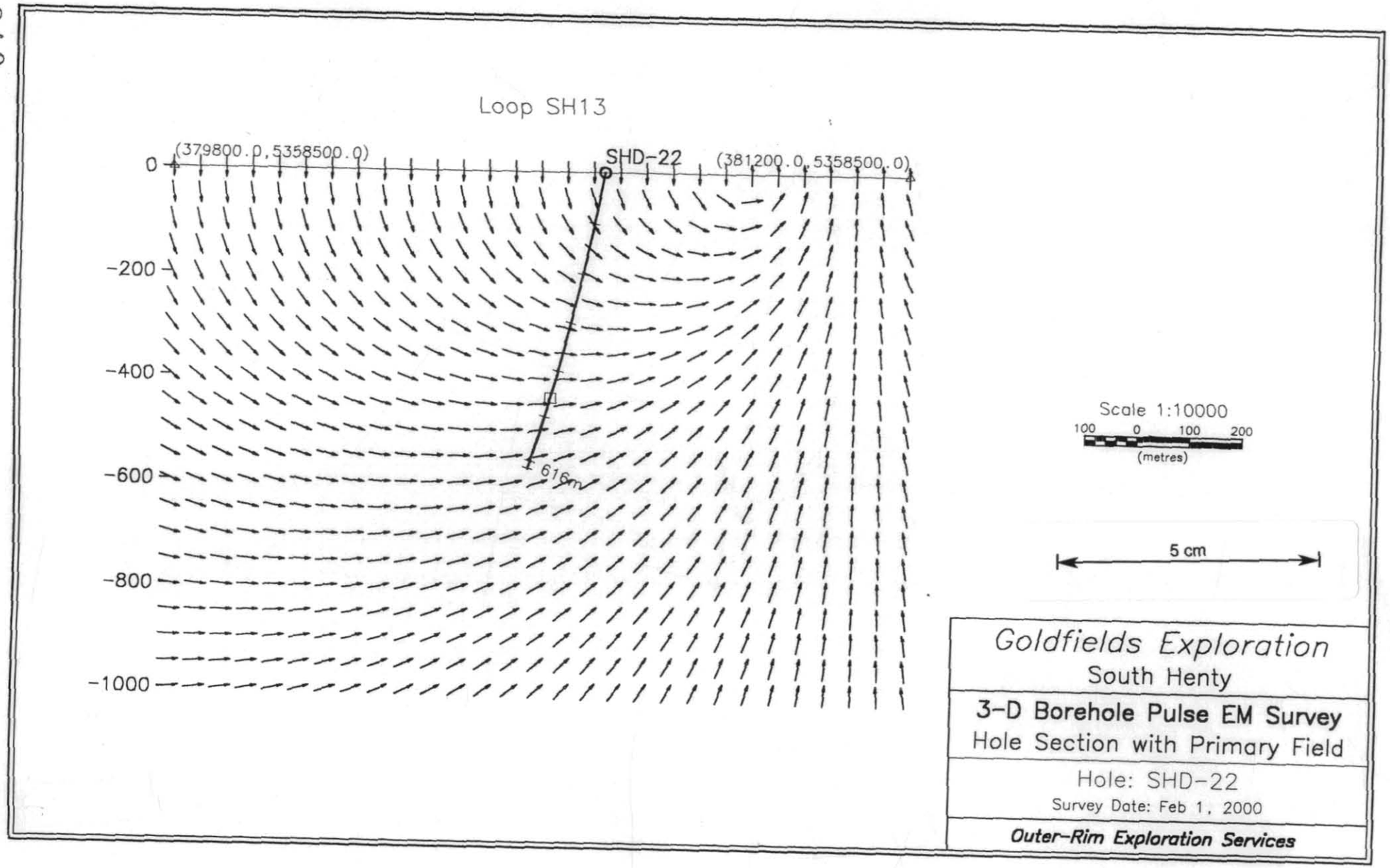
Hole: SHD-22

Survey Date: Jan 27, 2000

Outer-Rim Exploration Services

675359

6755353


Loop SH13
(379800.0,5358500.0)
SHD-22
(381200.0,5358500.0)
0
-200
-400
-600
-800
-1000
616m
Scale 1:10000
100 0 100 200
(metres)
5 cm
Goldfields Exploration
South Henty
3-D Borehole Pulse EM Survey
Hole Section with Primary Field
Hole: SHD-22
Survey Date: Feb 1, 2000
Outer-Rim Exploration Services

675354

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client	: **Goldfields Exploration**	Hole	: **SHD-20**
Grid	: **South Henty**	Tx Loop	: **SH11**
Date	: Dec 7, 1999	File name	: SHD20Z11.PEM
Time Base	: 20.00 ms	# Readings	: 89
Ramp Time	: 1.00 ms	Stn Units	: Metric
# Channels	: 31	Coil Area	: 6500 sq m
Sync Type	: Cable	Polarity	: +
Loop Size	: 600m X 500m	Receiver	: Digital #105
Current	: 13 Amps	Operator	: Brett Rankin

Loop Coordinates (X,Y,Z)

1. 381350m, 5.35925e+06m, 0m
2. 381350m, 5.35978e+06m, 0m
3. 381000m, 5.35978e+06m, 0m
4. 380850m, 5.3597e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. 380580m, 5.35944e+06m, 0m
2. 270deg, 70deg, 30m
3. 268deg, 69deg, 60m
4. 271deg, 69deg, 60m
5. 271deg, 67.5deg, 60m
6. 278deg, 65.2deg, 60m
7. 278deg, 62.3deg, 60m
8. 284deg, 60deg, 60m
9. 286deg, 58deg, 60m
10. 286.5deg, 55.5deg, 60m
11. 291deg, 53deg, 60m
12. 288deg, 50deg, 60m
13. 288deg, 46.5deg, 60m
14. 289deg, 43deg, 60m
15. 290deg, 41deg, 34m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

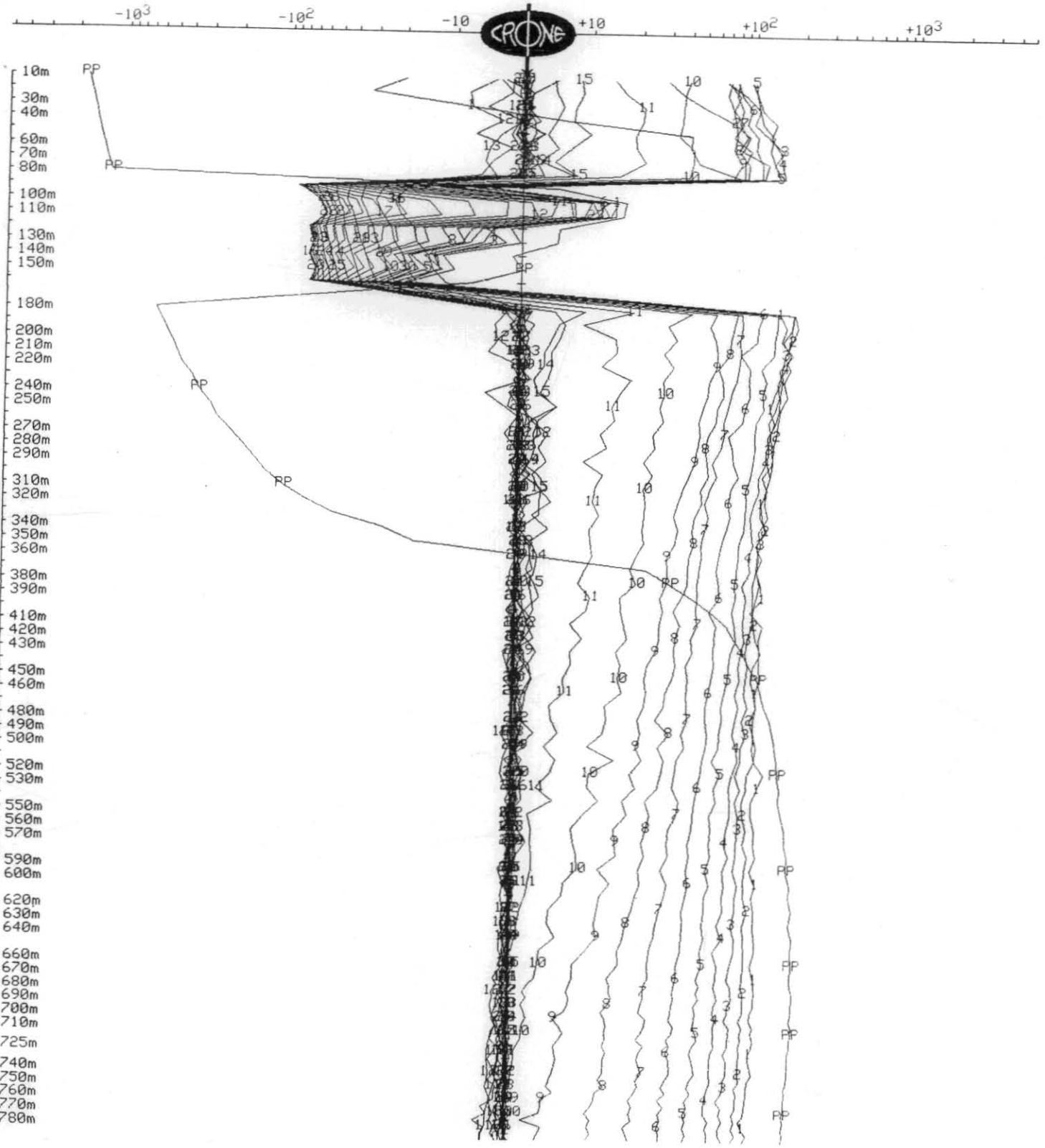
6275355

Client : Goldfields Exploration
Grid : South Henty
Date : Dec 7, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20Z11.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



5 cm

675356

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

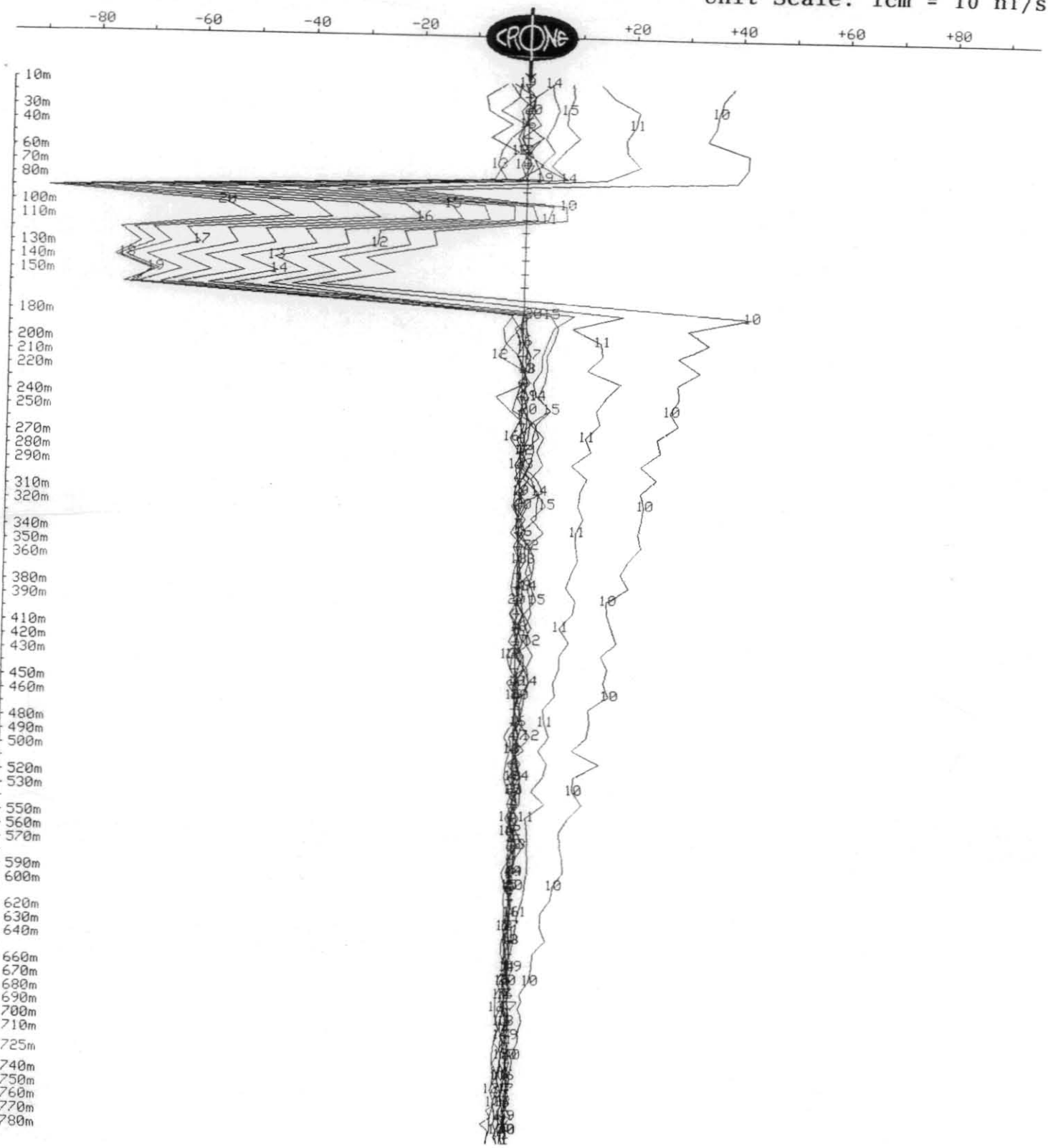
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 7, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20Z11.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



5 cm

675357

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

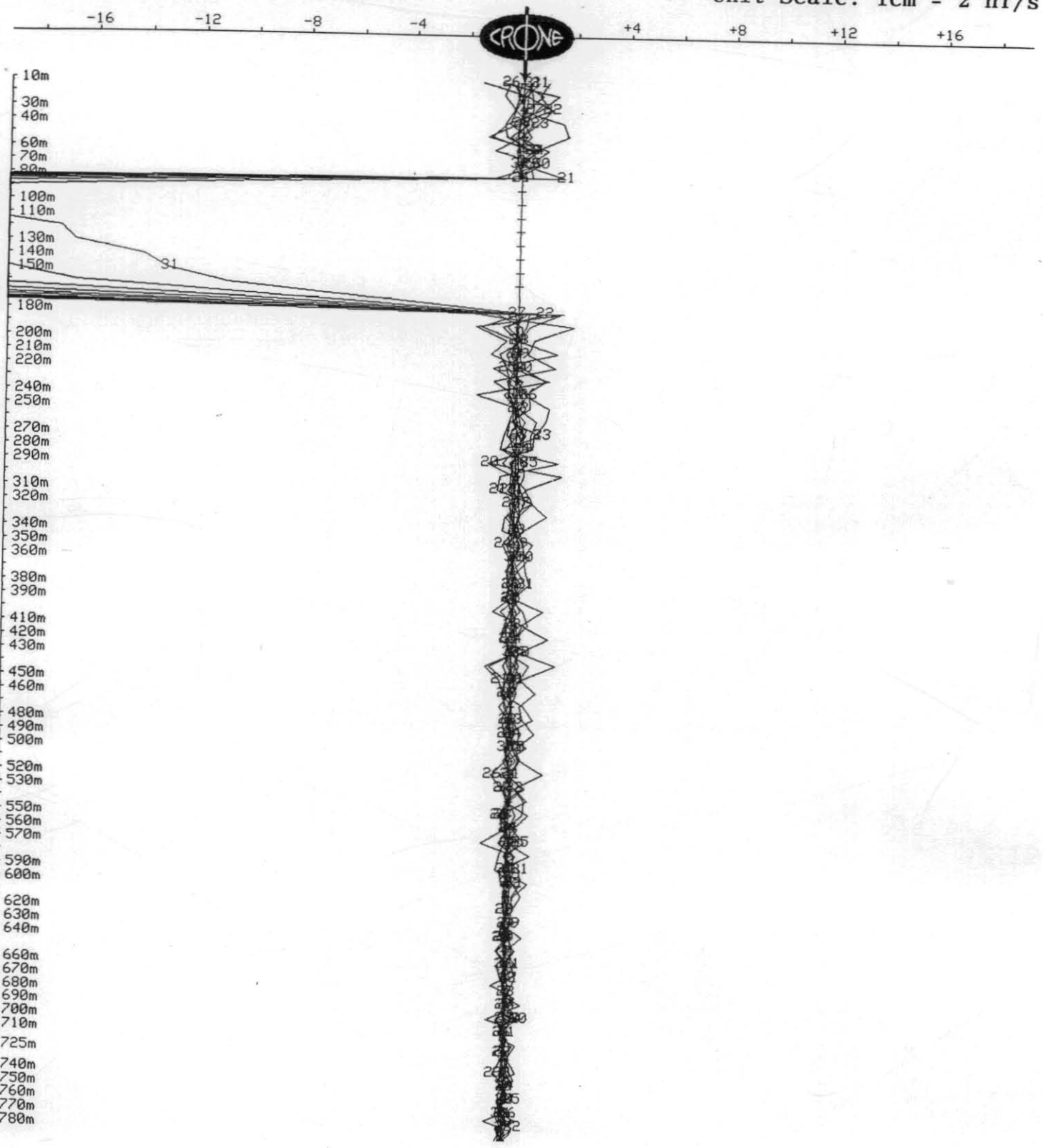
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 7, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20Z11.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

675358

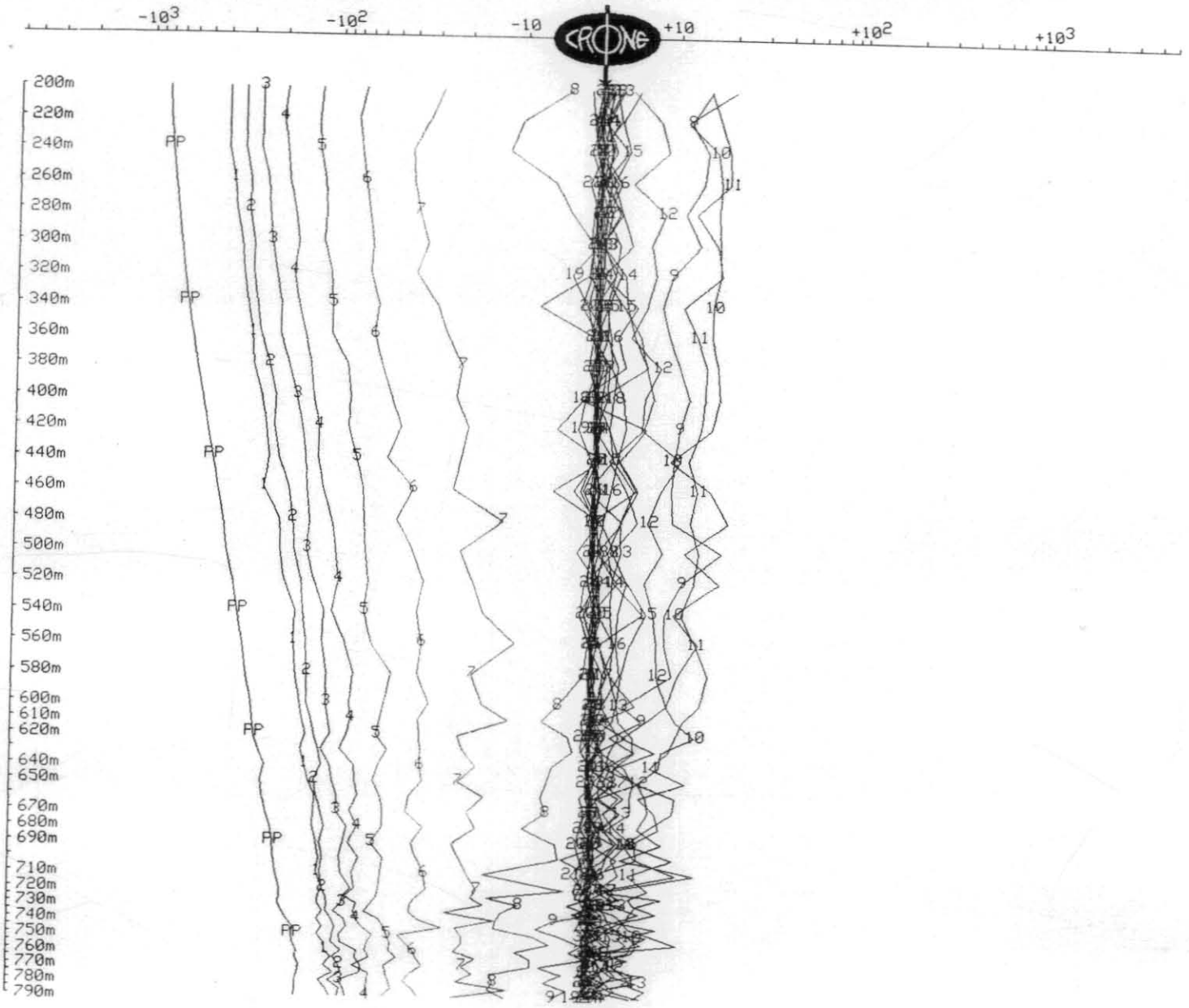
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675359

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

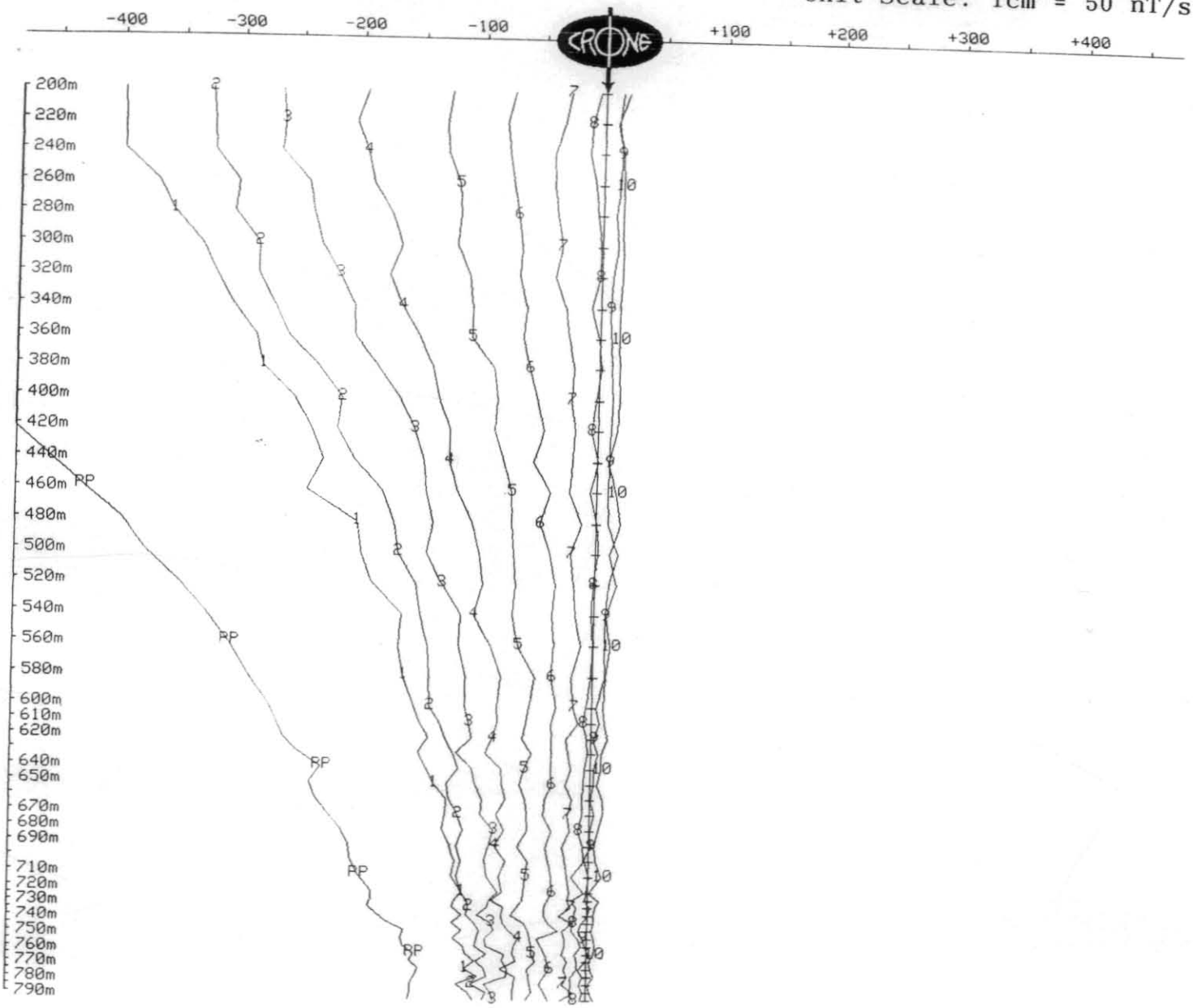
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 50 nT/s



675360

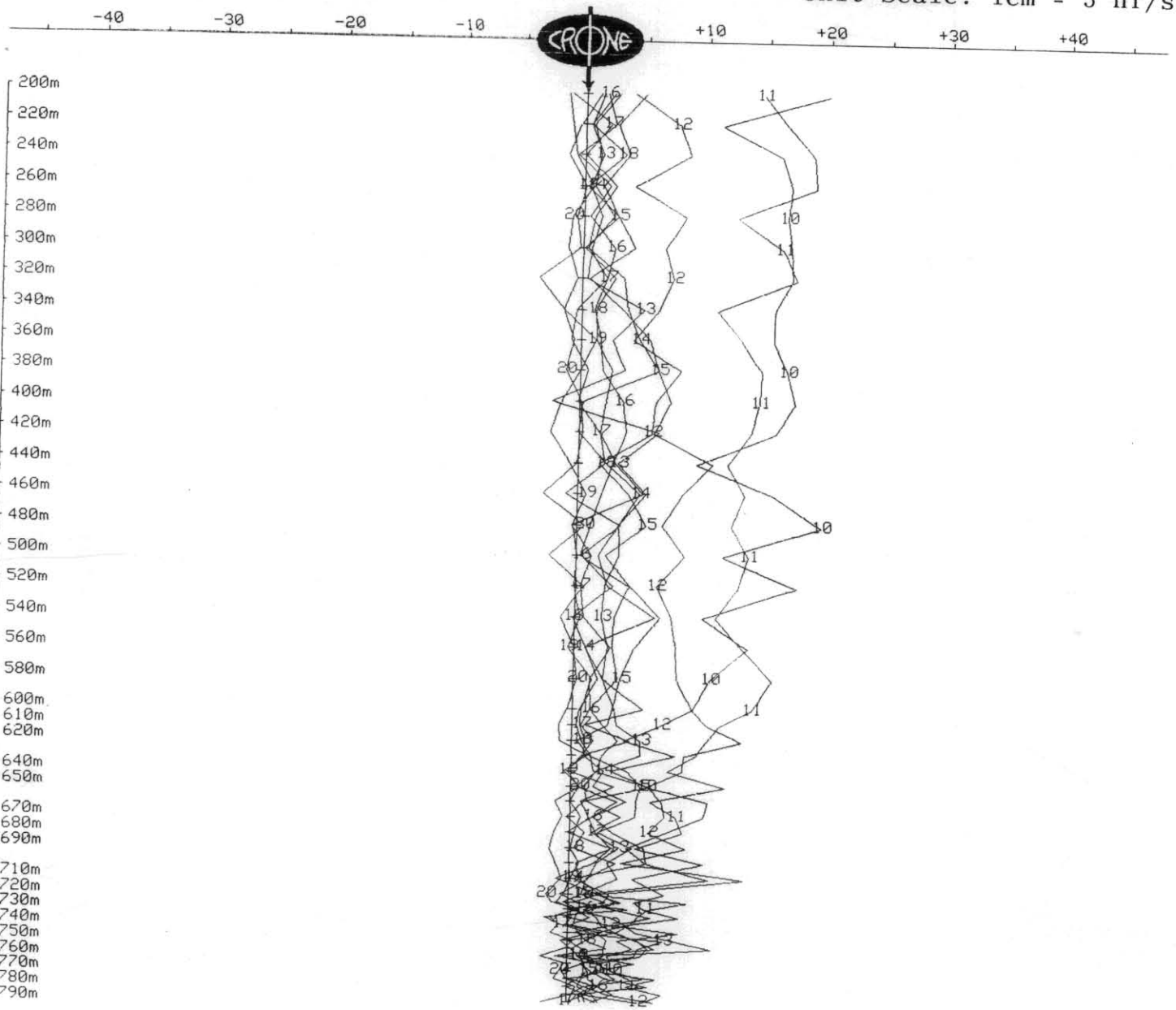
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client	: Goldfields Exploration	Hole	: SHD-20
Grid	: South Henty	Tx Loop	: SH11
Date	: Dec 8, 1999	File name	: SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 5 nT/s



675361

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

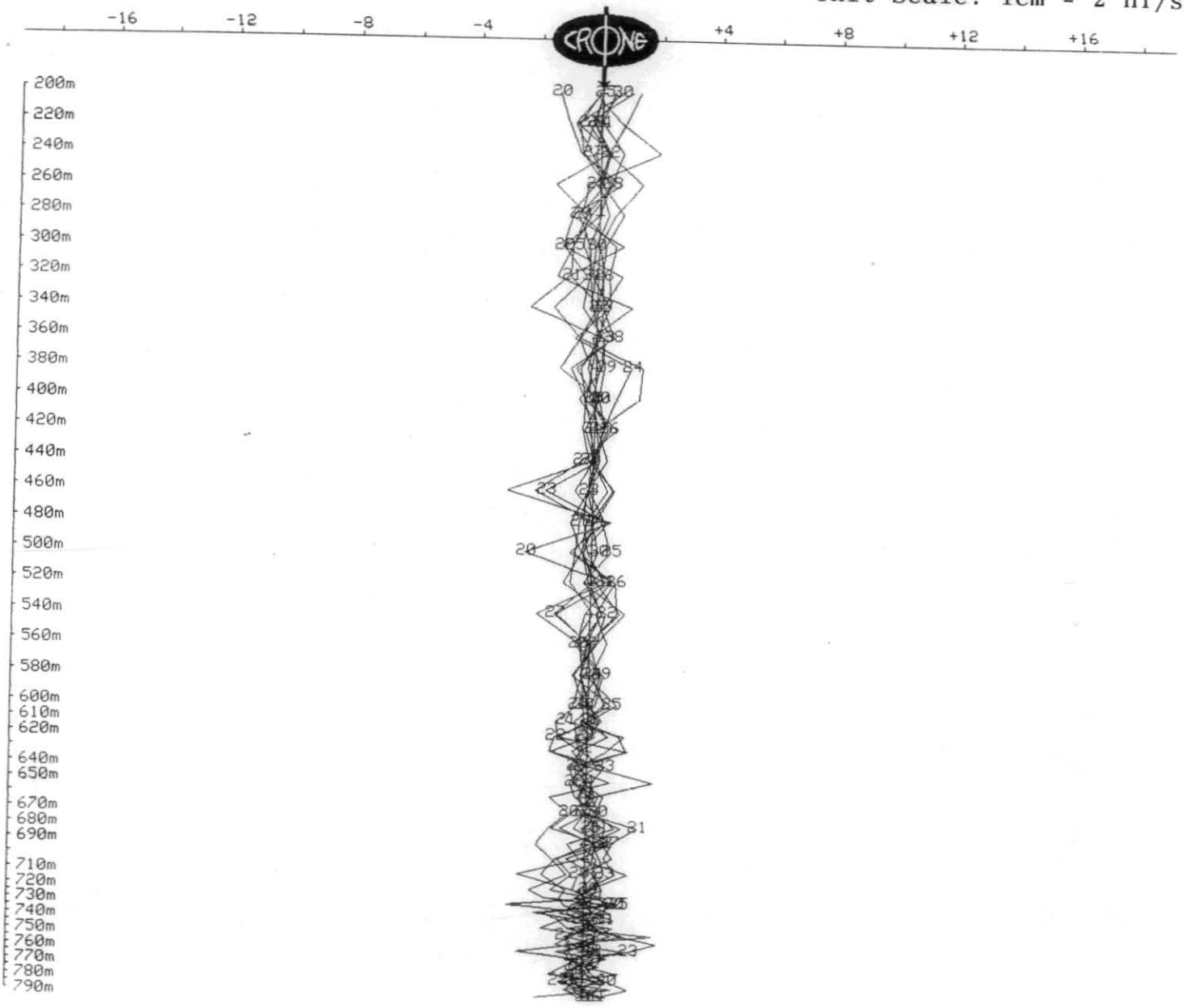
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



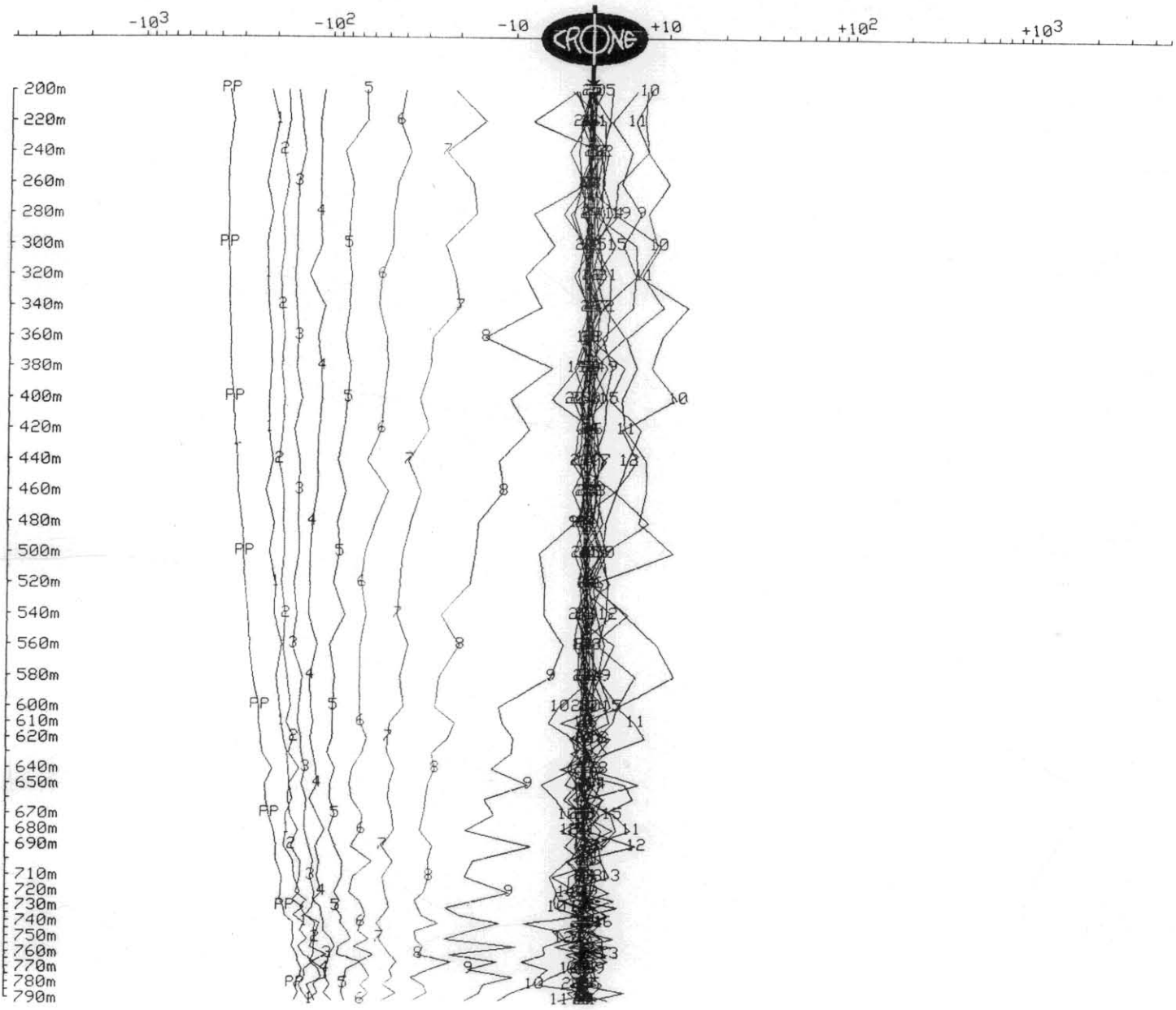
675362

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client	: Goldfields Exploration	Hole	: SHD-20
Grid	: South Henty	Tx Loop	: SH11
Date	: Dec 8, 1999	File name	: SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675363

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

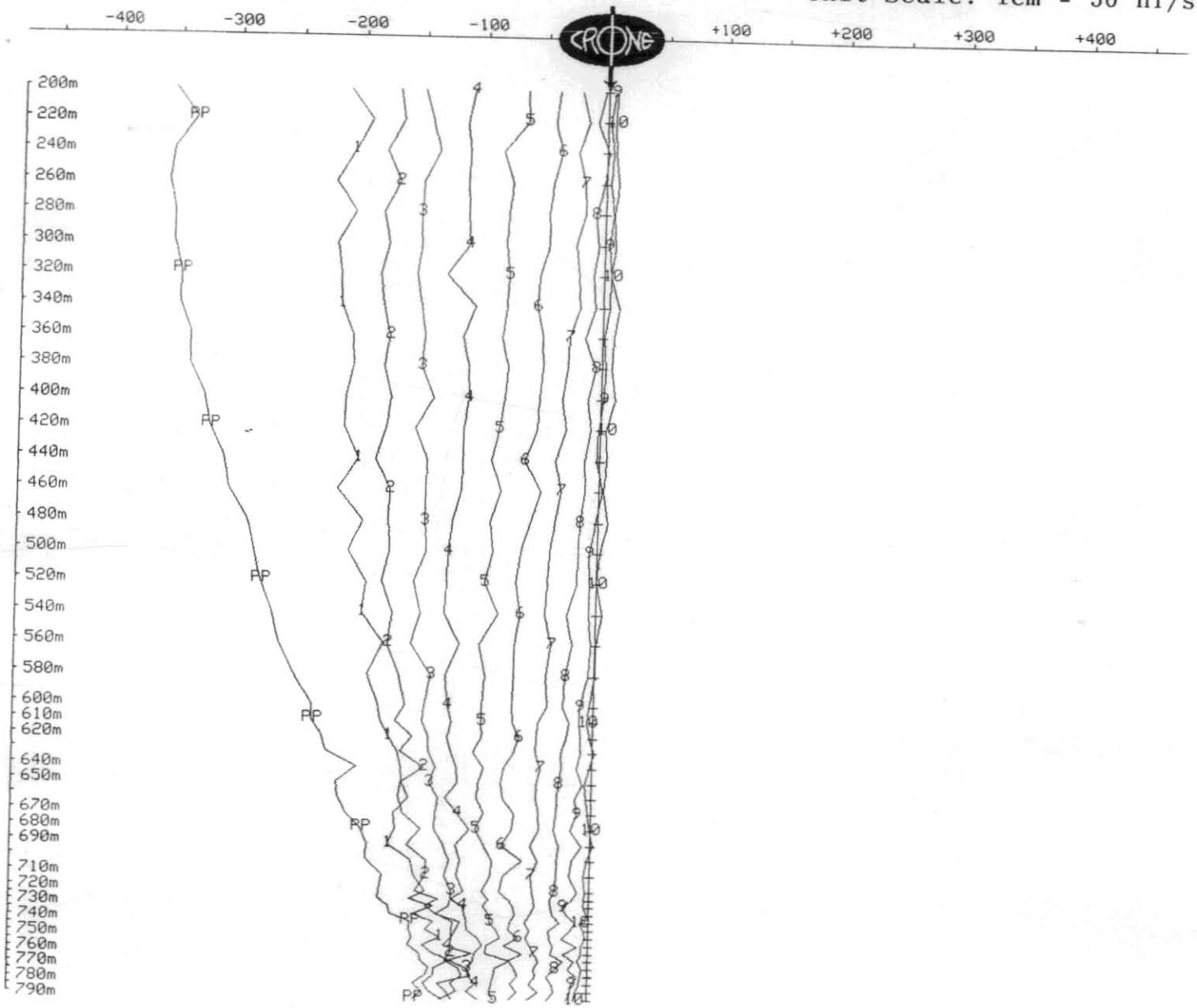
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 50 nT/s



675364

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

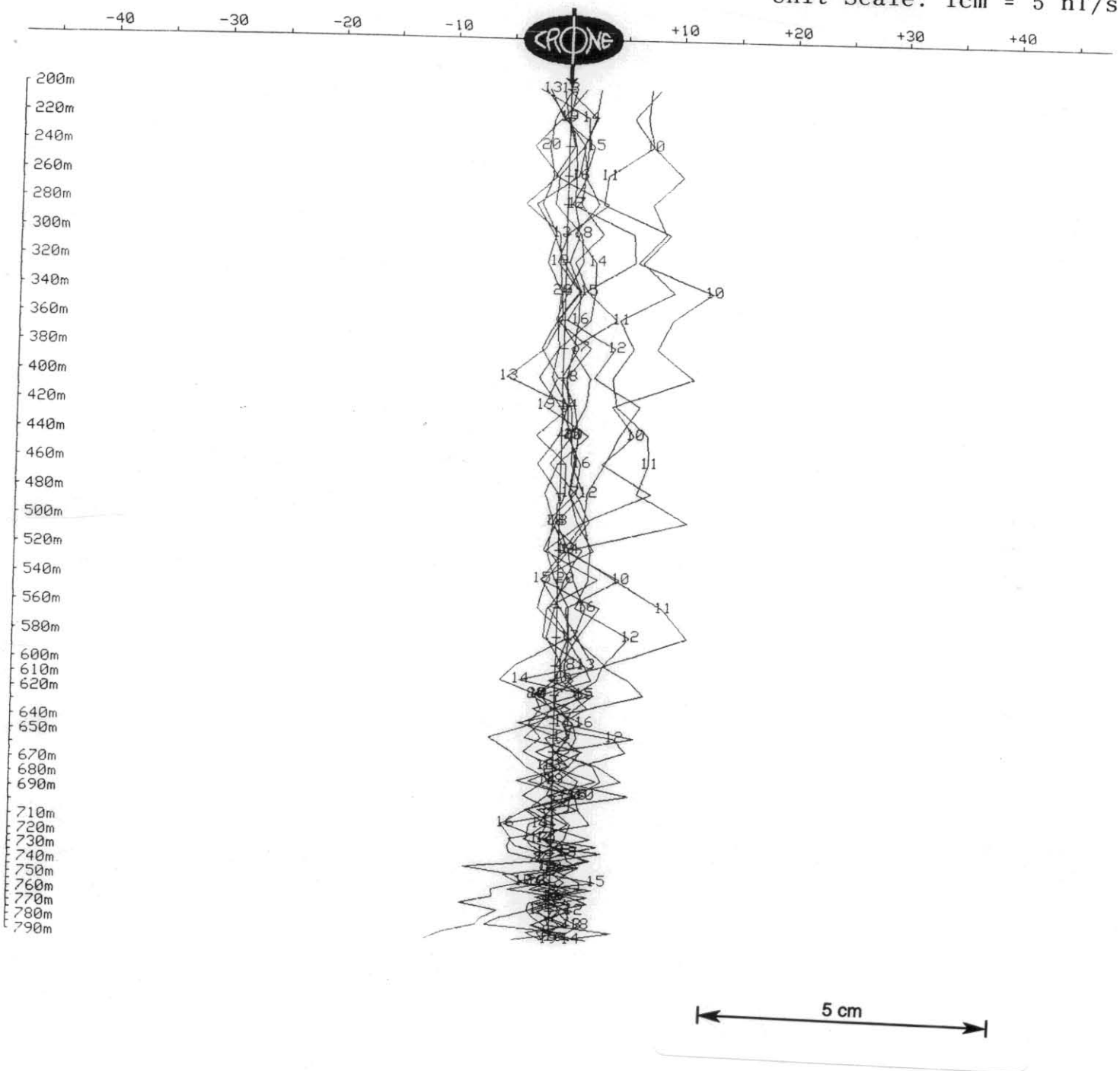
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 5 nT/s



675365

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

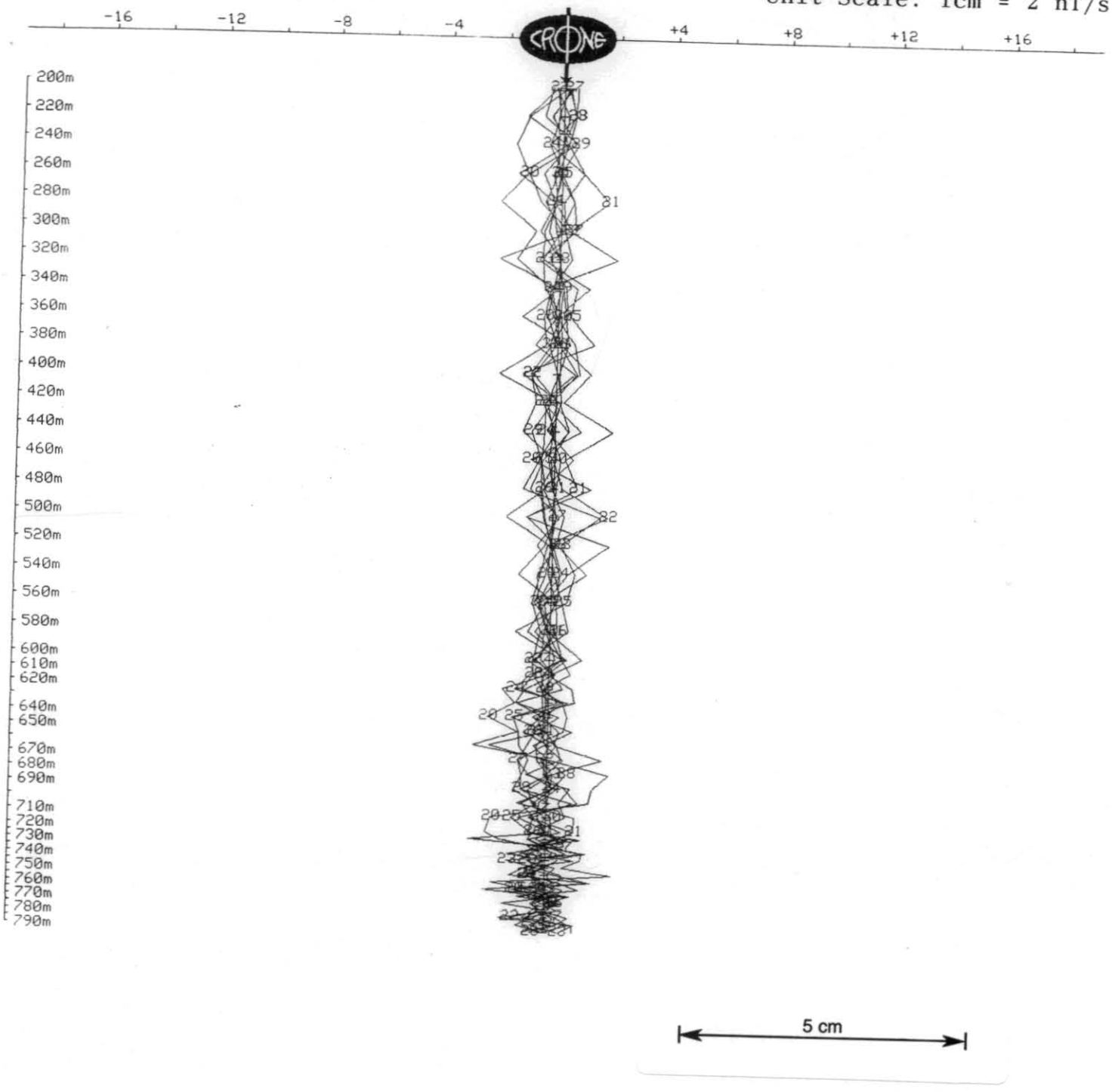
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH11
File name : SHD20X~1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

675366

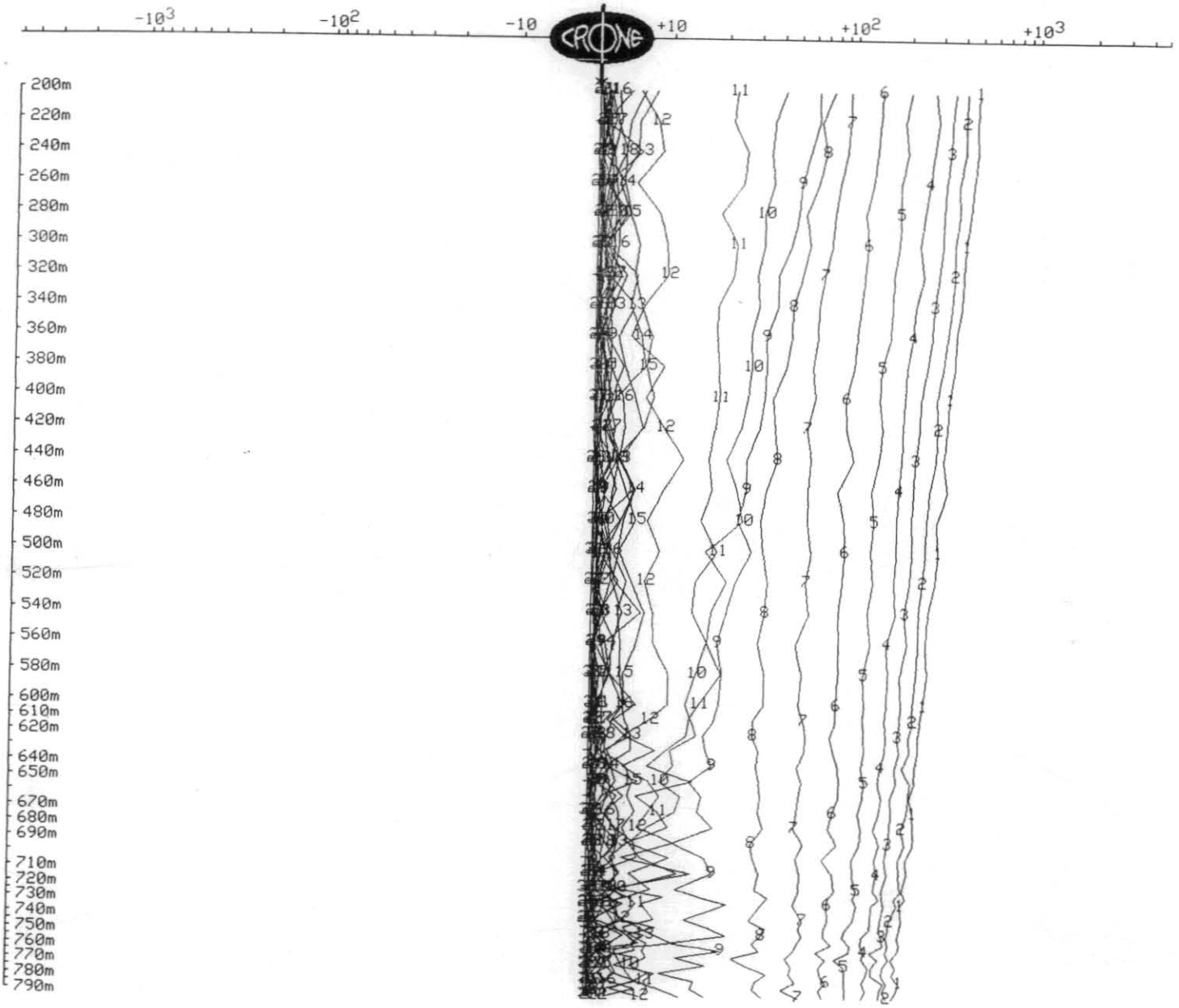
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH11
File name : S20XYZ11.PEM

TOTAL FIELD dBxyz/dt nanoTesla/sec - 31 of 31 channels

Scale: 1:4000



5 cm

675367

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfield Exploration
Grid : South Henty
Date : Dec 8, 1999
Time Base : 20.00 ms
Ramp Time : 1.00 ms
Channels: 31
Sync Type : Cable
Loop Size : 500m X 400m
Current : 17 Amps

Hole : SHD-20
Tx Loop : SH12
File name : SHD20Z12.PEM
Readings: 60
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : +
Receiver : Digital #105
Operator : Brett Rankin

Loop Coordinates (X,Y,Z)
1. 380300m, 5.3593e+06m, 0m
2. 380300m, 5.359e+06m, 0m
3. 380800m, 5.359e+06m, 0m
4. 380800m, 5.3594e+06m, 0m
5. 380520m, 5.3594e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 380580m, 5.35944e+06m, 0m
2. 270deg, 70deg, 30m
3. 268deg, 69deg, 60m
4. 271deg, 69deg, 60m
5. 271deg, 67.5deg, 60m
6. 278deg, 65.2deg, 60m
7. 278deg, 62.3deg, 60m
8. 284deg, 60deg, 60m
9. 286deg, 58deg, 60m
10. 286.5deg, 55.5deg, 60m
11. 291deg, 53deg, 60m
12. 288deg, 50deg, 60m
13. 288deg, 46.5deg, 60m
14. 289deg, 43deg, 60m
15. 290deg, 41deg, 34m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

675368

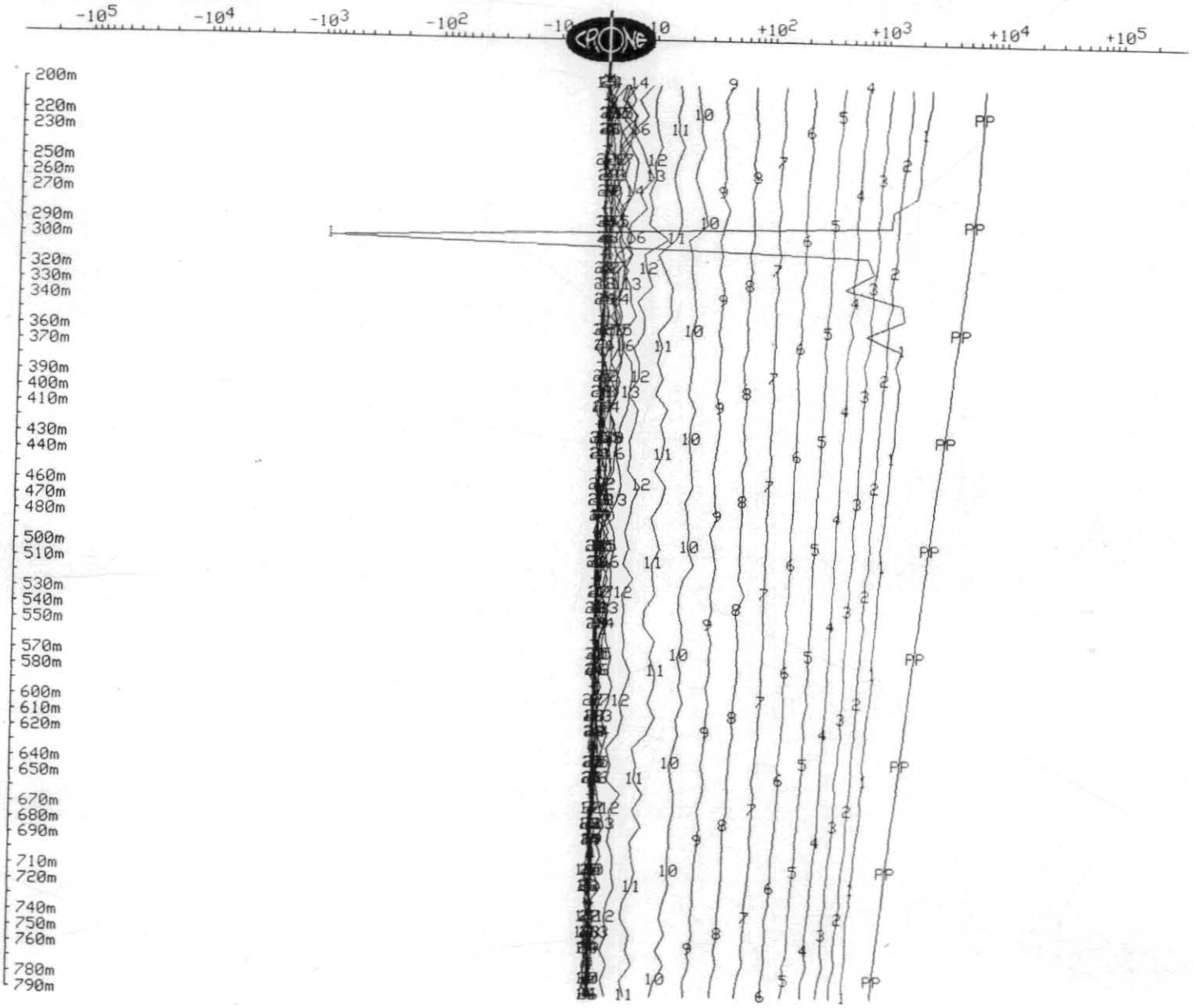
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfield Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH12
File name : SHD20Z12.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



5 cm

675369

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

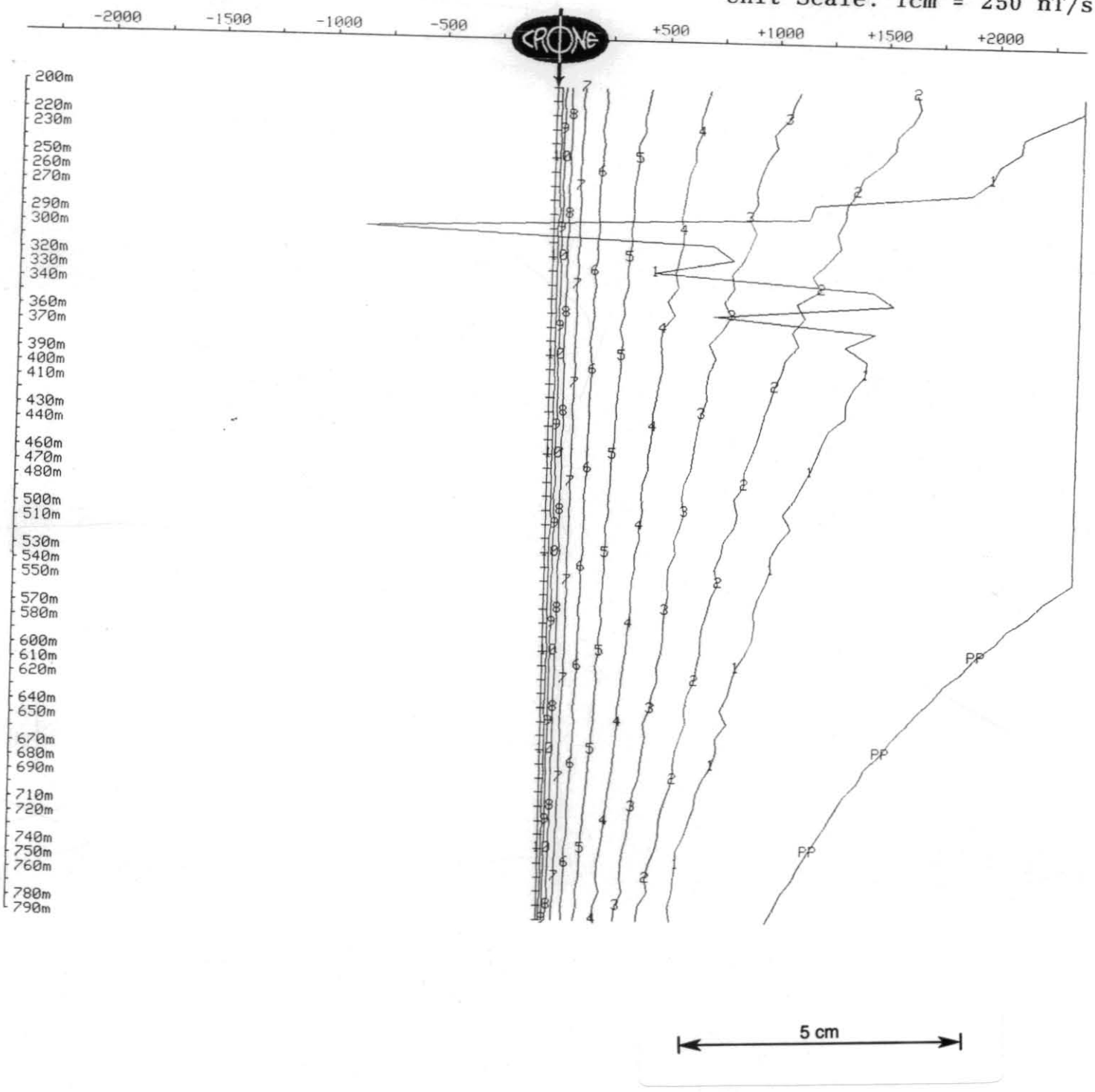
Client : Goldfield Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH12
File name : SHD20Z12.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 250 nT/s



675370

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

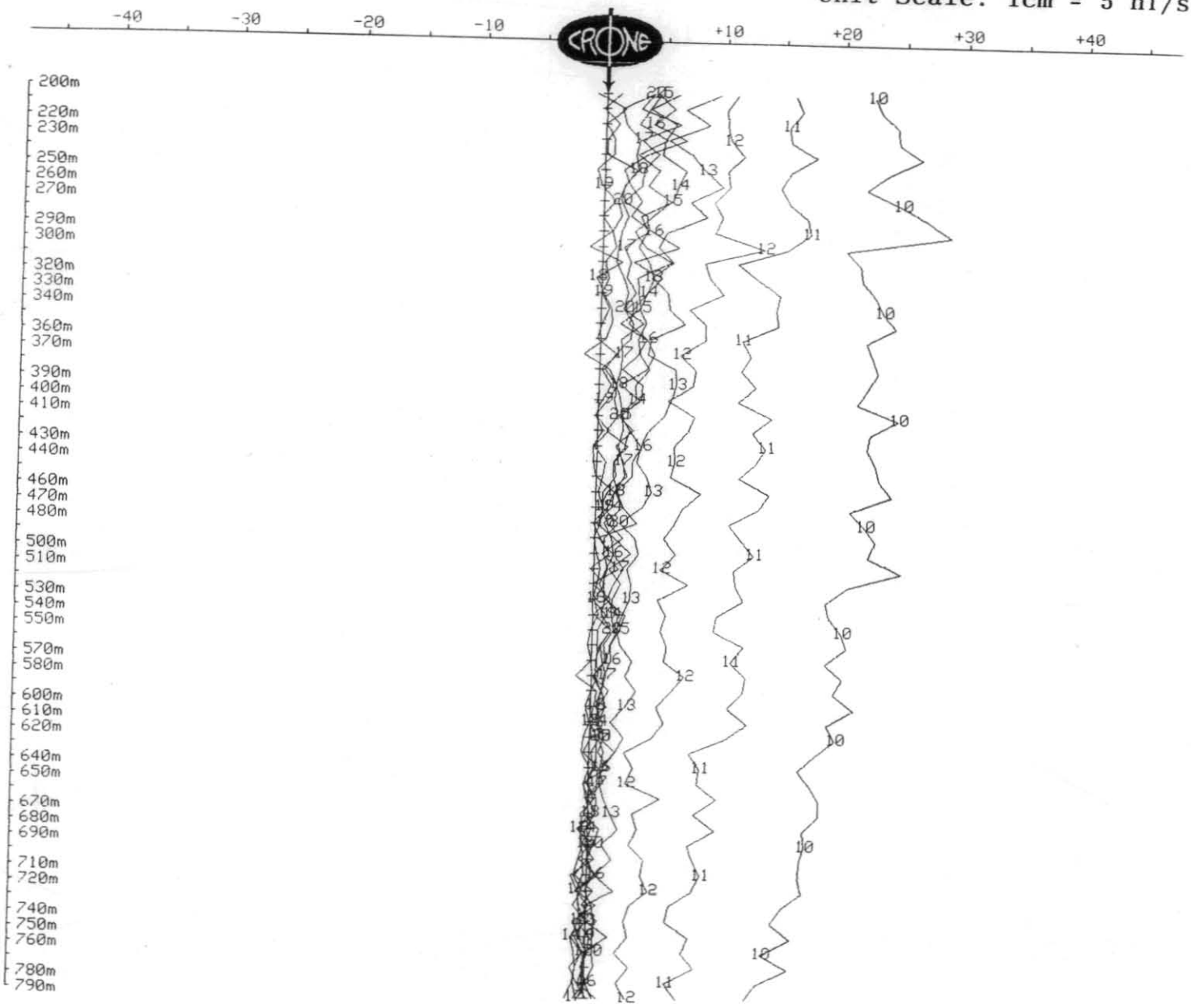
Client : Goldfield Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH12
File name : SHD20Z12.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 5 nT/s



5 cm

675371

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

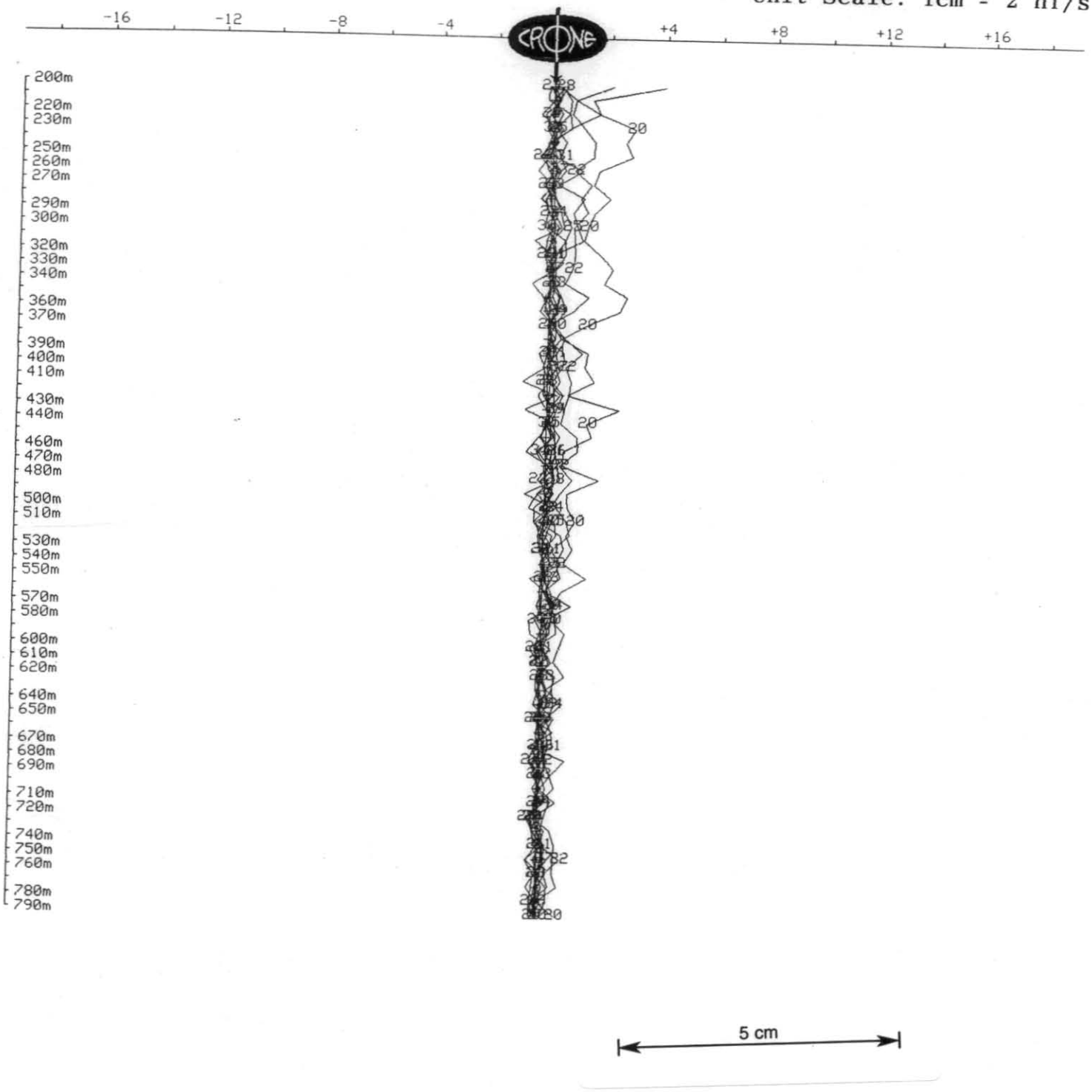
Client : Goldfield Exploration
Grid : South Henty
Date : Dec 8, 1999

Hole : SHD-20
Tx Loop : SH12
File name : SHD20Z12.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



675372

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfield Explkoration
Grid : South Henty
Date : Dec 9. 1999
Time Base : 20.00 ms
Ramp Time : 1.00 ms
Channels: 31
Sync Type : Cable
Loop Size : 400m X 400m
Current : 17 Amps

Hole : SHD-20
Tx Loop : SH14
File name : SHD20Z14.PEM
Readings: 60
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : +
Receiver : Digital #105
Operator : Brett Rankin

Loop Coordinates (X,Y,Z)
1. 379900m, 5.3598e+06m, 0m
2. 379900m, 5.3594e+06m, 0m
3. 380300m, 5.3594e+06m, 0m
4. 380300m, 5.3598e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 380580m, 5.35944e+06m, 0m
2. 270deg, 70deg, 30m
3. 268deg, 69deg, 60m
4. 271deg, 69deg, 60m
5. 271deg, 67.5deg, 60m
6. 278deg, 65.2deg, 60m
7. 278deg, 62.3deg, 60m
8. 284deg, 60deg, 60m
9. 286deg, 58deg, 60m
10. 286.5deg, 55.5deg, 60m
11. 291deg, 53deg, 60m
12. 288deg, 50deg, 60m
13. 288deg, 46.5deg, 60m
14. 289deg, 43deg, 60m
15. 290deg, 41deg, 34m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

675373

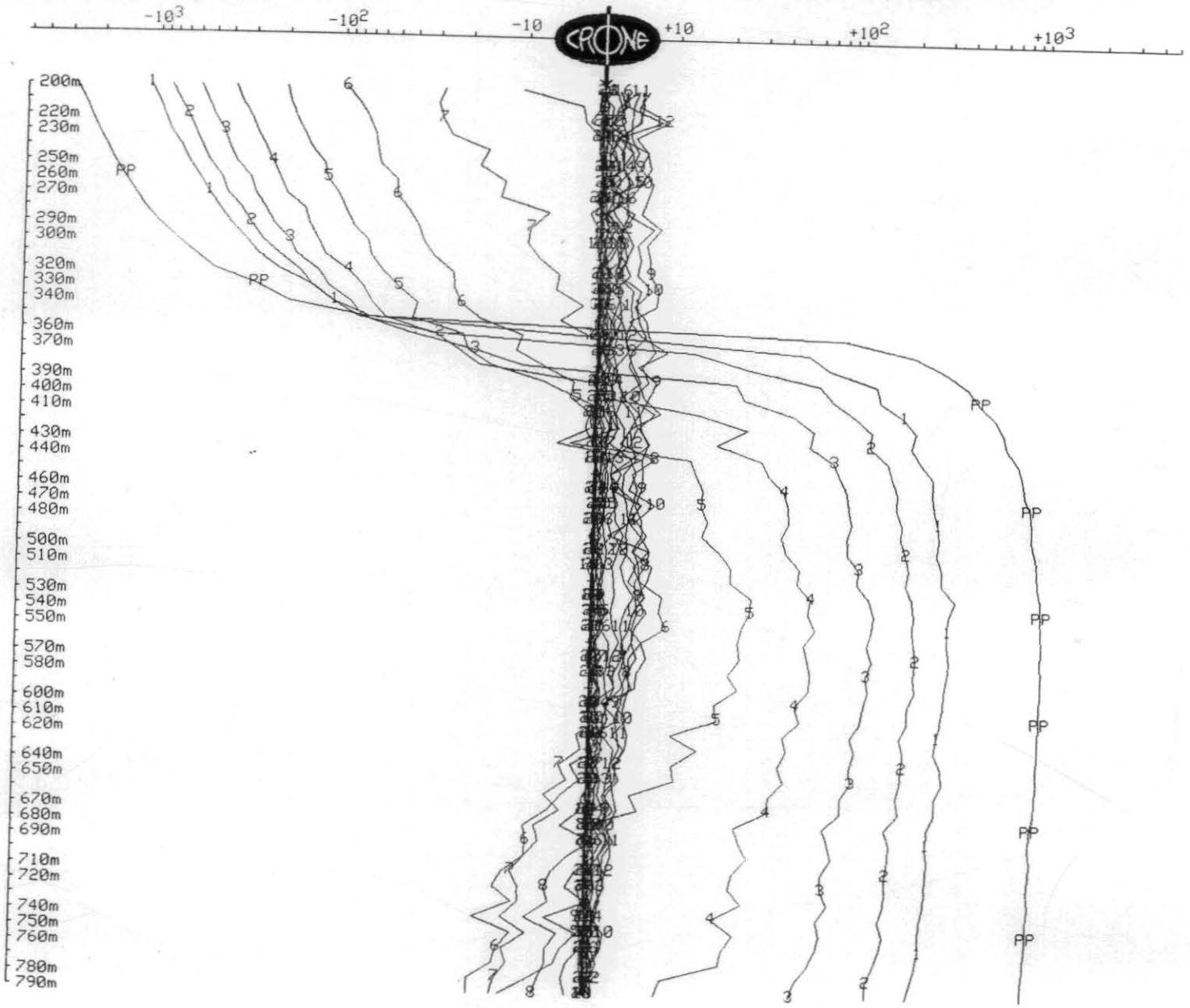
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfield Explkoration
Grid : South Henty
Date : Dec 9, 1999

Hole : SHD-20
Tx Loop : SH14
File name : SHD20Z14.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



5 cm

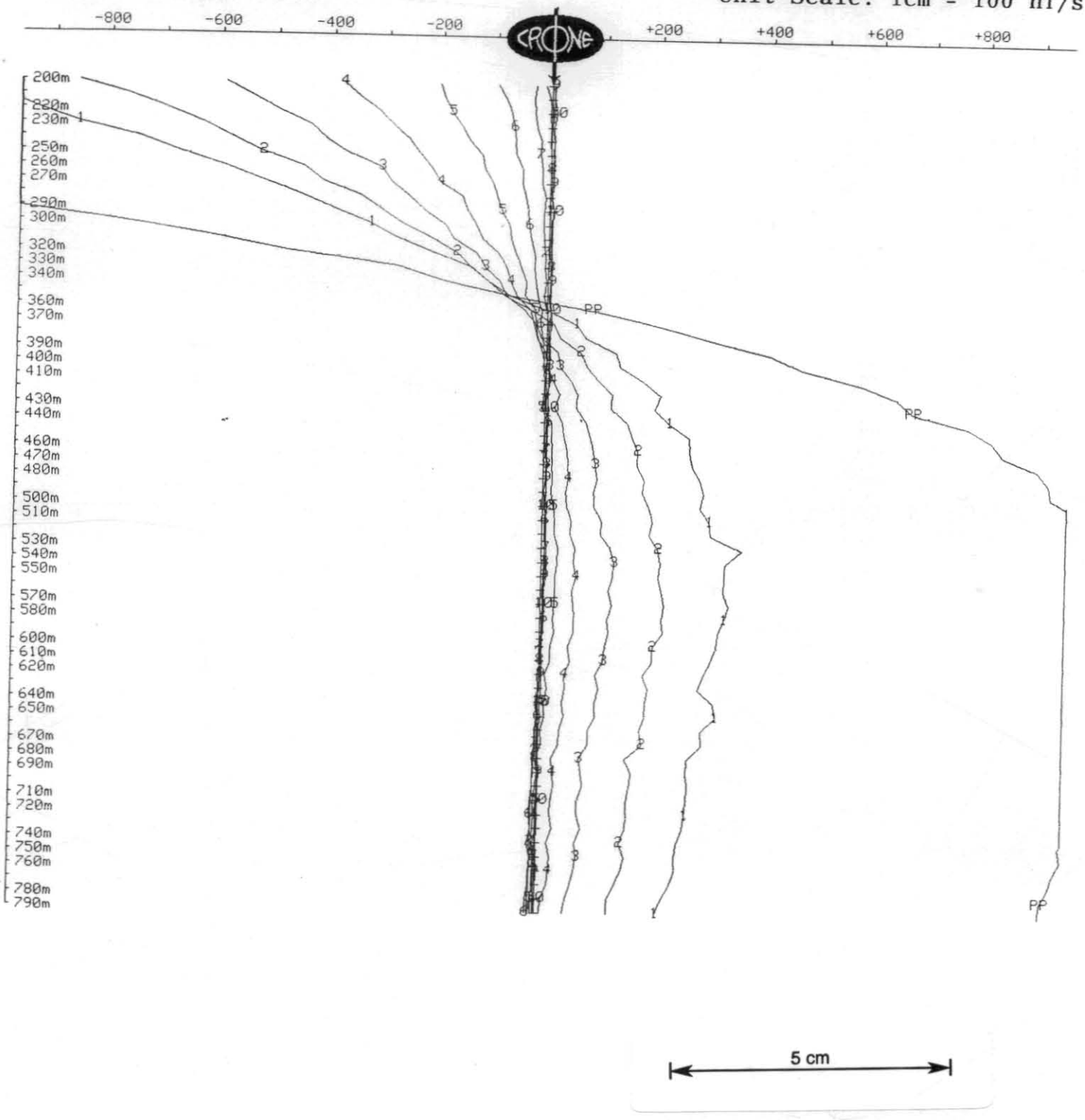
675374

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfield Explkoration
Grid : South Henty
Date : Dec 9, 1999

Hole : SHD-20
Tx Loop : SH14
File name : SHD20Z14.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 10 of 31 channels and PP
Scale: 1:4000
Unit Scale: 1cm = 100 nT/s



5 cm

675375

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

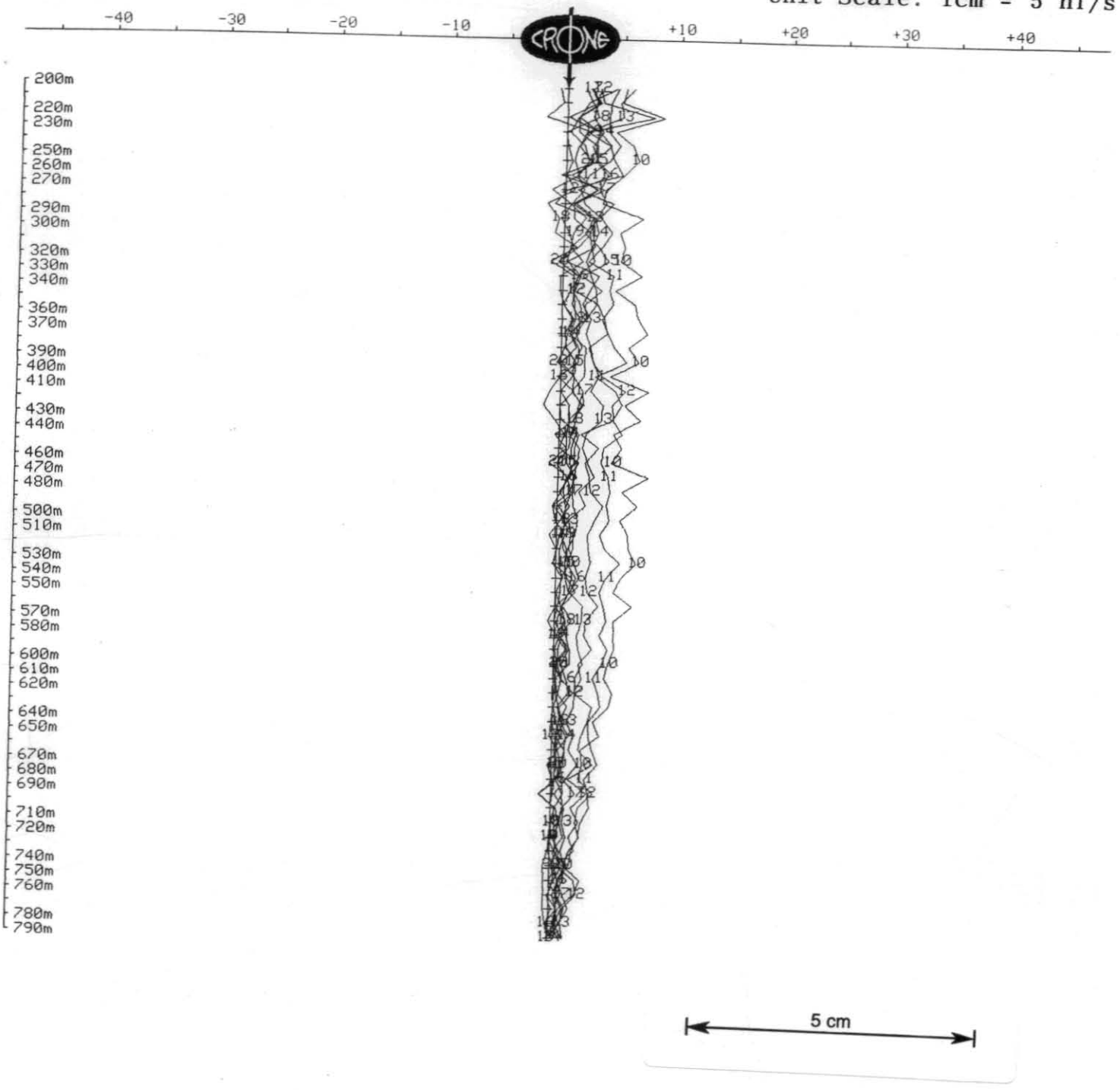
Client : Goldfield Explkoration
Grid : South Henty
Date : Dec 9, 1999

Hole : SHD-20
Tx Loop : SH14
File name : SHD20Z14.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 5 nT/s



5 cm

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

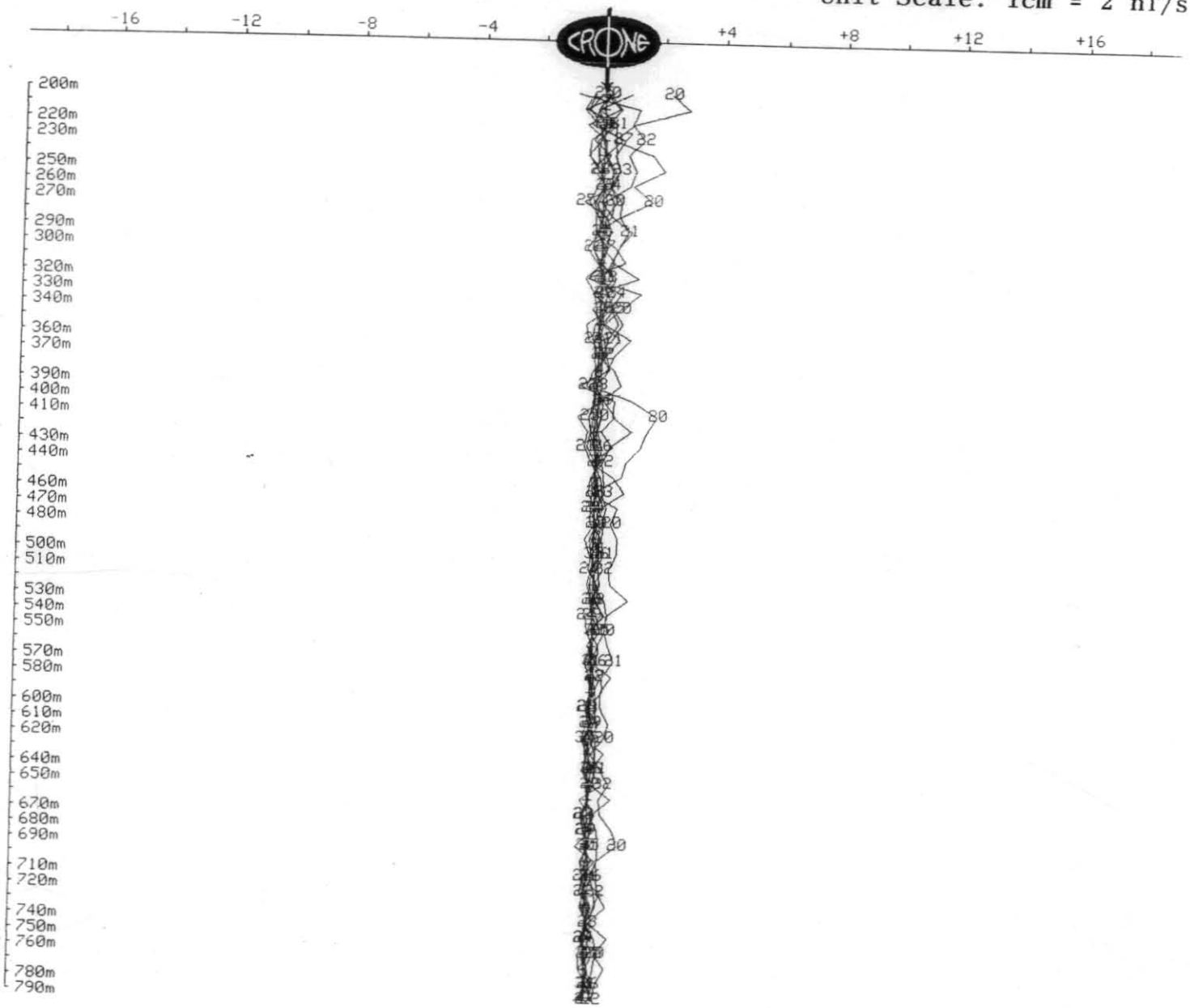
Client : Goldfield Explkoration
Grid : South Henty
Date : Dec 9, 1999

Hole : SHD-20
Tx Loop : SH14
File name : SHD20Z14.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

675377

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client	: Goldfields Exploration	Hole	: SHD-21
Grid	: South Henty	Tx Loop	: SH1
Date	: Dec 11, 1999	File name	: SHD21Z1.PEM
Time Base	: 20.00 ms	# Readings	: 83
Ramp Time	: 0.50 ms	Stn Units	: Metric
# Channels	: 31	Coil Area	: 6500 sq m
Sync Type	: Cable	Polarity	: +
Loop Size	: 600m X 500m	Receiver	: Digital #105
Current	: 10 Amps	Operator	: Brett Rankin

Loop Coordinates (X,Y,Z)

1. 380900m, 5.35917e+06m, 0m
2. 380900m, 5.3587e+06m, 0m
3. 381300m, 5.3587e+06m, 0m
4. 381400m, 5.35917e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. 380890m, 5.35889e+06m, 0m
2. 270deg, 73.8deg, 30m
3. 270deg, 72.8deg, 60m
4. 270deg, 71.5deg, 60m
5. 273deg, 66.5deg, 60m
6. 275deg, 62.8deg, 50m
7. 272deg, 58deg, 50m
8. 271deg, 54.5deg, 55m
9. 271deg, 50.5deg, 55m
10. 270deg, 47.4deg, 60m
11. 269deg, 44deg, 60m
12. 268deg, 41.5deg, 70m
13. 271deg, 37.5deg, 75m
14. 273deg, 33.1deg, 65m
15. 275deg, 29deg, 70m
16. 276deg, 25deg, 65m
17. 275deg, 20deg, 36m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

675378

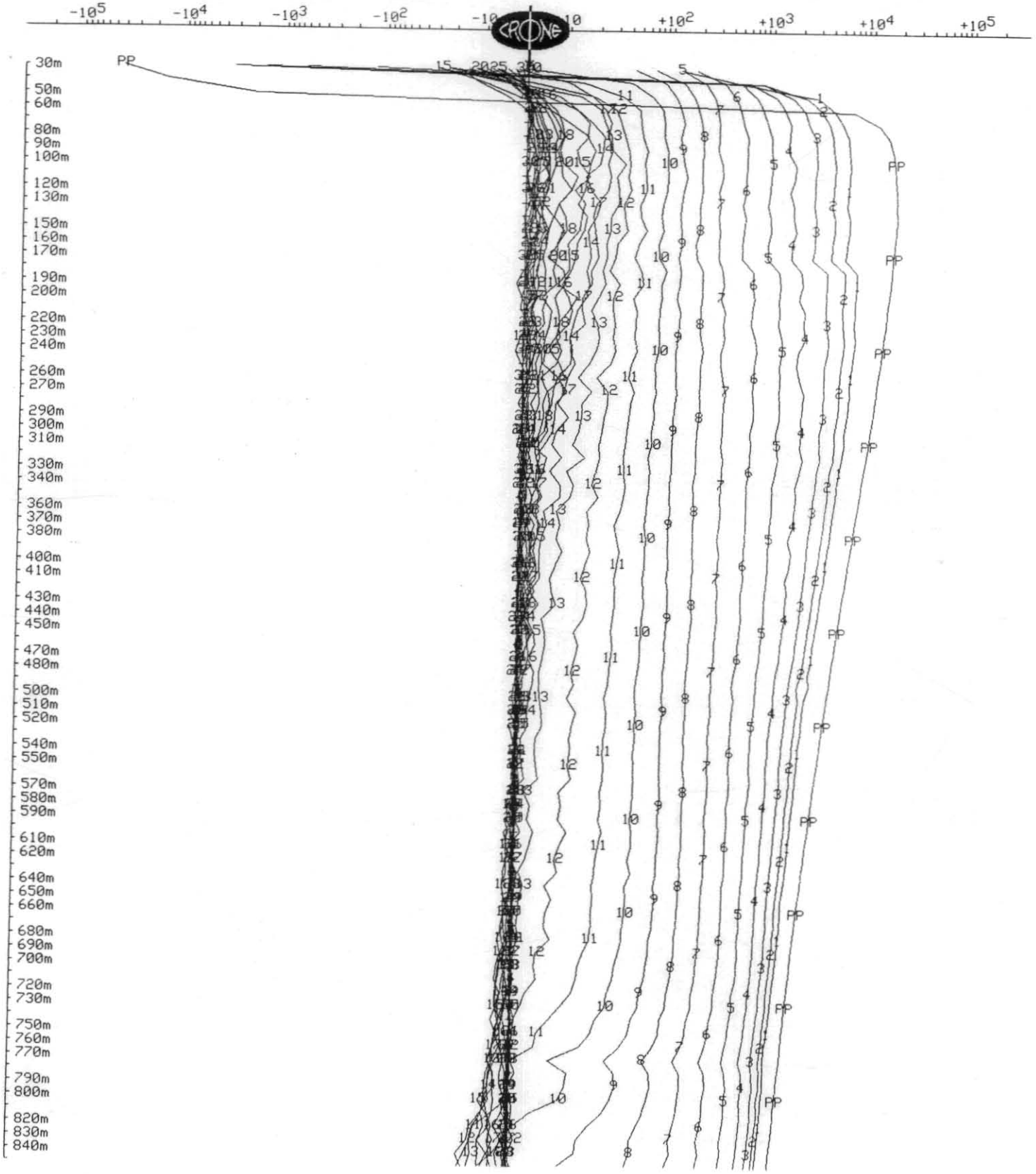
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Dec 11, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21Z1.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



5 cm

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

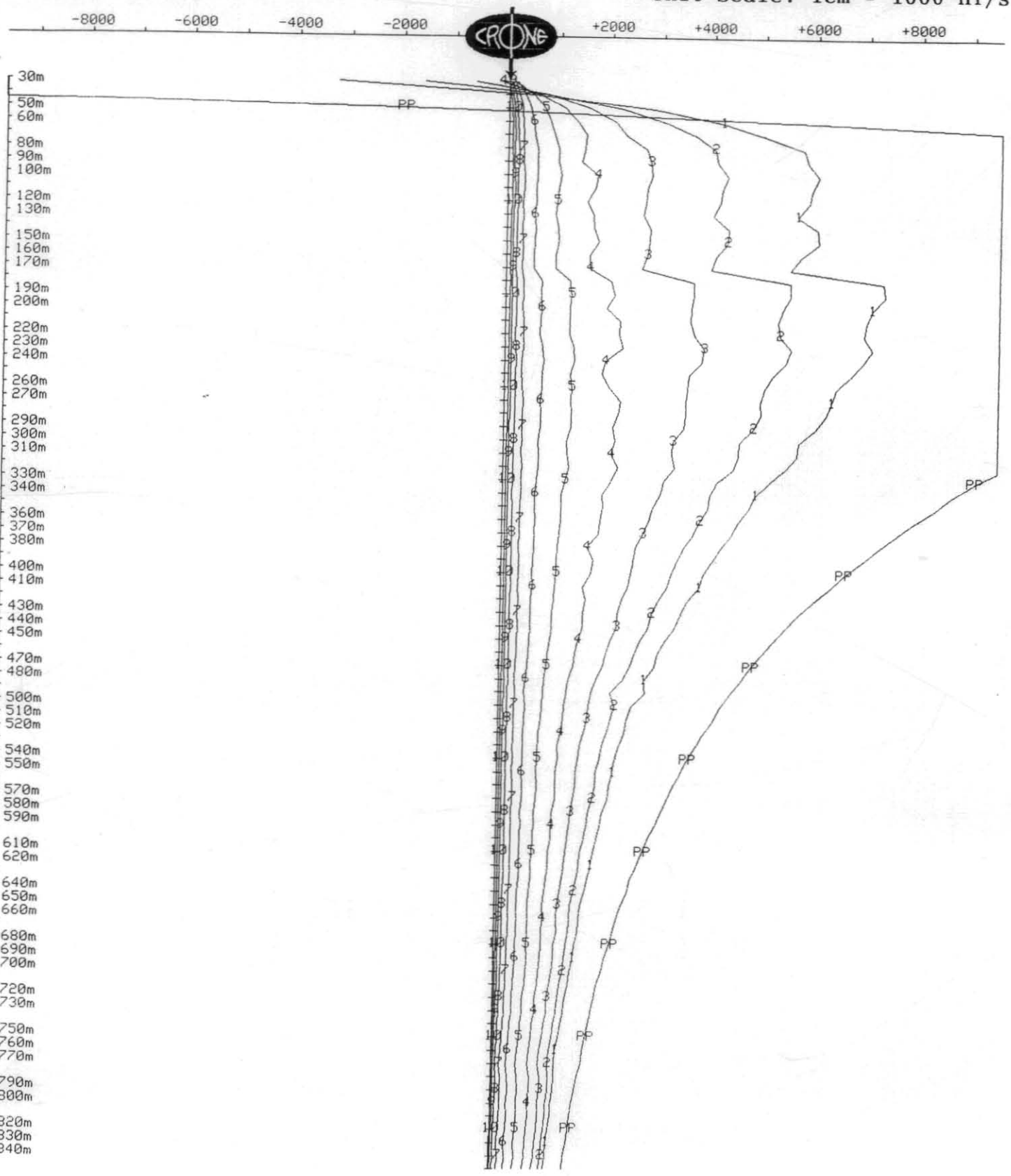
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 11, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21Z1.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 1000 nT/s



5 cm

675380

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

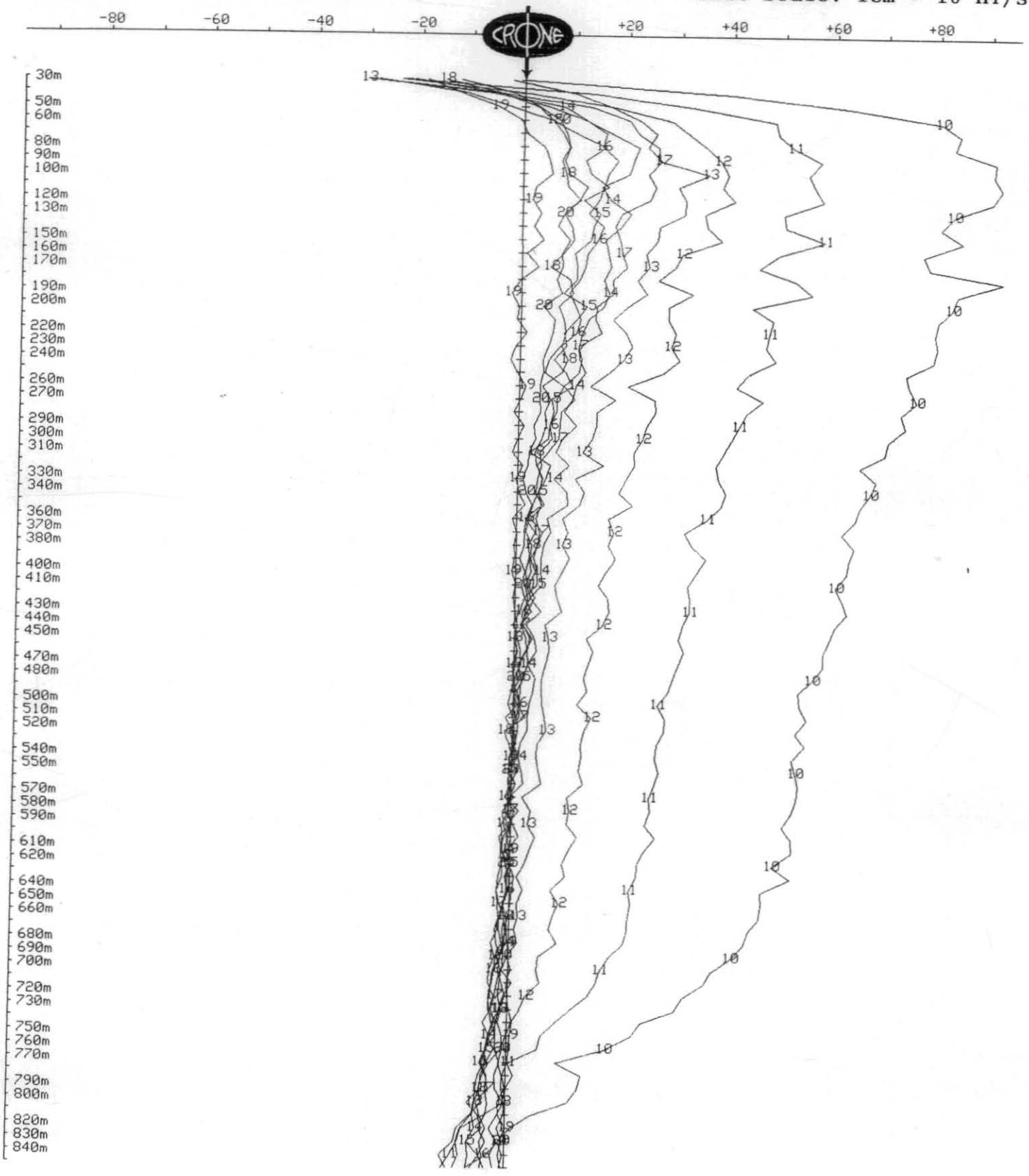
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 11, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21Z1.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



675381

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

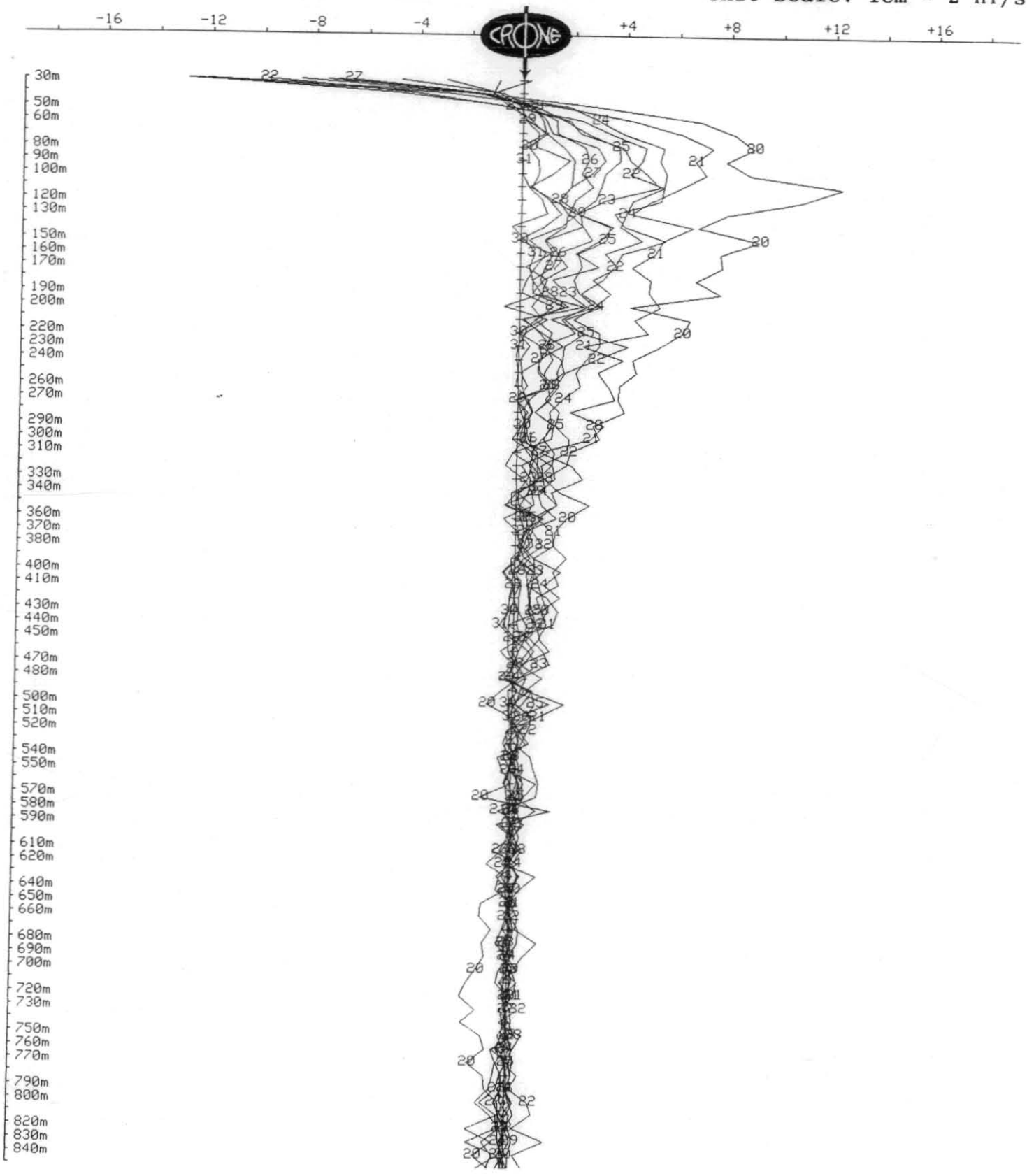
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 11, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21Z1.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



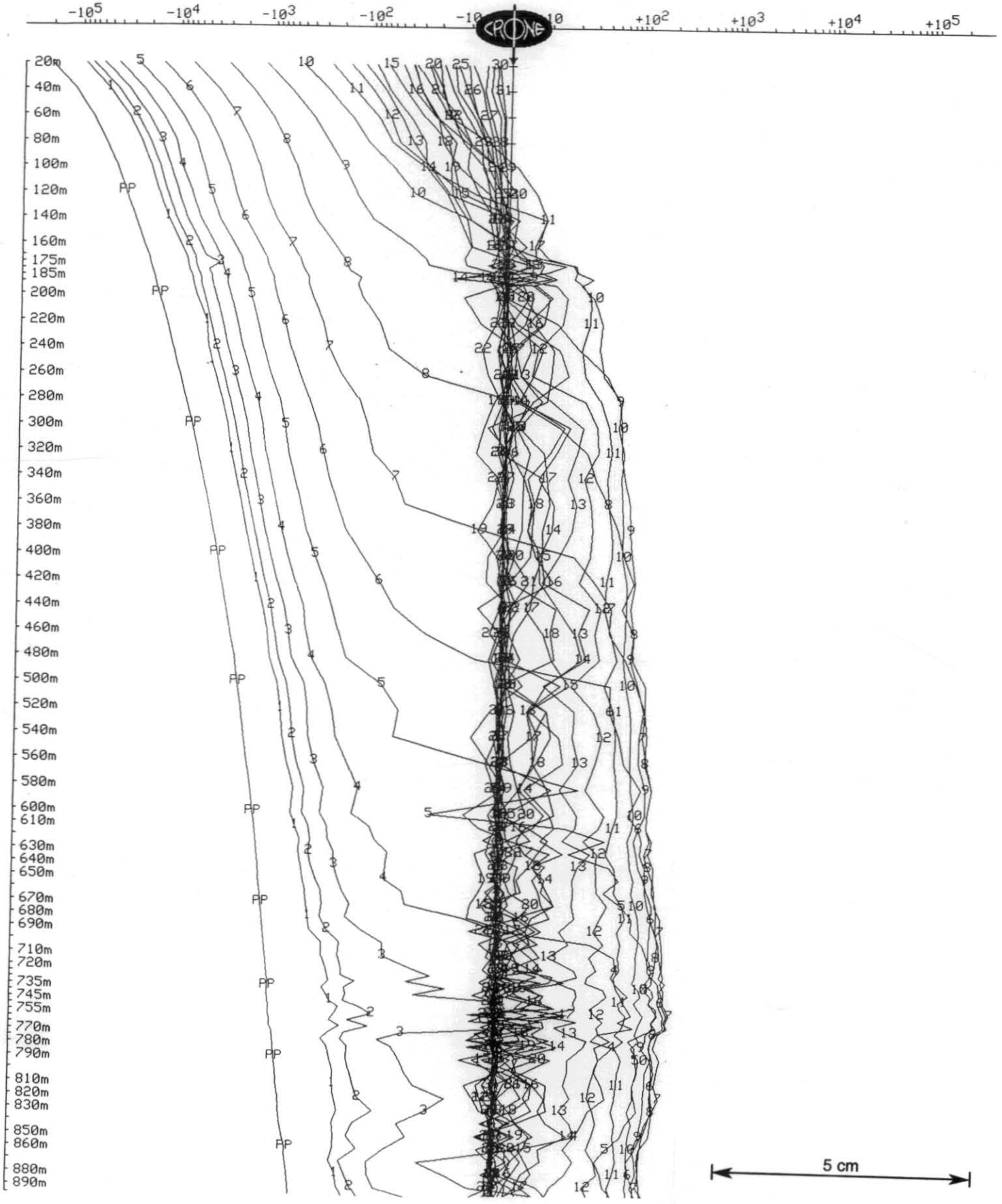
675382

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client	: Goldfields Exploration	Hole	: SHD-21
Grid	: South Henty	Tx Loop	: SH1
Date	: Dec 12, 1999	File name	: SHD21XY1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

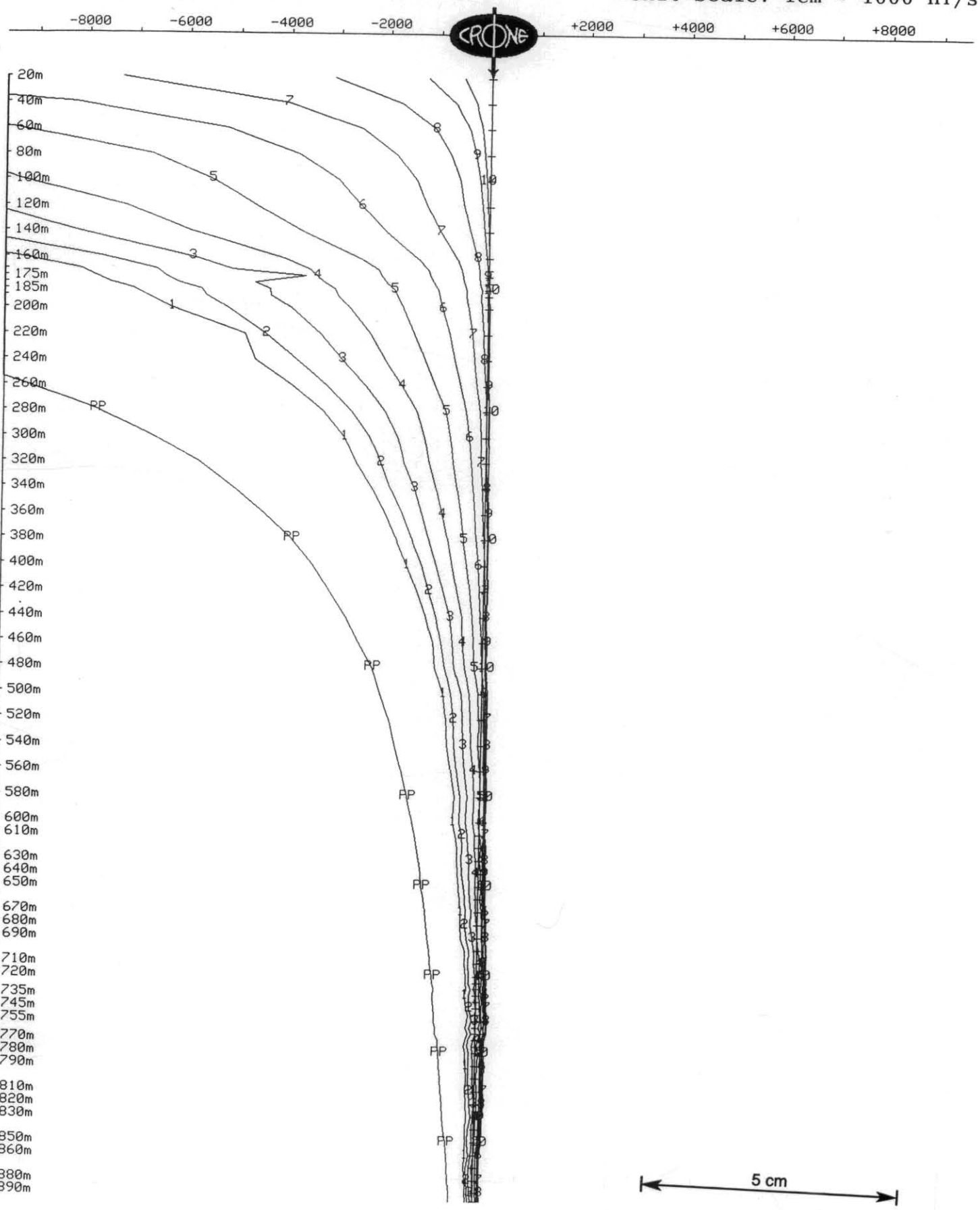
675383

Client	: Goldfields Exploration	Hole	: SHD-21
Grid	: South Henty	Tx Loop	: SH1
Date	: Dec 12, 1999	File name	: SHD21XY1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 1000 nT/s



OUTER-RIM EXPLORATION SERVICES

675384

Borehole Pulse EM Survey

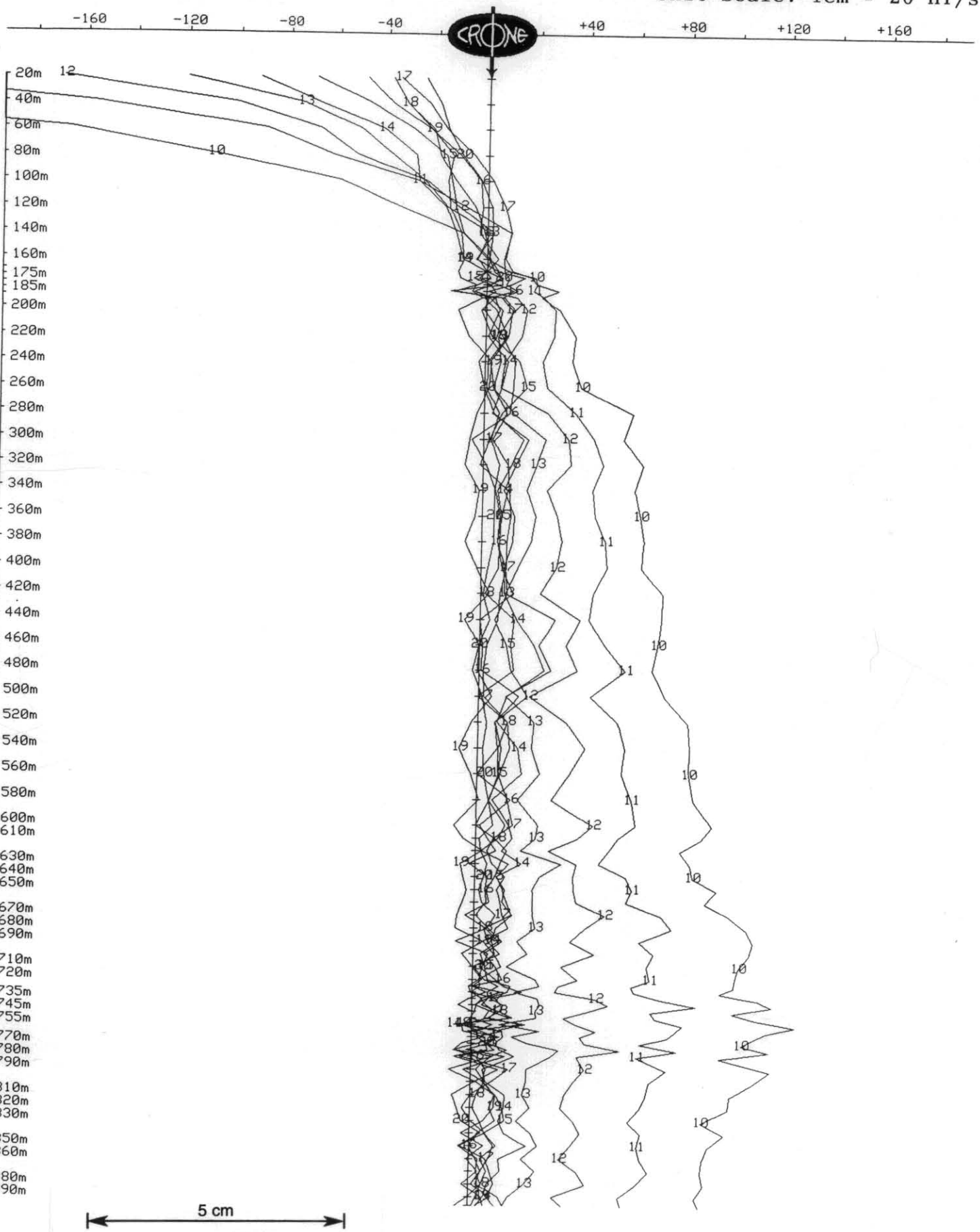
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 12, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21XY1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 20 nT/s



OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

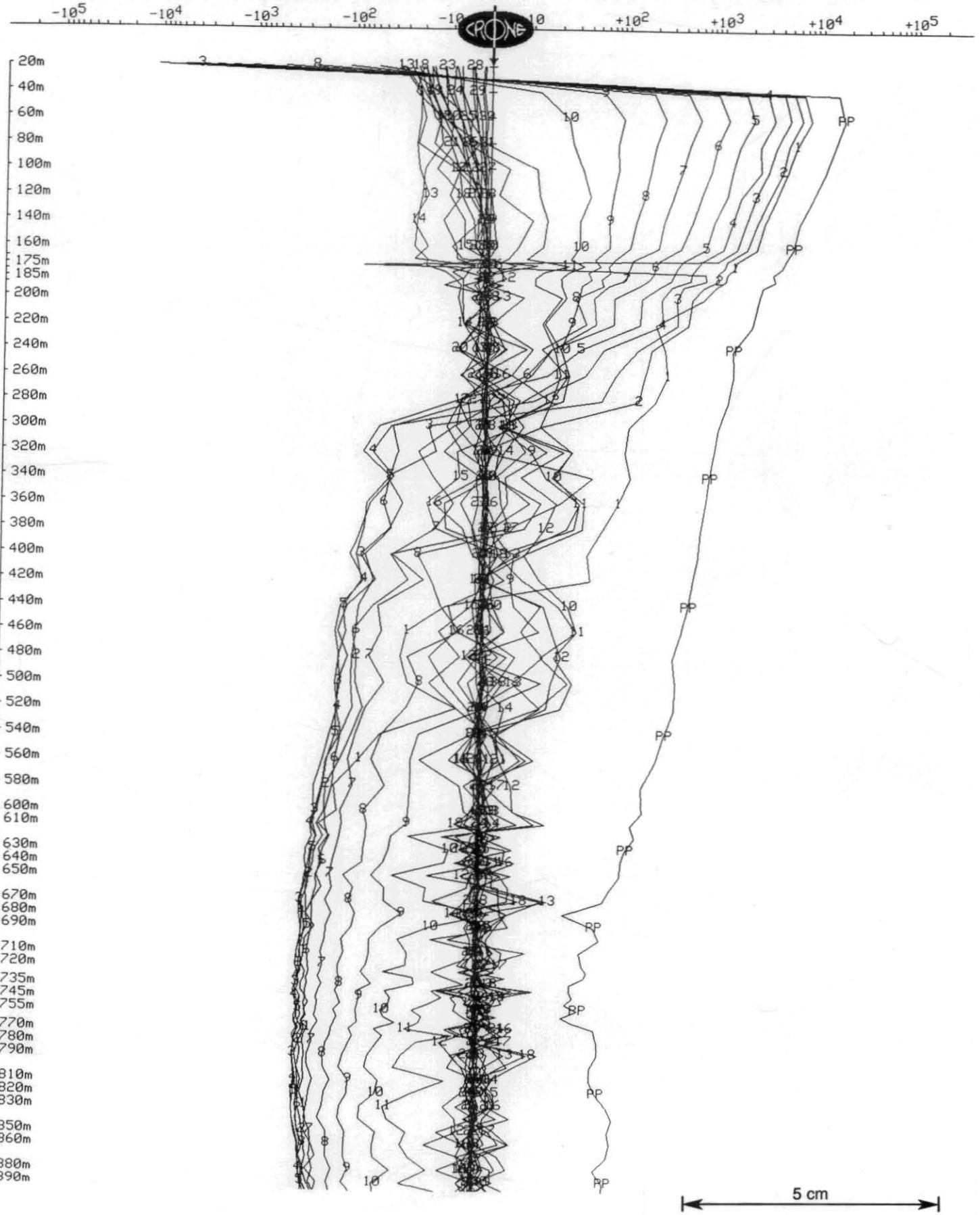
625385

Client : Goldfields Exploration
Grid : South Henty
Date : Dec 12, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21XY1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675386

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

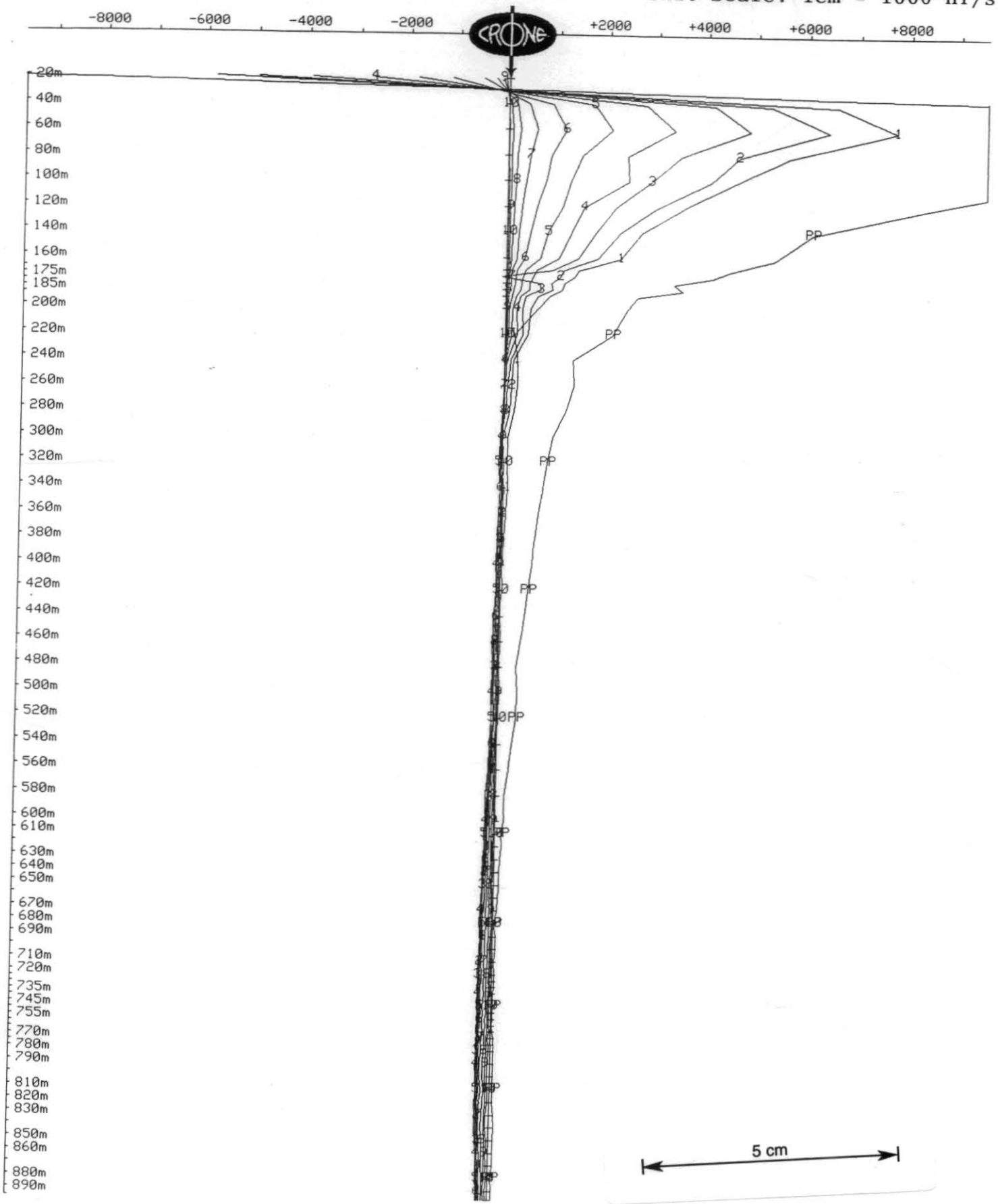
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 12, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21XY1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 1000 nT/s



675387

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

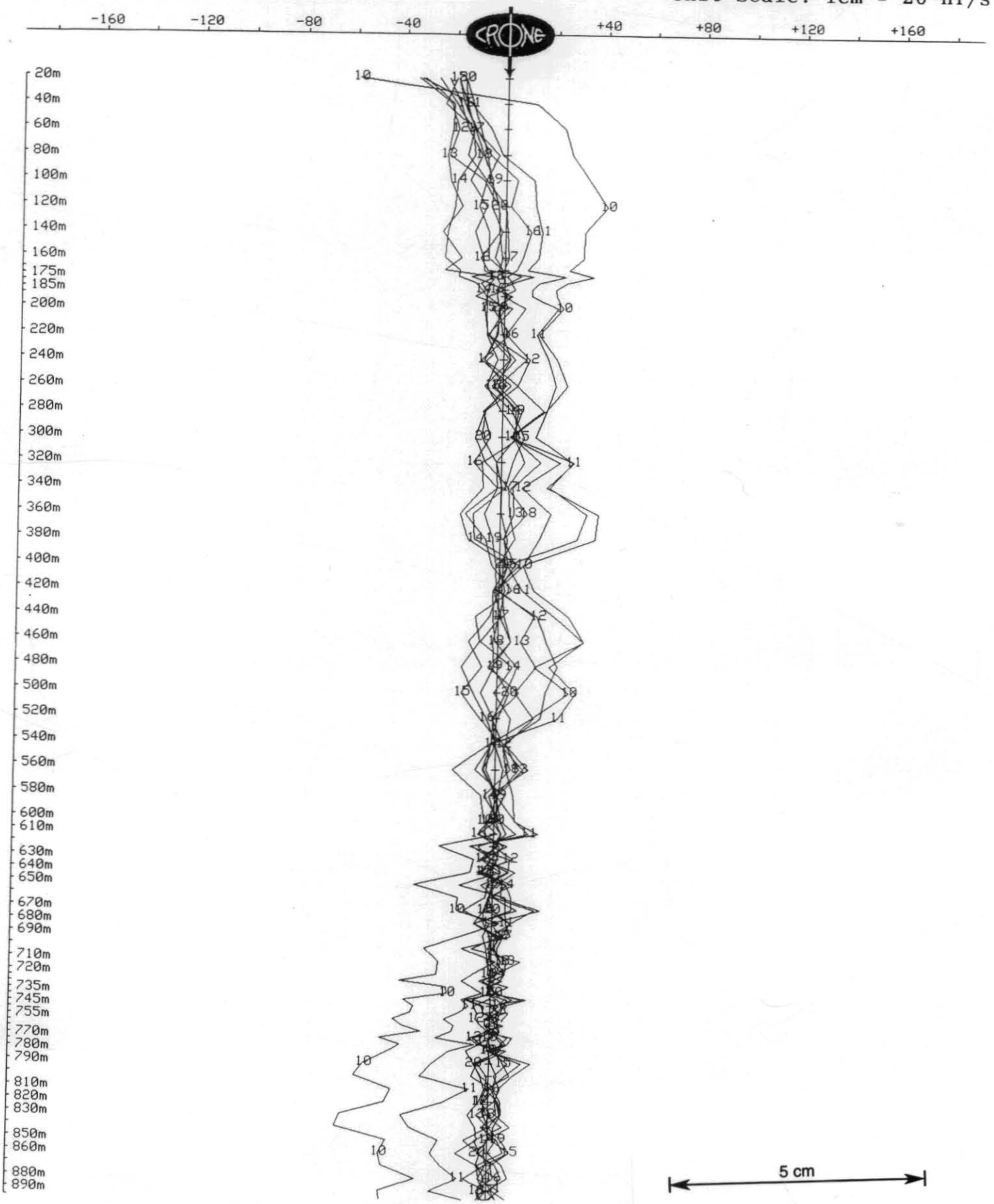
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 12, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21XY1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 20 nT/s



675388

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

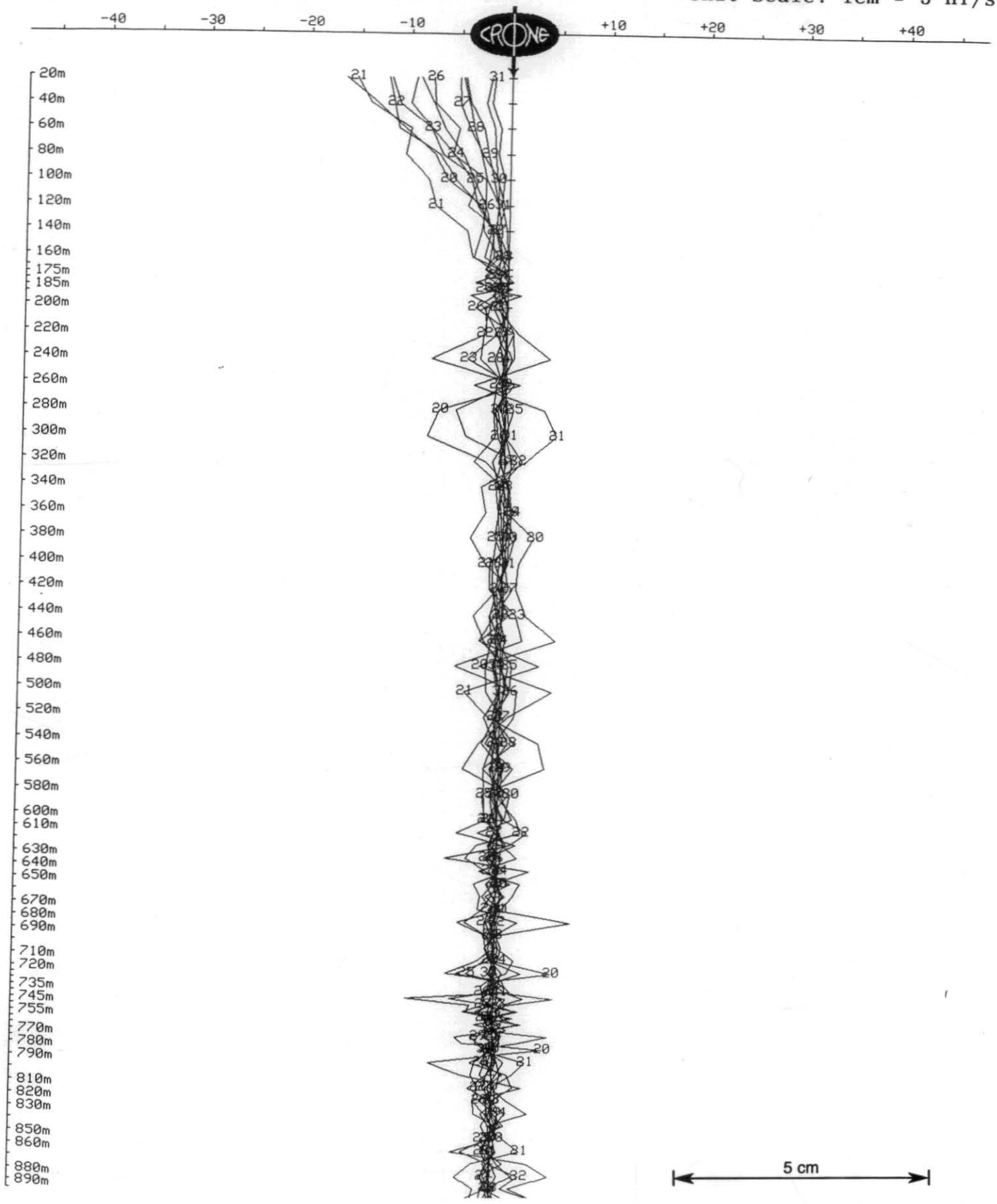
Client : Goldfields Exploration
Grid : South Henty
Date : Dec 12, 1999

Hole : SHD-21
Tx Loop : SH1
File name : SHD21XY1.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 5 nT/s



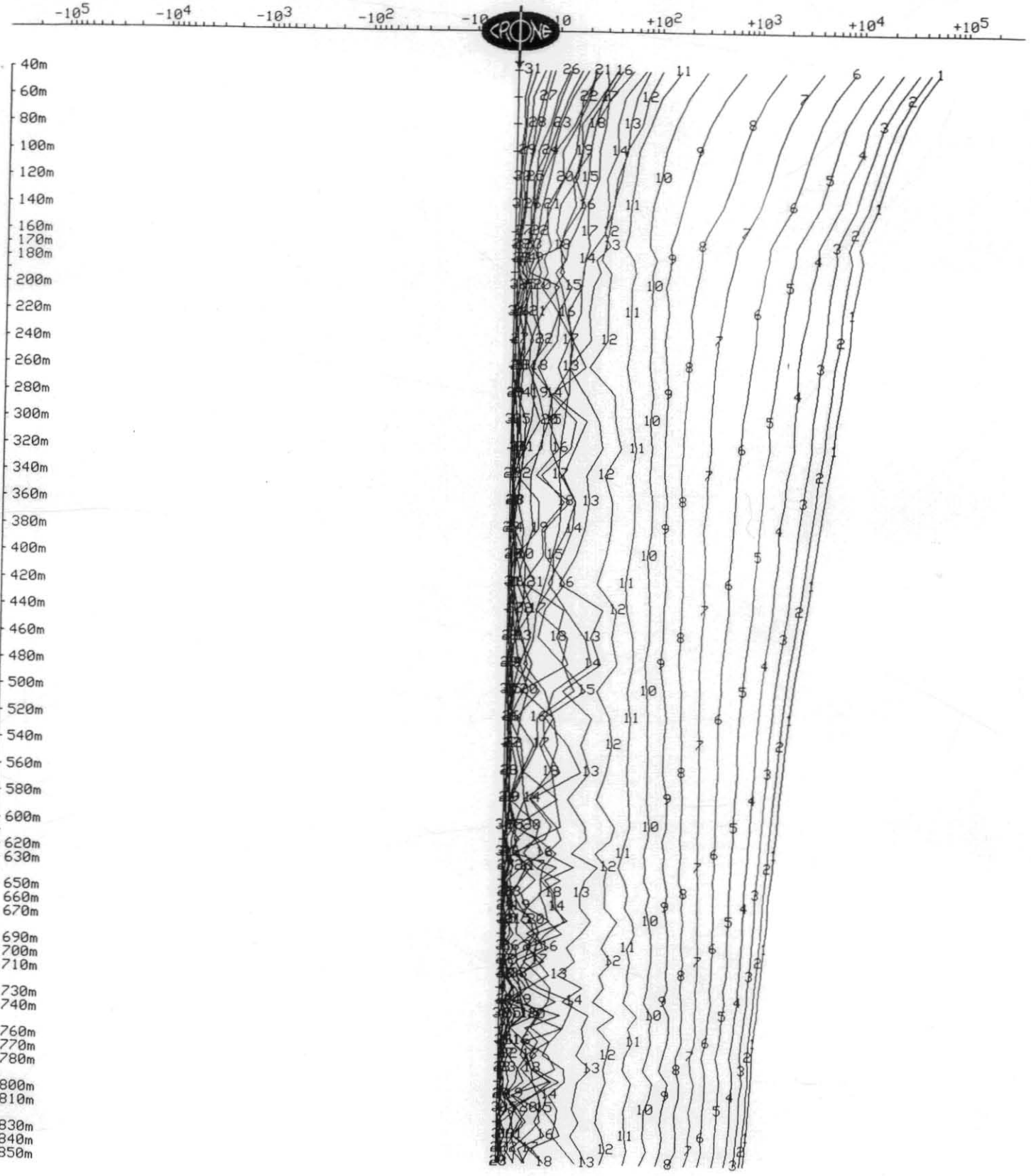
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

675385

Client	: Goldfields Exploration	Hole	: SHD-21
Grid	: South Henty	Tx Loop	: SH1
Date	: Dec 12, 1999	File name	: S21XYZ1.PEM

TOTAL FIELD dBxyz/dt nanoTesla/sec - 31 of 31 channels

Scale: 1:4000



5 cm

675390

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

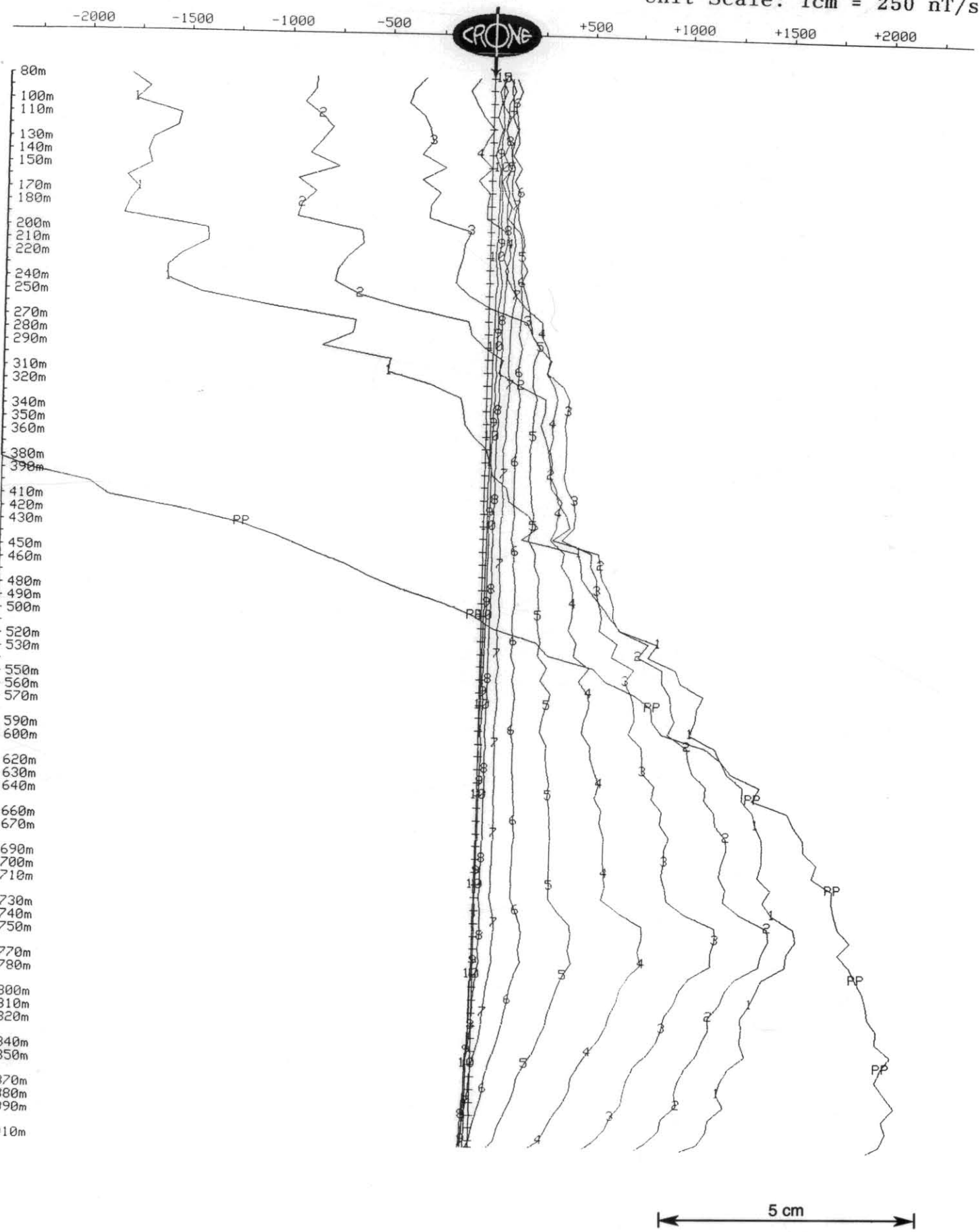
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 26, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21Z2.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 250 nT/s



675391

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

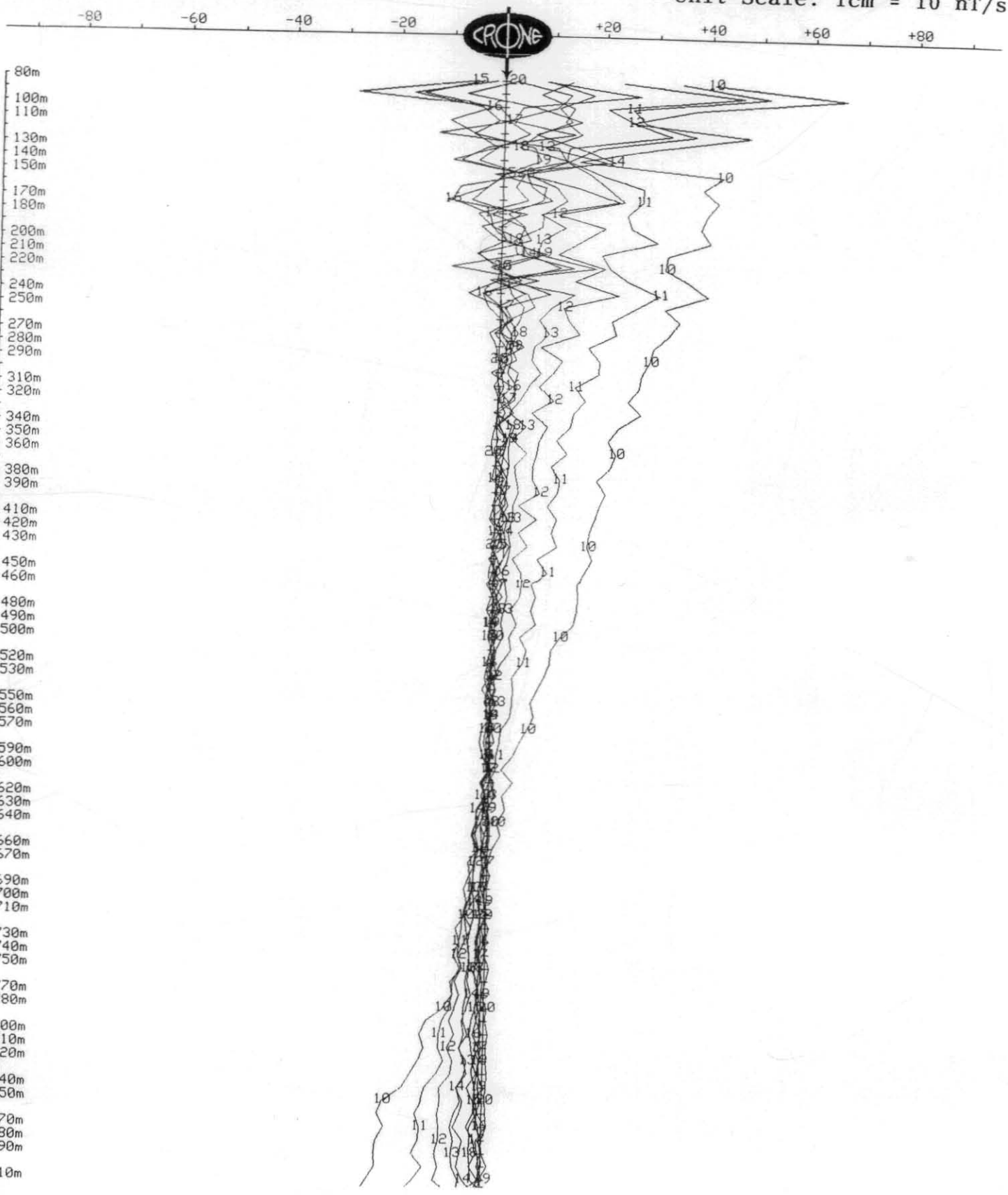
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 26, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21Z2.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



5 cm

675392

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

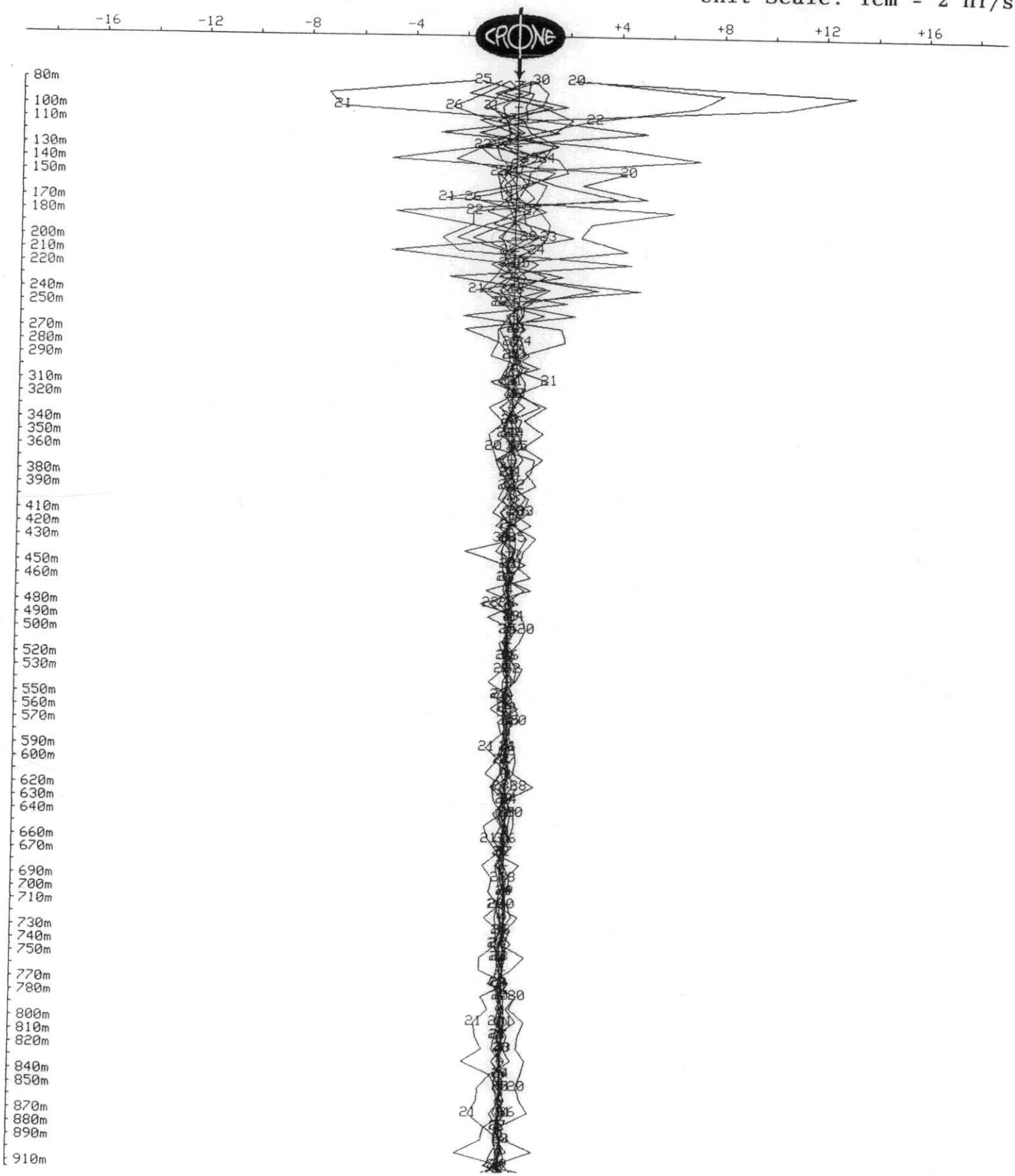
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 26, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21Z2.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

675393

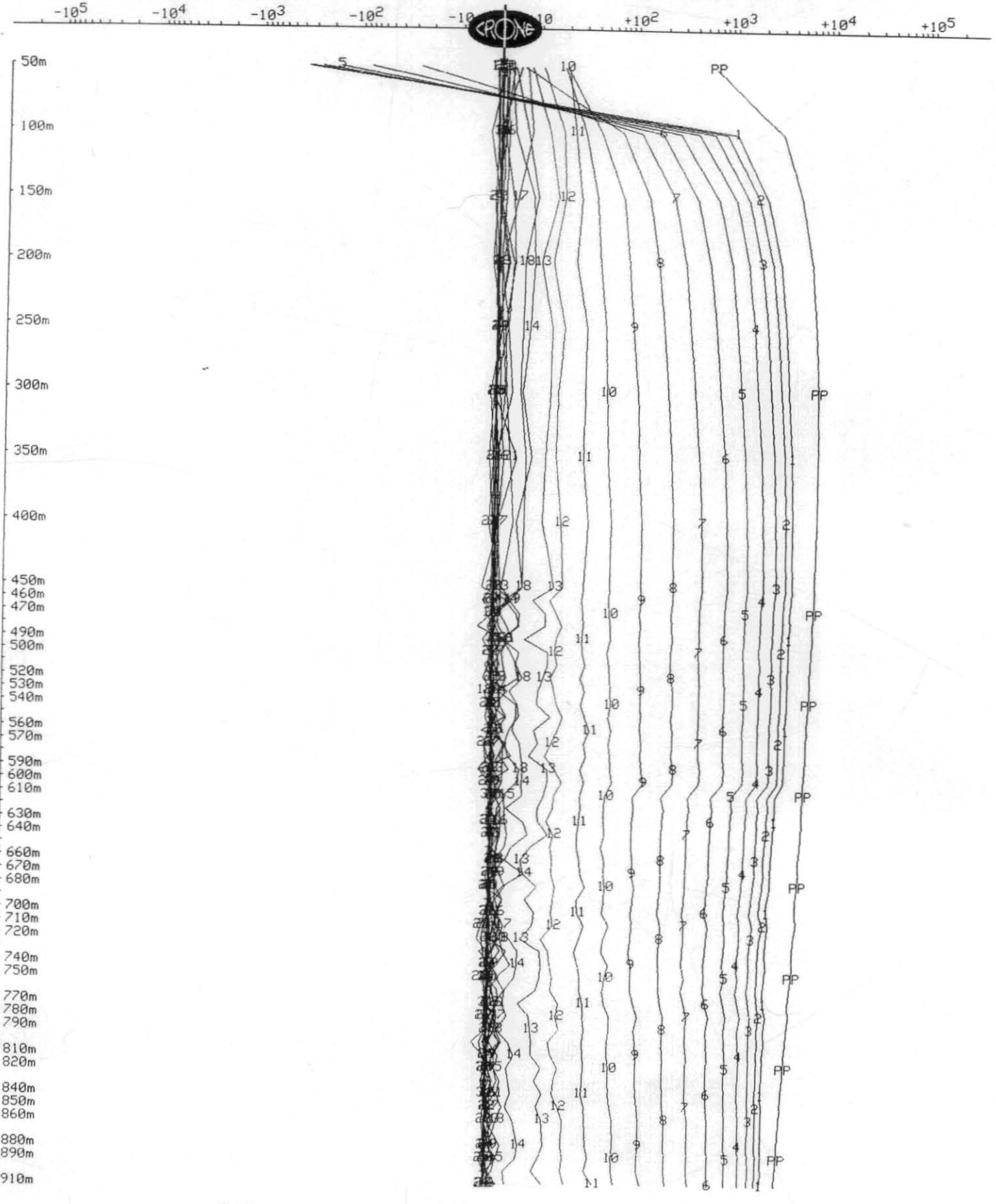
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675394

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

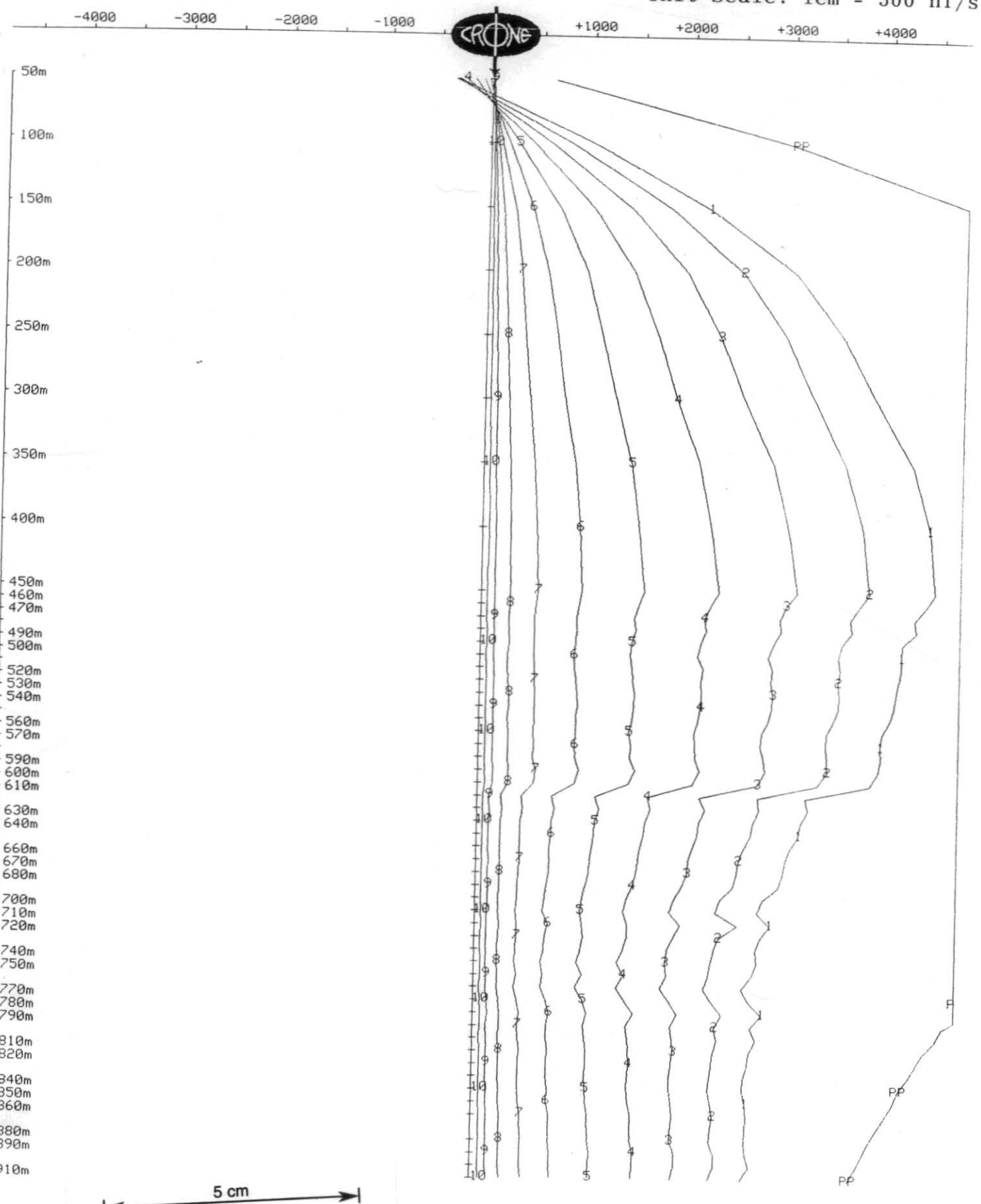
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 500 nT/s



675395

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

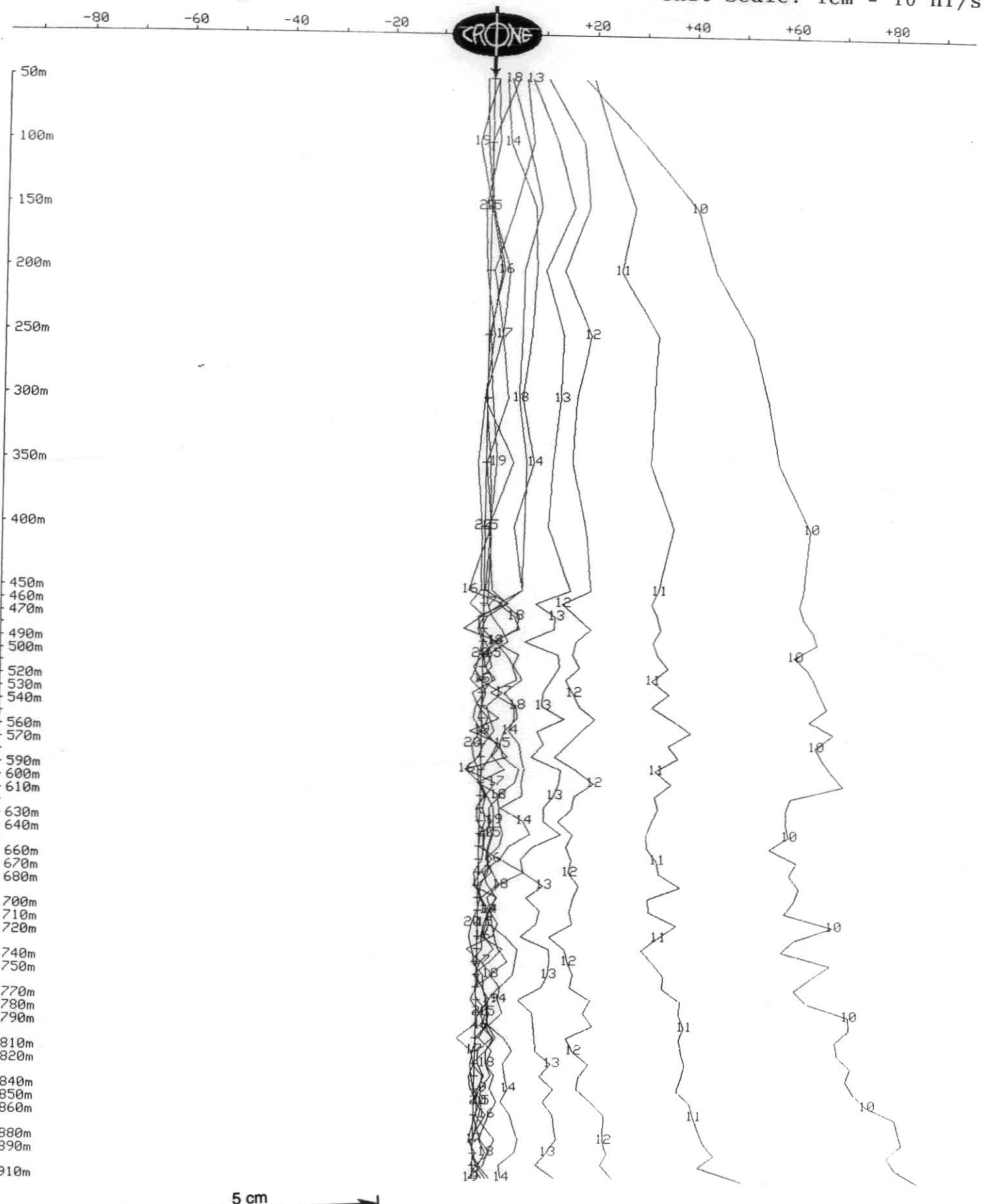
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



675396

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

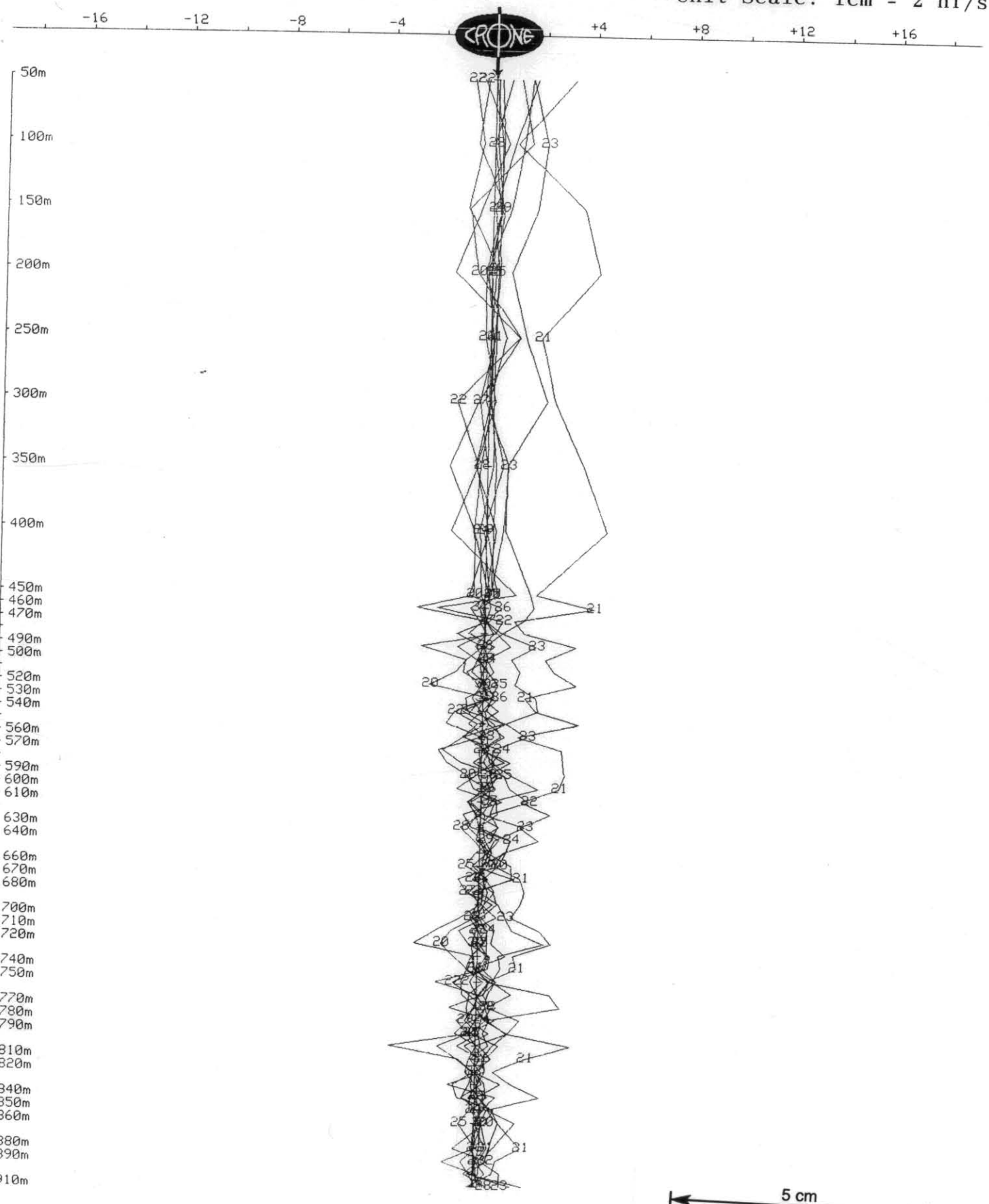
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



675397

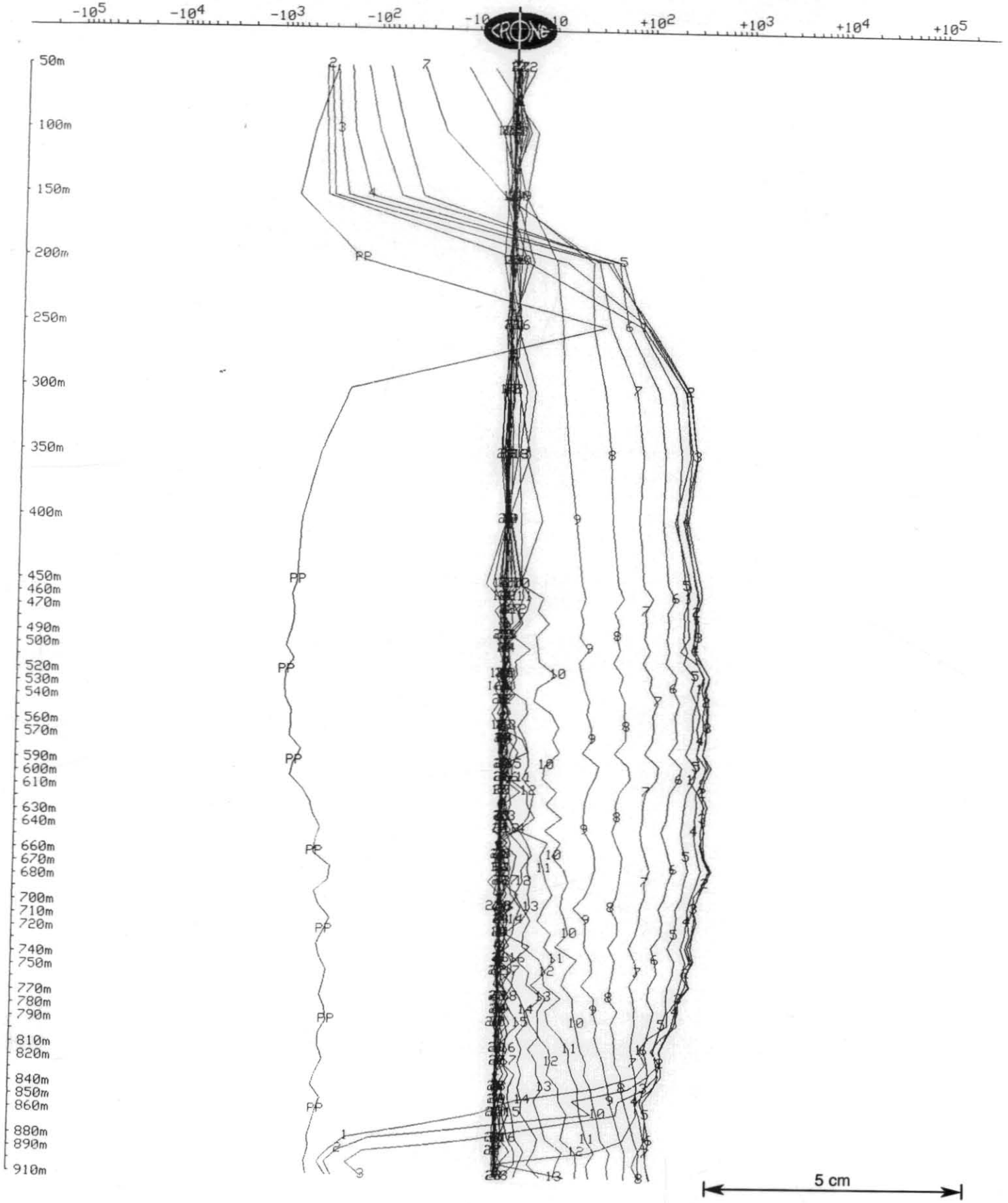
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675398

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

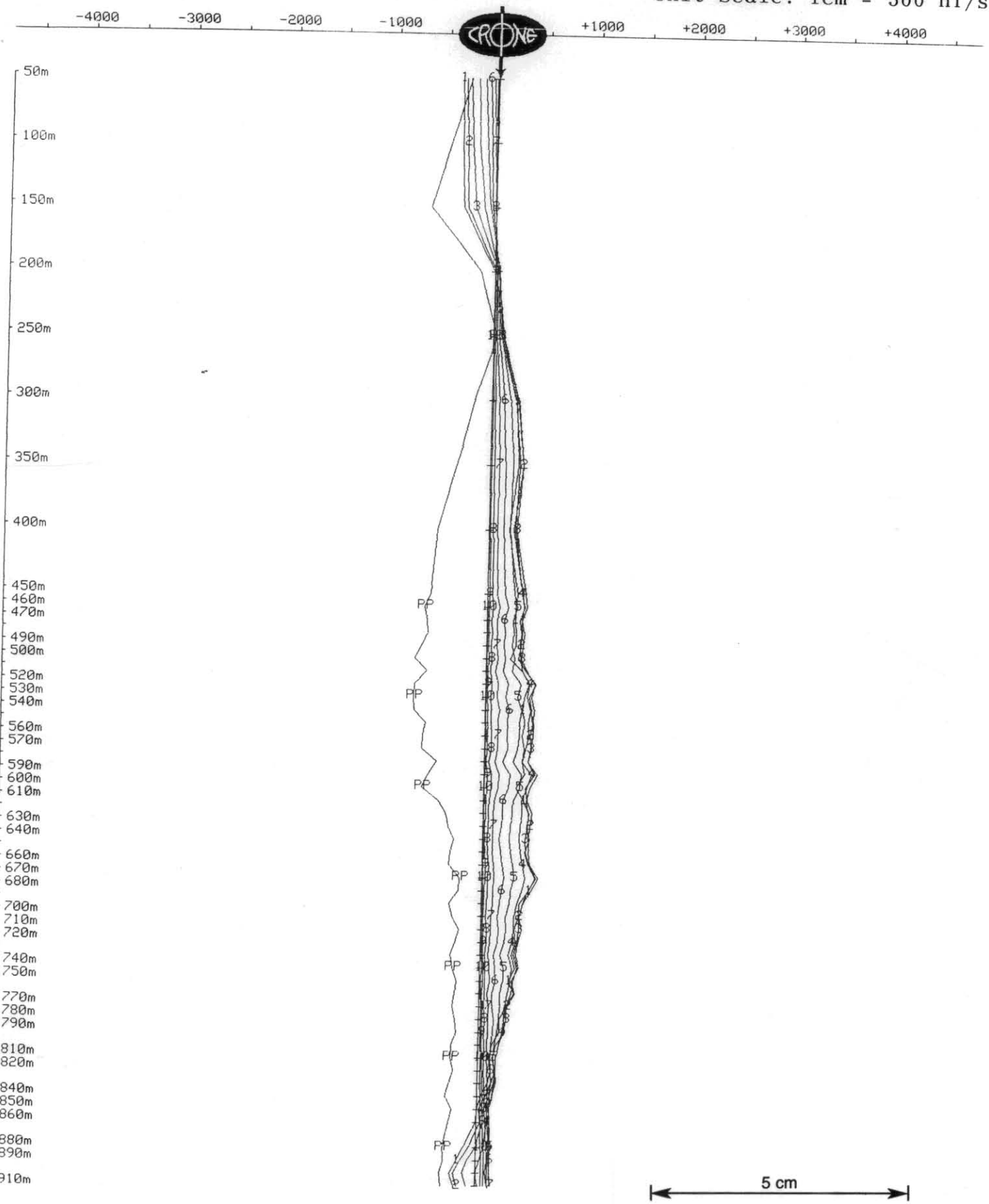
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 500 nT/s



675399

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

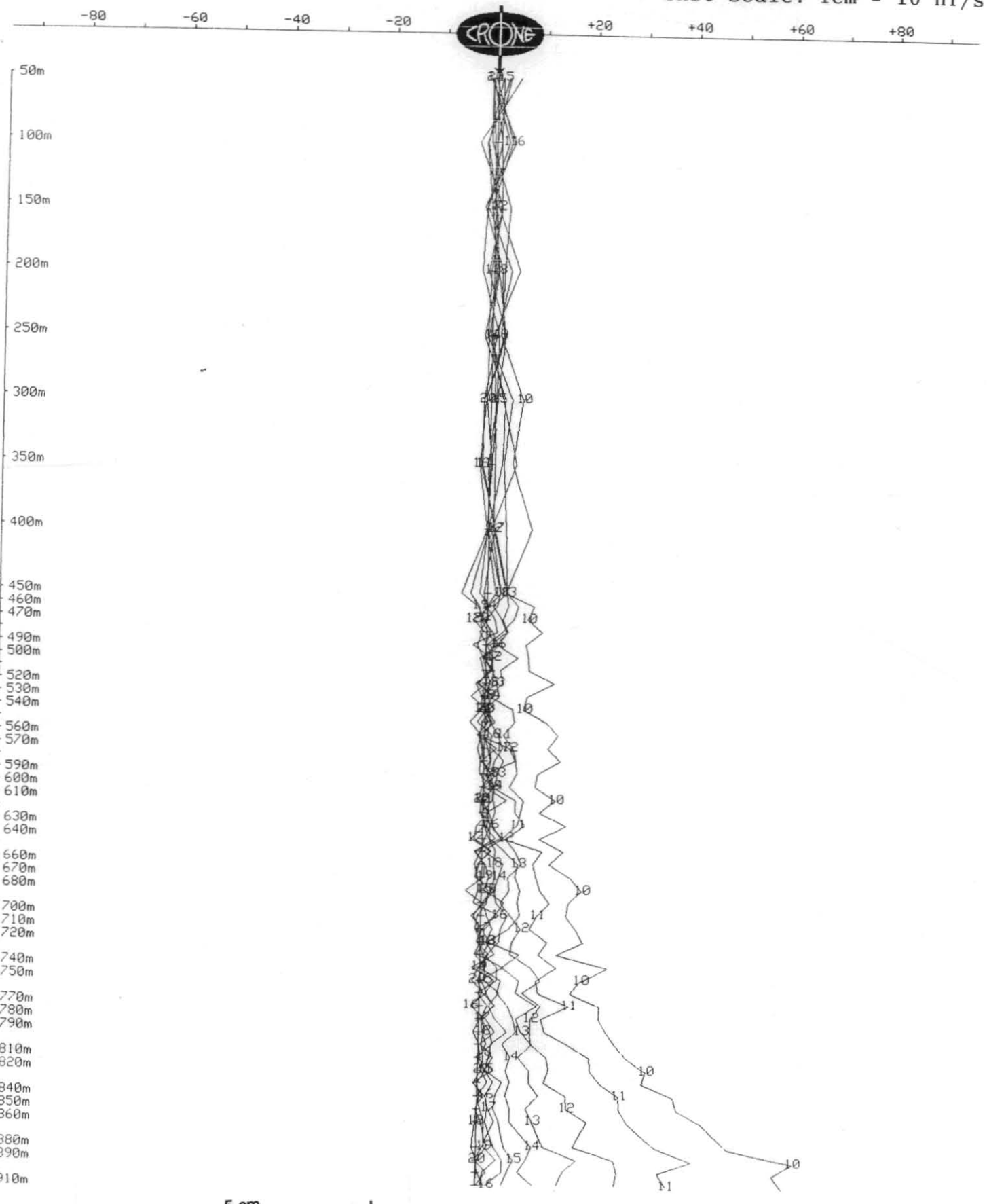
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



675400

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

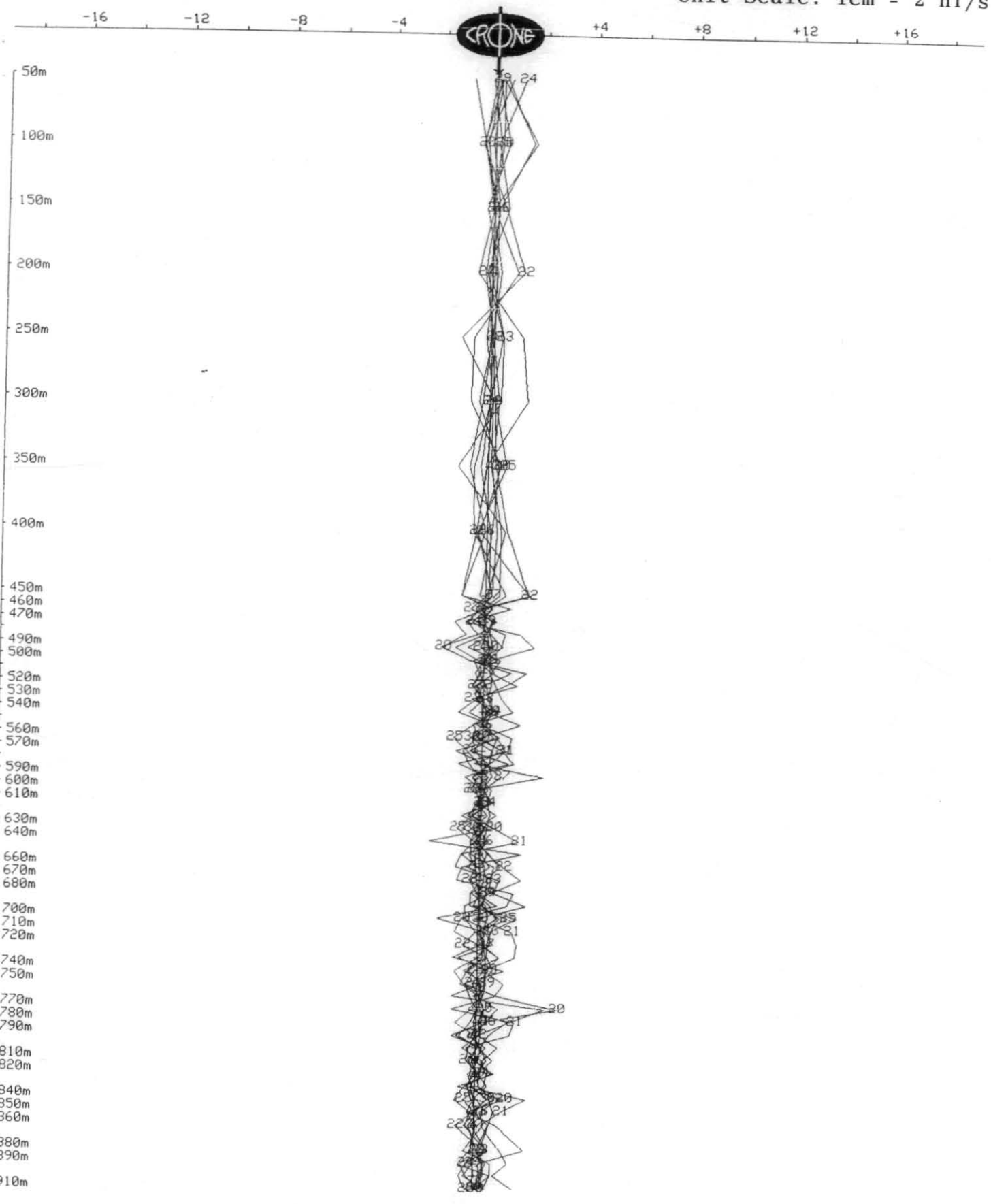
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : SHD21XY2.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



675401

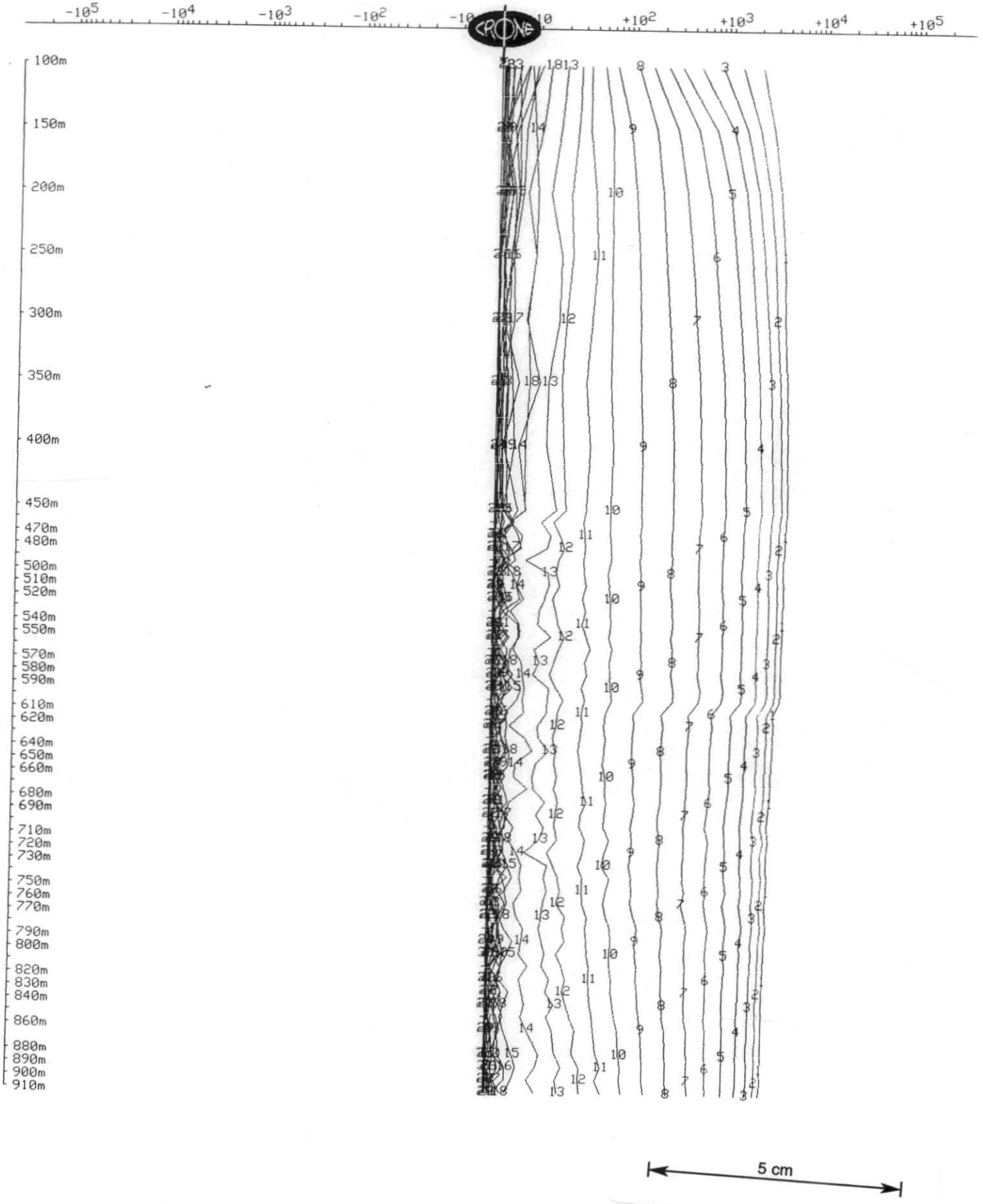
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 30, 2000

Hole : SHD-21
Tx Loop : #2
File name : S21XYZ2.PEM

TOTAL FIELD dBxyz/dt nanoTesla/sec - 31 of 31 channels

Scale: 1:4000



675402

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client	: **Goldfields Exploration**	Hole	: **SHD-21**
Grid	: **South Henty**	Tx Loop	: **#9**
Date	: Jan 26, 2000	File name	: SHD21Z9.PEM
Time Base	: 20.00 ms	# Readings	: 85
Ramp Time	: 0.50 ms	Stn Units	: Metric
# Channels	: 31	Coil Area	: 6500 sq m
Sync Type	: Crystal-MASTER	Polarity	: -
Loop Size	: 500m X 600m	Receiver	: Digital #105
Current	: 12 Amps	Operator	: Brett Rankin

Loop Coordinates (X,Y,Z)

1. 379500m, 5.3584e+06m, 0m
2. 380010m, 5.3584e+06m, 0m
3. 379820m, 5.3588e+06m, 0m
4. 379500m, 5.3588e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. 380890m, 5.35889e+06m, 0m
2. 270deg, 73.8deg, 30m
3. 270deg, 72.8deg, 60m
4. 270deg, 71.5deg, 60m
5. 273deg, 66.5deg, 60m
6. 275deg, 62.8deg, 50m
7. 272deg, 58deg, 50m
8. 271deg, 54.5deg, 55m
9. 271deg, 50.5deg, 55m
10. 270deg, 47.4deg, 60m
11. 269deg, 44deg, 60m
12. 268deg, 41.5deg, 70m
13. 271deg, 37.5deg, 75m
14. 273deg, 33.1deg, 65m
15. 275deg, 29deg, 70m
16. 276deg, 25deg, 65m
17. 275deg, 20deg, 36m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

675403

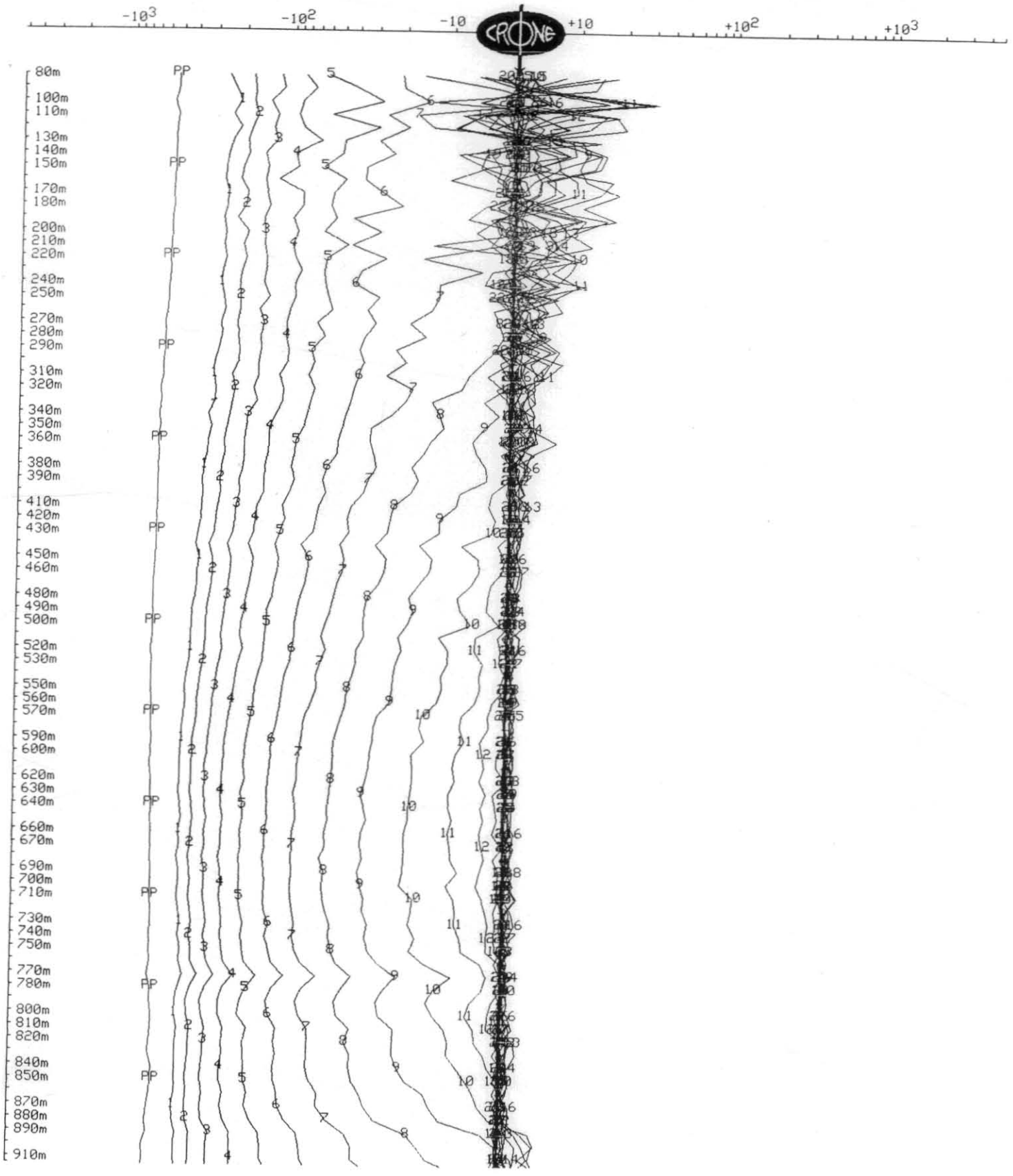
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 26, 2000

Hole : SHD-21
Tx Loop : #9
File name : SHD21Z9.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



5 cm

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

675404

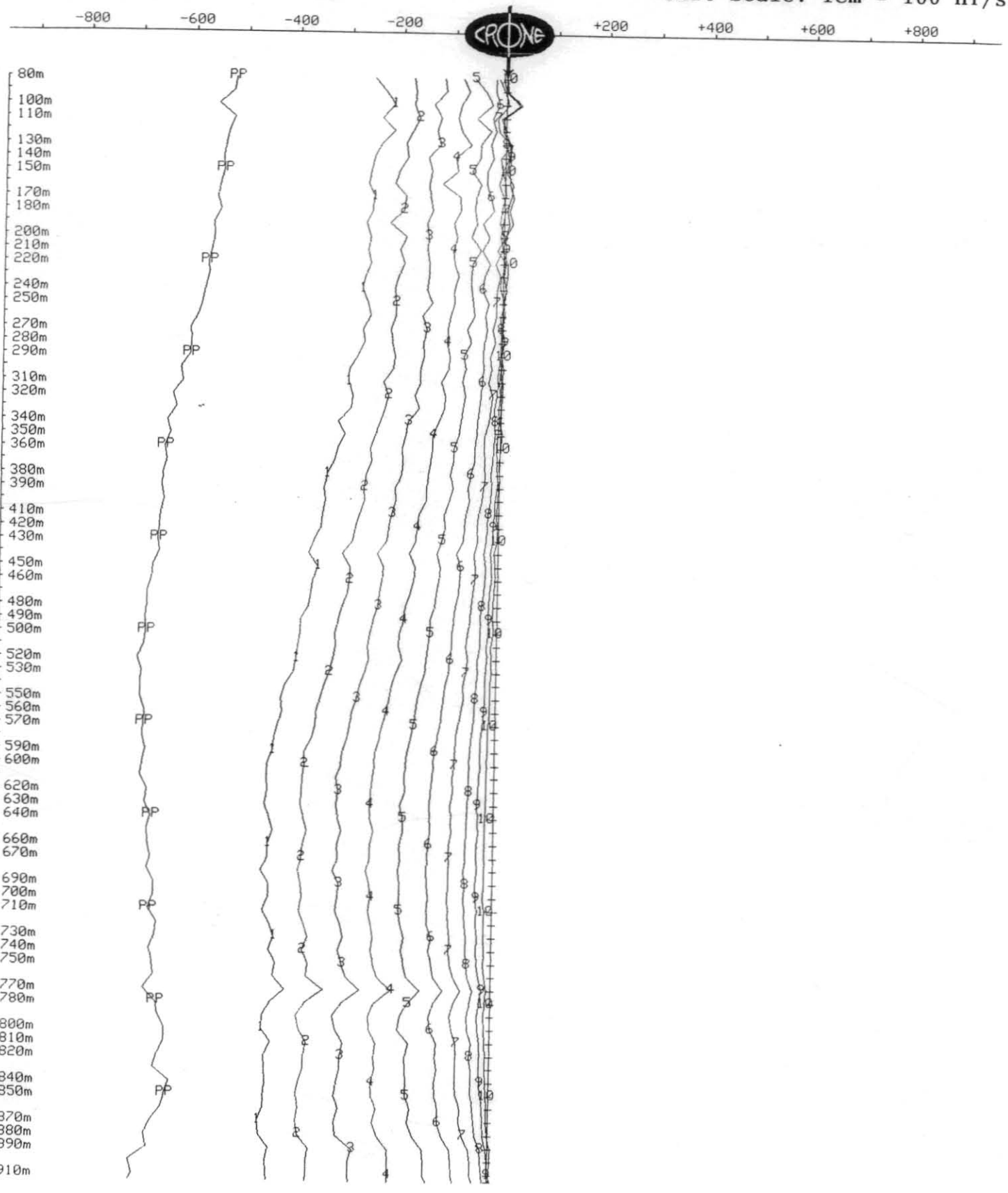
Client : **Goldfields Exploration**
Grid : **South Henty**
Date : Jan 26, 2000

Hole : **SHD-21**
Tx Loop : **#9**
File name : SHD21Z9.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 100 nT/s



5 cm

675405

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

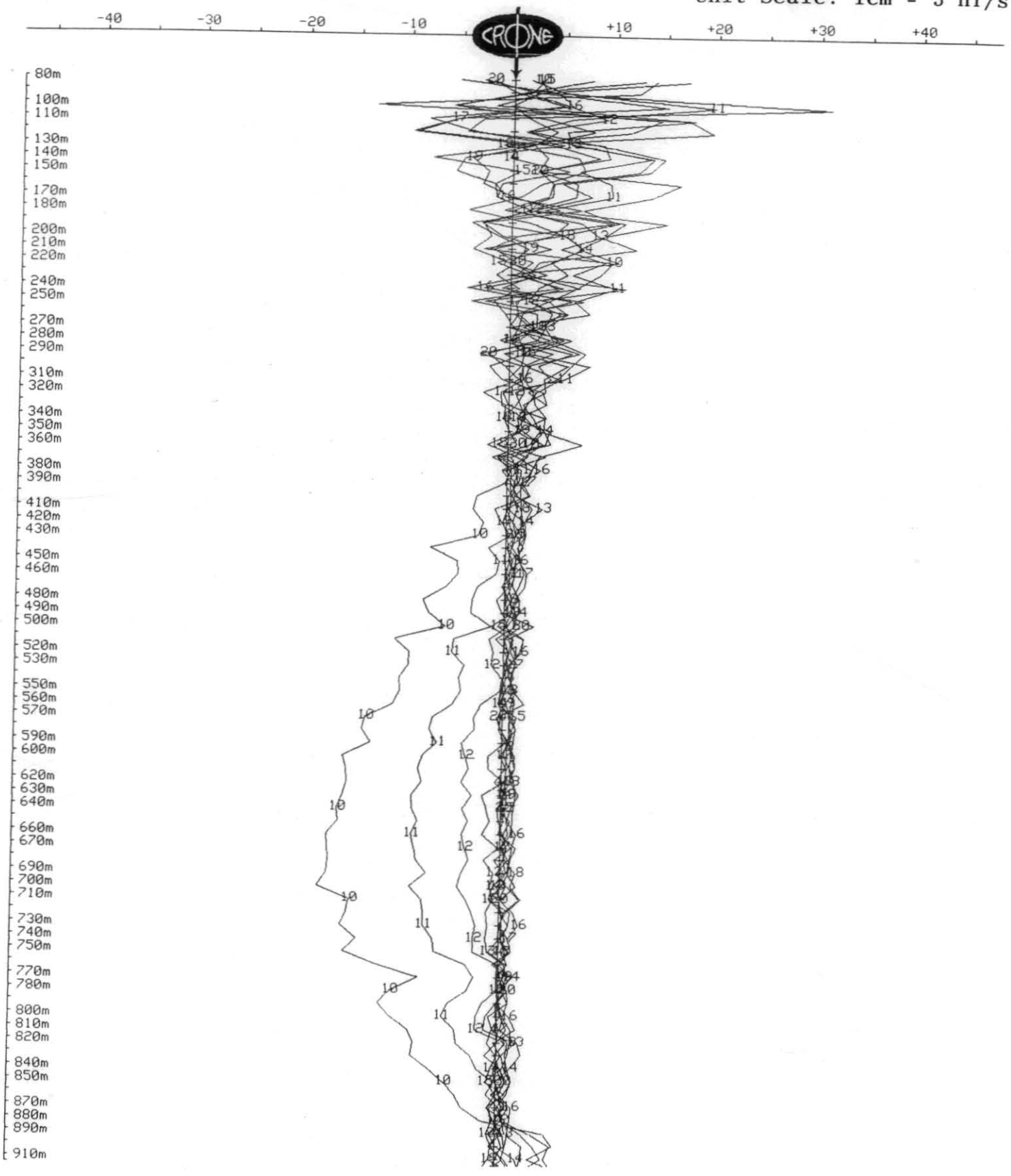
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 26, 2000

Hole : SHD-21
Tx Loop : #9
File name : SHD21Z9.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 5 nT/s



OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

675406

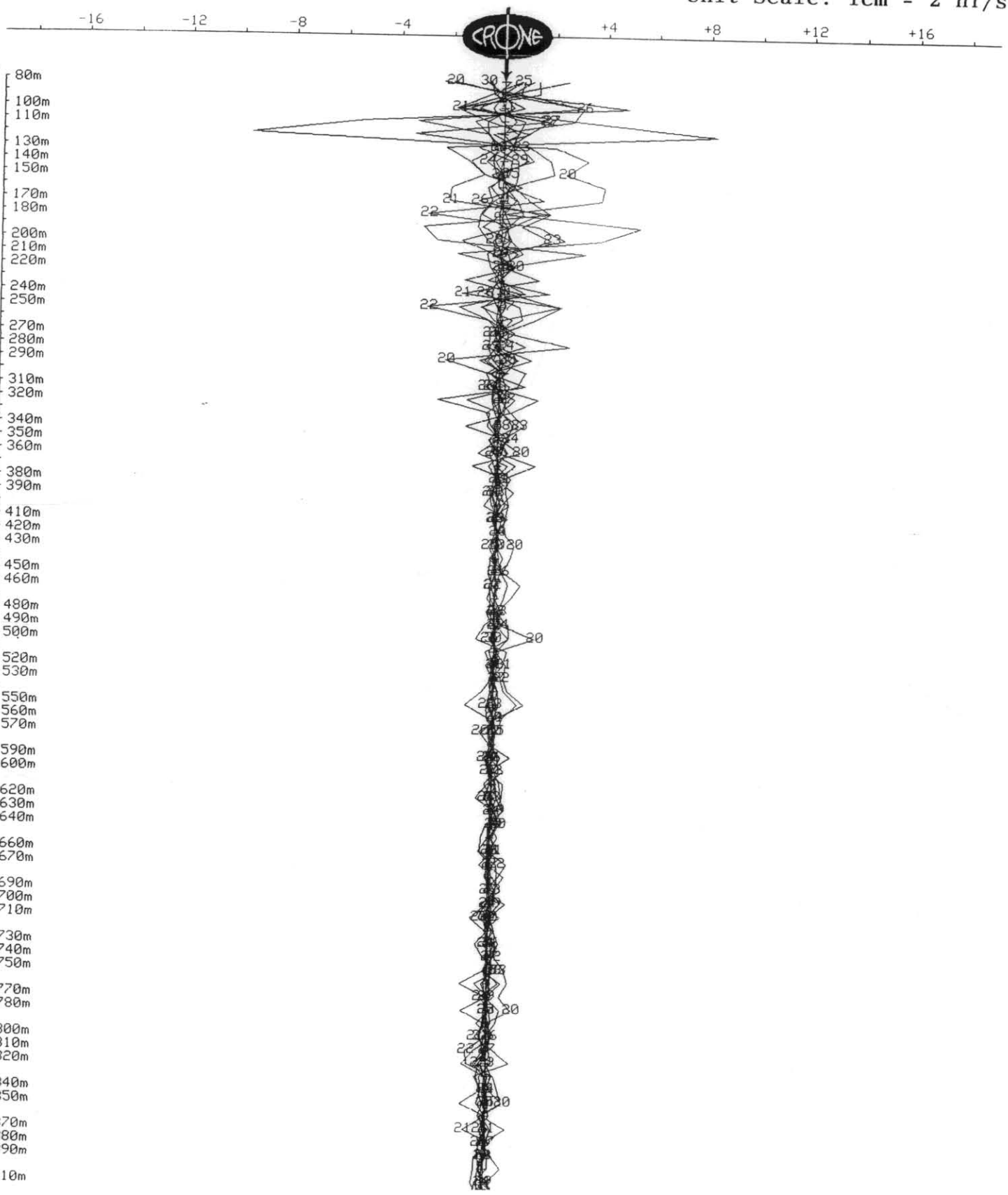
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 26, 2000

Hole : SHD-21
Tx Loop : #9
File name : SHD21Z9.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



675407

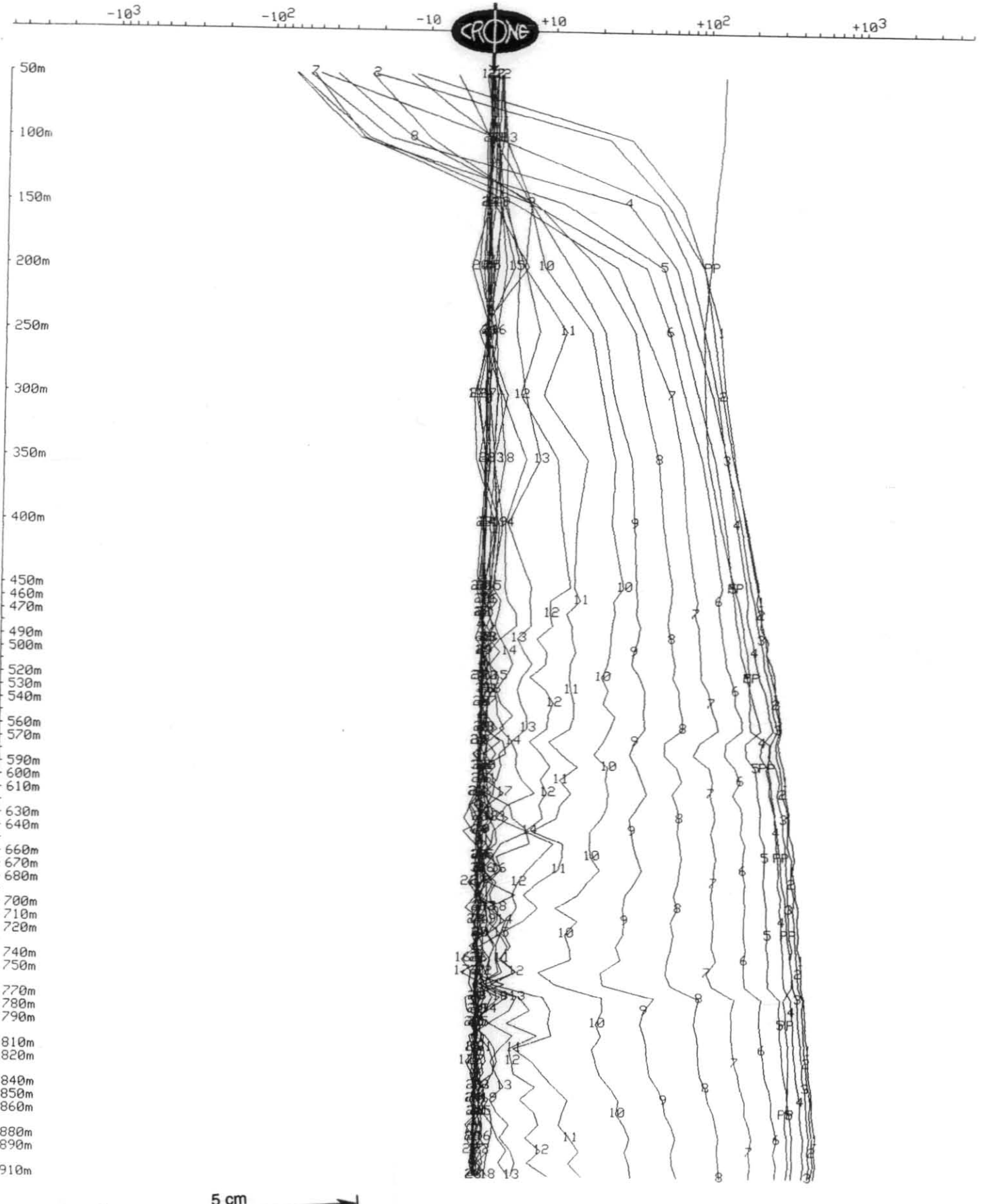
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675408

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

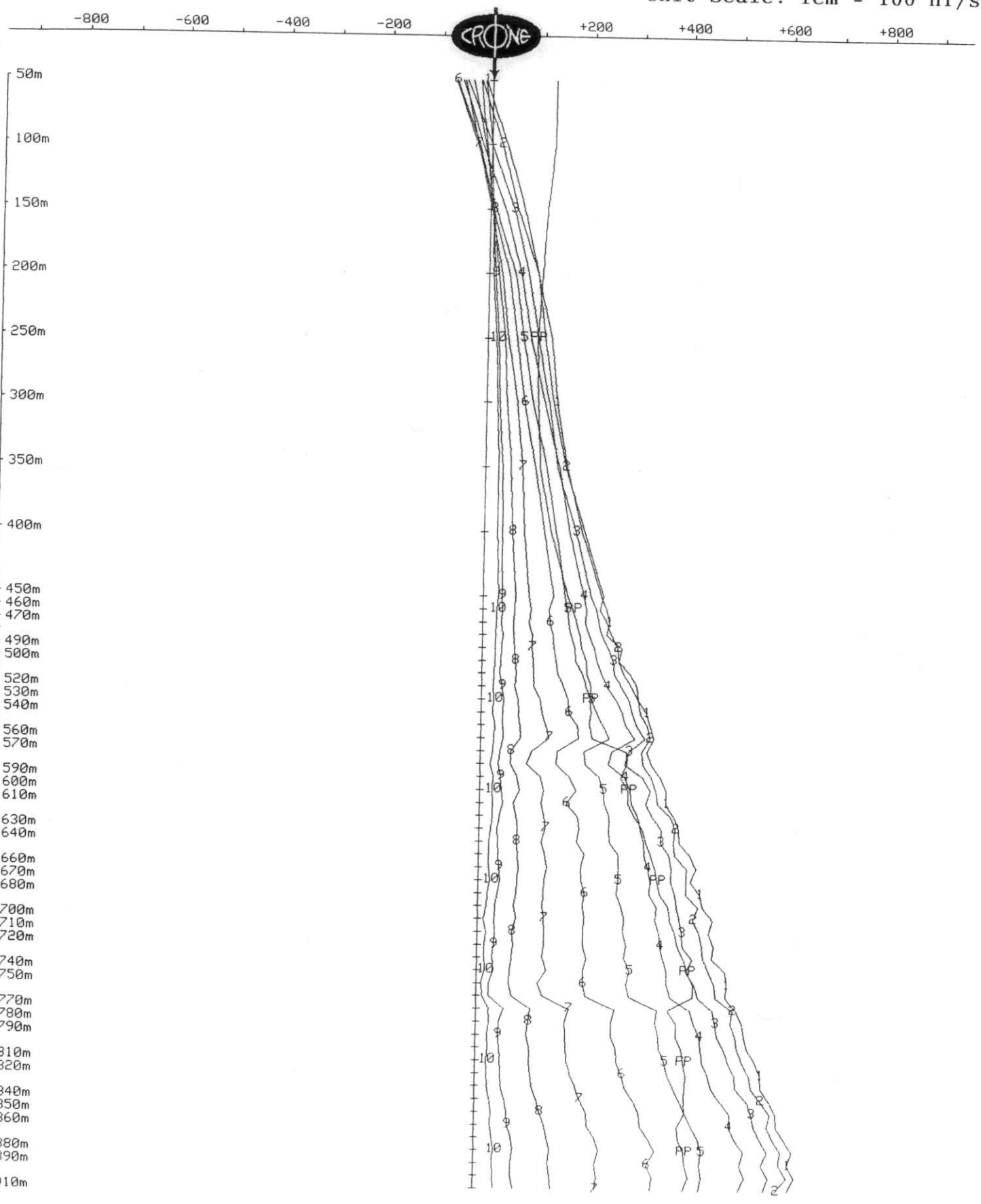
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 100 nT/s



675409

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

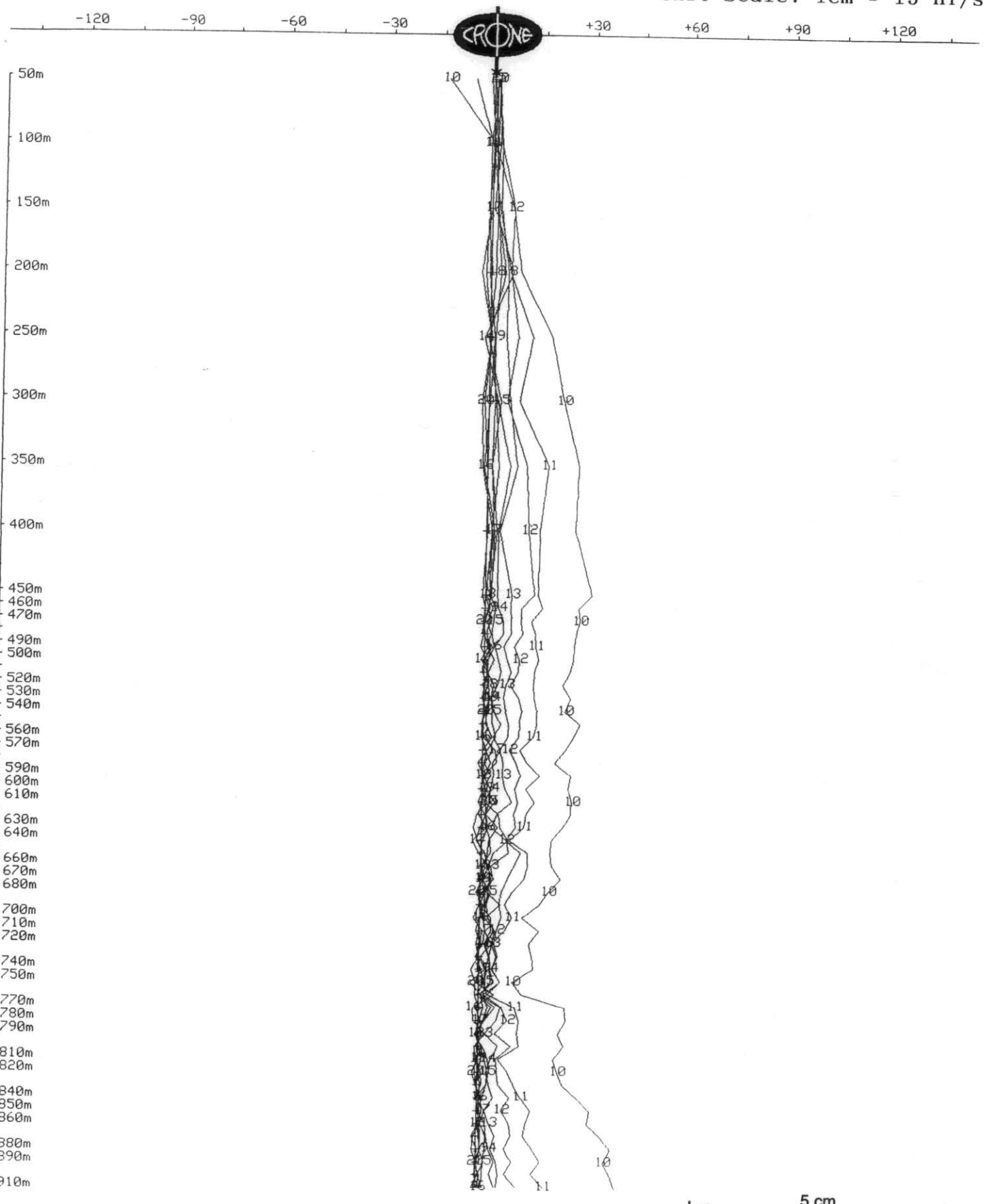
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 15 nT/s



675410

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

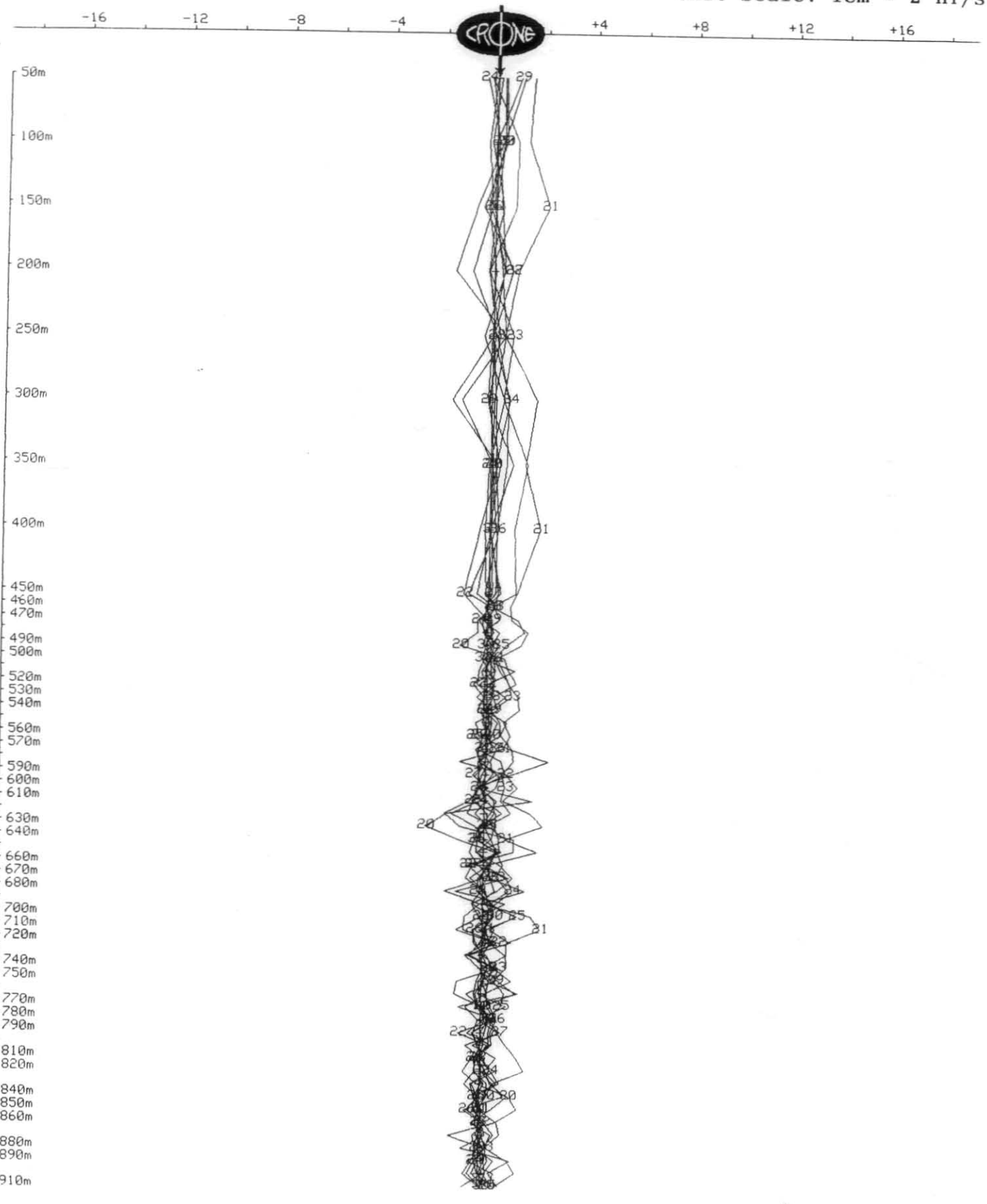
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

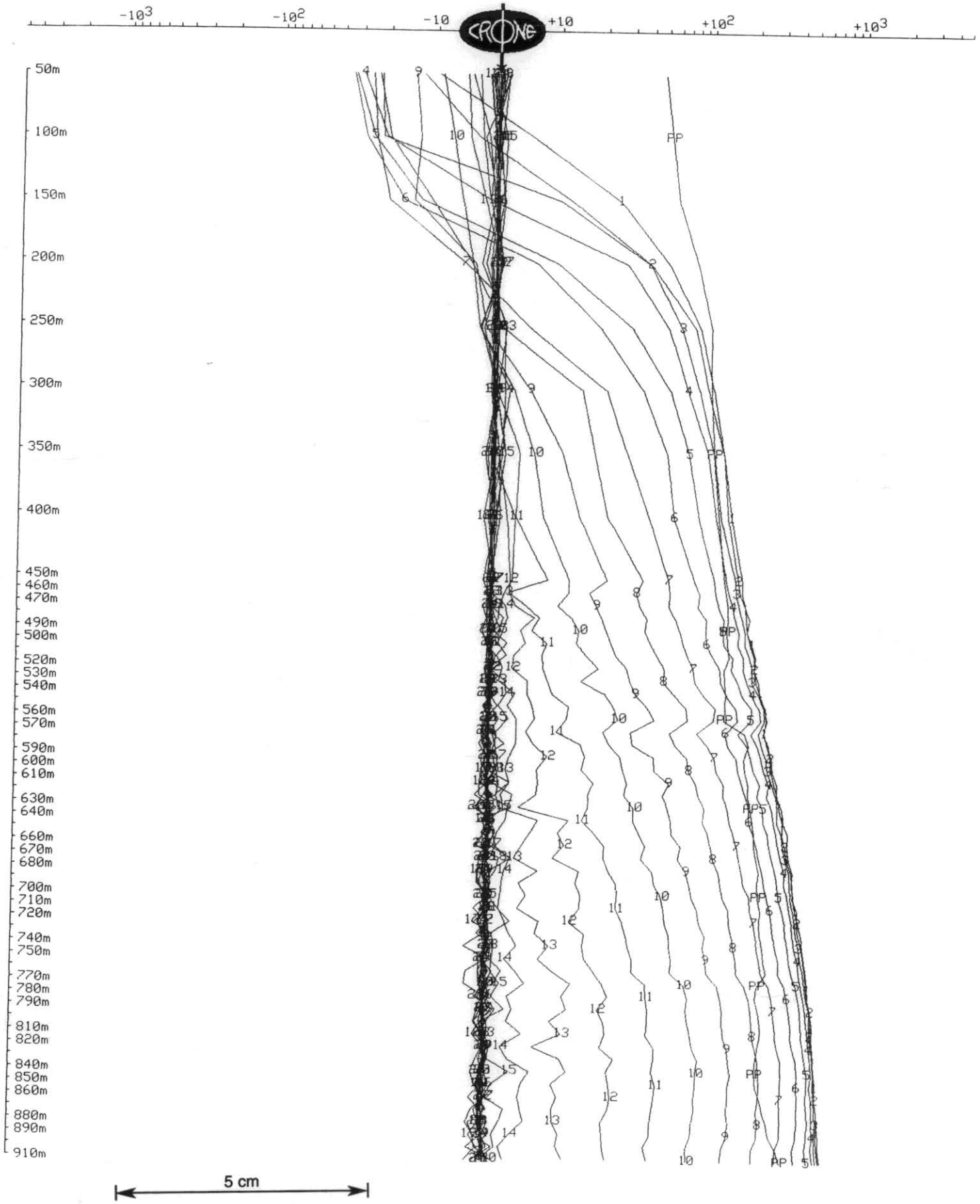
675411

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675412

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

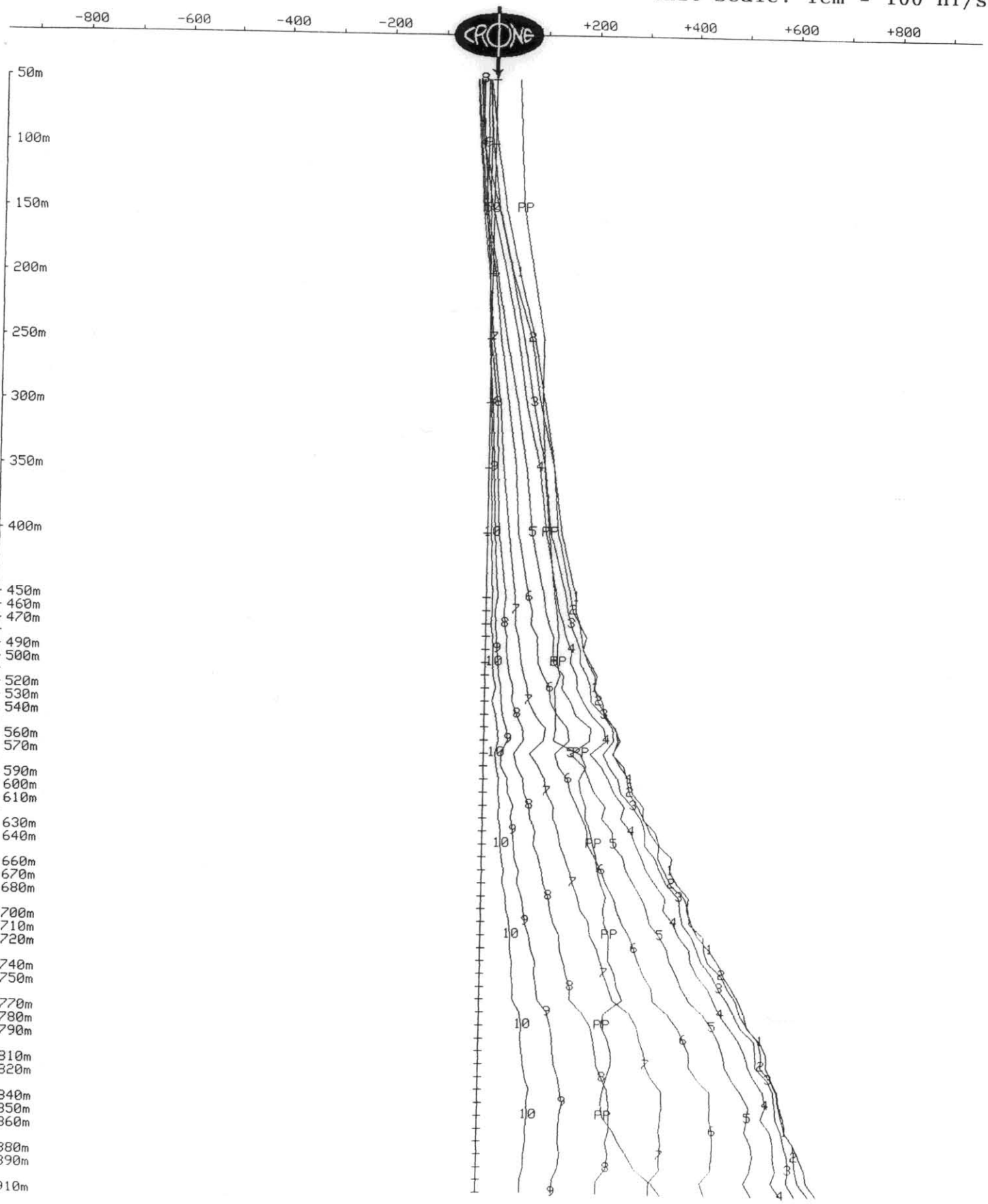
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 100 nT/s



675413

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

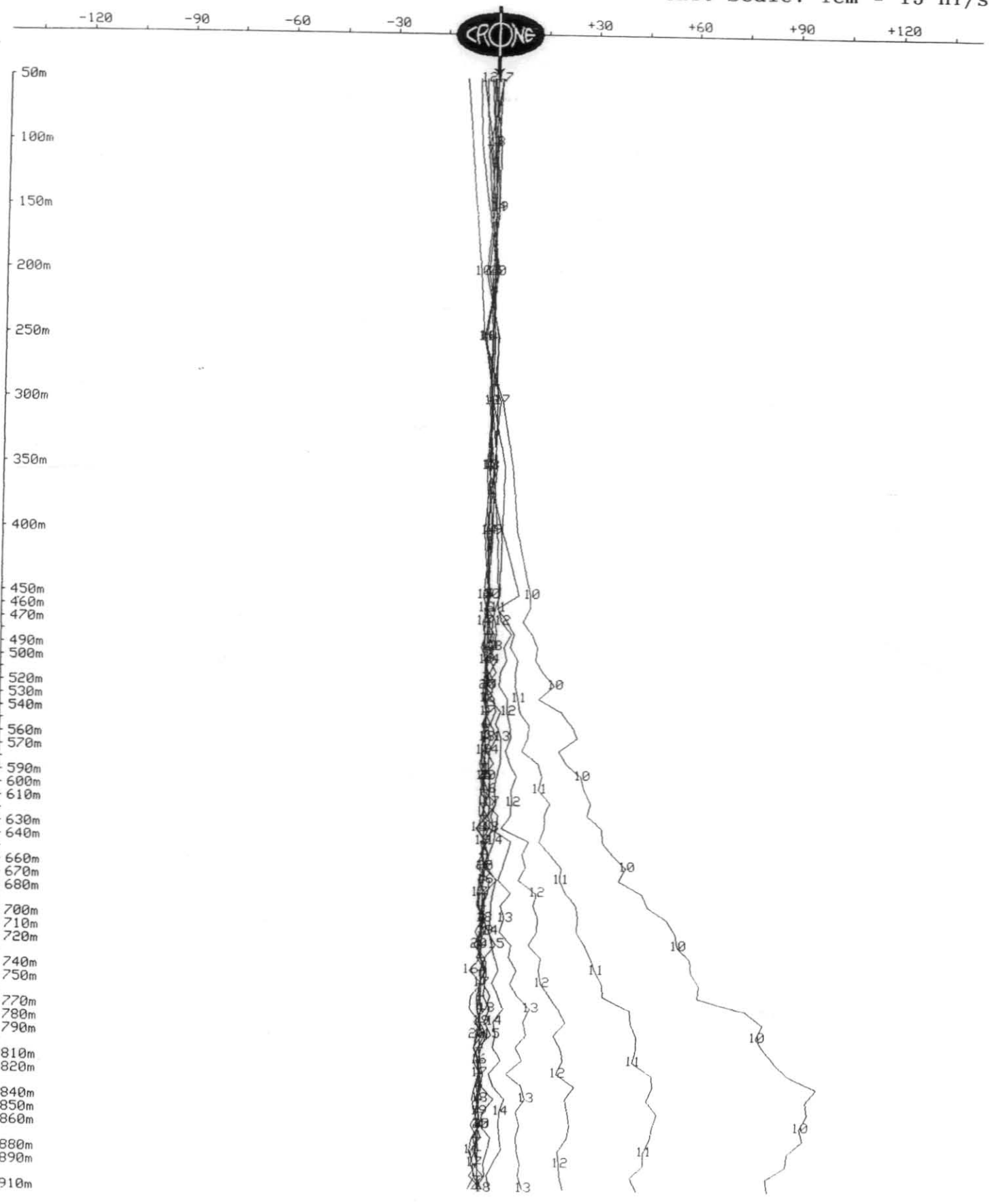
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 15 nT/s



675414

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

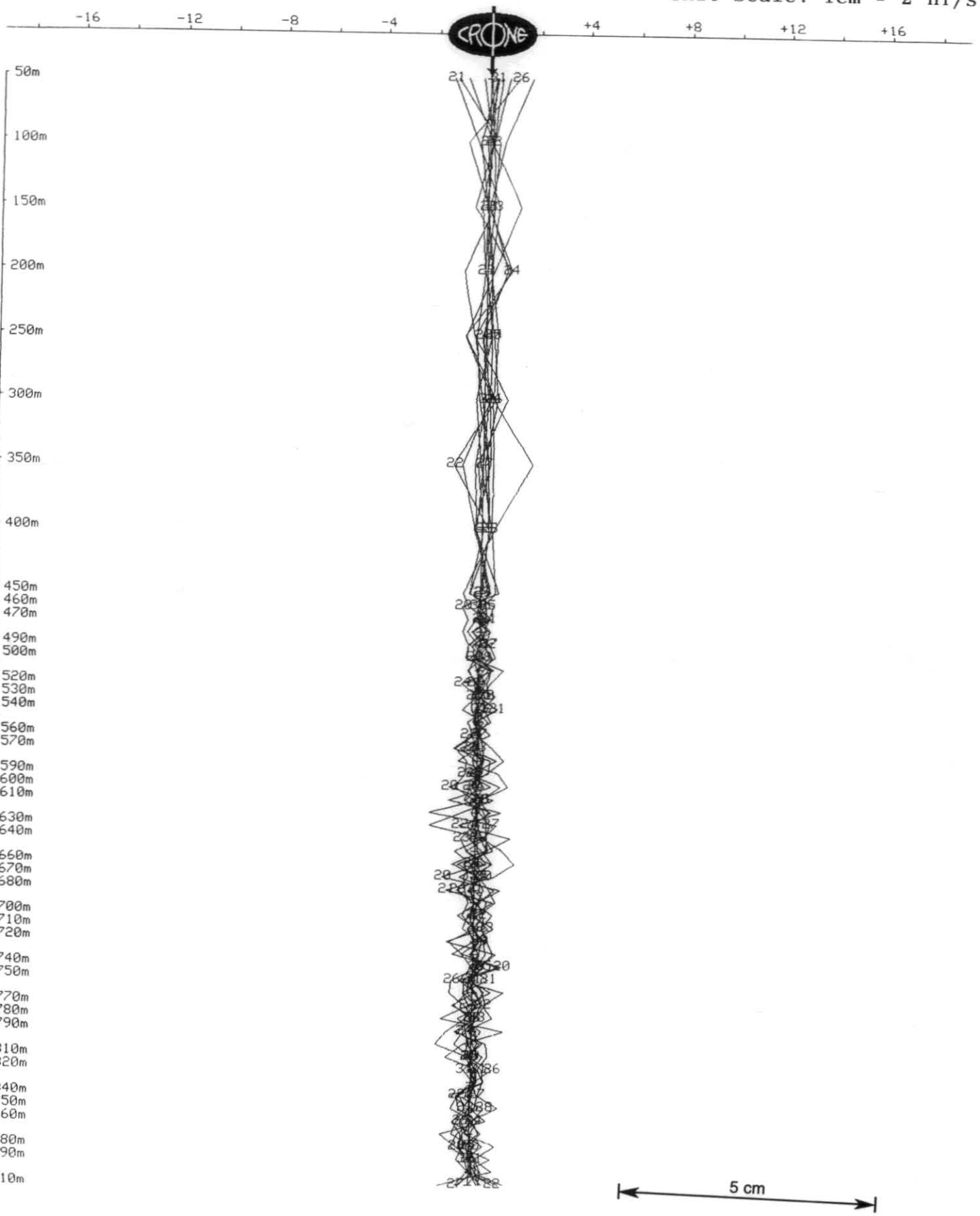
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : SHD21XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



675415

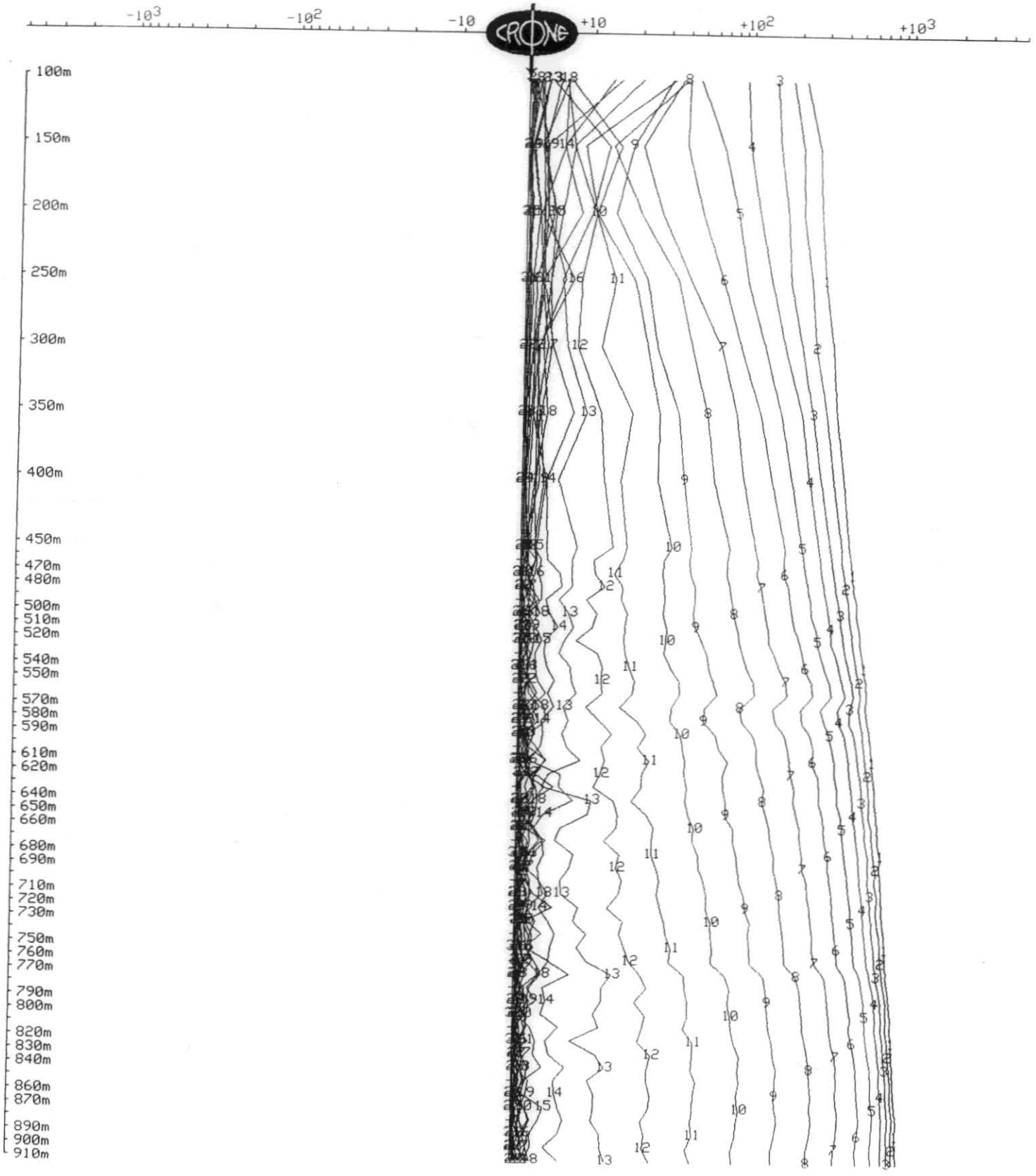
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 1900

Hole : SHD-21
Tx Loop : #9
File name : S21XYZ9.PEM

TOTAL FIELD dBxyz/dt nanoTesla/sec - 31 of 31 channels

Scale: 1:4000



5 cm

675416

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 2000
Time Base : 20.00 ms
Ramp Time : 0.50 ms
Channels: 31
Sync Type : Crystal-MASTER
Loop Size : 500m X 600m
Current : 13 Amps

Hole : SHD-22
Tx Loop : #9
File name : SHD22Z9.PEM
Readings: 61
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : -
Receiver : Digital #105
Operator : Heath

Loop Coordinates (X,Y,Z)
1. 379500m, 5.3584e+06m, 0m
2. 380010m, 5.3584e+06m, 0m
3. 379820m, 5.3588e+06m, 0m
4. 379500m, 5.3588e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 380620m, 5.35841e+06m, 0m
2. 294deg, 79.8deg, 30m
3. 298deg, 78deg, 60m
4. 301deg, 76.1deg, 60m
5. 308deg, 74.8deg, 60m
6. 310deg, 73deg, 60m
7. 316deg, 71deg, 60m
8. 321deg, 69.2deg, 60m
9. 324deg, 66deg, 64m
10. 327deg, 62deg, 64m
11. 329deg, 59deg, 60m
12. 329deg, 54deg, 38m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

675417

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

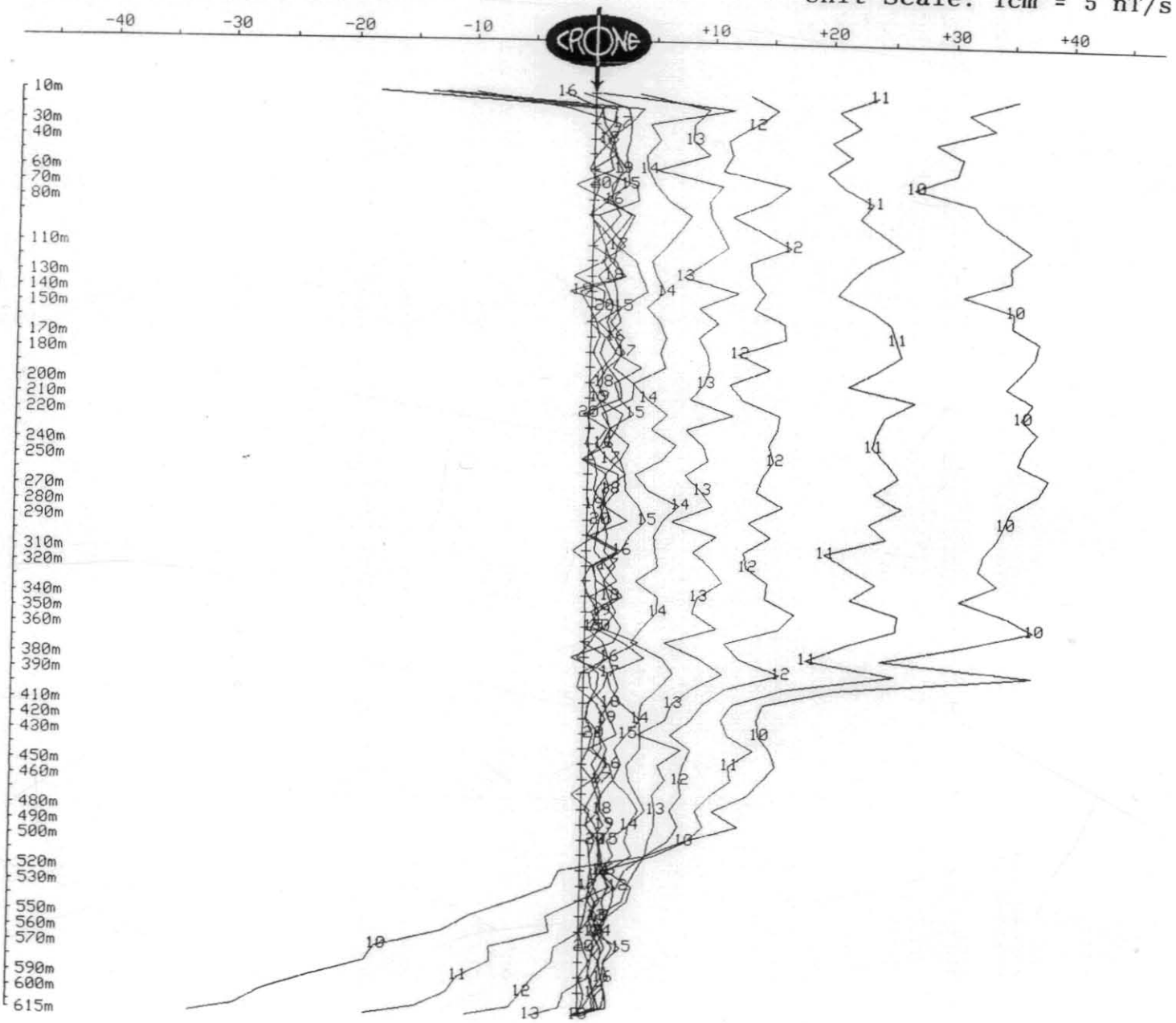
Client : Goldfields Exploration
Grid : South Henty
Date : Jan 27, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22Z9.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 5 nT/s



5 cm

675418

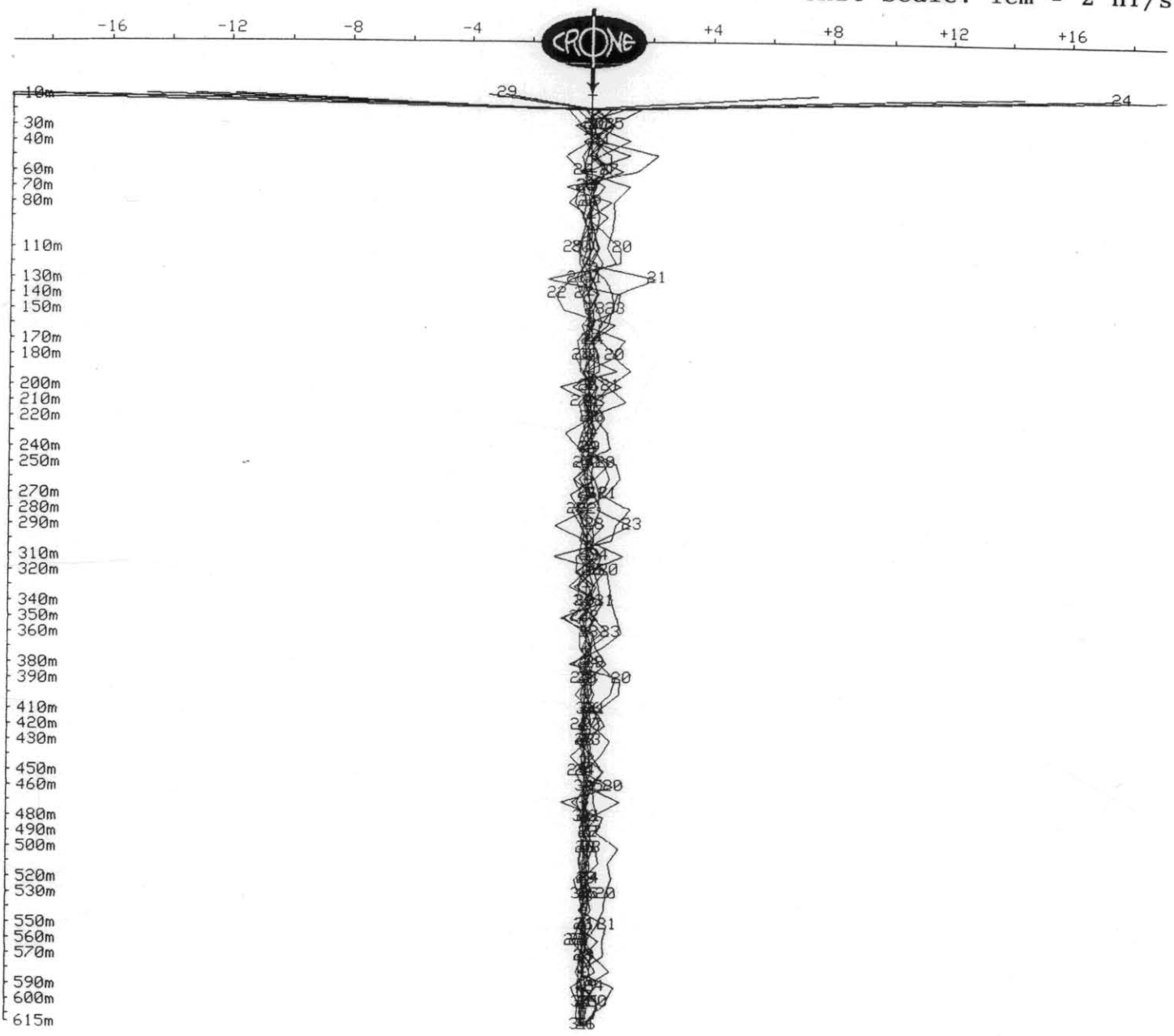
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client	: Goldfields Exploration	Hole	: SHD-22
Grid	: South Henty	Tx Loop	: #9
Date	: Jan 27, 2000	File name	: SHD22Z9.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

675419

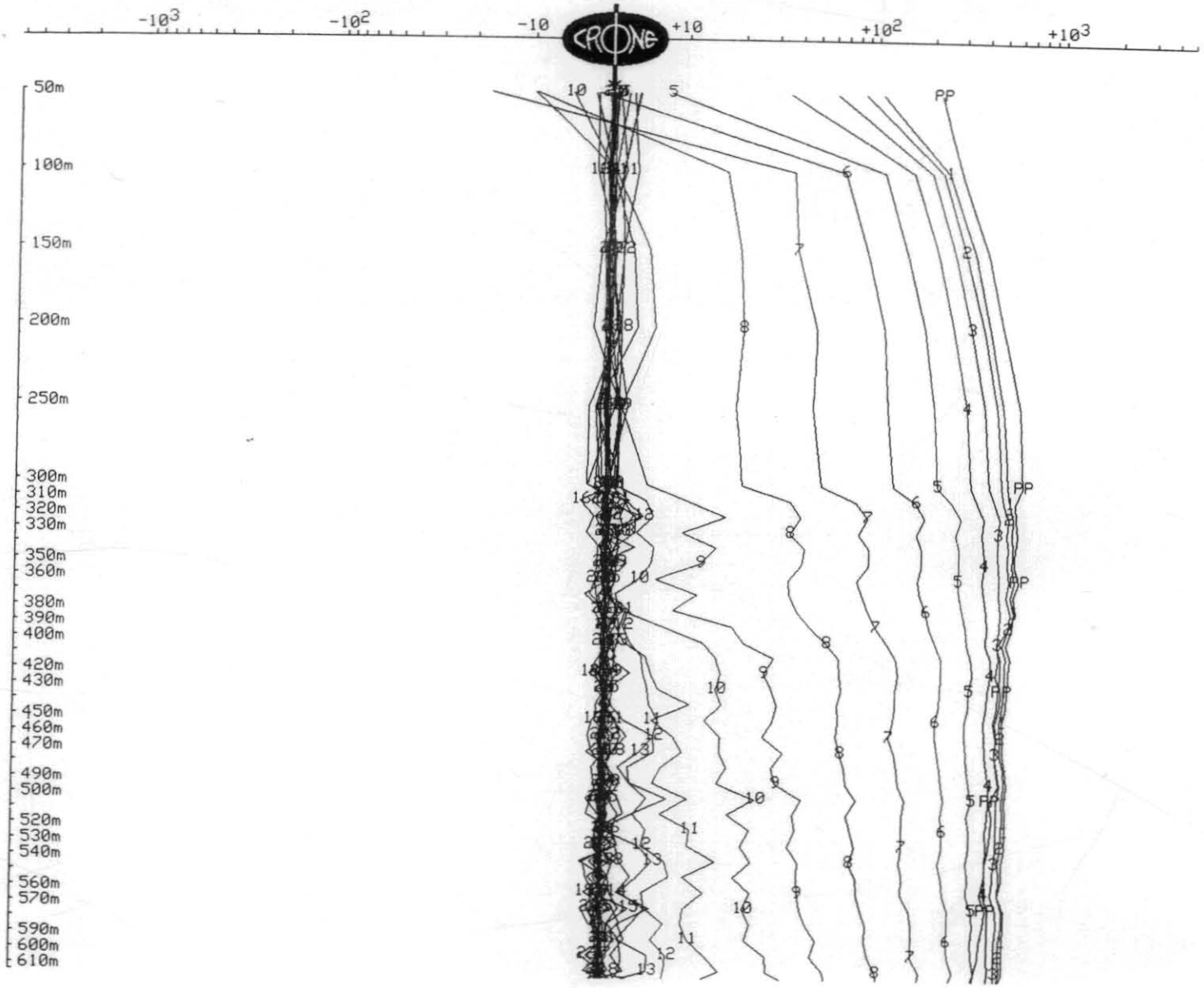
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



675420

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

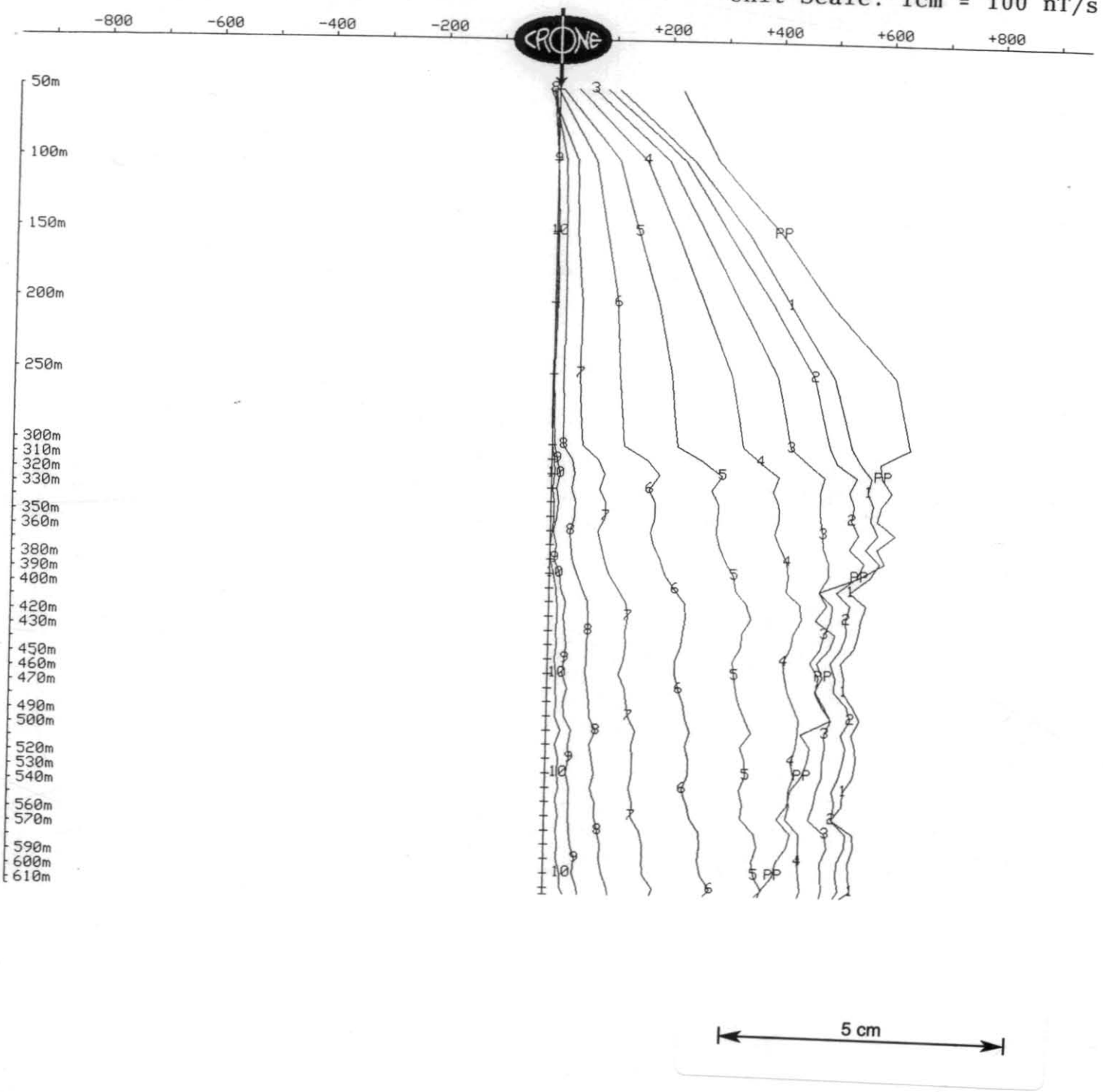
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 100 nT/s



675421

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

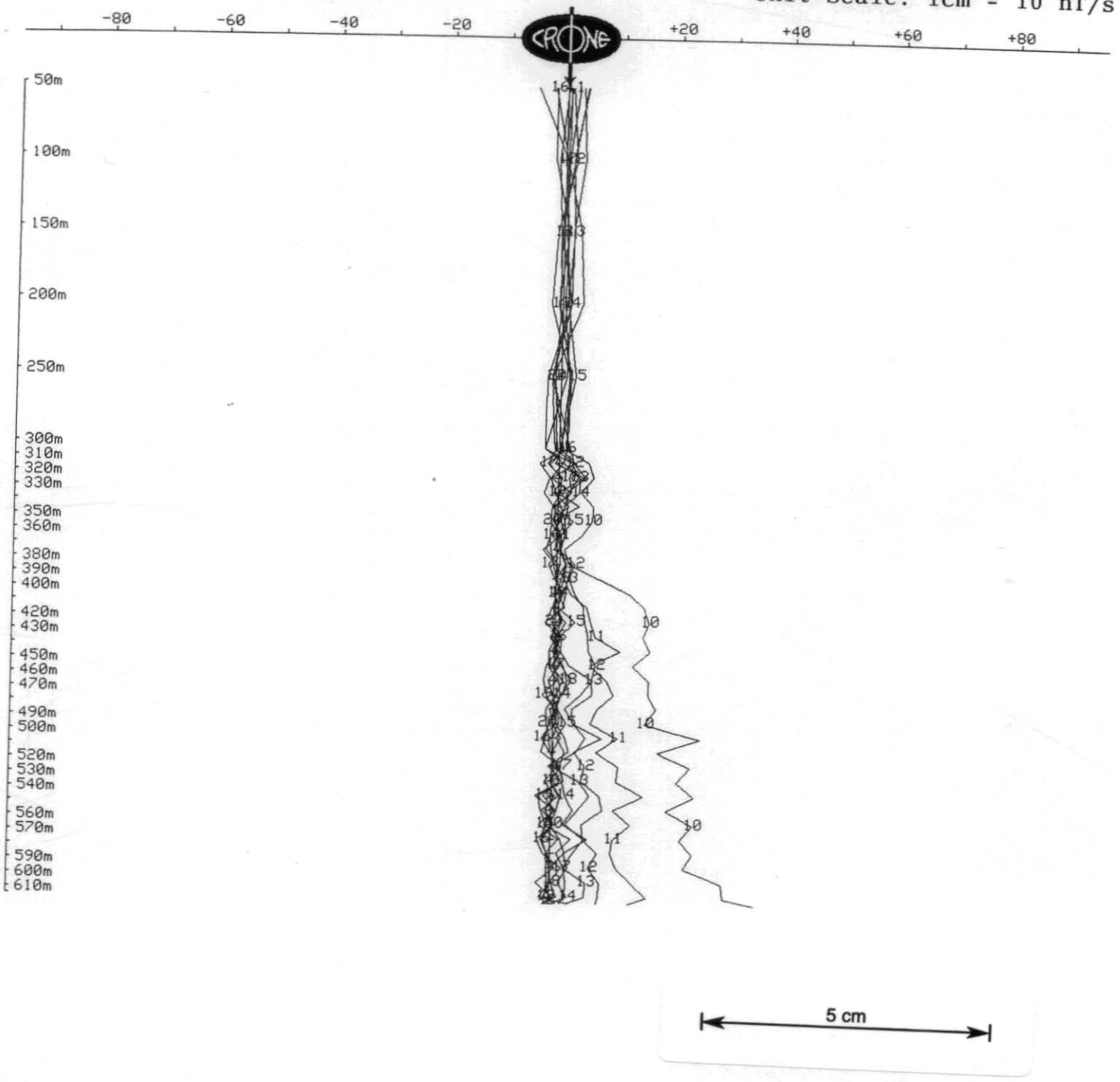
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



675422

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

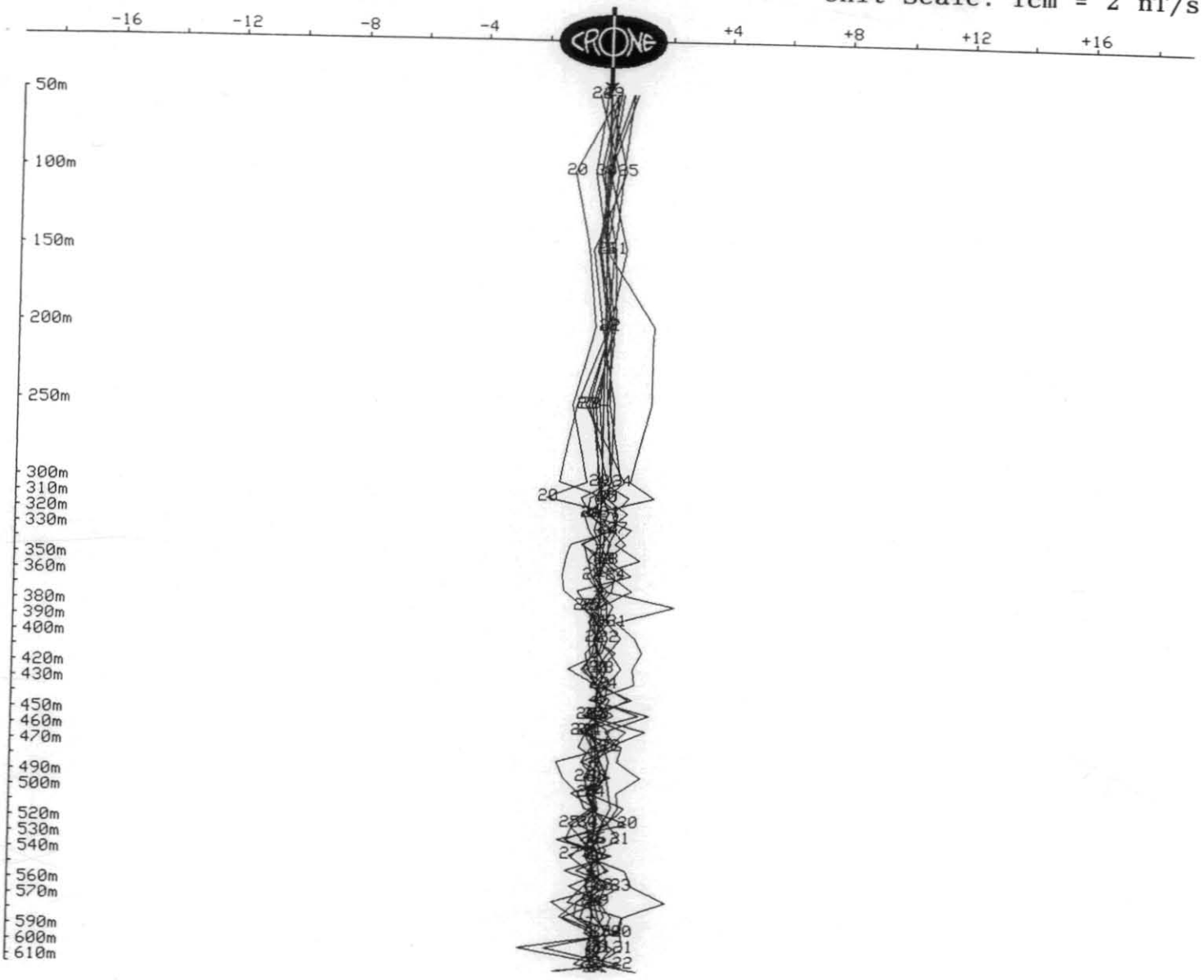
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
X COMPONENT dBx/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

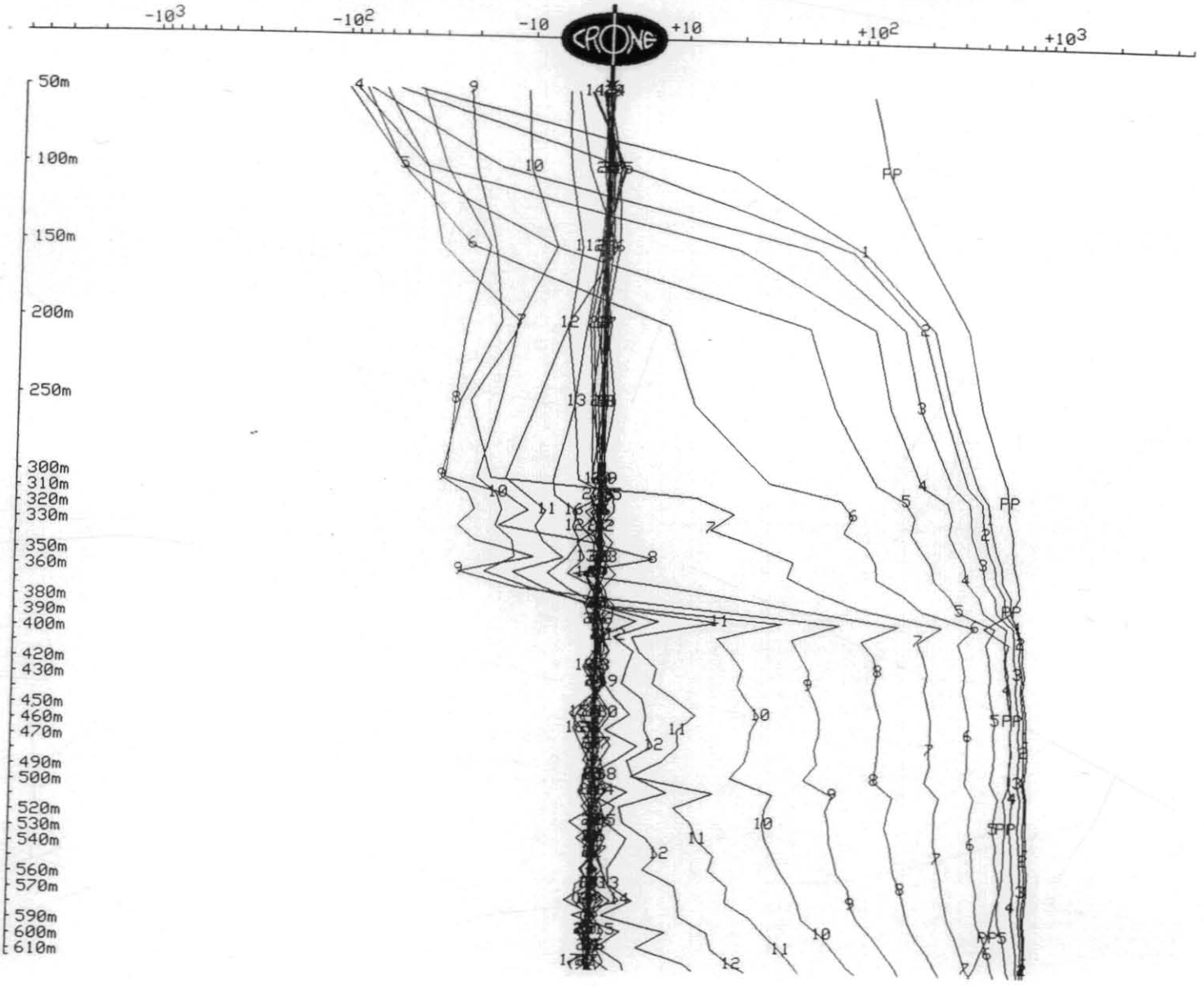
675423

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 31 of 31 channels and PP
Scale: 1:4000



675424

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

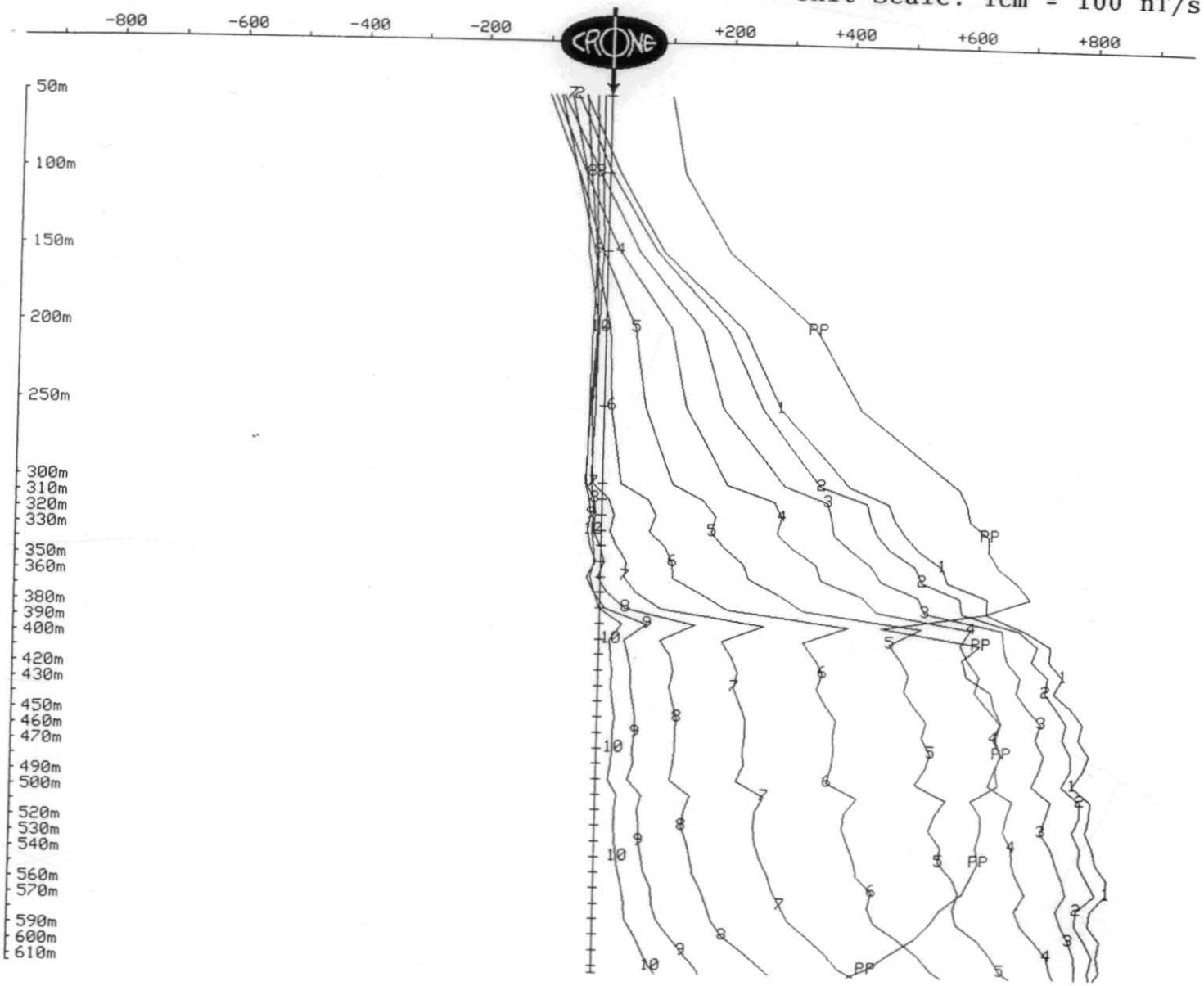
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 100 nT/s



675425

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

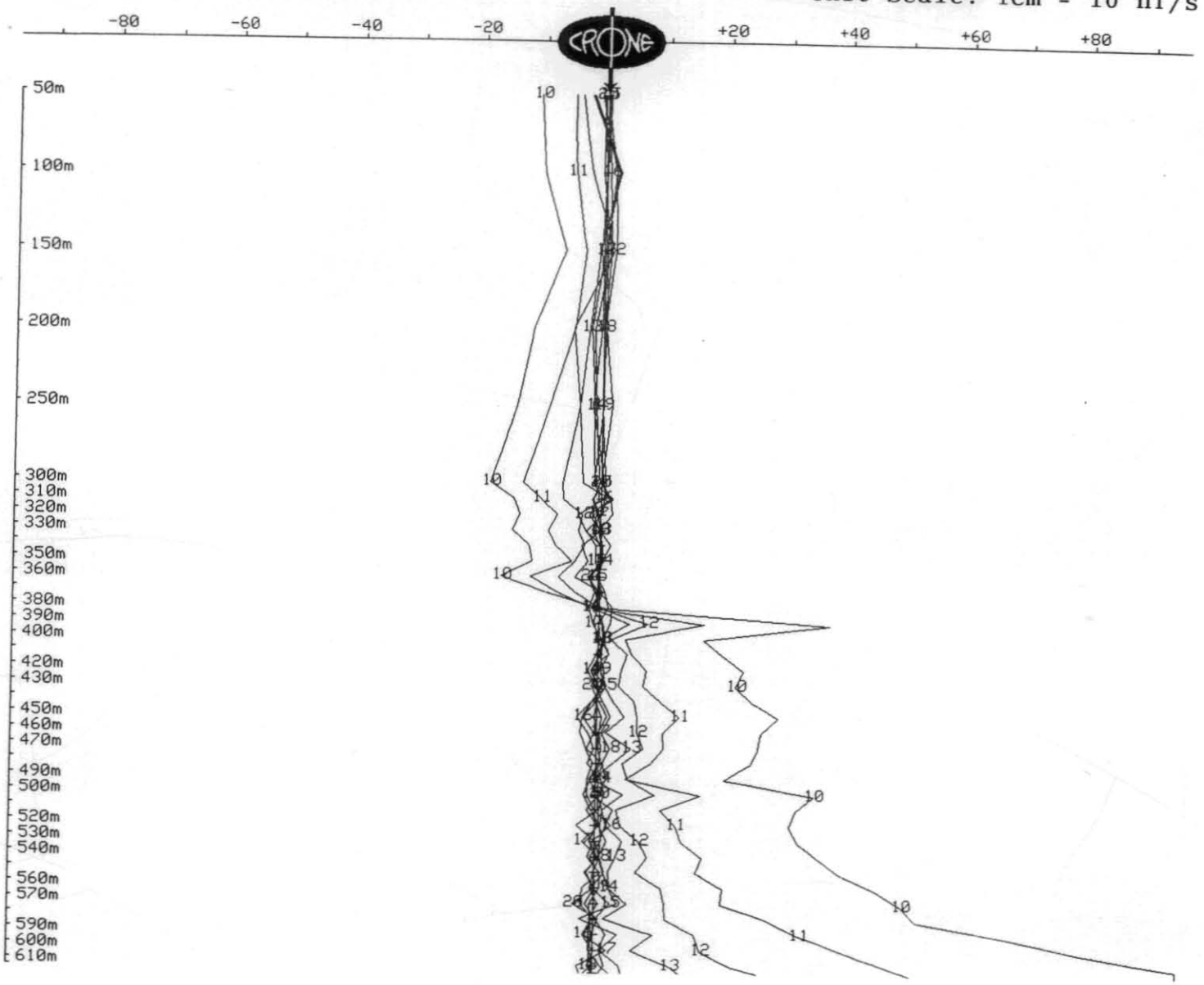
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



675426

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

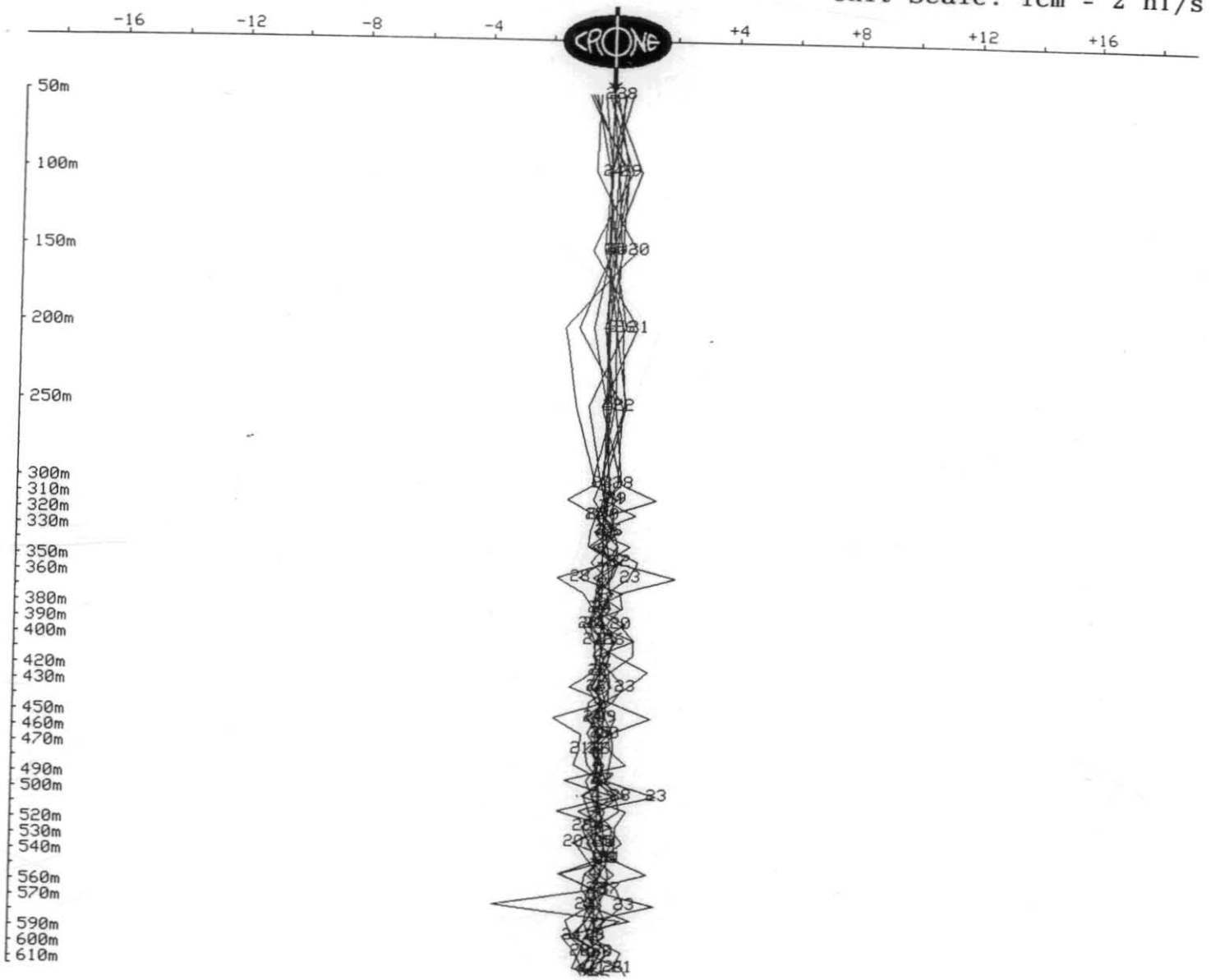
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : SHD22XY9.PEM

Data Corrected for Probe Rotation using Orientation Tool #8
Y COMPONENT dBy/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

675427

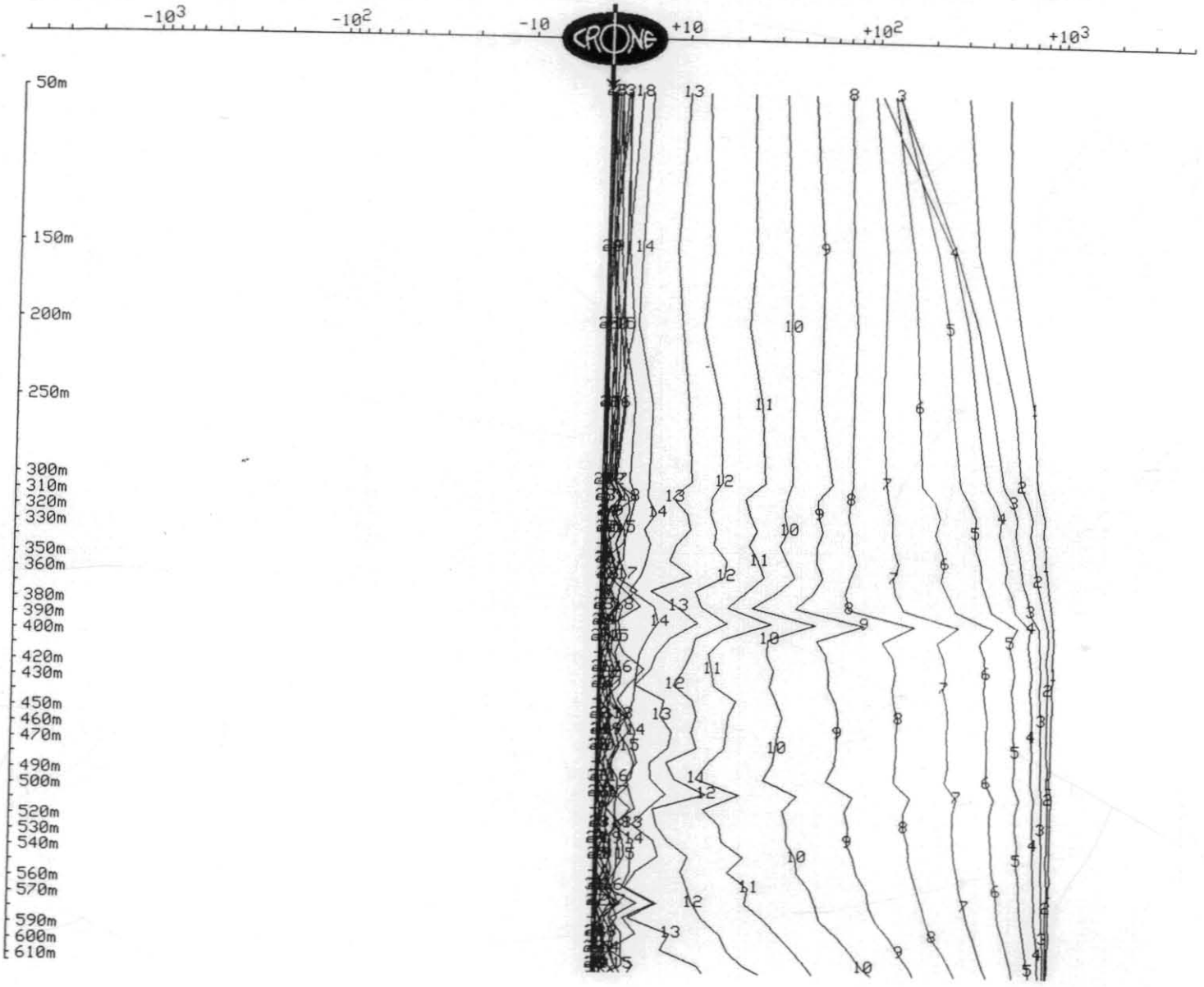
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Feb 2/3, 2000

Hole : SHD-22
Tx Loop : #9
File name : S22XYZ9.PEM

TOTAL FIELD dBxyz/dt nanoTesla/sec - 31 of 31 channels

Scale: 1:4000



5 cm

675428

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Feb 1, 2000
Time Base : 20.00 ms
Ramp Time : 0.50 ms
Channels: 31
Sync Type : Crystal-MASTER
Loop Size : 500m X 600m
Current : 12 Amps

Hole : SHD-22
Tx Loop : #13
File name : SHD22Z13.PEM
Readings: 55
Stn Units : Metric
Coil Area : 6500 sq m
Polarity : -
Receiver : Digital #105
Operator : Kent Honner

Loop Coordinates (X,Y,Z)
1. 380900m, 5.3581e+06m, 0m
2. 381380m, 5.3581e+06m, 0m
3. 381300m, 5.3585e+06m, 0m
4. 380900m, 5.3585e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)
1. 380620m, 5.35841e+06m, 0m
2. 294deg, 79.8deg, 30m
3. 298deg, 78deg, 60m
4. 301deg, 76.1deg, 60m
5. 308deg, 74.8deg, 60m
6. 310deg, 73deg, 60m
7. 316deg, 71deg, 60m
8. 321deg, 69.2deg, 60m
9. 324deg, 66deg, 64m
10. 327deg, 62deg, 64m
11. 329deg, 59deg, 60m
12. 329deg, 54deg, 38m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

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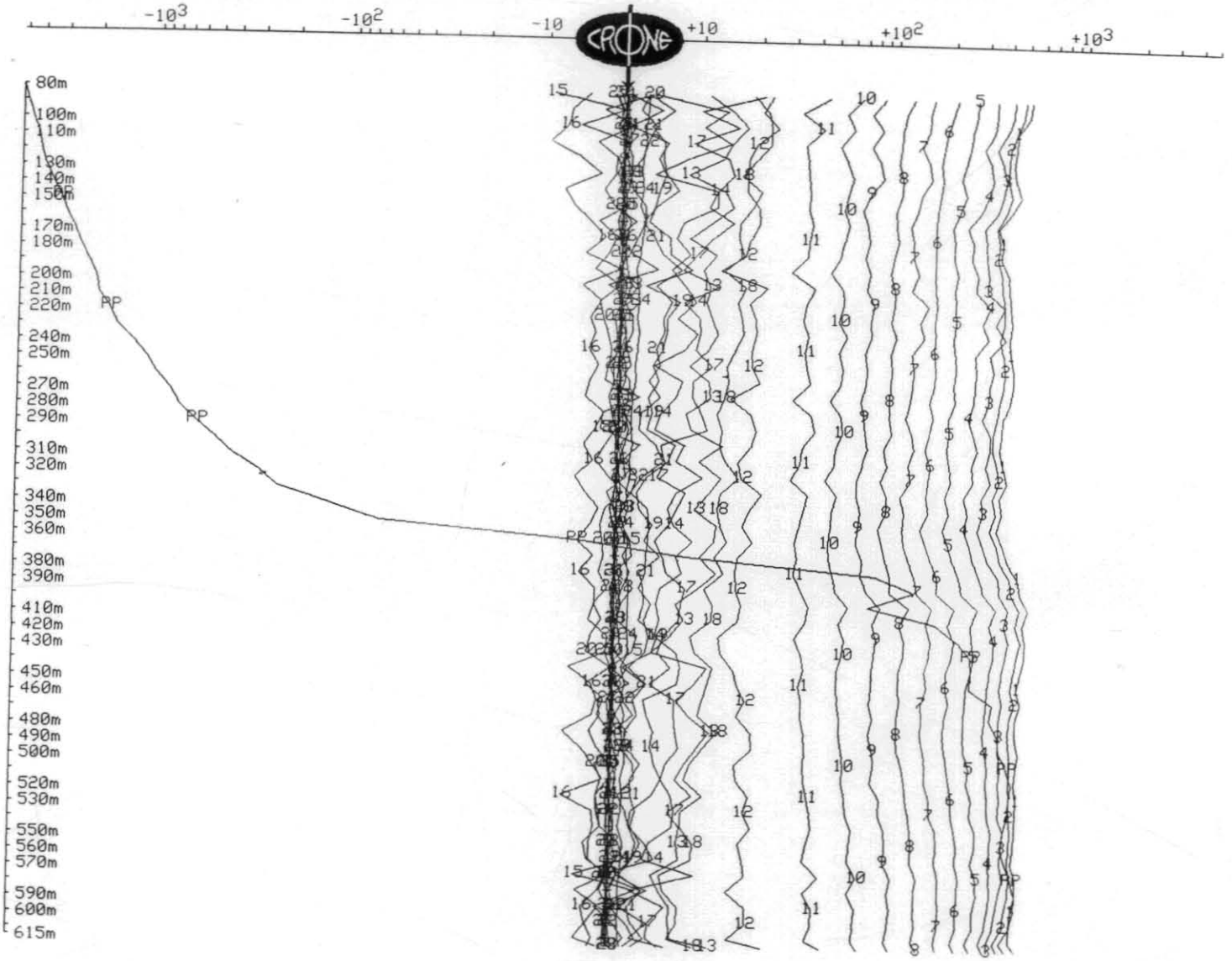
OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

Client : Goldfields Exploration
Grid : South Henty
Date : Feb 1, 2000

Hole : SHD-22
Tx Loop : #13
File name : SHD22Z13.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 of 31 channels and PP

Scale: 1:4000



5 cm

675430

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

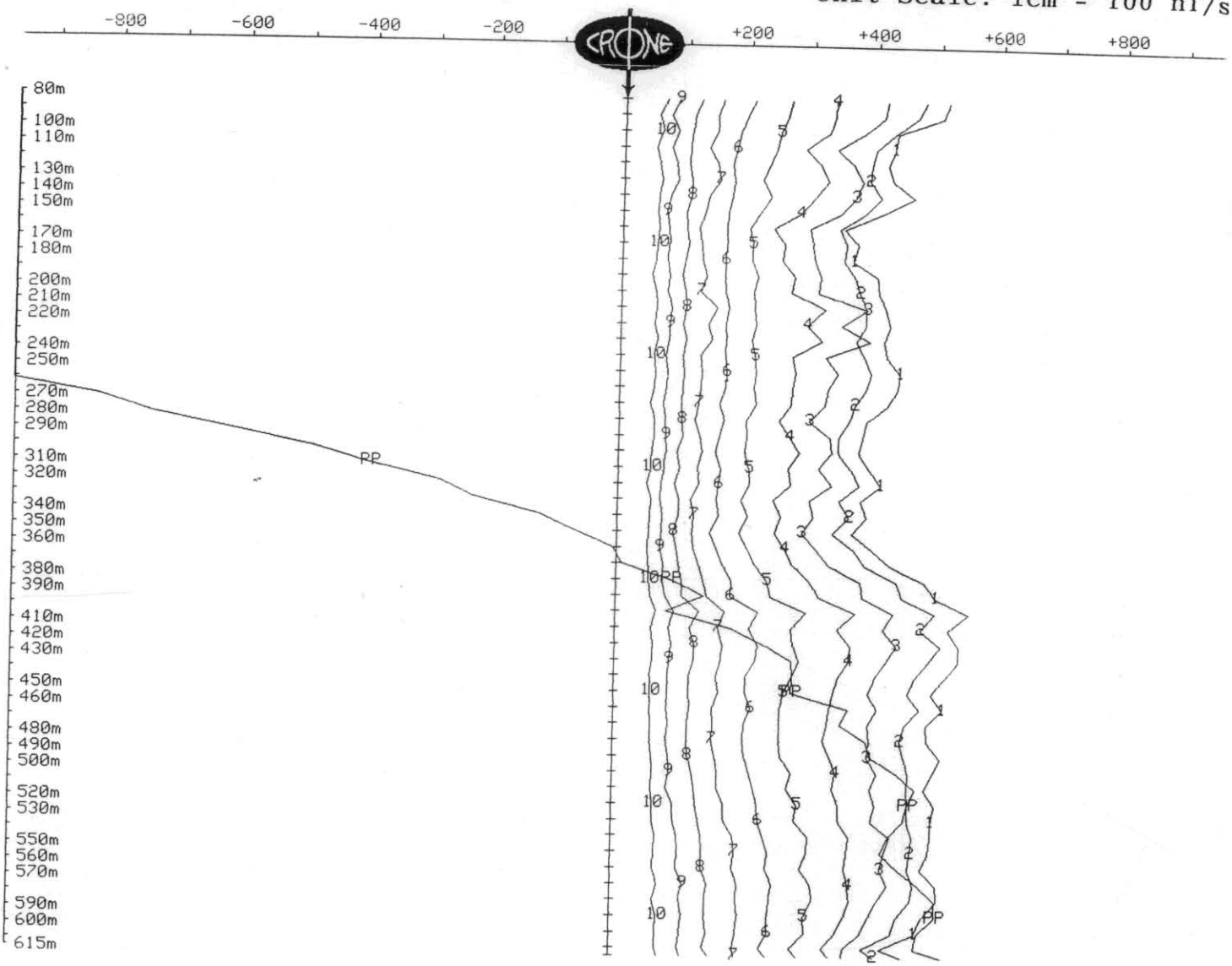
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 1, 2000

Hole : SHD-22
Tx Loop : #13
File name : SHD22Z13.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 10 of 31 channels and PP

Scale: 1:4000

Unit Scale: 1cm = 100 nT/s



5 cm

675431

OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

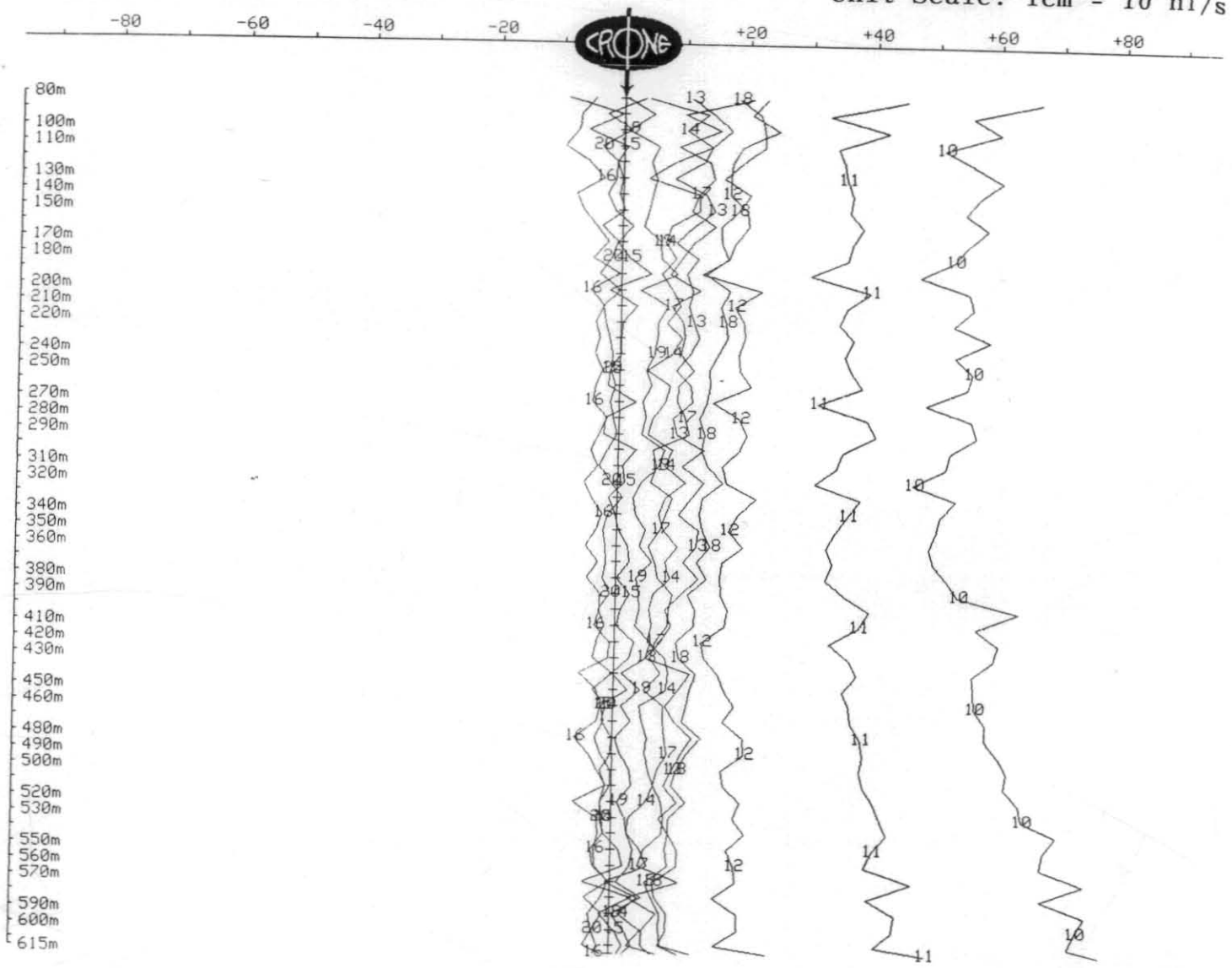
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 1, 2000

Hole : SHD-22
Tx Loop : #13
File name : SHD22Z13.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 11 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 10 nT/s



5 cm

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OUTER-RIM EXPLORATION SERVICES
Borehole Pulse EM Survey

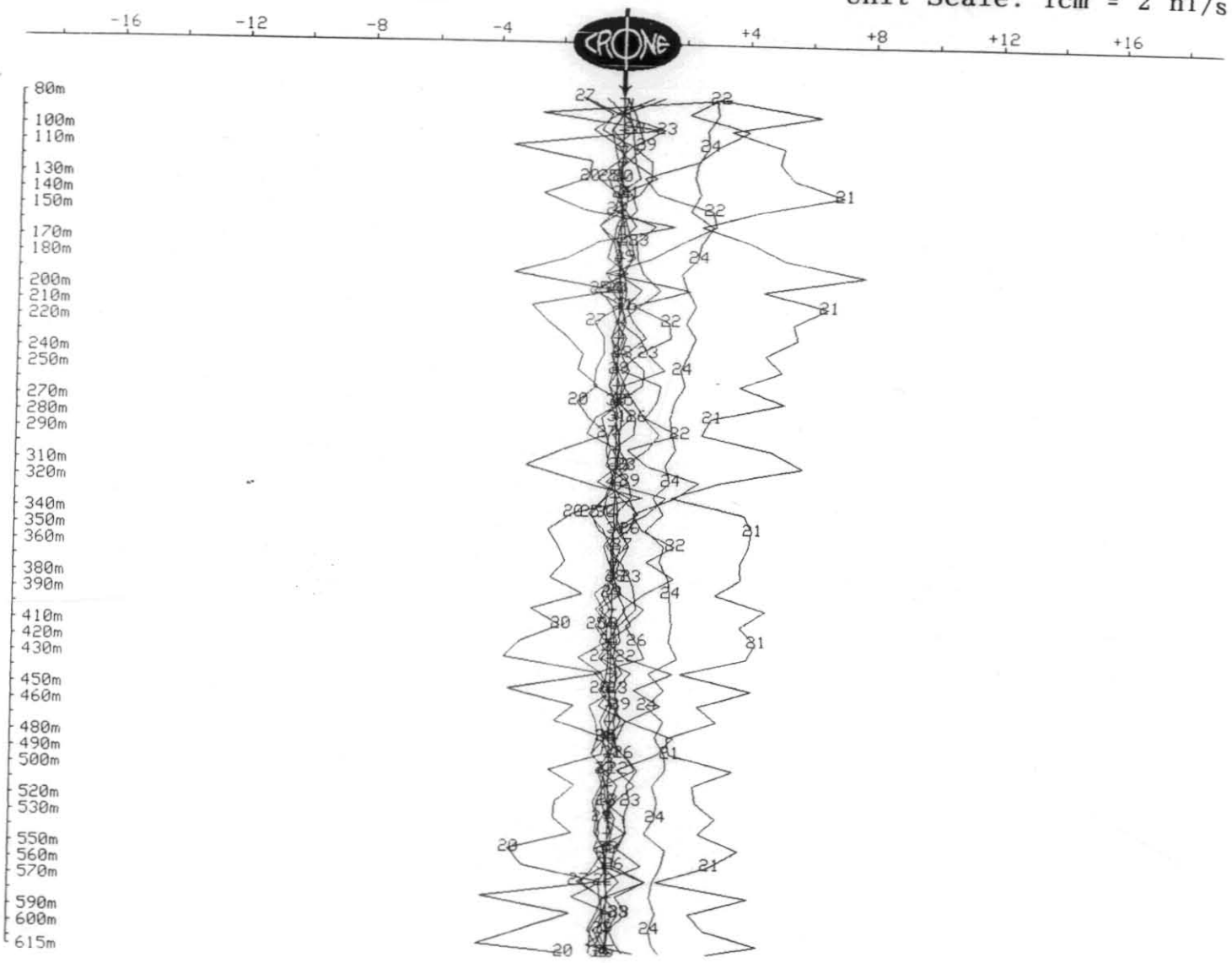
Client : Goldfields Exploration
Grid : South Henty
Date : Feb 1, 2000

Hole : SHD-22
Tx Loop : #13
File name : SHD22Z13.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 12 of 31 channels

Scale: 1:4000

Unit Scale: 1cm = 2 nT/s



5 cm

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Hugh Rutter	Geophysicist
Geof Fethers	Geologist
Nigel Hungerford	Geophysicist
Paul Hamlyn	Geologist
Michael Asten	Geophysicist
Ross Caughey	Geologist
Alaster Edwards	Geologist

Report 9906/2

Report for Goldfields Exploration Ltd SOUTH HENTY PROSPECT, ZEEHAN, TASMANIA EL 8/96 Review of Borehole EM surveys, 1997-1999

Michael W Asten
Flagstaff GeoConsultants Pty Ltd

25 June 1999

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INTERPRETATION OF SOUTH HENTY BOREHOLE EM SURVEYS

INTRODUCTION

The history is summarised in a Goldfields Exploration Technical Note by Chris Dauth, dated 14/1/99. Holes SHD1, 2, 12 and 13 were drilled by Resolute Ltd, and logged with Crone PEM, in 1997. Holes SHD16 and 18 were drilled in 1998 by Goldfields Exploration, and logged similarly in 1998.

Hole SHD19 was drilled in 1999 by Goldfields Exploration, and logged similarly in 1999. At the same time, additional logging of holes SHD2, SHD12, SHD1 and SHD2 was completed.

This note presents an interpretation of the entire borehole EM set of data to June 1999, plus comments on conductive trends as deduced from surface CSAMT profiles (also acquired in 1998).

Plotted profiles of all historical and current data, including two-dimensionally-filtered data where applicable, are appended to this report.

Hole SHD1

Both loops 1 and 2 give borehole A-component (also called Z-component) profiles which show a broad negative anomaly at near the base of the hole. This is consistent with a flat-lying conductor. Amplitude is stronger on Loop1 (x2). Distance off-hole order 100 - 200 m? Likely position is west of base of SHD1, dipping 20-30 deg east. NB re-interpretation of intersections of Ccs in holes SHD1,SHD16,SHD13 is consistent with this shallow dip.

Additional logging with Loop 9 gives a similar signature in the A-component. The time-constant with loop 9 is 0.13 msec (Figure 1). At this loop-conductor distance, energisation by current channelling might have been expected to dominate, but the power-law decay coefficient is t^-7, which is very different from an expected current channelling response of t^-3.5.

Study of U components (also called X-components) is inconclusive; profiles of U components for both loops 1 and 2 are positive, and flat. There is possibly a negative signature superimposed on the profile Loop1 SHD1, over 500-700m depths. I doubt the XY probe was functioning correctly for this survey.

Study of the V-component (also called Y-component) is much clearer; the loop 1 SHD1 V-component shows a classic off-hole profile shape for conductor at range order 100 m, displaced along strike to north. The decay curve (Figure 2) gives tau=0.2 msec. This is consistent with a significant conductor (Conductor A) of 8 S, size order 200x200 m. (This decay constant is greater than the value of 0.13 obtained

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with Loop 9, but is probably more reliable due to the stronger inductive energisation from the closer transmitter loop).

Hole SHD13

Similar general shape on the A-component to Hole SHD1, but no anomaly visible at base of hole for Loop1. Profiles for Loop 2 show similar weak anomaly to SHD1, except anomaly is weaker and broader. This corroborates the interpretation of Conductor A placed west of the base of hole SHD1 (ie further away from the base of hole SHD13).

Hole SHD2

Profiles for Loop2 data A-component are dominated by the strong primary field profile shape. The strongest feature is an intersection anomaly between 280 and 320 m depth. The conductor located east of this hole (Conductor C - see discussion below) is poorly coupled with this loop and does not produce any measureable signature, even after filtering the data.

Loop 1 gives clear signatures of the intersecting conductor (Conductor B, at depth 280-320 m downhole) and of an off-hole conductor, Conductor C. The anomaly maximum is negative, and the peak migrates down the hole with delay time; interpretation is difficult from such data, as such a response could be due to a large, formational conductor.

Following my recommendation of 27/4/99, this hole was additionally logged with Loop 9. Loop 9 gives an A-component anomaly of opposite sign to loop 1, and allows a clear interpretation of Conductor C as being steeply dipping, and of order 300 m east of the bottom of the hole. Figures 3-5 show a computer model for Conductor C which duplicates satisfactorily the field profile shape and decay. The off-hole anomaly is best seen on channels 10-14. Examination of U and V components of the Loop 9 field data shows Conductor C to strike both north and south of the hole. Fig. 6 shows field data in the same format as Fig. 7.

The intersection anomaly is strong at early times, but decays to nothing by channel 10. It is possible that the intersection identifying Conductor B is that of a weaker conductor which is continuous with the stronger off-hole Conductor C located down-dip (shown in Figure 3). An alternative possibility is that the weak Conductor B links to the south (down plunge) with Conductor D located below hole SHD12.

Hole SHD16

This hole was unfortunately only logged with a single collar loop (Loop 7) , and the data is strongly overprinted with a primary field response. Two steps in the data occur at 240 and 560 m depths, but these look more like instrumental steps (faults in calibration) rather than responses of intersected conductors.

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The A-component shows negatives near the base of the logged hole (ie at 680 m, not the full drilled depth). These are probably indicative of a real off-hole conductor. Comparison with data and interpretation from hole SHD2, Loop 1, suggests that this off-hole signature is the western edge of Conductor A. Conductor B is located below the maximum logged depth, and is probably not contributing to this anomaly in SHD16.

Examination of U and V components for hole SHD16 is indeterminate; I believe the XY probe used for the survey was probably malfunctioning, as the data is "non-physical" and lacks consistency between components.

Hole SHD12

Loop 3 (collar loop) A-component shows a strong overprint of the primary field profile, and no off-hole conductor can be discerned.

Loop 4 A-component shows a positive anomaly signature consistent with a weak (rapidly decaying) off-hole conductor (Conductor D). The shape is congruent with the primary field profile, and was regarded as questionable without corroboration.

Following my recommendation of 27/4/99, this hole was additionally logged using loop 10. The A-component profile shows a negative anomaly in channels 6-10, which confirms the interpretation available from Loop 4. The off-hole conductor appears to be located order 100 m off-hole, nearest approach 450 m down-hole. Examination of profiles of A and U-components confirms the Conductor D to lie below the hole, extending north and south of the hole, and probably striking order 30 deg west of the normal to the hole-azimuth. This is consistent with a north-south strike for the conductor. (Note that the transmitter and window times are different for the two surveys in this hole, but the difference is not significant – see Appendix B).

The A-component profiles do not contain sufficient length to allow a useful determination of dip of Conductor D, other than to note that it is steeply dipping. It is possible that Conductor D links up-plunge to the north, with Conductor B (intersecting SHD2).

The position of Conductor D needs to be plotted on a geological section (none available at present) before discussing further.

Hole SHD18

This hole was logged with one loop only (Loop 8, around the collar). The data shows a strong primary field overprint, but no anomalies.

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Hole SHD19

The hole was logged with two loops (11 and 12). There is no evidence of an off-hole conductor within 200 m of this hole.

CONDUCTORS IN PLAN VIEW

The location of the four interpreted conductors A, B, C and D is plotted in plan view in Figure 3. Note correspondence with trends in conductive ground as deduced from surface CSAMT surveys on line 5358200N, 5259000N and 5359400N. CSAMT data for line 5358600N is not available (in the middle of the area of greatest interest, naturally) due to the presence of a lake.

RECOMMENDATIONS SUBJECT TO FURTHER DISCUSSION ON GEOLOGY

1) Drill conductor A, target point 200 m east of the base of hole SHD1. This hole could be extended to intersect Conductor C also.

2) Drill conductor C.

3) Drill CSAMT conductive zone on line 5358200N, along strike from and south of Conductor C.

4) Drill CSAMT conductive zone on line 5359000N, along strike from and north of Conductors A and C.

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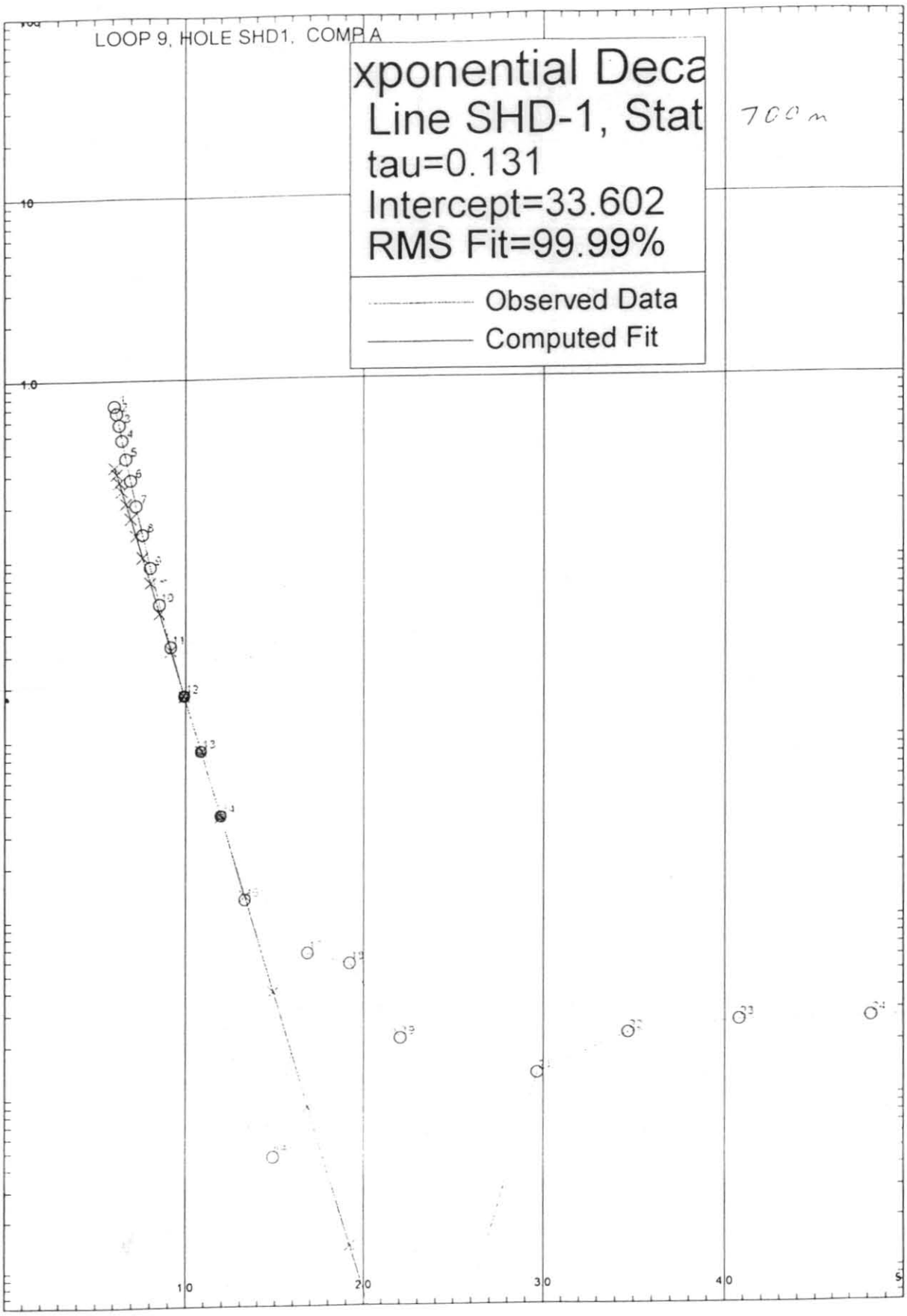

LOOP 9, HOLE SHD1, COMP.A
xponential Deca
Line SHD-1, Stat
tau=0.131
Intercept=33.602
RMS Fit=99.99%
Observed Data
Computed Fit
700 m
10
1.0
10
20
30
40
5 cm

Fig. 1.

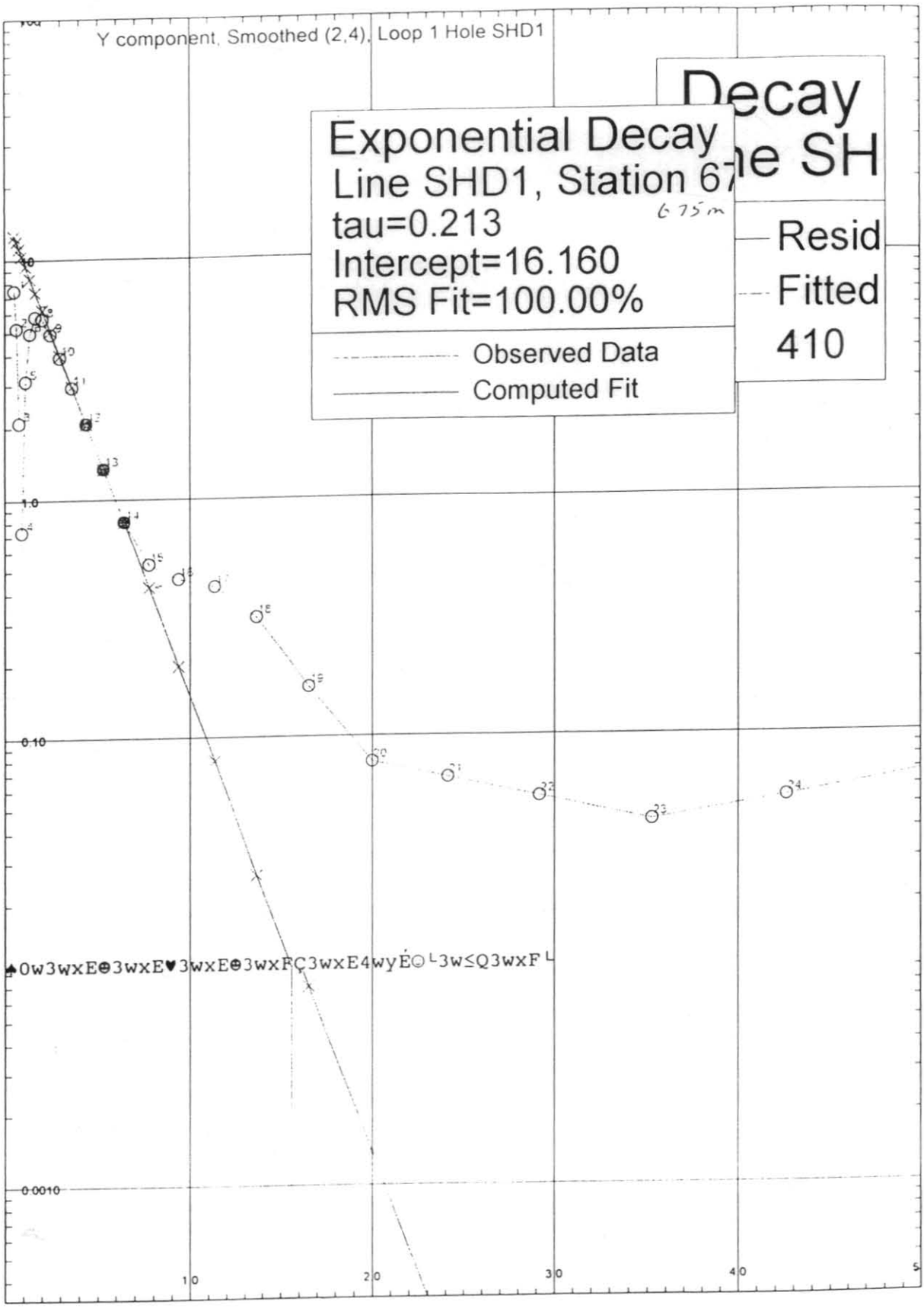
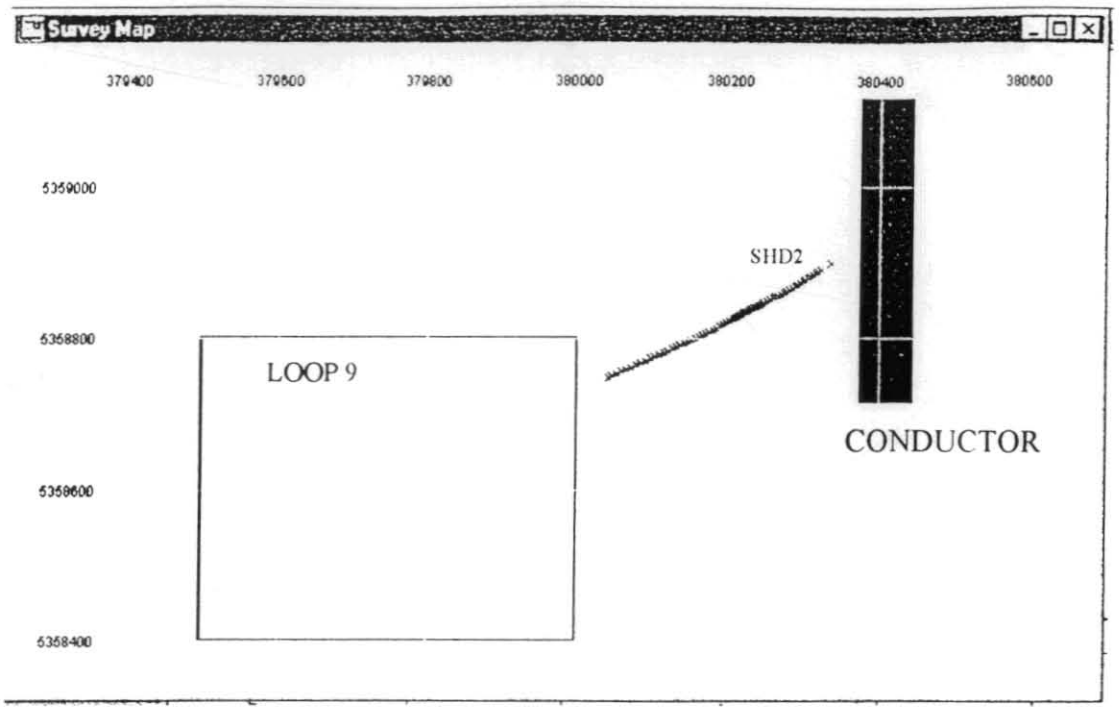
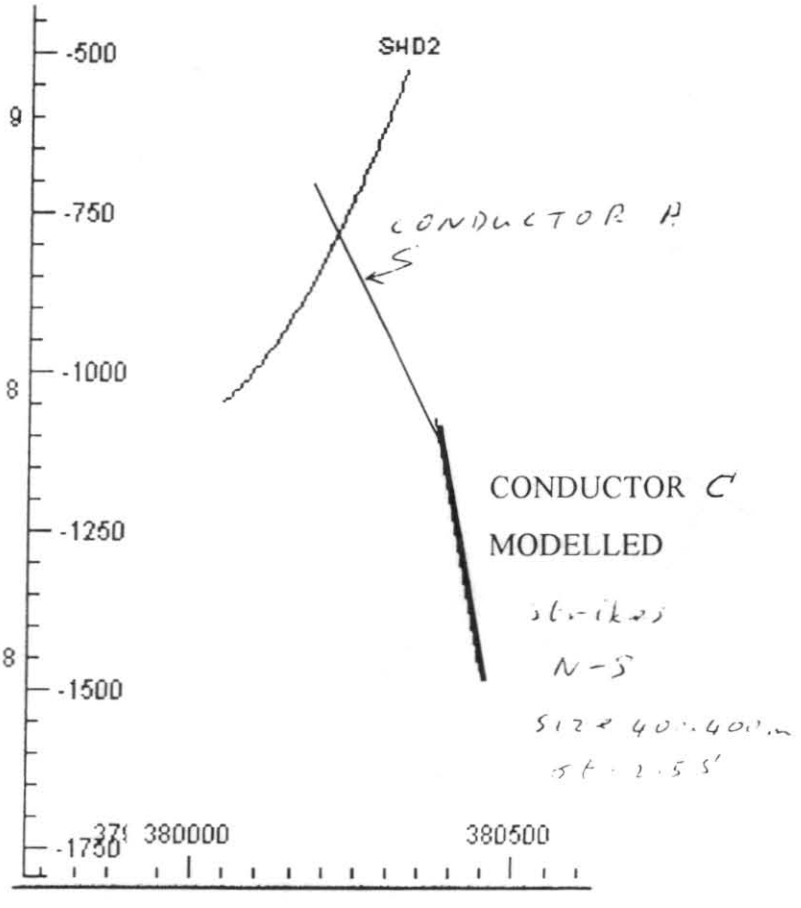

Y component, Smoothed (2,4), Loop 1 Hole SHD1
Decay
Exponential Decay
Line SHD1, Station 67
6.75m
tau=0.213
Intercept=16.160
RMS Fit=100.00%
Observed Data
Computed Fit
Resid
Fitted
410
1.0
0.10
0.0010
10
20
30
40
5
5 cm

Fig. 2.

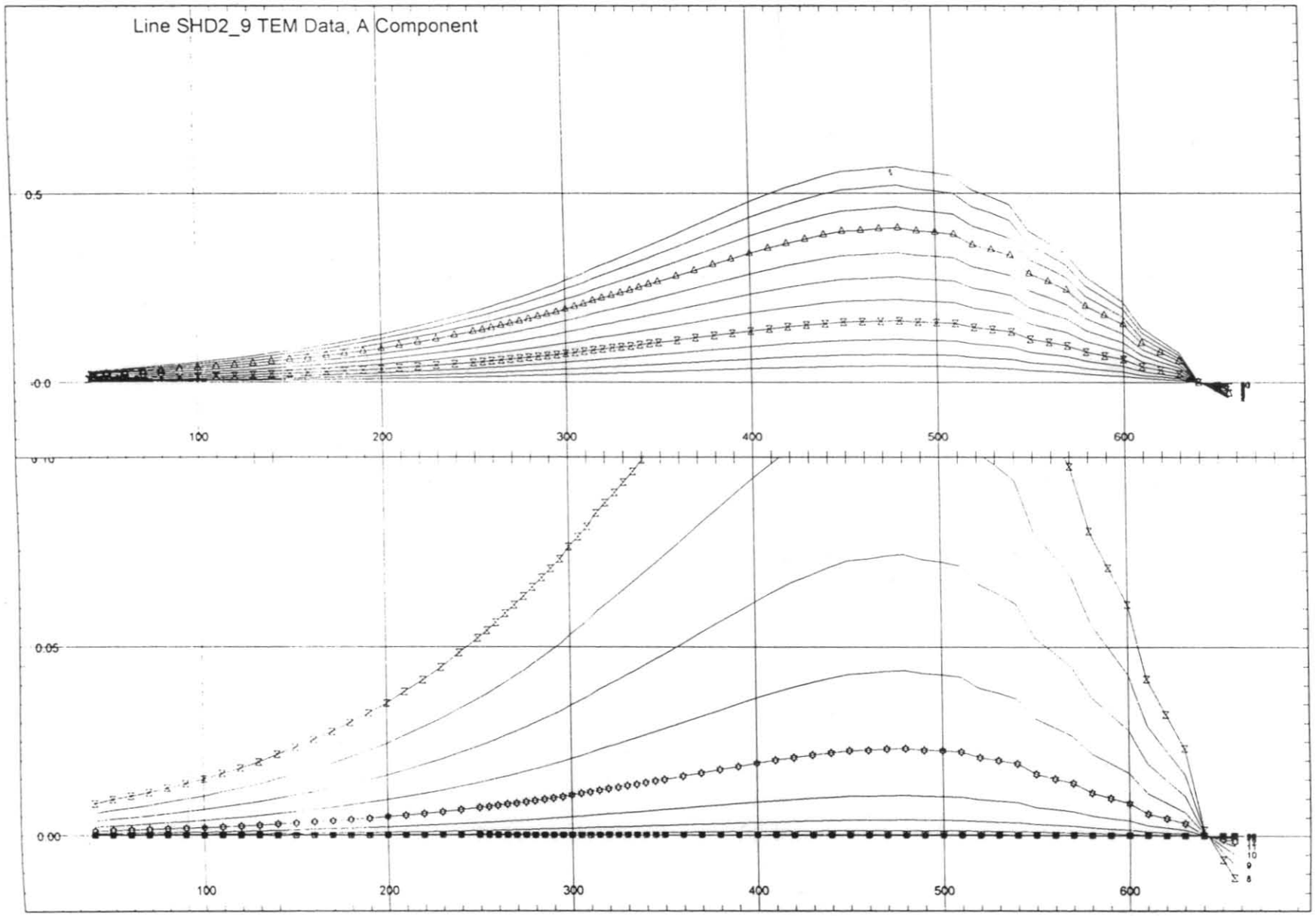




SOUTH HENTY: CONDUCTOR MODEL BELOW HOLE SHD2

5 cm

Fig. 3.



5 cm

Fig. 4. Model data for Conductor C, A component.

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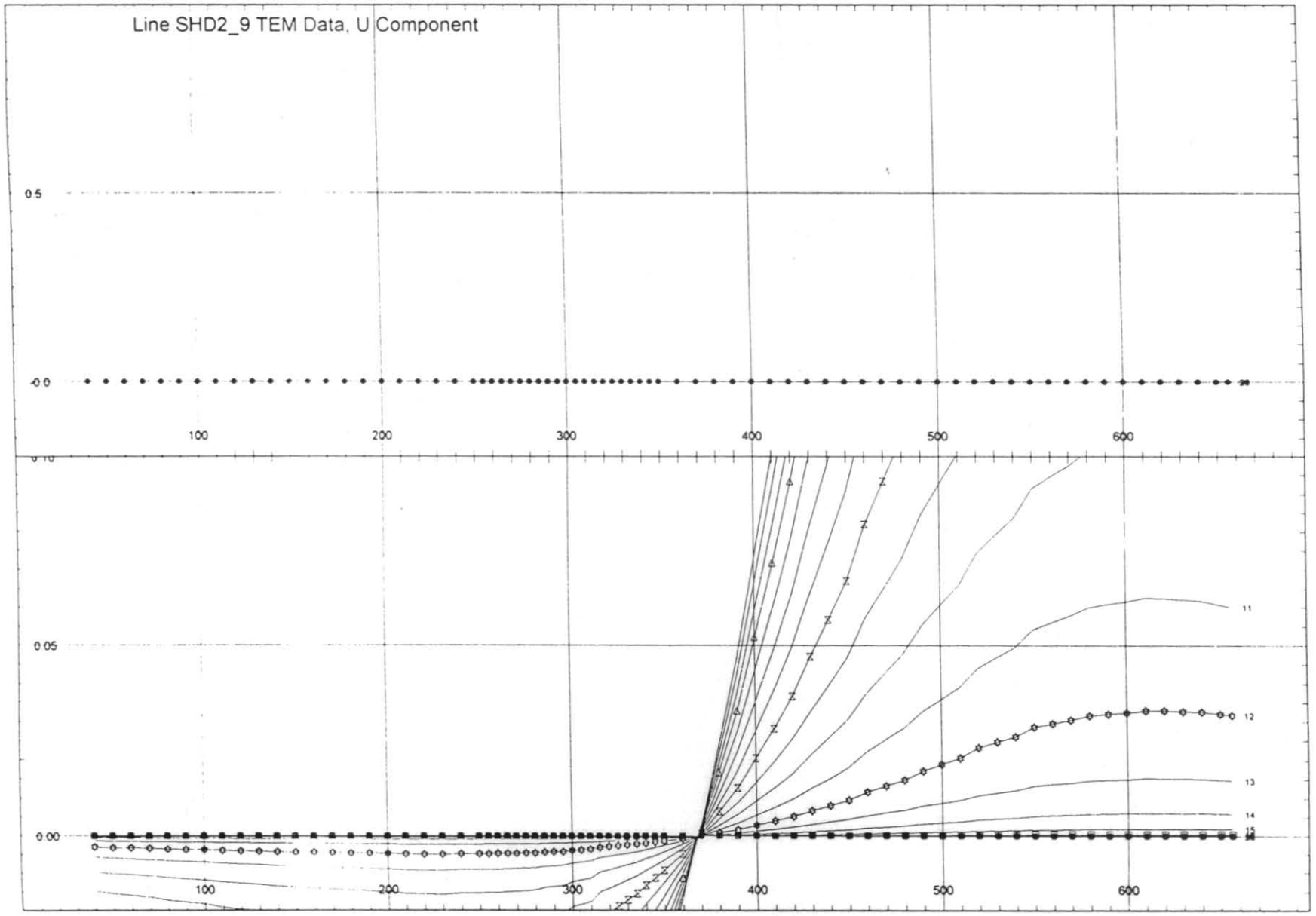


Fig. 5. Model data for Conductor C, U component.

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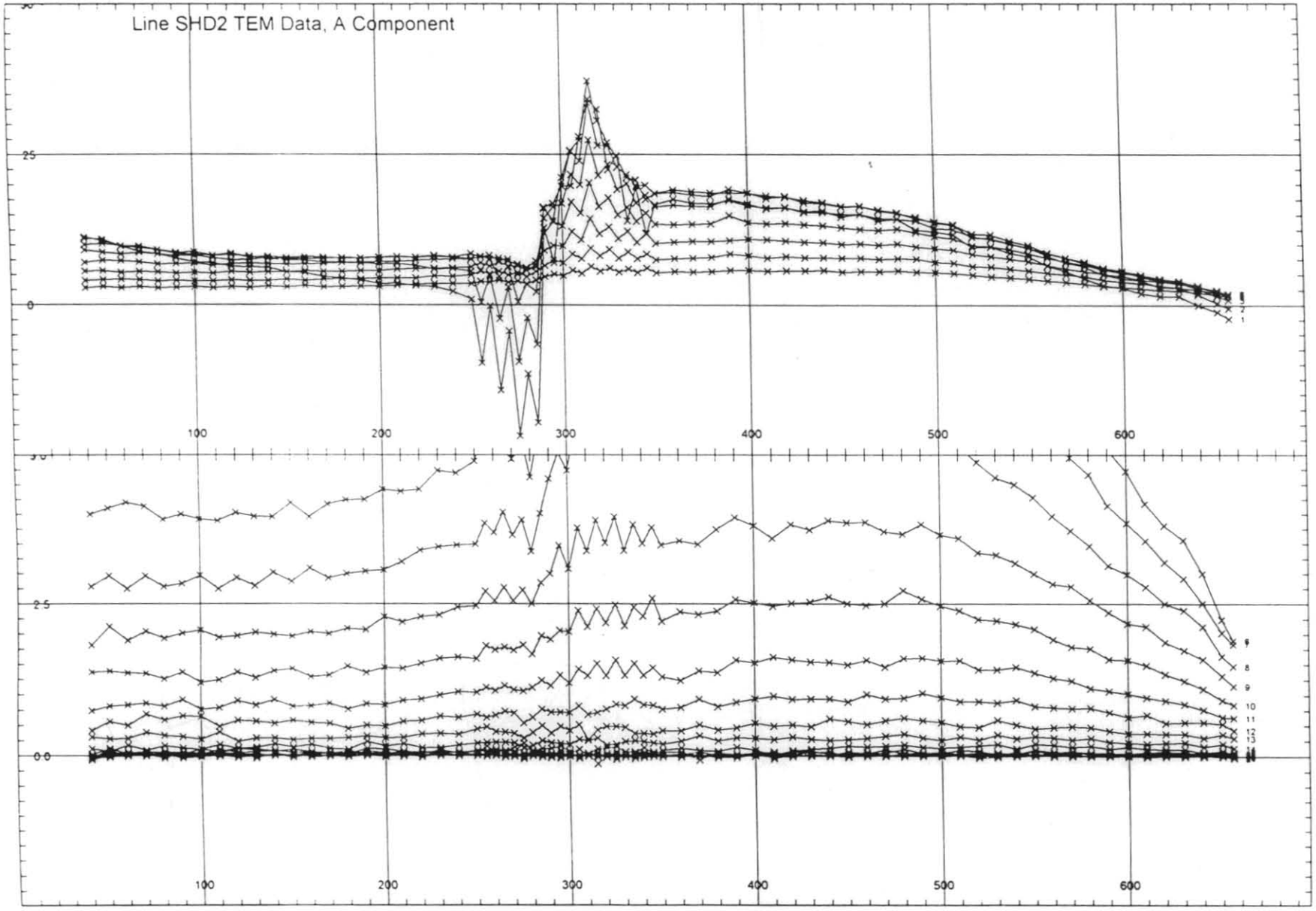


Fig. 6. Field data, A component.

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APPENDIX A

SOME PROCESSING ISSUES WITH SOUTH HENTY TEM DATA

Three problems arise in interpreting borehole EM data on this prospect.

1) Background resistivities are high, with the result that signal strengths are low, and the self response of the borehole probe becomes an issue in distinguishing genuine from instrumental anomalies. The probe self response is best identified by either computing the shape of the primary field profile down the borehole, or by comparing the TEM profiles with the "primary" pulse amplitude as recorded by the Crone PEM receiver. Both have been done in trials with this data, and found to give similar results. In consequence the latter technique has been applied routinely (a faster process). The importance of the comparison of profiles with the primary field pulse, when interpreting data from multiple transmitter loops, makes the plotting of absolute amplitudes of the primary pulse a necessity.

2) The low signal strengths combined with high electrical (powerline) noise in parts of the prospect, result in noisy data in late channels, which tend to obscure subtle signatures of off-hole conductors. This problem is greatly alleviated with the use of two-dimensional filtering of the data prior to plotting (a facility exclusively available to Flagstaff GeoConsultants).

3) The Crone PEM data acquired is routinely presented by the contractor in digital form, but not normalised for transmitter current. When comparing signal strengths from two or more transmitter loops (which typically use different transmitter currents), it is necessary to normalise data to units of nT/amp/sec, rather than the original nT/sec.

The effect of items (1) and (2) above is illustrated in Figures A1-A4.
Figure A1 shows profiles for Loop1, Hole SHD1, with the primary field over-plotted in red. The primary field is strong for this transmitter (encompassing the collar of the hole) and the shape of the profiles largely mirrors the primary field, ie the evidence evidence for an off-hole conductor is dubious. Figure A2 shows the same data after two-dimensional filtering. At late time windows, the profiles go negative while the primary field remains positive, thus it is possible to deduce the presence of a genuine off-hole conductor near the base of the hole. Figures A3 and A4 show similar plots for the same hole SHD1, with transmitter loop 2 (centred 700 m west of the hole collar). In this case, the shape of the profiles is quite different to the shape of the primary filed profile, and note the primary field strength is a factor of 30 smaller

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(scaled at 0.2 compared with 7.4). The TEM profiles can therefore be interpreted with some confidence as due to an off-hole conductor.

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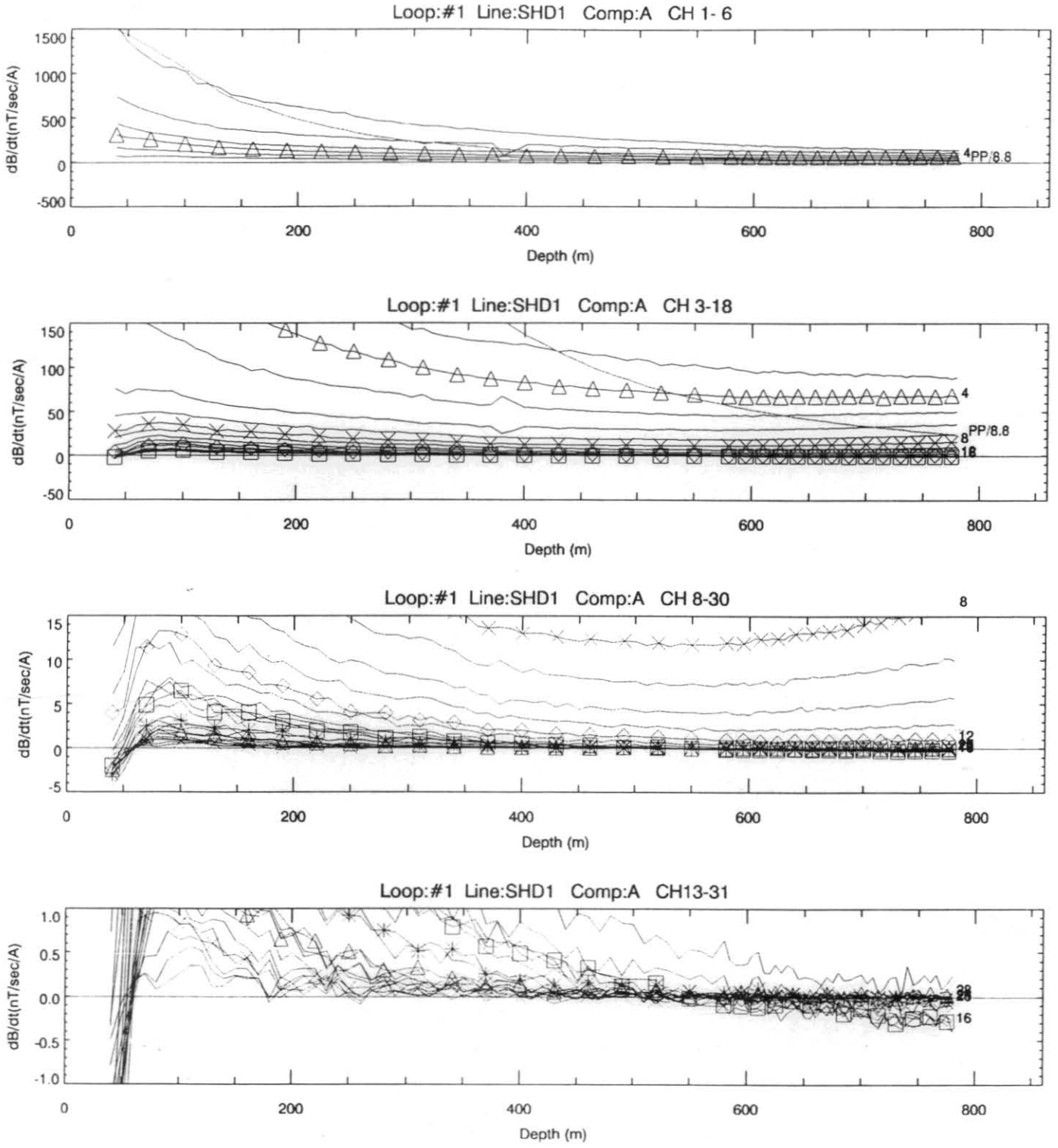
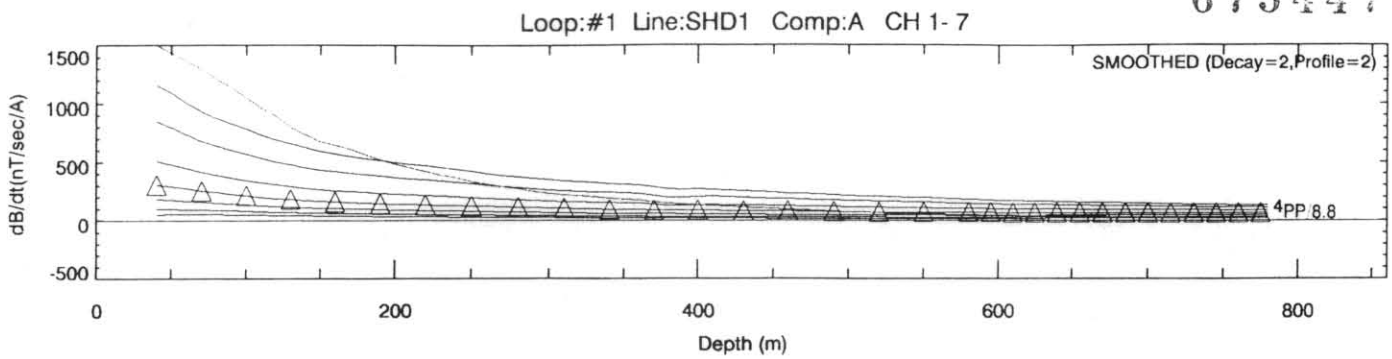


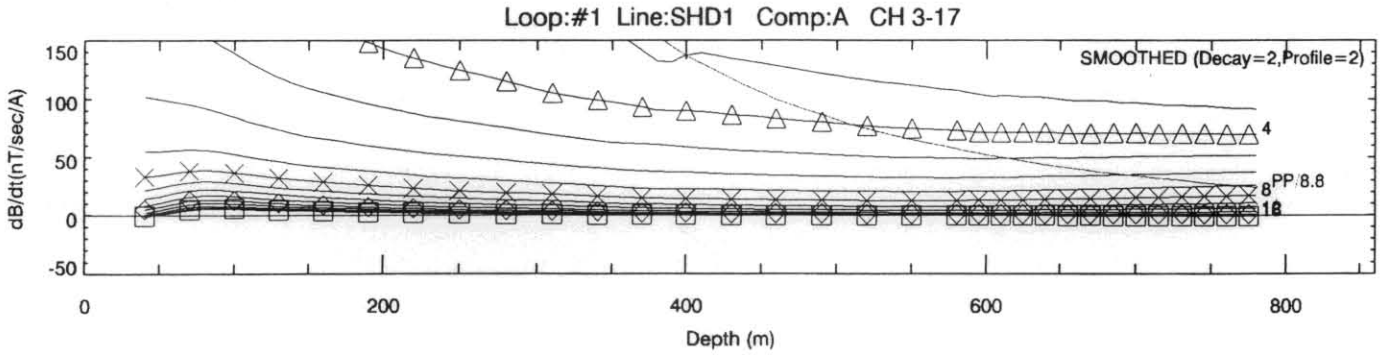
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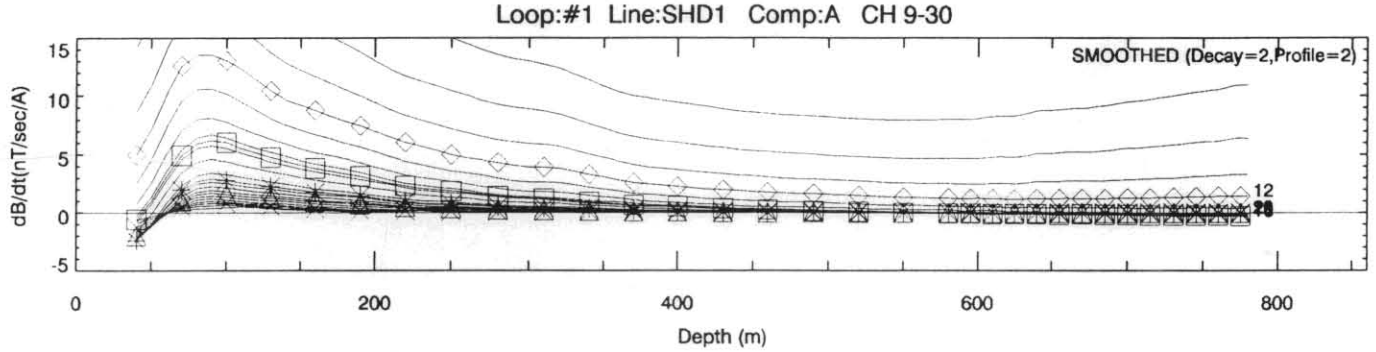
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS Drawn 27-Apr-2000	

5 cm

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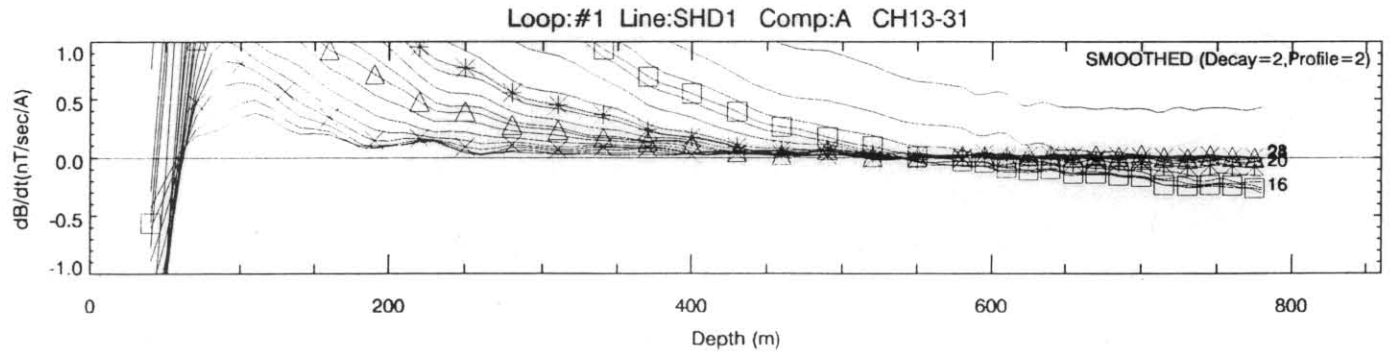
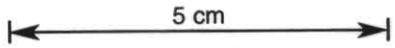
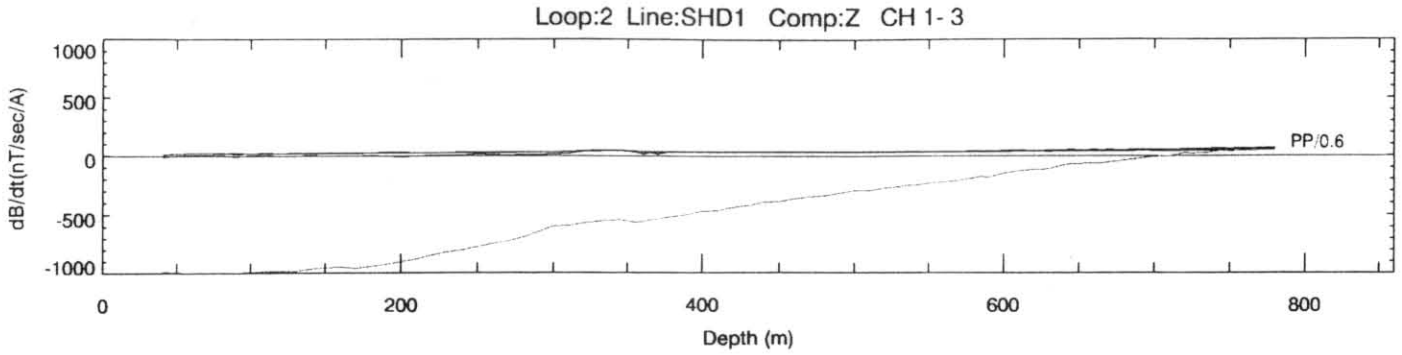


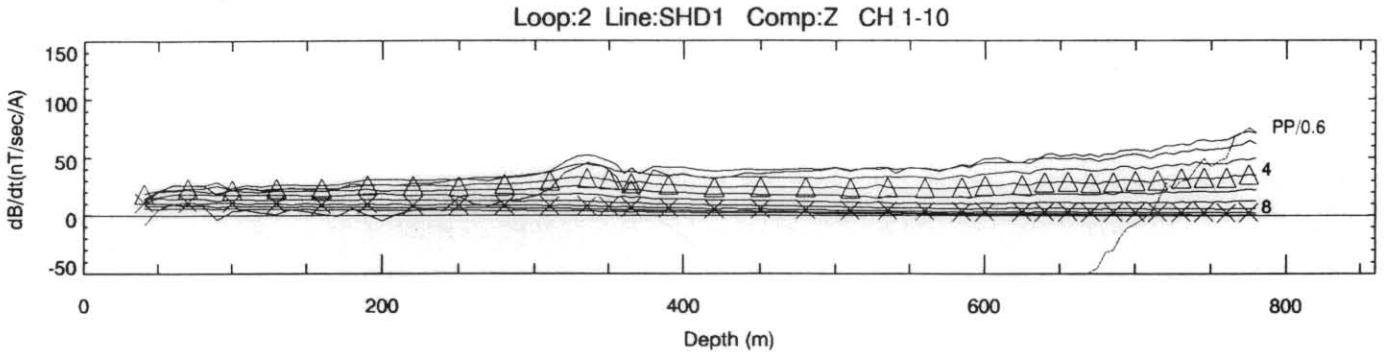
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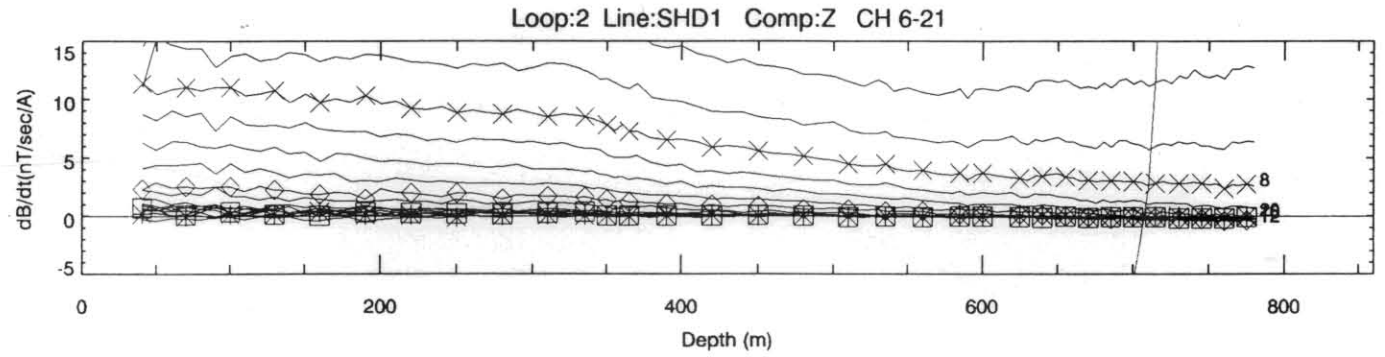
Goldfields Ltd
South Henty EL8/96. Borehole EM.
Crone PEM. Tx Frequency 12.5 Hz
Window Set Ch1-31
FLAGSTAFF GEOCONSULTANTS
Drawn 27-Apr-2000



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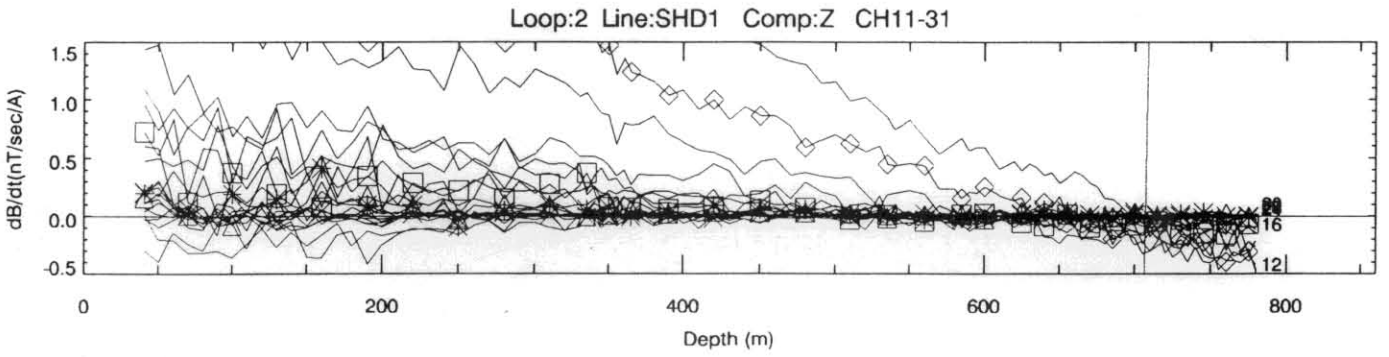
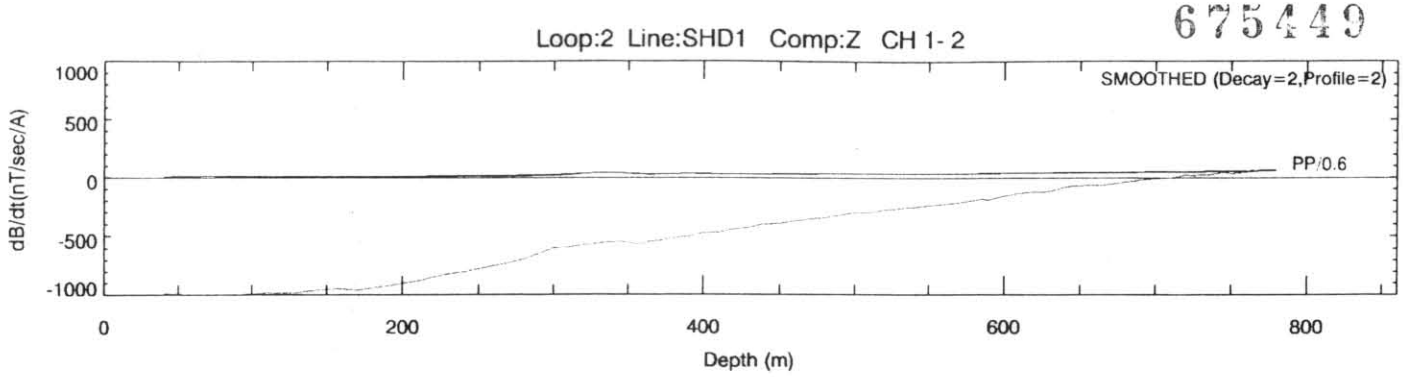


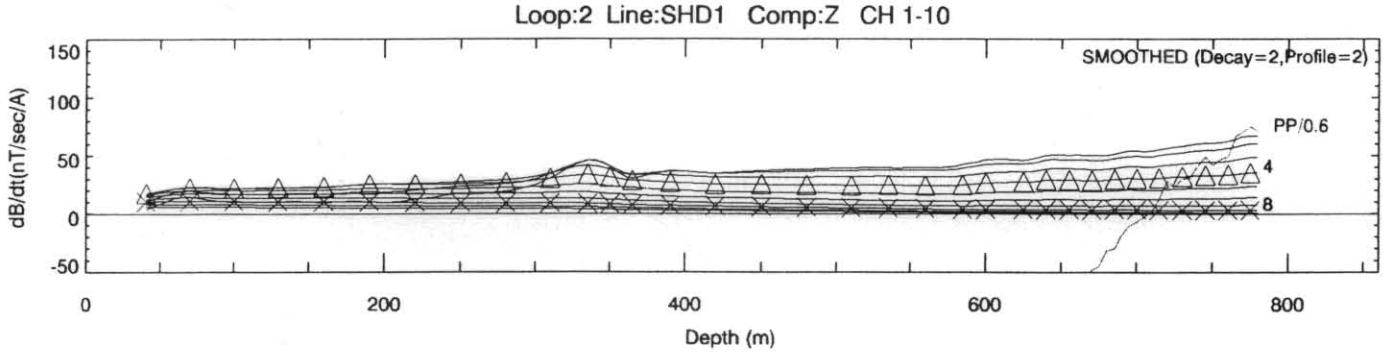
Fig. A3.

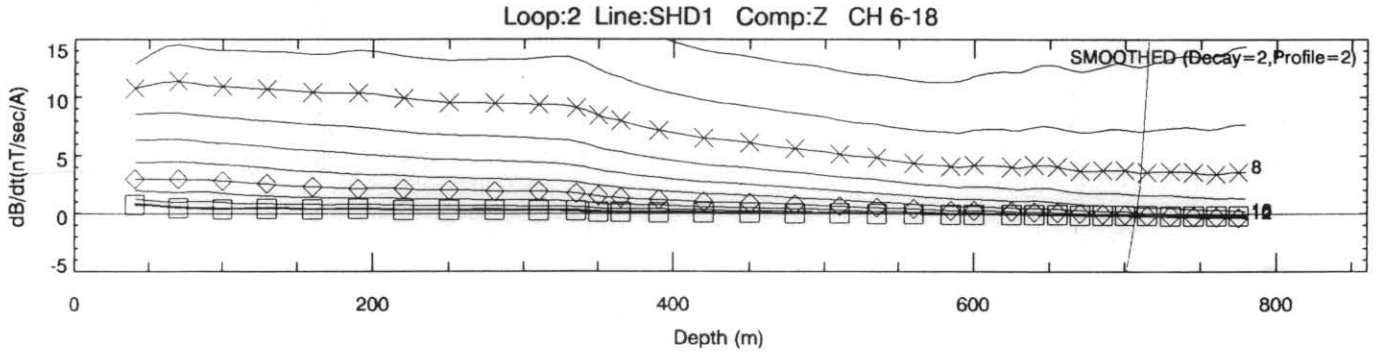
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

5 cm

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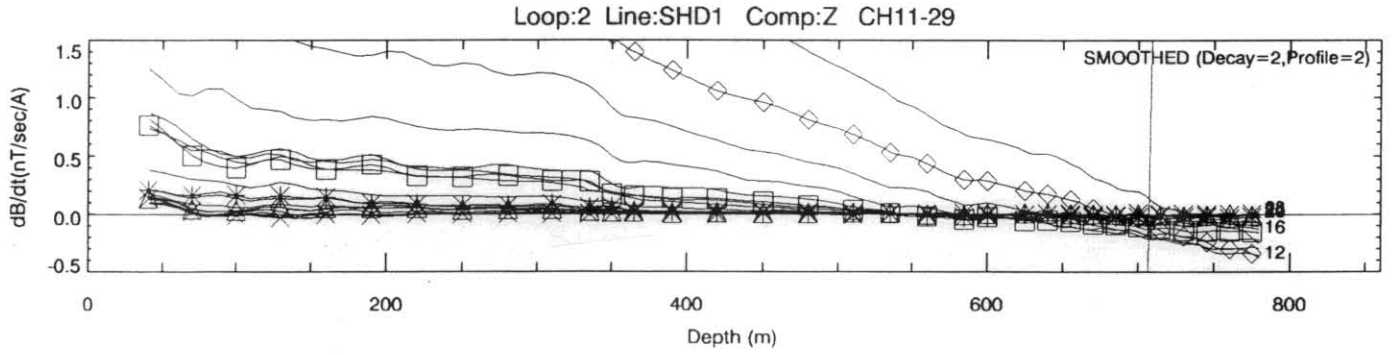


Fig. A4.

Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

5 cm

675450

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APPENDIX B

Transmitter Frequencies and time windows used in South Henty DHEM surveys

All holes were surveyed with 12.5 Hz transmitter frequency (ie 20 msec off-time), and 31 receiver time windows (channels) with the exception of

hole SHD13 (20 msec off-time, 20 time windows, where 20 wider time windows cover the same total time range as the above 31 window set), and

hole SHD12 (10 msec off-time, 17 time windows, corresponding approximately to the first 17 windows of the 20 msec off-time 31-window set).

The Crone PEM parameters are as follows:

All holes except SHD13, SHD1:

\Borehole Metric Cable 20.00 500 31 190
\#106 4.50 Jan.1,1996 SHD1XYE N 1000 2800 +
\ pri pulse is t2-t1; ch1 is t4-t3, ch2 is t5-t4 etc
\-1.982e-04 -9.900e-05 4.950e-05 5.850e-05 7.200e-05 8.550e-05 1.035e-04
\ 1.261e-04 1.531e-04 1.847e-04 2.252e-04 2.700e-04 3.284e-04 3.960e-04
\ 4.815e-04 5.804e-04 7.019e-04 8.505e-04 1.026e-03 1.242e-03 1.498e-03
\ 1.813e-03 2.187e-03 2.646e-03 3.195e-03 3.861e-03 4.666e-03 5.634e-03
\ 6.808e-03 8.221e-03 9.936e-03 1.200e-02 1.449e-02 1.751e-02

Hole SHD13:

\Borehole Metric Cable 20.00 500 20 168
\#109 4.50 Jan.1,1996 SHD13XYE N 1000 2800 +
\
\-1.982e-04 -9.900e-05 4.950e-05 6.299e-05 8.550e-05 1.125e-04 1.531e-04
\ 2.027e-04 2.700e-04 3.600e-04 4.815e-04 6.389e-04 8.505e-04 1.129e-03
\ 1.498e-03 1.993e-03 2.646e-03 3.514e-03 4.666e-03 6.192e-03 8.221e-03
\ 1.091e-02 1.449e-02

Hole SHD12:

Borehole Metric Crystal-MASTER 10.00 500 17 61
#109 4.50 Jan.1,1996 SHD12Z1 N 1000 6500 +

-1.982e-04 -9.900e-05 4.950e-05 6.299e-05 8.550e-05 1.125e-04 1.531e-04

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2.027e-04 2.700e-04 3.600e-04 4.815e-04 6.389e-04 8.505e-04 1.129e-03
1.498e-03 1.993e-03 2.646e-03 3.514e-03 4.666e-03 6.192e-03

The EMVISION channel file for all holes except SHD13, SHD12 is:

Times for the Downhole survey
NUMTIMES=31 OFFTIME=20.
DELAY WIDTH
0.054 0.008
0.065 0.014
0.079 0.014
0.094 0.018
0.115 0.022 5
0.140 0.027
0.169 0.032
0.205 0.040
0.248 0.045
0.299 0.058 10
0.362 0.068
0.439 0.086
0.531 0.098
0.641 0.122
0.776 0.148 15
0.938 0.176
1.134 0.216
1.370 0.256
1.656 0.315
2.000 0.374 20
2.416 0.459
2.920 0.549
3.528 0.666
4.264 0.805
5.150 0.968 25
6.221 1.174
7.514 1.413
9.078 1.715
10.968 2.064
13.245 2.490 30
16.000 3.020

Flagstaff GeoConsultants Pty. Ltd. (ACN 074 693 637)
Suite 2, 337A Lennox Street, (PO Box 2236) Richmond South, Victoria, 3121 Australia
Phone: +61 3 9421 1000 Fax +61 3 9421 1099
Email: postman@flagstaff-geoconsultants.com.au WebSite: www.flagstaff-geoconsultants.com.au

675452

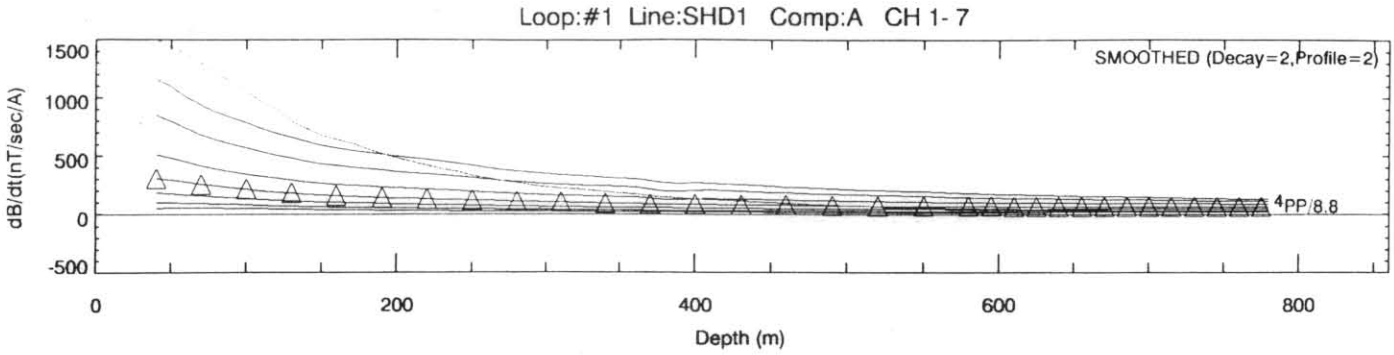
SOUTH HENTY EL 8/96

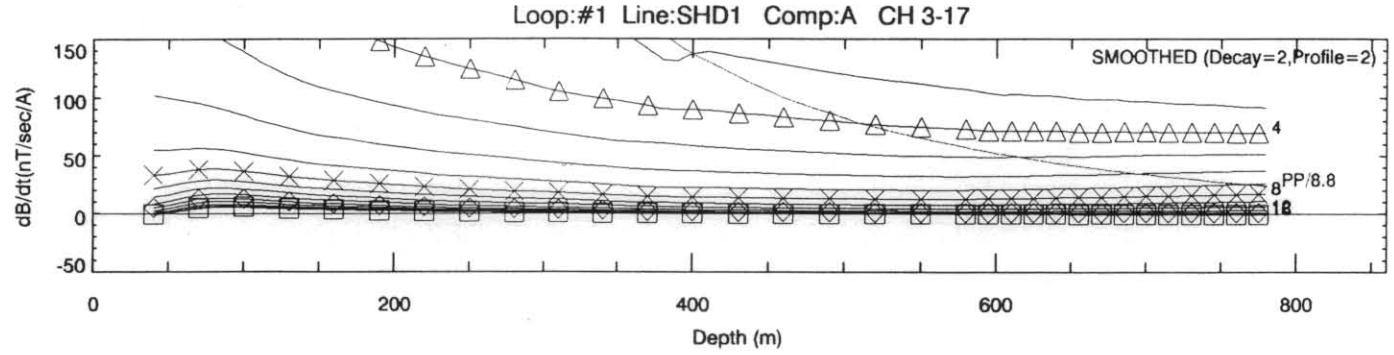
BOREHOLE EM DATA TO JUNE 1999

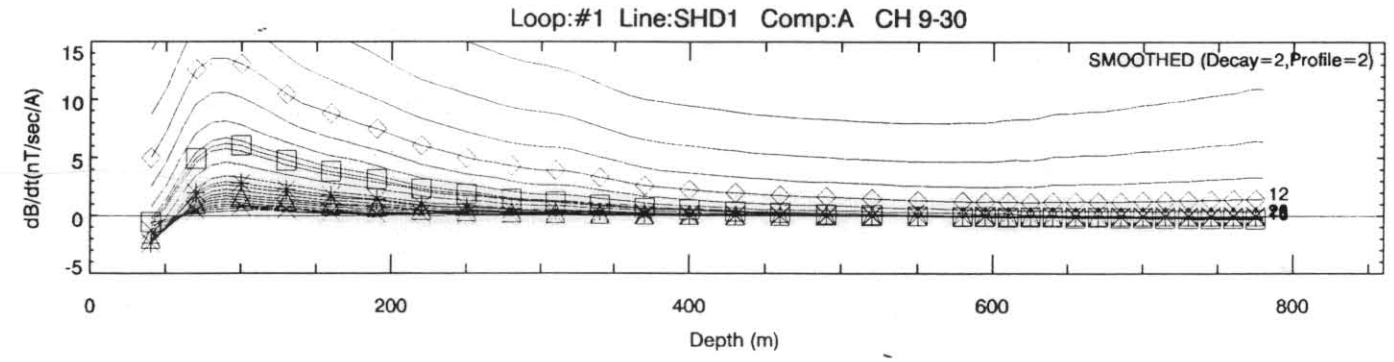
Hole	Tx Loop	Components
SHD1	1	A,U,V
	2	A,U,V
	9	A,U,V
SHD2	1	A,U,V
	2	A,U,V
	9	A,U,V
SHD12	3	A,U,V
	4	A,U,V
	10	A,U,V
SHD13	5	A,U,V
	6	A,U,V
SHD18	8	A,U,V
SHD19	11	A
	12	A

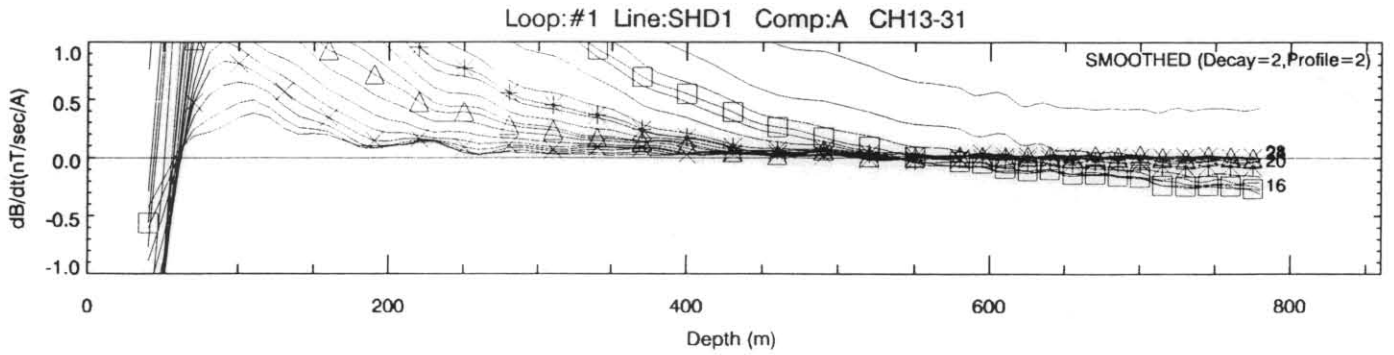
NOTE: Use of components A,U,V and Z,X,Y are synonomous; the contractor changed to industry-standard nomenclature (A,U,V) in 1999.

675453





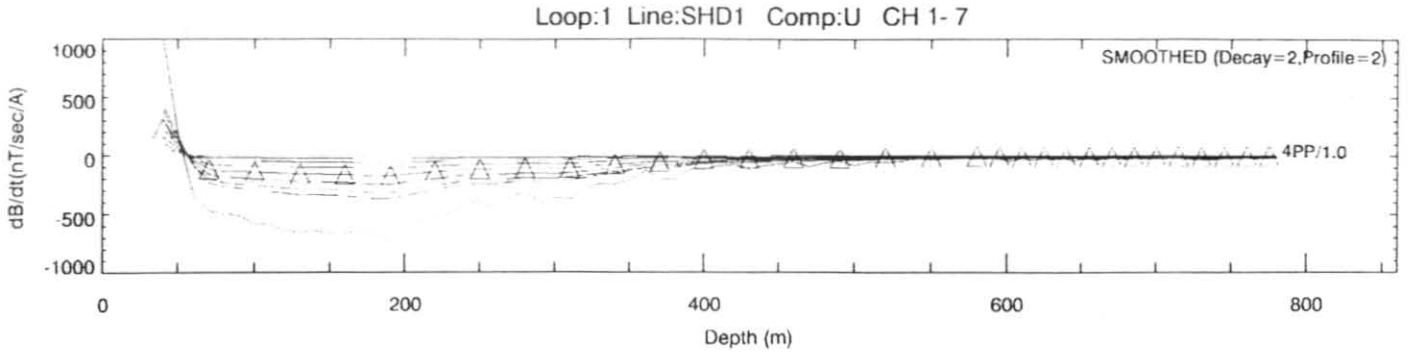


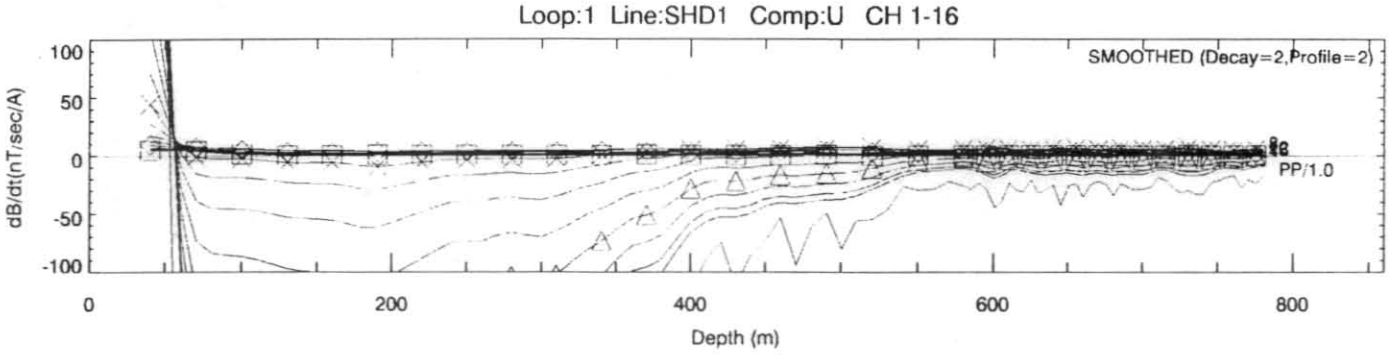


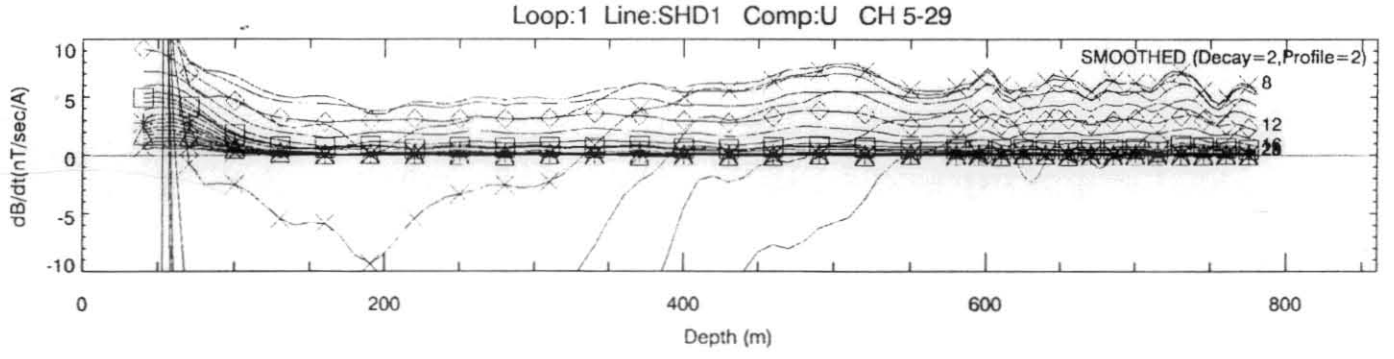
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 29-Mar-2000	

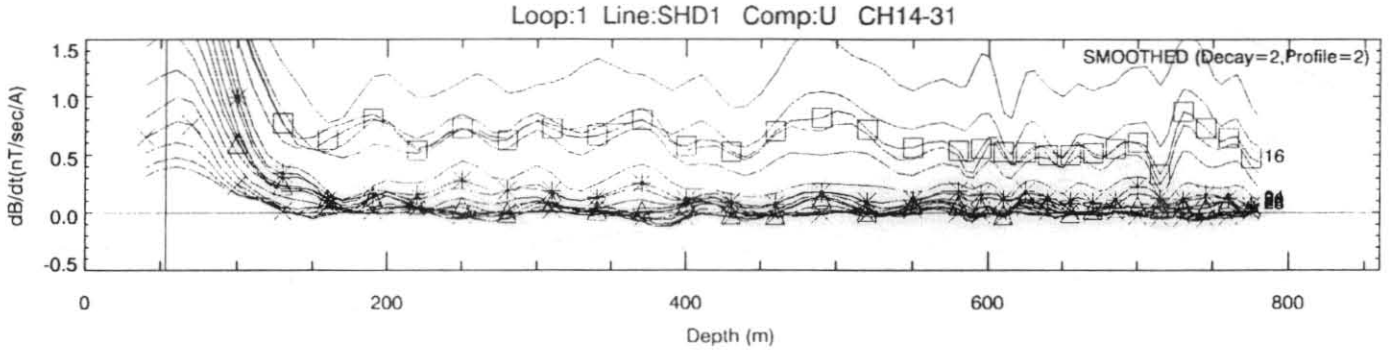
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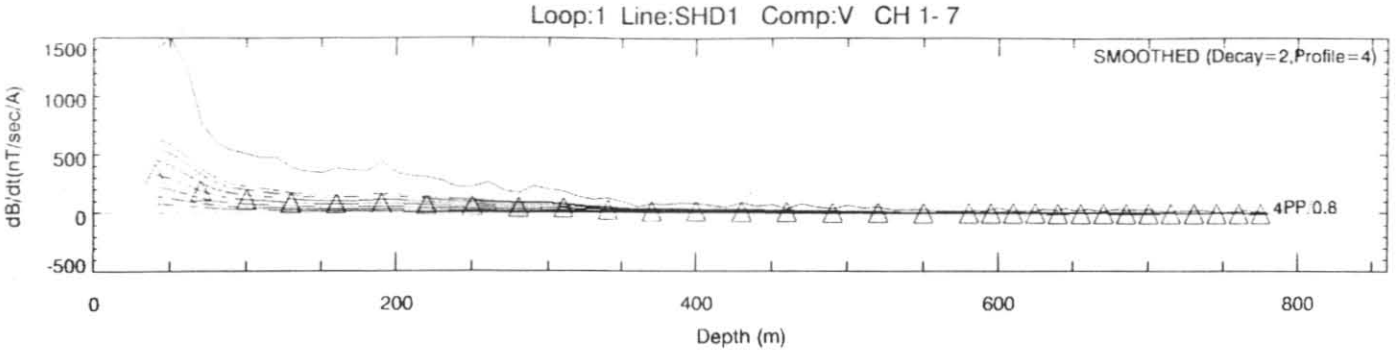


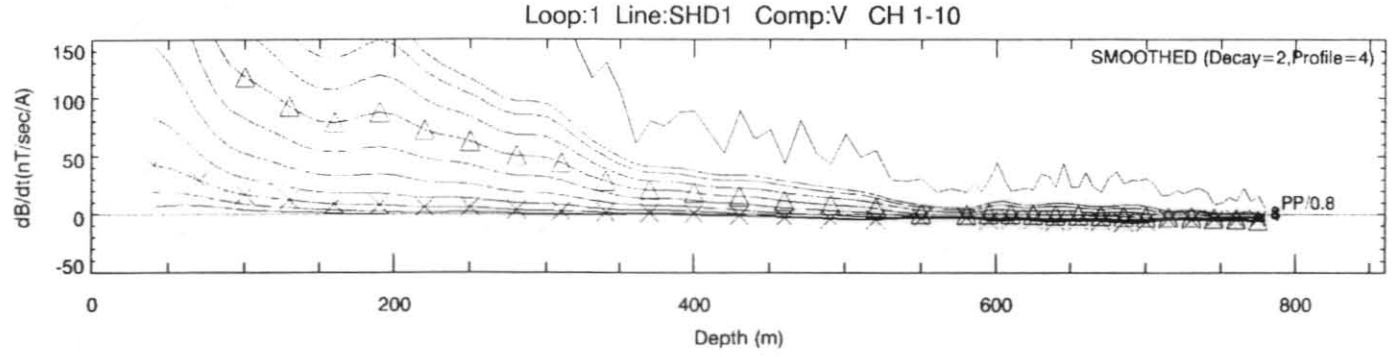


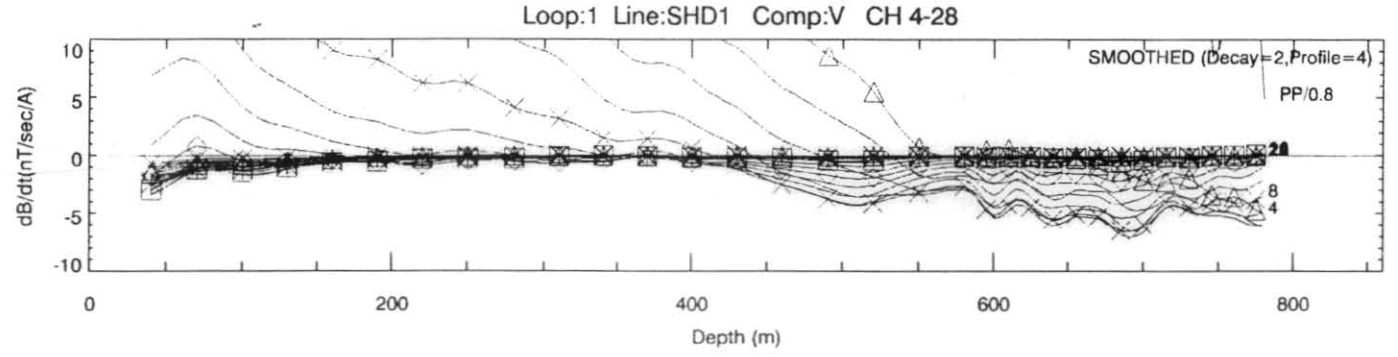
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 15-Feb-2000	

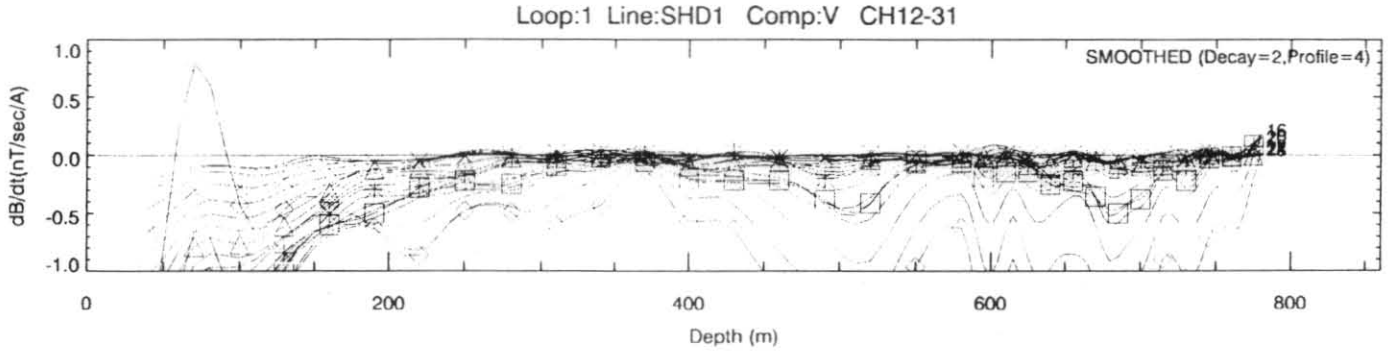
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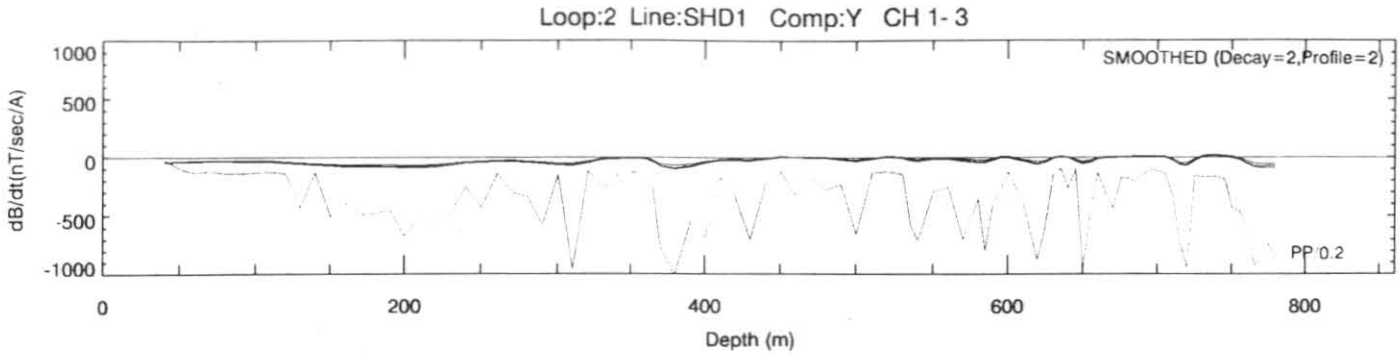


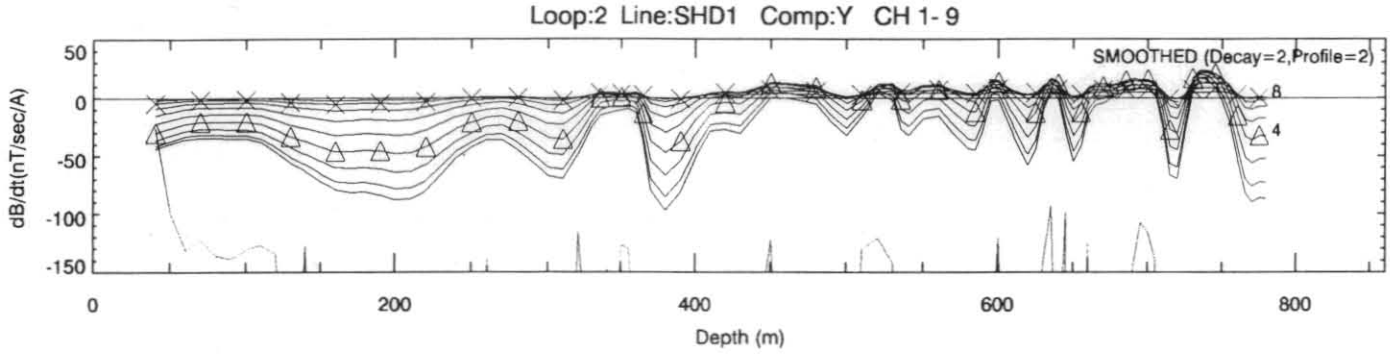


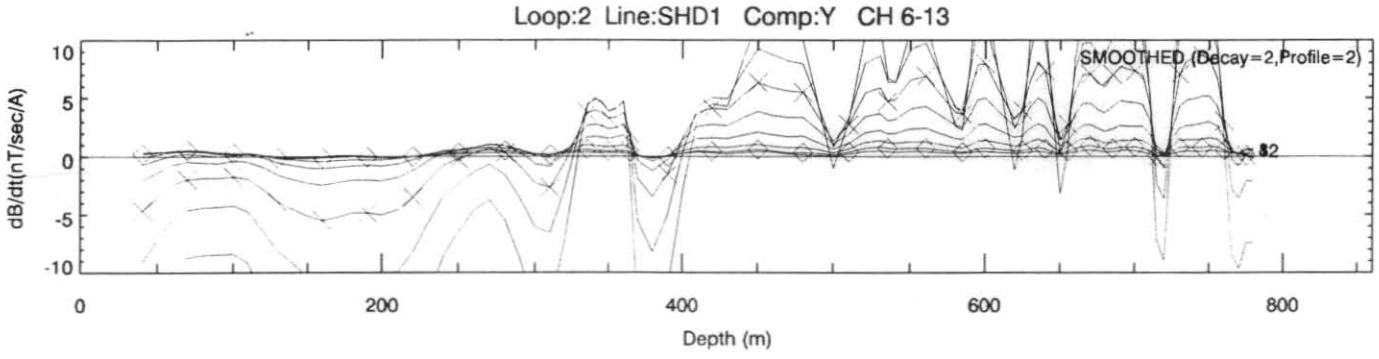
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 15-Feb-2000	

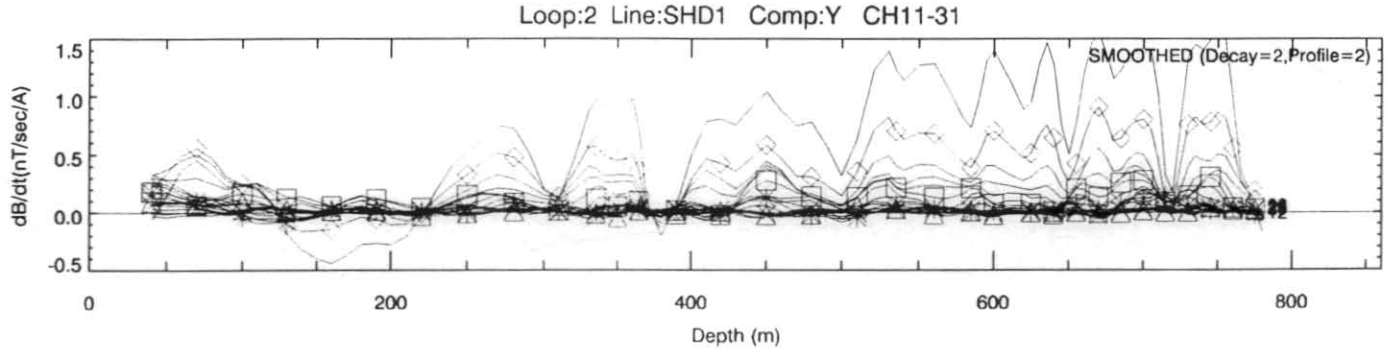
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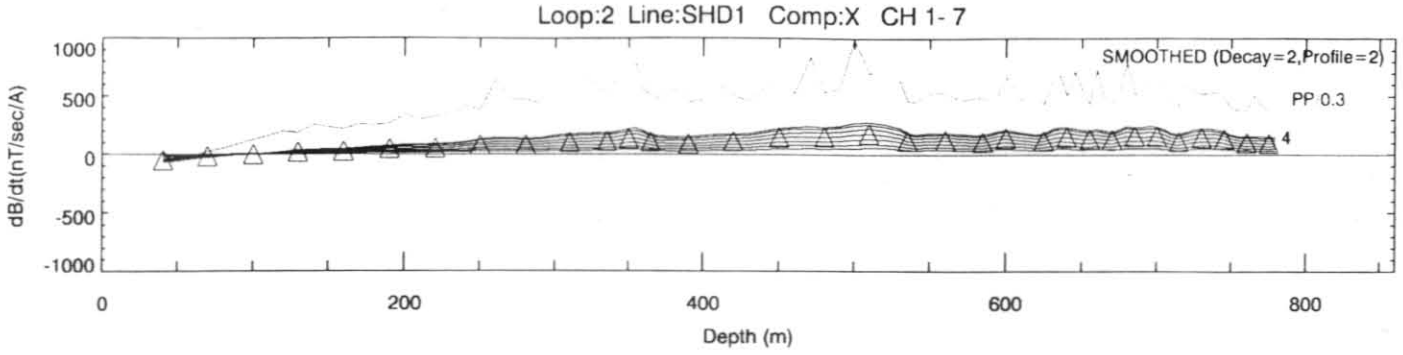


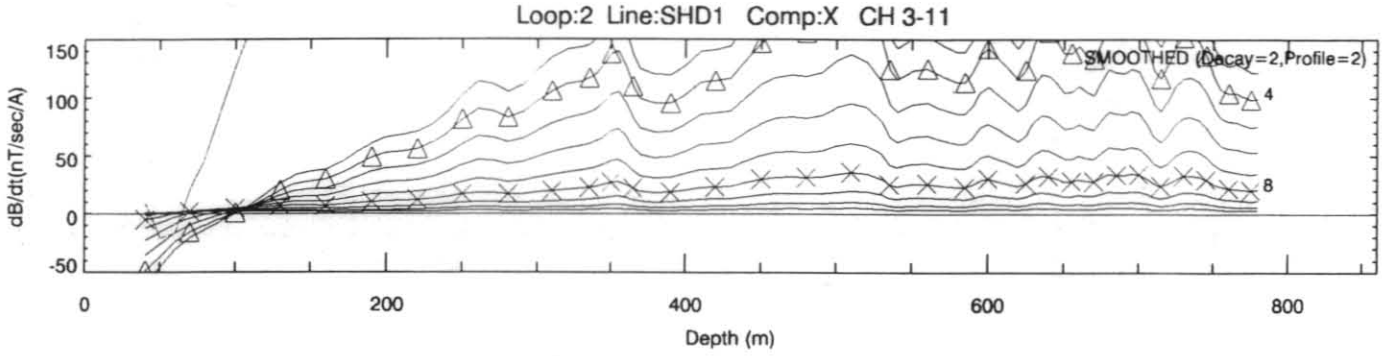


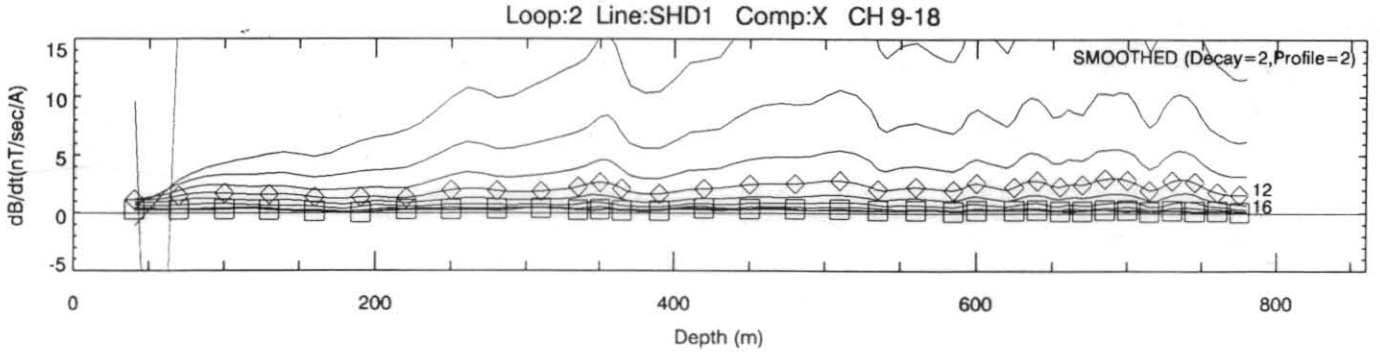
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

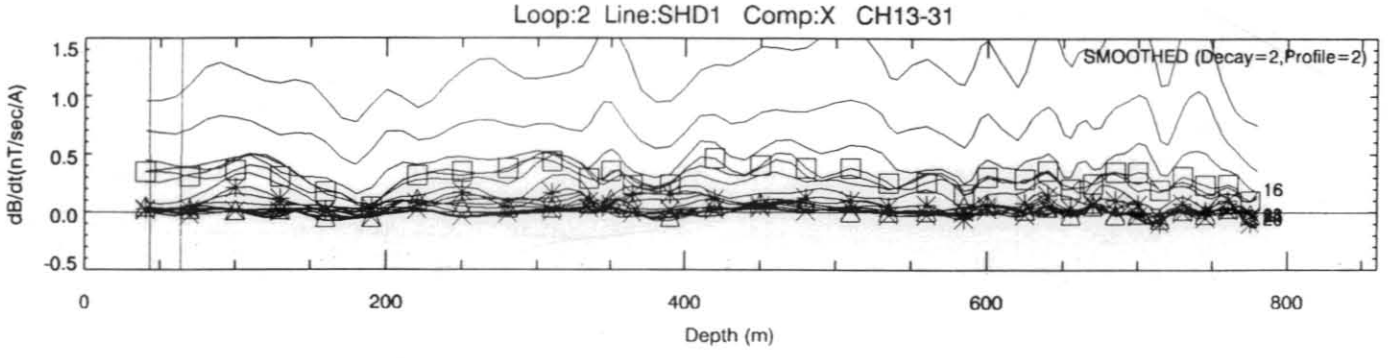
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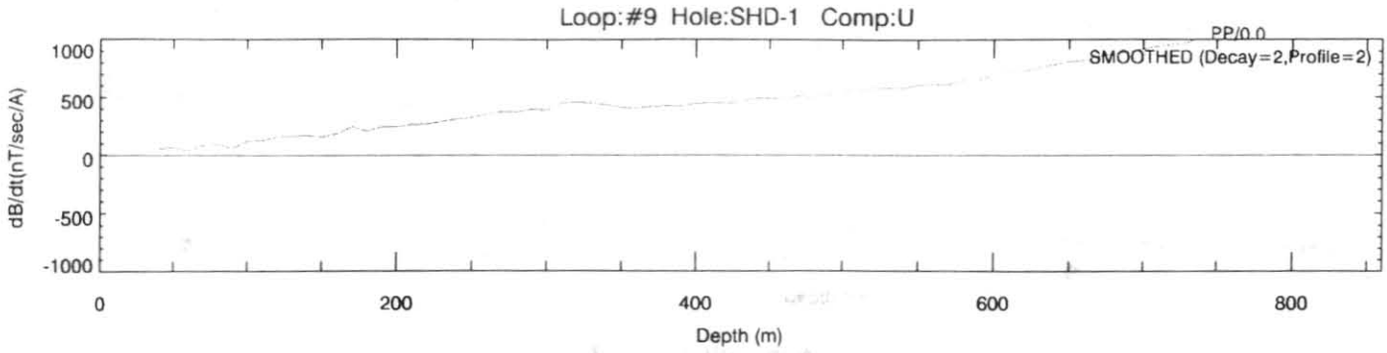


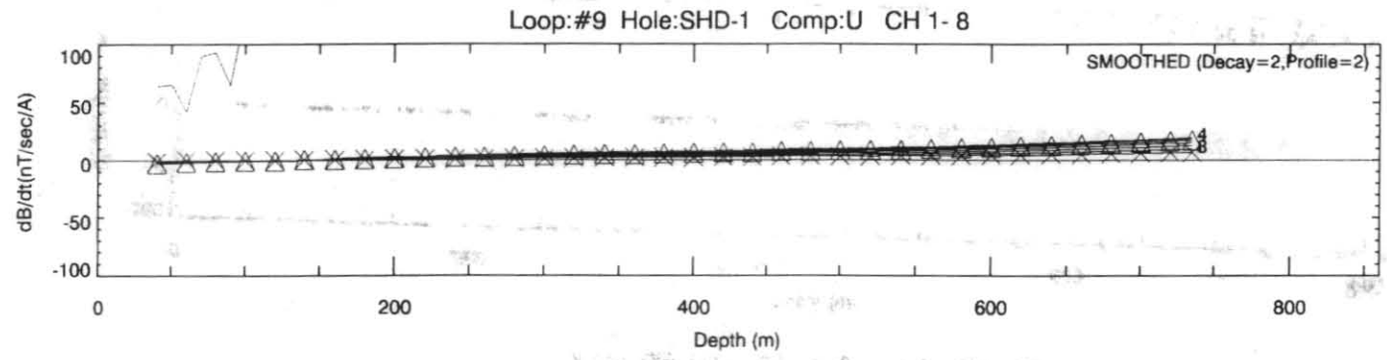


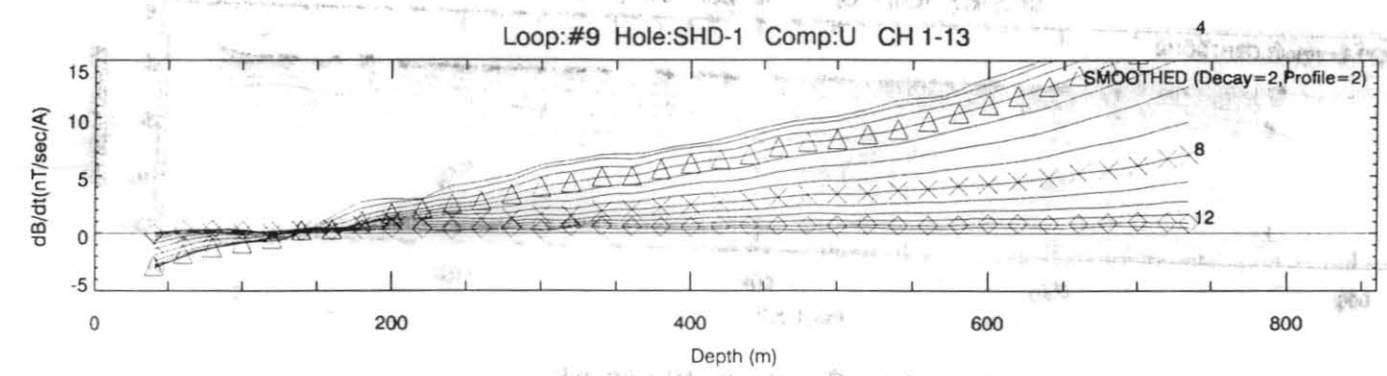
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

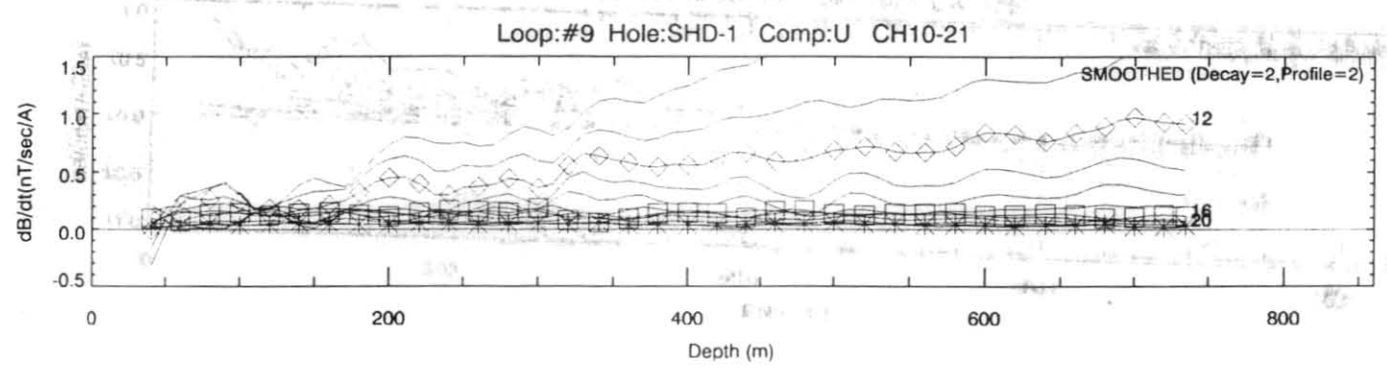
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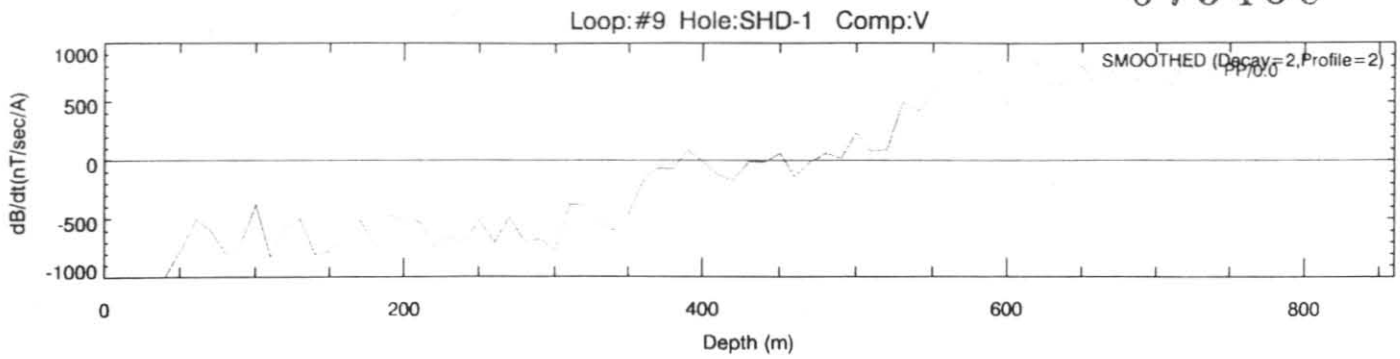


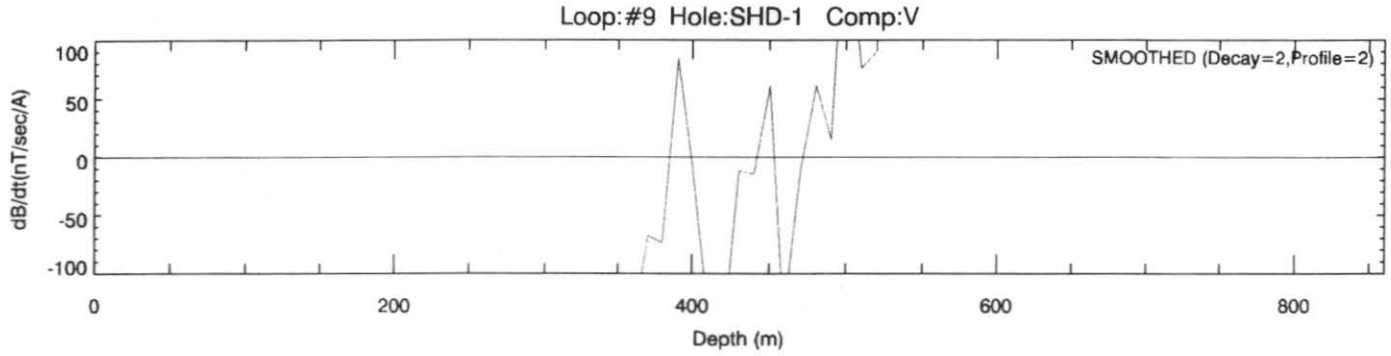


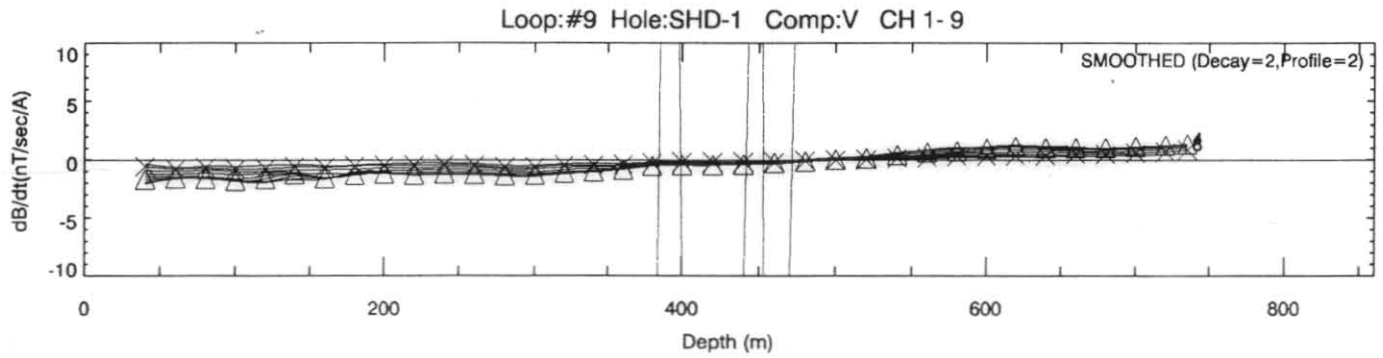
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

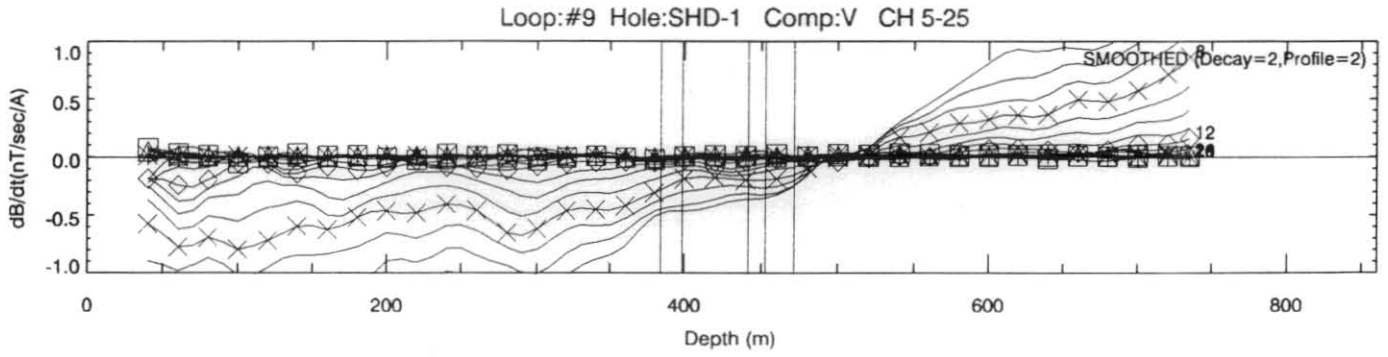
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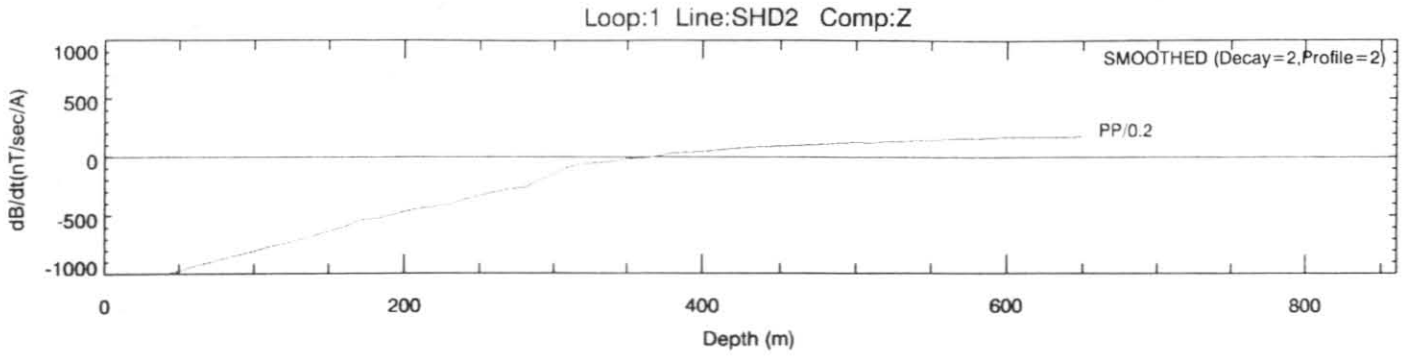


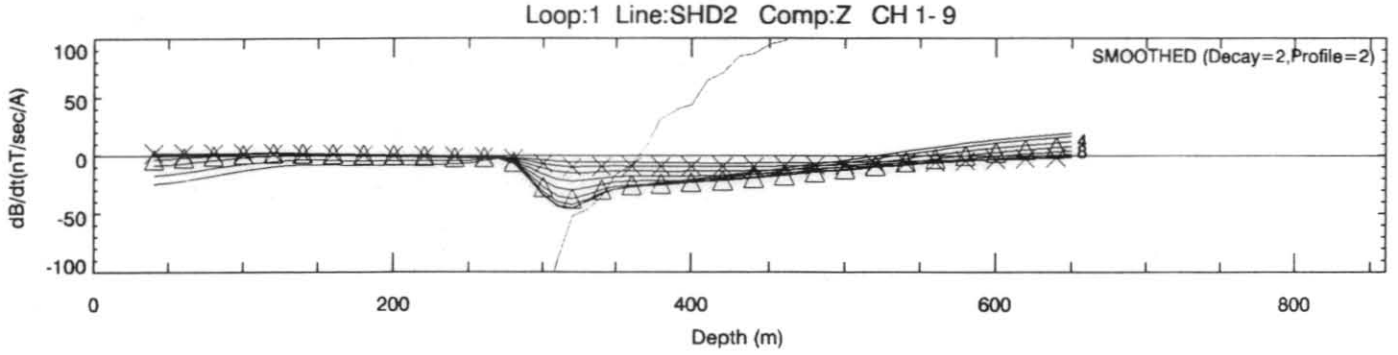


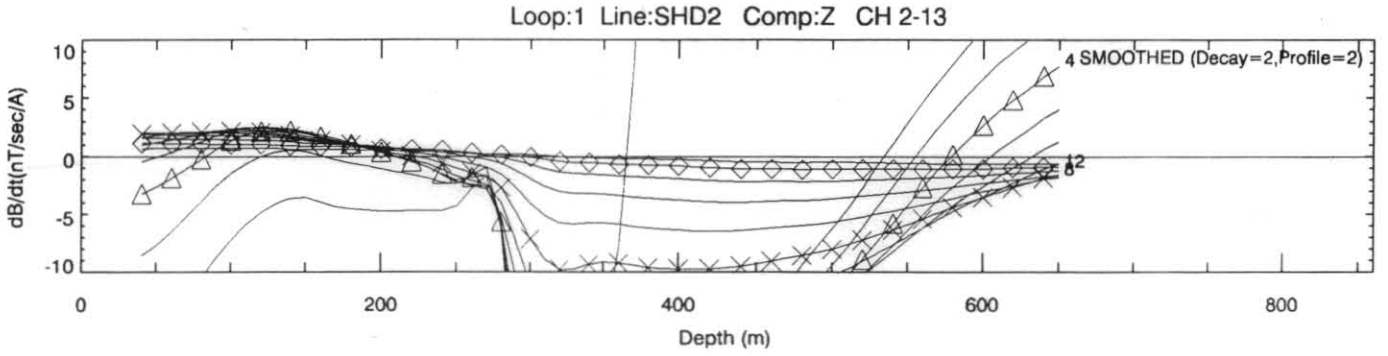
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

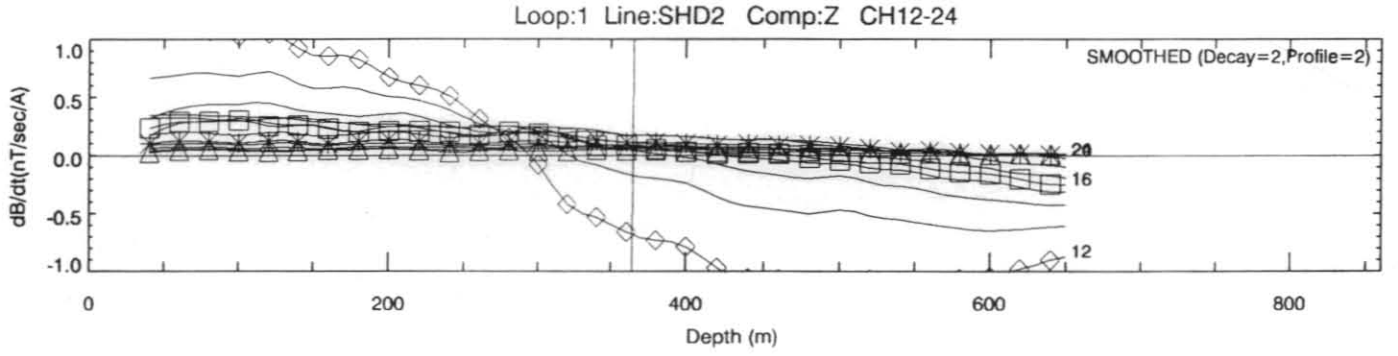
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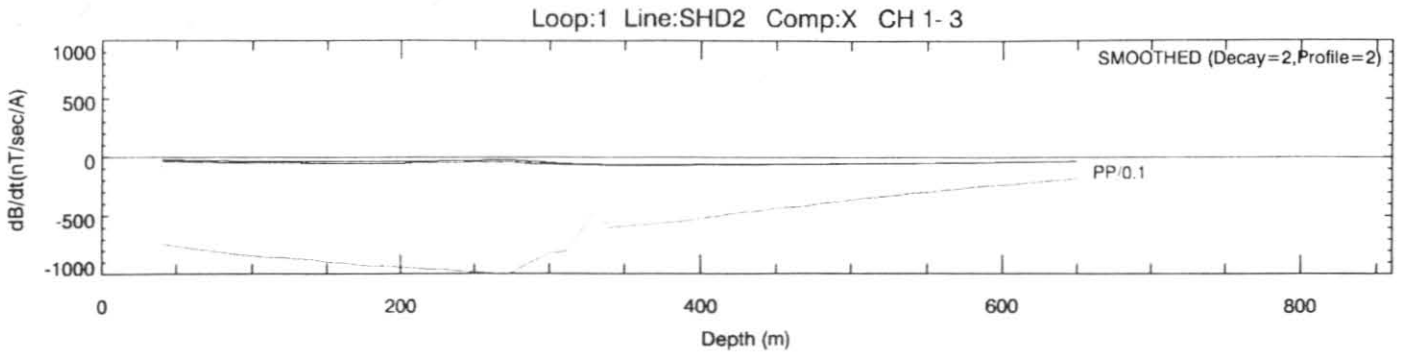


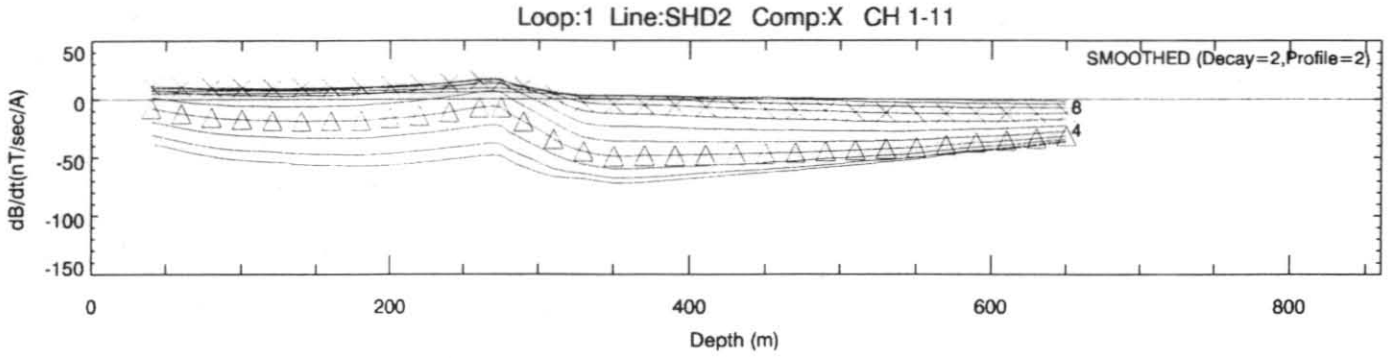


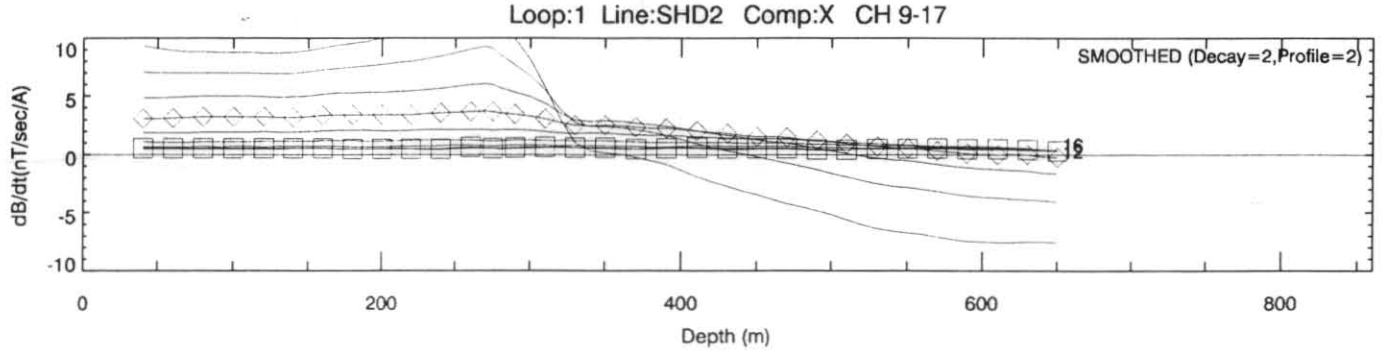
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

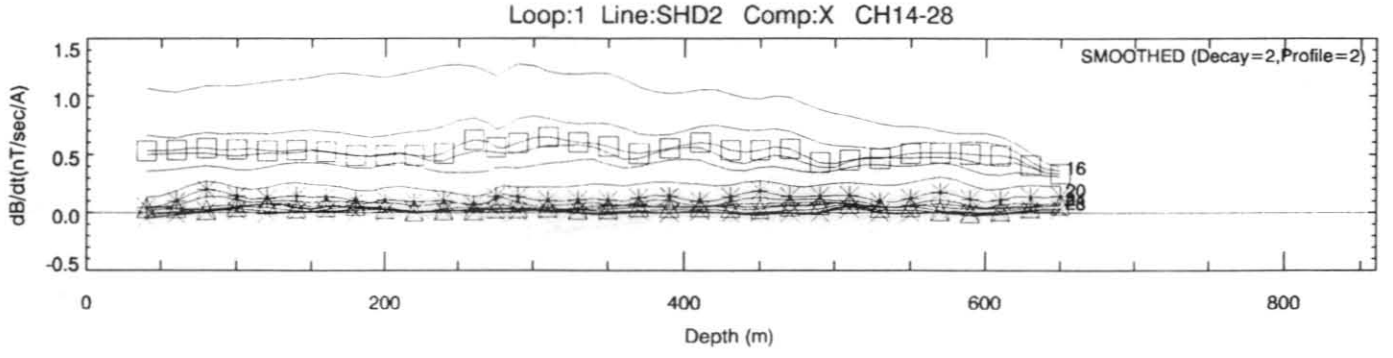
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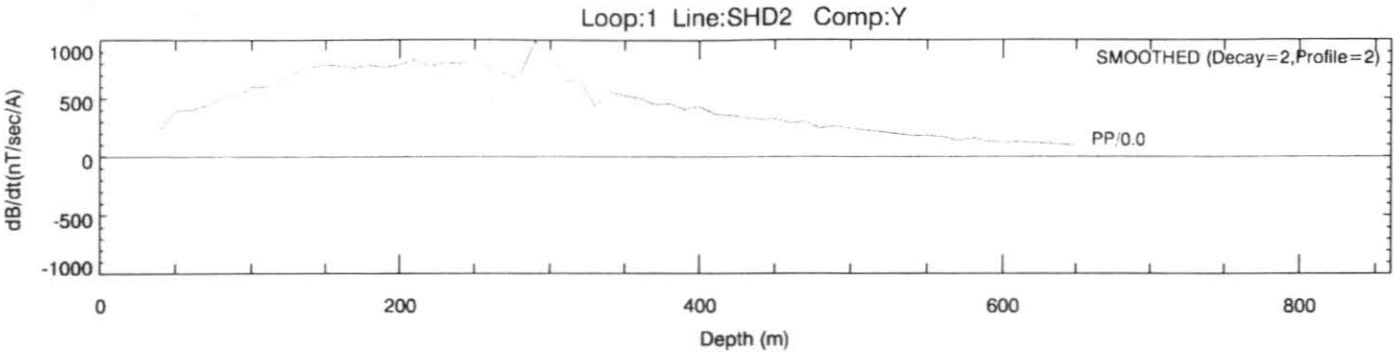


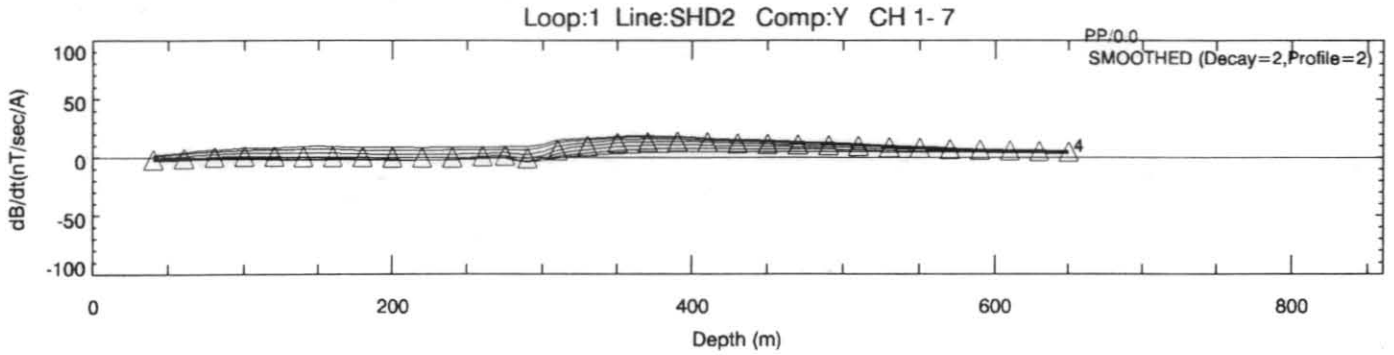


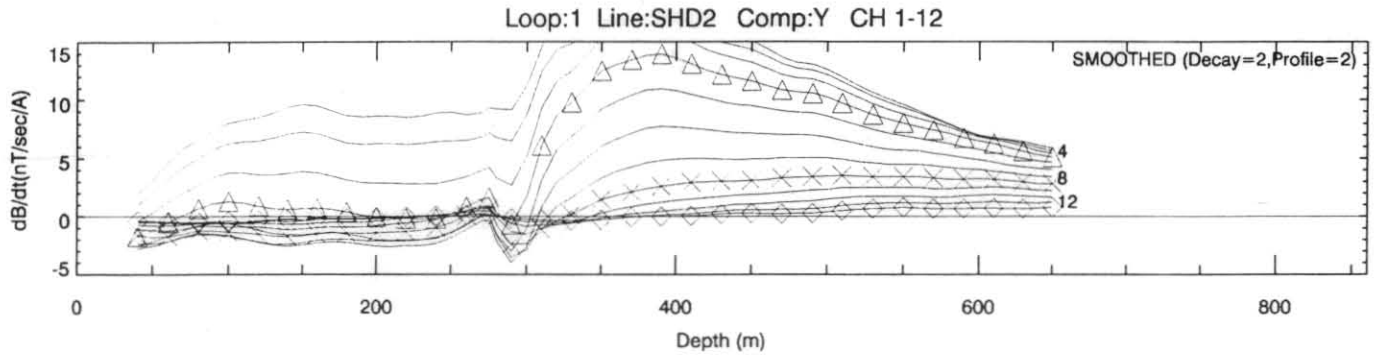
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
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Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

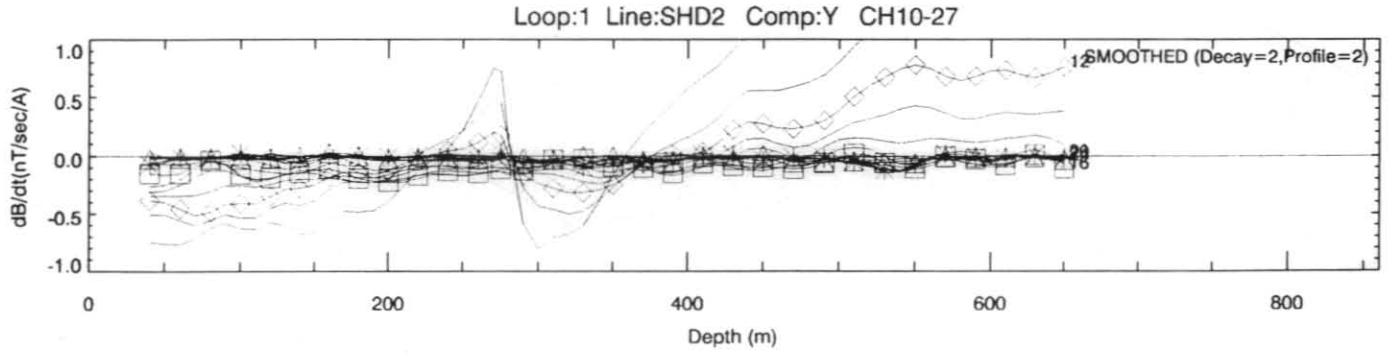
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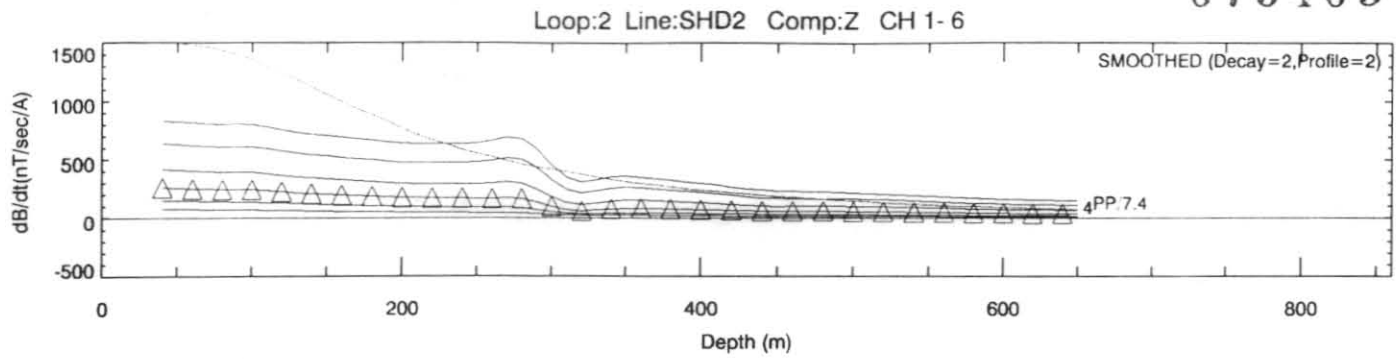


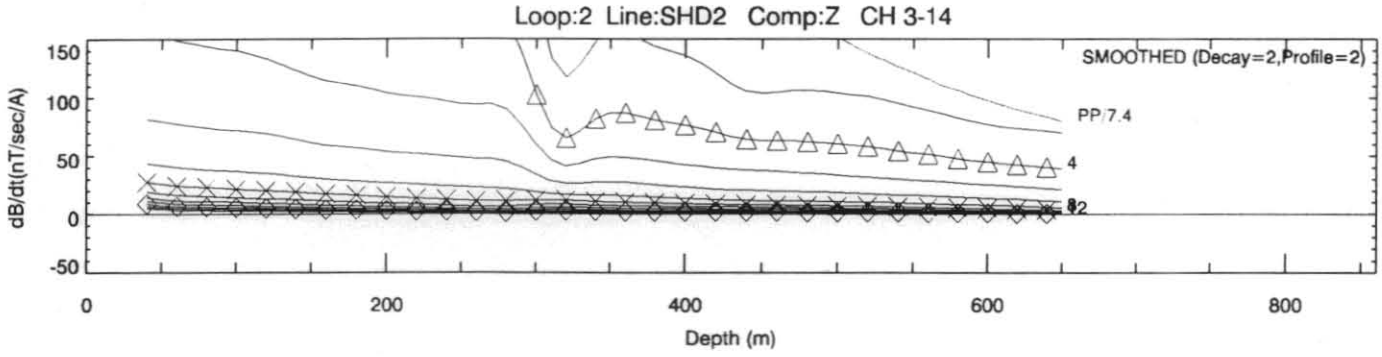


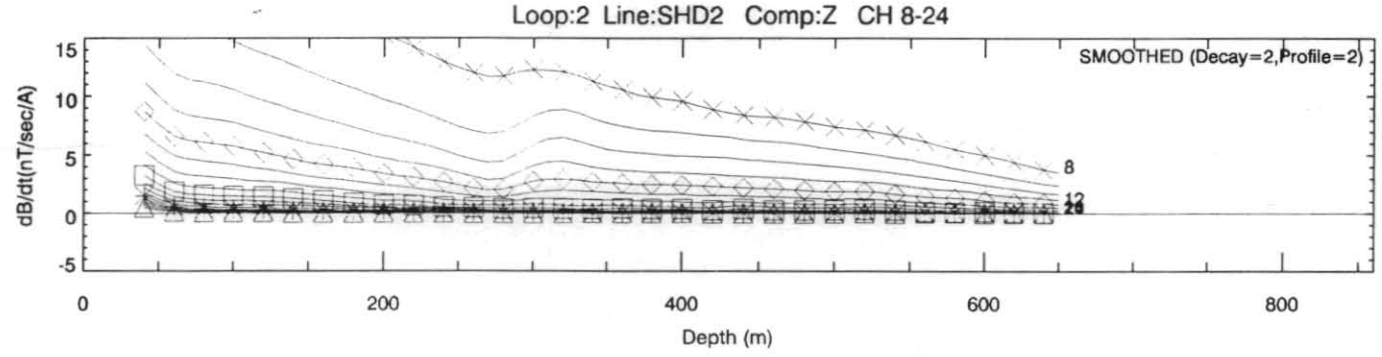
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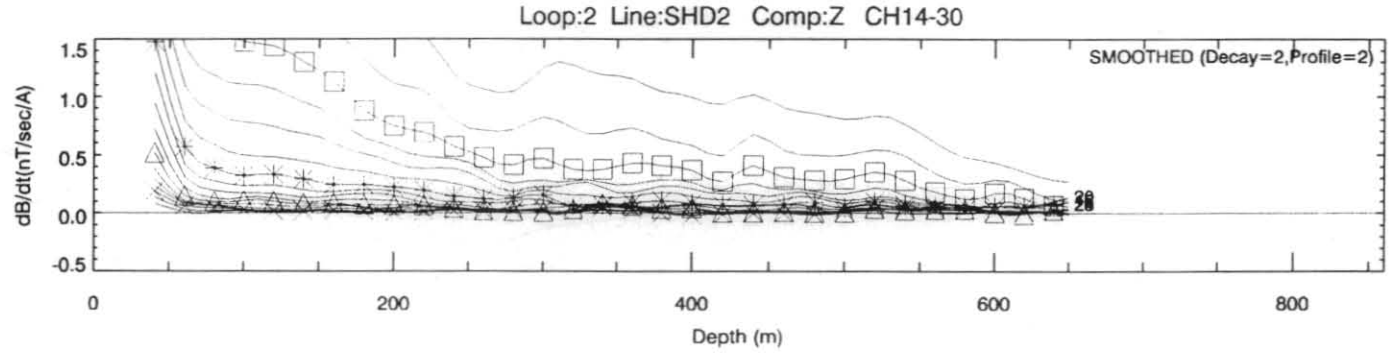
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

675463





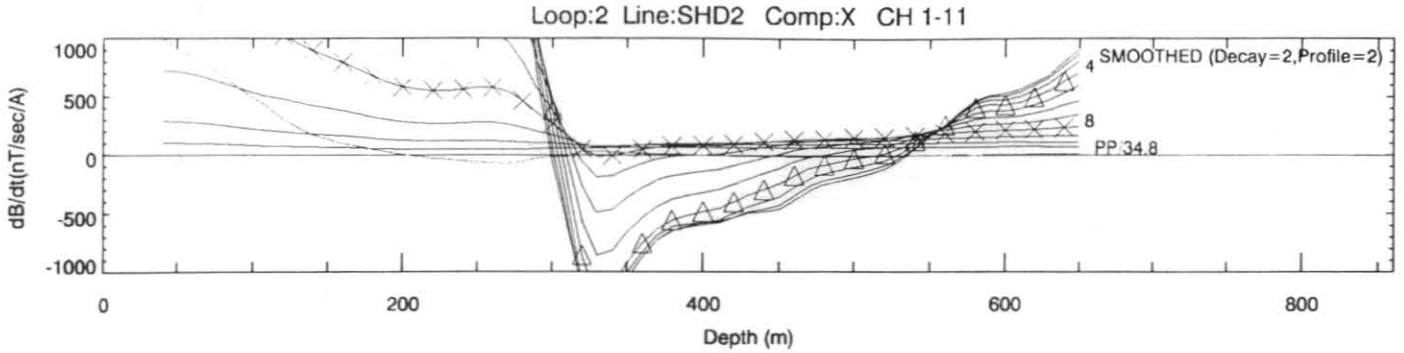


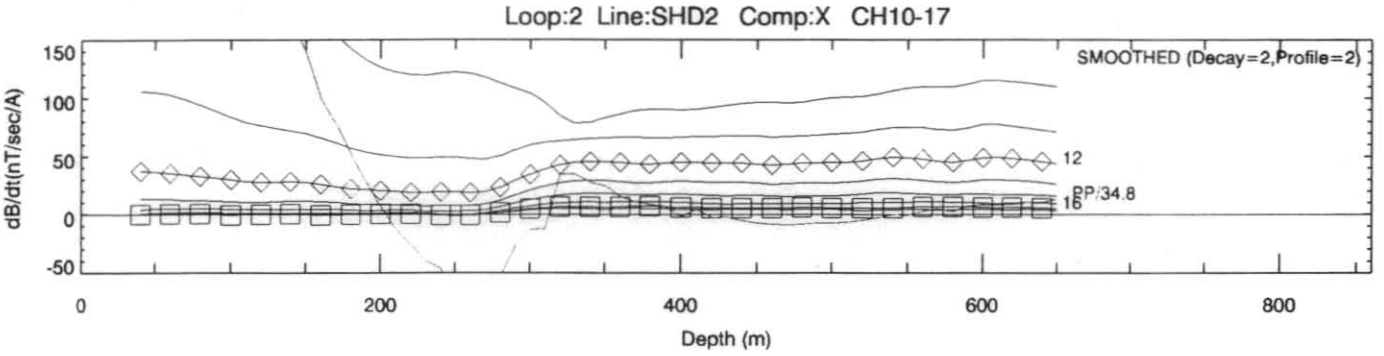


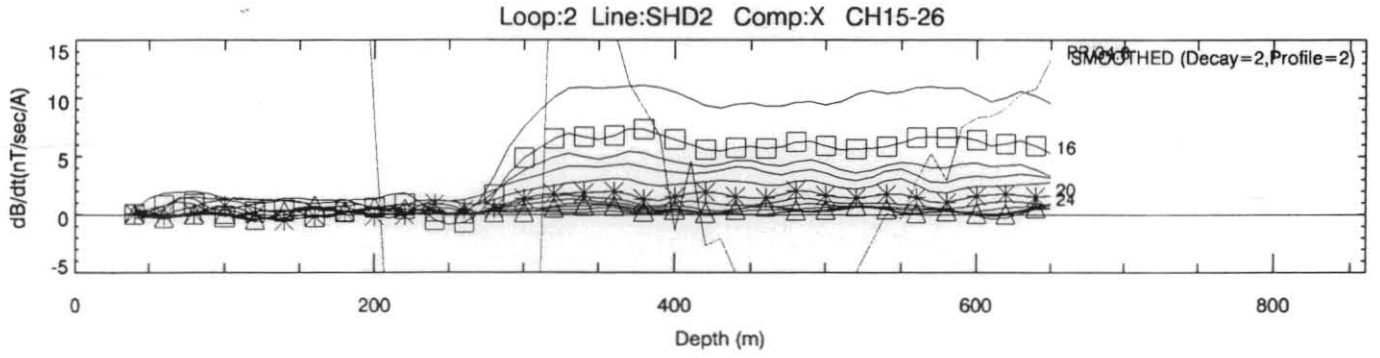
5 cm

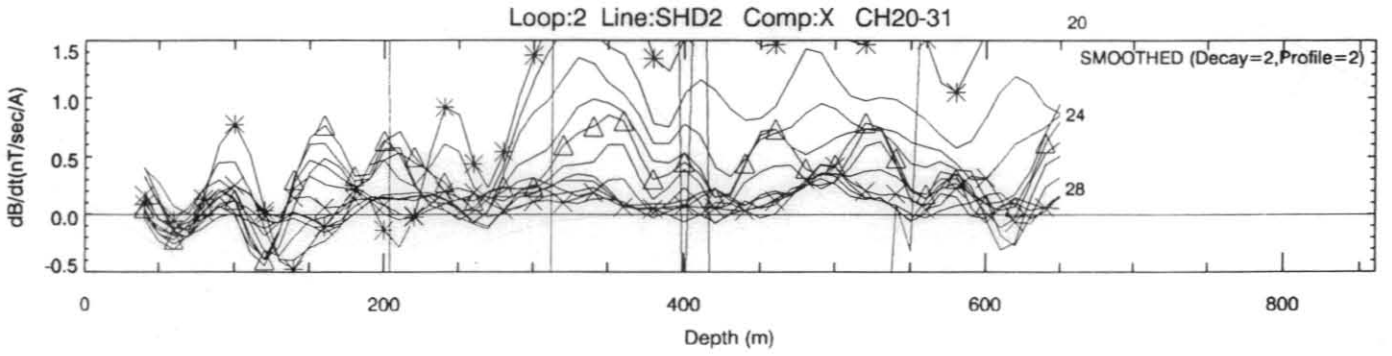
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

675464





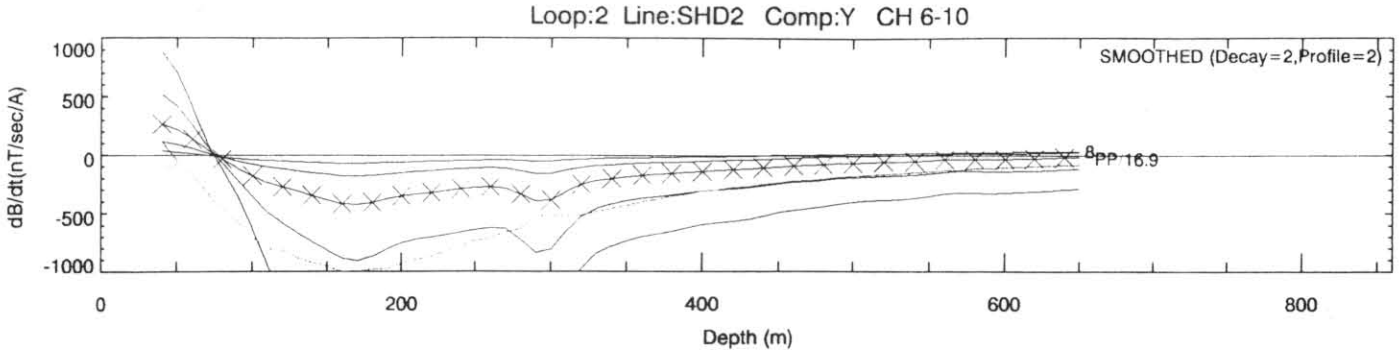


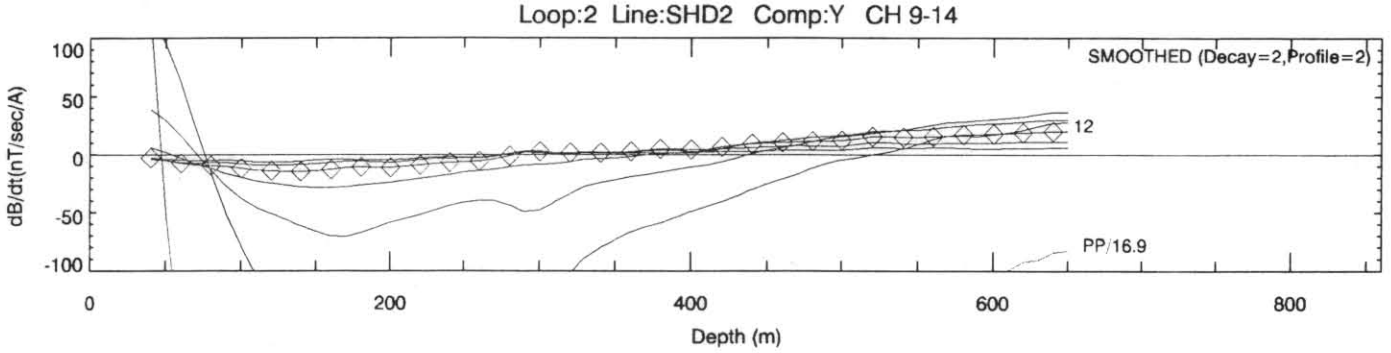


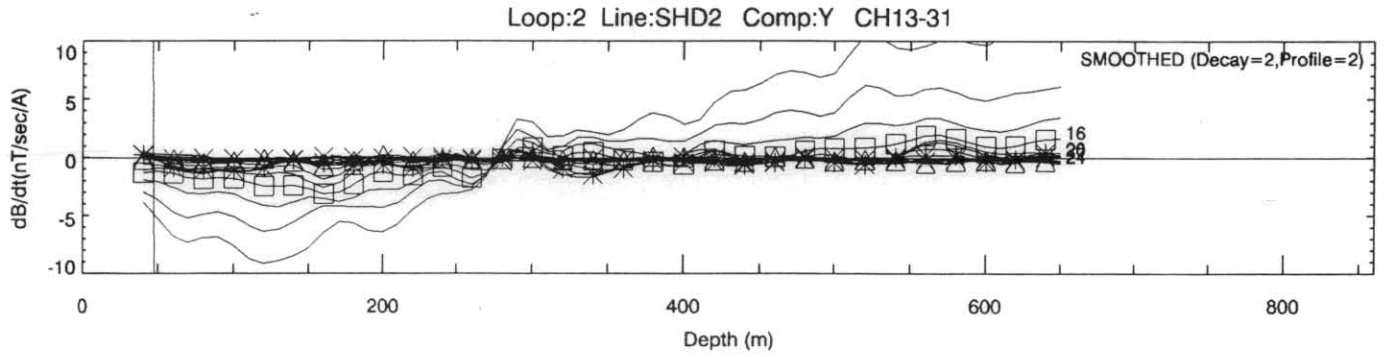
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

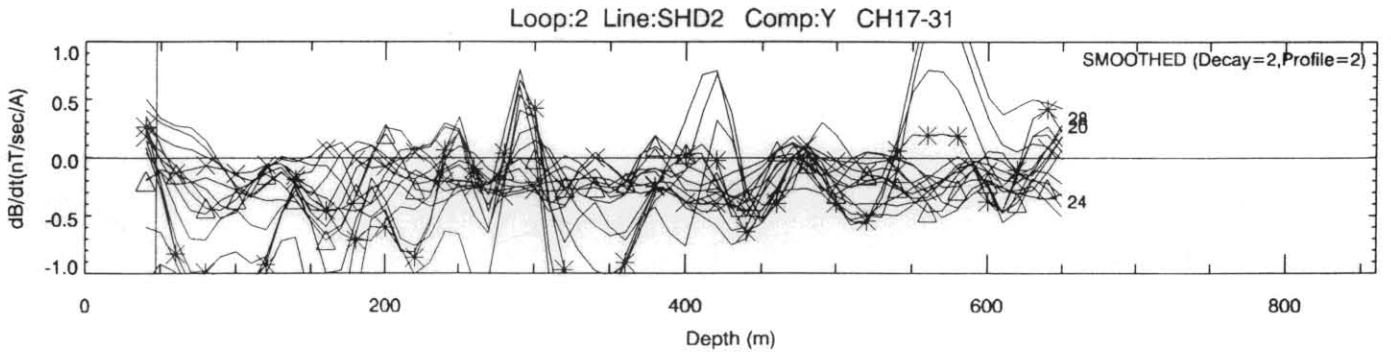
5 cm

675465





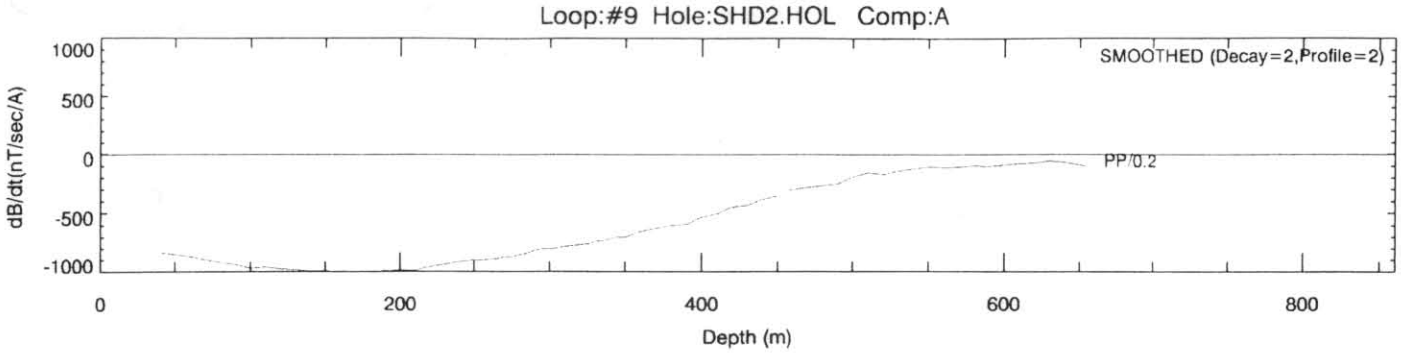


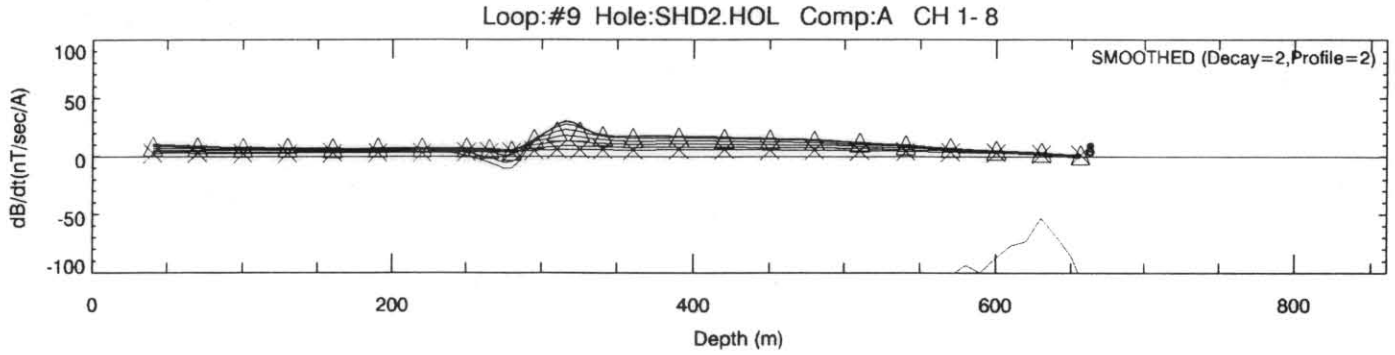


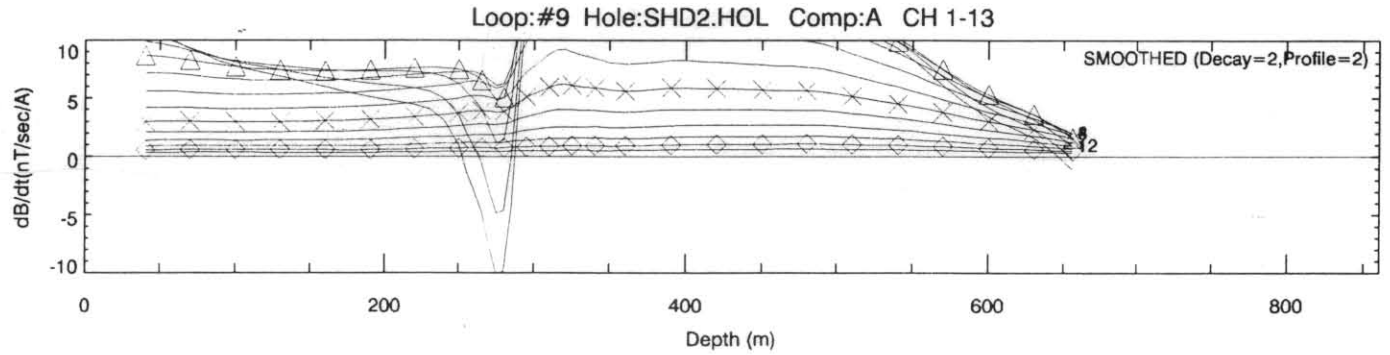
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

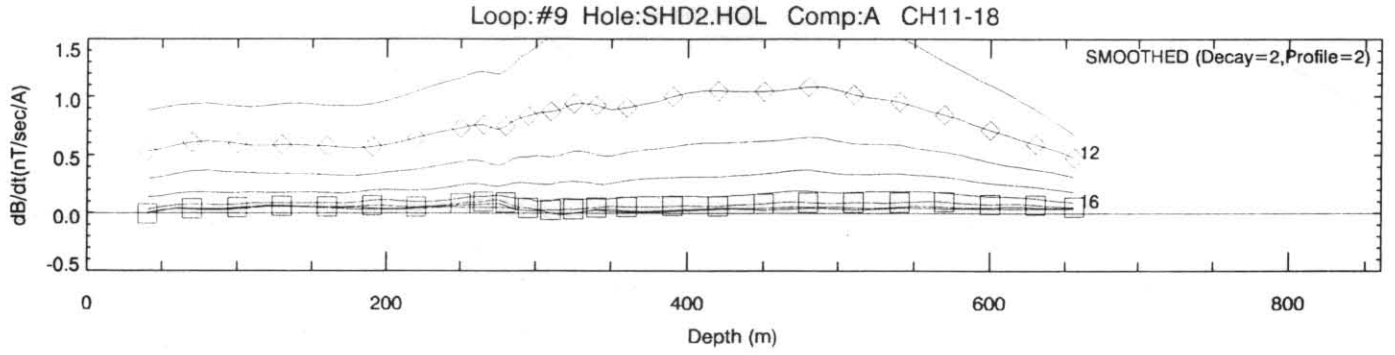
5 cm

675466





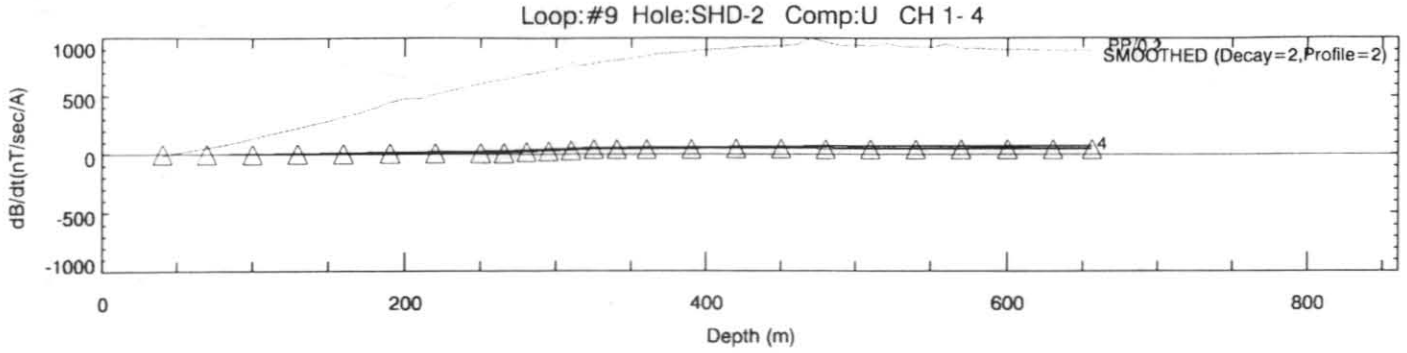


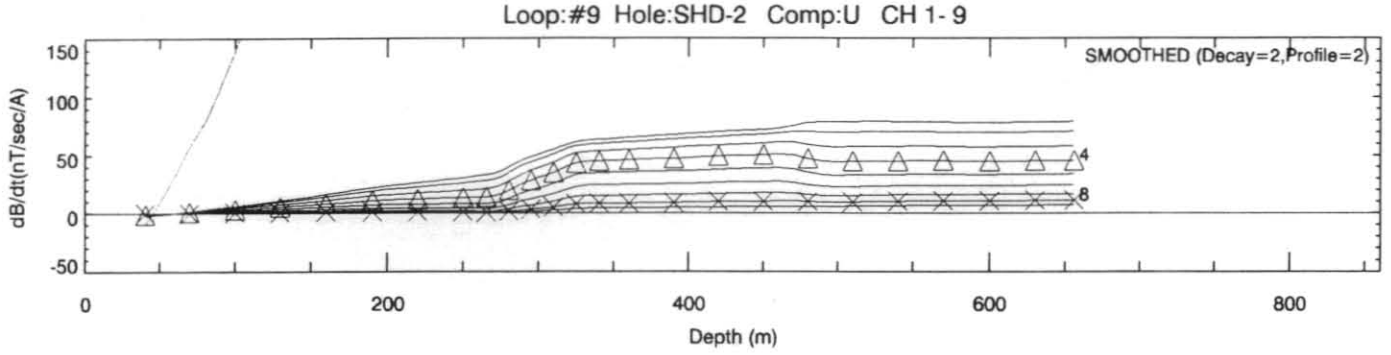


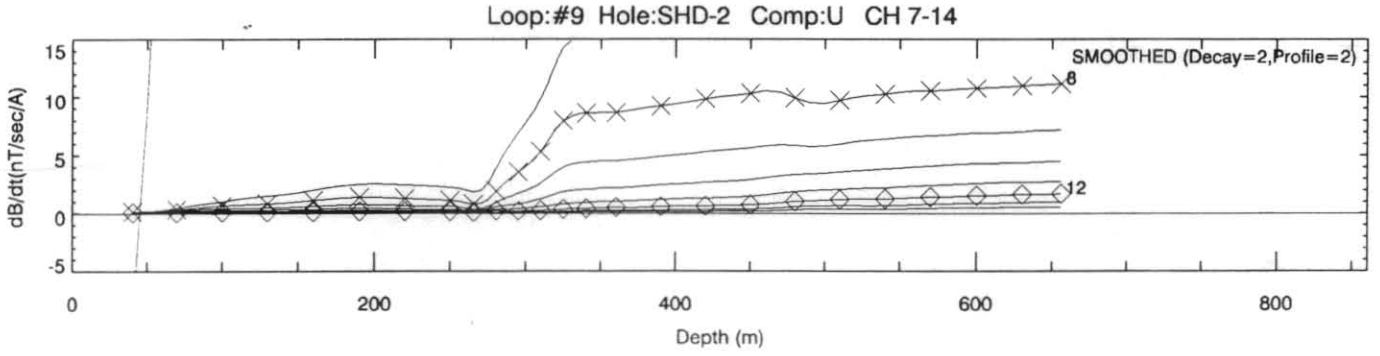
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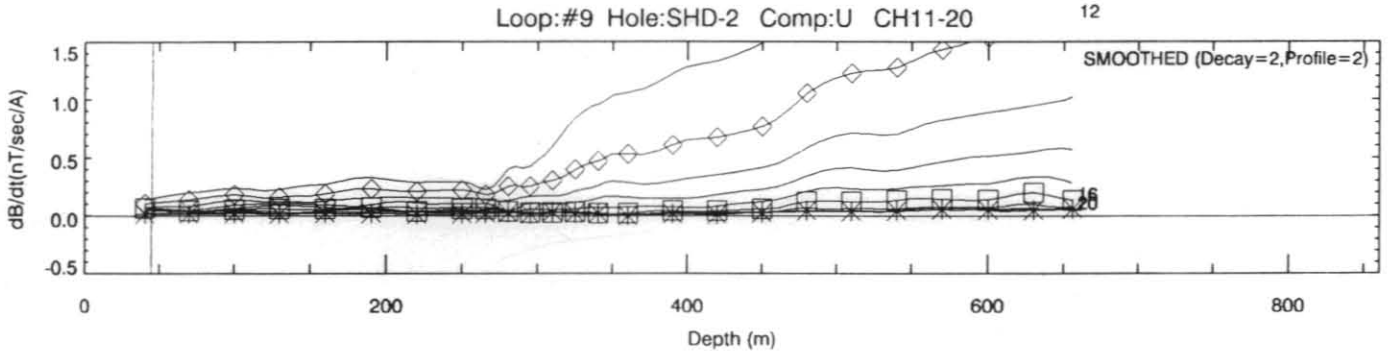
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

675467





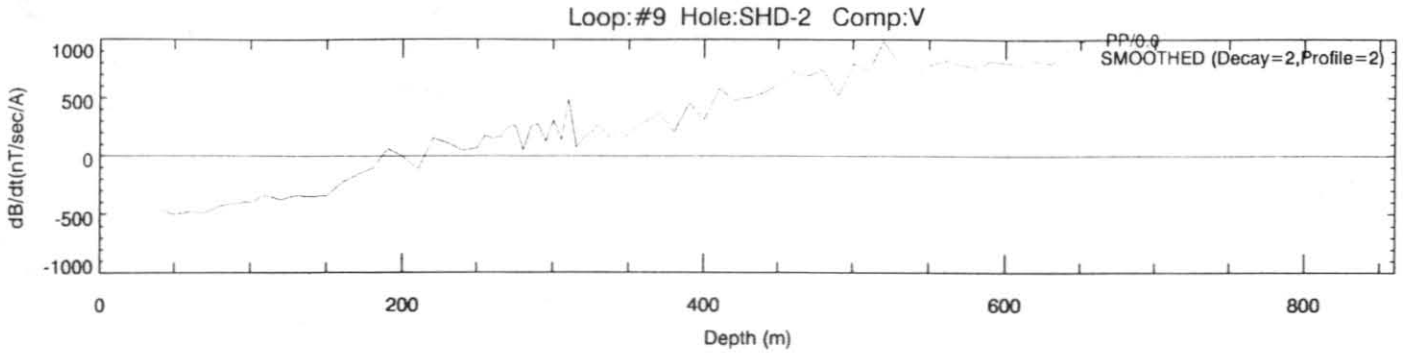


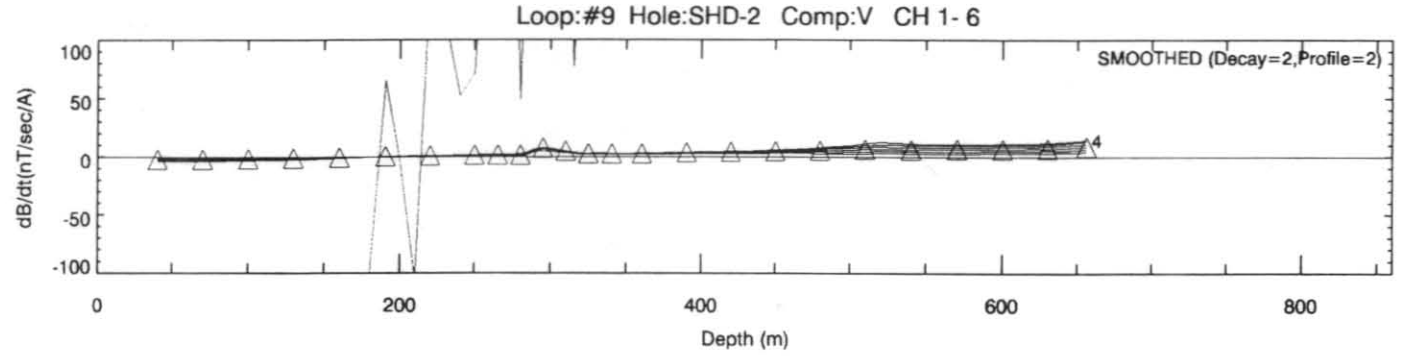


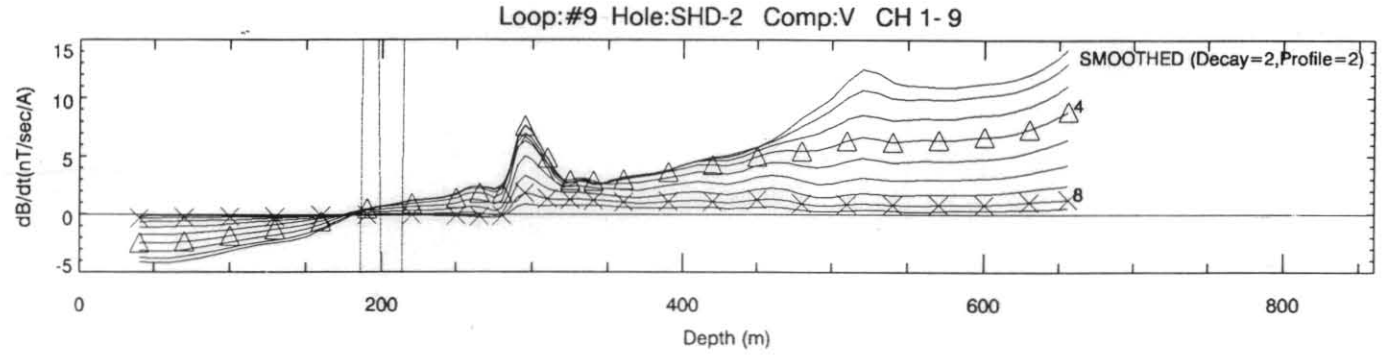
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

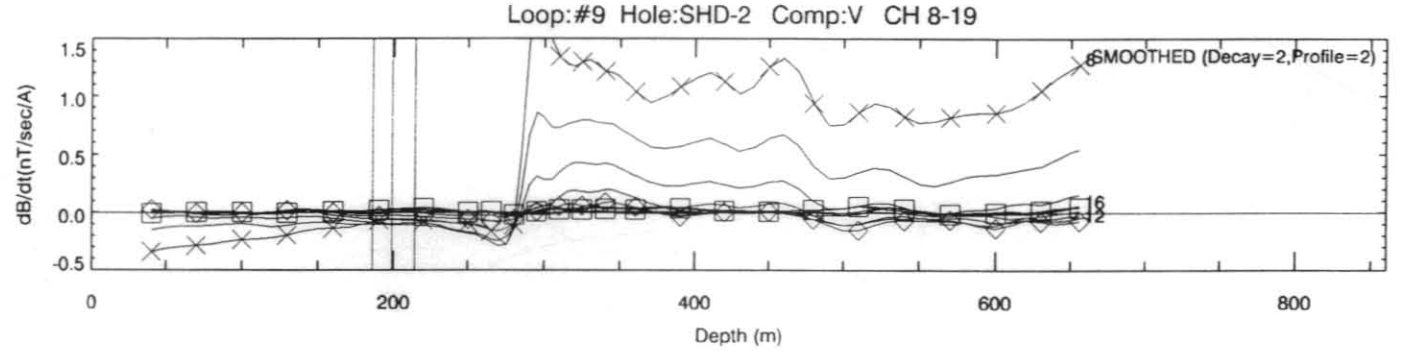
5 cm

675468





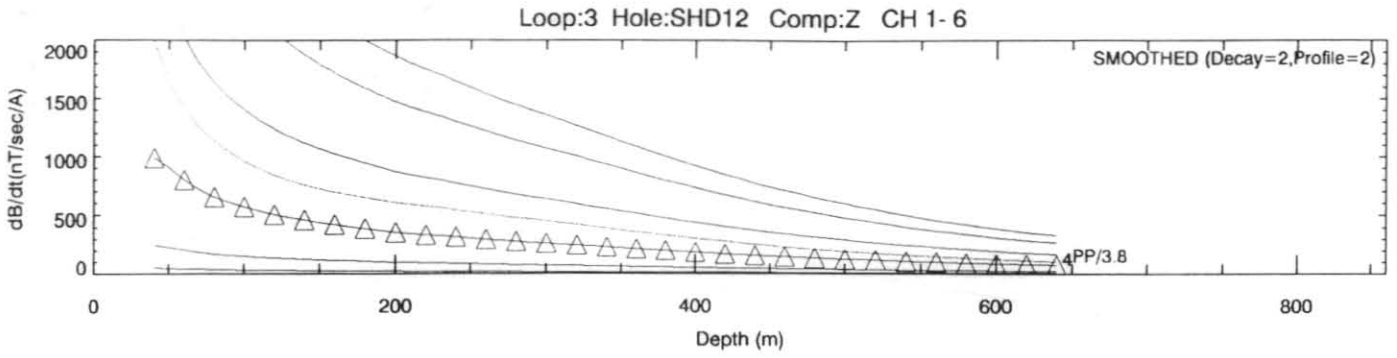


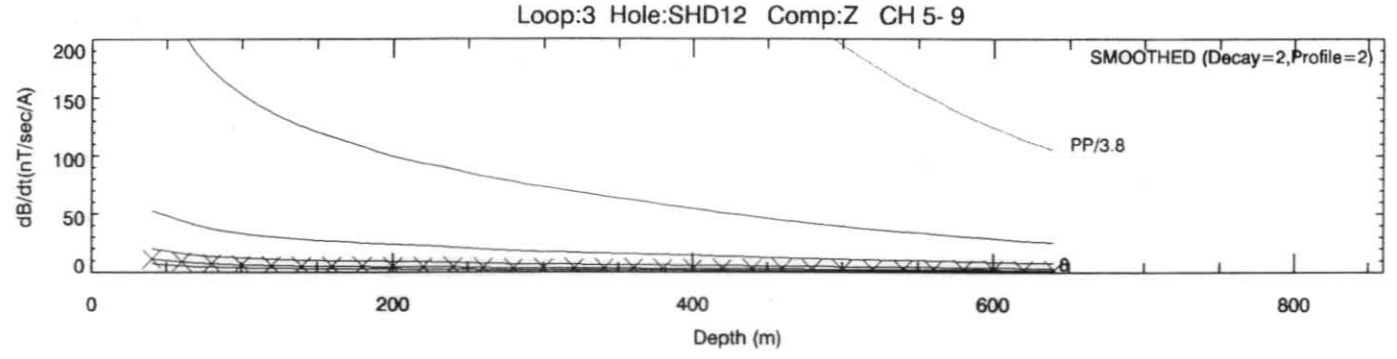


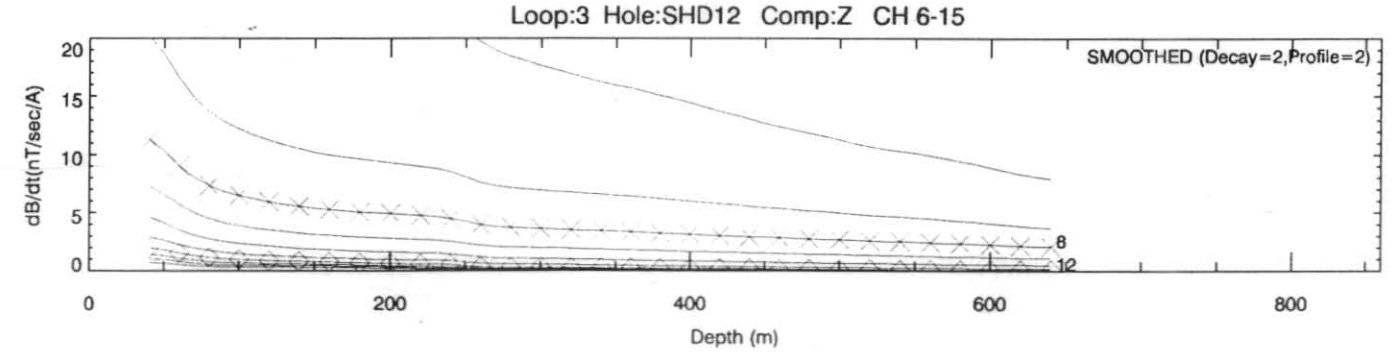
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

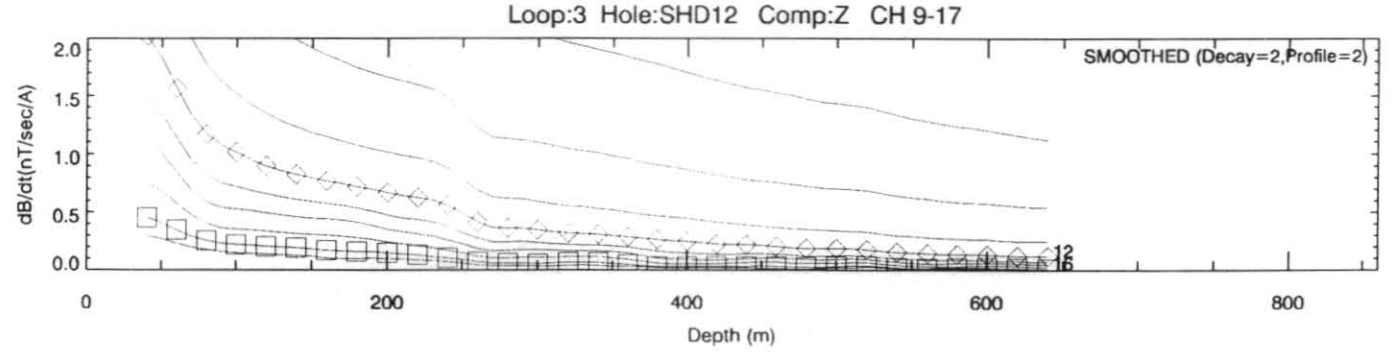
5 cm

675469





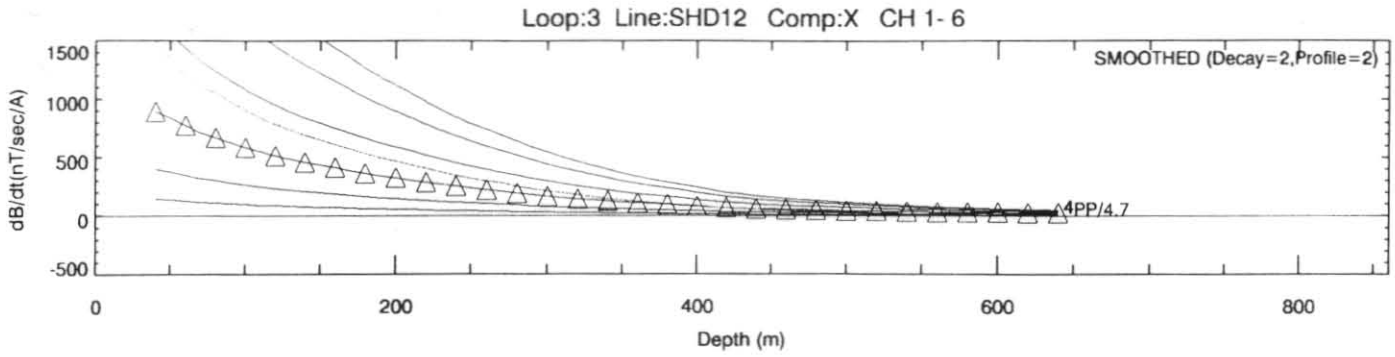


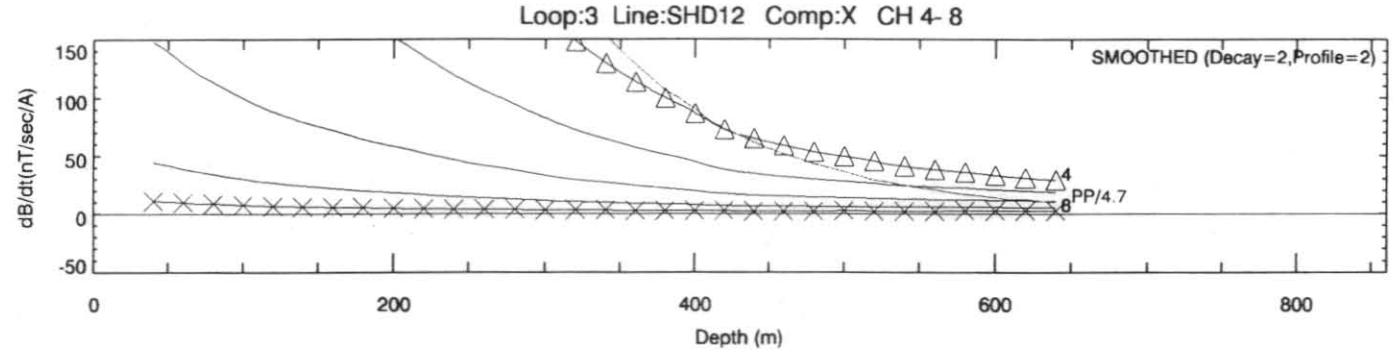


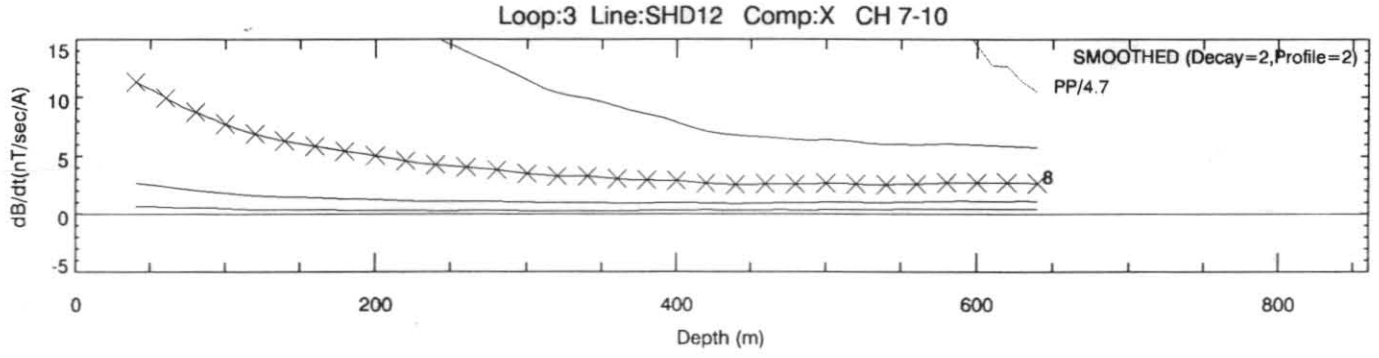
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1; ~~31~~ 17	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

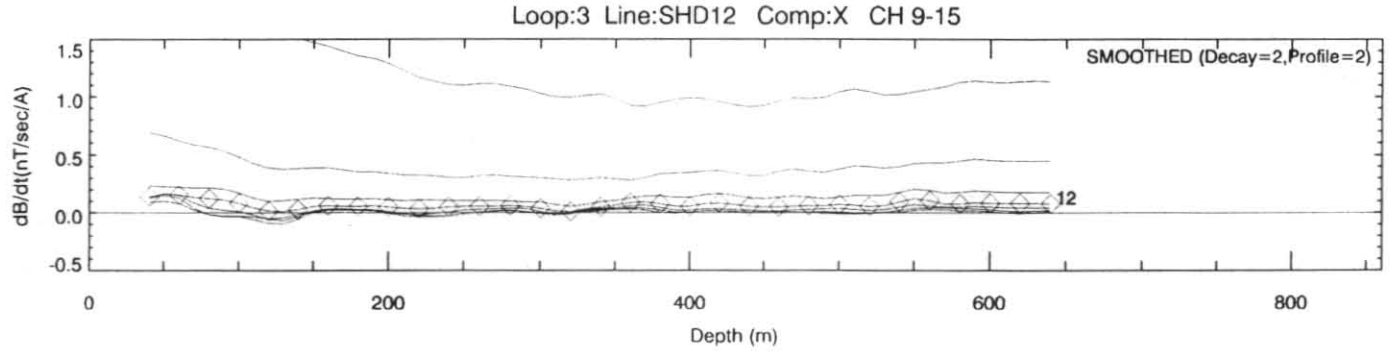
5 cm

675470





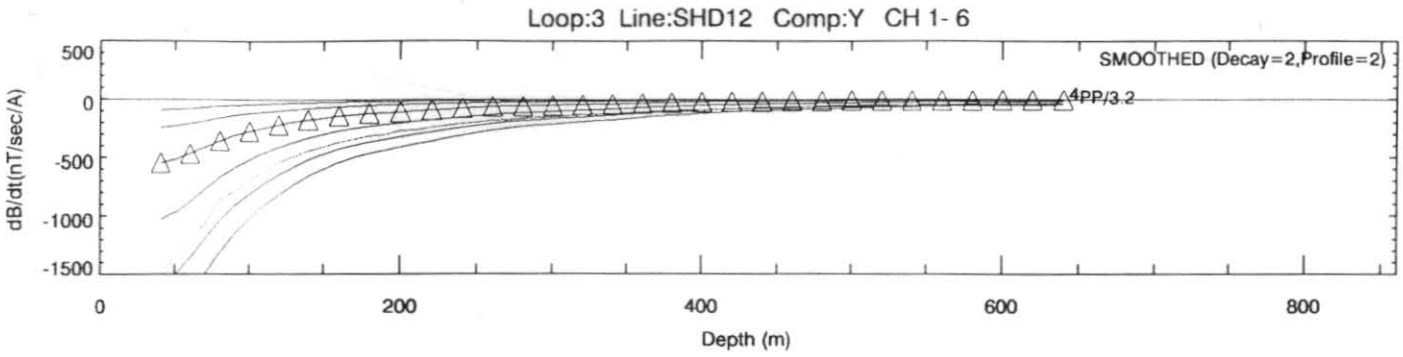


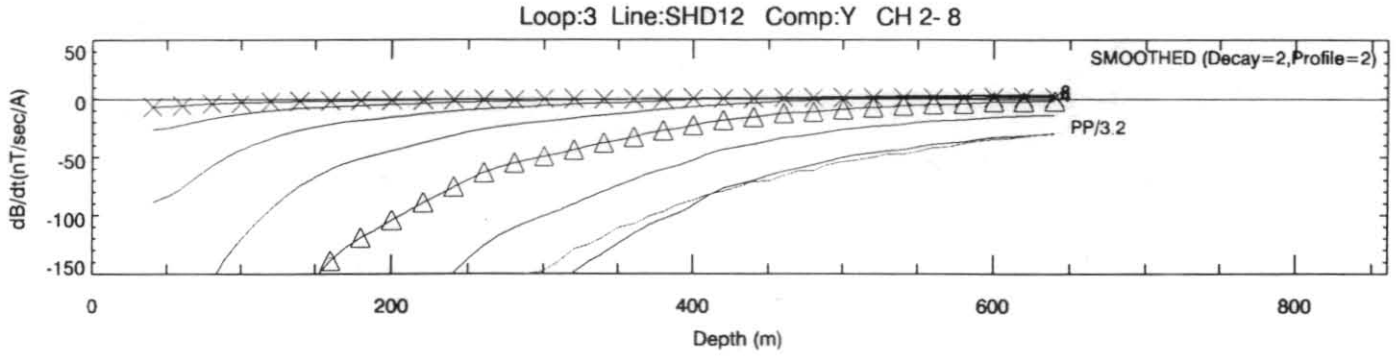


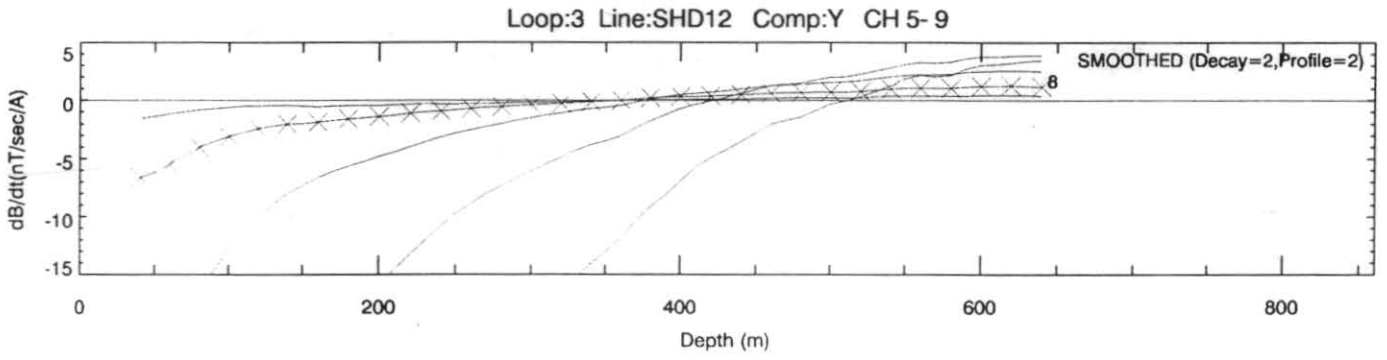
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1-~~31~~ 17	
FLAGSTAFF GEOCONSULTANTS Drawn 27-Apr-2000	

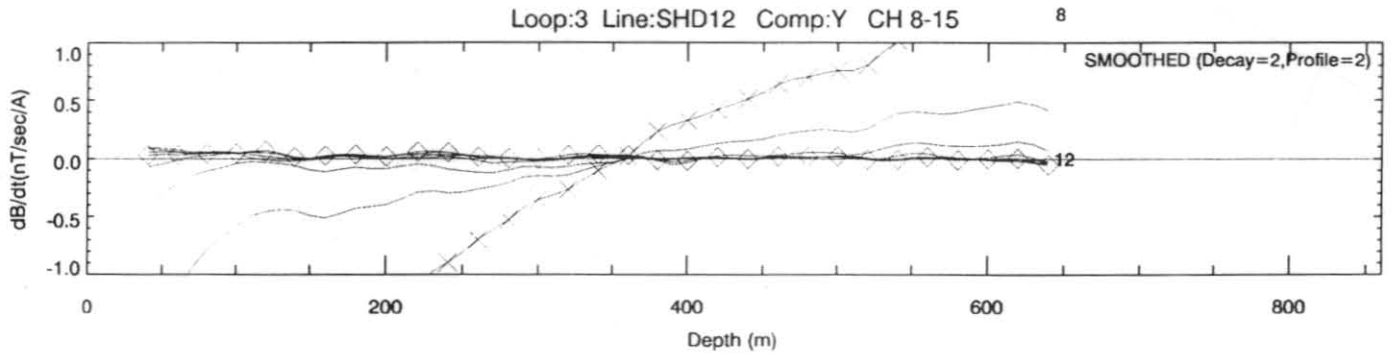
5 cm

675471





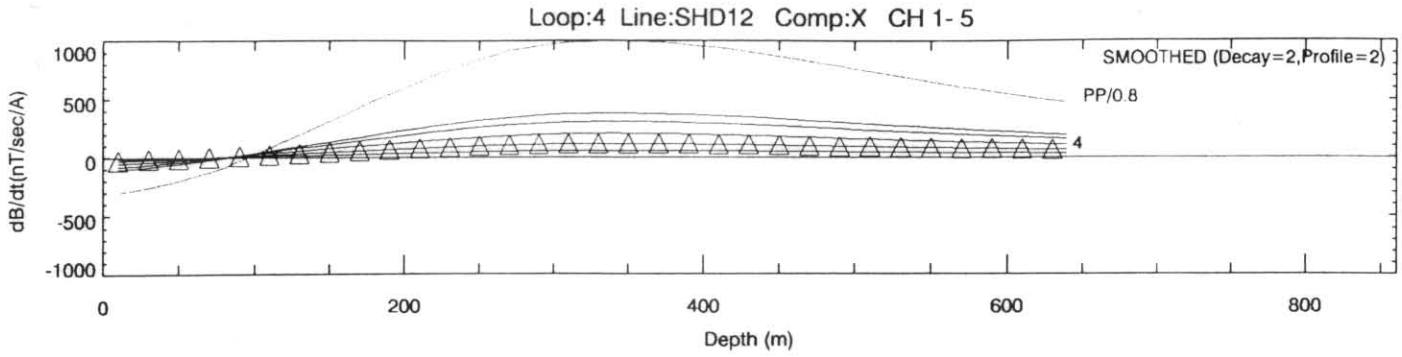


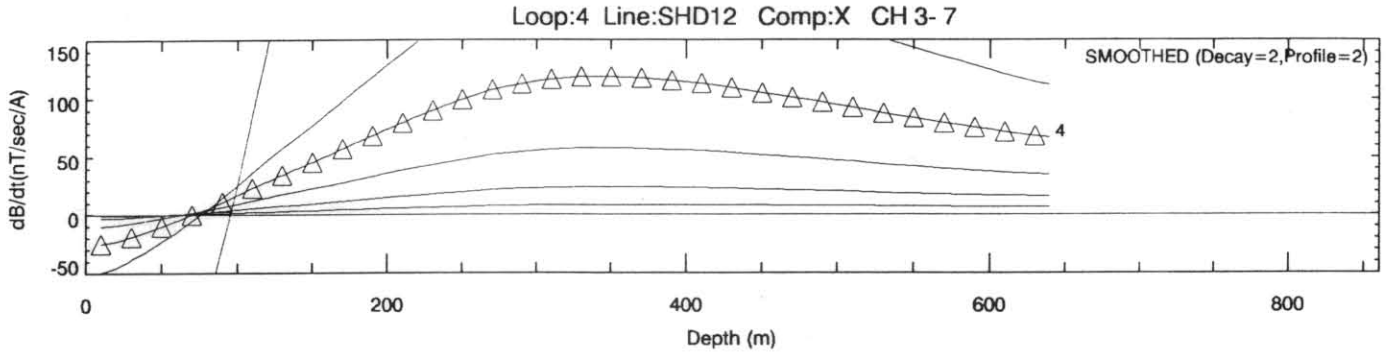


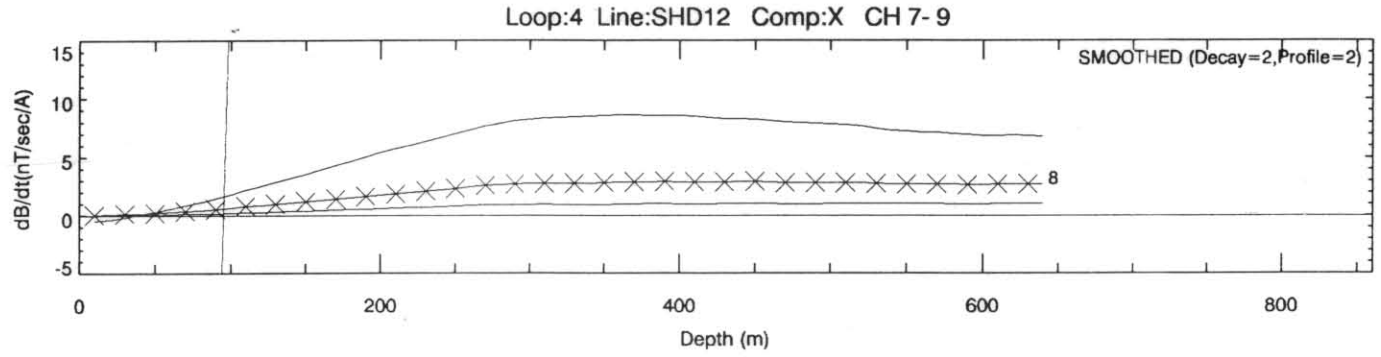
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1-~~31~~ 27	
FLAGSTAFF GEOCONSULTANTS Drawn 27-Apr-2000	

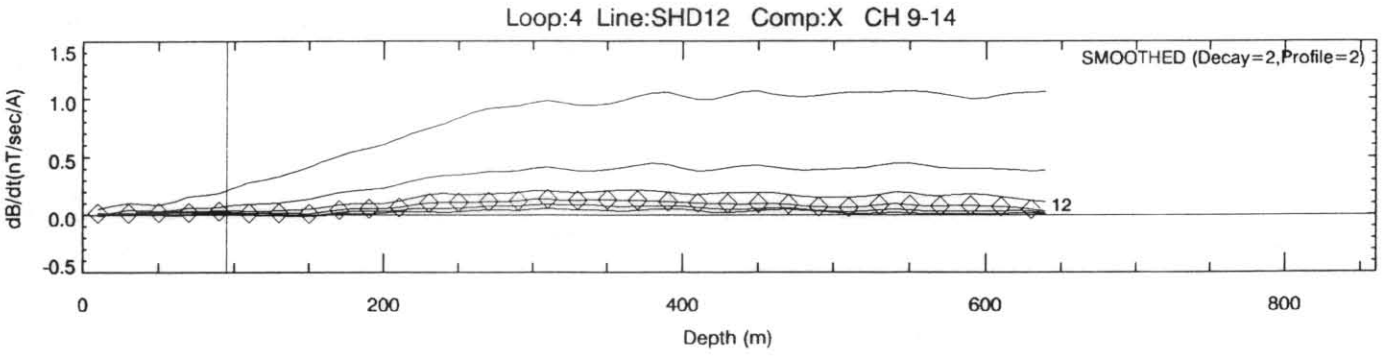
5 cm

675472





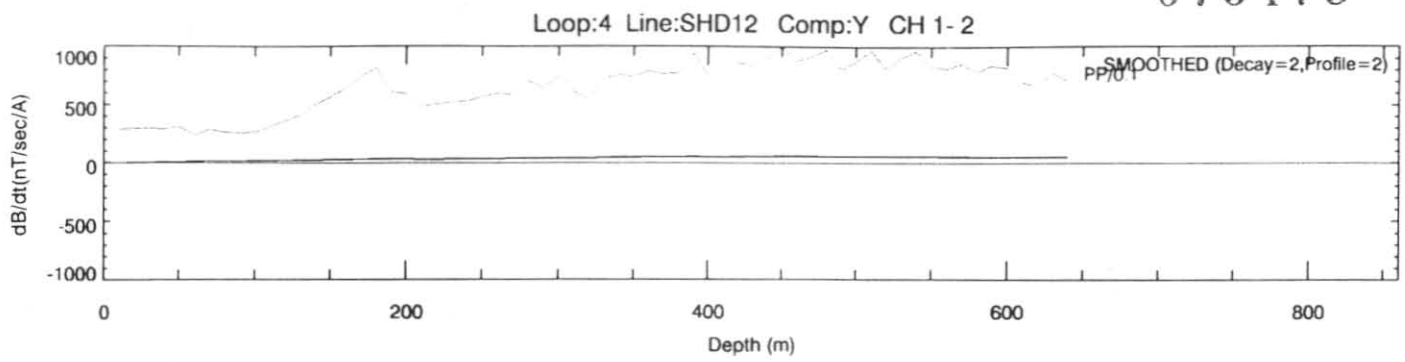


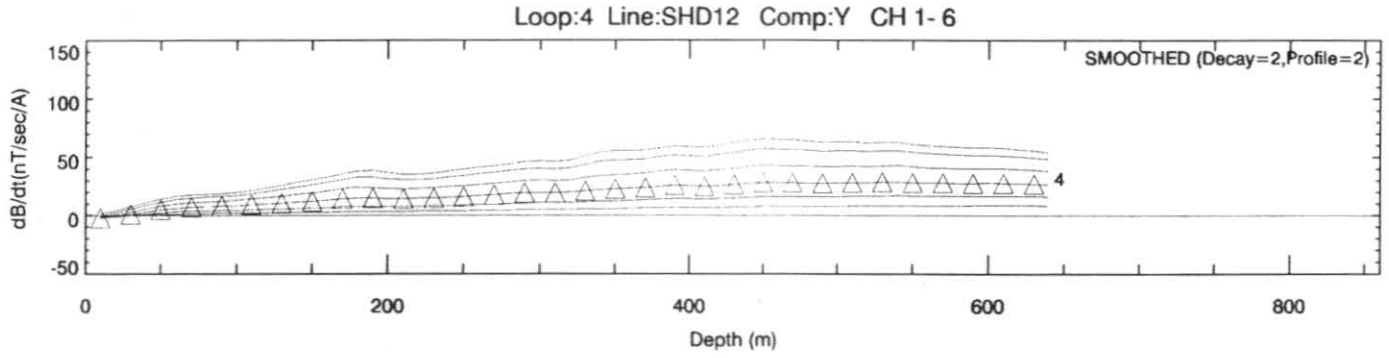


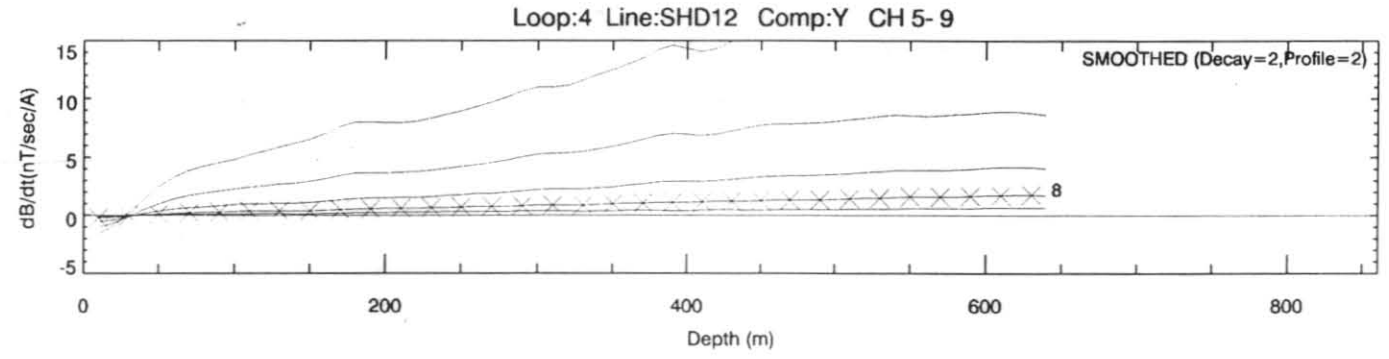
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1-~~31~~ 17	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

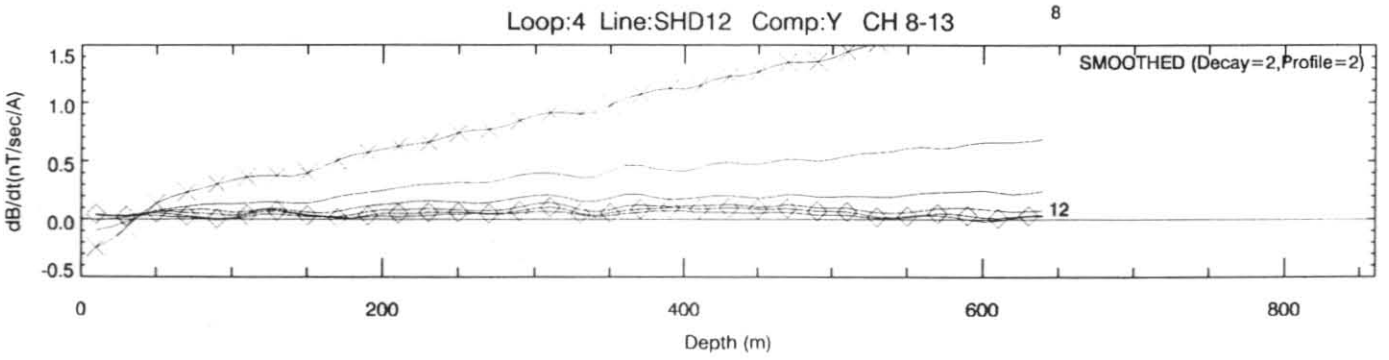
5 cm

675473





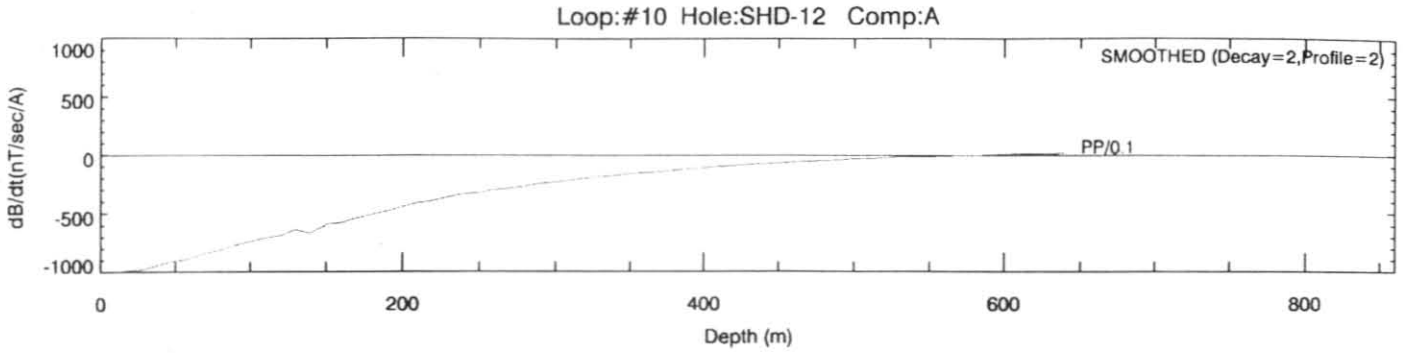


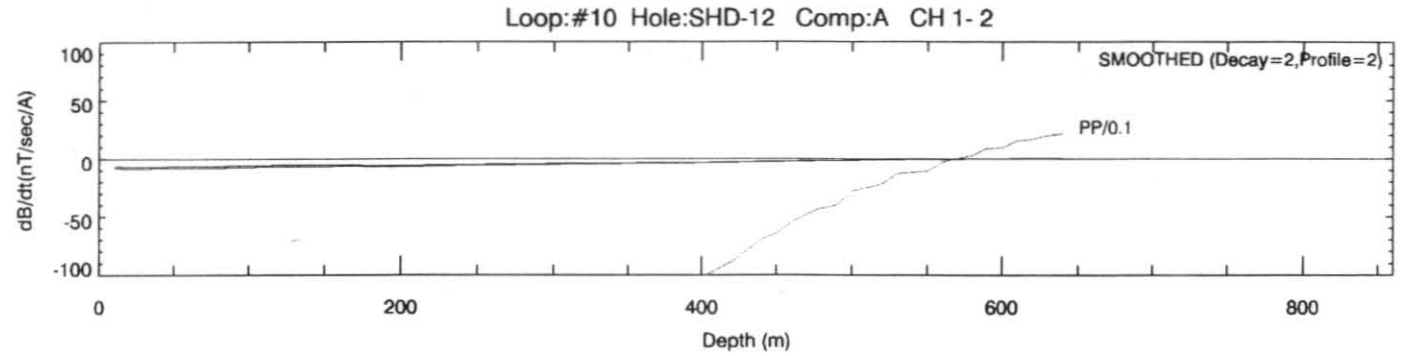


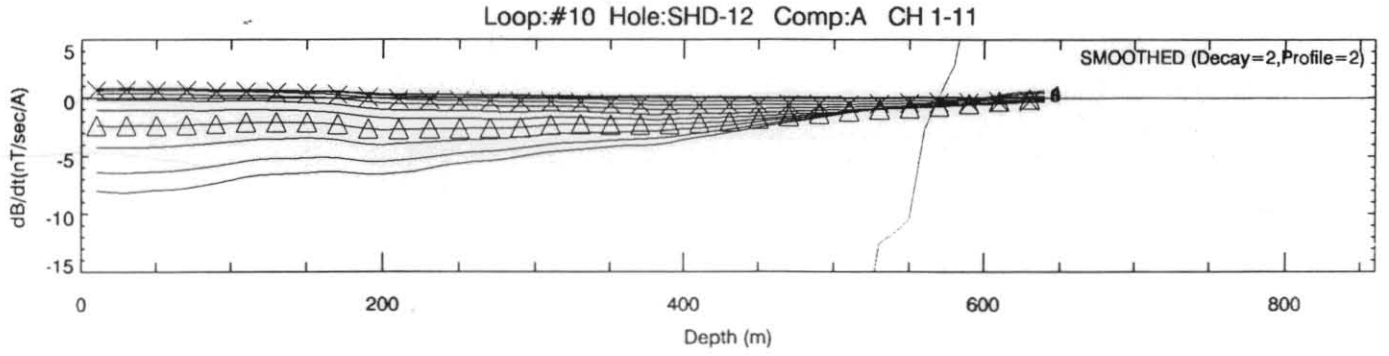
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1-~~31~~ 17	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

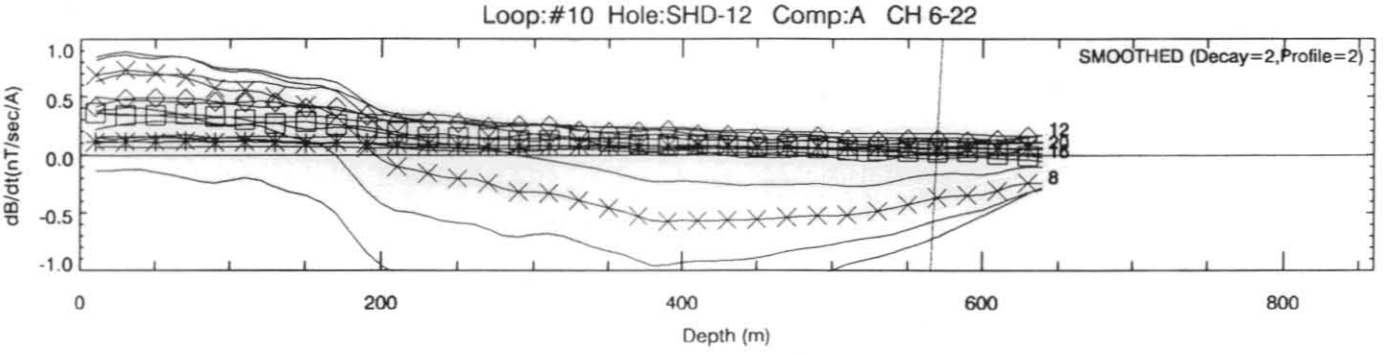
5 cm

675474





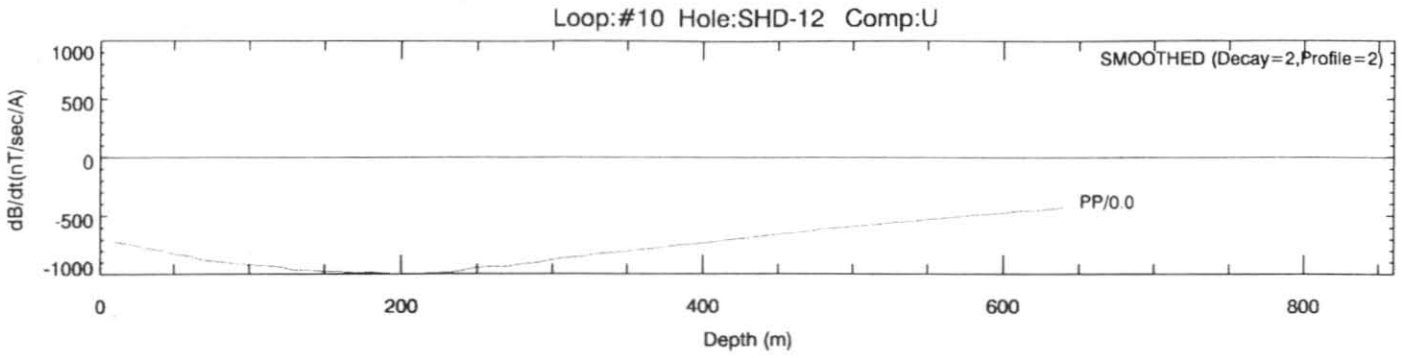


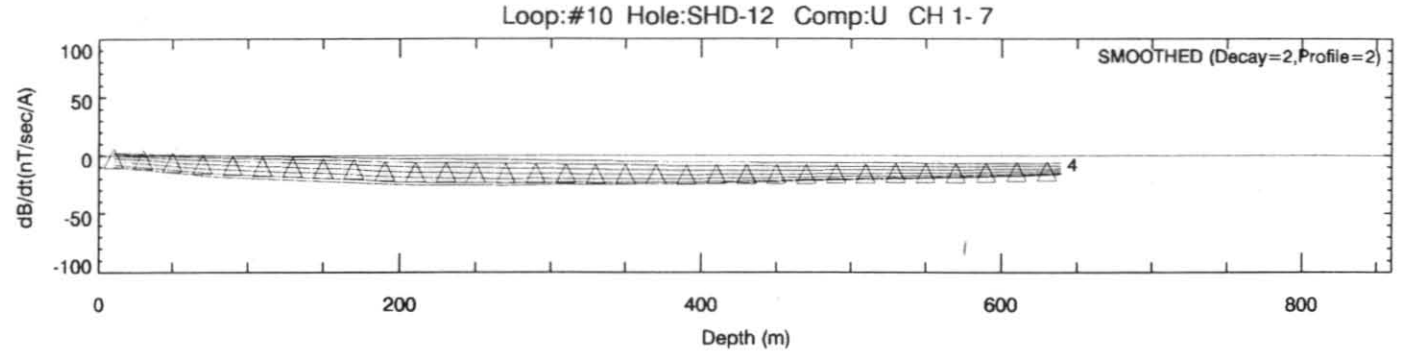


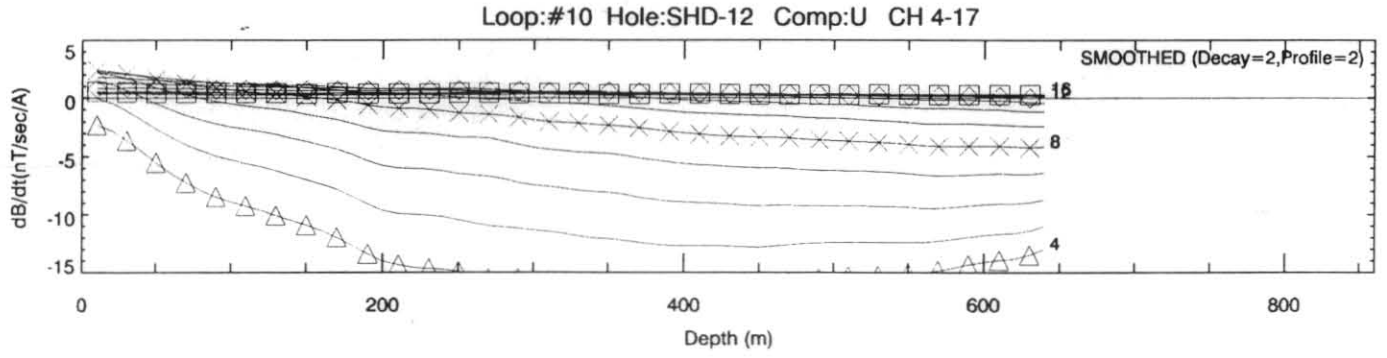
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1 ~~31~~ / 7	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

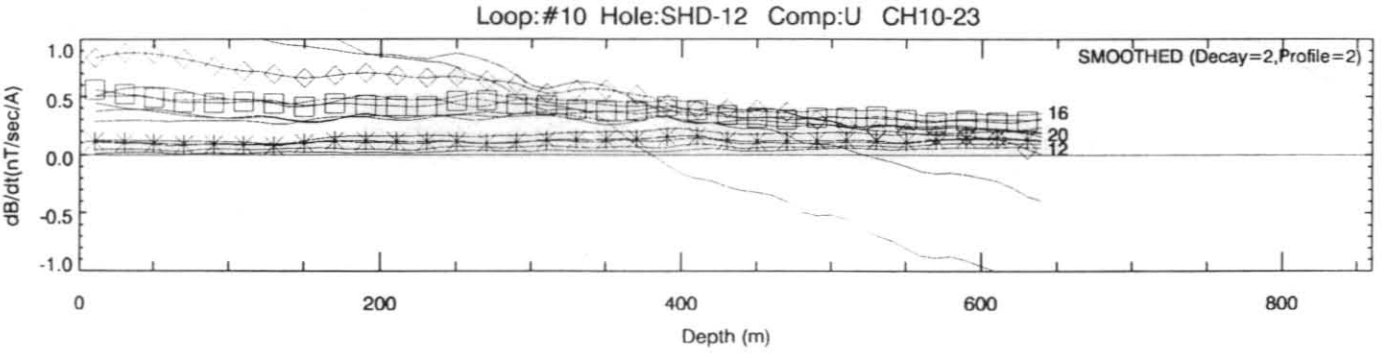
5 cm

675475





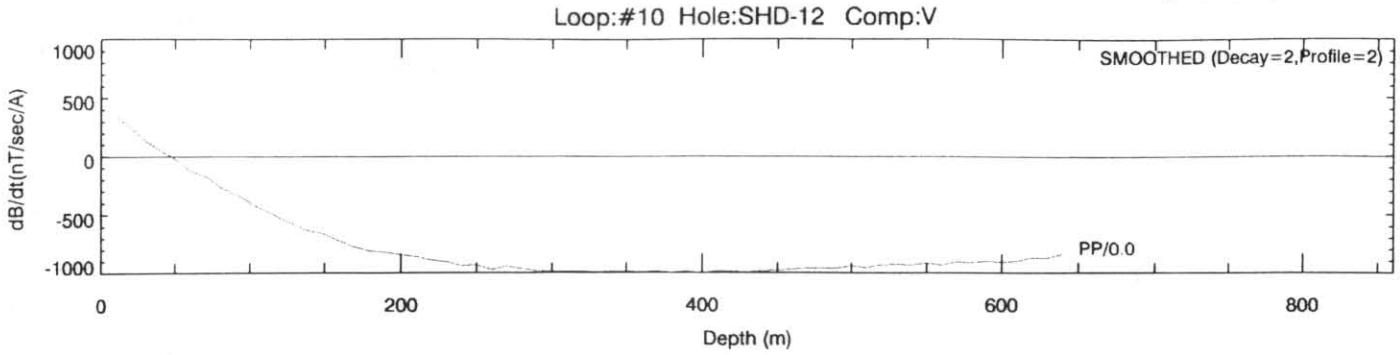


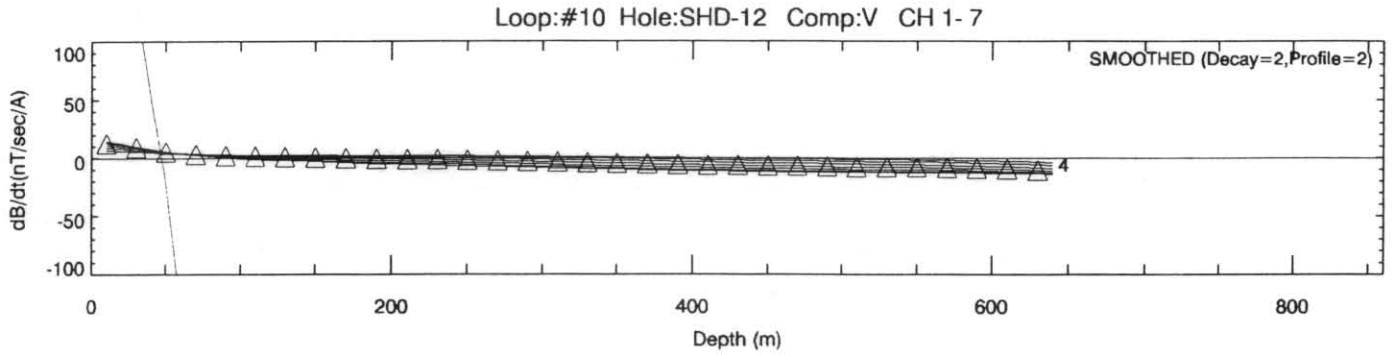


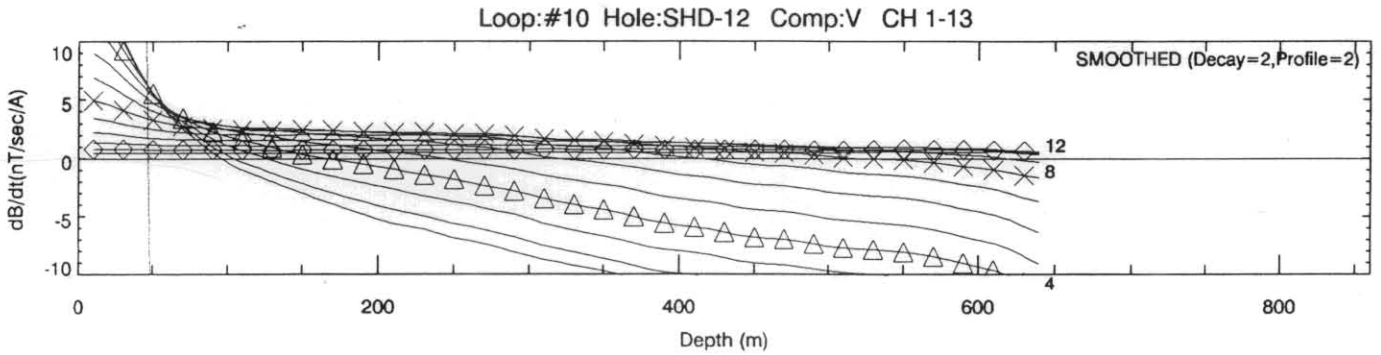
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1:~~31~~ 17	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

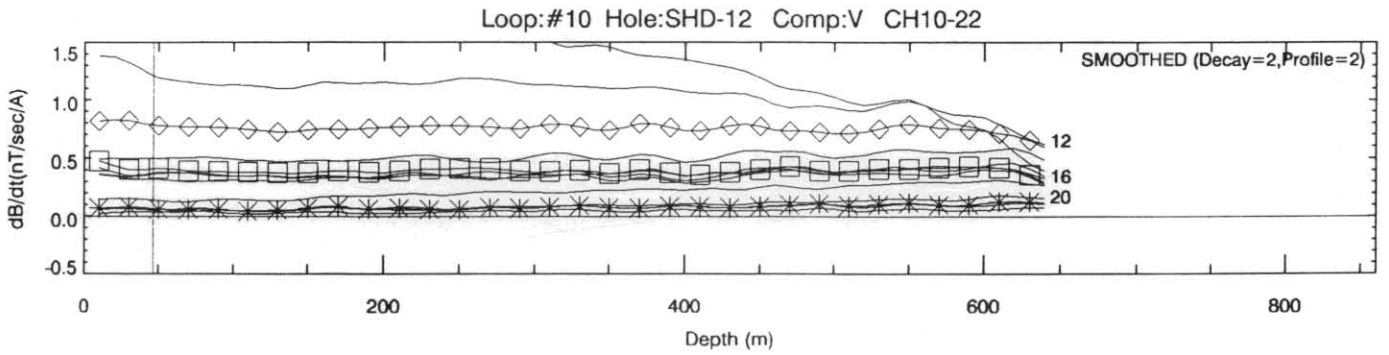
5 cm

675476

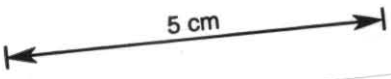




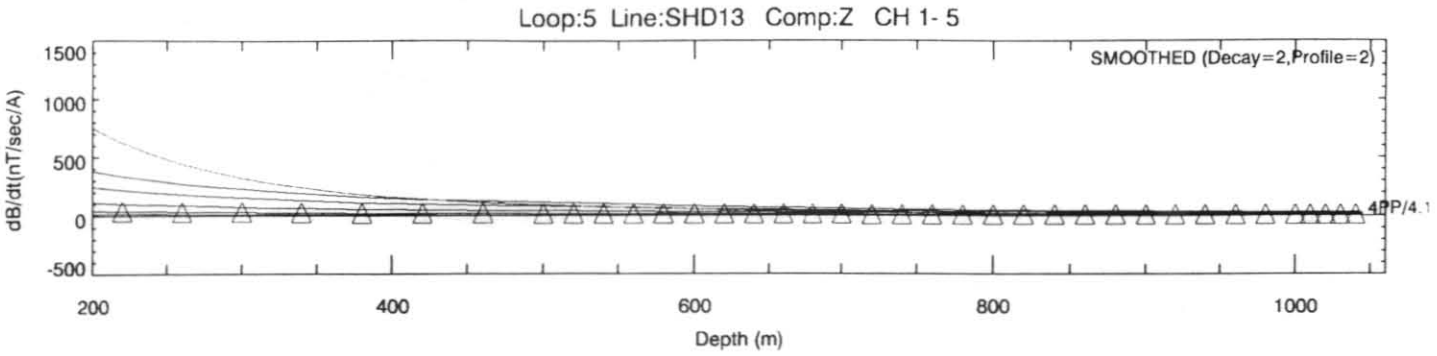


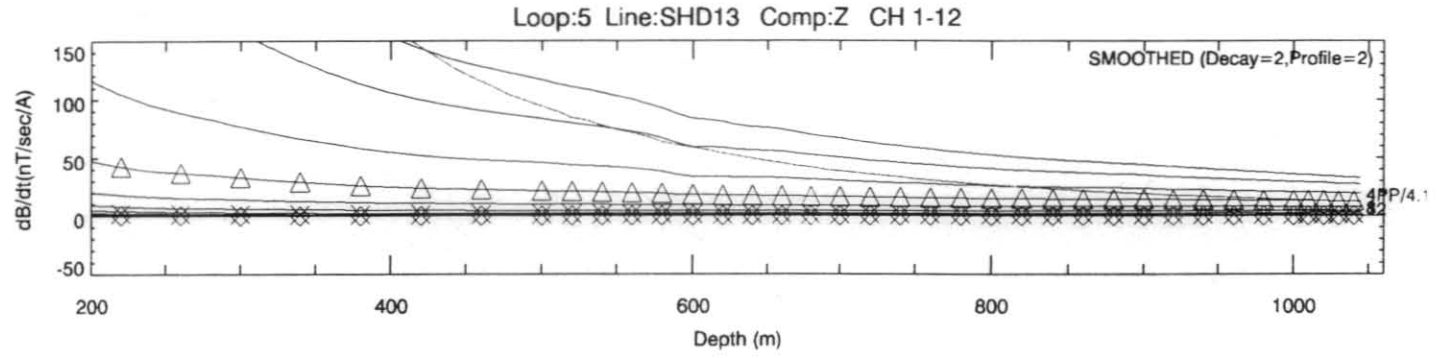


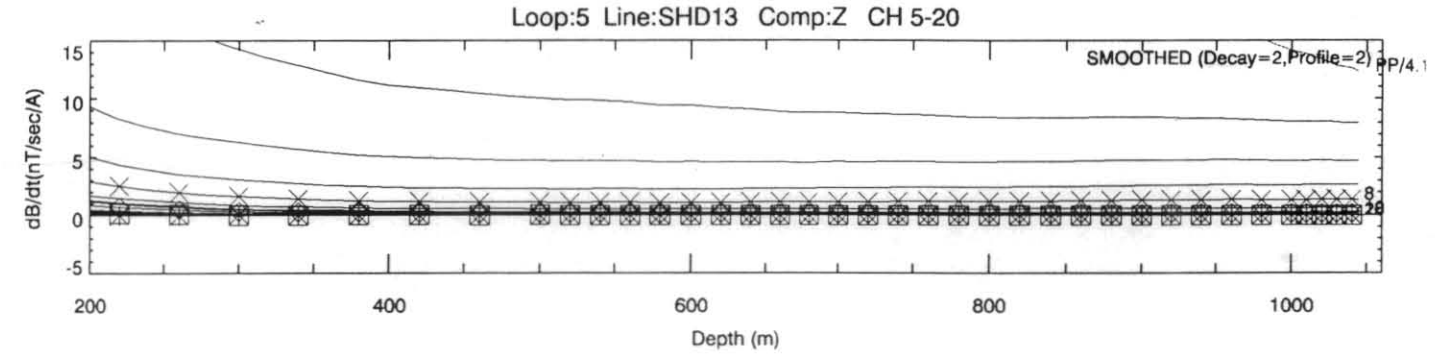
Goldfields Ltd	
South Henty EL8/96. Borehole EM.	
Crone PEM. Tx Frequency ~~12.5~~ 25 Hz	
Window Set Ch1-~~31~~ 17	
FLAGSTAFF GEOCONSULTANTS	
Drawn 27-Apr-2000	

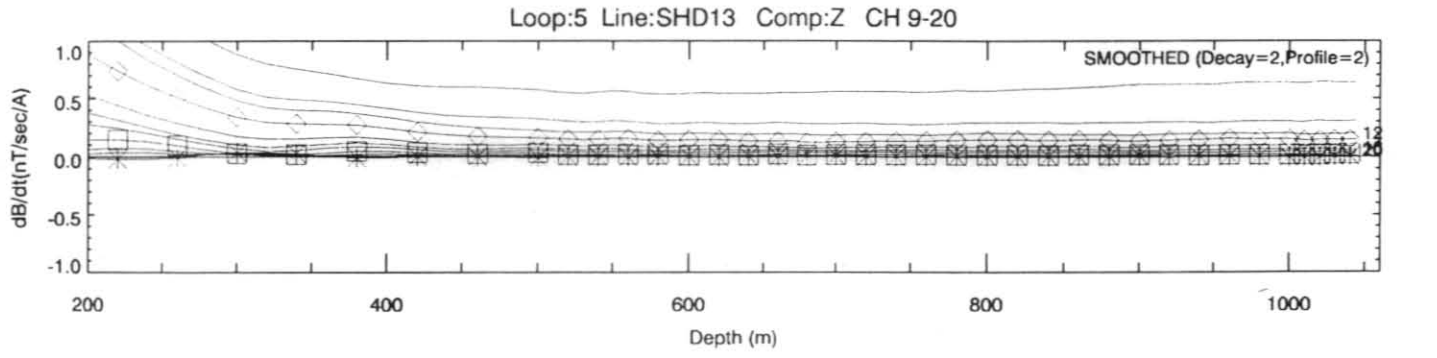


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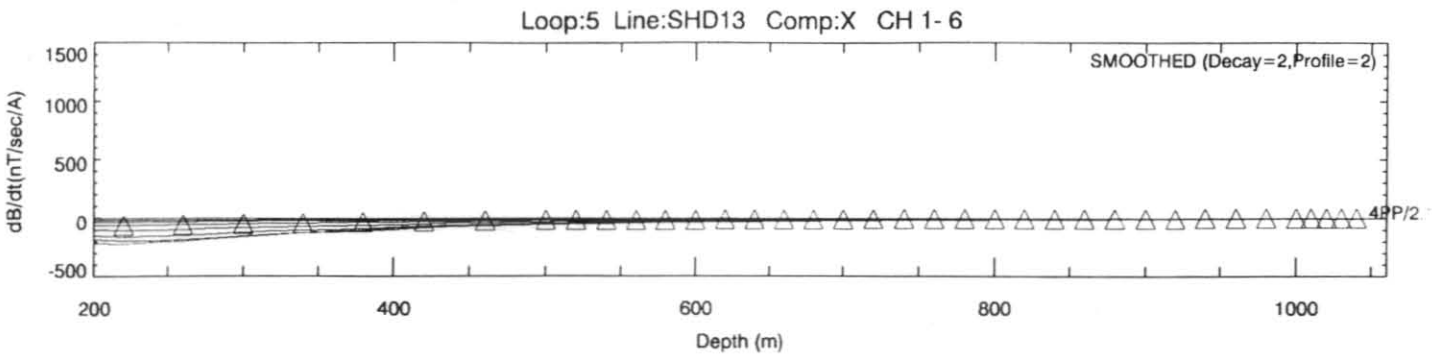


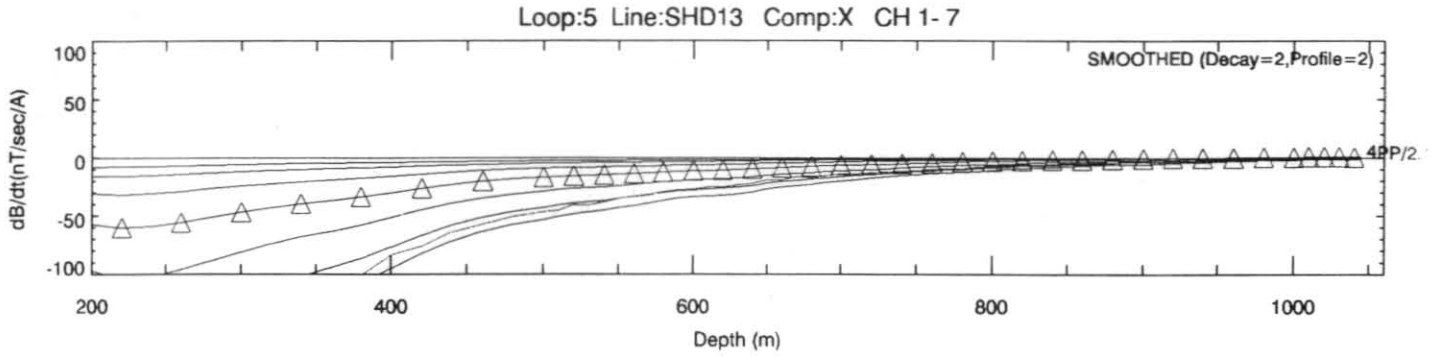


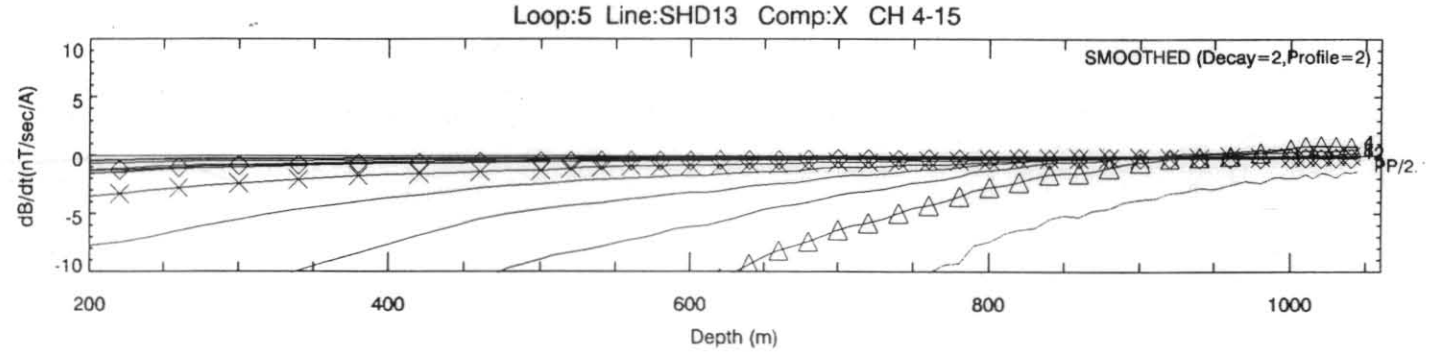
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31 2 0	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

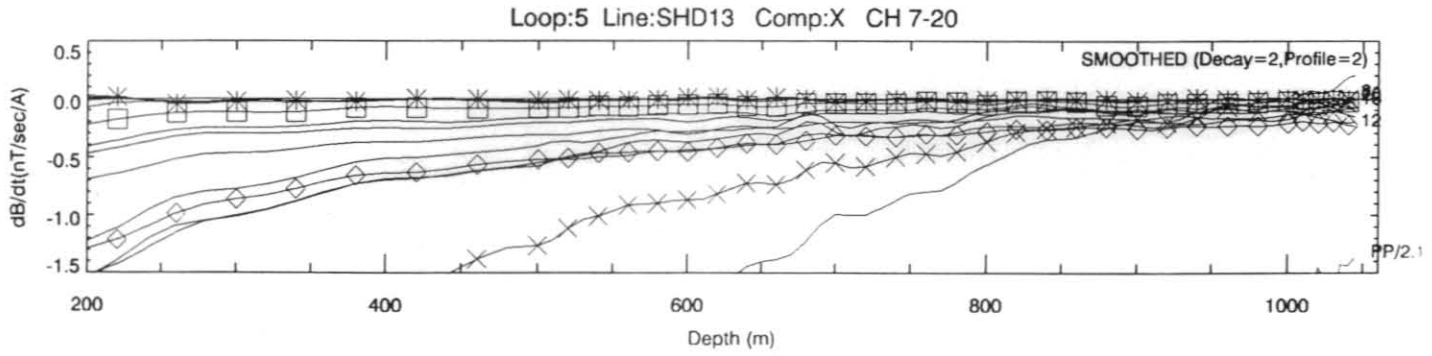
5 cm

675478





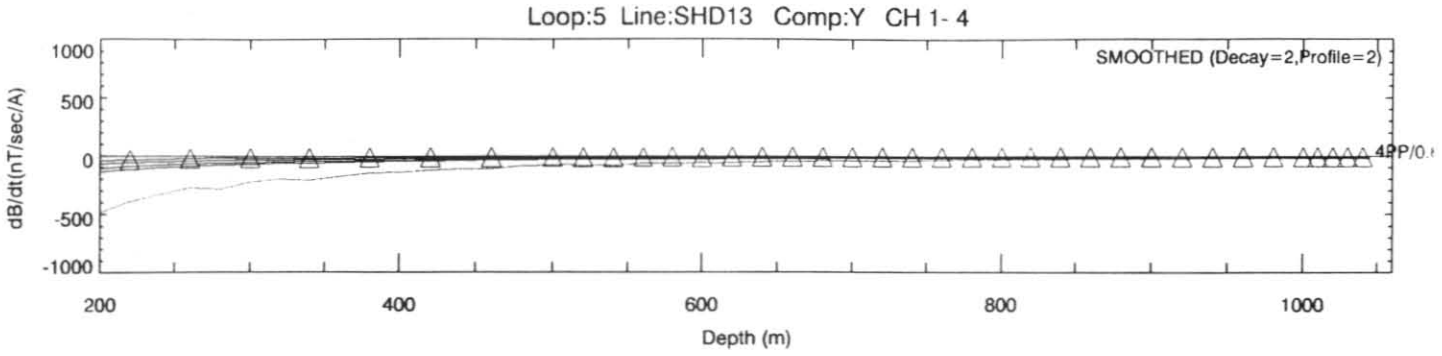


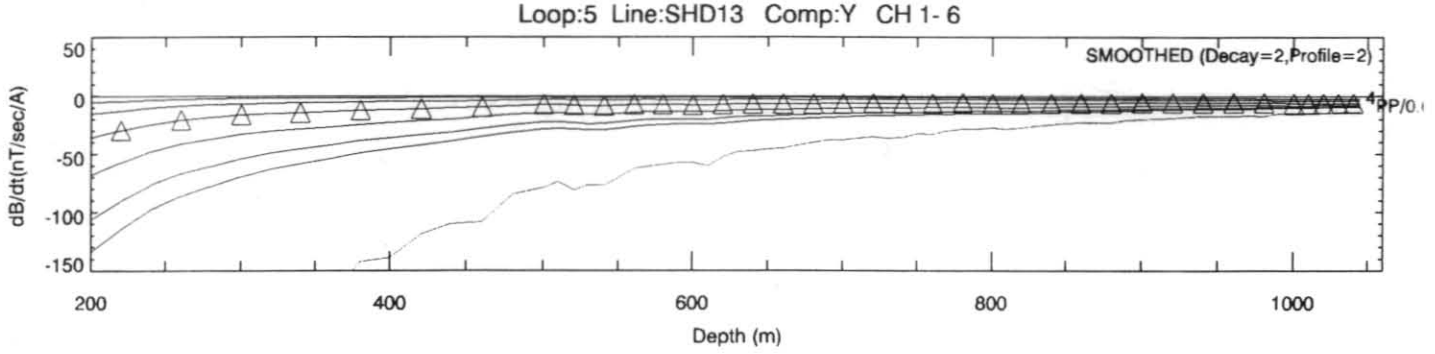


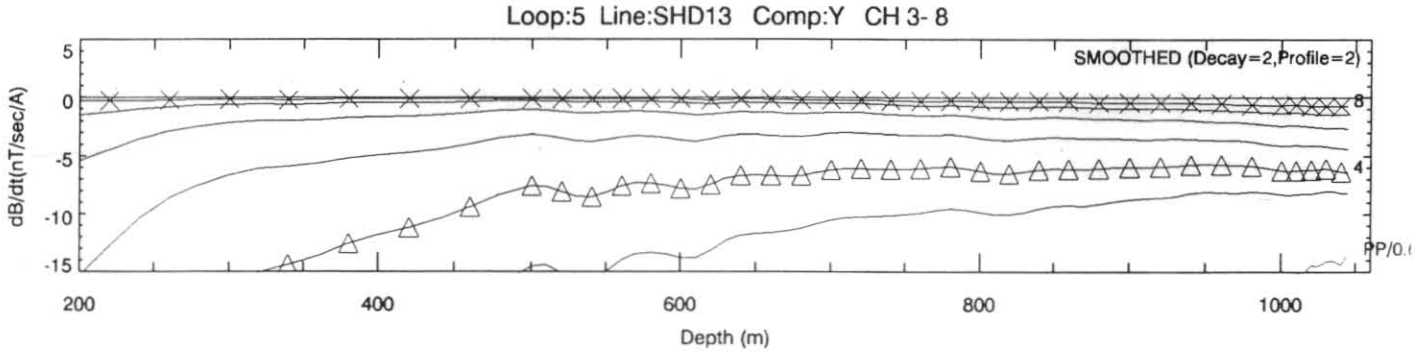
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31 2 0	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

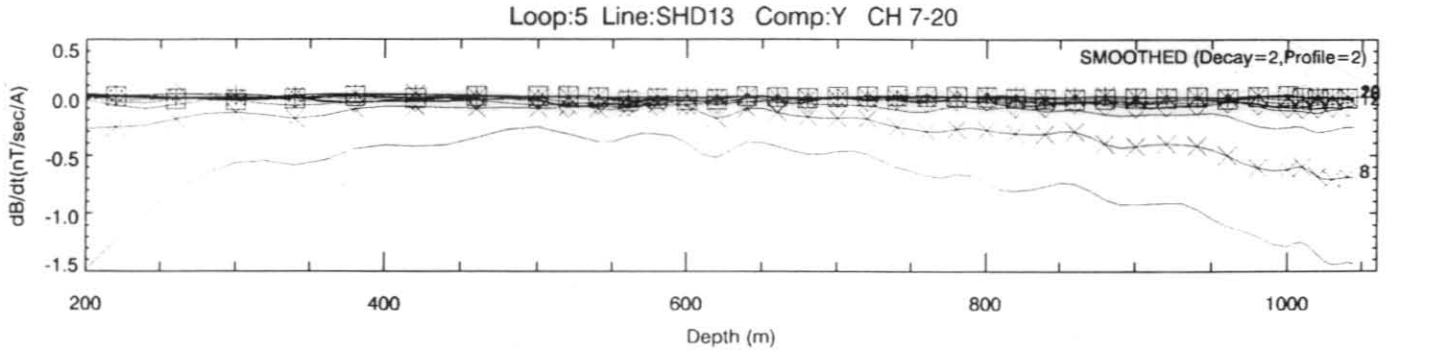
5 cm

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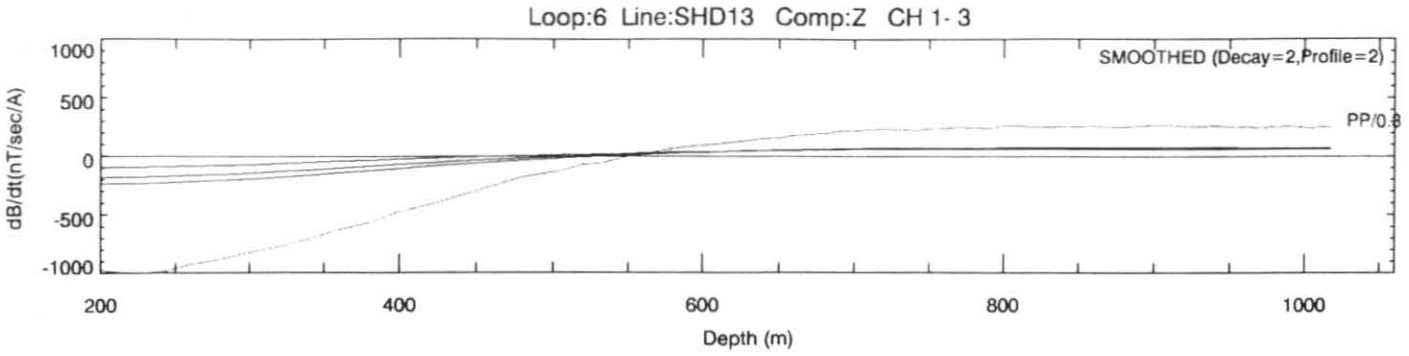


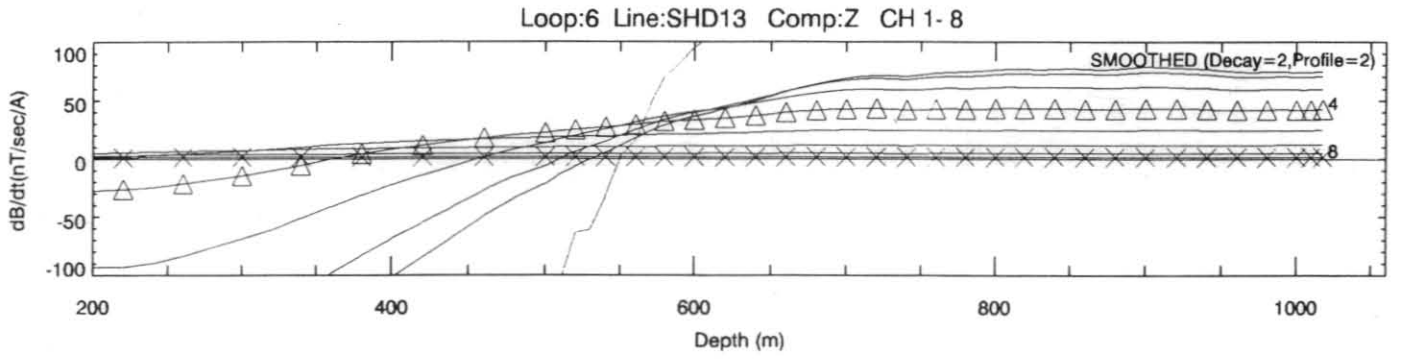


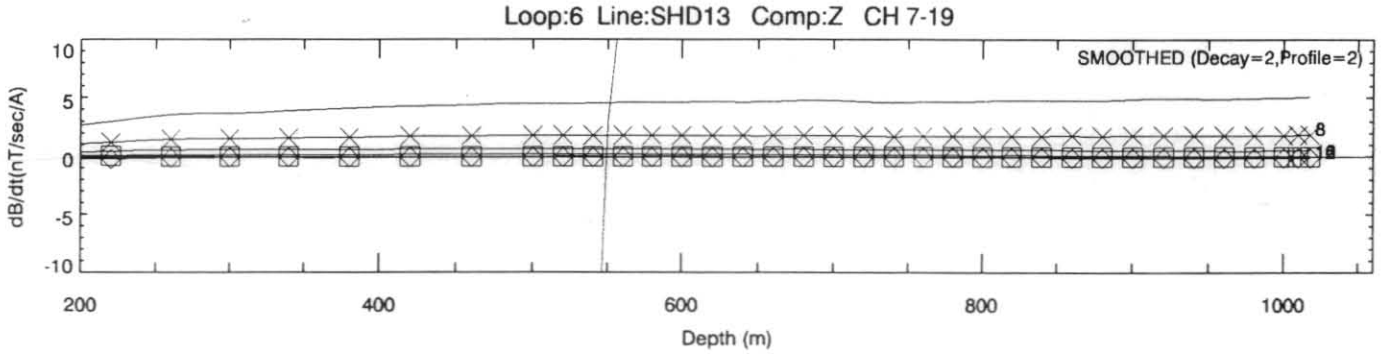
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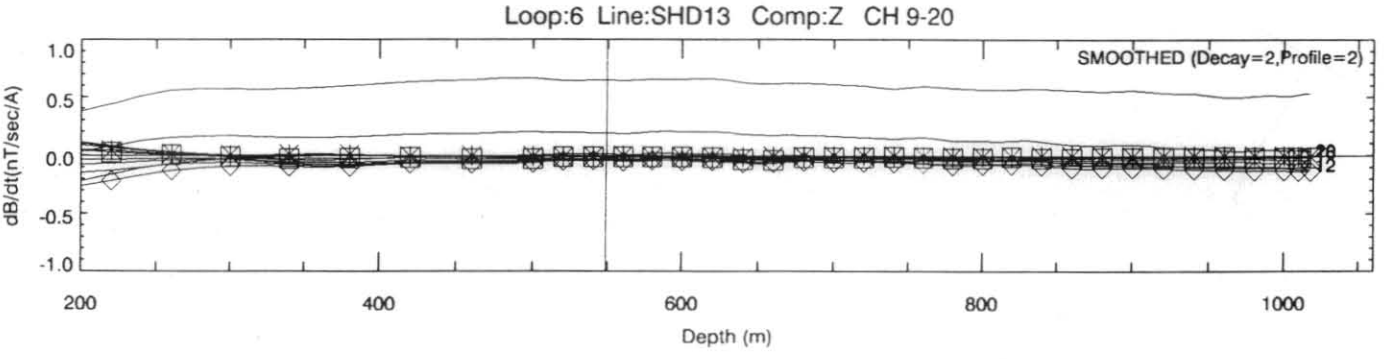
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31 2 0	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

675480





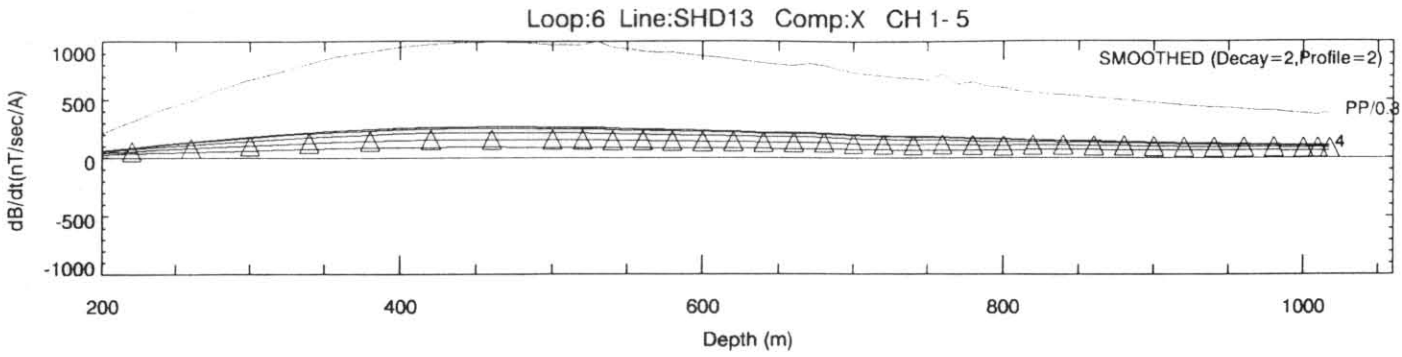


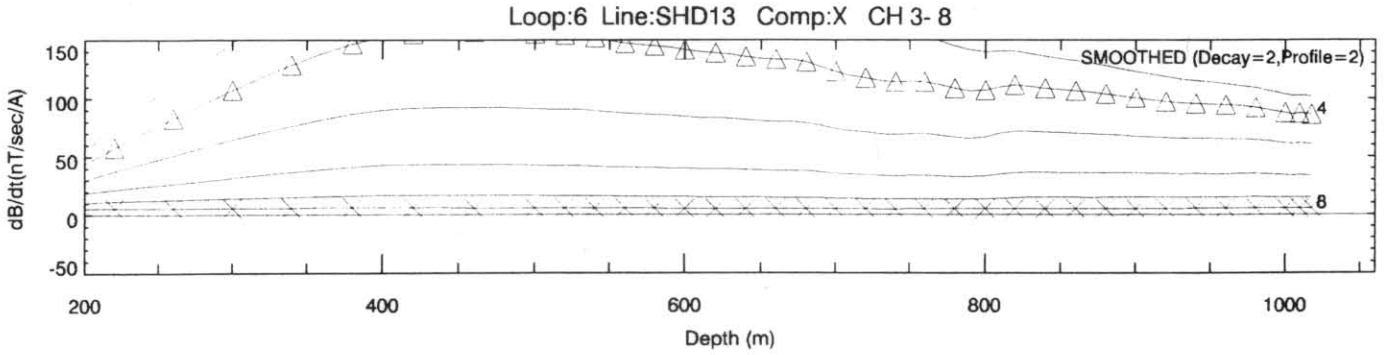


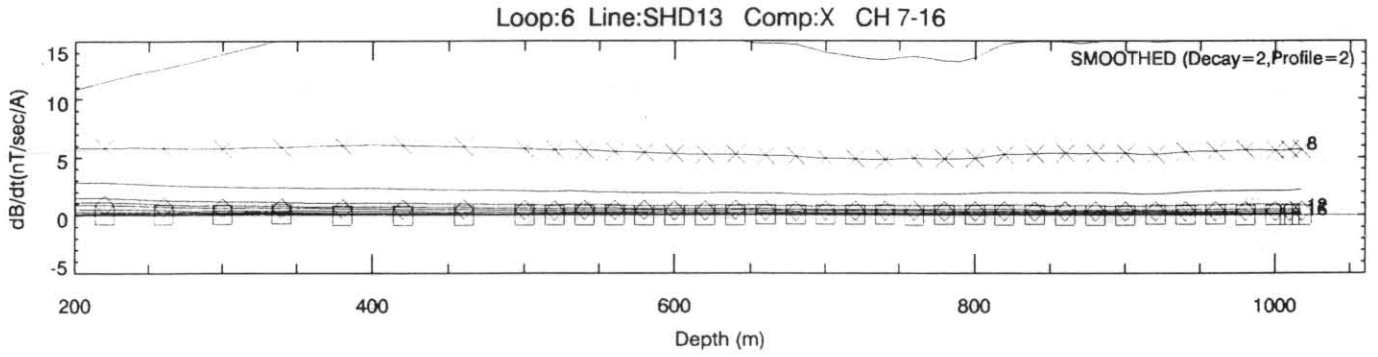
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-~~31 20 31~~ 20	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

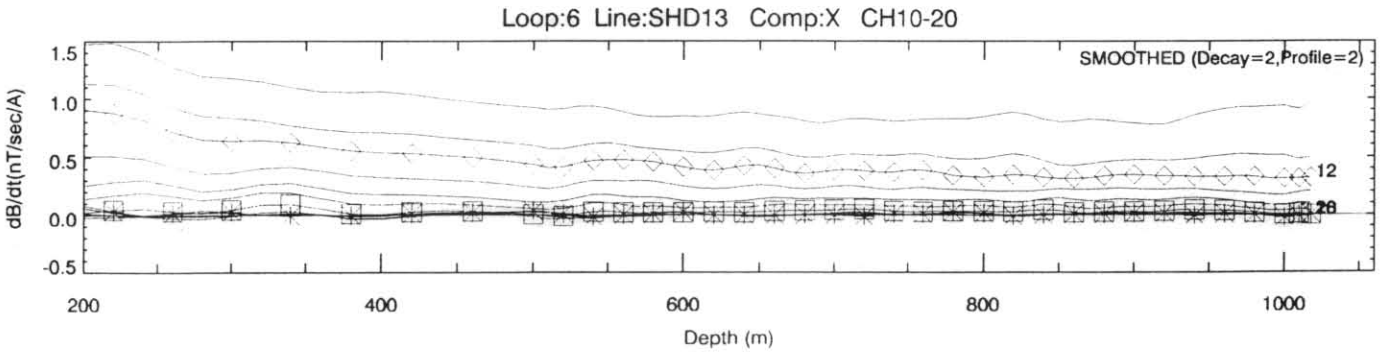
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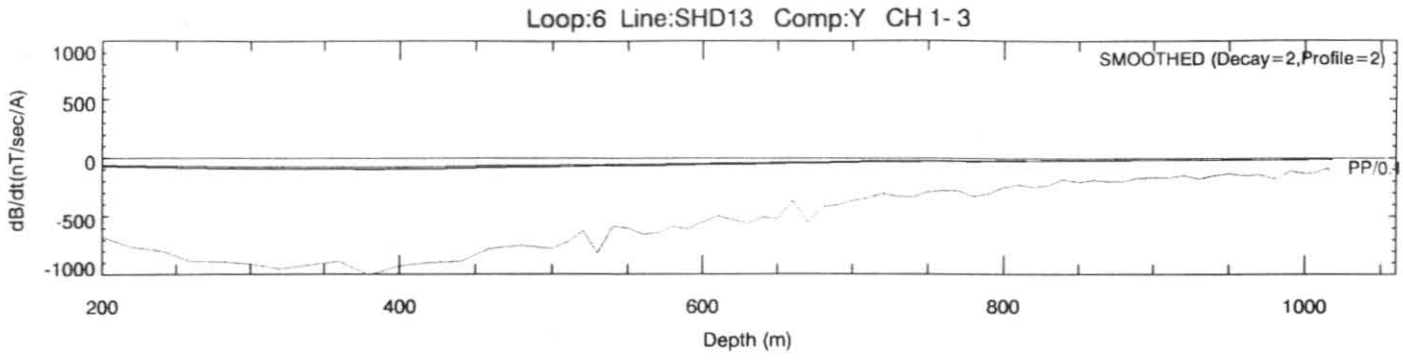


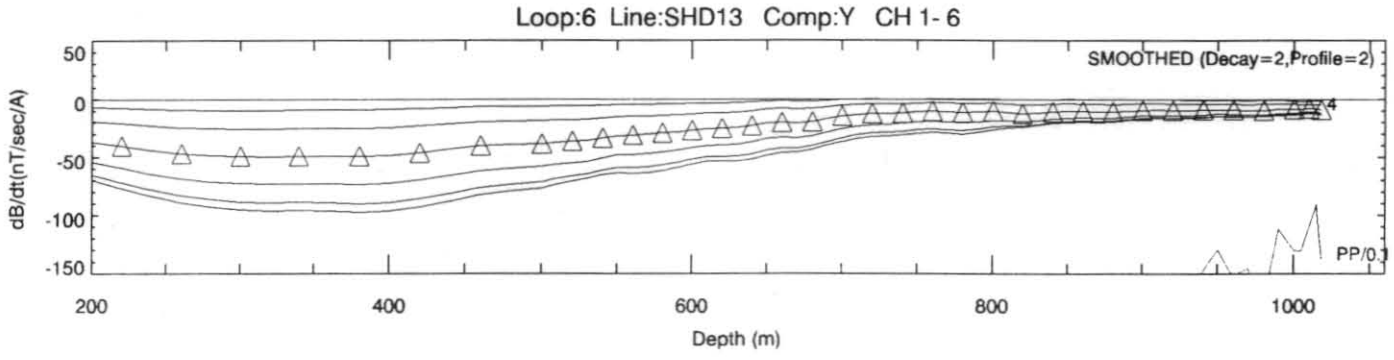


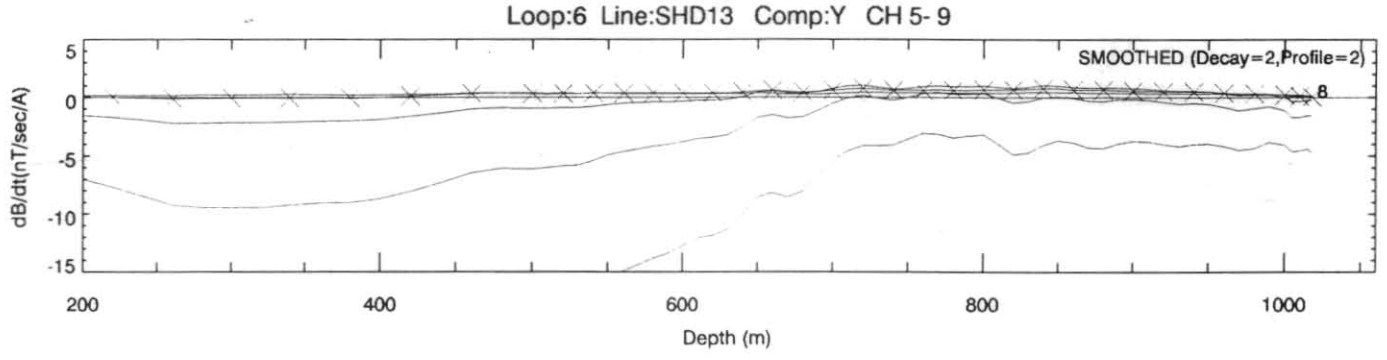
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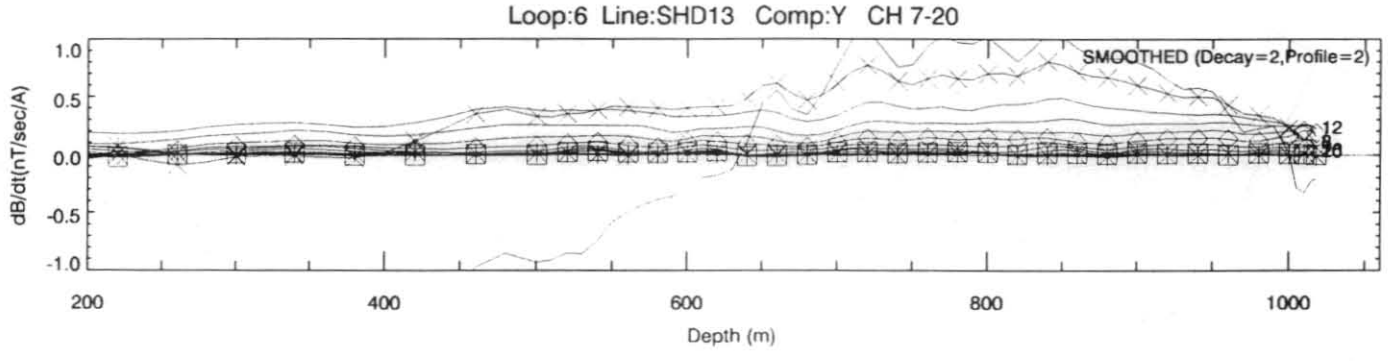
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-~~31~~ 20	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

675482





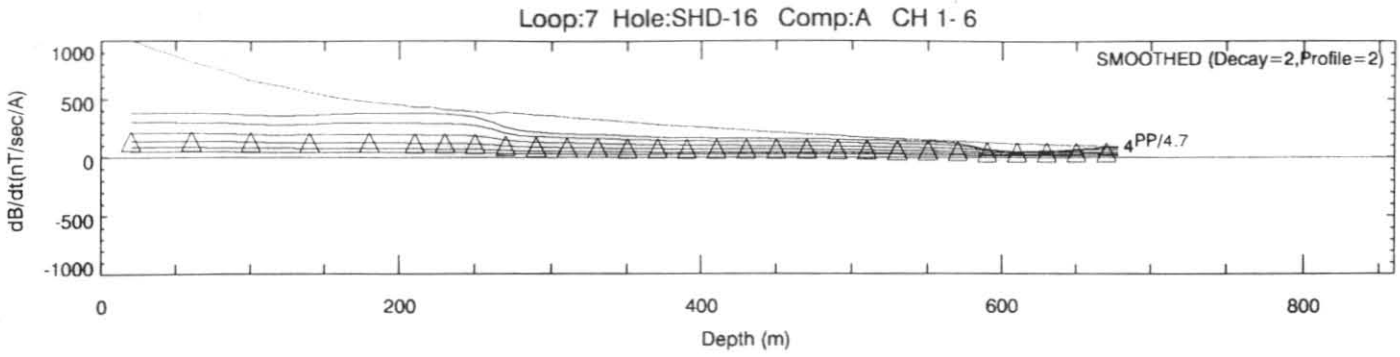


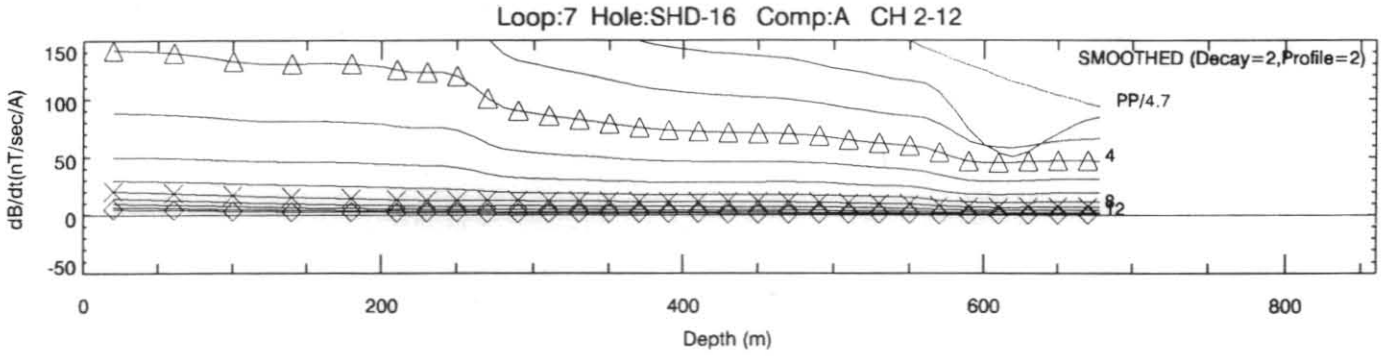


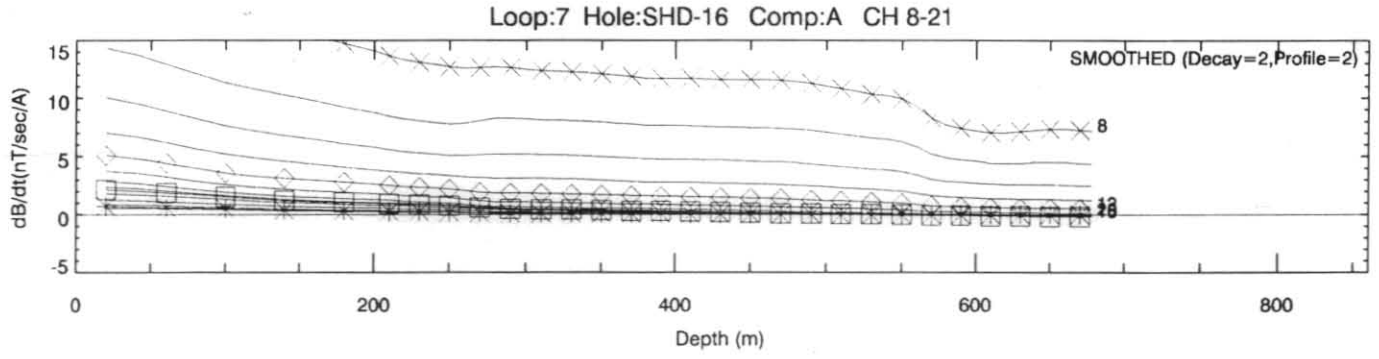
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-~~31~~ 20	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

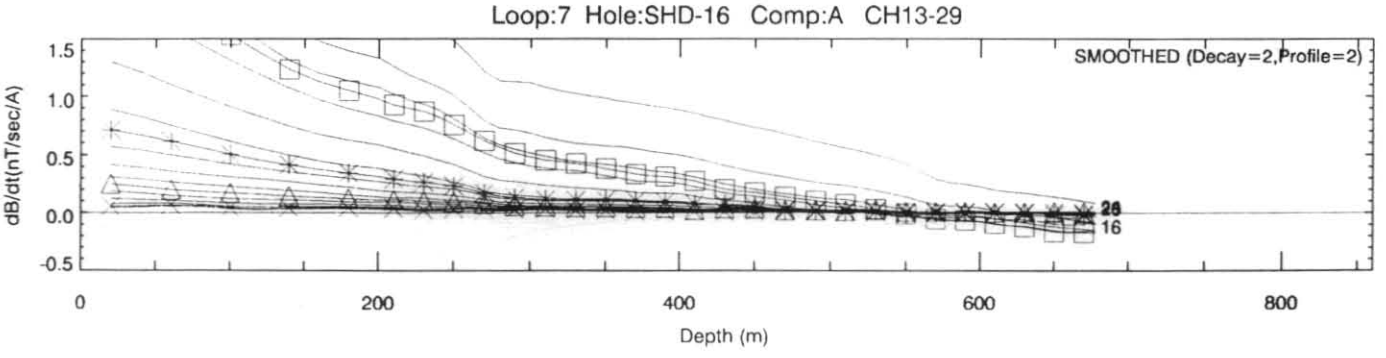
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675483





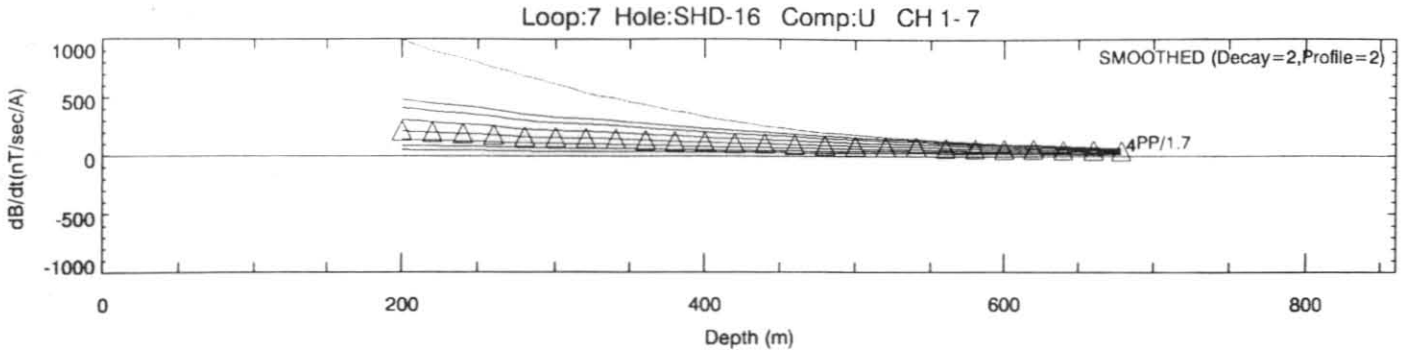


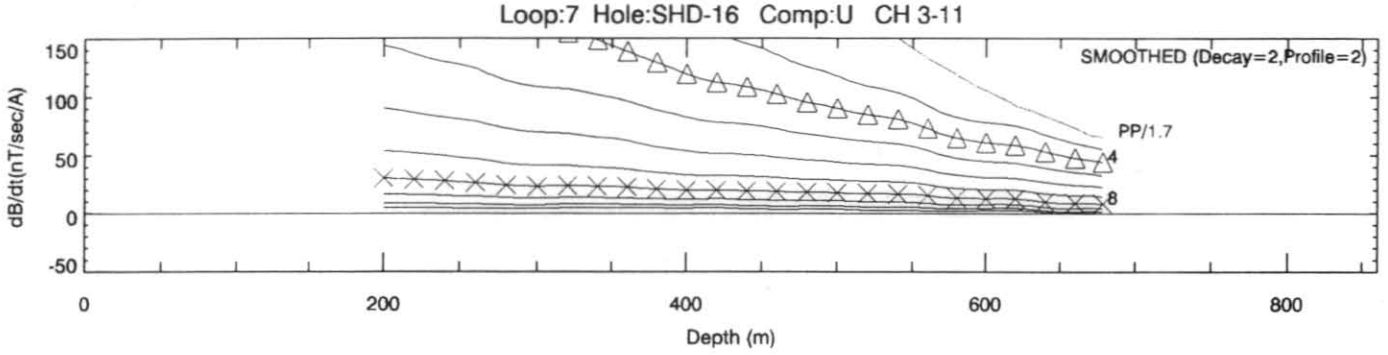


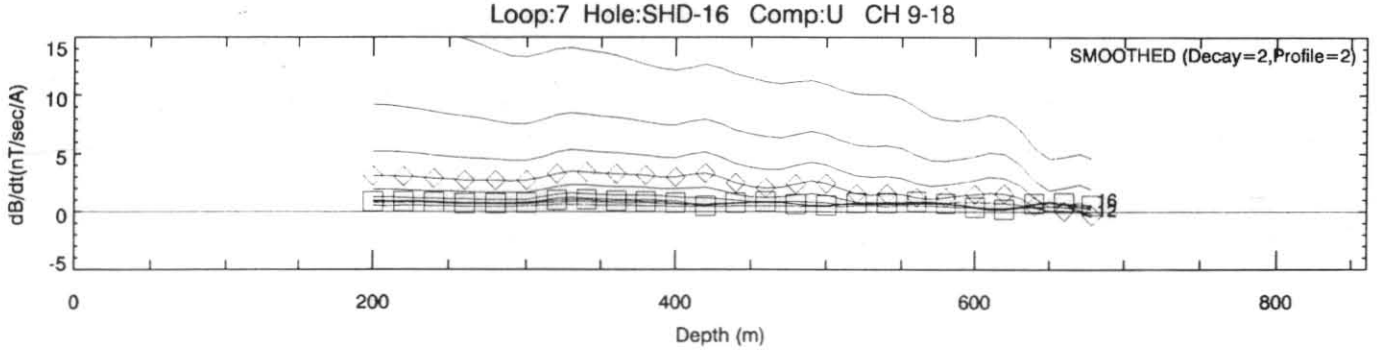
Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 2/ 2/2000	

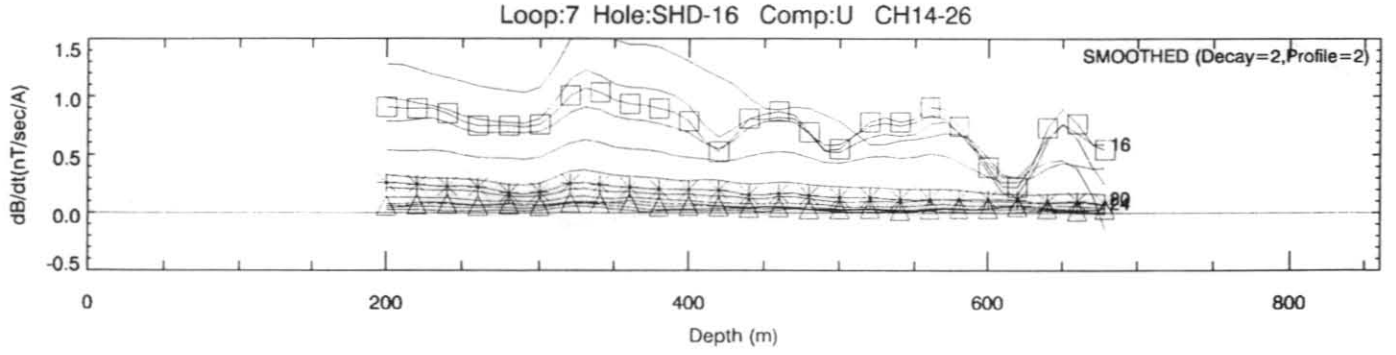
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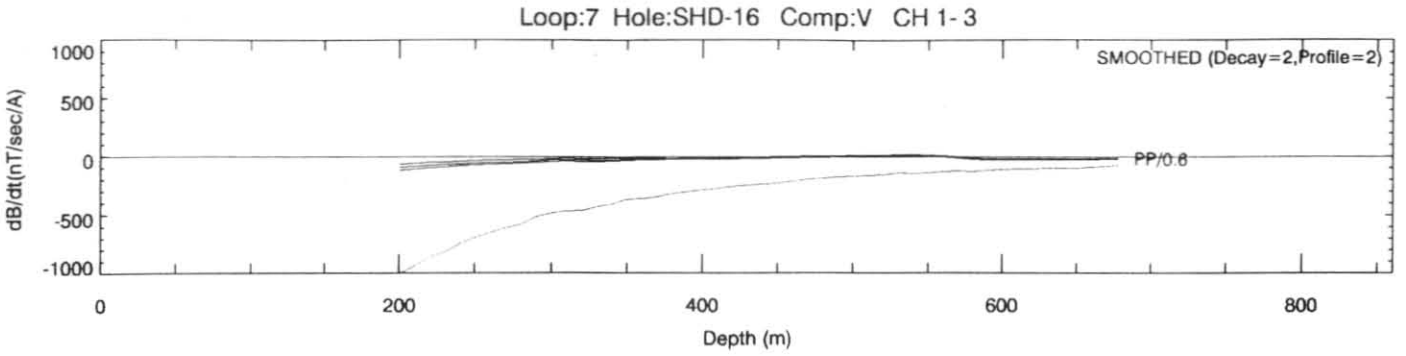


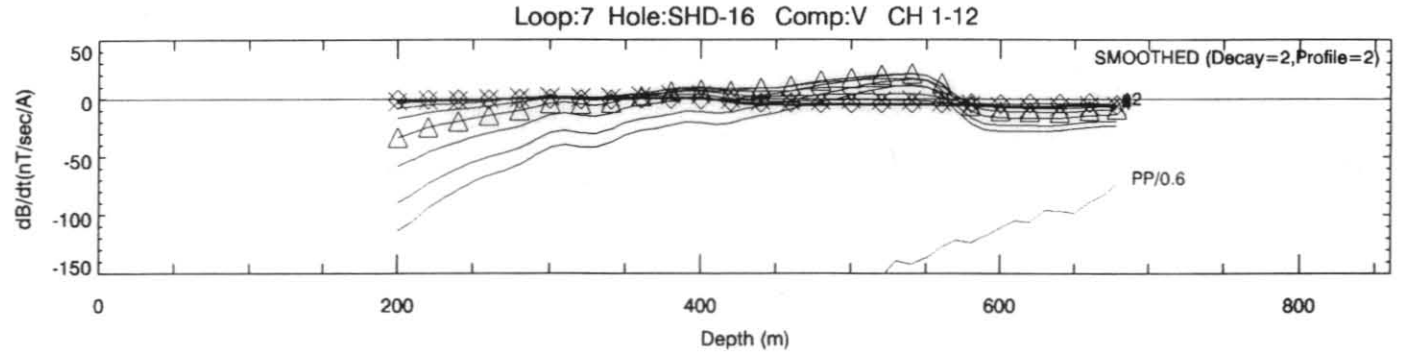


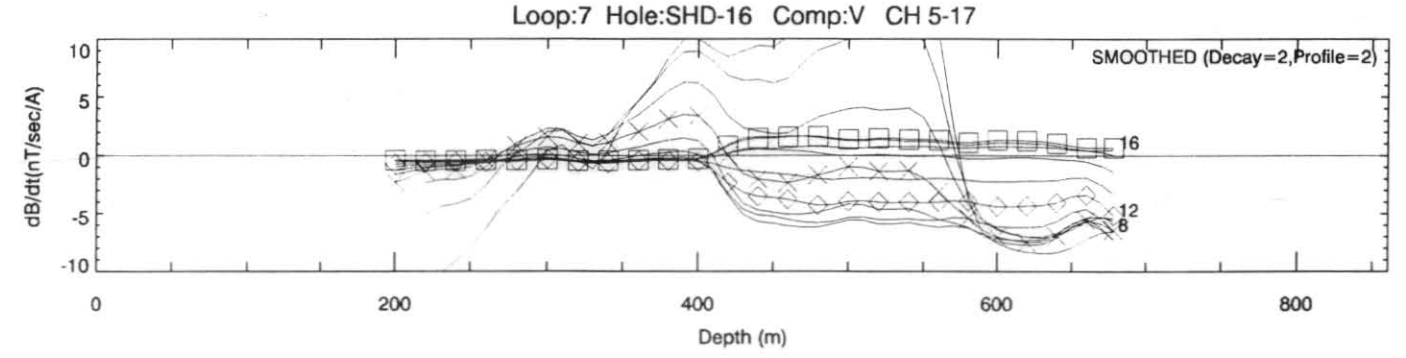
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

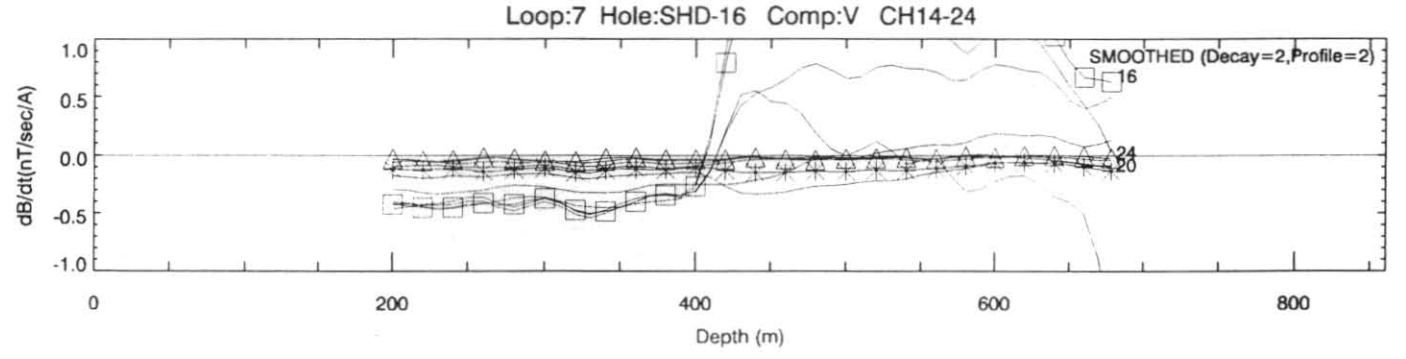
5 cm

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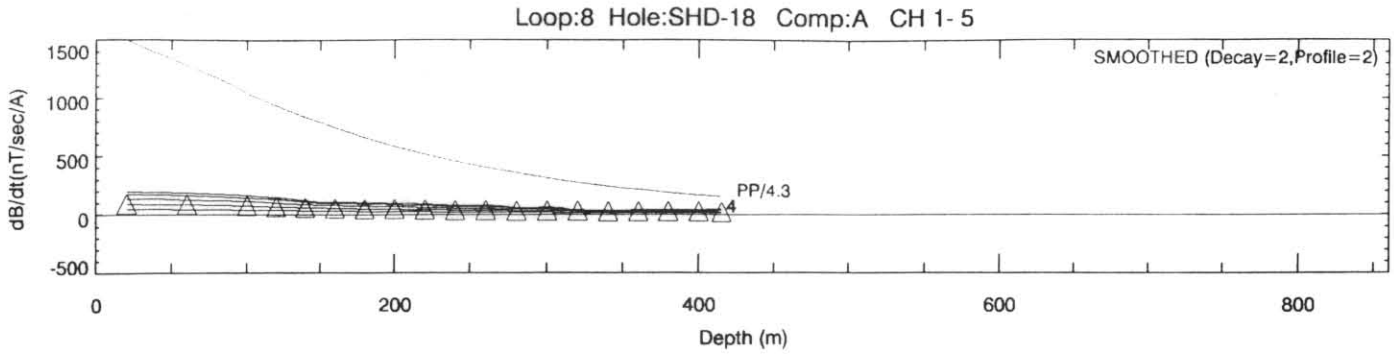


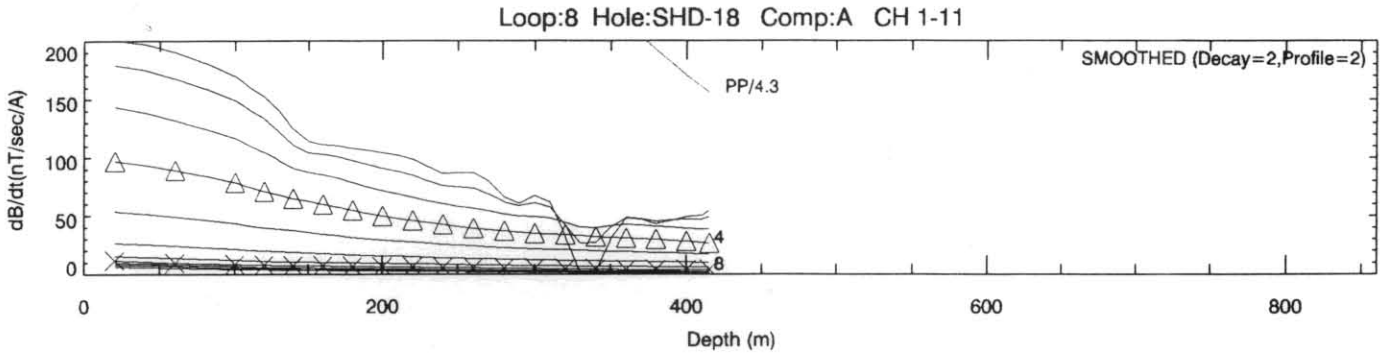


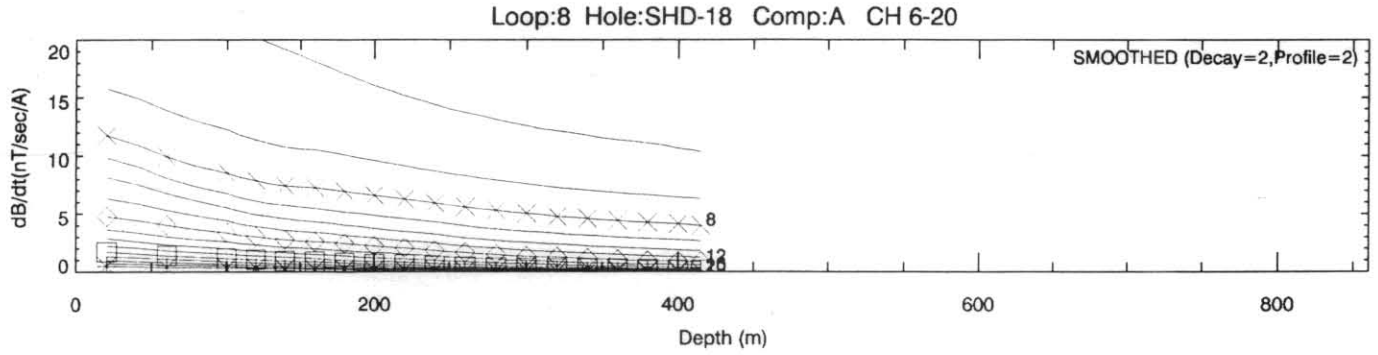
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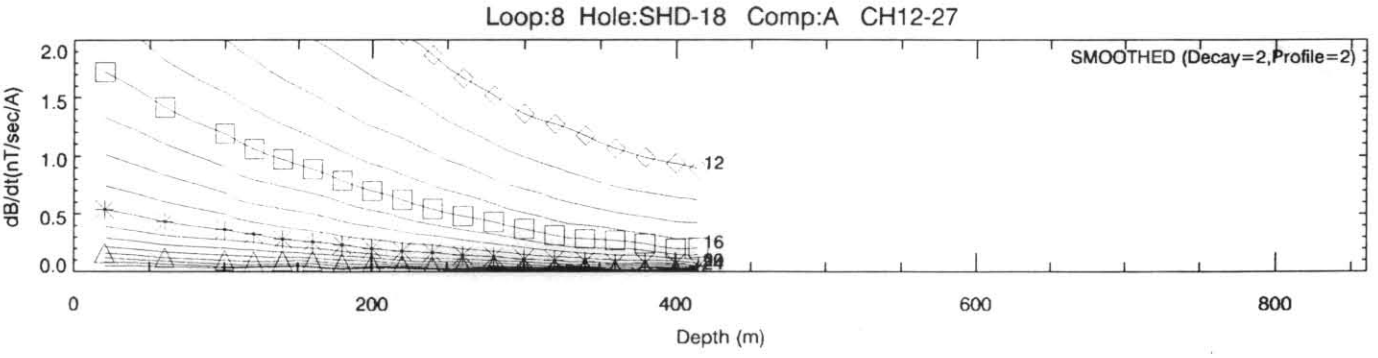
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

675486





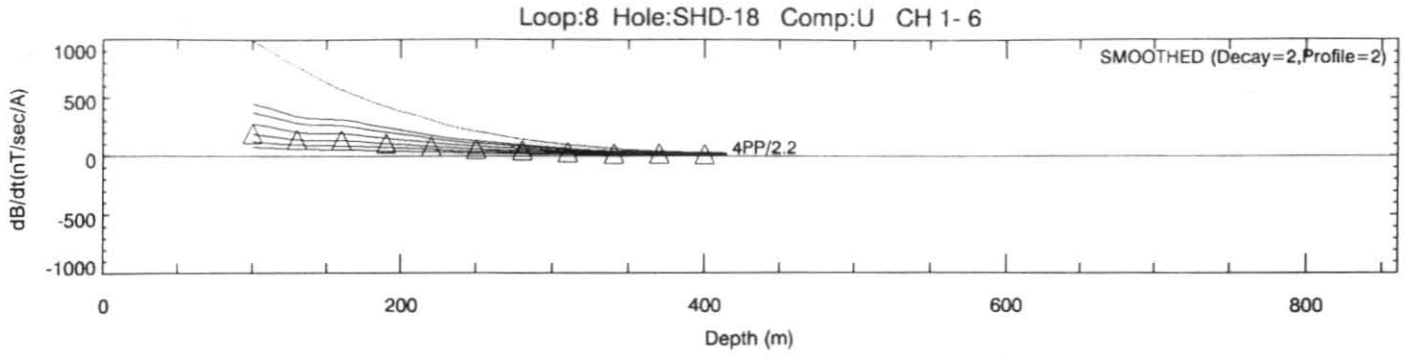


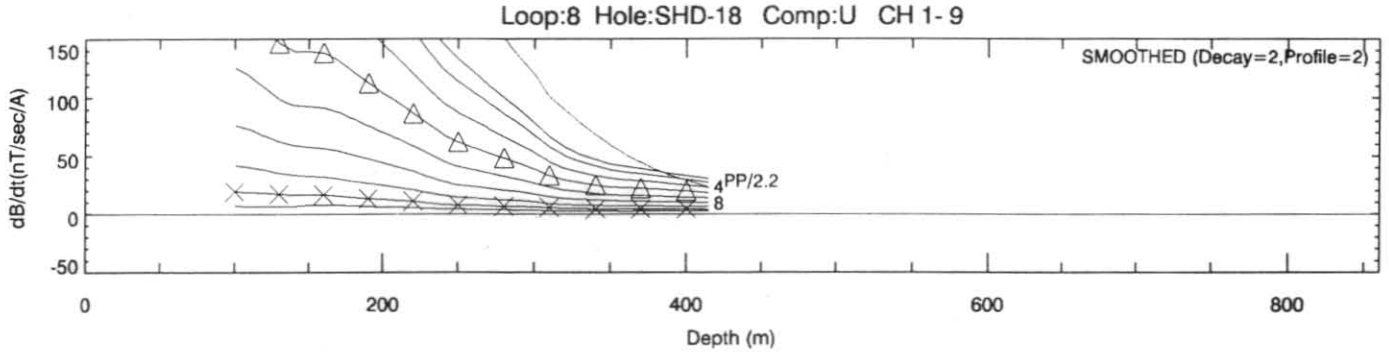


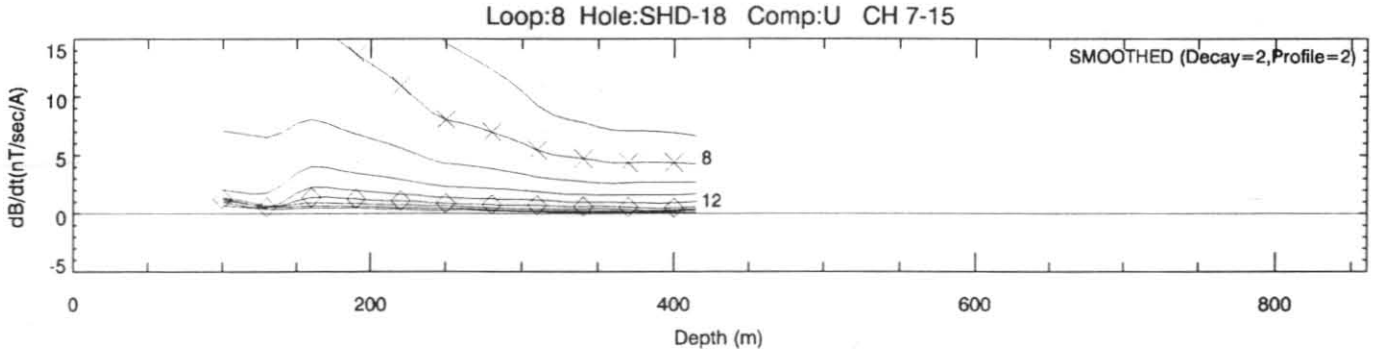
Goldfields Ltd	
South Henty. Borehole EM Jan 2000.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

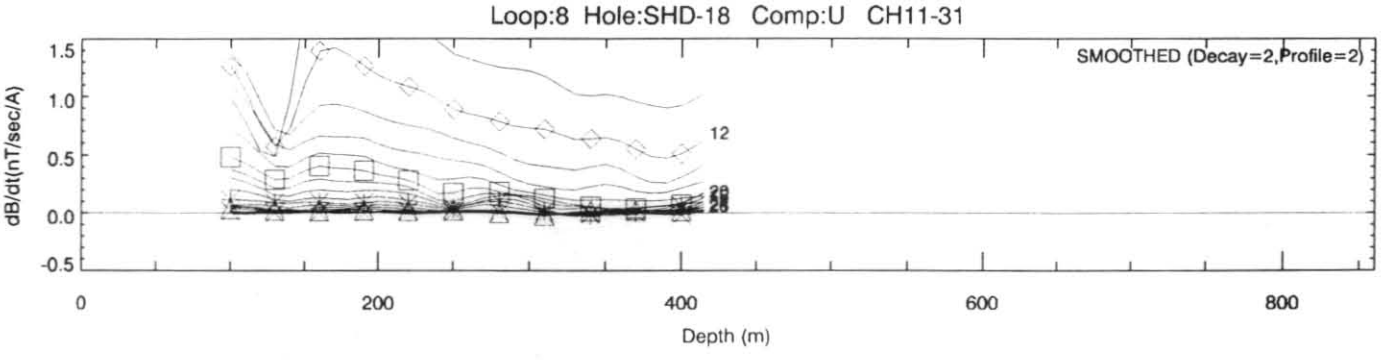
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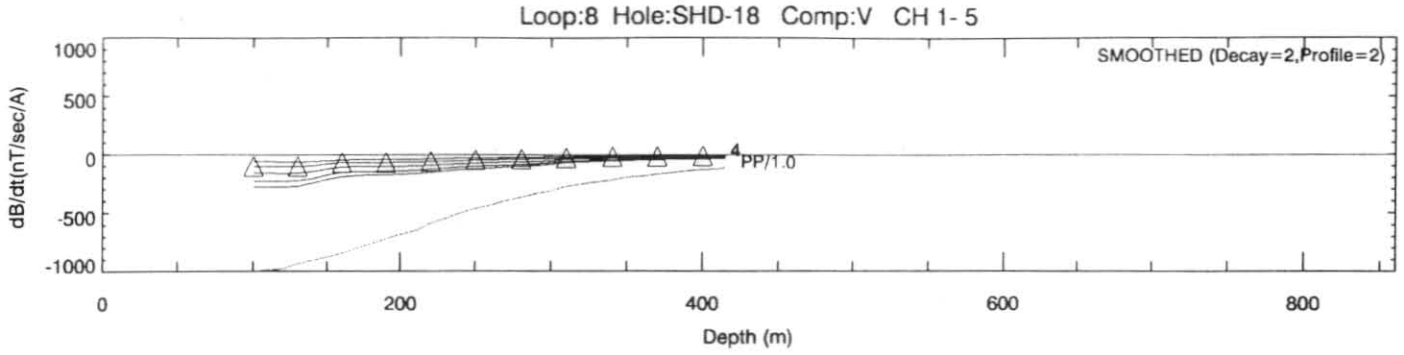


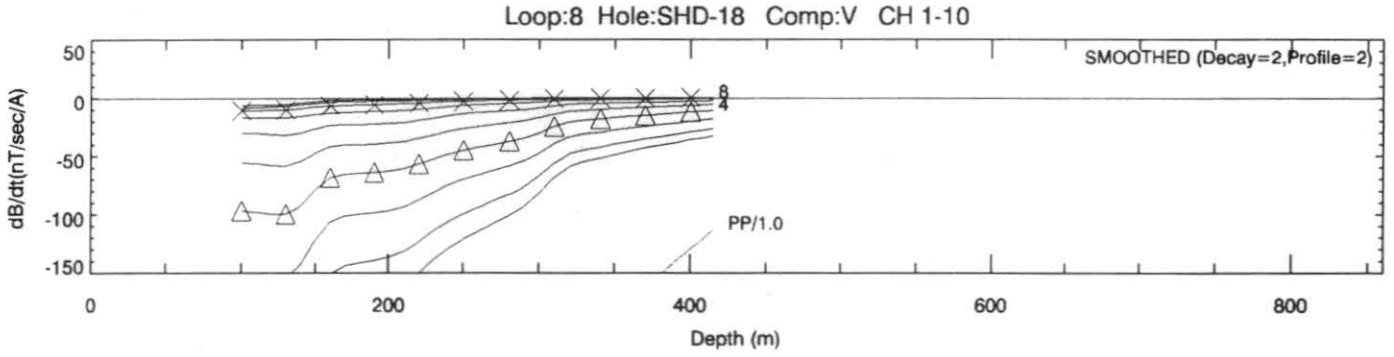


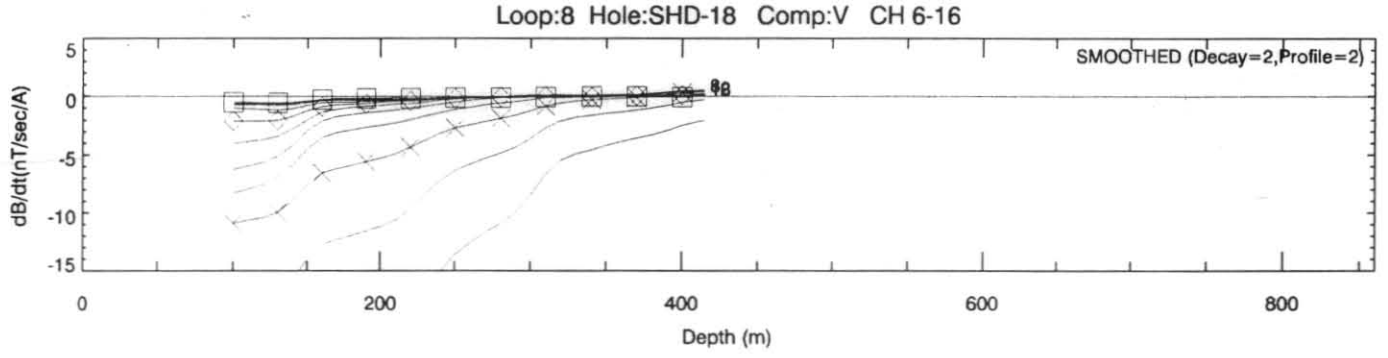
Goldfields Ltd	
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FLAGSTAFF GEOCONSULTANTS	
Drawn 3-Apr-2000	

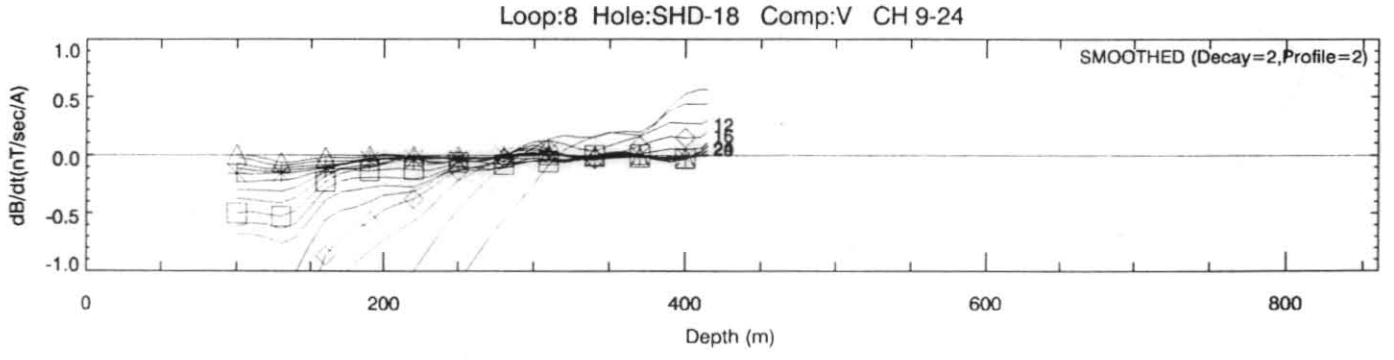
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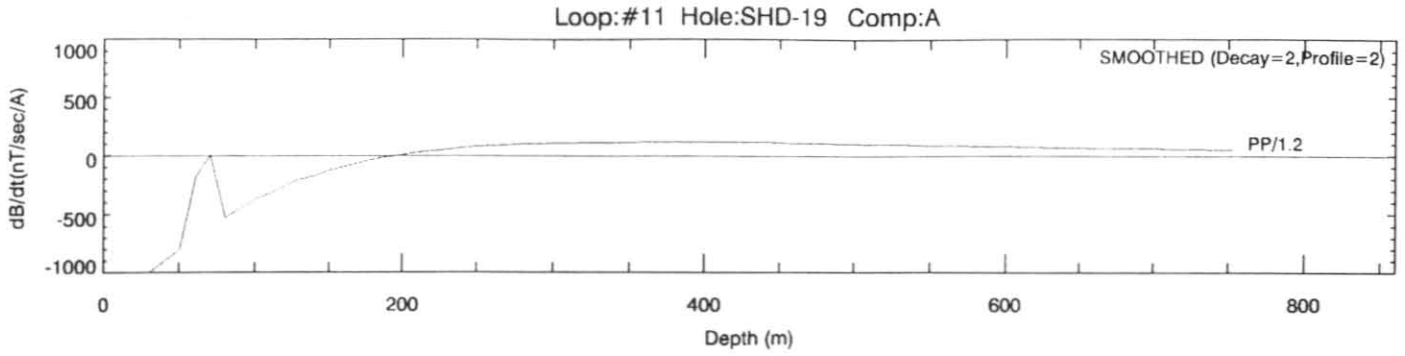


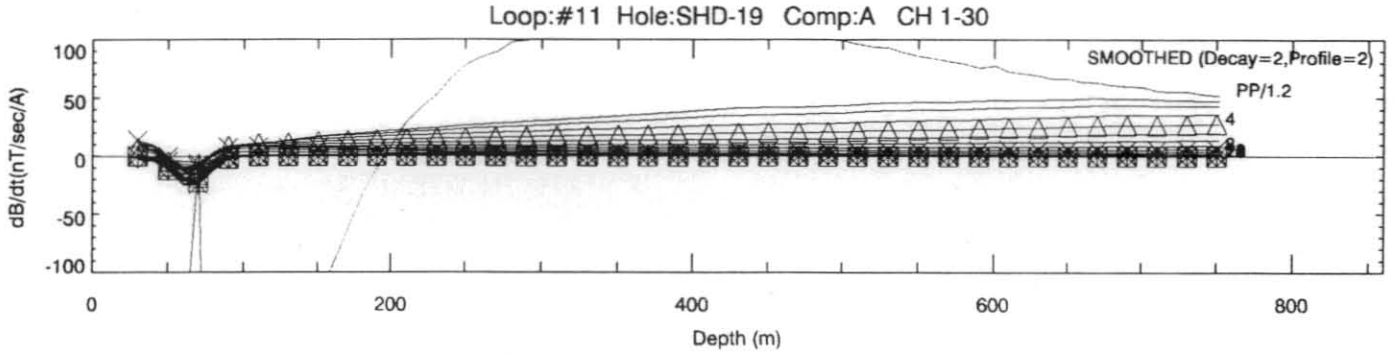


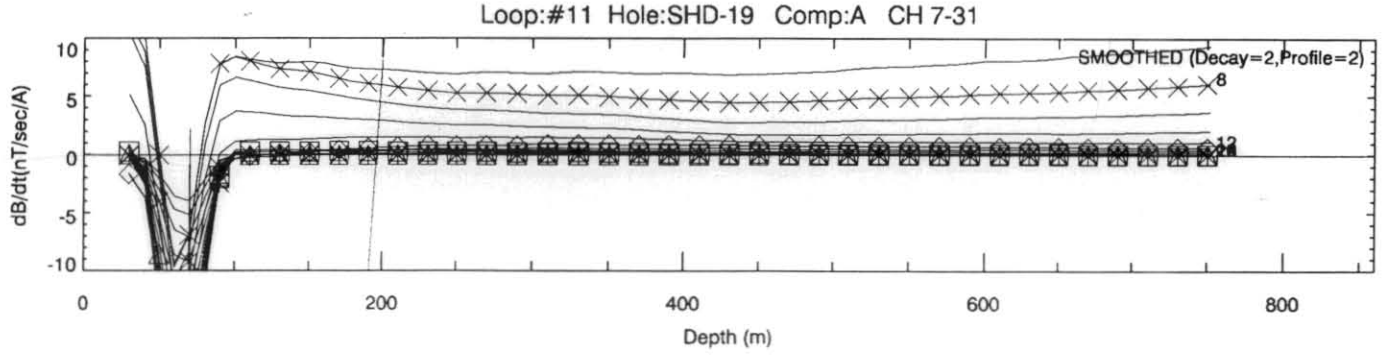
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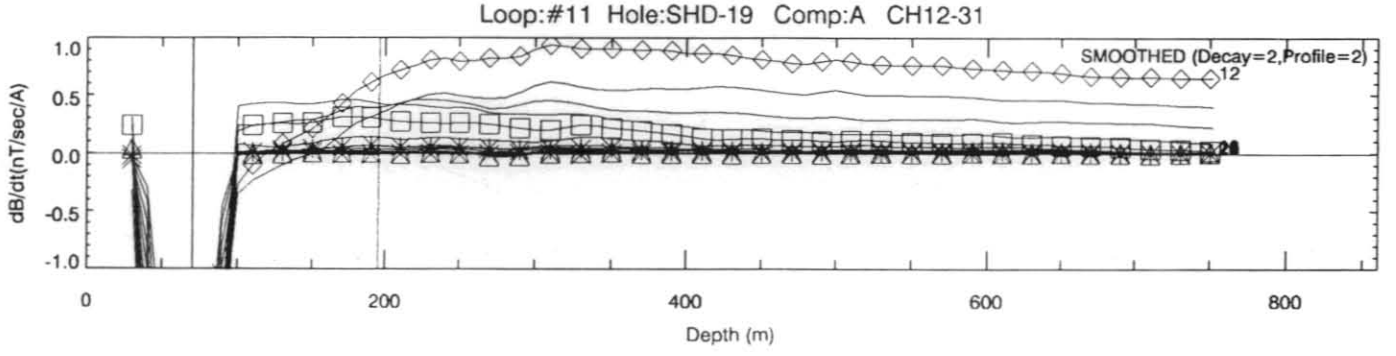
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Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
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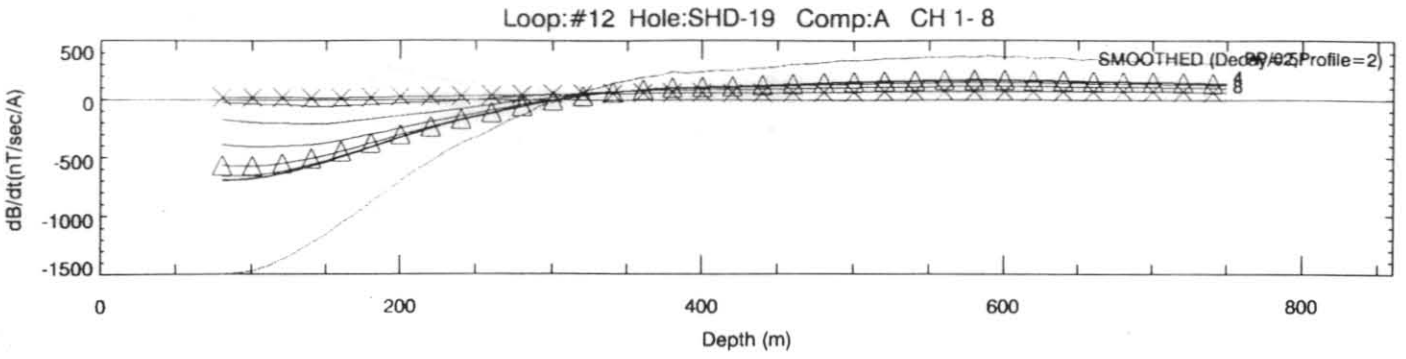


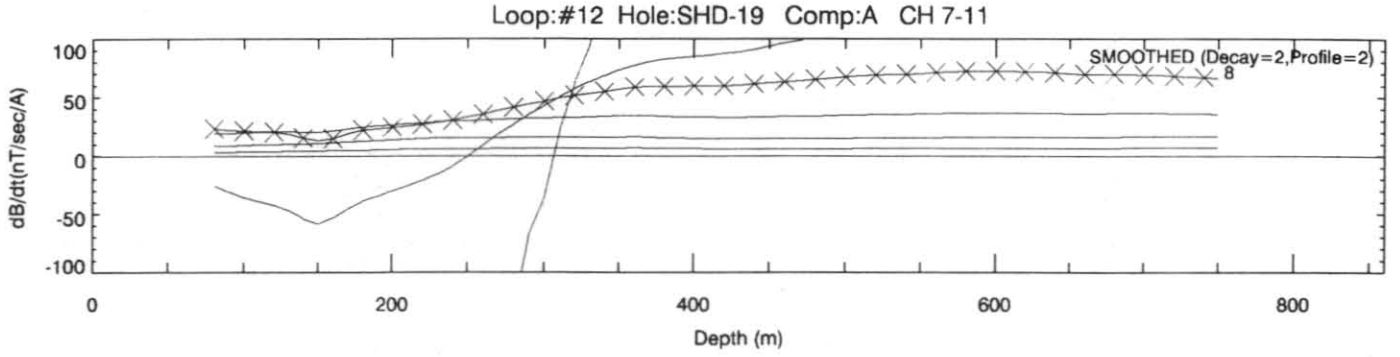


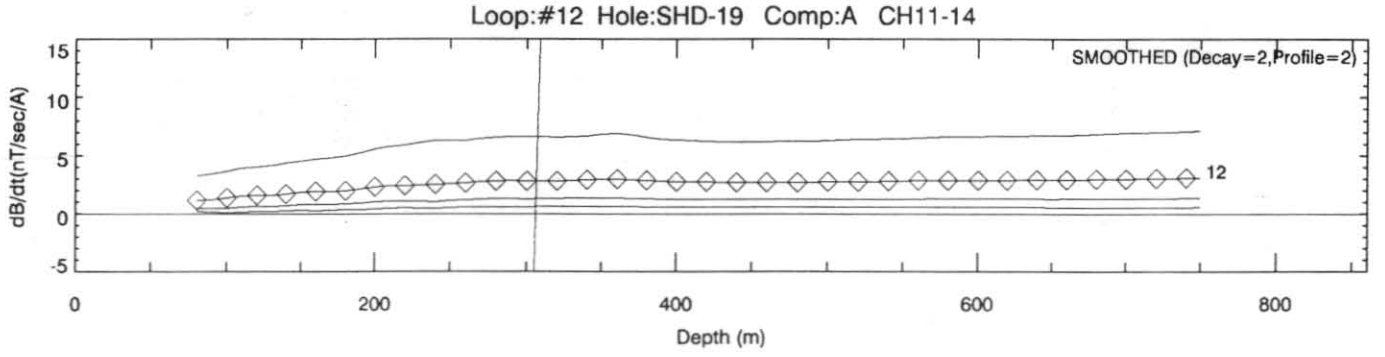
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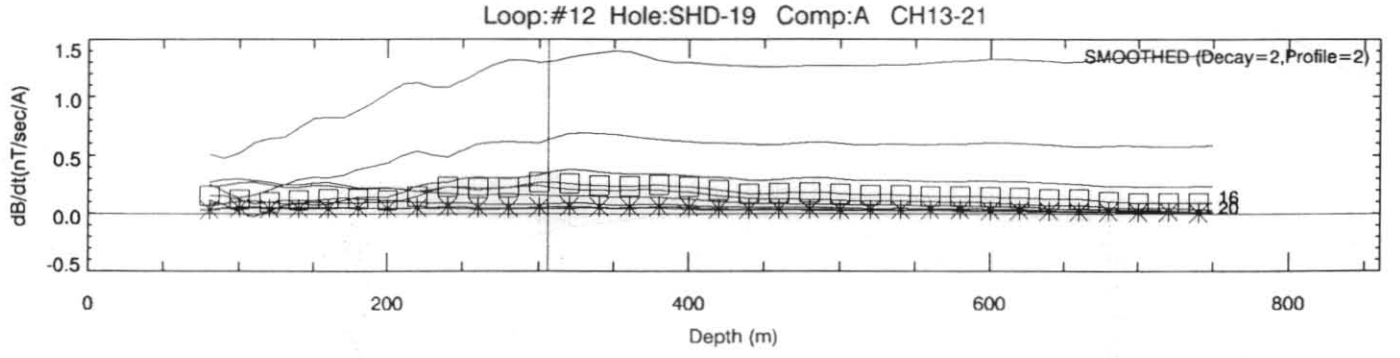
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FLAGSTAFF GEOCONSULTANTS	
Drawn 2/ 2/2000	

675490









5 cm

Goldfields Ltd	
South Henty. Borehole EM Apr 1999.	
Crone PEM. Tx Frequency 12.5 Hz	
Window Set Ch1-31	
FLAGSTAFF GEOCONSULTANTS	
Drawn 2/ 2/2000	

675491

OUTER-RIM EXPLORATION SERVICES

ACN 059 220 192

Geophysical Contracting Services

100% Australian Owned

35 Fleming Street,
(P.O. Box 1754)
AITKENVALE, QLD. 4814

Tel: 07 4725 3544
Fax: 07 4725 4805
Mob: 0412 54 9980
Email: oreserv@ozemail.com.au

5th June, 1998

Mr Chris Dauth
RGC Exploration Pty. Ltd.
89 Burswood Road
VICTORIA PARK, W. A. 6100

Dear Chris,

Enclosed is the report on the DHEM surveys recently completed South Henty in Tasmania, including daily logs, plots, copies of the digital data, plans and sections, and the invoice. As previously, I have presented the digital data in the AMIRA format - .TEM files. I presume you didn't have any problems with it last time.

Please don't hesitate to contact me as usual, if you require any additional information or plots.

Yours sincerely,

David Lemcke

David Lemcke
Manager.

675492

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Volume 1 of 1

Client	:	Goldfields Exploration Pty Ltd
Prospect	:	South Henty.
Area	:	Zeehan, Tas.
Survey	:	Borehole PEM Survey
Survey Period	:	27th to 31st May 1998.
Operator	:	Alistair McMillan.

DAILY LOG: Goldfields Exploration Pty Ltd - May, 1998

DATE	COMMENTS	CHARGES

27-05-98

Departed from the motel at 7:00am, organised fuel and food for the day and arrived at the RGC Exploration office at 7:40am. Met Bruce and Scott and travelled out to the South Henty grid - approximately 40 km from Zeehan. Dummied the hole which, due to the shallow dip and the fact that the hole was making water, we were only able to get down to 680m. It was decided that this would be enough and that the hole could be logged. Located the transmitter site and started to lay out Loop #1 (600 x 500m). Bruce returned to Zeehan to pick up some wire to lay across the lake. We completed the loop shortly after lunch and logged SHD-16 to a depth of 260m using 1024 stacks and two readings per station in an attempt to reduce the noise caused by the movement of water in the hole and called it a day at 5:00pm.

SURVEY PARAMETERS:

Loop #1 :600 x 500m
380300E; 5359600N: 380300E; 5359000N
380800E; 5359000N: 380800E; 5359600N
Current :14 Amps
Time Base :20 ms
Ramp Time :0.5ms
Sync :Cable

Hole No. **:SHD-16**
380612.01E, 5359380.01N
Depth :260m
Channels :31
Components :Z

1 Survey day	$1250.00
1 Field Assist. day	$ 180.00

28-05-98

Departed the motel at 7:15am and organised some lunch before dropping into the RGC office to swap radios for the day. Travelled out to the site and continued logging SHD-16 from 270m to 678m (the probe would go no further). Recovered the Z probe and started logging the hole with the X-Y probe. Logged the hole from 200m to 310m. While I logged the hole Heath, Bruce and Scott layed out loops #2 and #3. Loop #2 consisted of RGC wire to speed things up so that we could move from hole to hole without having to worry about laying loops. Called it a day 5:20pm.

SURVEY PARAMETERS:

Loop #1 :600 x 500m
380300E; 5359600N: 380300E; 5359000N
380800E; 5359000N: 380800E; 5359600N
Current :14 Amps
Time Base :20 ms
Ramp Time :0.5ms
Sync :Cable

Hole No. **:SHD-16**
380612.01E, 5359380.01N
Depth :678m
Channels :31
Components :Z,X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

29-05-98 Departed motel at 7:20am, picked up some lunch and travelled out to the site. Completed logging the X-Y components for SHD-16 from 320 to 678m using 1024 stacks and two readings per component to help overcome noise from water movement. Dummied SHD-18 to 415m, recovered the dummy probe and called it a day at 5:30pm.

SURVEY PARAMETERS:

Loop #1 :600 x 500m
380300E; 5359600N: 380300E; 5359000N
380800E; 5359000N: 380800E; 5359600N
Current :14 Amps
Time Base :20 ms
Ramp Time :0.5ms
Sync :Cable

Hole No. **:SHD-16**
380612.01E, 5359380.01N
Depth :678m
Channels :31
Components :X,Y

1 Survey day $1250.00
1 Field Assist. day $ 180.00

30-05-98 Departed motel at 8:00am, pick up some lunch and travelled out to the site. Recovered the equipment from site #1 and moved up to site #3. The access to site 3 was very boggy and there was no way we could get the 4WD into the hole so we had to use a 4WD motorcycle to ferry all the equipment into the hole - this took a couple of hours by the time we had everything in and we were able to start surveying. Surveyed the Z component on SHD-18 from 20m to 415m, then and

started the X-Y survey and read to 300m before calling it a day at 5:30pm. Heath recovered loop #1.

SURVEY PARAMETERS:

Loop #3	:400 x 300m
	380000E; 5359400N: 380000E; 5359000N
	380300E; 5359000N: 380300E; 5359400N
Current	:16 Amps
Time Base	:20 ms
Ramp Time	:0.5ms
Sync	:Cable
Hole No.	**:SHD-18**
	380180E, 5359100N
Depth	:415m
Channels	:31
Components	:Z,X,Y

1 Survey day	$1250.00
1 Field Assist. day	$ 180.00

31-05-98 Departed motel at 7:45am, picked up lunch and travelled out to the site. Completed the X-Y on hole SHD-18, recovered the probe, packed up and ferried all the equipment back out to to the vehicle through the bog. Moved to SHD-15, set up and dummied the hole which was open to 383m. Surveyed the Z component but there was no apparent response so I decided that there was no point in reading the X-Y. Heath recovered the wire from loop #3. Packed up the vehicle and returned to Zeehan.

SURVEY PARAMETERS:

Loop #3	:400 x 300m
	380000E; 5359400N: 380000E; 5359000N
	380300E; 5359000N: 380300E; 5359400N
Current	:16 Amps
Time Base	:20 ms
Ramp Time	:0.5ms
Sync	:Cable
Hole No.	**:SHD-18**
	380180E, 5359100N
Depth	:415m
Channels	:31
Components	:X,Y
Loop #2	:400 x 400m
	379800E; 5360800N: 379800E; 5360400N
	380200E; 5360400N: 380200E; 5360800N
Current	:11 Amps

Time Base	:20 ms
Ramp Time	:0.5ms
Sync	:Cable

Hole No. **:SHD-15**
380032.04E, 5360647.59N

Depth	:380m
Channels	:31
Components	:Z

1 Survey day	$1250.00
1 Field Assist. day	$ 180.00

01-06-98 Dropped into the RGC office and gave the data for holes SHD-18 and SHD-15 to Bruce, said our farewells and departed for Devonport.

1/2 Mob. day	$ 275.00

Appendix

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CRONE PULSE EM SYSTEM

SYSTEM DESCRIPTION

The Crone Pulse EM system is a time domain electromagnetic method (TDEM) that utilizes an alternating pulsed primary current with a controlled shut-off and measures the rate of decay of the induced secondary field across a series of time windows during the off-time. The system uses a transmit loop of any size or shape. A portable power source feeds a transmitter which provides a precise current waveform through the loop. The receiver apparatus is moved along surface lines or down boreholes.

The transmitter cycle consists of slowly increasing the current over a few milliseconds, a constant current, abrupt linear termination of the current, and finally zero current for a selected length of time in milliseconds. The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic field will decay with time. The amplitude of the secondary field and the decay rate are dependent on the quality and size of the conductor. The receiver, which is synchronized to the off-time of the transmitter, measures this transient magnetic field where it cuts the surface coil or borehole probe. These readings are across fixed time windows or "channels".

SYSTEM TERMINOLOGY

Ramp Time

"Ramp time" refers to the controlled shut-off of the transmitter current. Three ramp times are selectable by the operator; 0.5ms, 1.0ms, and 1.5ms. By controlling the shut-off rather than having it depend on the loop size and current ensures that the same waveform is maintained for different loops so data can be properly compared.

The 1.5ms ramp is the normally used setting for good conductors. It keeps the early channel responses on scale and decreases the chance of overload. The faster ramp times of 1.0ms and 0.5ms will enhance the early time responses. This can be useful for weak conductors when data from the higher end of the frequency spectrum is desired.

Time Base

Time base is the length of time the transmitter current is off (it includes the ramp time). This also equals the on time of the current. Eight time bases are selectable by the operator. They include the original time bases used in the analog system as well as time bases to eliminate the effects of powerline interference. The eight time bases are as follows: compatible to analog Rx: 10.89ms, 21.79ms; 60hz powerline noise reduction: 8.33ms, 16.66ms, & 33.33ms; 50hz powerline noise reduction: 10.00ms, 20.00ms, 50.00ms and 150ms.

Since readings are taken during the off cycles, the time base will have an effect on the receiver channels. Normally, a standard time base is selected for the type of system and survey being used, but this can be changed to suit a particular situation. A longer time base is preferred for conductors of greater time constants, and in surveys such as resistive soundings where more channels are desired.

Zero Time Set

The term "zero time set" or "ZTS" refers to the starting point for the receiver channel measurements. It is manually set on the receiver by the operator thus allowing adjustments for the ramp times and fine tuning for any fluctuations in the transmitter signal.

Receiver Channels

The rate of decay of the secondary field is measured across fixed time windows which occupy most of the off-time of the transmitter. These time windows are referred to as "channels". These channels are numbered in sequence with "1" being the earliest. The analog and datalogger receivers measured eight fixed channels. The digital receiver, being under software control, offers more flexibility in the channel positioning, channel width, and number of channels.

PP Channel

The PEM system monitors the primary field by taking a measurement during the current ramp and storing this information in a "PP channel". This means that data can be presented in either normalized or unnormalized formats, and additional information is available during interpretation. The PP channel data can provide useful diagnostic information and helps avoid critical errors in field polarity.

Synchronization

Since the PEM system measures the secondary field in the absence of the primary field, the receiver must be in

"sync" with the transmitter to read during the off-time. There are three synchronization methods available: cable connection, radio telemetry, and crystal clock. This flexibility enhances the operational capabilities of the system.

SURVEY METHODS

The wide frequency spectrum of data produced by a Pulse EM survey can be used to provide structural geological information as well as the direct detection of conductive or conductive associated ore deposits. The various types of survey methods, from surface and borehole, have greatly improved the chances of success in deep exploration programs. There are eight basic profiling methods as well as a resistivity sounding mode.

Moving Coil

A small, multi-turn transmitter loop (13.7m diameter) is moved for each reading while the receiver remains a fixed distance away. This method is ideal for quick reconnaissance in areas of high background conductivity.

Moving Loop

Same as Moving Coil method, but with a larger transmit loop (100 to 300 meters square). This method provides deeper penetration in areas of high background conductivity, and works best for near-vertical conductors. This method can be used in conjunction with the Moving In-loop survey for increased sensitivity to horizontal conductors.

Moving In-Loop

A transmit loop of size 100 to 300 meters square is moved for each reading while the receiver remains at the center of the loop. This method provides deep penetration in areas of very high background conductivity, and works best for near-horizontal conductors. It can be used in conjunction with the Moving Loop survey.

Large In-Loop

A very large, stationary transmit loop (800m square or more) is used, and survey lines are run inside the loop. This mode provides very deep penetration (700m or more) and couples best with shallow dip conductors (<45 deg.) under the loop.

Deepem

A large, stationary transmit loop is used, and survey lines are run outside the loop. This mode provides very deep penetration, and couples best with steeply dipping conductors (>45 deg.) outside the loop.

Borehole (Z Component only)

Isolated Borehole: A drill hole is surveyed by lowering a probe down a hole and surveying it with a number of transmit loops laid out on surface. The data from multiple loops gives directional information on the conductors.

Multiple Boreholes: One large transmit loop is used to survey a number of closely spaced holes. The change in anomaly from hole to hole provides directional information.

These methods have detected conductors to depths of 2500m from surface and up to 200m from the hole.

3-D Borehole

Drill holes are surveyed with both the Z and the XY borehole probes. The X and Y components provide accurate direction information using just one transmit loop.

Since the probe rotates as it moves down the hole a correction is required for the X-Y data. This is accomplished in one of two ways. The standard approach is to use the measurement of the primary field from the "PP" channel, apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation device for the X-Y probe which is produced in cooperation with IFG Corp. This attachment uses dipmeters to calculate the probe rotation.

Underground Borehole

Underground drill holes can be surveyed in any of the above mentioned borehole methods with one or more transmit loops on the surface. Near-horizontal holes can be surveyed using a push-rod system.

Resistivity Soundings

By reading a large number of channels in the centre of a transmit loop it is possible to preform a decay curve analysis giving a best-fit layer earth model using programs such as ARRTI or TEMIX.

EQUIPMENT

Transmit Loops

The PEM system can operate with practically any size of transmit loop, from a multi-turn circular loop 13.7m in diameter, to a 1 or 2 turn loop of any shape up to 1 or 2 kilometers square using standard insulated copper wire of 10 or 12 gauge. The multi-turn loop is made in two sections with screw connectors. The 10 or 12 gauge loop wire comes on spools in either 300m or 400m lengths.

Power Supply

The PEM system normally operates with an input voltage from 24v to 120v. The maximum current is 20 amps in a single loop but the effective current can be increased by doubling the loop wire in series. For low power surveys a 20amp/hr 24v battery can be used. The power supply requires a motor generator and a voltage regulator to control and filter the input voltage to the transmitter.

Specifications: PEM Motor Generator

- 4.5 hp Wisconsin, (2 kw)
- belt drive to D.C. alternator
- cable output to regulator
- maximum output: 120v, 20amp (2 kw);
- fuse type overload protection
- steel frame
- external gas tank
- unit weight: 33kg (2 kw); 52kg (4 kw)

Specifications: PEM Variable Voltage Regulator

- selectable voltage between 24v and 120v or 48v and 240v
- 20amp maximum current
- fuse and internal circuit breaker protection

Transmitter

The transmitter controls the bi-polar on-off waveform and linear current shut-off ramp. The latest 2000w PEM Transmitter has the following specifications:

Specifications: PEM Transmitter

- time bases: 10.89ms, 21.79ms, 8.88ms, 16.66ms, 33.33ms, 10ms, 20ms, 50ms 150ms.
- ramp times: 0.5ms, 1.0ms, 1.5ms
- operating voltage: 24v to 120v (2 kw); 48v to 240v (4 kw)
- output current: 5amp to 20amp
- monitors for input voltage, output current, shut-off ramp, tx loop continuity, instrument temperature, and overload output current
- automatic shut-off for open loop, high instrument temperature, and overload
- fuse and circuit breaker overload protection
- three sync modes: 1) built-in radio and antenna
  2) cable sync output for direct wire link to receiver or remote radio
  3) connectors for the crystal clock

Receiver

The receivers measure the rate of decay of the secondary field across several time channels. Three types of receivers are available with the PEM system: Analog Rx, Datalogger Rx, and Digital Rx. The Analog Rx and Datalogger Rx read eight fixed time channels while the Digital Rx, under software control, offers a variety of channel configurations. The Digital Rx has been used in the field for contract surveys since 1987.

Specifications: Digital PEM Receiver

- operating temperature -40 °C to 50 °C
- unit weight 15kg; shipping weight 25.5kg

Hardware:

- 24v rechargeable gel cell battery supply
- two CMOS microprocessors (NSC800)
- alphanumeric keyboard

- 2 x 16 character cold weather display
- 16 x 40 character (256 x 128 pixels graphic) display
- 64k byte solid state memory storage
- cable, radio or crystal clock synchronization
- RS-232 serial I/O

Sampling process features:

- 16 bit A/D conversion
- digital recording of data in nano-tesla/sec
- rejection of atmospheric noise samples based on digital threshold detection
- automatic gain control to optimize receiver signal to noise ratio

Menu driven operating software system offering the following functions:

- controls channel positions, channel widths, and number of channels using a basic slice of 4.5µsec
- time bases: 10.89ms, 21.79ms, 8.88ms, 16.66ms, 33.33ms, 10ms, 20ms, 50ms and 150ms
- ramp time selectable in 4.5µsec steps
- sample stacking from 512 to 65536
- scrolling routines for viewing data
- graphic display of decay curve and profile with various plotting options
- routines for memory management
- control of data transmission
- provides information on instrument and operating status

Sync Equipment

There are three modes of synchronization available; radio, cable, and crystal clock. The radio sync signal can be transmitted through a booster antenna from either the PEM Transmitter internal radio or through a Remote Radio.

Specifications: Sync Cable

- 2 conductor, 24awg, teflon coated
- approx. 900m per aluminum spool with connectors

Specifications: Remote Radio

- operating frequency 27.12mhz
- 12v rechargeable gel cell battery supply
- fuse protection
- sync wire link to transmitter
- coaxial link to booster antenna

Specifications: Booster Antenna

- 8m, 4 section aluminum mast
- guide rope support
- ¼ wave CB fiberglass antenna
- range up to 2km
- coaxial connection to transmitter or remote radio

Specification: Crystal Clocks

- heat stabilized crystals
- 24v rechargeable gel cell battery supply
- rx unit can be separate or housed in the receiver
- outlet for external supplementary battery supply

Surface PEM Receive Coil

The Surface PEM Receive Coil picks up the EM field to be measured by the receiver. The coil is mounted on a tripod that can be positioned to take readings of any component of the field.

Specifications: Surface PEM Receive Coil

- ferrite core antenna
- built-in preamplifier
- VLF filter
- 10khz bandwidth
- 23:1 amplifier gain
- two 9v transistor battery supply
- tripod adjustable to all planes

Borehole PEM Z Component Probe

The Z component probe measures the axial component of the EM field. The Z component data is not affected

by probe rotation so no correction are required.

Specifications: Borehole PEM Z Component Probe

- ferrite core
- built-in preamplifier
- dimensions: length - 1.6m; dia - 3.02cm (3.15cm for high pressure tested probes)
- internal rechargeable ni-cad battery supply
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths 2800m

Borehole PEM XY Component Probe

The XY probe measures two orthogonal components of the EM field perpendicular to the axis of the hole. Correction for probe rotation can be achieved by two methods. The standard approach is to use the measurement of the primary field from the "PP" channel, apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation device for the X-Y probe that uses dipmeters to calculate the probe rotation.

Specifications: Borehole PEM XY Component Probe

- ferrite core
- built-in preamplifier
- dimensions: length - 2.01m; dia - 3.02cm
- internal rechargeable ni-cad battery supply
- selection of X or Y coils by means of a swich box on surface or automatic switching with Digital receiver
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths to 2800m

Orientation Device

The orientation device is an optional attachment for the XY probe which measures the rotation of the probe using two dipmeters.

Specifications: Orientation Device

- 2 axis tilt sensors
- sensitivity +/- 0.1 deg.
- operating range -89.5 to -10 deg.
- dimensions: length - 0.94m; dia - 28.5cm

Borehole Equipment

To lower the probe down a drill hole requires a cable and spool, winch assembly frame and cable counter. Borehole surveys also require equipment to "dummy probe" the hole before doing the survey.

Specifications: Borehole Cable

- two conductor shielded cable
- kevlar strengthened
- currently 1500m but will shortly have cabability of surveying to depths of 3000m.

Specifications: Slip Ring

- attaches to side of borehole cable spool providing a connection to the receiver while allowing the spool to turn.
- VLF filter
- pure silver contacts

Specifications: Borehole Counter

- attaches to the drill hole casing
- calibrated in meters

Specifications: Dummy Probe and Cable

- solid steel or steel pipe
- same dimensions as borehole probe
- shear pin connection to dummy cable

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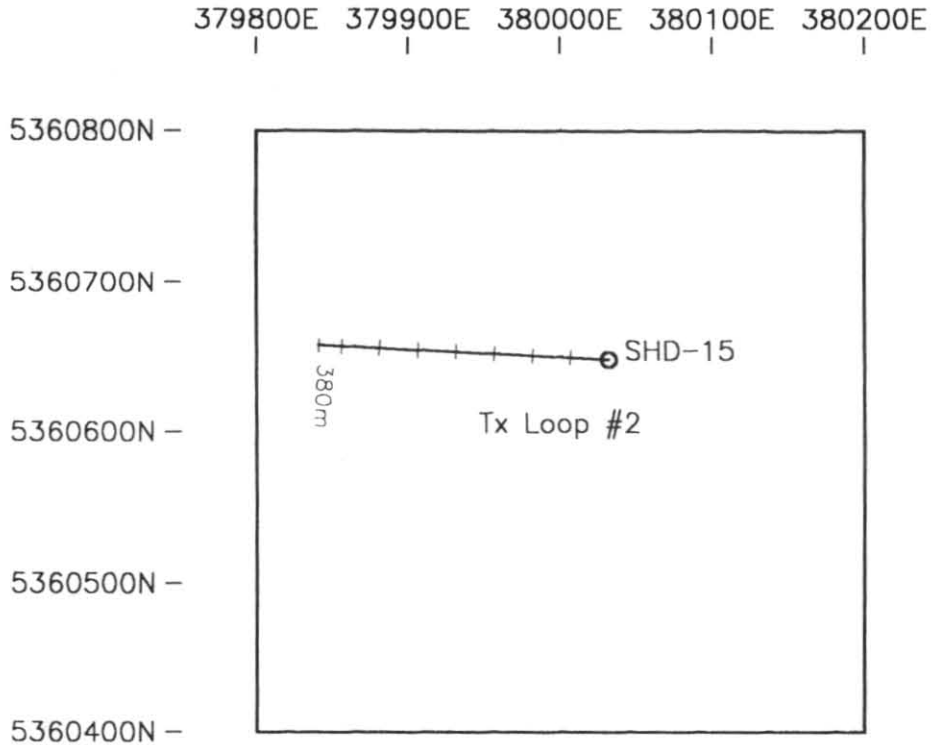
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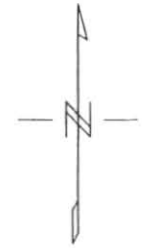
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3	Header	SHD-15	Header information	N/A
4	Profile	(#2)	Z - Log plot	1:2000
5			- Linear, Ch1-15, 1:250	1:2000
6			- Linear, Ch15-25, 1:5	1:2000
7			- Linear, Ch25-31, 1:2	1:2000
8	Plan	SHD-16,18	Hole location plan	1:5000
9	Section	SHD-16	Primary Field plot	1:5000
10		SHD-18	Primary Field plot	1:5000
11	Header	SHD-16	Header information	N/A
12	Profile	(#1)	Z - Log plot	1:3000
13			- Linear, Ch1-15, 1:800	1:3000
14			- Linear, Ch15-25, 1:5	1:3000
15			- Linear, Ch25-31, 1:2	1:3000
16			X - Log plot	1:3000
17			- Linear, Ch1-15, 1:800	1:3000
18			- Linear, Ch15-25, 1:5	1:3000
19			- Linear, Ch25-31, 1:2	1:3000
20			Y - Log plot	1:3000
21			- Linear, Ch1-15, 1:800	1:3000
22			- Linear, Ch15-25, 1:5	1:3000
23			- Linear, Ch25-31, 1:2	1:3000
24			Total Field plot	1:3000
25	Header	SHD-18	Header information	N/A
26	Profile	(#3)	Z - Log plot	1:2000
27			- Linear, Ch1-15, 1:1000	1:2000
28			- Linear, Ch15-25, 1:5	1:2000
29			- Linear, Ch25-31, 1:2	1:2000
30			X - Log plot	1:2000
31			- Linear, Ch1-15, 1:1000	1:2000
32			- Linear, Ch15-25, 1:5	1:2000
33			- Linear, Ch25-31, 1:2	1:2000
34			Y - Log plot	1:2000
35			- Linear, Ch1-15, 1:1000	1:2000
36			- Linear, Ch15-25, 1:5	1:2000
37			- Linear, Ch25-31, 1:2	1:2000
38			Total Field plot	1:2000

675504





Scale 1:5000

50 0 50 100

(metres)

5 cm

Goldfields Exploration P/L

South Henty

3-D Borehole Pulse EM Survey

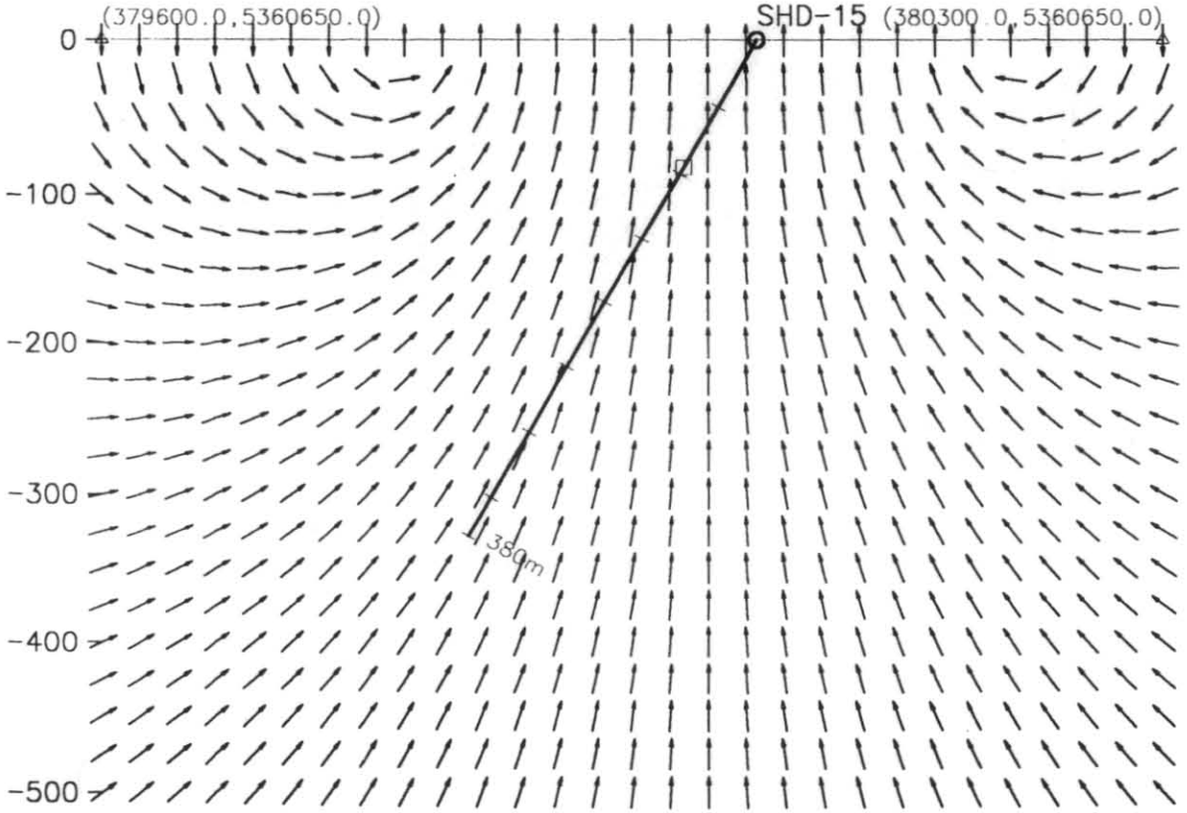
Borehole & Loop Location Map

Hole: SHD-15

Survey Date: May 31, 1998

Outer-Rim Exploration Services

675505



Scale 1:5000

50 0 50 100

(metres)

5 cm

Goldfields Exploration P/L

South Henty

3-D Borehole Pulse EM Survey

Hole Section with Primary Field

Hole: SHD-15

Survey Date: May 31, 1998

Outer-Rim Exploration Services

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

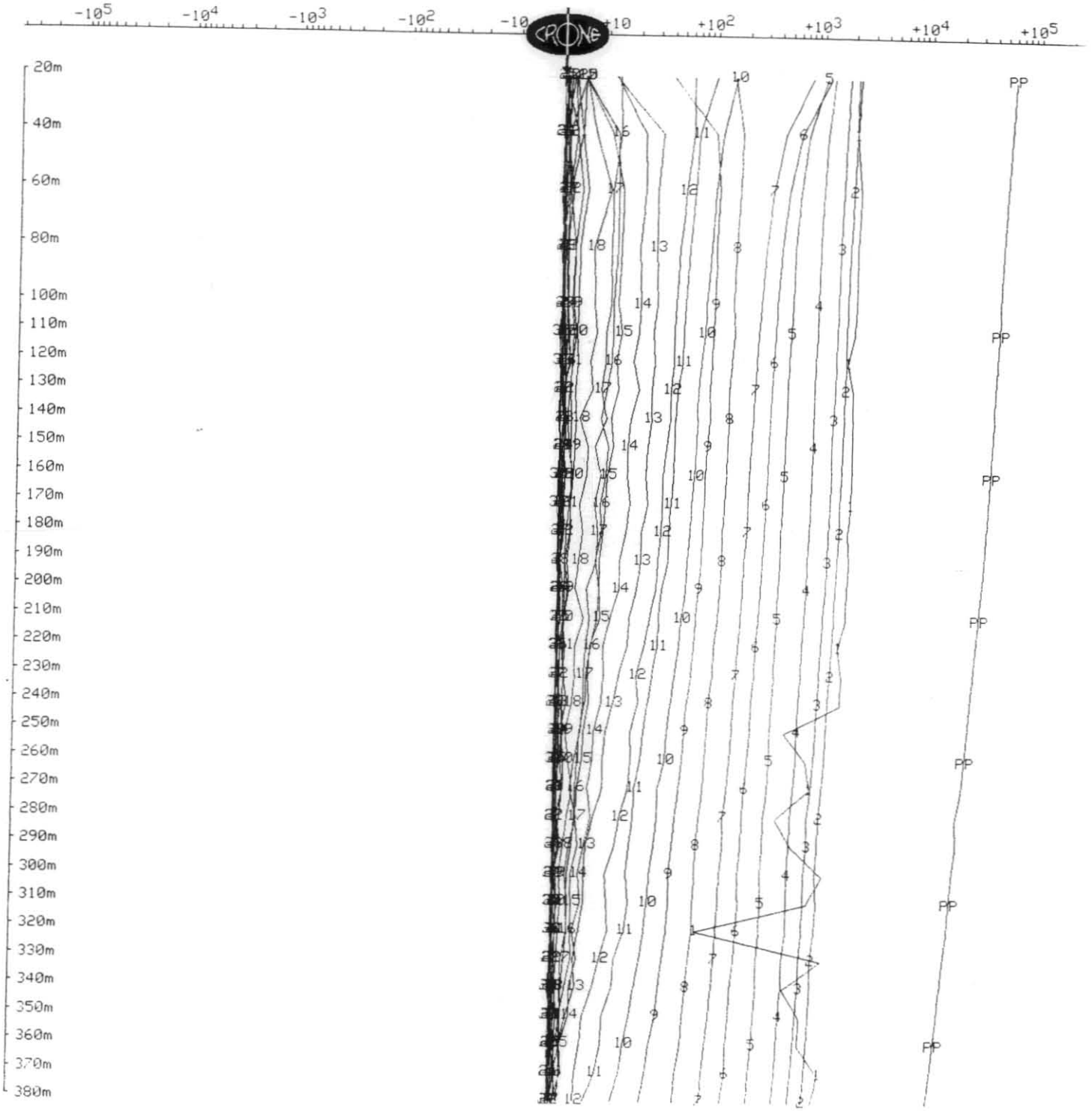
675506

Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 31, 1998

Hole : SHD-15
Tx Loop : #2
File name : SHD15Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675507

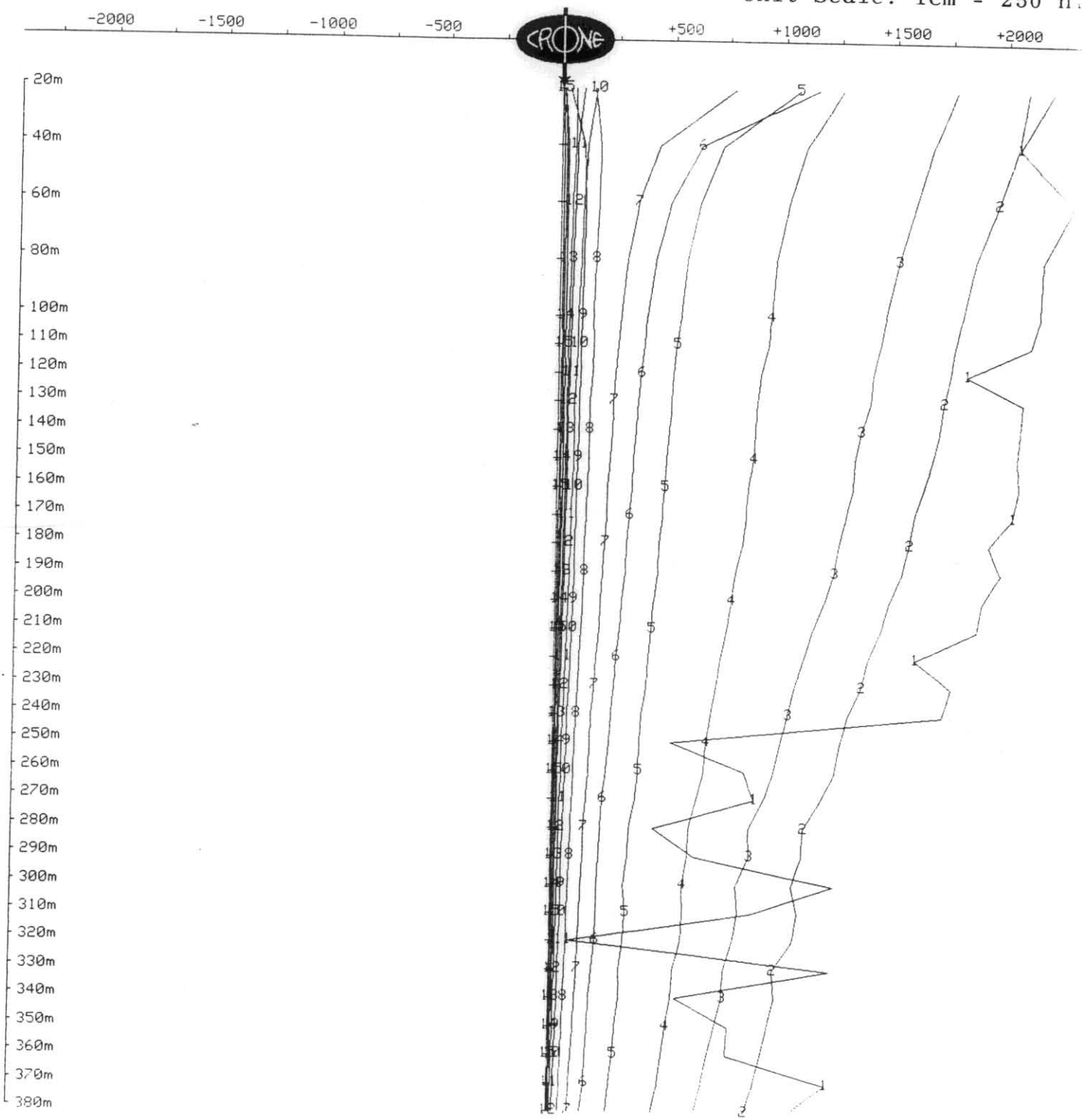
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 31, 1998

Hole : SHD-15
Tx Loop : #2
File name : SHD15Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000

Unit Scale: 1cm = 250 n



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675508

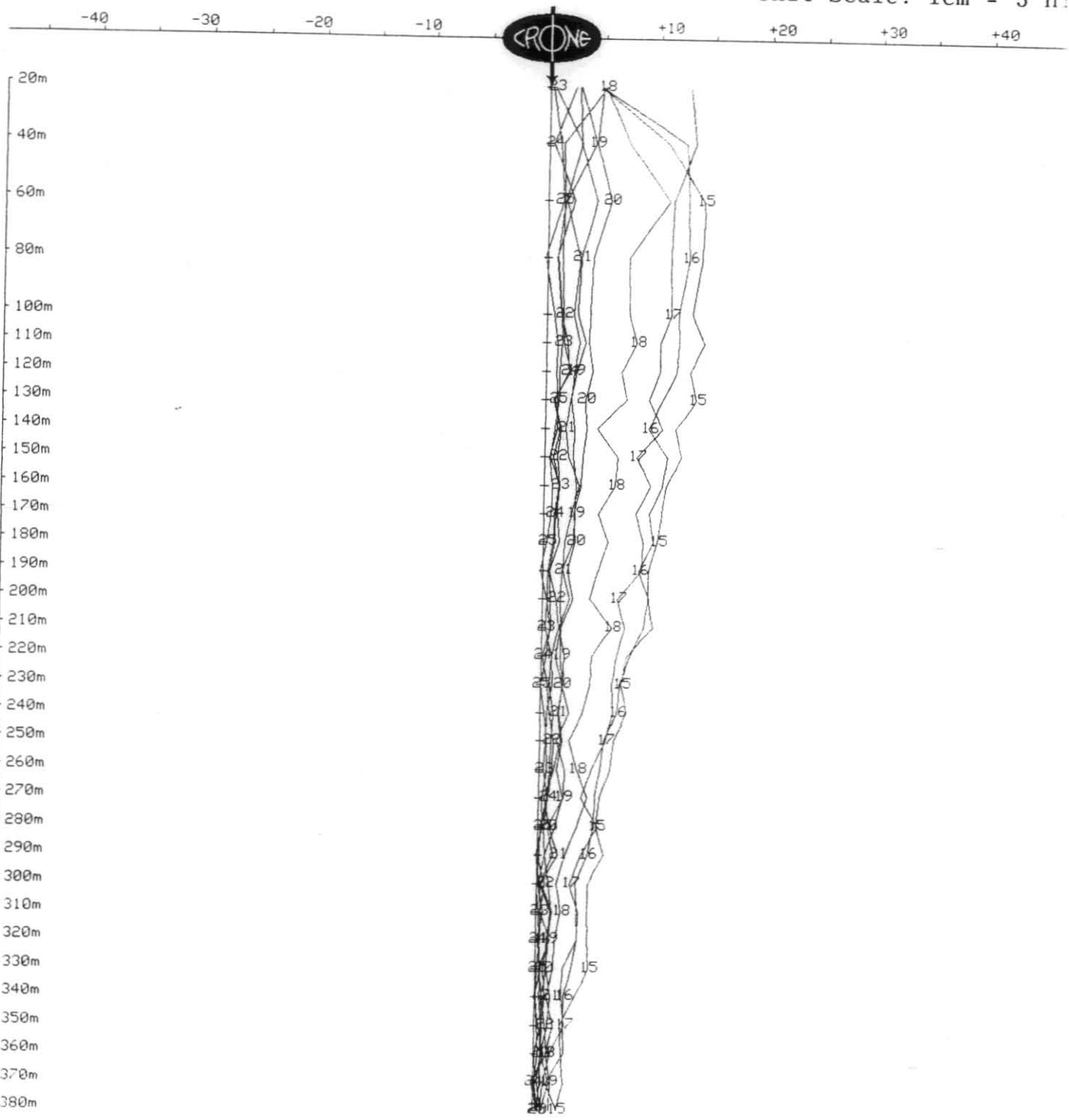
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 31, 1998

Hole : SHD-15
Tx Loop : #2
File name : SHD15Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels

Scale: 1:2000

Unit Scale: 1cm = 5 n



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675509

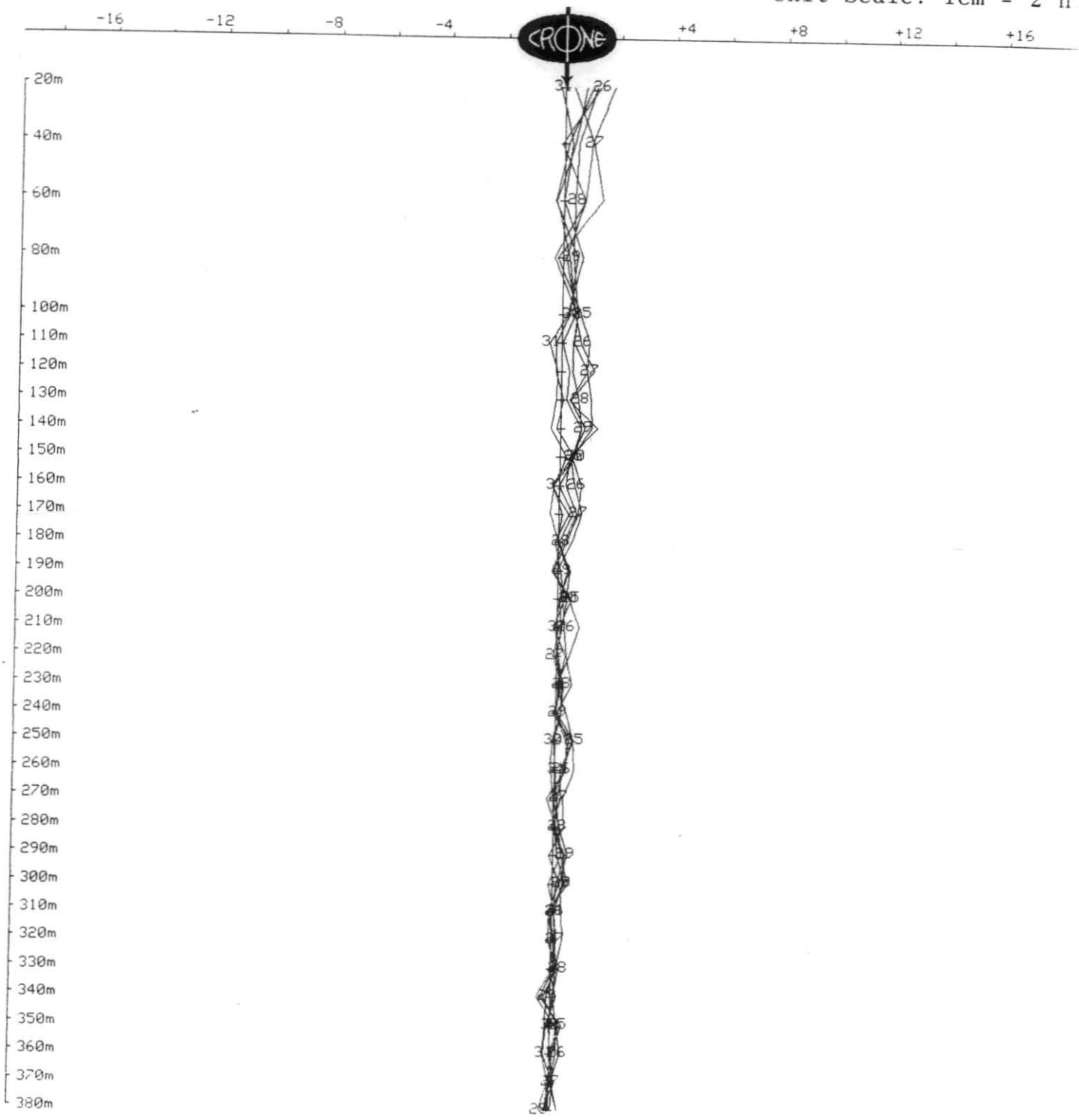
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 31, 1998

Hole : SHD-15
Tx Loop : #2
File name : SHD15Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels

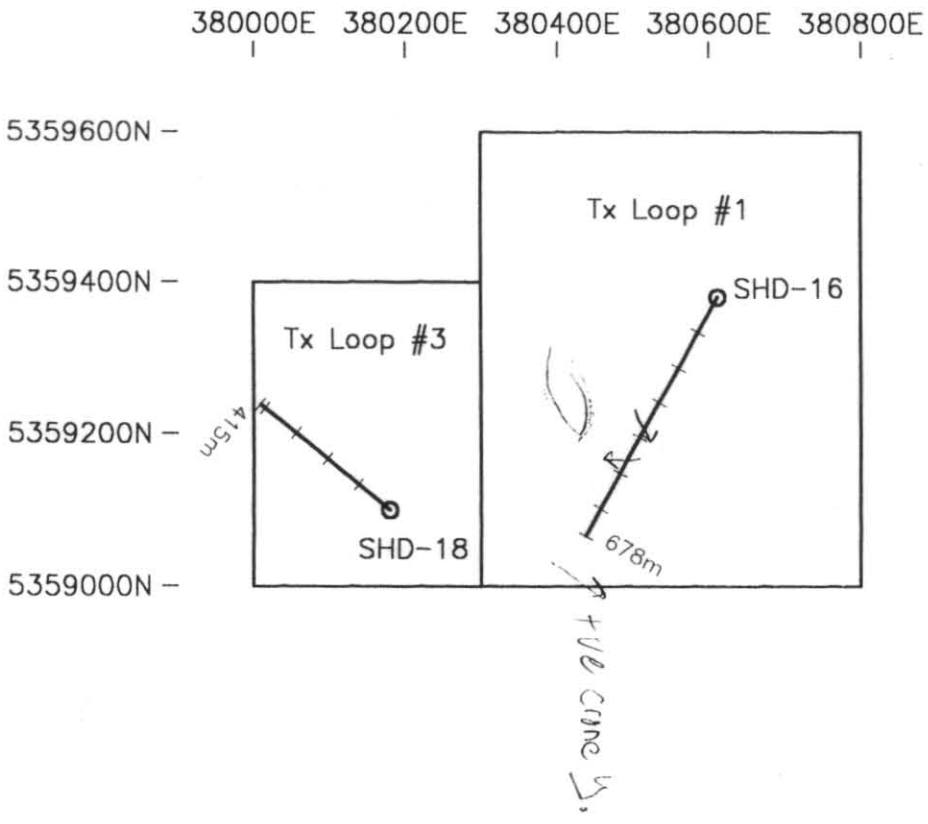
Scale: 1:2000

Unit Scale: 1cm = 2 n



5 cm

675510





Scale 1:10000

100 0 100 200

(metres)

5 cm

Goldfields Exploration P/L

South Henty

3-D Borehole Pulse EM Survey

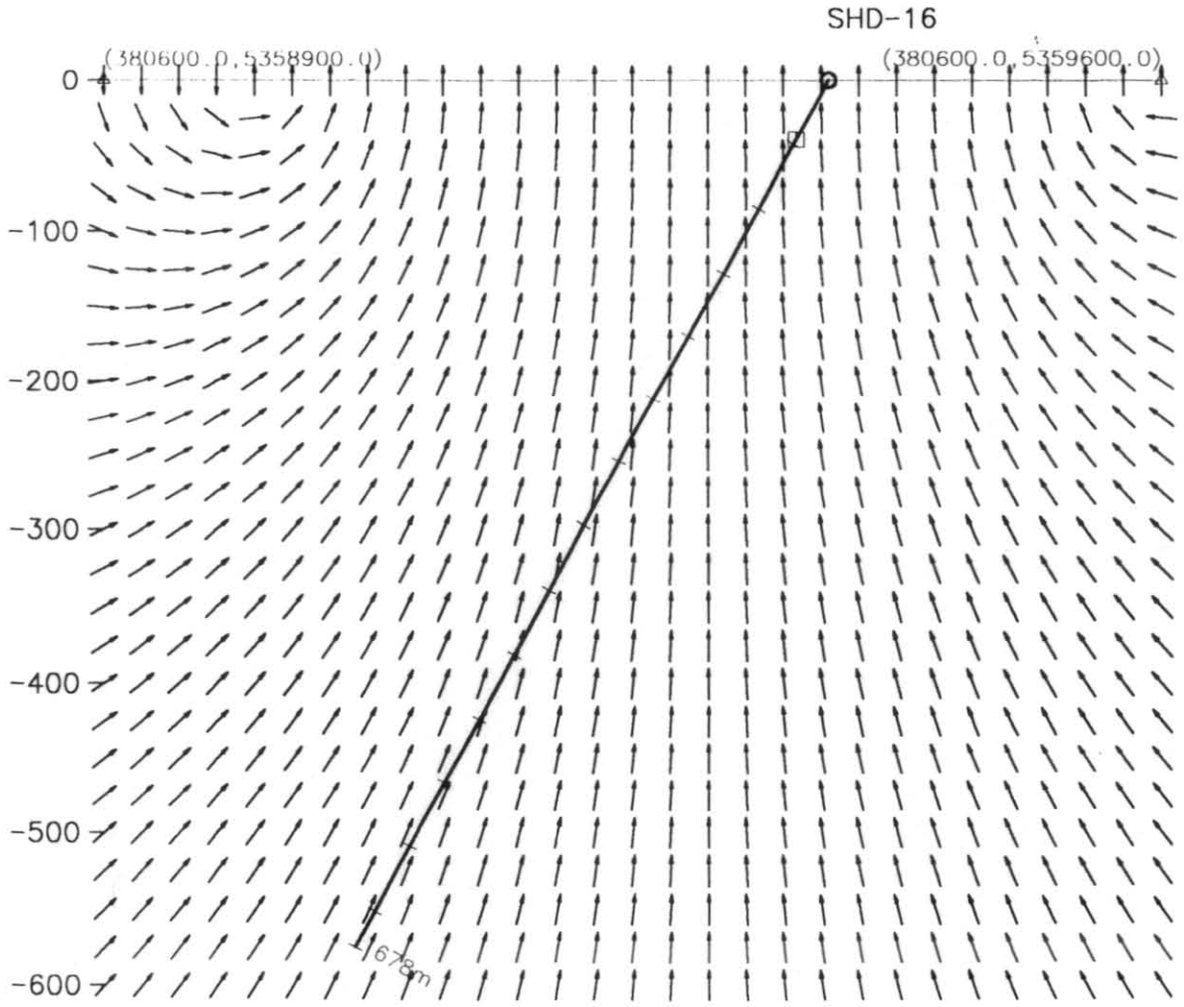
Borehole & Loop Location Map

Hole: SHD-16 & SHD-18

Survey Date: May 27/30, 1998

Outer-Rim Exploration Services

675511



Scale 1:5000

50 0 50 100

(metres)

5 cm

Goldfields Exploration P/L

South Henty

3-D Borehole Pulse EM Survey

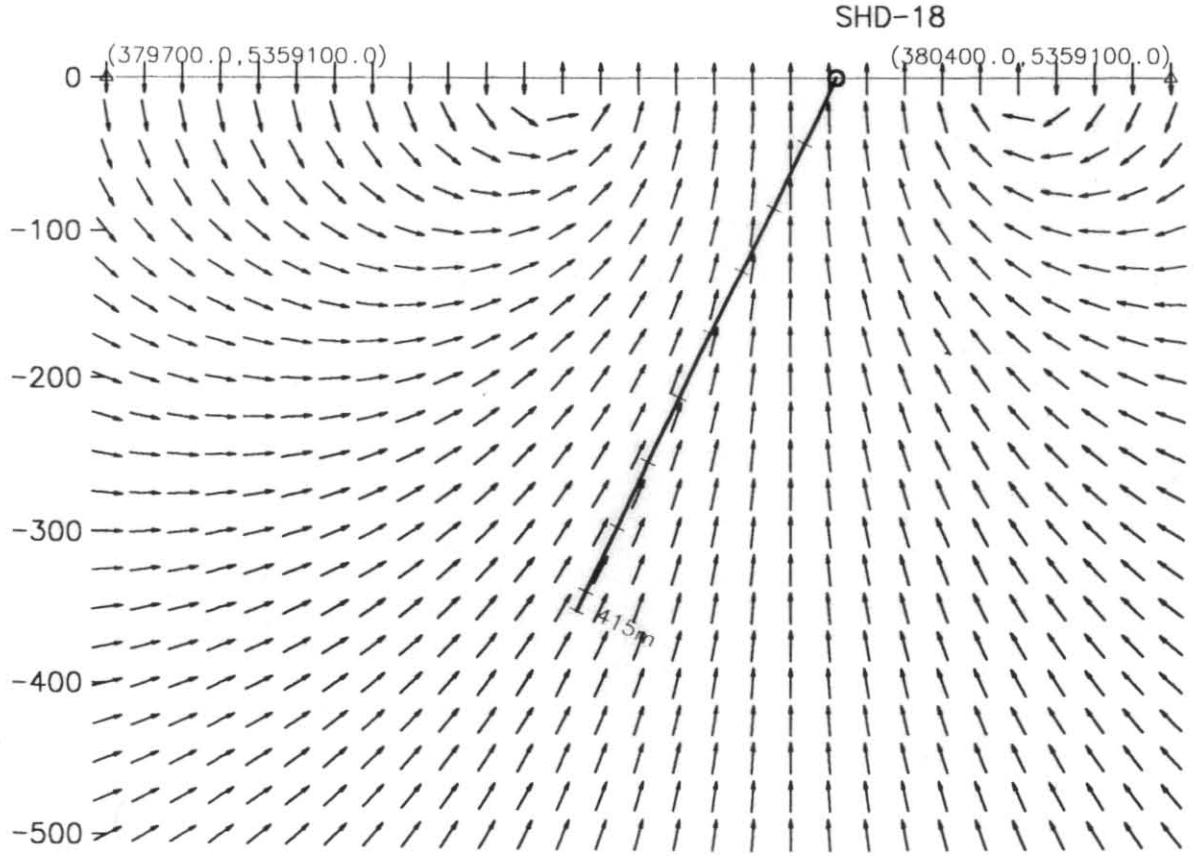
Hole Section with Primary Field

Hole: SHD-16

Survey Date: May 27, 1998

Outer-Rim Exploration Services

675512



Scale 1:5000

50 0 50 100

(metres)

5 cm

Goldfields Exploration P/L

South Henty

3-D Borehole Pulse EM Survey

Hole Section with Primary Field

Hole: SHD-18

Survey Date: May 30, 1998

Outer-Rim Exploration Services

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675513

Client	: Goldfields Exploration P/L	Hole	: SHD-16
Grid	: South Henty	Tx Loop	: #1
Date	: May 27, 1998	File name	: SHD16Z.PEM
Time Base	: 20.00 ms	# Readings	: 58
Ramp Time	: 0.50 ms	Stn Units	: Metric
# Channels	: 31	Coil Area	: 6500 sq m
Sync Type	: Cable	Polarity	: +
Loop Size	: 600m X 500m	Receiver	: Digital #105
Current	: 14 Amps	Operator	: Al McMillan

Loop Coordinates (X,Y,Z)

1. 380300m, 5.3596e+06m, 0m
2. 380300m, 5.359e+06m, 0m
3. 380800m, 5.359e+06m, 0m
4. 380800m, 5.3596e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. 380612m, 5.35938e+06m, 0m
2. 209deg, 58deg, 678m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

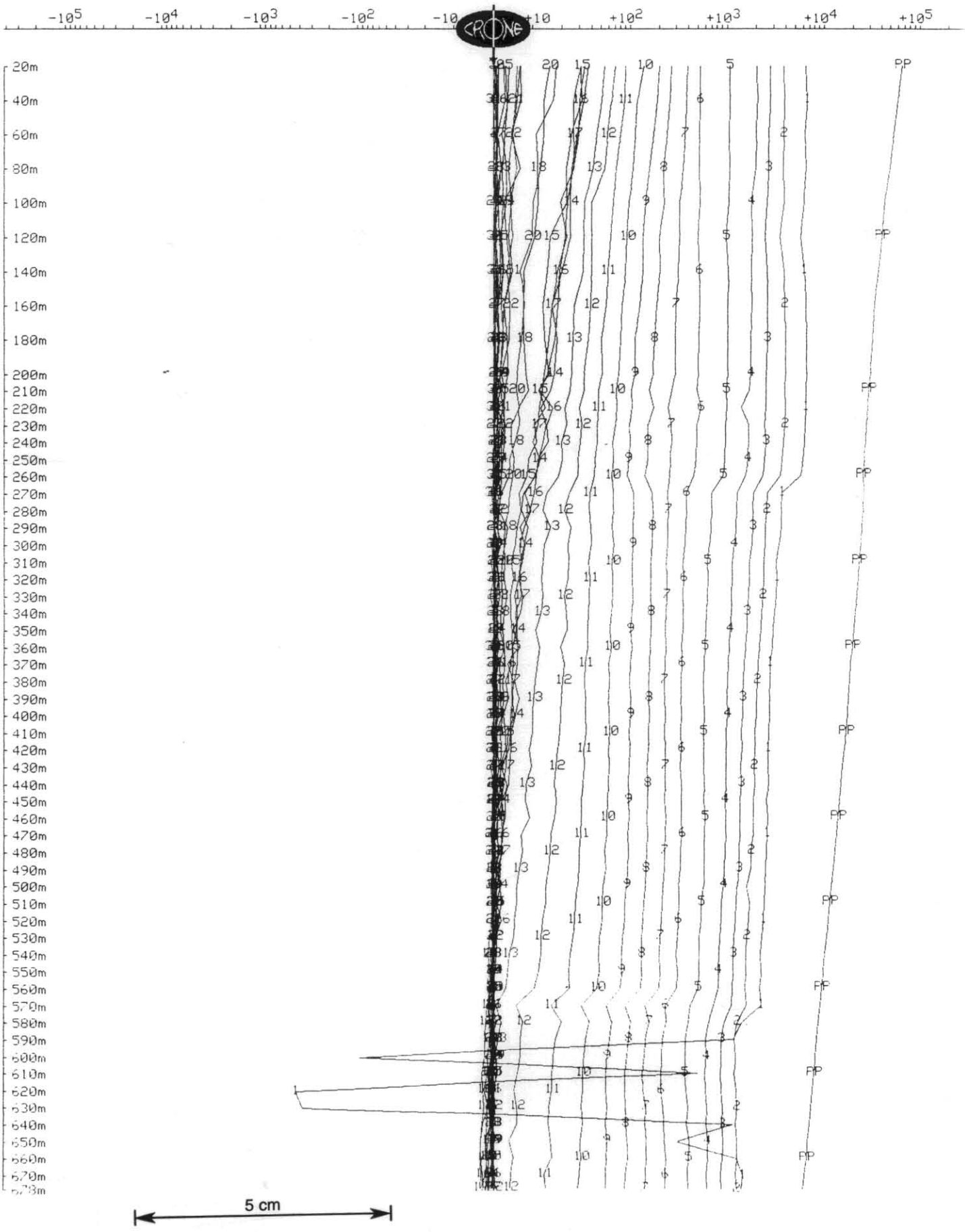
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675514

Client	: Goldfields Exploration P/L	Hole	: SHD-16
Grid	: South Henty	Tx Loop	: #1
Date	: May 27, 1998	File name	: SHD16Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels and PP

Scale: 1:3000



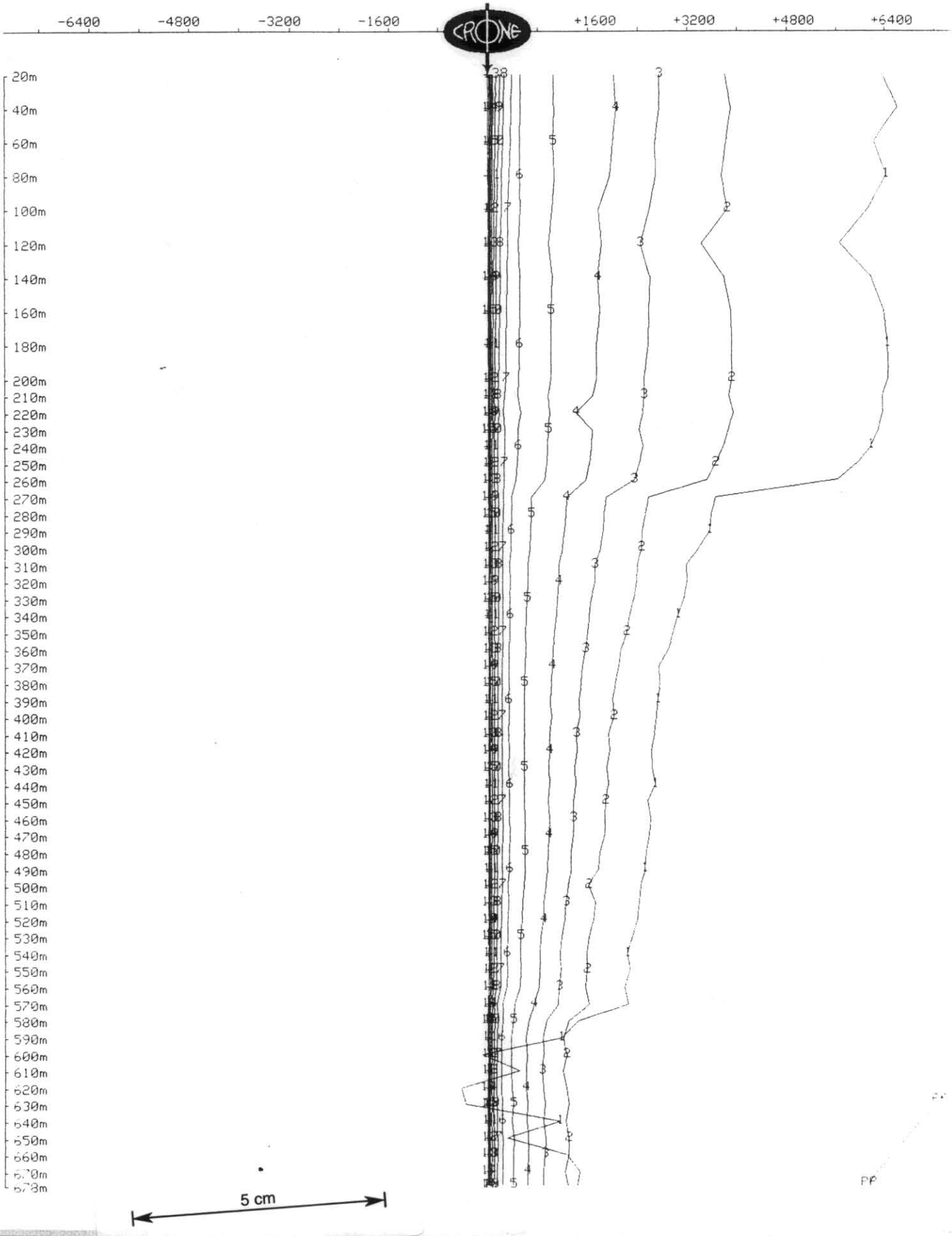
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675515

Client	: Goldfields Exploration P/L	Hole	: SHD-16
Grid	: South Henty	Tx Loop	: #1
Date	: May 27, 1998	File name	: SHD16Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels and PP

Scale: 1:3000 Unit Scale: 1cm = 800 nT



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675516

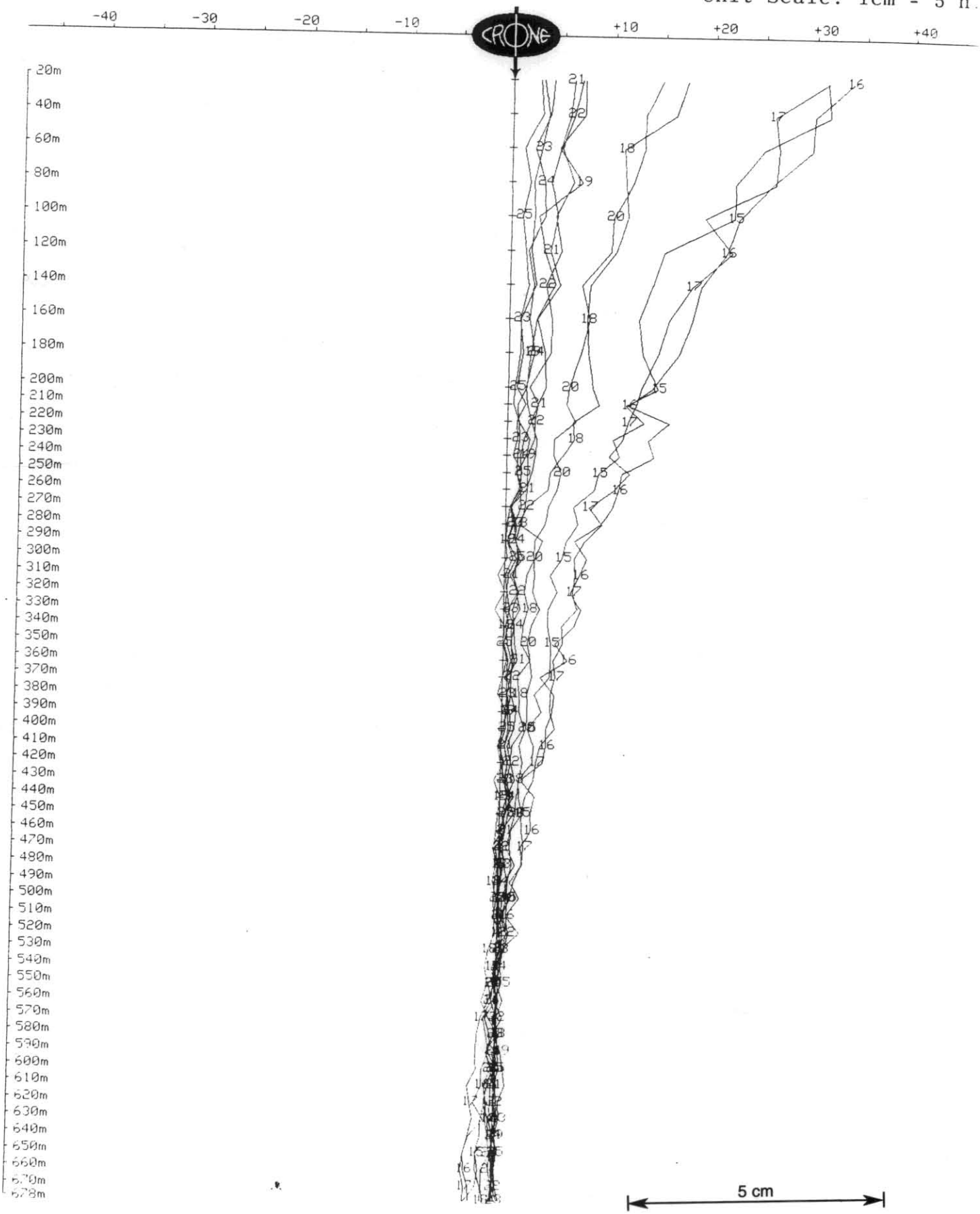
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 27, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels

Scale: 1:3000

Unit Scale: 1cm = 5 n



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675517

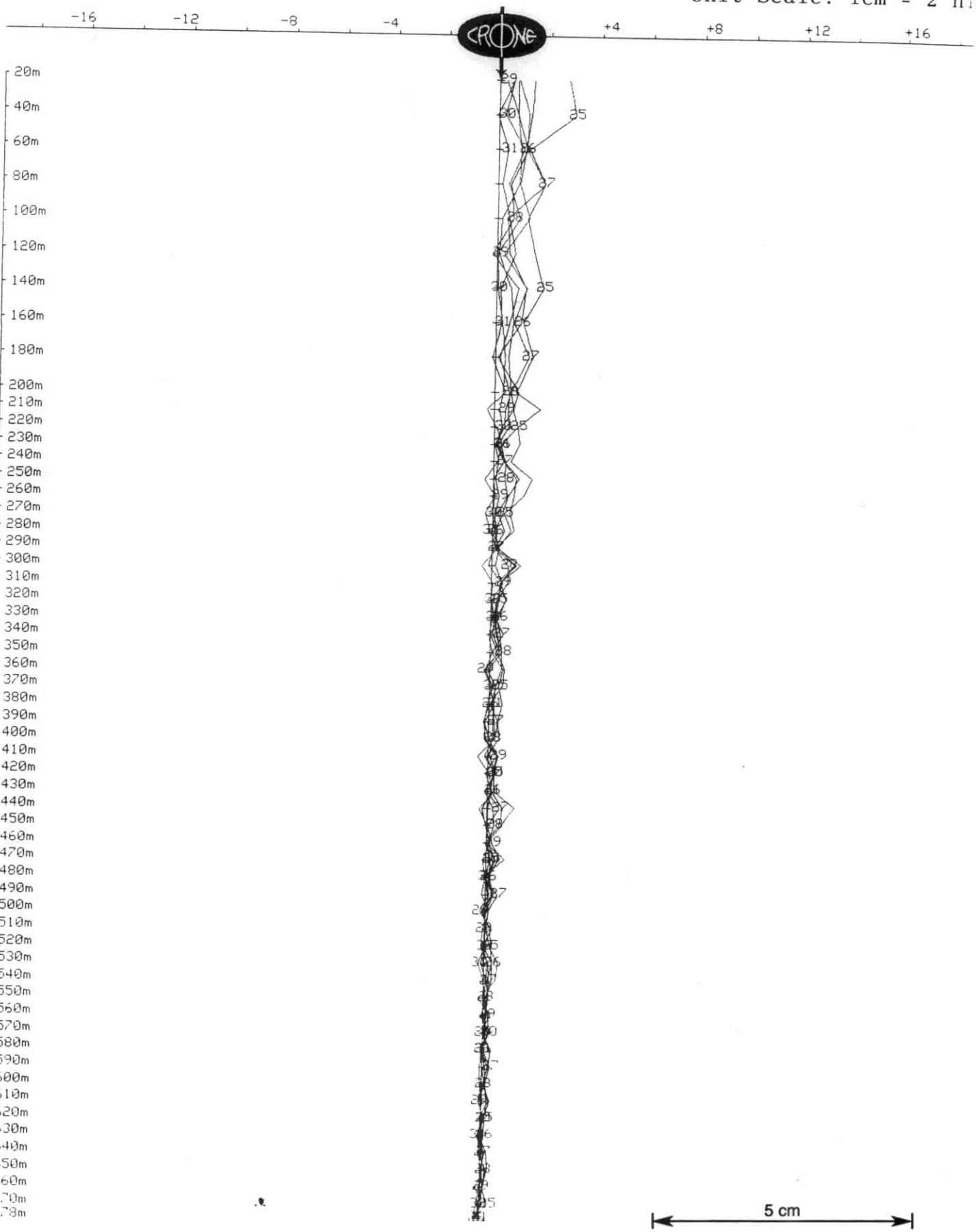
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 27, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels

Scale: 1:3000

Unit Scale: 1cm = 2 nT



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

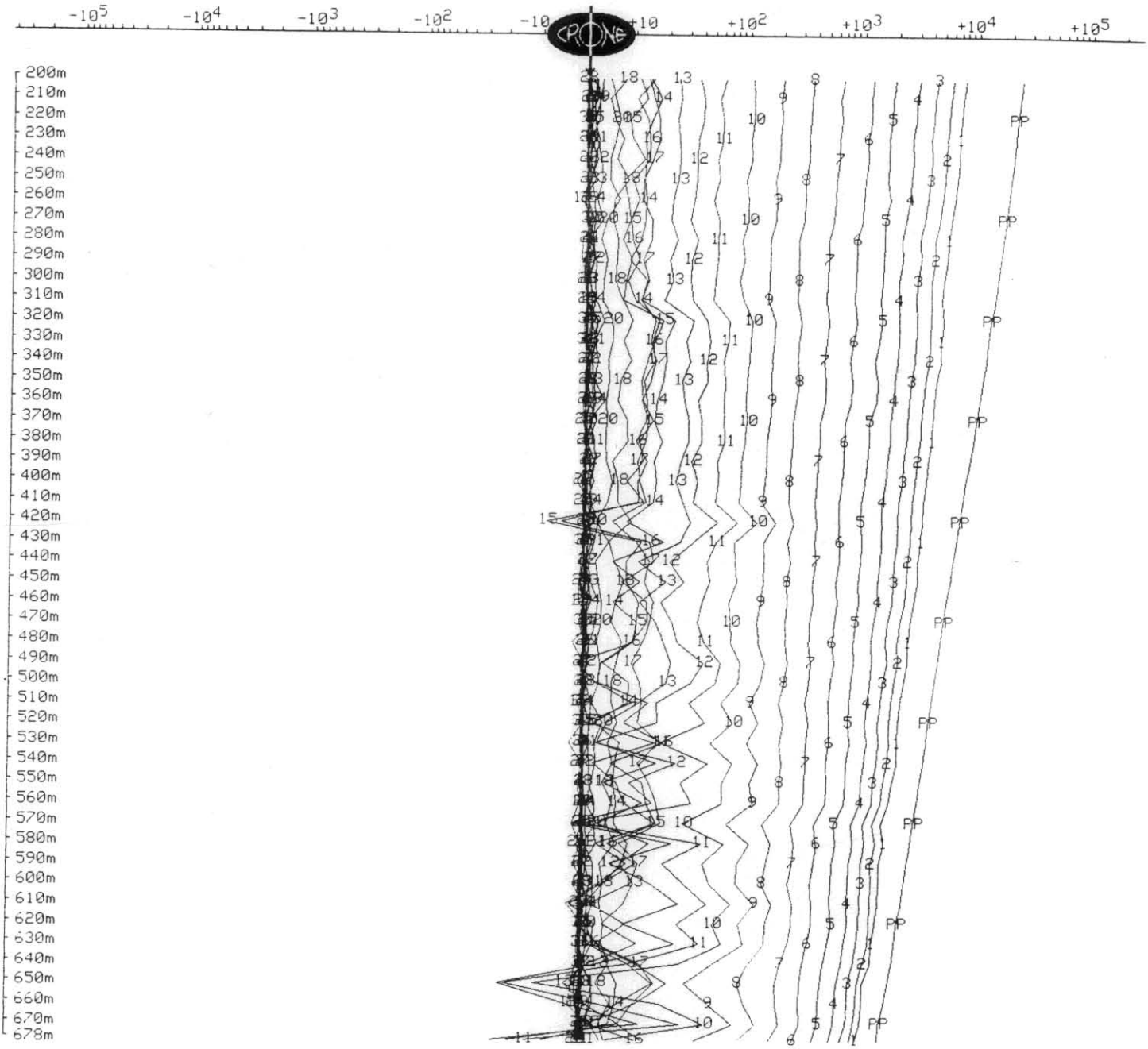
675518

Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels and PP

Scale: 1:3000



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675519

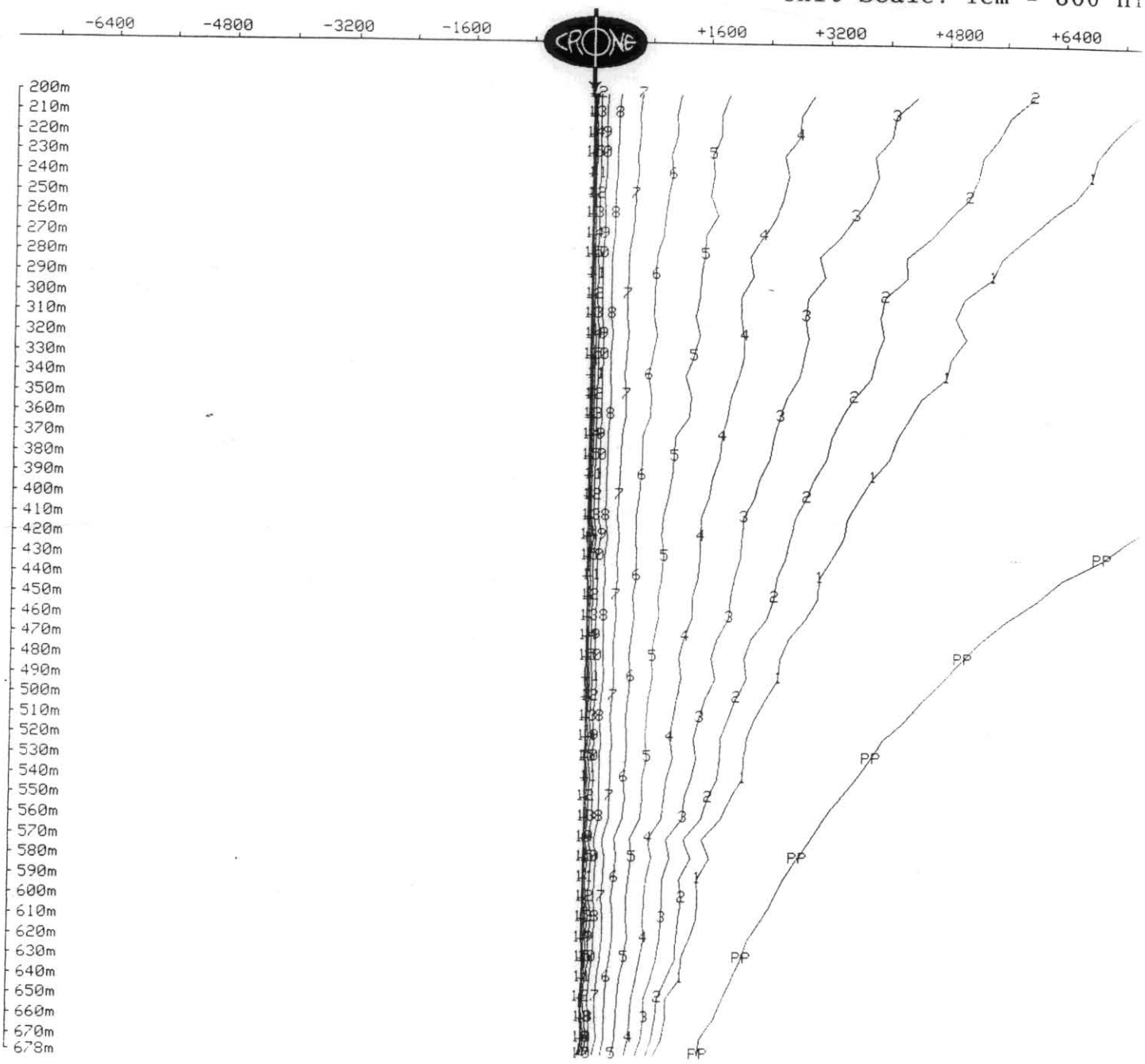
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels and PP

Scale: 1:3000

Unit Scale: 1cm = 800 nT



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675520

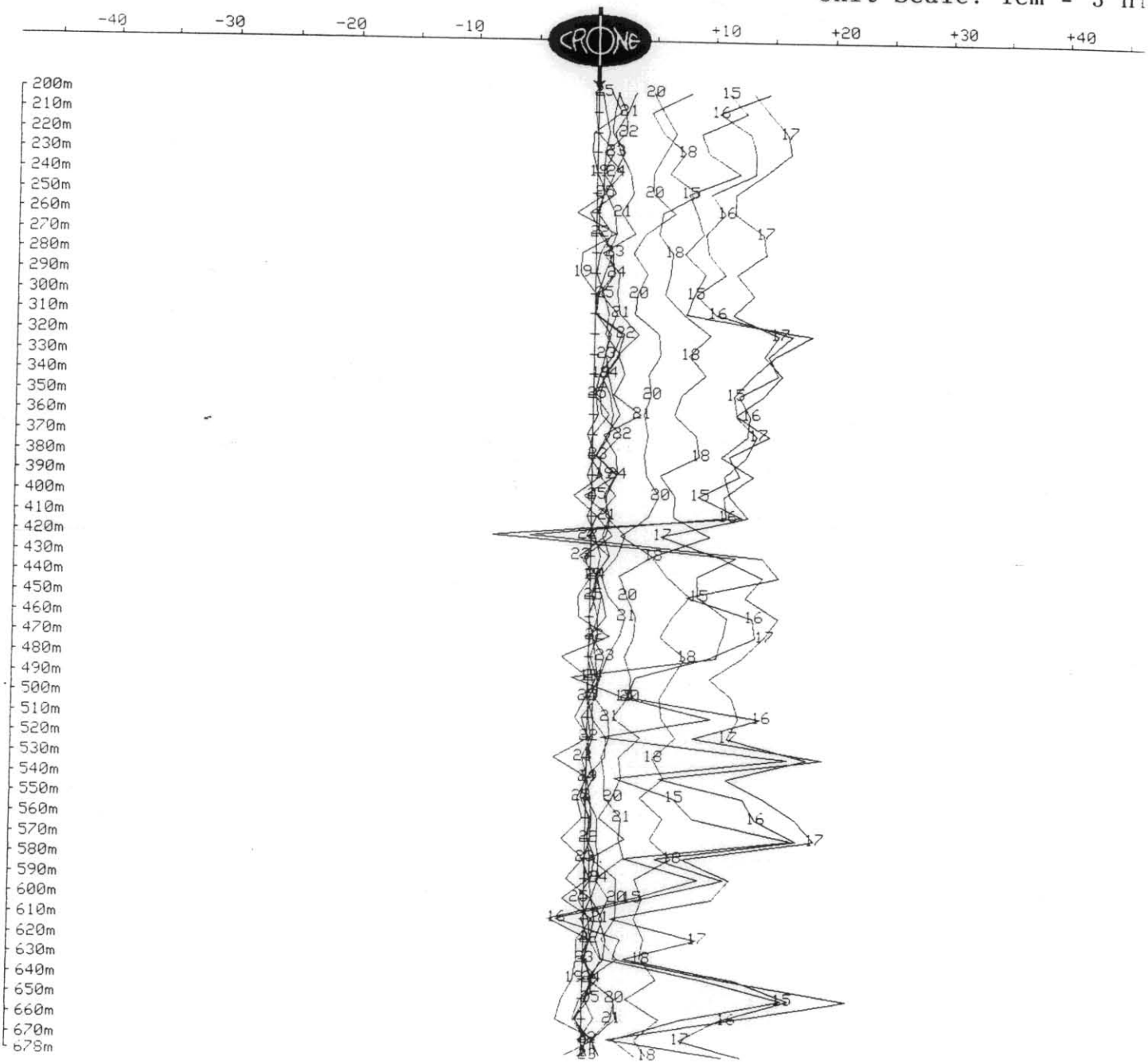
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels

Scale: 1:3000

Unit Scale: 1cm = 5 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

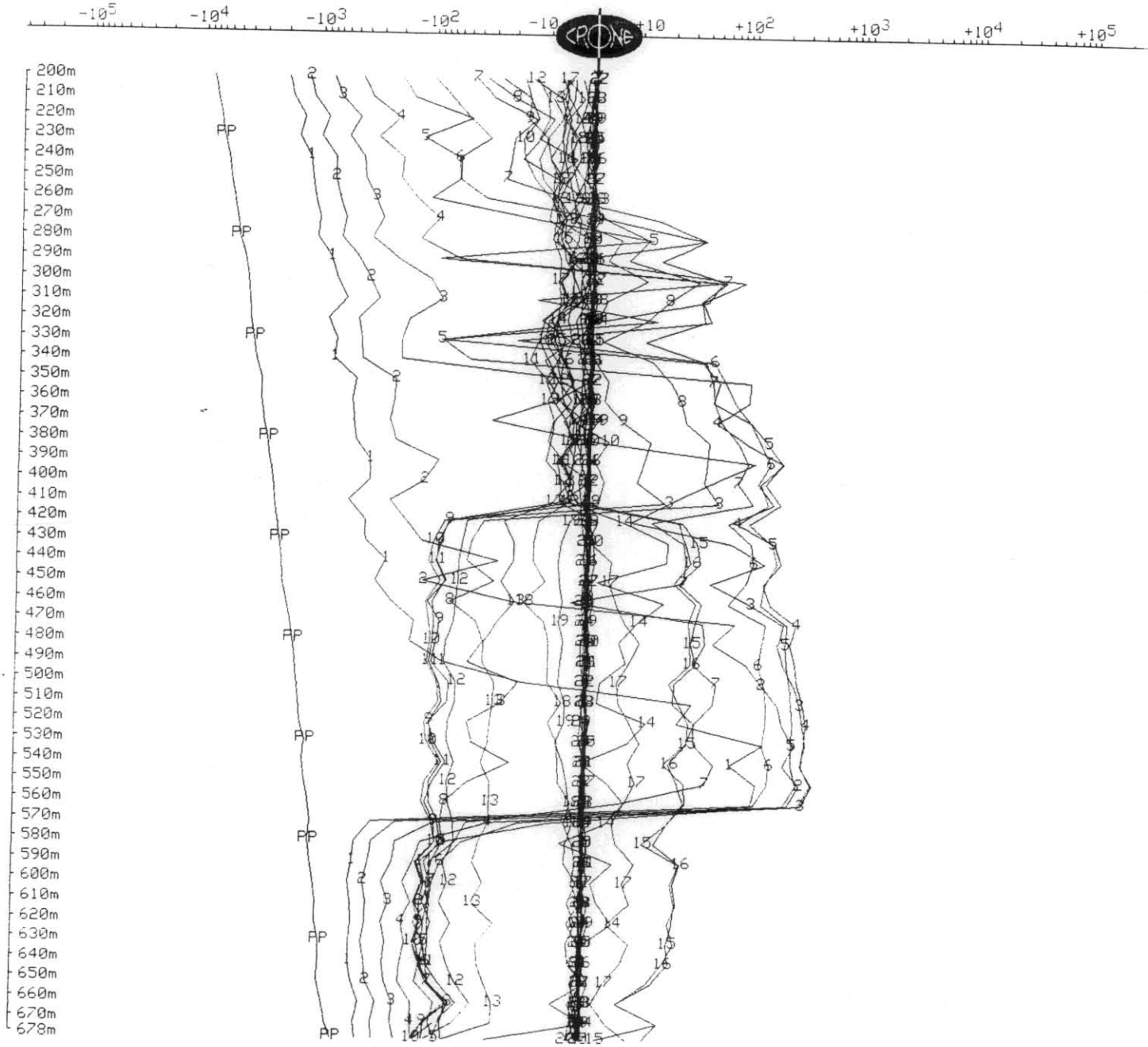
675521

Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels and PP

Scale: 1:3000



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675522

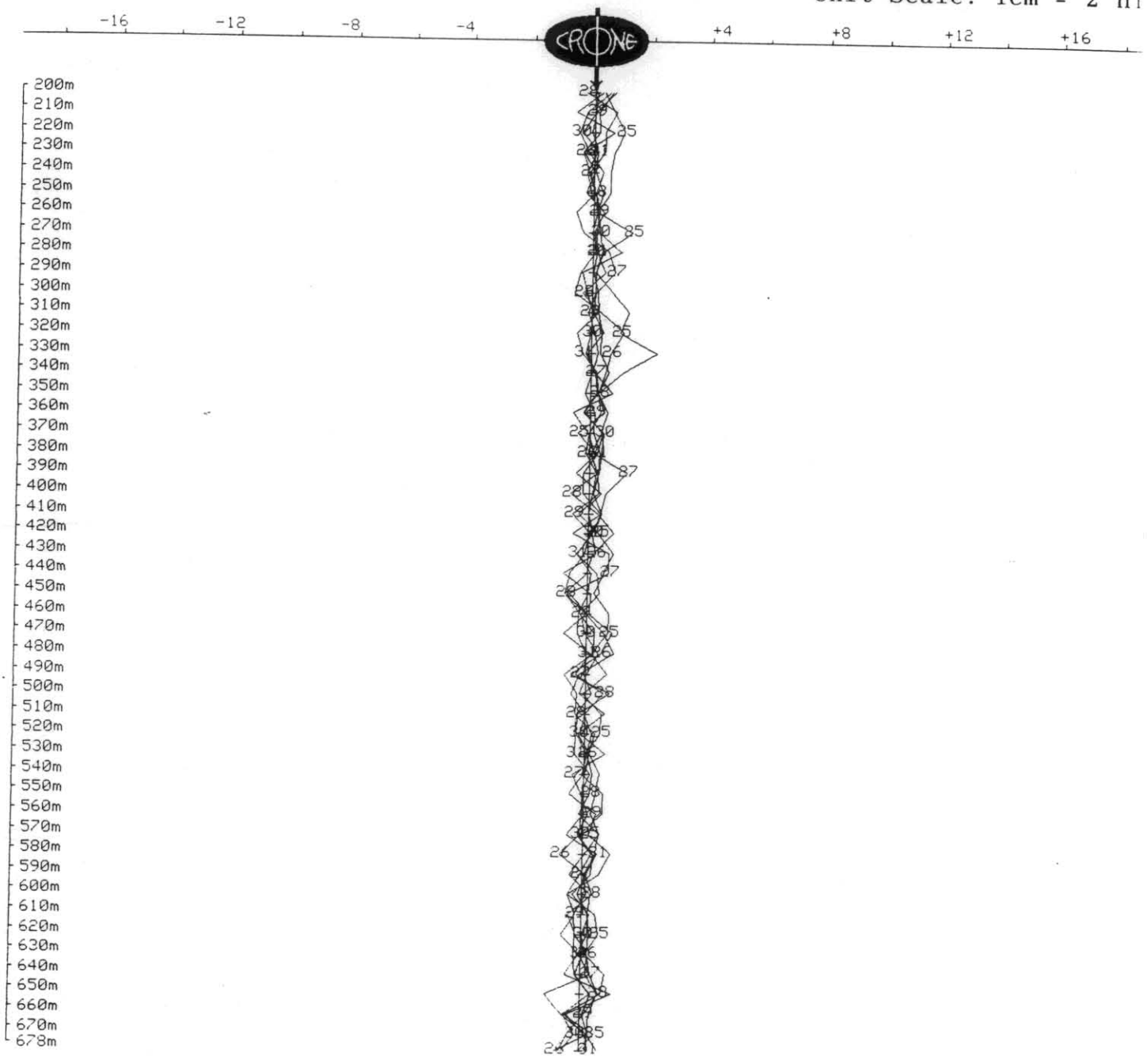
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels

Scale: 1:3000

Unit Scale: 1cm = 2 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675523

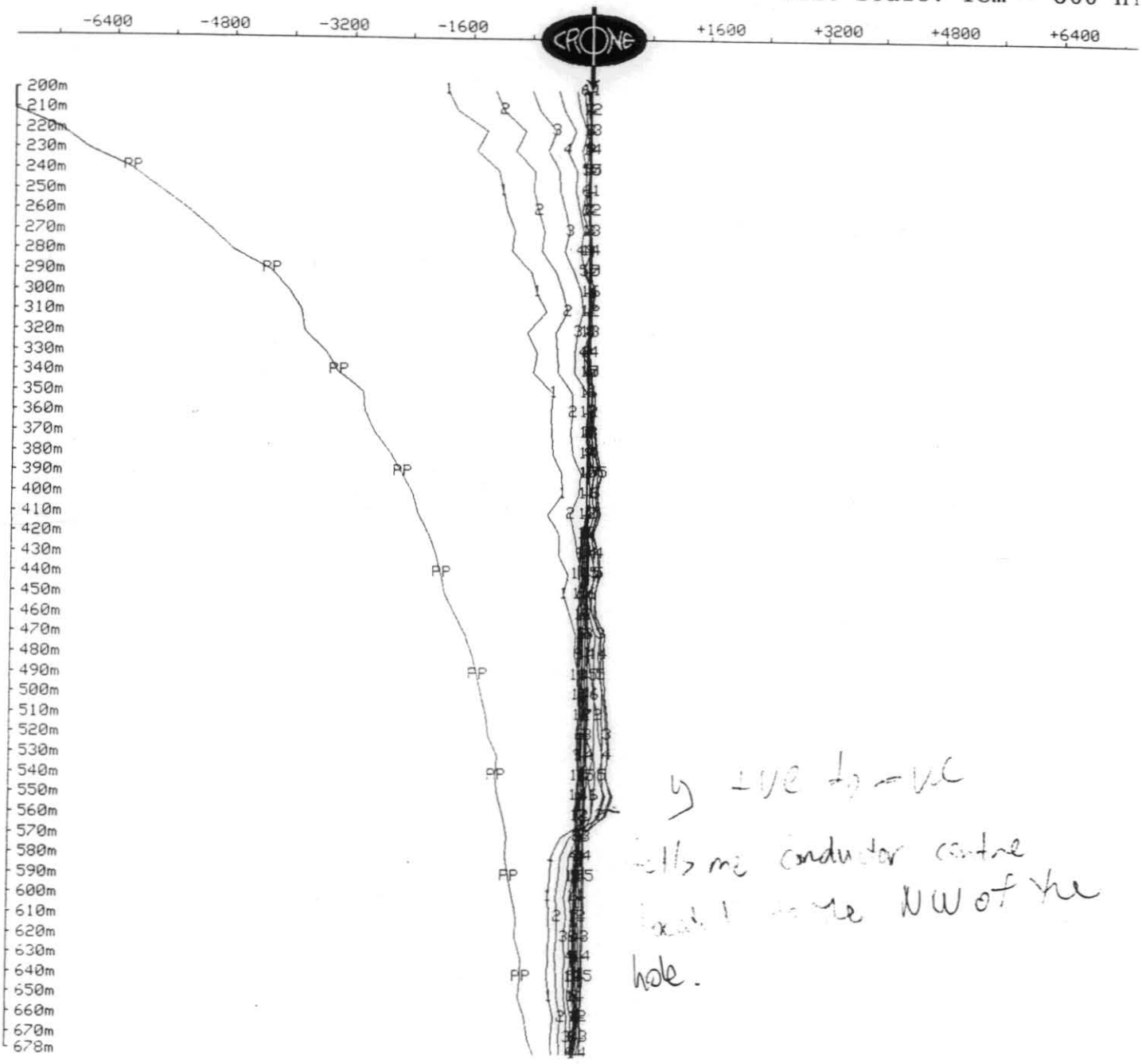
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels and PP

Scale: 1:3000

Unit Scale: 1cm = 800 nT



y -ve to -ve
-ll> me conductor centre
[illegible] me NW of the
hole.

5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675524

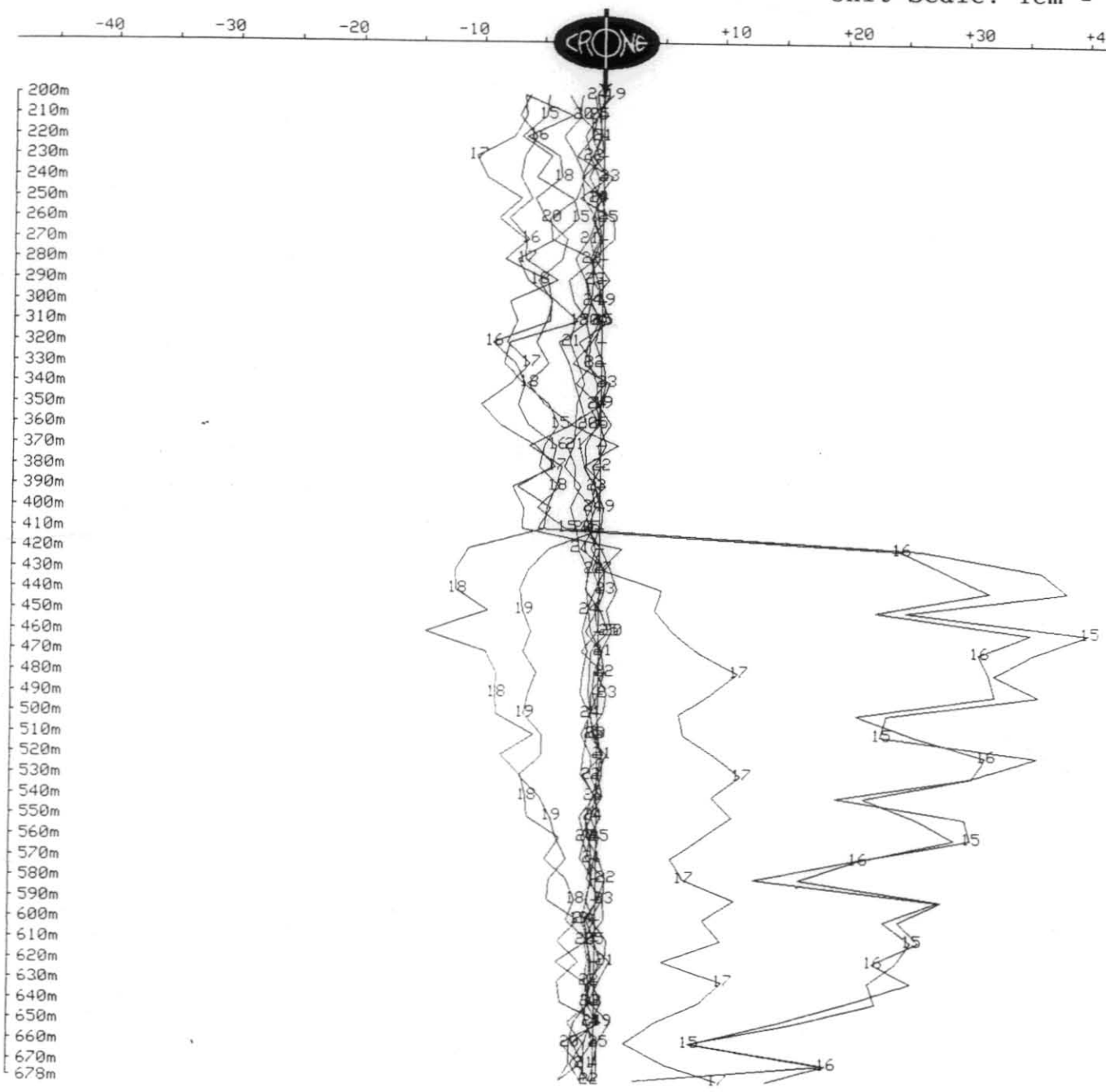
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels

Scale: 1:3000

Unit Scale: 1cm = 5 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

6755525

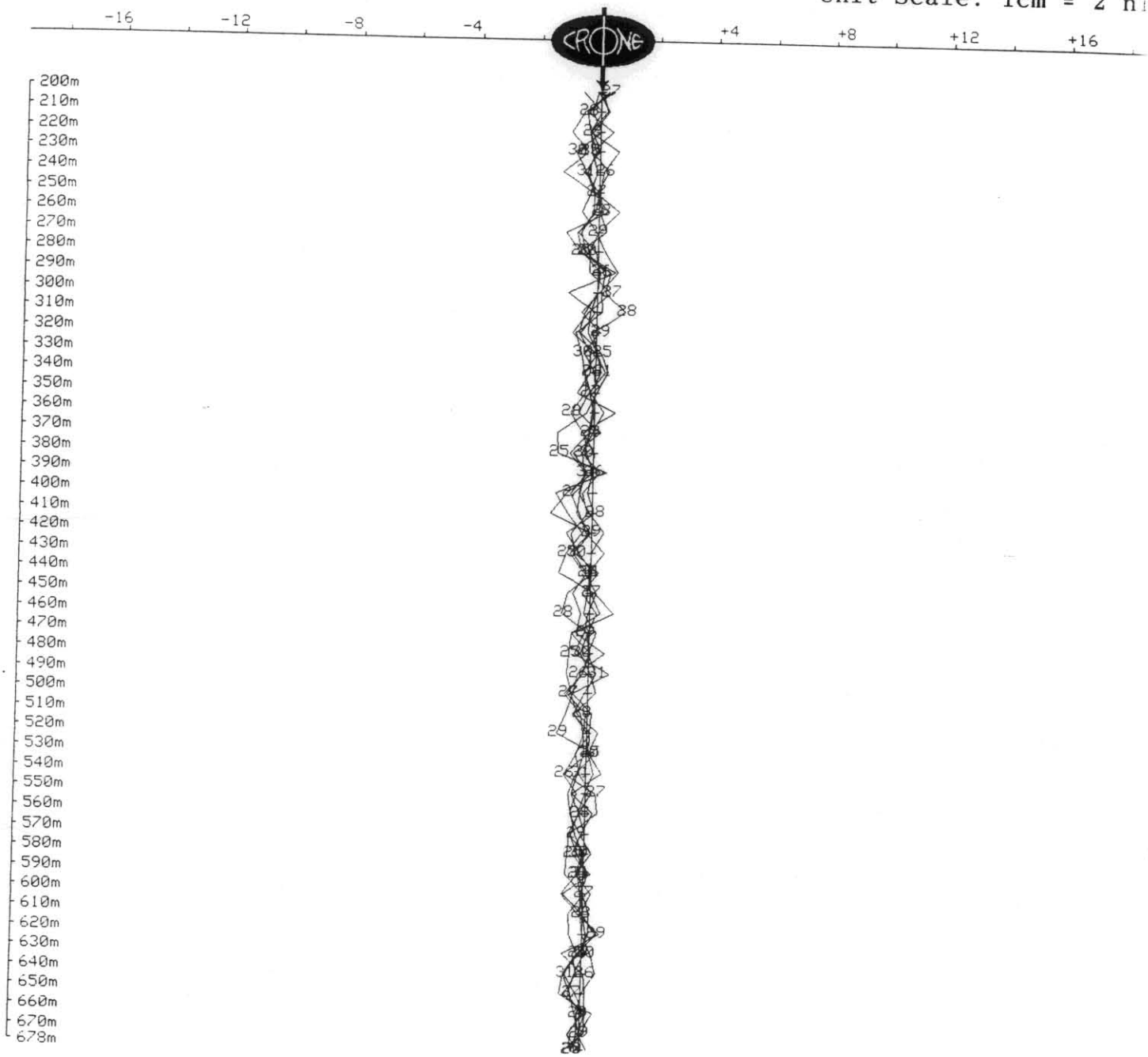
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels

Scale: 1:3000

Unit Scale: 1cm = 2 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

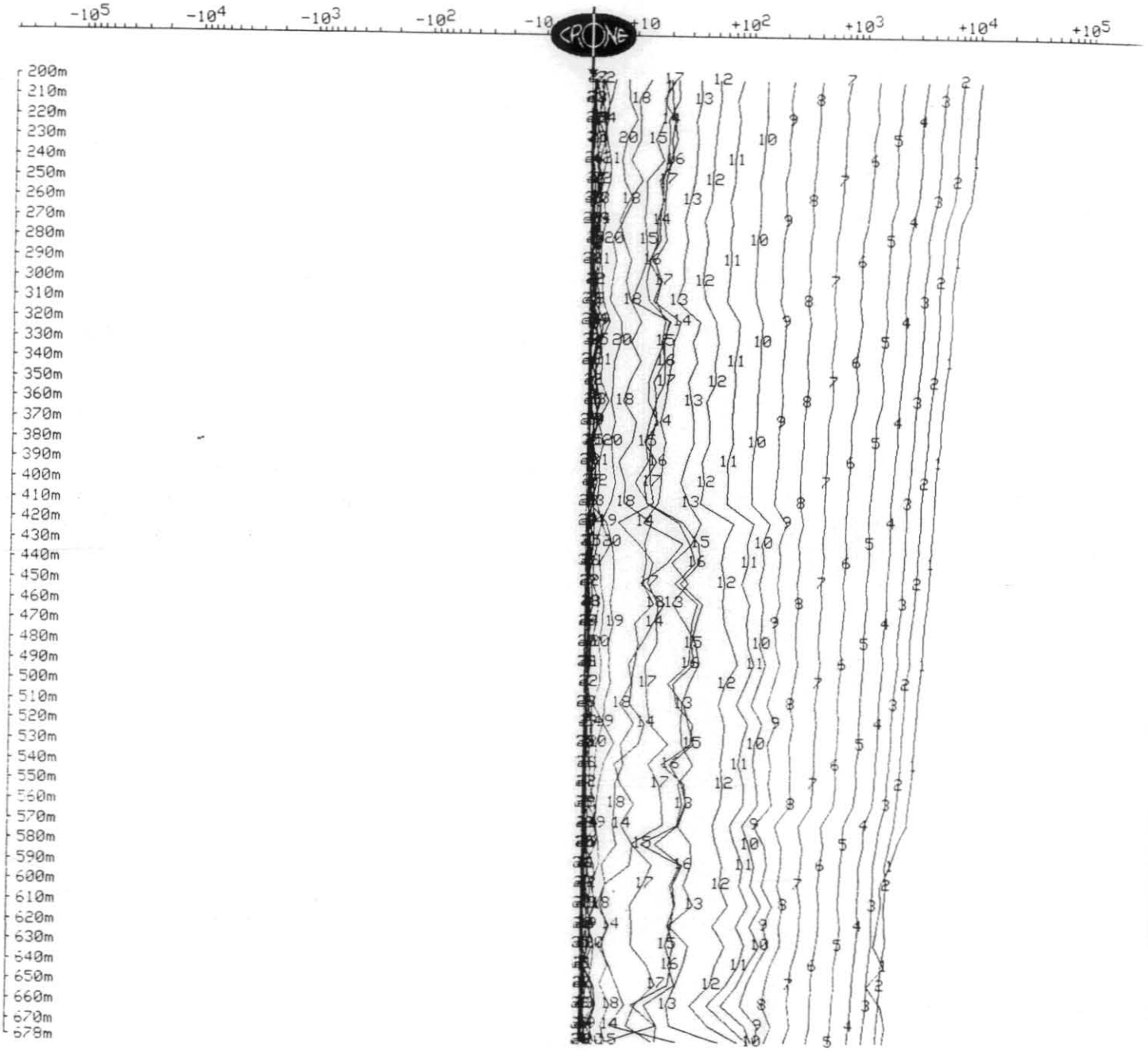
675526

Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 28, 1998

Hole : SHD-16
Tx Loop : #1
File name : SHD16XYZ.PEM

TOTAL FIELD dBxyz/dt nanoTesla/sec - 31 channels

Scale: 1:3000



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675527

Client	: Goldfields Exploration P/L	Hole	: SHD-18
Grid	: South Henty	Tx Loop	: #3
Date	: May 30, 1998	File name	: SHD18Z.PEM
Time Base	: 20.00 ms	# Readings	: 37
Ramp Time	: 0.50 ms	Stn Units	: Metric
# Channels	: 31	Coil Area	: 6500 sq m
Sync Type	: Cable	Polarity	: +
Loop Size	: 300m X 400m	Receiver	: Digital #105
Current	: 16 Amps	Operator	: Al McMillan

Loop Coordinates (X,Y,Z)

1. 380000m, 5.3594e+06m, 0m
2. 380000m, 5.359e+06m, 0m
3. 380300m, 5.359e+06m, 0m
4. 380300m, 5.3594e+06m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. 380180m, 5.3591e+06m, 0m
2. 309deg, 58deg, 415m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	50	58	54	2	58	72	65
3	72	86	79	4	86	104	94	5	104	126	115
6	126	153	140	7	153	185	169	8	185	225	205
9	225	270	248	10	270	328	299	11	328	396	362
12	396	482	439	13	482	580	531	14	580	702	641
15	702	850	776	16	850	1026	938	17	1026	1242	1134
18	1242	1498	1370	19	1498	1813	1656	20	1813	2187	2000
21	2187	2646	2416	22	2646	3195	2920	23	3195	3861	3528
24	3861	4666	4264	25	4666	5634	5150	26	5634	6808	6221
27	6808	8221	7514	28	8221	9936	9078	29	9936	12000	10968
30	12000	14490	13245	31	14490	17510	16000				

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

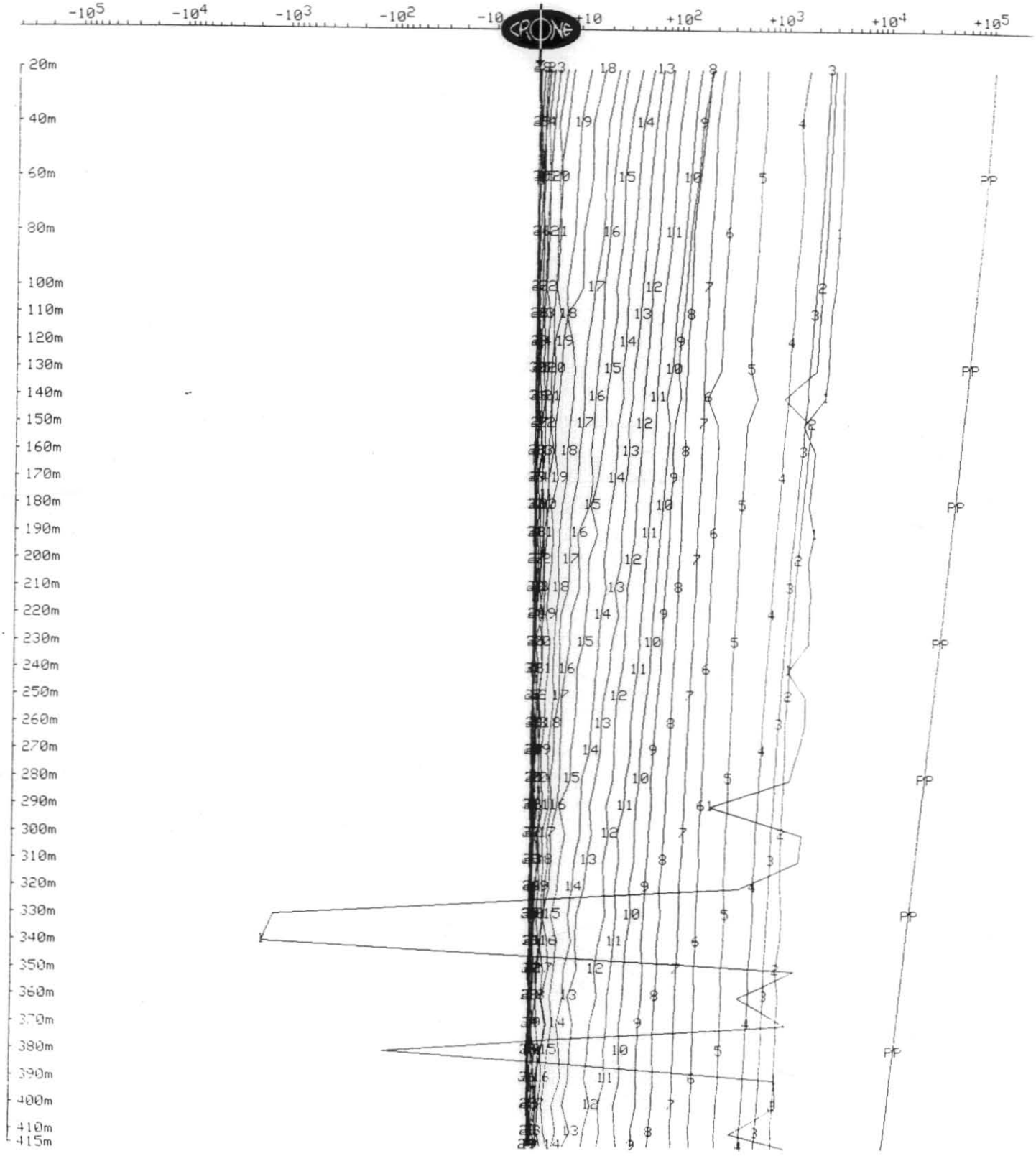
675528

Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 30, 1998

Hole : SHD-18
Tx Loop : #3
File name : SHD18Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675529

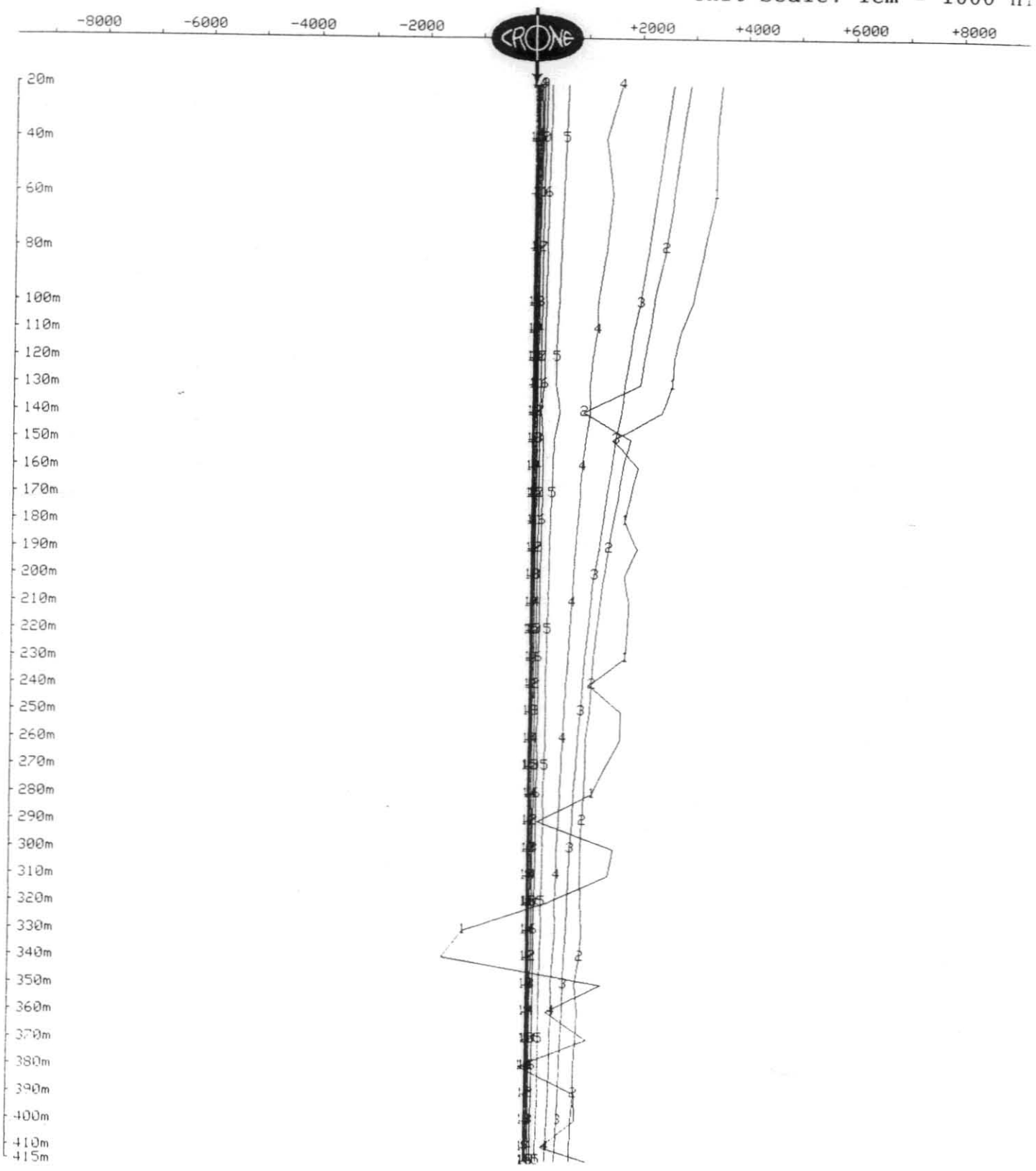
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 30, 1998

Hole : SHD-18
Tx Loop : #3
File name : SHD18Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000

Unit Scale: 1cm = 1000 nT



5 cm

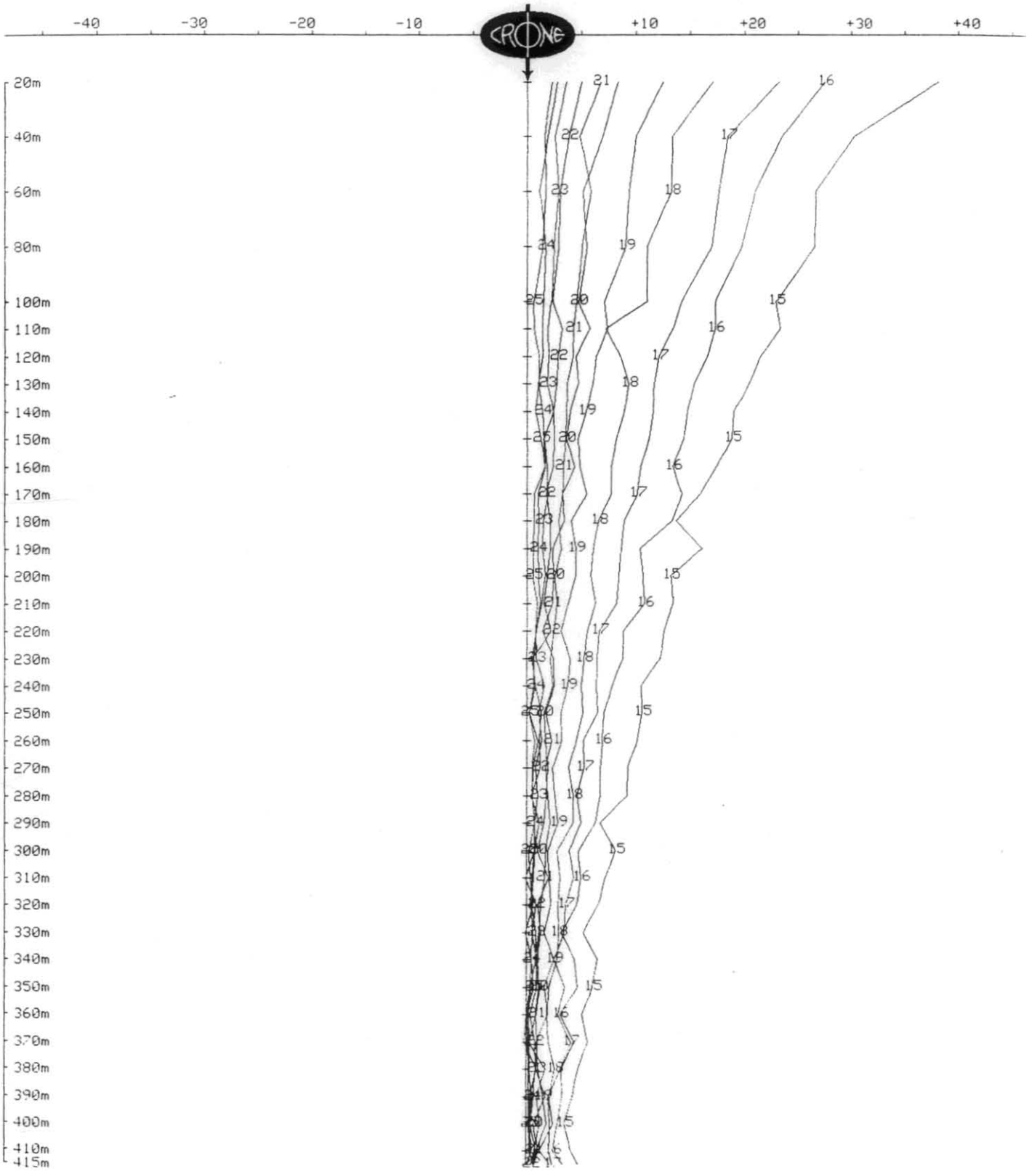
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675530

Client	: Goldfields Exploration P/L	Hole	: SHD-18
Grid	: South Henty	Tx Loop	: #3
Date	: May 30, 1998	File name	: SHD18Z.PEM

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels

Scale: 1:2000 Unit Scale: 1cm = 5 nT



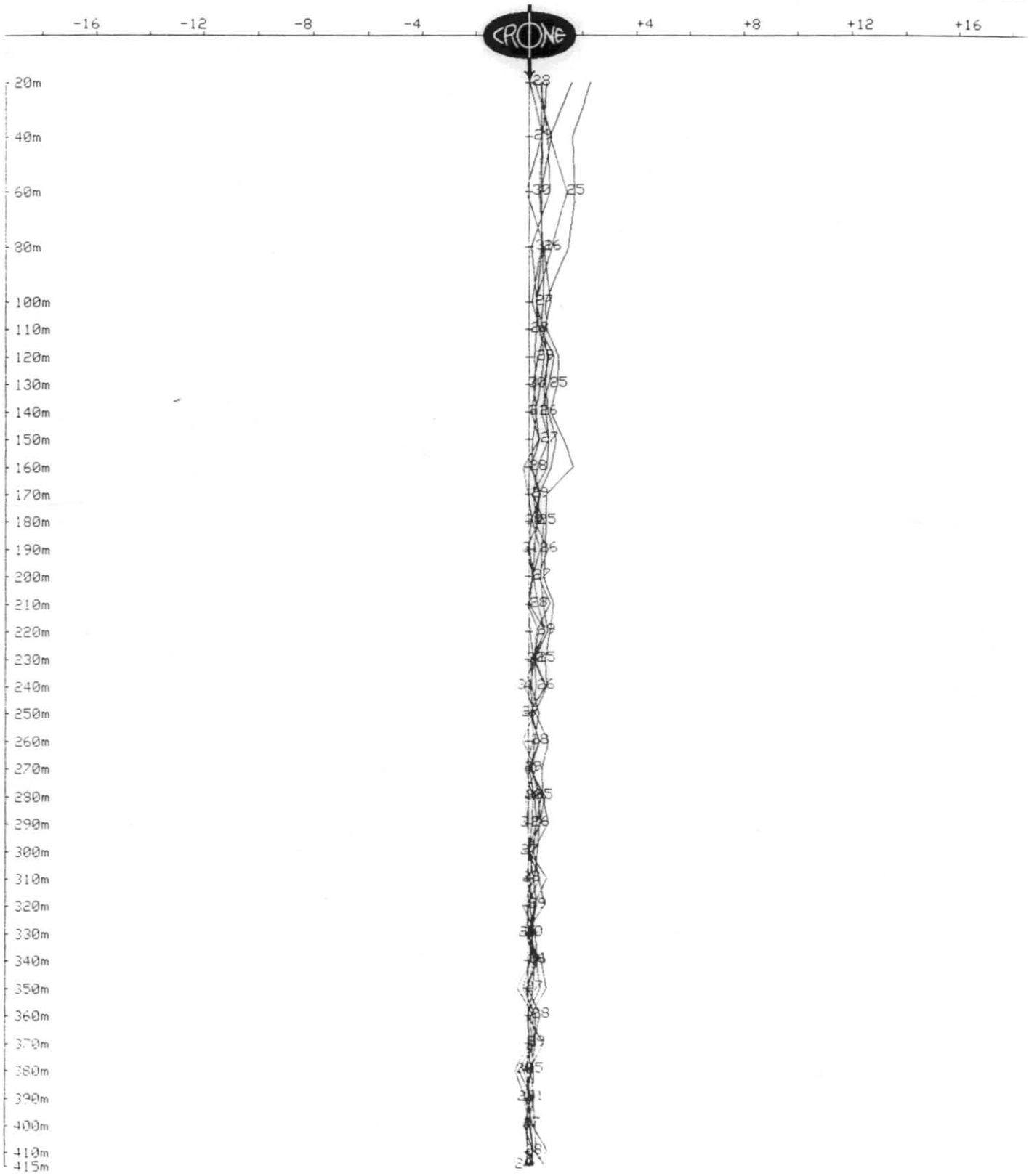
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675531

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Grid : **South Henty** Tx Loop : **#3**
Date : **May 30, 1998** File name : **SHD18Z.PEM**

Z COMPONENT dBz/dt nanoTesla/sec - 31 channels

Scale: 1:2000 Unit Scale: 1cm = 2 nT



5 cm

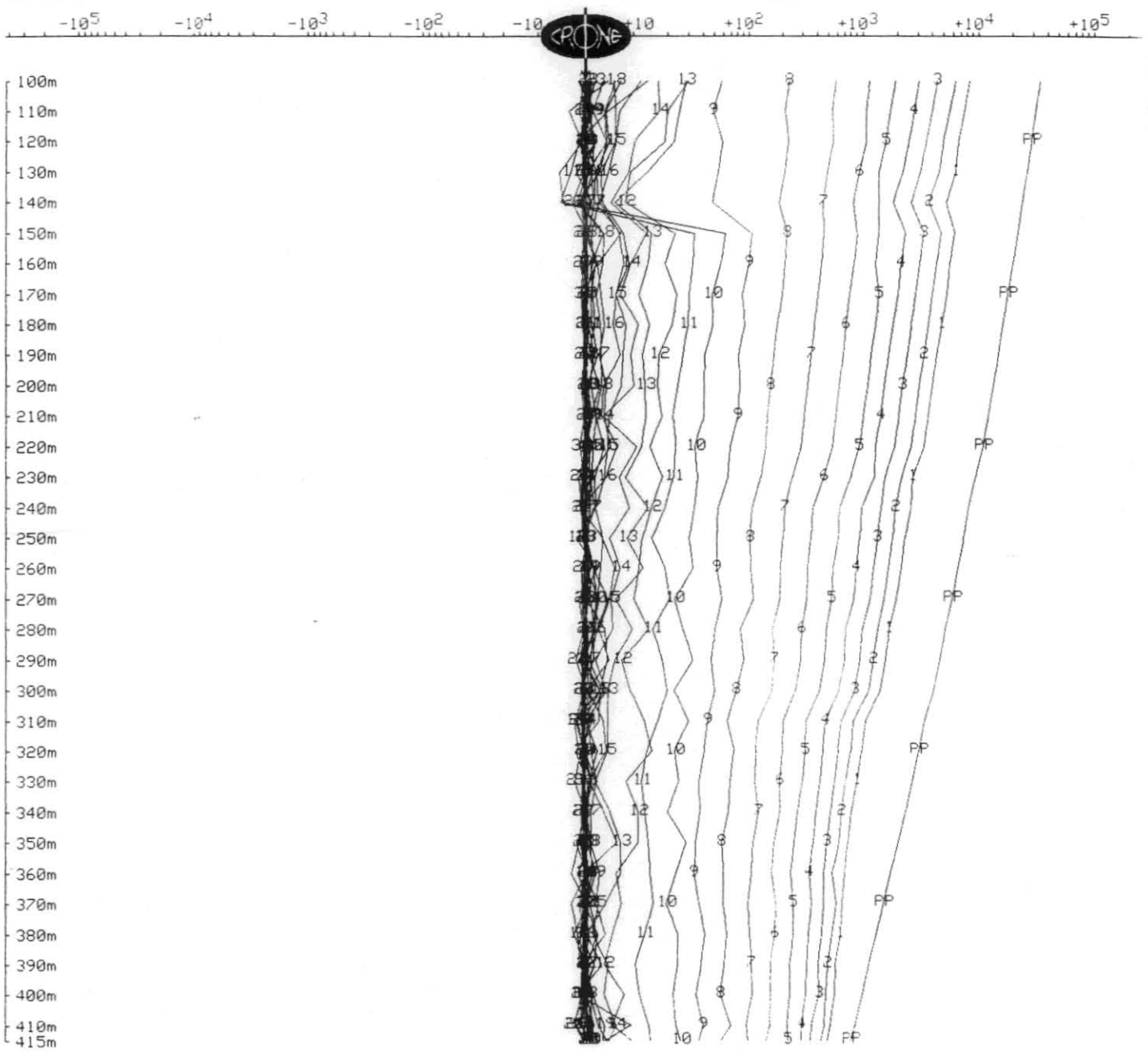
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675532

Client	: Goldfields Exploration P/L	Hole	: SHD-18
Grid	: South Henty	Tx Loop	: #3
Date	: May 30, 1998	File name	: SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000



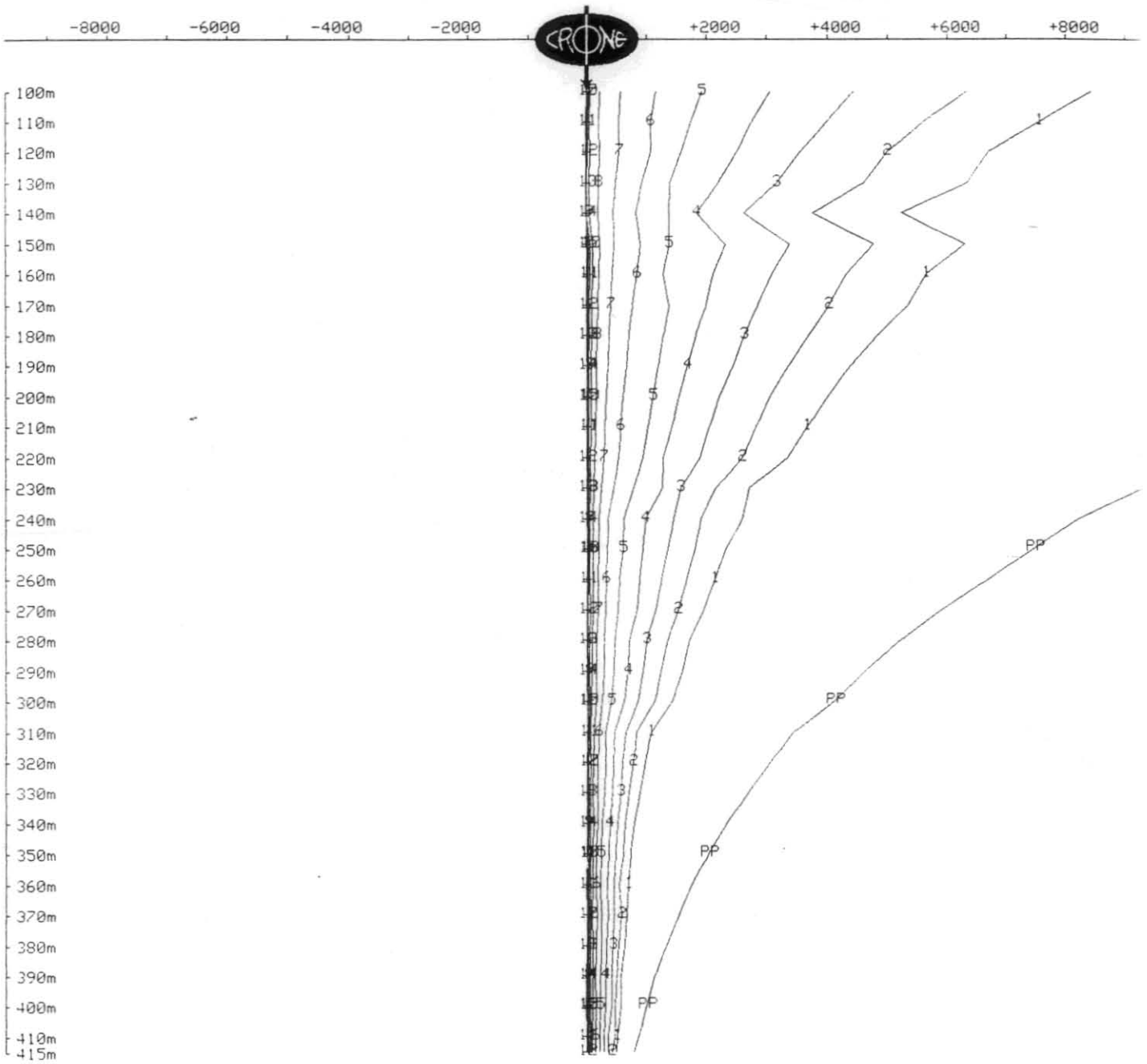
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675533

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Grid	: South Henty	Tx Loop	: #3
Date	: May 30, 1998	File name	: SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000 Unit Scale: 1cm = 1000 nT



OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675534

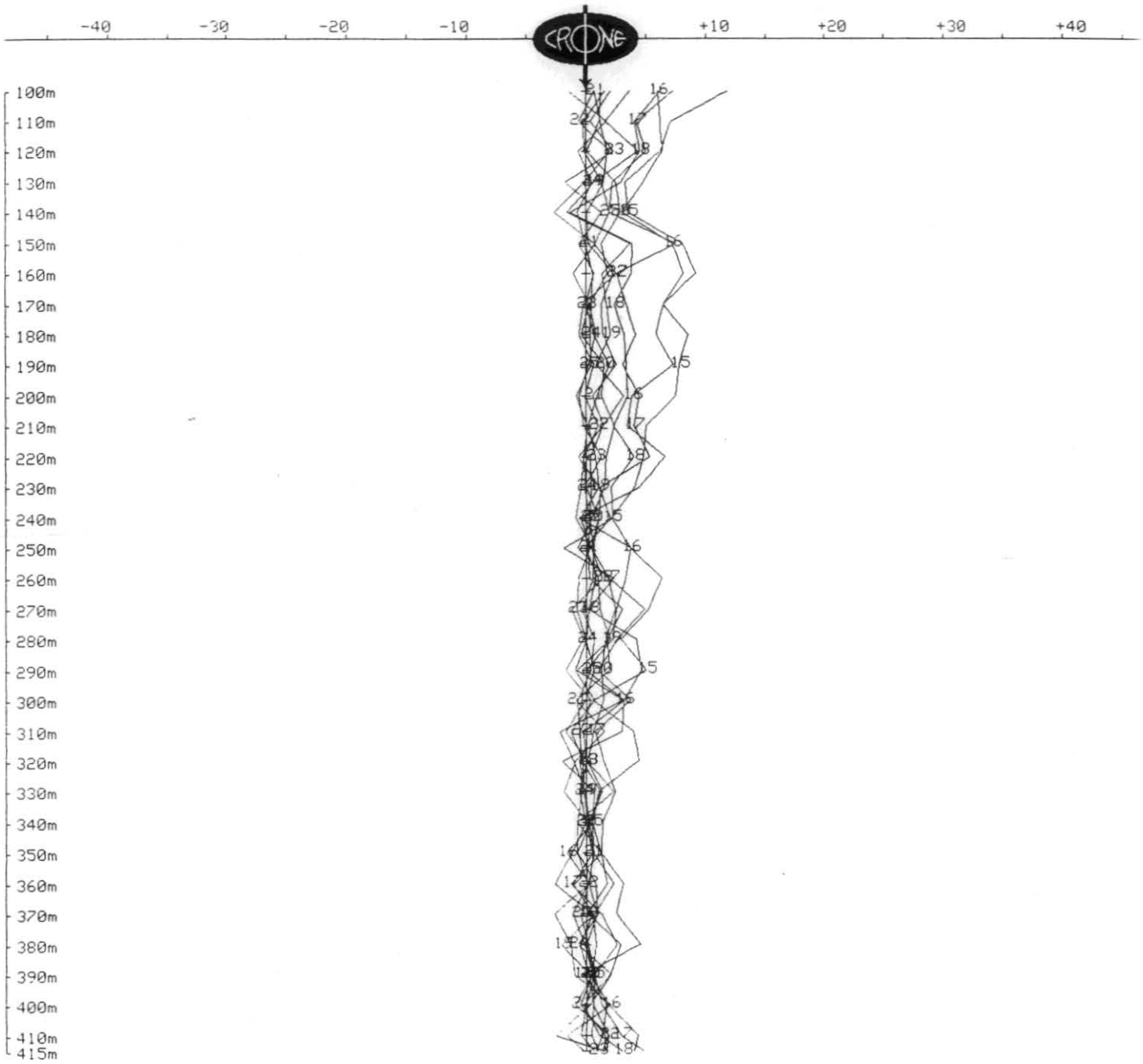
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 30, 1998

Hole : SHD-18
Tx Loop : #3
File name : SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels

Scale: 1:2000

Unit Scale: 1cm = 5 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675535

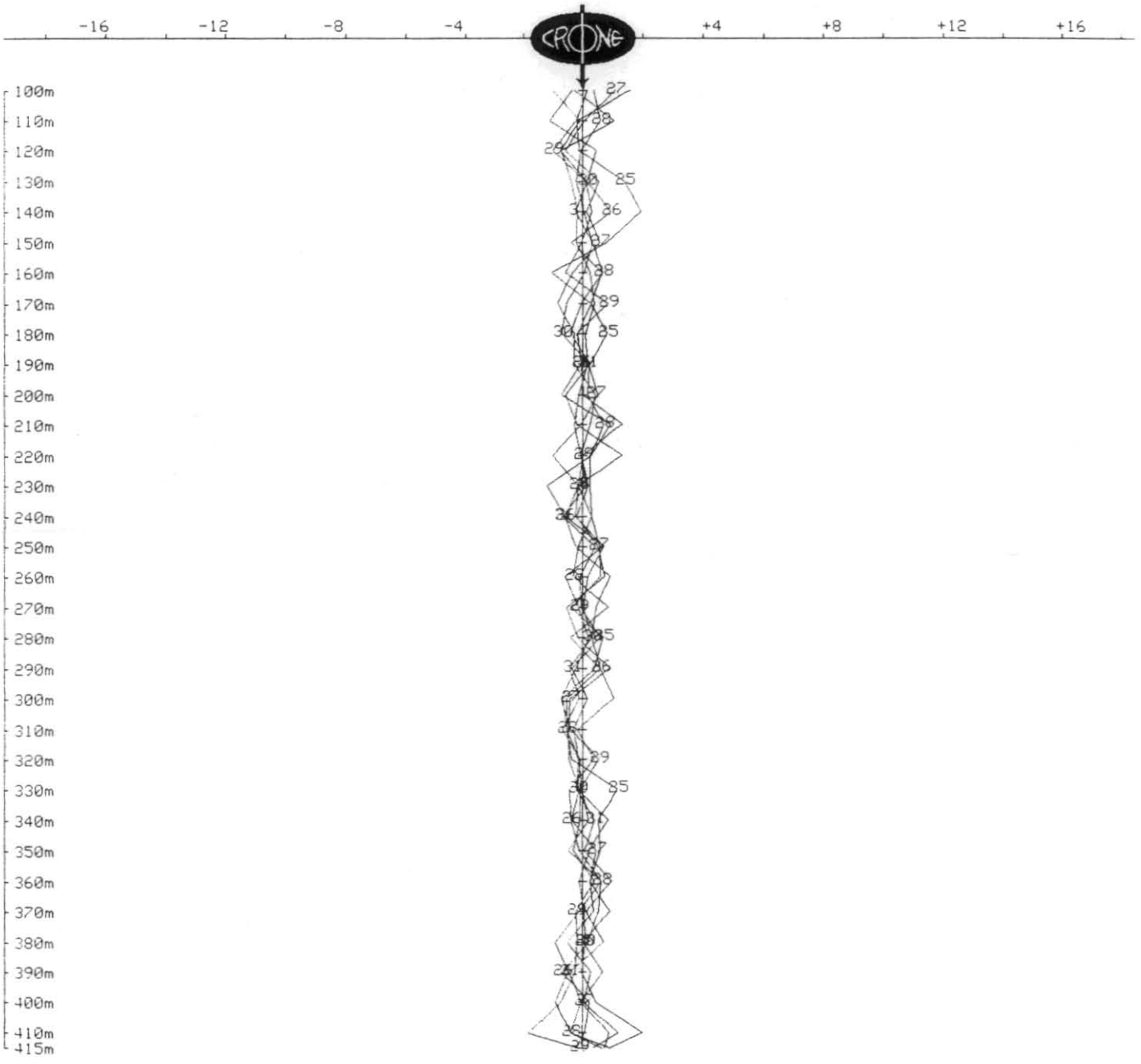
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 30, 1998

Hole : SHD-18
Tx Loop : #3
File name : SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
X COMPONENT dBx/dt nanoTesla/sec - 31 channels

Scale: 1:2000

Unit Scale: 1cm = 2 nT



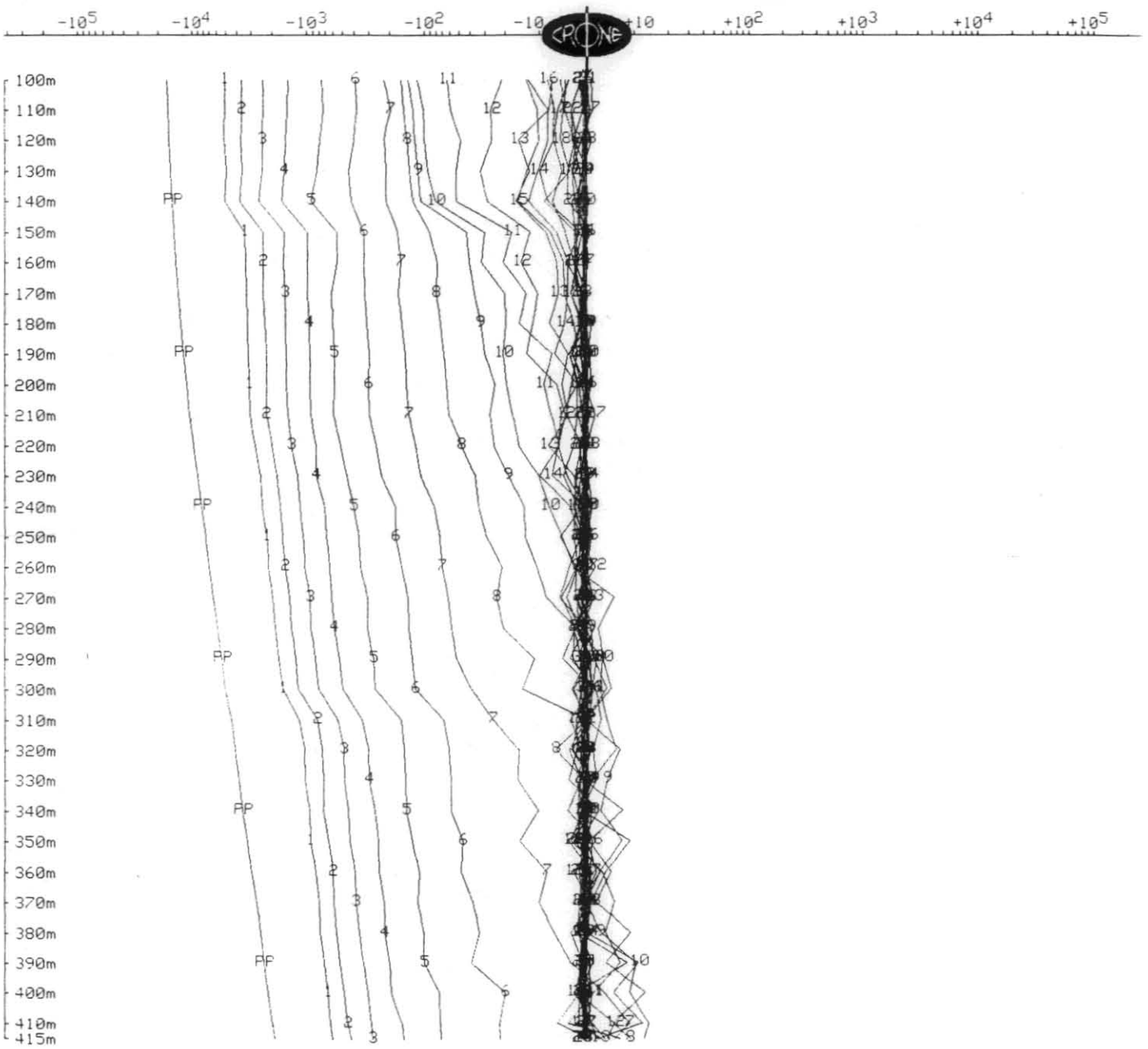
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675536

Client	: Goldfields Exploration P/L	Hole	: SHD-18
Grid	: South Henty	Tx Loop	: #3
Date	: May 30, 1998	File name	: SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000



5 cm

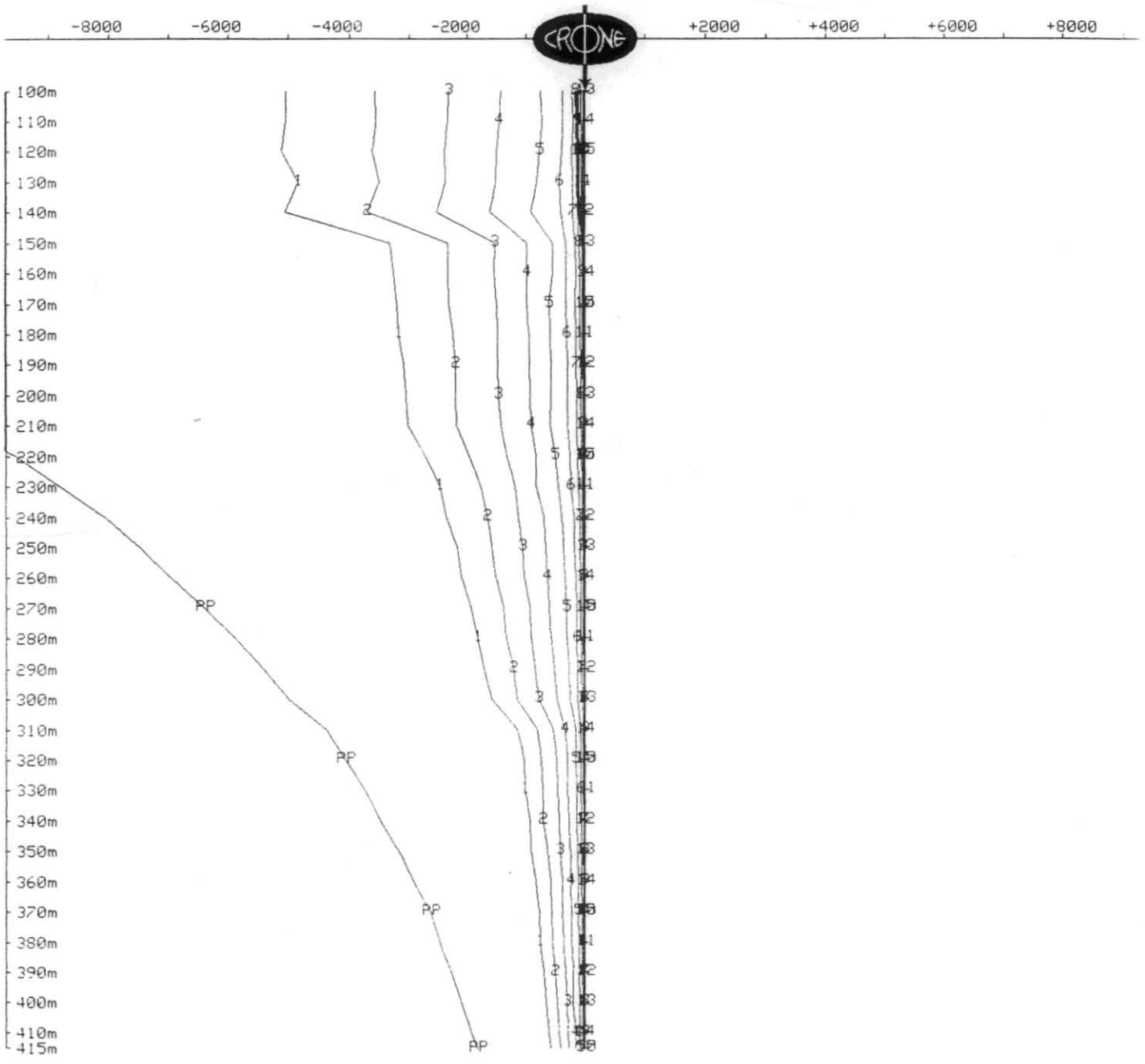
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675537

Client : Goldfields Exploration P/L Hole : SHD-18
Grid : South Henty Tx Loop : #3
Date : May 30, 1998 File name : SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels and PP

Scale: 1:2000 Unit Scale: 1cm = 1000 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675538

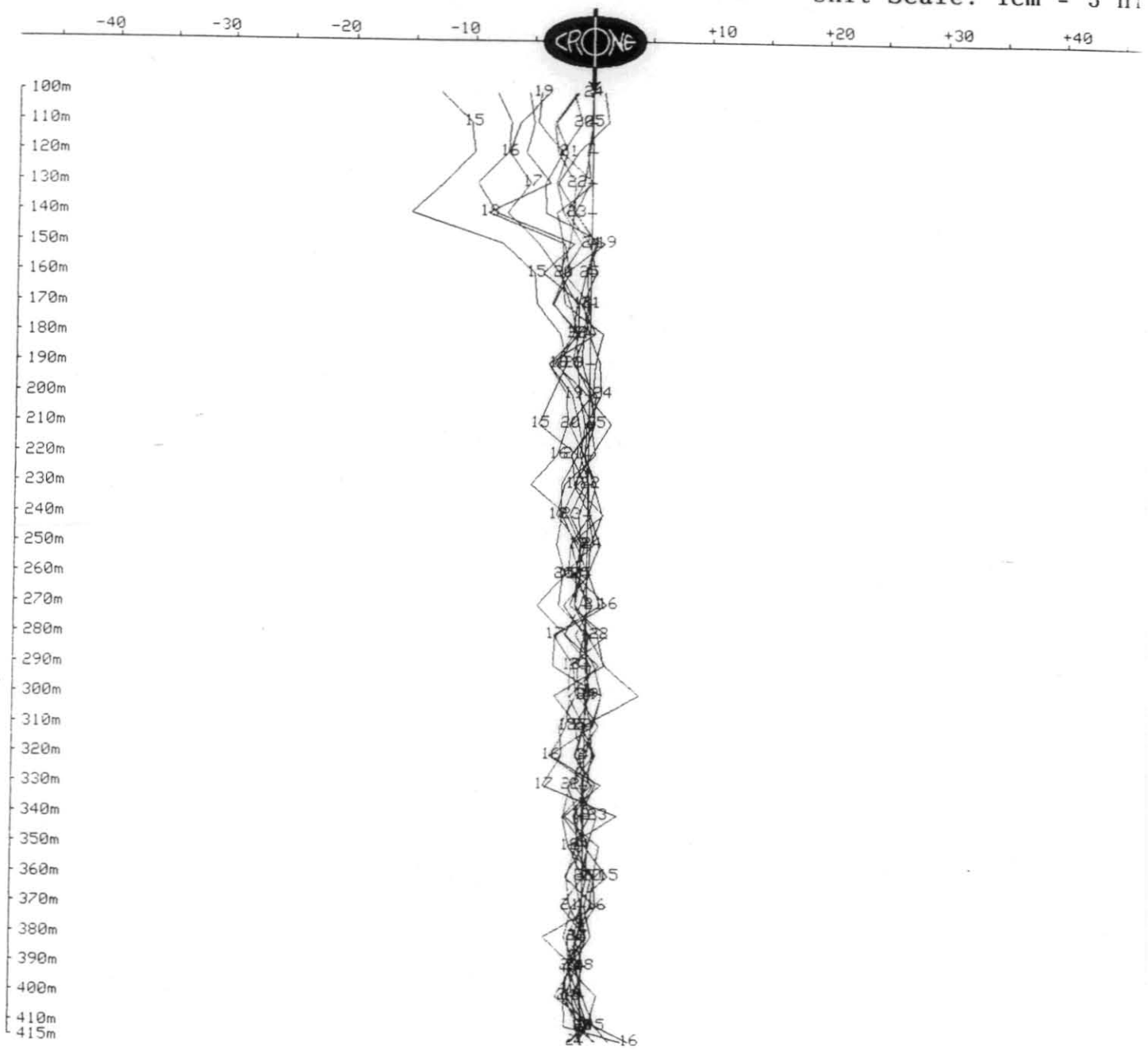
Client : Goldfields Exploration P/L
Grid : South Henty
Date : May 30, 1998

Hole : SHD-18
Tx Loop : #3
File name : SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels

Scale: 1:2000

Unit Scale: 1cm = 5 nT



5 cm

OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

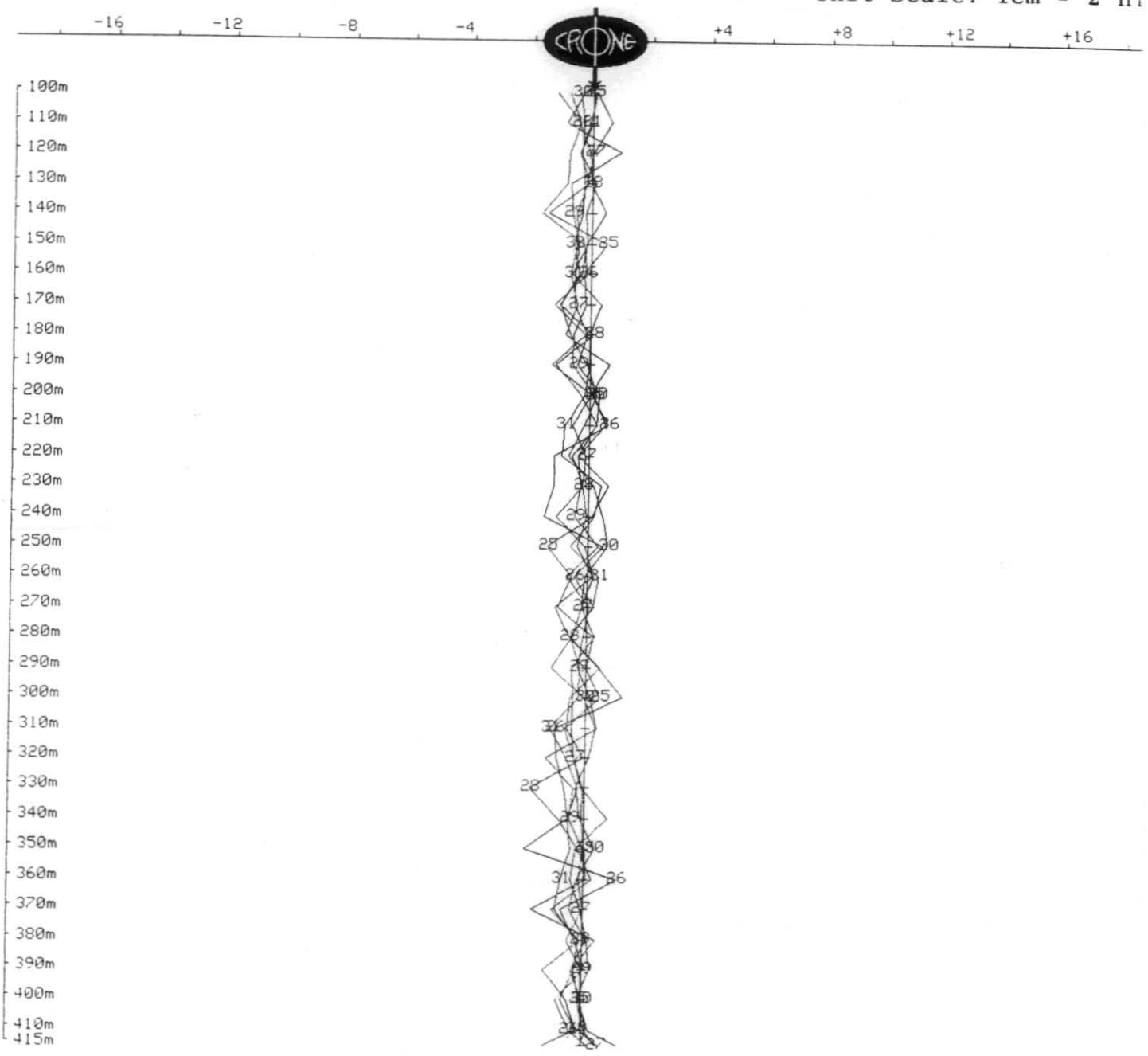
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Client	: Goldfields Exploration P/L	Hole	: SHD-18
Grid	: South Henty	Tx Loop	: #3
Date	: May 30, 1998	File name	: SHD18XY.PEM

Data Corrected for Probe Rotation using Orientation Tool #2
Y COMPONENT dBy/dt nanoTesla/sec - 31 channels

Scale: 1:2000

Unit Scale: 1cm = 2 nT



5 cm

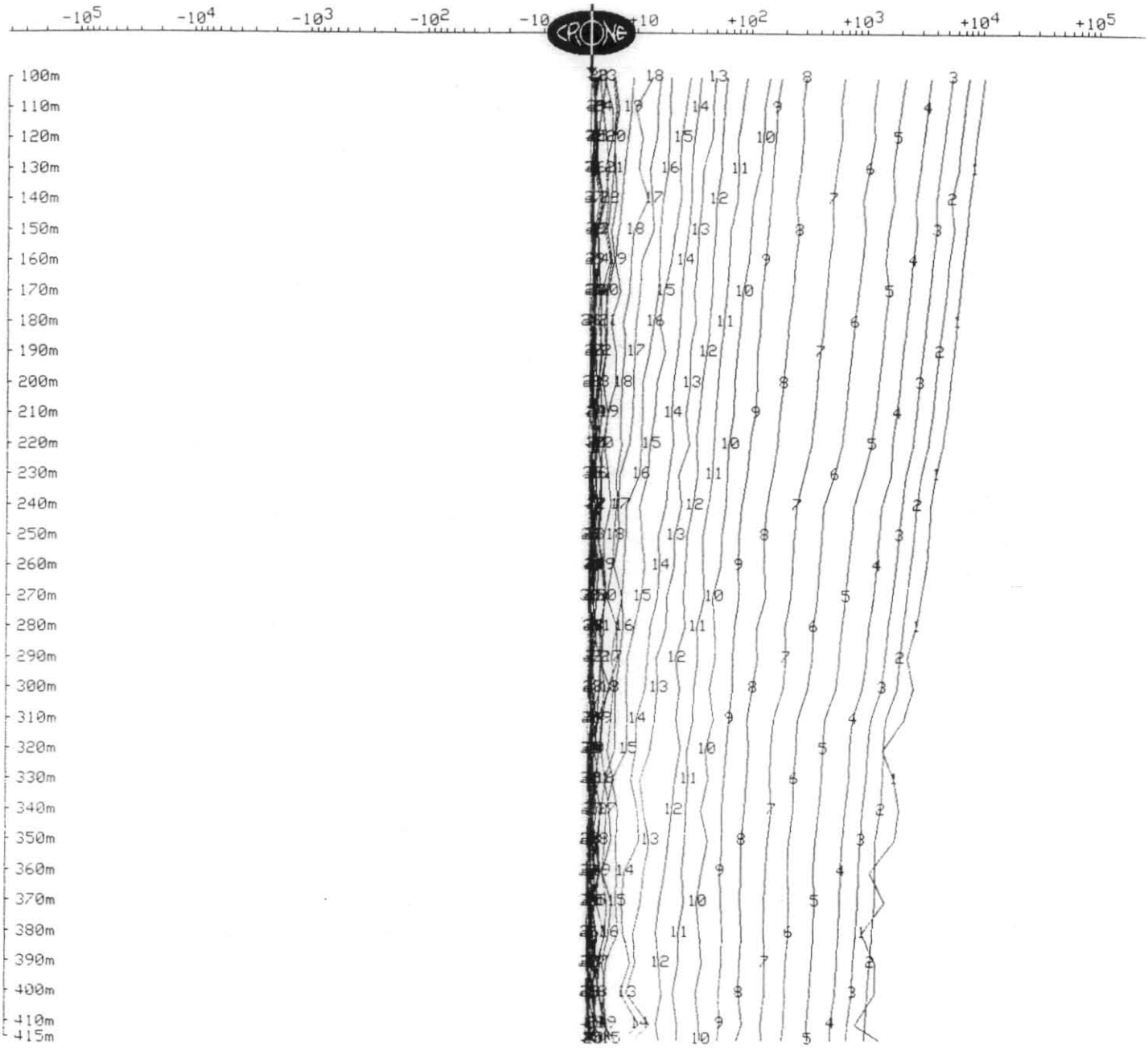
OUTER-RIM EXPLORATION SERVICES
Operating Crone PEM System
BOREHOLE PEM

675540

Client	: Goldfields Exploration P/L	Hole	: SHD-18
Grid	: South Henty	Tx Loop	: #3
Date	: May 30, 1998	File name	: SHD18XYZ.PEM

TOTAL FIELD dBxyz/dt nanoTesla/sec - 31 channels

Scale: 1:2000



5 cm

675541

GOLDFIELDS EXPLORATION
GOLDFIELDS EXPLORATION PTY LTD
ACN 067 813 932
89 Burswood Road P.O. Box 322 Victoria Park WA 6100
Telephone: (08) 9442 8110 Facsimile: (08) 9442 8181

TECHNICAL NOTE

goltecs.dot

To : Michael Asten

cc : Michael Vicary, RGC Exploration Information Centre Reference:

From : Chris Dauth

Date : 14 January, 1999

Subject : South Henty DHEM data compilation

INTROCUDTION

This TECHNICAL NOTE has been written to assist with transferring of Goldfields Exploration Tasmanian geophysical project work to out-sourced consultants as a consequence of geophysical staff relocations in the RGC/Goldfields Exploration Perth Group. The purpose of this particular TECHNICAL NOTE is to compile data from down-hole electromagnetic (DHEM) surveys conducted in 1997-98 by Resolute Ltd and Goldfields Exploration in the Tyndall Mine region of the South Henty Project in Western Tasmania. The South Henty Project is a JV between Resolute Ltd (who operated the exploration prior to 1998) and Goldfields Ltd. Goldfields Exploration currently manage the exploration activities. A location diagram (Figure 1) shows the location of the project with respect to the Henty Mine, and other nearby projects operated by the RGC/Goldfields Exploration Group.

DHEM results are provided for six diamond drillholes that were targeted on two prospective horizons, the Spillway Horizon, and the Henty-Comstock Horizon within about a 1km radius at the South Henty Project. These horizons have been identified as prospective for VHMS-volcanogenic gold mineralisation. Intersections have included significant silica-sericite-pyrite +/- chalcopyrite alteration with some associated encouraging gold and minor basemetal mineralisation. Regional geology and drill logs are well documented by Callaghan 1998.

WORK COMPLETED

Drillholes SHD1, SHD2, SHD12, and SHD13 were completed by Resolute Ltd during 1997. DHEM surveys using the CROME PEM three component downhole system were conducted on all holes by OUTER RIM Exploration Services. Three component data utilising two transmitter loop positions were surveyed for each hole. It is the understanding of the author of this TECHNICAL NOTE that J Bishop (of Mitre Geophysics Pty Ltd) was the geophysical consultant acting on behalf of Resolute Ltd with regard to survey design and data interpretation.

Drillholes SHD16 and SHD18 were completed by Goldfields Exploration during 1998. DHEM surveys using the CROME PEM three component downhole system were conducted on both holes by OUTER RIM Exploration Services in 1998. Three component data utilising one

transmitter loop position for each hole were acquired. Surveys were designed by C. Dauth and S. Mudge (in C. Dauth's absence on leave) of Goldfields Exploration.

Transmitter loop location in the West Coast of Tasmania is difficult at the best of times due to problems associated with steep topography and dense vegetation. Surveys at South Henty are additionally complicated due to the presence of Hydro Scheme Water Dams and high voltage overhead electric cables. Transmitter loop locations were severely hampered due to a water storage dam situated relatively central to all of the drillhole collars. Transmitter loop wire was layed out across the surface (by Goldfields Exploration using floats), and within the dam (Resolute) for position of several of the EM transmitter loops. The location of drillhole collars and all utilised transmitter loop layouts is presented in Plan 1. Transmitter loops have not historically been labelled with a consistent naming system that would facilitate a compilation of all results. To avoid any confusion, and hopefully not create more, transmitter loops have been relabelled from their previous names to a chronological numbering system outlined in Table 1. The new names have been labelled in Plan 1.

Table 1. DHEM transmitter loop nomenclature.

Old Tx Name	Re-named Tx	Holes Logged
East	1	SHD1, SHD2
West	2	SHD1, SHD2
1	3	SHD12
2	4	SHD12
13E	5	SHD13
13W	6	SHD13
1	7	SHD16
3	8	SHD18

Drillhole details indicating hole location, depths drilled and logged, and DHEM transmitter loops utilised are tabulated in Table 2.

Table 2. Drillhole details.

Hole	East (AMG)	North (AMG)	RL	Depth Drilled	Depth logged	Tx Loops	Components
SHD1	381000	5358935	485	779	775	1, 2	UVA
SHD2	380335	5358900	485	665	640	1, 2	UVA
SHD12	380360	5358295	490	643	640	3, 4	UVA
SHD13	381300	5358935	510	1051	1045	5, 6	UVA
SHD16	380612	5359380	495	828	678	7	UVA
SHD18	380180	5359100	495	441	415	8	UVA

DHEM survey specifications are outlined below:

System: CRONE PEM 3 component
Contractor: OUTER RIM Exploration Services
Rx Coil Effective Area: 6500m^2
Polarity: +ve up in Tx loop
Ramp: 0.5msec
Channels: 17 for SHD12; 20 for SHD13; and 31 for SHD1, SHD2, SHD16, and SHD18
Time Base: 10 msec for SHD12; and 20 msec for SHD1, SHD2, SHD13, SHD16, and SHD18;

It should be pointed out that the CRONE coordinate definition does not comply with that commonly accepted by the author as defined by the axis of the borehole. The CRONE Z component is more commonly referred to as the A (axial) component positive up the drillhole.

The CRONE X component is most commonly referred to as the U component (where U is in the vertical plane pointing upwards at 90° to the borehole axis). The CRONE Y component is most commonly referred to as the V component (which is normal to the plane containing A and U, positive to the left pointing downhole). Reference, Bishop 1996.

RESULTS

A complete report on the Resolute Ltd DHEM results was not able to be located. Some notes on results and modelling of data compiled by J Bishop are "loosely" provided within the Goldfields South Henty geophysical database in the Goldfields Zeehan Office. Brief comments on the results are however included within the annual report to the Mines Department completed for the period 1996-97 by Resolute Ltd, McDonald 1997 (a copy of this report is held by the Goldfields Exploration Zeehan Office).

Results of the Goldfields DHEM surveys at the South Henty Project in 1998 (three holes in total) have been summarised into an internal Goldfields Exploration TECHNICAL NOTE, Dauth 1999.

Data have not been replotted in hardcopy format for detailed interpretation (hence the need for this compilation of data and survey layout to facilitate such a process).

A brief summary of results follows. This section is intended only as an introduction to survey results and should by no means be addressed as a final interpretation.

SHD1 features a broad wavelength negative trending trough in the axial component It is centred at approximately 500m down-hole for channel 10 (0.328 msec) and migrates down the hole later in time. The cross-over from positive to negative response at about 500m in channels later than CH15 (0.850 msec) should discount "self-response" as the source since the primary field always has a positive axial component for Loop 1. Further investigation is warranted.

SHD2 features a relatively early time short wavelength (about 60m peak to peak) response centred at 270m downhole. The DHEM anomaly is apparent in all three acquired components. Brief discussion with a consultant from Flagstaff Geoscience Consultants (Dr M. Asten) proposed a possible current channelling effect as the anomalous source. Further investigation is warranted. The viability of conducting a down-hole magneto-metric resistivity survey (DHMMR) as a follow-up was discussed.

SHD12 results have no readily identifiable anomalies considered worthy of follow-up.

SHD13 DHEM data feature a similar broad wavelength negative trending "anomaly" in the axial component centred at approximately 600m down-hole to that observed in SHD1.

SHD16 DHEM data exhibit three apparent anomalous responses. The first is centred at about 310m downhole. It is a broad (150m wavelength) negative trending trough in the axial component. This response is very subtle, and a self-response has not been discounted as the source. Further investigation would be warranted. The second DHEM response in SHD16 is very short in wavelength (<50m), and most apparent in the Y (V) component as an early time positive to negative cross-over centred at 560-570m down-hole. This position corresponds with a zone of intense silica-sericite-pyrite +/- chalcopyrite alteration and is interpreted to be attributed to a zone of more massive sulphide accumulation a short distance off-hole to the north-west. The response is very subtle in the Z (A) component, and difficult to distinguish in the X (U) component. The source is most likely too small to be of exploration interest. The third

anomalous DHEM response in SHD16 is observed as a mid-channel (channels 12-18) migration from positive to negative polarity readings towards the bottom of the hole. Primary field observations discount the possibility that this could be attributed to probe "self-response". The lack of corresponding identified response in the X (U) and Y (V) components, and the very broad wavelength (> 300m) make interpretation of the source very difficult. The nature of this anomaly is very similar to that observed in SHD1 and SHD13 and requires adequate explanation.

No DHEM anomalies worthy of further investigation were detected in the results from SHD18.

DIGITAL DATA

Digital data provided on floppy disks in the sleave of this report have been separated into three file sets for each hole.

1. RAW format files. These are the raw CRONE instrument output dump files in ASCII format.
2. PEM format files. These are processed CRONE DHEM format ASCII files.
3. TEM AMIRA format files. These have DHEM data sorted into a clean column delimited ASCII format, most suitable for re-plotting (Goldfields Exploration drillholes SHD16 and SHD18)

   or

3. XYZ ASCII column delimited format files, again most suitable for data re-plotting (Resolute drillholes SHD1, SHD2, SHD12, and SHD13).

REFERENCES

Bishop, J. R., 1996, Introduction to the special volume on DHEM, Exploration Geophysics, 27, 37-39

Callaghan, T., 1998, Annual Report Tasmanian Gold Project EL8/96 South Henty, Goldfields Report to the Department of Mineral Resources Tasmania, Internal Report No. 1603-9801

Dauth, C., 1999, DHEM on SHD15, 16, and 18, South Henty Project Internal Goldfields Exploration TECHNICAL NOTE

McDonald, G., 1997, EL 8/96 South Henty, Annual Report on Exploration, June 96 to June 97, Resolute Ltd (unpublished)

5 cm

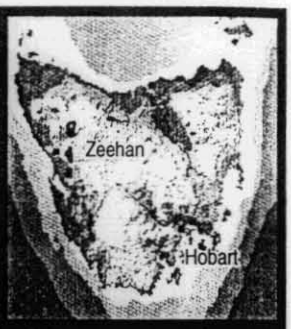


Figure 1. Location Diagram

675545

375000 mE
380000 mE
385000 mE
5365000 mN
5360000 mN
5355000 mN
5350000 mN
HENTY
Henty Mine Lease
DHEM survey region
South Henty Project
White Spur
Anthony
Basin Lake
To Zeehan
To Queenstown

675546 01-457SC

APPENDIX 4

GOLDFIELDS EXPLORATION
GOLDFIELDS EXPLORATION PTY LTD
ACN 087 813 932
Cnr Main & Gellibrand Steets P.O. Box 62 Zeehan Tas 7469
Telephone: (004) 716 444 Facsimile: (004) 716 644

TECHNICAL NOTE

sulphur1.doc

To : Mike Vicary, Scott Halley, Rob Taylor

cc : RGC Exploration Information Centre Reference:

From : Tim Callaghan

Date : 27 June, 2001

Subject : South Henty and Mt Julia Sulphur Isotopes

INTRODUCTION

During June 1998 fourteen samples from Mt Julia and Sth Henty were submitted to the University of Tasmania CSL for analysis of stable isotopes of sulphur. The aims of the investigation were to:

1) Signature the sulphur in the deposits and provide an idea of the fluid source and depositional processes.

2) Identify zonation patterns that may provide useful vectors to aid exploration for high grade parts of the system.

Samples were selected from drillcore intersections and the sulphides for analysis marked before despatch. Table 1 lists sample locations, sulphide types, a brief description of the samples and the $\delta^{34}S$ value obtained for each analysis (reported in ‰ CDT).

Prospect	Samp_Id	Hole_Id	Depth	Mineral	Delta34S	Remarks
STHHENTY	1080025	SHD17	681.10	Pyrite	13.79	Minor Py-Sphal-Gal in dacites.
STHHENTY	1080026	SHD17	655.90	Pyrite	10.98	Minor Py-Sphal-Gal vns in dacites.
STHHENTY	1080027	SHD16	567.50	Pyrite	6.66	Disseminated Py-Cpy in CVC
STHHENTY	1080028	SHD16	661.40	Pyrite	5.96	Disseminated Py-Cpy in CVC.
STHHENTY	1080029	SHD16	704.30	Pyrite	6	Disseminated Py-Cpy in CVC.
STHHENTY	1080030	SHD16	714.30	Pyrite	8.01	Disseminated Py-Cpy in CVC.
STHHENTY	1080031	SHD16	775.00	Pyrite	5.95	Pyrite bands in vitric siltstone.
STHHENTY	1080074	SHD1	676.3	Barite	44.43	Barite vein in altered pumice breccias.
MTJULIA	1080032	MJ005A	913.20	Pyrite	-3.25	Pyrite in MV/MQ.
MTJULIA	1080033	MJ005C	874.00	Pyrite	9.94	MQ with Minor MV, Py
MTJULIA	1080033b	MJ005C	874.00	Chalcopyrite	8.75	MQ with minor MV, Cpy
MTJULIA	1080034	MJ006A	955.70	Pyrite	11.19	MV, Cpy-py rich
MTJULIA	1080034b	MJ006A	955.70	Chalcopyrite	9.83	MV, Py-Cpy rich
MTJULIA	1080035	MJ006B	829.40	Pyrite	7.72	MQ

Table 1. Sample locations, descriptions and $\delta^{34}S$ analysis.

RESULTS

South Henty

Exploration of the South Henty EL has identified a large, low grade alteration zone within dacitic pumice breccias, dacitic lavas and basaltic andesites of the Central Volcanic Complex known as the Lake Newton Prospect. The alteration zone extends for over three kilometres and may be semi-continuous with the Henty-Mt Julia alteration zone just to the north of the EL and Howard's Anomaly to the south.

The alteration is zoned from an outer halo of pervasive sericite-carbonate, to an intermediate zone of sericite-carbonate-pyrite, to an inner halo of sericite-silica-pyrite. Sulphide mineralisation is also well zoned with disseminated, blebby and vein style pyrite-sphalerite-galena associated with the outer carbonate halo, pyrite with the intermediate zone and pyrite-chalcopyrite-gold within the inner halo. The sulphides are disseminated and constitute approximately 1-5% of the sulphidic alteration facies. Figures 2[1] and 3[2] demonstrate the alteration zonation and antipathetic relationship between Zn and Cu sulphide mineralisation respectively.

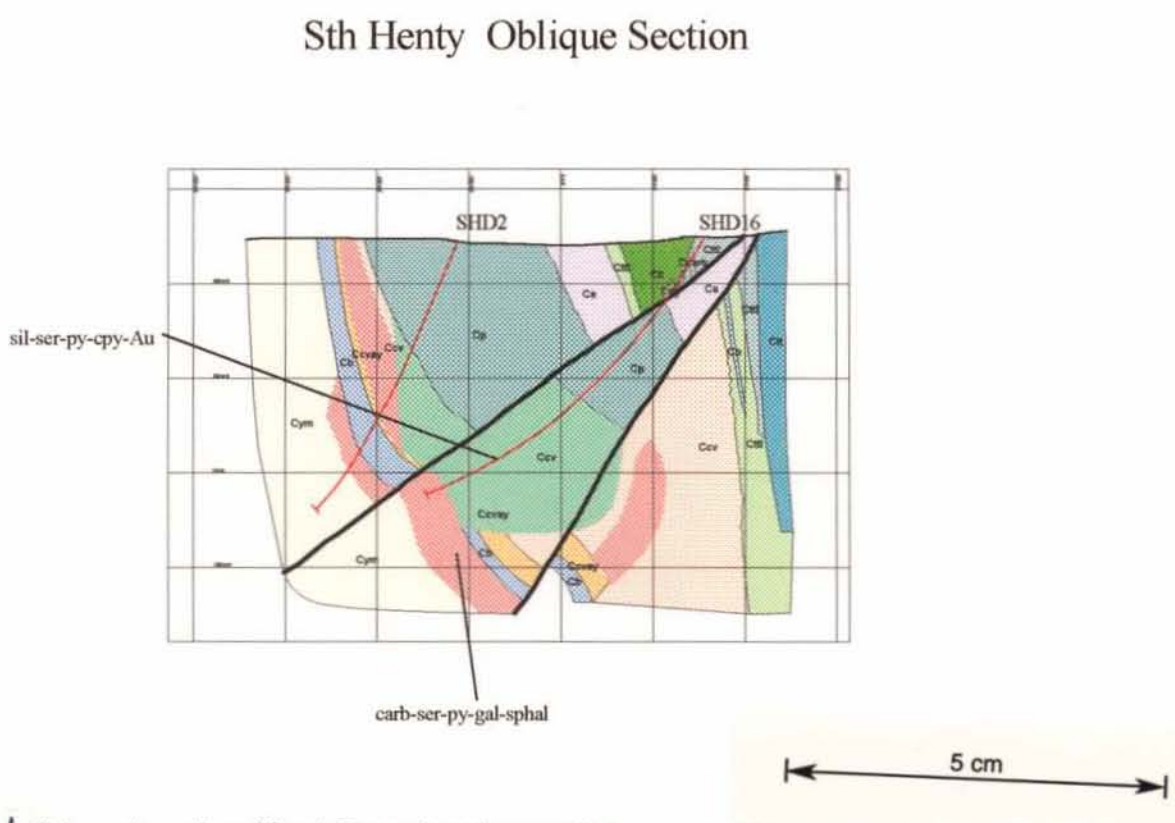


Figure 1 Schematic section of South Henty alteration zonation.

The outer halo has been extensively drilled by Pasminco and Resolute Ltd, but so far there is only one significant intersection of the inner silica-sericite-pyrite-copper-gold zone (SHD16). The alteration system has many similarities with some of the Mt Lyell deposits, particularly Western Tharsis as is documented in the 1998 Annual Report for the South Henty EL (Callaghan, 1998a).

The sulphur isotope samples associated with the outer halo were obtained from pyrite samples in drillhole SHD17. A barite sample from the outer halo was taken from SHD1. Samples from the inner zone were obtained from pyrites in SHD16.

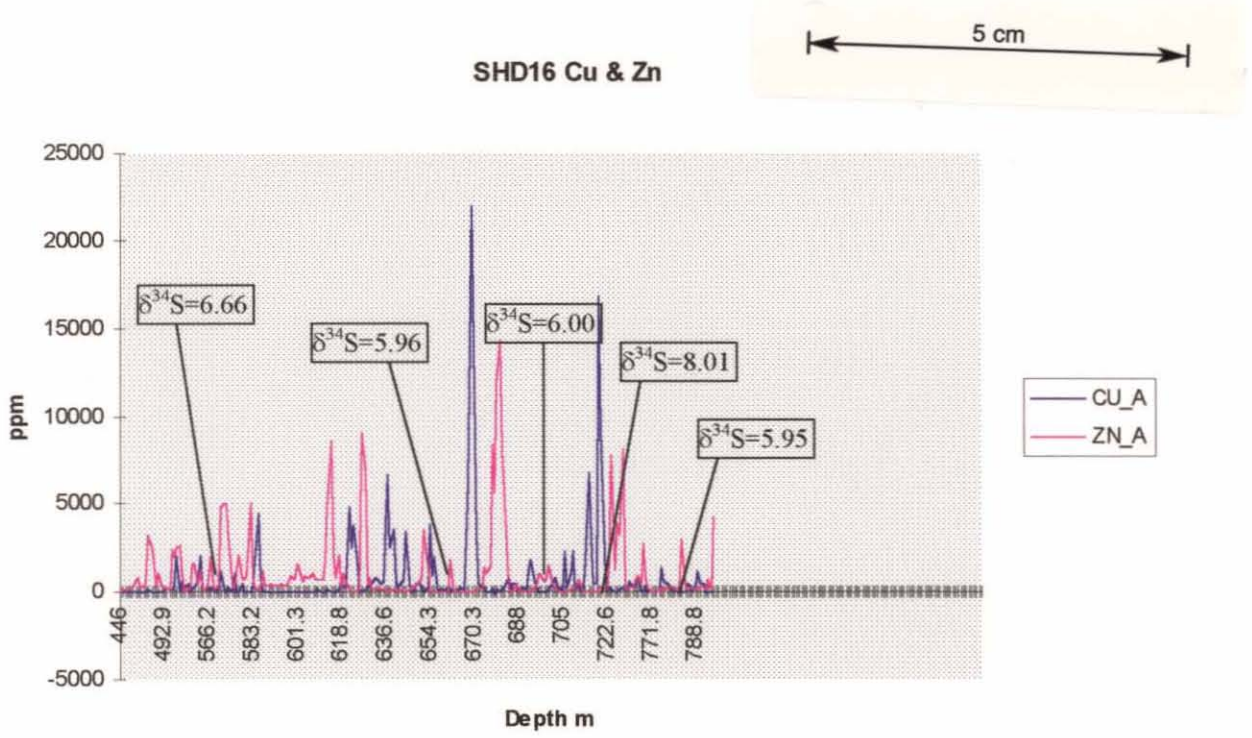


Figure 2. Antipathetic relationship between Cu and Zn sulphides in SHD16. Sphalerite occurs with carbonate-sericite-chlorite alteration and chalcopyrite is associated with silica-sericite-pyrite alteration.

The alteration system crosscuts the stratigraphy of the CVC but is mainly concentrated in dacitic pumice breccias and coherent dacites of the Newton Creek Dacites.

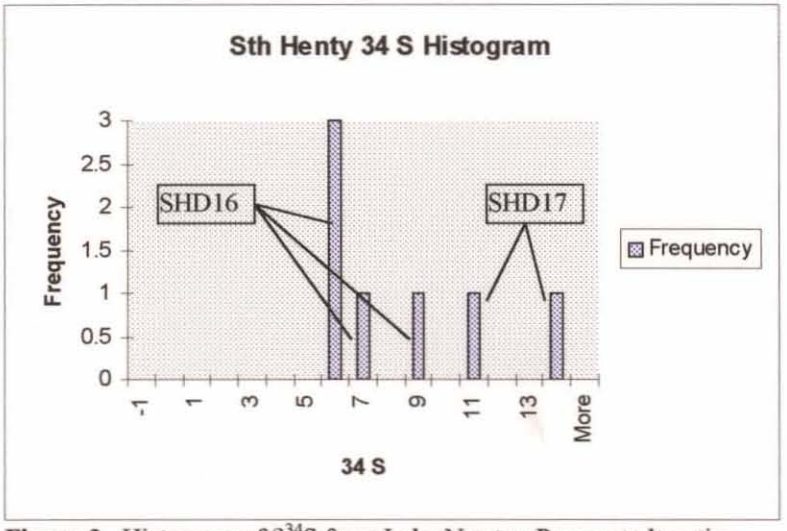


Figure 3. Histogram of $\delta^{34}S$ from Lake Newton Prospect alteration.

The sulphur isotopes sampled vary from $\delta^{34}S$ of 5.95 to 13.79. The copper-gold zone has distinctly lighter $\delta^{34}S$ (~6) than the outer carbonate basemetal zone(~ 12). Only one sample of heavier $\delta^{34}S$ (8) was obtained from SHD16. This sample was associated with the blebby carbonate alteration more commonly developed in the outer halo.

There are two possible explanations for the zonation of $\delta^{34}S$ in the Lake Newton mineralisation:

1. The hydrothermal fluid is of VHMS type, dominated by convective seawater. The fluid contains a mixture of reduced Cambrian seawater sulphate and scavenged volcanic rock sulphide, resulting in a fluid with lighter $\delta^{34}S$ than what would be predicted from straight reduction of Cambrian seawater sulphate. Gemmell and Large (1992), use this model to explain the lighter $\delta^{34}S$ found in the inner zone of the Hellyer footwall alteration pipe. The heavier $\delta^{34}S$ of the outer halo (at both Hellyer and Lake Newton) has the typical isotopic signature of reduced Cambrian seawater sulphate (Ohmoto and Rye, 1979).

2. The hydrothermal fluid is of magmatic origin ($\delta^{34}S = 0$) and demonstrates fluid mixing with reduced seawater sulphate in the zone of deposition and alteration. The lighter $\delta^{34}S$ of the inner halo suggests a higher magmatic sulphur/seawater sulphur ratio.

Deposition of metals as a result of fluid mixing between the hydrothermal fluid and cooler reduced seawater circulating through the permeable volcanics is apparent from the metal, alteration and $\delta^{34}S$ zonation using either model.

The single barite sample from SHD1 has heavier $\delta^{34}S$ (44.43‰) than contemporaneous Cambrian seawater (30‰, Ohmoto and Rye, 1979). Heavy $\delta^{34}S$ are also noted at both Rosebery (Green et. al., 1981) and Hellyer (Gemmell and Large, 1992). This phenomenom has been attributed to the incomplete reduction of seawater sulphate in the volcanic pile, resulting in partioning of heavier $\delta^{34}S$ into the remaining sulphate.

Although the sulphur isotopes do provide a vector towards hotter parts of the system, cheaper and more efficient vectors are provided by alteration mapping and routine analysis for the standard suite of metallic elements. Further sampling may provide subtle vectors but will probably be of more academic interest than of use to exploration.

Mt Julia

Earlier sulphur isotope studies of the Henty deposits have been documented by Yeats, (1989) and Taheri and Green (1992). Studies have not been extended to Mt Julia previously so four samples were submitted along with the South Henty samples as an orientation study. Two of the samples were analysed for both pyrite and chalcopyrite $\delta^{34}S$.

Most of the sulphur isotopes have the reduced Cambrian seawater signature ($\delta^{34}S$ = 8-12 ‰) with the exception of one sample with a negative $\delta^{34}S$ of -3.25 ‰. No obvious trend between $\delta^{34}S$ and gold grade is evident in Table 2.

BHID	Depth	Mineral	$\delta^{34}S$	Au g/t	Comments
MJ005A	913.2	pyrite	-3.25	2.9	MV/MQ
MJ005C	874.0	pyrite	9.94	1.0	MQ, minor MV
MJ005C	874.0	chalcopyrite	8.75	1.0	MQ, minor MV
MJ006A	955.7	pyrite	11.19	2.9	MV, cpy-py rich.
MJ006A	955.7	chalcopyrite	9.83	2.9	MV, cpy-py rich.
MJ006B	829.4	pyrite	7.72	8.7	MQ

Table 2. Mt Julia $\delta^{34}S$ and Au grade.

From the limited sampling conducted it would appear that most of the sulphur is derived from reduced Cambrian seawater . This is consistent with the $\delta^{34}S$ values for the Zone 96 and Sill

Zone deposits (Yeats, 1989, Taheri and Green, 1991). However the single negative value from MJ005A needs follow up sampling to verify this result. The lower $\delta^{34}S$ may indicate some magmatic sulphur is present in the system.

DISCUSSION

The similarities of the Henty-Mt Julia alteration system with the Comstock Deposit of the Mt Lyell Field, particularly the alteration facies, volcanic environment and stratigraphic relationships has long been recognised by Goldfields Geologists (eg. Halley and Roberts, 1997). It is becoming increasingly apparent that the copper gold deposits located to the southeast of the South Henty Fault may be related to a regional Cu-Au mineralising event. During the 1980's and early 1990,s VHMS models for Mt Lyell and Henty were favoured (eg. Walshe and Solomon, 1981, Halley and Roberts, 1997) although involvement of magmatic components was considered a possibility. Recent work suggests a stronger magmatic signature to the deposits as evidenced by alteration mineralogy, immobile element geochemistry, stable isotopes of carbon and oxygen, metal zonation and ore mineralogy (Huston and Kamprad, 1998, Callaghan 1998b).

A review of the stable isotopes from sulphides in the Mt Lyell field demonstrates a broad spectrum of results from deposits with possible magmatic sulphur signatures to those with reduced seawater sulphate signatures, to some very negative values (-10) (figures 4-8). Walshe and Solomon (1981) suggest the lower $\delta^{34}S$ values from some of the deposits could result from higher SO_4/H_2S ratios. The presence of barite in the mineralisation assemblege supports their hypothesis. Alternatively, if a fluid mixing model for the deposits is hypothesisied, the results could be interpreted to reflect different seawater/hydrothermal fluid ratios in the depositional environment of the deposits. The mineralogy of the different deposits supports either possibility. Davidson and Kitto, (1997) suggest some of the very negative $\delta^{34}S$ values found in Cambrian rocks result from partial leaching of igneous sulphur by low temperature, oxidised waters leaving a residuum of light sulphide. This process occurs near surface where Cambrian seawater permeates the volcanic pile. Mixing of magamatic volatiles and fluids with these ground waters could result in the range of $\delta^{34}S$ found in these deposits.

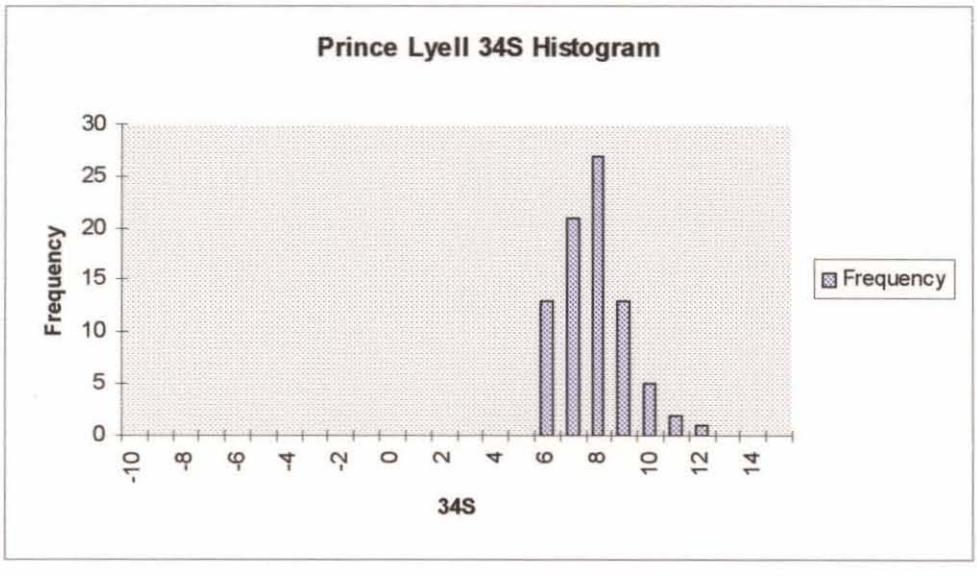


Figure 4. Histogram of pyrite $\delta^{34}S$ from Prince Lyell. Note similarities with Lake Newton Histogram (data from Walshe and Solomon, 1981).

5 cm

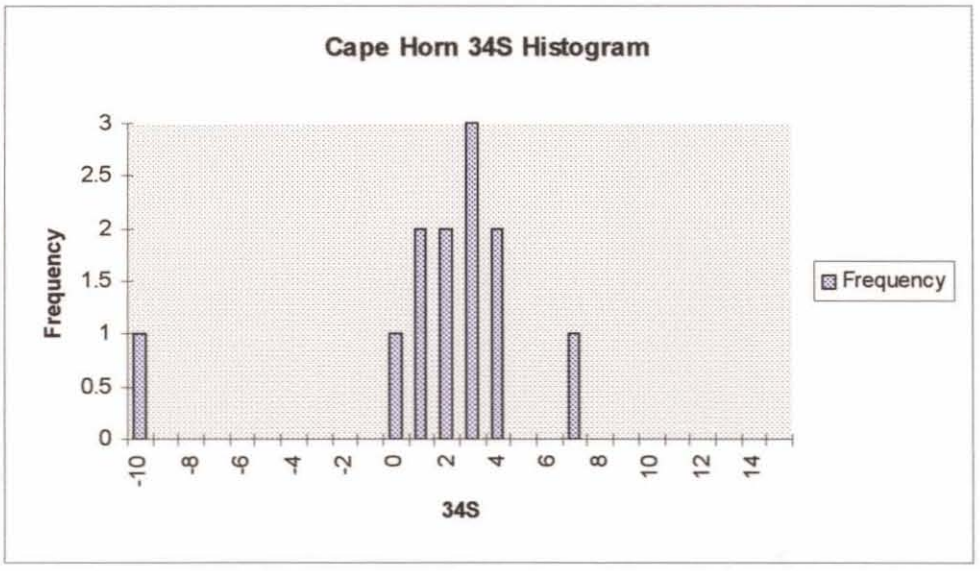


Figure 5. Histogram of $\delta^{34}S$ from Cape Horn pyrites (data from Walshe and Solomon, 1981). Note that $\delta^{34}S$ fall within the range of magmatic sulphur values with a slight bias toward positive values suggesting a high magmatic/seawater ratio in the depositional environment.

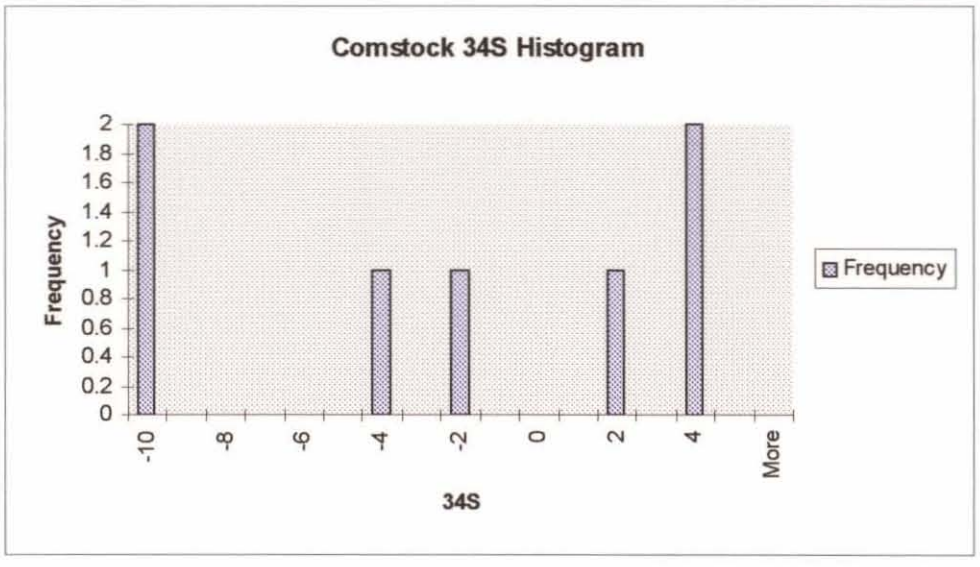
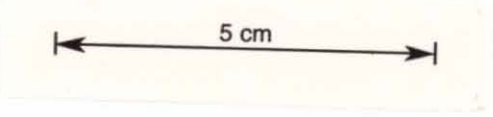
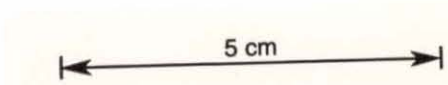


Figure 6. Histogram of $\delta^{34}S$ from Comstock pyrites (data from Walshe and Solomon, 1981). Note that $\delta^{34}S$ fall within the range of expected magmatic sulphur values. Negative values result from incomplete oxidation of volcanic sulphur by low temperature, oxidised fluids permeating the volcanic pile. Mixing of these two fluids may be responsible for the deposition of metals in the deposit.





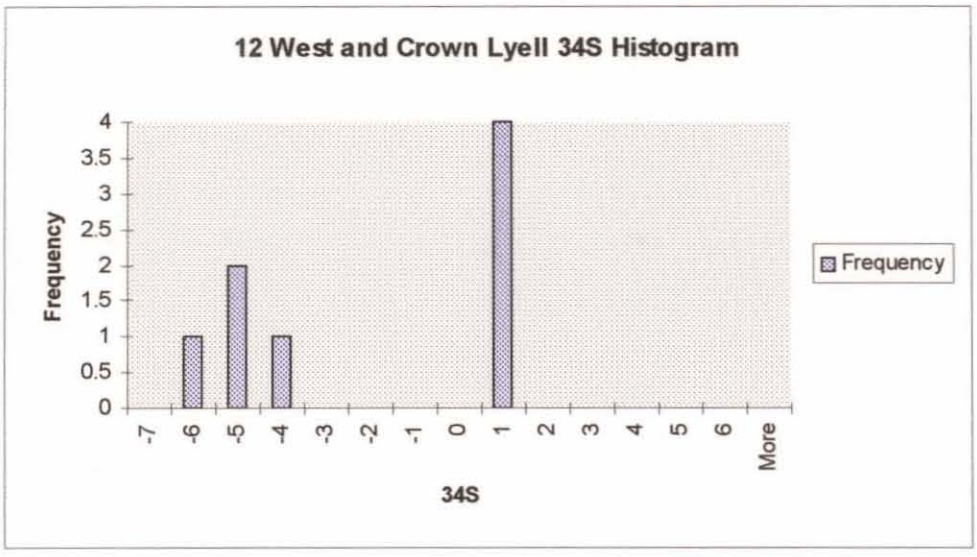


Figure 7. Histogram of $\delta^{34}S$ from12 West and Crown Lyell orebodies (data from Walshe and Solomon, 1981). Note that $\delta^{34}S$ fall within the range of magmatic sulphur values for these orbodies.

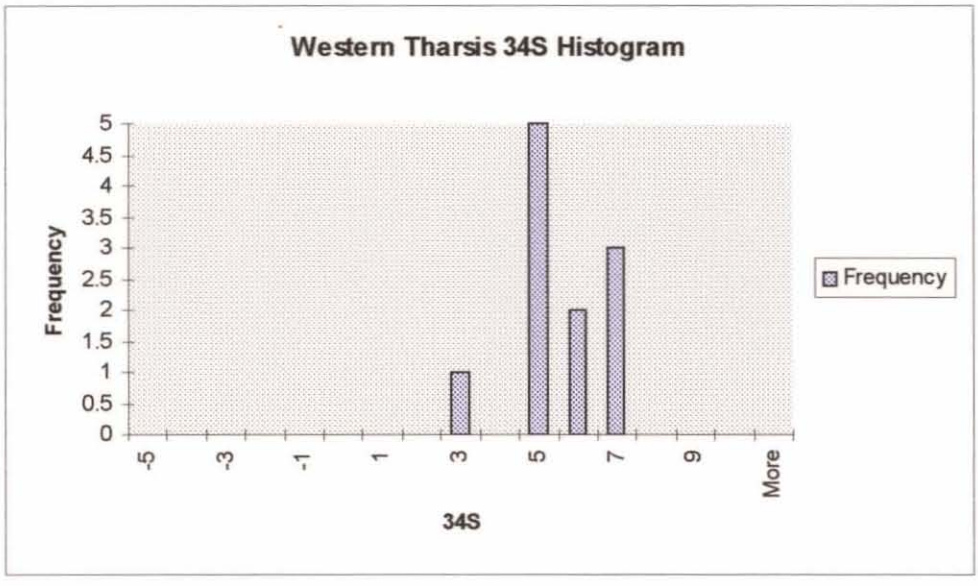


Figure 8. Histogram of $\delta^{34}S$ from Cape Horn pyrites (data from Walshe and Solomon, 1981). Note that $\delta^{34}S$ fall within the range of magmatic sulphur values with a slight bias toward positive values suggesting a high magmatic/seawater ratio in the depositional environment.

CONCLUSIONS AND RECOMMENDATIONS

The South Henty, Mt Julia, Henty and Mt Lyell sulphur isotopes suggest these deposits have formed through fluid mixing between magmatic volatiles and brines with reduced Cambrian seawater circulating through unconsolidated volcanics in a submarine environment. This model is

supported by the geological environment, alteration and metal associations, immobile element geochemistry and stable isotopes of carbon and oxygen (Callaghan 1998b, Huston and Camprad, 1998).

Although sulphur isotopes do provide a vector to mineralisation (lighter $\delta^{34}S$ indicates higher hydrothermal fluid/seawater ratios), alteration mapping and standard metallic element analysis is cheaper and more efficient. Sulphur isotope studies will be of more academic interest than immediate practical use for exploration. It is recommended limited sulphur isotope studies of different styles of alteration within the district be completed as part of sponsored research projects.

A district wide mineralising event with porphyry copper-epithermal characteristics has effected the Cambrian volcanics just prior to and during deposition of the Tyndall Group. Very few ancient submarine epithermal-porphyry style deposits have been recorded in the literature.

This district has the potential to host a variety of deposits including large low grade copper-gold deposits (eg Prince Lyell), high grade copper deposits (eg North Lyell), high grade Henty style deposits and potentially Lihir type deposits. The source of the hydrothermal fluids has not yet been identified but could include any of the complex rock suites found at the CVC/Tyndall Group boundary or even the Cambrian granites occurring just to the east of the mineralised strip of volcanics.

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TECHNICAL NOTE

sulphur.doc

To : Mike Vicary, Scott Halley, Rob Taylor

cc : RGC Exploration Information Centre Reference:

From : Tim Callaghan

Date : 14 June, 2002

Subject : South Henty and Mt Julia Sulphur Isotopes

INTRODUCTION

During January 1999 thirty samples from the recent Sth Henty Lake Newton Prospect drilling program were submitted to the University of Tasmania CSL for analysis of stable isotopes of sulphur. The aims of the investigation were to identify zonation patterns that may provide useful vectors to aid exploration for high grade parts of the system.

The Lake Newton Prospect is a well zoned, epigenetic, low grade, disseminated copper-gold system with an extensive low grade base metal halo. It is of considerable size and has many similarities with the Mt Lyell and Henty-Mt Julia copper-gold deposits of the district (Callaghan, 1998, Callaghan, 1999). The entire alteration zone extends over a strike length of at least 2kms, varies between 30m to over 400m in width and is open at depth. The alteration is well zoned (Figure 1) from the outer halo moving inwards in the following order:

carbonate-chlorite halo
carbonate-sericite-(chlorite-sphalerite-galena)
sericite-pyrite-carbonate (Au-galena-sphalerite)
sericite-silica-pyrite±chalcopyrite±gold

The top of the alteration system is characterised by either:

sericite-pyrite-barite-jasper-(sphalerite-galena)
hematite-carbonate-chlorite-jasper-(Ag)

Previous sulphur isotope studies (Callaghan, 1999) have defined a distinct zonation of $\delta^{34}S$ within the Lake Newton Prospect with the silica-sericite-pyrite Cu-Au mineralised core having lighter $\delta^{34}S$ (~6) than the surrounding carbonate-sericite-chlorite Pb-Zn anomalous halo (~12). The zonation is similar to that defined by basemetal geochemistry and alteration mapping (Callaghan, 1998, Callaghan, 1999).

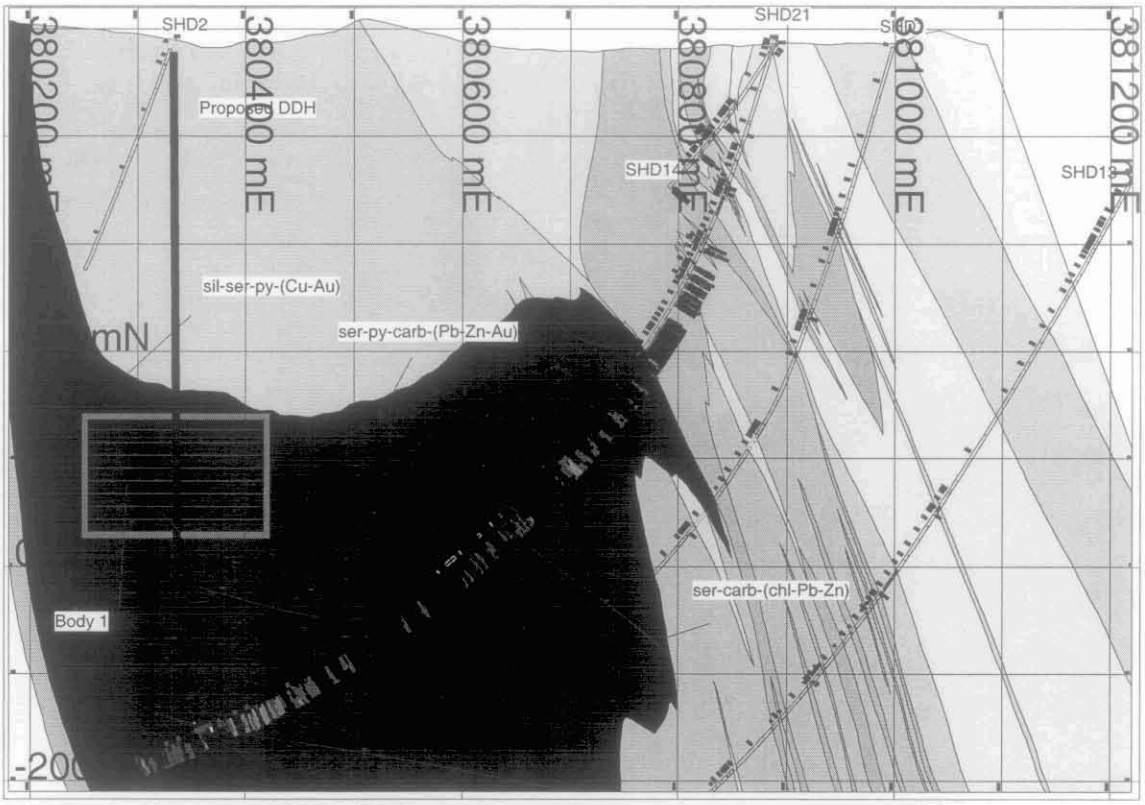


Figure 1. Section 5358900N, Lake Newton Prospect alteration zonation

COon	Undifferentiated. - Newton Creek Sandstone	Cb	Basalt lava and breccias
COonc	Mainly pebble conglomerate with minor thinly bedded quartzitic sandstone and pebble sandstone - Newton Creek Sandstone	Cymf	Rhyolitic-dacitic massflows, commonly graded. - Yolande River Sequence
COonsh	Mainly thinly bedded siltstone, quartzitic sandstone with bands of pebble conglomerate - Newton Creek Sandstone	Cys	Units of bedded siltstone, sandstone. - Yolande River Sequence
Ctc	Mainly volcaniclastic conglomerate with minor siltstone and volcaniclastic sandstone. - Upper Tyndall Group / Zig Zag Hill Formation	Cp	Quartz-feldspar hornblende porphyry
Cts	Bedded sandstone - siltstone units	Chf	Undifferentiated Henty Fault Wedge sequence
Ctt	Mainly crystal - rich volcanic sandstone (quartz-feldspar phyric). - Comstock Tuff and correlates.	Ccarb	Exhalitive carbonate horizon
Ctl	Quartz-feldspar phyric lava and intrusives	MZ	Silica - sericite - pyrite - chlorite alteration
Cttl	Crystal - rich volcanic sandstone (feldspar-pyroxene phyric), lithic-rich bases with minor ash, sandstone and limestone. - Lynchford Member and correlates.	MV	Silica - sericite alteration
Ctb	Basalt - commonly hematitic and carbonate altered. - Howards Basalt	MQ	Silica - sulphide alteration
Ca	Andestitic to basaltic intrusive bodies with lavas & clastic units. Includes feldspar-hornblende-pyroxene phyric types & small chlorite altered dykes. - Anthony Road Andesite	MA	Sericite - pyrite - carbonate alteration
Ccv	Mainly felsic pyroclastic rocks, dominantly feldspar phyric, including pumice bearing tuff & breccia , cyrstal vitric tuff, vitric tuff & minor shale & sandstone	AS	Intense albite - silica alteration
Ccvl	Mainly felsic felspar phyric lava and intrusives; massive to flow banded or autobrecciated, with rare colmnar jointing	fault	Fault

Legend for Figure 1.

It was concluded that the zonation reflects one of two possible mechanisms for the formation of the system:

1) Mixing of low $\delta^{34}S$ magmatic derived fluids with higher $\delta^{34}S$ reduced Cambrian seawater circulating through the upper volcanic pile.
2) Mixing of deeply circulating, seawater dominated hydrothermal fluid with low $\delta^{34}S$ (from scavenged rock sulphur) with higher $\delta^{34}S$ reduced Cambrian seawater circulating through the upper volcanic pile.

5 cm

Regional setting, mineralogy, metal ratios and similarities with nearby deposits favor the first possibility (Callaghan, 1998, Callaghan, 1999).

University of Tasmania Honours student Mathew Street (1999) completed infill sampling of the Lake Newton Prospect holes and came up with similar numbers and conclusions. The Howard's anomaly and Tyndall Creek areas located at the top of the Lake Newton alteration system have both negative $\delta^{34}S$, and high $\delta^{34}S$ associated with typical Lake Newton $\delta^{34}S$ (Figure 4, Sharpe, 1992). These values are associated with carbonate-barite-hematite alteration and minor sphalerite and galena mineralisation. This area represents a high level zone of mixing of hydrothermal fluid with Cambrian seawater. Negative $\delta^{34}S$ result from partioning of heavy sulphur into the oxidised sulphate phase during partial leaching of rock sulphur by low temperature, oxidised waters (Solomon et al., 1988).

A brief description of each sample, its location, sulphide type and $\delta^{34}S$ (reported in ‰ CDT) are summarised in Table 1.

Samples were selected from drillcore intersections of SHD21 and SHD22 and the sulphides for analysis marked before despatch.

Table 1. Sth Henty Sulphur Isotopes, 1999

DDH	Spl_No	From	34S	Mineral	Remarks
SHD21	1080105	286.4	5.76	py	Basaltic lithic breccia, ser-py alt.
SHD21	1080106	315.8	3.45	py	Suite II porphyry, ser-py alt.
SHD21	1080107	321	6.99	py	Massive pyrite
SHD21	1080108	372.2	30.71	py	Cvc dacitic volcaniclastic breccia, ser-CO3 alt, minor py vns.
SHD21	1080109	439	25.64	py	Suite II porphyry, CO3 alt, silica-py vns, BM stringers.
SHD21	1080110	502.4	10.01	py	Suite II porphyry, CO3 alt, carb-py vns.
SHD21	1080111	609.2	8.21	py	Cvc dacitic pumice brxx. ser-py-carb alt.
SHD21	1080112	646	7.01	py	Cvc dacitic pumice brxx. ser-py-carb-chl alt. BM vns.
SHD21	1080113	674.5	4.45	py	Cvc dacitic pumice brxx. ser-py-carb alt.
SHD21	1080114	703	4.39	py	Cvc dacitic pumice brxx. sil-ser-py alt.
SHD21	1080115	726.8	3.92	py	Cvc dacitic pumice brxx. sil-ser-py alt.
SHD21	1080116	769.4	7.98	py	Cvc dacitic VC sst. sil-ser-py alt.
SHD21	1080117	812.6	4.87	py	Cvc dacitic VC sst. carb-ser-py alt.
SHD21	1080118	825.9	5.04	py	Cvc dacitic VC sst. sil-ser-py alt.
SHD21	1080119	855.9	3.94	py	Cvc dacitic pumice brxx. sil-ser-py alt.
SHD21	1080120	876.9	3.3	py	Cvc dacitic pumice brxx. sil-ser-py alt.
SHD21	1080121	911.1	4.43	py	Cvc dacitic pumice brxx. sil-ser-py alt.
SHD22	1080122	127.4	5.8	py	Suite II porphyry, ser-py alt.
SHD22	1080123	179	5.1	py	Suite II porphyry, ser-py alt.
SHD22	1080124	224	5.72	py	Suite II porphyry, sil-ser-py alt.
SHD22	1080125	285	5.04	py	Suite II porphyry, sil-ser-py alt.
SHD22	1080126	328	7.24	py	Suite II porphyry, sil-ser-py alt.
SHD22	1080127	375	6.16	py	Suite II porphyry, sil-ser-py alt.
SHD22	1080128	413.9	5.83	py	Suite II porphyry, carb-ser-py alt.
SHD22	1080129	440.9	5.17	py	Suite II porphyry, carb-ser-py alt.
SHD22	1081031	469.2	9.94	py	Cvc pumice brxx. Ser-py-carb-chl alt.
SHD22	1081032	495.9	6.78	py	Cvc pumice brxx. sil-ser-py alt.
SHD22	1081033	513.8	5.97	py	Cvc pumice brxx. sil-ser-py alt.
SHD22	1081034	572.9	5.43	py	Cvc pumice brxx. sil-ser-py alt.
SHD22	1081035	600	2.77	py	Cvc pumice brxx. sil-ser-py alt.

RESULTS

The samples vary from a $\delta^{34}S$ of 2.77 to 30.71. The silica-sericite-pyrite zone has distinctly lighter $\delta^{34}S$ of approximately 6‰ (Figure 2) than the outer carbonate-basemetal zone with of approximately 8‰ (Figure 3).

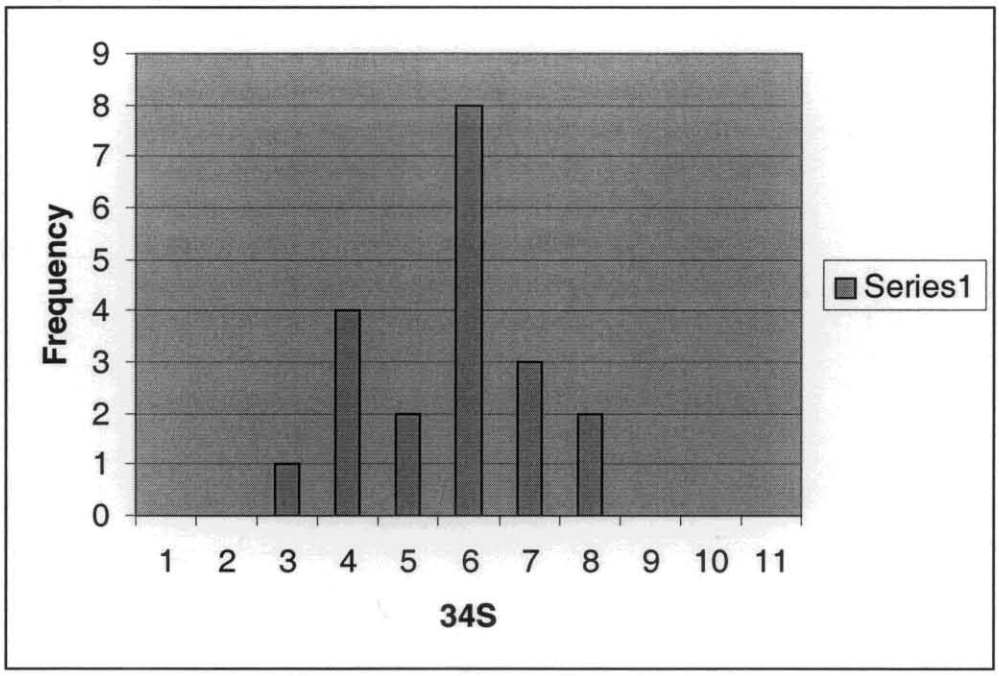


Figure 2. Histogram of $\delta^{34}S$ for silica-sericite-pyrite alteration.

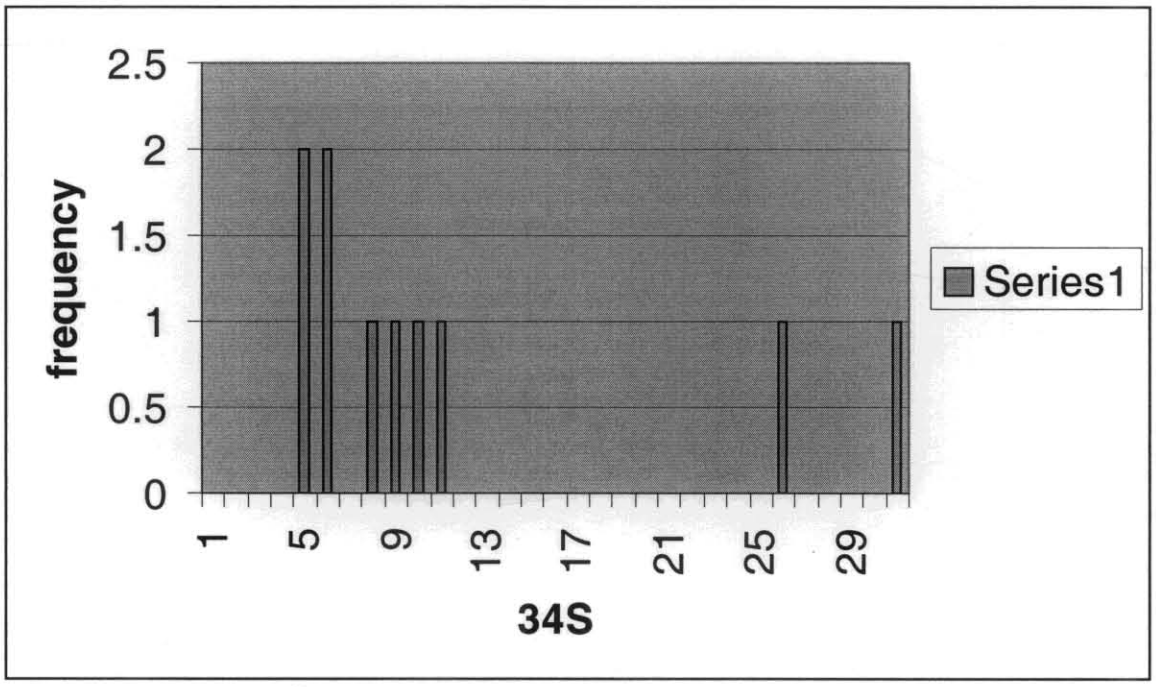
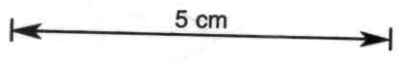


Figure 3. Histogram of $\delta^{34}S$ for carbonate alteration zone.



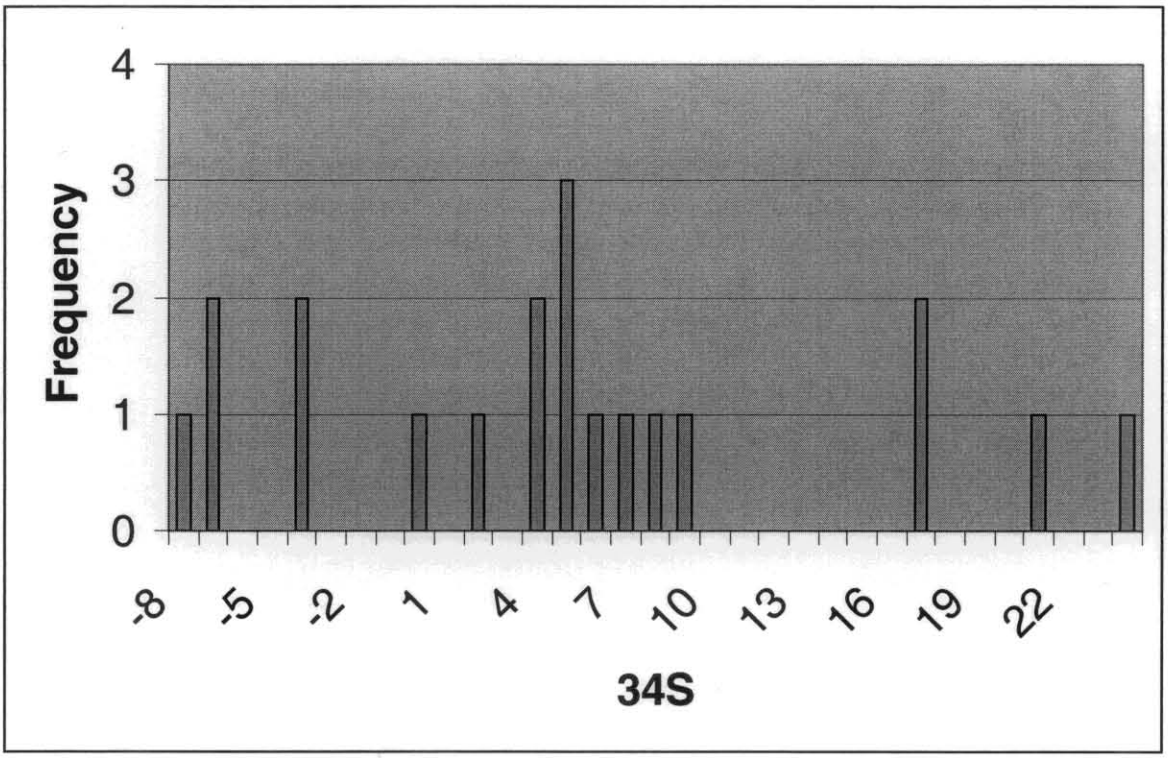


Figure 4. Howards Anomaly-Tyndall Creek $\delta^{34}S$ Histogram, (Sharpe, 1992).

There is some overlap in the values from the two groupings. Samples from the carbonate alteration zone with low $\delta^{34}S$ were taken from the sericite-carbonate-pyrite zone immediately adjacent to the inner silica-sericite-pyrite zone. Samples with higher $\delta^{34}S$ of approximaely 10-12‰ are associated with the outer carbonate-sericite-chlorite zone. Two samples have very high $\delta^{34}S$ of around 30‰. Values of this type occur around the margins of very large massive sulphide deposits such as Rosbery or Hellyer or in the upper zone of Cambrian growth faults due to complete insitu Cambrian seawater sulphate reduction (Davidson & Kitto, 1997).

Both holes intersected extensive alteration zones, both with the most intense silica-sericite-pyrite alteration (and anomalous Au) at the end of the hole. The $\delta^{34}S$ of both holes also decrease downhole reflecting the proximity to the centre of the alteration system at the end of the hole.

Alteration mapping, sulphur isotope analysis and DHEM surveys all suggest the proximity of the centre of the mineralisation system to these holes. Further drilling is recommended. Targets should include coincident geophysical and geochemical vectors.

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