

LOG NO:	NOV 30 1992 RD.
ACTION:	
FILE NO:	

**REPORT ON THE GEOLOGY, GEOPHYSICS, GEOCHEMISTRY AND
DRILLING ON THE MGM PROPERTY**

**SUB-RECORDER
RECEIVED**
NOV 20 1992
M.R.# _____ \$ _____
VANCOUVER B.C.

Golden Mining Division
NTS 83 D/1 & 82M/16
Lat: 52°02' Long: 118°14'

Owner: John Leask; White Knight Resources
Suite 922 510 W. Hastings St.
Vancouver, B.C.
V6B 1L8

Operator: Teck Exploration Ltd.
350-272 Victoria St.,
Kamloops, B.C.
V2C 2A2

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,637

Craig Ahford
Greg Thomson

SUMMARY

A sequence of faulted and folded limestones and calcareous mica and garnet schists belonging to the Kinbasket and Tsar Creek Formations were observed on the property north of the Cummins River canyon. Thus the conformable sequence of Kinbasket Limestones, Tsar Creek metapelites and Gog Group lithologies is correlatable across the property, south to Tsar Creek, a strike length of 16 kilometres.

A ground Pulse E-M survey delineated an open-ended E-M anomaly extending between lines 16+00S through the Cominco Bend claims, northward to line 24+00N. The anomaly strikes 130° approximately coplanar with observed stratigraphy.

Narrow, strong conductive horizons coincident with the mineralized horizons were recognized by the downhole EM survey of holes TK-91-1 and TK-91-3. The surface EM anomaly appears to correlate with mineralization encountered in the drill holes

Drilling confirmed the presence of the sulphide horizon, similar to that observed within the canyon showing, north from the Cummins River, to Line 24+00S, a strike length of approximately 1.2 kilometres. Thus the overall proven strike extent of the mineralized horizon is approximately 4.5 kilometres.

The results from the 1992 MGM drilling program were not encouraging. Of three drill holes, TK-92-6 and TK-92-13 intersected the target stratigraphy and sulphide horizon. At best the mineralized horizon assayed 3.13% Zn, 1.14% Pb and 0.77 oz/t Ag over 0.54 metres (TK-92-6). Elevated values of base metal sulphides were encountered in hole TK-92-13.

A strong linear Mag anomaly striking approximately 110-120° was defined by geophysical surveys conducted over re-established grid lines north of the Cummins River. Drill Hole TK-92-10 intersected the cause of the anomaly: two layers of strongly magnetic, magnetite rich mafic-intermediate tuffs within a sequence of siliceous schists and cherts.

The sulphide horizon exhibits characteristics of a large, mineralized basinal environment, with generally decreasing width and increasing Zn/Pb ratios away from the Cummins River canyon.

RECOMMENDATIONS

Considerable strike length and down-dip potential for the sulphide horizon still exist. However, due to the similarity of the character (grade, mineral assemblage) of the sulphide horizon observed to date, only a limited drill program along strike (possibly south) is recommended to test mineralization continuity and character.

TABLE OF CONTENTS

		Page
	Summary	i
	Recommendations	i
1.	Introduction	1
2.	Location and Access	1
3.	Physiography and Vegetation	3
4.	Claim Status	3
5.	Previous Work	6
6.	1992 Program	8
7.	Geology	9
	A) Regional Geology	9
	B) Property Geology	9
	I) Lithology	9
	II) Structure	11
	III) Trenches	12
8.	Soil Geochemistry	13
9.	Geophysics	14
10.	Drilling	16
	A) Results	17
	B) Mineralization and Geochemistry	22
11.	Discussions	25
12.	Conclusions	27
13.	References	28

TABLES

		Page
Table 1:	MGM Claim Group Records	4
Table 2:	Tsar Claim Group Records	4
Table 3:	Previous Work	6
Table 4:	Diamond Drill Data	16
Table 5:	Geochemical Ratios	26

LIST OF FIGURES

		Page
Figure 1:	Property Location Map	2
Figure 2:	Claim Map	5
Figure 3a&b:	Drill Hole Location	In Pocket
Figure 4:	Property Geology: North Side (1:5,000)	In Pocket
Figure 5:	Zn Soil Geochemistry	In Pocket
Figure 6:	Pb Soil Geochemistry	In Pocket
Figure 7:	Mn Soil Geochemistry	In Pocket
Figure 8:	North Rd. Zone: Pb Soil Geochemistry	In Pocket
Figure 9:	Ground Pulse E.M. Survey: Line Profiles	In Pocket
Figure 10:	Magnetometer Survey: South side	In Pocket
Figure 11:	Magnetometer Survey: North side	In Pocket
Figure 12:	VLF EM Line Profiles: South side	In Pocket
Figure 13:	VLF EM Line Profiles: North side	In Pocket
Figure 14:	Fraser Filtered In-Phase VLF: South Side	In Pocket
Figure 15:	Fraser Filtered In-Phase VLF: North Side	In Pocket
Figure 16:	Cross Section DDH TK-92-6 (1:1000)	18
Figure 17:	Cross Section DDH TK-92-10 (1:1000)	19
Figure 18:	Cross Section DDH TK-92-13 (1:1000)	21
Figure 19:	Cross Section MGM-1 (1:1000)	23
Figure 20:	Cross Section MGM-2 (1:1000)	24
Figure 21:	True Thickness Longitudinal Section	In Pocket

APPENDICES

- Appendix A: Statement of Qualifications
- Appendix B: Cost Statement
- Appendix C: Certificate of Analyses
- Appendix D: Analytical Procedures
- Appendix E: Drill Hole Logs
- Appendix F: Geophysical Instrumentation and Field Technique

1. INTRODUCTION

During the summer of 1991, Teck Exploration conducted a program consisting of mapping, lithogeochemistry, soil sampling and HLEM geophysics on the MGM and TSAR claim groups. Work concentrated mainly on the area south of Cummins River. A geological sequence similar to that which hosts the Cummins River massive sulphide occurrence (covered by the Cominco Bend claim group) was located from the Cummins River southeast to Tsar Creek, a distance of 13 kilometres.

During the fall of 1991, Teck's four hole (1873.8m) diamond drill program and down hole geophysical surveys on the claim groups south of the Cummins River successfully proved the continuity of mineralization from the Bend claims onto the MGM claim group to ≈ 2.5 kilometres south of the Cummins River.

During 1992, from June through to mid September, a program of VLF, Magnetometer, surface and downhole Pulse EM geophysical surveys, soil sampling, geologic field mapping and drilling was performed by Teck on both the MGM and the Cominco Bend claim groups.

The 1992 soil geochemical survey, geological mapping (1:5000) and drilling of the MGM claims concentrated on the area north of the Cummins River canyon. A total of three diamond drill holes (464.2m) were completed on the MGM property.

This report describes the MGM program's results and presents an interpretation of the results.

2. LOCATION AND ACCESS

The property lies on the east side of the Rocky Mountain Trench approximately 100km northwest of Golden, B.C. (Figure 1), located both north and south of the confluence of Cummins River and Columbia Reach (Kinbasket Lake). The property is located on NTS map sheet 83D1 and 82M/16, bounded by latitude's $51^{\circ}59'$ to the south and $52^{\circ}05'$ to the north and longitude's $118^{\circ}04'$ to the east and $118^{\circ}17'$ to the west.

The property is not road accessible. Helicopter services out of Golden or Revelstoke or a float plane service from Golden are available. Large freight may be brought in by a barge service out of Bush Harbour, located 50km southeast of the claim area.

The property itself is well covered by recent clear cut logging areas and logging roads which are in good driveable condition. Several are present between Cummins river and Tsar creek. Road coverage of the portion of the property lying to the north of Cummins river has been greatly increased by several new roads constructed during the 1992 field season.

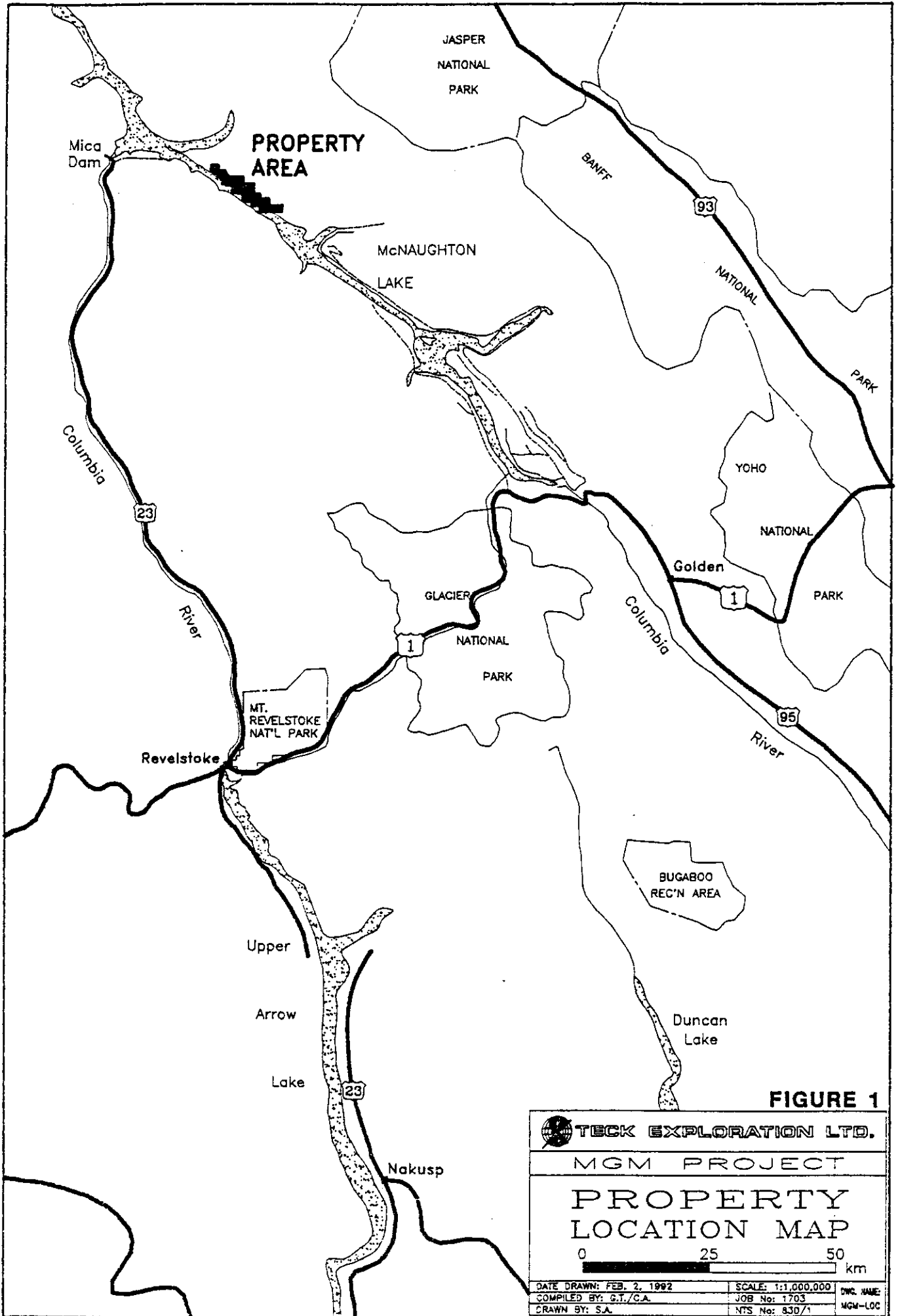

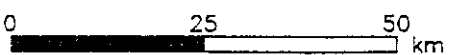


FIGURE 1

 TECK EXPLORATION LTD.		
MGM PROJECT		
PROPERTY LOCATION MAP		
		
DATE DRAWN: FEB. 2, 1992	SCALE: 1:1,000,000	DWG. NAME:
COMPILED BY: G.J./C.A.	JOB No: 1703	MGM-LOC
DRAWN BY: S.A.	NTS No: 830/1	

3. PHYSIOGRAPHY AND VEGETATION

Elevations across the property range between lake level at approximately 762m to the top of the property boundary at 1,800m. The entire property is below the treeline which is approximately at 1,970 metres. Slopes are moderate to steep.

The property lies within the Interior Wet Belt where precipitation can exceed 100 centimetres per year. Winters in the area are usually long and severe with snowfall often exceeding 9 metres. Water line of the Columbia Reach varies seasonally from approximately 730-765 metres (\approx 2400-2500 ft).

Vegetation consists of thick stands of cedar, douglas fir and hemlock at lower elevations giving way to lodgepole pine and balsam fir above 1370 metres. For the most part the property is covered by alluvial sediments ranging in thickness from 1 to 30 metres.

4. CLAIM STATUS

The property is located in the Golden mining division. The following claims (Tables 1 & 2) are registered in the name of Teck Corporation currently held in trust for White Knight Resources Ltd.

The current claim configuration for the property is shown on Figure 2.

Table 1. MGM GROUP OF CLAIMS

Claim Name	Record No.	Units	Record Date	Expiry Date
MGM	213115	9	AUG/20/79	AUG/20/2001
MGM 2	213128	2	SEPT/19/79	SEPT/19/2000
MGM 3	213129	6	SEPT/19/79	SEPT/19/2000
MGM 5	213239	5	JUNE/28/83	JUNE/28/2001
MGM 8	213676	6	MAY/27/90	MAY/27/2001
TSAR 1	213843	16	FEB/17/91	FEB/17/2001
TSAR 3	213845	12	FEB/18/91	FEB/18/2002
TSAR 5	213847	6	FEB/16/91	FEB/16/2002
TSAR 11	306071	2	OCT/26/91	OCT/26/2002
TSAR 12	306072	2	OCT/26/91	OCT/26/2002
TSAR 13	306073	2	OCT/26/91	OCT/26/2002
TSAR 14	306074	2	OCT/29/91	OCT/29/2002
TSAR 15	306075	3	OCT/29/91	OCT/29/2002
TSAR 16	306076	2	OCT/29/91	OCT/29/2002
TSAR 17	306077	3	OCT/29/91	OCT/29/2002
TSAR 18	306078	3	OCT/29/91	OCT/29/2002
TSAR 19	306079	6	OCT/28/91	OCT/28/2002
TSAR 20	306080	3	OCT/28/91	OCT/28/2002
TSAR 21	306081	4	OCT/30/91	OCT/30/2002
Total: 94 Units				

Table 2. TSAR GROUP OF CLAIMS

Claim Name	Record No.	Units	Record Date	Expiry Date
ARM	213851	1	FEB/17/91	FEB/17/2002
MGM 4	213218	20	AUG/4/82	AUG/4/2001
TSAR 2	213844	20	FEB/17/91	FEB/17/2002
TSAR 4	213846	12	FEB/18/91	FEB/18/2002
TSAR 6	213848	12	FEB/18/91	FEB/18/2002
TSAR 7	213849	6	FEB/16/91	FEB/16/2002
TSAR 8	213850	18	FEB/17/91	FEB/17/2002
TSAR 9	306069	6	OCT/26/91	OCT/26/2002
TSAR 10	306070	5	OCT/27/91	OCT/27/2002
Total: 100 Units				

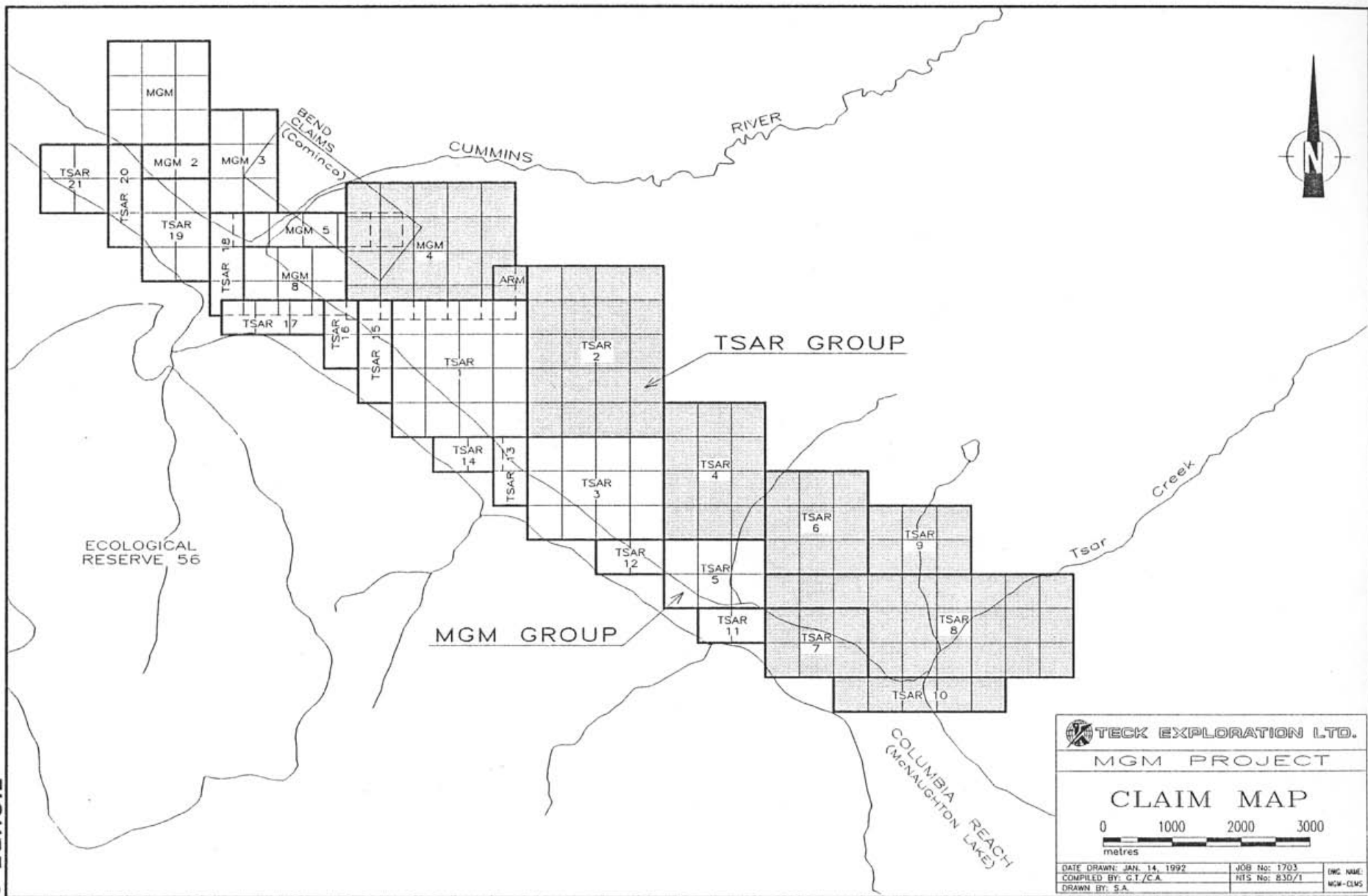


FIGURE 2

TABLE 3
5. PREVIOUS WORK

YEAR	COMPANY	WORK	RESULTS
1940		Big Bend highway Construction	Discovered Canyon zone on Cummins river.
1949		First claims staked	Claims lapsed.
1966	Cominco Ltd.	Staked the Bend group of claims (45 units)	
1967	Cominco Ltd.	Geological mapping 240m of drilling (13 holes) Trenched main showing on either side of Cummins river	Outlined the Canyon zone to be a stratiform body of massive sulphide mineralization yielding an average width of 6.5m of 3% combined Zn-Pb & 0.25 oz/t Ag. Considered occurrence to be of 'fissurevein' type.
1968-1974	Cominco Ltd.		Cominco gradually reduced claim group to the 12 now currently being held.
1970	Laura Mines Ltd.	Geological mapping Soil sampling ≈490m of drilling (4 holes - canyon showing)	A coincident Pb-Zn geochem anomaly was outlined in the area of the known mineralized structural trend. No other geochemical trend was outlined. Expanded known width of the canyon zone to 8.6m however as a result aggregate grades are lower than Cominco's. Drill results include: DDH A: 0.75% Zn, 0.36% Pb, 0.6 oz/t Ag over 11.43m. DDH B-1: 1.75% Zn, 0.27% Pb, 0.015 oz/t Ag over 2.89m. DDH C: 0.99% Zn, 0.26% Pb, 0.25 oz/t Ag over 15.85m. Returned property to Cominco.
1979	John Leask & Assoc.	Staked the MGM and the MGM2-4 claims Reconnaissance geological mapping	Reinterpreted the Bend mineral occurrence to be of a shale hosted massive sulphide type similar to the Cirque and Howards Pass deposits.
1981	E&B Explorations Inc.	Geological mapping	Related the north road showing, the canyon showing and a pyrrhotite showing within the Tsar creek area to one conformable mineralized unit with a strike length of approximately 12 kilometres.
1983	Riocanex	Carried out Magnetic, VLF-EM and SE-88 Genie surveys over the MGM and the MGM2,3 and 7 claims. Minor prospecting over the magnetic anomaly.	A magnetometer anomaly, north of the Cummins River, striking ≈110° was observed. A slightly weaker mag response was observed over the North Rd. showing. No VLF-EM response was observed over the known mineralization. The mag anomaly was found to be caused by narrow bedding conformable bands of disseminated magnetite within a 'dirty quartzite'.
1985	Eso Minerals Canada	Geological mapping Soil sampling VLF-EM & large loop EM-37 over north rd. showing 211.85m of drilling (2 holes near north rd. showing)	Further outlined the north road showing (3km north of canyon zone) with Zn and Pb soil geochemistry and geologic mapping. The two drill holes intersected weak Zn-Pb mineralization within a siliceous dolomite, however, results neither confirmed nor denied the presence of the massive sulphide extension to the North road area. A picture of greater geological complexity was encountered.

PREVIOUS WORK CONTINUED

7

YEAR	COMPANY	WORK	RESULTS
1987	Cominco Ltd.	Geological mapping Road access and drill site construction	Enhanced access to mineralized area south of Cummins River. Observed the stratabound mineralization over a longer strike/dip distance than previously inferred.
1991	Cominco Ltd.	≈1200m of drilling (3 holes)	Traced the mineralized dolomite unit to greater depth and southeasterly extent. DDH C-91-2 provided an 11.2m (structurally thickened) intersection of the sulphide-dolomite unit. Best intersections include C-91-1: 3.29% Zn, 0.86% Pb over 1.93m and 3.36% Zn, 0.86% Pb over 1.8m. C-91-2: 4.68% Zn, 1.02% Pb over 5.4m which includes a 1.25m section of 10.2% Zn, 2.1% Pb. C-91-3: 1.85% Zn, 0.29% Pb over 3.5m.
1991	Teck Exploration	Geologic Mapping Geochemical Sampling HLEM Geophysics 1873.8m of drilling Downhole UTEM survey	Mapped a similar geological sequence to that exposed within the Cummins River 13Km south to Tsar Creek. Indicated and confirmed the presence of the sulphide horizon 3Km south from Cummins River. Intersections of the sulphide horizon were generally of sub-economic width, best intersections include: TK-91-1: 9.36% Zn, 4.22% Pb, 65.6 g/t Ag over 0.5m. TK-91-3: 4.44% Zn, 3.06% Pb, 34.6 g/t Ag over 0.4m. TK-91-4: 5.82% Zn, 0.76% Pb, 8 g/t Ag over 0.5m.

6. 1992 PROGRAM

From June 10 to Sept 20, Teck Exploration conducted a concurrent exploration program of the Cominco Bend and the White Knight MGM claims. In total, 30 field days were spent examining the MGM property.

Work by Teck Exploration on the MGM Property consisted of the following:

1. Establishment of 7,585 metres of new gridlines, both north of the Cummins River (the north side) and south of the Cummins River (the south side of the MGM property).
2. Re-establishment of 11,110 metres of old gridlines on the north side of the property.
3. 9,940 metres of ground Pulse E-M surveys conducted both north and south of Cummins River (Pacific Geophysical Surveys).
4. Collecting of 183 soil samples on the north side and 2 'fill in' soil samples on the south side of the property.
5. A total of 22,345 metres of concurrent ground Magnetometer and VLF surveys, covering 11,005 metres of 1992 gridlines on the north side and 11,340 of 1991 and 1992 gridlines on the south side of the property.
6. Downhole Pulse E-M surveys on diamond drill holes TK-91-1 and TK-91-3 (Pacific Geophysical).
7. Two backhoe trenches along the main access road on the north side of the MGM property.
8. Joint payment with Forestry Service in the completing of new access roads north of the Cummins River.
9. Geologic mapping of exposure along access roads and grid lines.
10. Diamond drilling of 3 holes totalling 464.2 metres.

Drill hole locations are shown on Figures 3a & 3b.

Drill core samples were analyzed by Rossbacher Labs of Burnaby, B.C.

7. GEOLOGY

A. Regional

Regionally, the property lies on the west limb of a major anticlinorium and is bounded to the west by the Purcell Thrust Fault.

The property is in an area of dominantly Lower to Mid Cambrian miogeosynclinal rocks represented by three main lithological elements: the Mid to Upper Cambrian Kinbasket Limestones and the Mid to Lower Cambrian Tsar Creek metapelites of the Chancellor Group and the Lower Cambrian Quartzites of the Gog Group.

Metamorphic grade throughout the property ranges from lower to upper greenschist facies up to amphibolite or garnet-staurolite-kyanite grade. *Muscovite, biotite, almandine garnet and cordierite are common metamorphic minerals. Kyanite and sillimanite were observed in a few localities.*

Previous depositional environment interpretation (Teck 1991) of the area has related the Tsar Creek Formation to be a product of an influx (orogenic?) of pelitic material into a quiescent platform-margin calcareous-chert basin (Gog group lithologies). With the cessation of pelitic deposition the carbonate platform environment of the Kinbasket Formation developed.

B. Property Geology

The 1992 field mapping concentrated mainly in the area north of the Cummins River. Significant overburden and forest coverage throughout the area severely limit outcrop exposure. Existing and newly constructed logging roads assisted greatly in providing outcrop exposure and drill access to the mineralized horizon.

Geologic mapping at 1:5000 (Figure 4) revealed similar lithologies to those observed within and south of the Cummins River Canyon. The 1992 investigation indicates the conformable sequence of Kinbasket Limestones, Tsar Creek metapelites and Gog Group lithologies is correlatable across the property south to Tsar Creek, a strike length of ≈ 16 kilometres.

I) Lithology

Gog Group

The Gog group is Lower Cambrian in age and consists of three formations, from youngest to oldest: Mahto, Mural and McNaughton. For the purpose of this investigation Gog group lithologies have not been subdivided.

In the property area this sequence consists of milky to greyish white quartzite, light grey to pale pink micaceous quartzite, thinly laminated light grey to pink quartzofeldspathic schists, chert, interbedded biotite and garnet schists and a greyish white to light buff coloured marble.

Chancellor Group

The Tsar Creek and Kinbasket Formations of the Chancellor group are recognized to be Middle Cambrian in age. Due to structural thickening, stratigraphic thicknesses are hard to establish. The upper Tsar creek-lower Kinbasket contact is gradational and thus its placement is very much subjective.

Tsar Creek Formation

Beginning at the base, the Tsar creek formation is dominated by dark grey-brown, non-calcareous pelitic schists of varying argillaceous component with lesser interbedded siliceous schists. Lithologies observed include biotite schists, garnet-biotite schists and garnet-staurolite schists and sericitic siliceous schists (altered muddy cherts).

Upwards, the Tsar Creek Formation hosts a crudely stratabound sulphide horizon of variable width bounded by relatively distinct hanging and foot wall lithologies. The sulphide mineralogy is simple with pyrrhotite, pyrite, sphalerite and galena predominating. Lithologies associated with the mineralized horizon, from hanging wall to foot wall are; Very fine grained, grey cherts and waxy, yellow-grey-green quartz-sericite schists, weakly siliceous, brown weathering, grey manganiferous dolomites, siliceous sericitic dolomitic schists and fine grained, dark grey to grey, argillaceous garnet schists and siliceous sericitic pelitic schists.

Such lithologies may relate to metamorphosed cherts, carbonates and argillites deposited within a cratonic margin basin.

Upwards from the mineralized zone the Tsar Creek rocks are dominated by light grey to grey-brown pelitic schists of variable metamorphic grade (the assemblage may reflect original bulk composition) and calcareous component. Lithological units observed were calcareous muscovite, biotite, garnet and cordierite schists, with lesser amounts of micaceous (often cordierite bearing) limestones and non-calcareous pelitic schists.

Kinbasket Formation

The Kinbasket Formation is dominated by light grey to grey, thinly laminated, sandy to silty limestones often with varying amounts of intercalated pelitic material. Interstratified beds of calcareous pelitic sediments from 2-30m in thickness occur within the limestones. Regularly banded, light grey-dark grey (carbonaceous \pm graphite laminae), limestones are also recognized within the formation.

The limestones have been metamorphosed to impure marbles and pelitic material within the limestones has formed mica, garnet and cordierite. Similarly, the interstratified pelitic layers have been metamorphosed to calcareous biotite-muscovite, garnet-biotite and garnet-cordierite-biotite schists. Under the local metamorphic grade the Kinbasket limestones generally appear as a rusty to buff weathered, biotitic and locally garnet bearing grey unit.

A sequence of creamy white cherts, grey-green muddy cherts, quartzo-feldspathic schists, dark grey to grey-brown garnet-mica schists and garnet-staurolite-biotite schists with minor interbeds grey to dark grey limestones and magnetite-bearing tuffs were observed within the Cummins canyon, in outcrop and in diamond drill holes TK-91-2 and TK-92-10. This sequence of rocks may conformably overlie the Kinbasket Formation or may be fault bounded to the sequence.

II) Structure

Three phases of deformation are recognized within the area. The dominant structures within the Kinbasket and Tsar Creek rocks are the second phase (F_2) tight to isoclinal asymmetric step-like folds with an associated axial planar (S_2) cleavage near parallel with the average long limb orientation. First phase folds (F_1) are isoclinal and may be observed on a single layer scale. Third phase structures (F_3) are recognized by the rotation of linear (L_2) fabrics and curvilinear F_2 fold axes.

South of the Cummins River lithologies of the Kinbasket and Tsar Creek Formations generally strike northwest-southeast and dip 50° - 60° southwest. Similar structural orientations are observed north of the Cummins River until the area north of Three Mile Creek.

North of Three Mile Creek, structures within the Kinbasket and Tsar Creek Formations are observed to be more gently dipping (15° - 35°) and the local topography often presents a dip-slope face for the Tsar Creek lithologies.

Previous interpretation, by the authors (Teck 1991), of structures north of Cummins River defined the area to be bounded by a thrust fault. This current investigation leads the authors to reinterpret the area.

The sequence of cherts, quartzofeldspathic schists, metatuffs and dark grey limestones which occurs mainly along the Columbia Reach north of the Cummins river (see Figure 4), is interpreted as being fault bounded to the Kinbasket and Tsar Creek stratigraphy. Within the fault boundary, lithologies strike approximately 110° and dip moderately 45 - 55° toward the South-South-West. This fault bounded strata is extended south of the Cummins River to approximately Line 12+00S, where it is thought the fault continues under the Columbia Reach.

The complex relationship between the Tsar Creek and Kinbasket Formations within the north side is mainly due to a flattening of the strata and dually plunging fold structures.

In the area of the North Road trenches, a complex topographical and F_2 - F_3 fold interference pattern is interpreted to explain the outcrop limits of the dolomite horizon. The structure represents exposed refolded F_2 antiformal and synformal structures that plunge toward both the northwest and southeast.

Two faults have been interpreted on the basis of geophysics conducted north of Cummins River. Both faults strike approximately 170° and display a apparent sinistral displacement. The faults correspond in attitude and apparent sense of motion to a fault mapped south of the Cummins River. The fault south of Cummins River appears to be a reverse normal fault as it dips steeply west and strata east of the fault is downthrown. The three faults appear to cross cut all of the geologic strata and are most likely the result of a late stage brittle deformation of the area.

III) Trenches

Two backhoe trenches were excavated along the main switchback road north of Cummins River. A single sample was examined from each trench. Samples were assayed by Eco-Tech Labs of Kamloops, B.C.

The first trench, at line 35+00N, 7+63W, was exposed to examine the possible surface expression of the high magnetometer response located nearby. A light grey, weakly foliated, quartz wacke with minor biotite and chert bands was encountered. Minor disseminated euhedral pyrite was observed within the rock. A sample (#106001) was analyzed from the trench, no significant base metal values were received.

The second trench, at line 38+20N, 2+30W, exposed chocolate brown dolomite and a siliceous schist. Both units strike northwest-southeast and dip moderately to the southwest. The siliceous schist appears to underlie the dolomite. A sample (#81708) of a 15cm wide fine grained, sphalerite-pyrrhotite band at the dolomite-siliceous schist contact (the base of the dolomite) was analyzed and received 7.06% Zn, 2.39% Pb and 23.2 g/t Ag.

8. SOIL GEOCHEMISTRY

Mattock soil sampling was carried out selected portions of the north and south side grid area. Sample interval was generally 25m. A total of 183 and 2 samples were collected from the north and south grid areas respectively and examined by 30 element (Ag, Al, As, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sn, Sr, Ti, U, V, W, Y, Zn) ICP analysis. Samples were collected from the 'B' horizon which generally occurred at a depth of 15 to 20cm. All analyses were conducted by Eco-Tech Laboratories in Kamloops, B.C. For a complete list of results see Appendix C for certificate of analyses. Analytical procedures are included in Appendix D.

Sample locations and geochemical results for zinc, lead and manganese are displayed on Figures 5, 6 and 7 respectively.

Results from lines 13+00N to 18+00N do not display any significant anomalous results in accordance to the strong magnetometer anomaly recorded by this current study and Riocanex (1983). However, thick overburden in the area may mask true surface geochemical trends.

Previous work (Esso Minerals 1985), has shown elevated Zn and Pb within the soil from lines 32+00N to 40+00N concordant with mineralized dolomite outcrop for the North Road trench area. Soil geochemical surveys of Lines 28+00N to 31+00N and lines 41+00N and 42+00N were conducted to examine the strike potential of lithologies exposed within the trench area. Within this area overburden cover is $\approx 0.5-3\text{m}$.

Figure 8 displays contoured Lead soil geochemical data from the current survey and that reported by Esso Minerals (1985). Lead was depicted due to its lack of mobility. Lead enrichment within the soil is strong near to the North Road Trenches. Anomalous Pb enrichment appears to extend toward the northwest (lines 41 & 42N) but not the southeast.

9. GEOPHYSICS

Several geophysical surveys were conducted. The down hole and ground Pulse E-M survey was conducted by Pacific Geophysics of Vancouver, B.C. The Magnetometer and VLF geophysical surveys were conducted by Teck personnel.

For the Pulse EM survey the association of pyrrhotite, an excellent conductor, with the lead-zinc mineralization was inferred to indicate areas of increased base metal accumulations.

The ground Pulse EM survey delineated an open-ended E-M anomaly extending between lines 16+00S, through the Cominco Bend claims, northward to line 24+00N on the MGM claims (Figure 9). The trace of the anomaly is continuous between lines 8+00S and 24+00N, striking approximately 130 degrees, coplanar with observed stratigraphy. Between lines 8+00S and 12+00S the trace of the anomaly is offset. Mapping within the area has interpreted a reverse normal fault striking roughly 170°, with the area to the south downthrown. The offset trace of the EM anomaly is likely due to the resultant displacement by the fault.

At present, the ground pulse EM anomaly does not appear to be directly related to the North Road Trench showings.

A downhole Pulse EM survey was employed in an attempt to locate any off-hole response which may reflect concentrated mineralization.

Two 1991 boreholes, TK-91-1 and TK-91-3 were surveyed with the EM system utilizing separate loop configurations. Previously (Teck 1991), holes TK-91-2 and TK-91-4 were surveyed by Syd Visser of SJ Geophysics Ltd. and Lamontagne Geophysics Ltd. with a BH-UTEM system utilizing two larger loop configurations.

The survey confirms the presence of a strong E-M anomaly coincident with the mineralization. Hole TK-91-3 produced an interesting off-hole response within 50 meters east of the hole. Another much less significant off-hole conductive response is located within 50 meters north of hole TK-92-1. Both off-hole responses may be related to folded structures within the massive sulphide horizons.

A full report and interpretation of the Pulse EM geophysics is included in Appendix F.

Magnetometer and VLF surveys were conducted over selected portions of the south side grid and the re-established north side Riocanex grid.

On the south side grid (Figure 10), an expected high mag response over the sulphide horizon did not manifest, this may be due to thinning upward nature of the horizon. An interesting high mag response occurs at Line 32+00S, 2+00E, coincident with a

relatively high soil anomaly and HLEM anomaly (Teck 1991).

On the northern grid (Figure 11) a strong mag response occurs between lines 13+00N, 0+75W to 32+00N, 8+00W striking roughly from 110°-120°. The trend is cut by two sinistral faults both striking at $\approx 170^\circ$. This strong magnetometer response has been, in part, previously surveyed by Riocanex (1983).

VLF data was recorded concurrently with magnetometer data. VLF profiles (Figures 12 & 13) do not display any immediately significant trends for the grid areas, however, fraser filtering of the in-phase data, displays some interesting features. On the grid south of Cummins River (Figure 14) a high response area on lines 4+00S, 6+00S and 8+00S occurs nearly coincident with the ground pulse EM anomaly and a high response occurs on 30+00S, 2+00E approximately corresponding with the trace of the 1991 HLEM conductor. Western-most stations from lines 0+00 to 6+00S display a high response that correlates with a low mag response.

North of Cummins River (Figure 15) the section of geology interpreted to be contained within the fault bounded sequence produces fraser filtered highs and lows which generally anticorrelate with the magnetometer data. The high mag trend produces a generally negative VLF response, however, the strike of the responses within the area are similar.

10. DIAMOND DRILLING

Three diamond drill holes were cored for a total of 464.2 metres. Drilling was carried out by Lone Ranger Diamond Drilling of Lumby, B.C. Selected portions of the NQ (1&7/8) core were split and sent to Rossbacher Labs in Burnaby, B.C. A total of 11 samples were collected and analyzed; all for 30 element by ICP; 2 were assayed for Ag, Pb and Zn, and 3 assayed for Au. Complete results are listed in the certificates of analyses in Appendix C.

Drill hole locations are plotted on Figure 3 and Table 4 summarizes the accurate locations and data for the 1991 and 1992 drill programs. Core is currently being stored on the property. Core recovery averaged 100%-90%.

TABLE 4. Diamond Drill Hole Data

Hole No.	Grid Location	Elevation	Azimuth	Dip	Length	No. of Samples
1991 DIAMOND DRILLING						
TK-91-1	5+04S, 3+34W	1017 m	03S	-70	319.1 m	15
TK-91-2	0+89N, 6+17W	1045 m	—	-90	572.0 m	7
TK-91-3	9+75S, 6+18W	1008 m	03S	-70	462.4 m	16
TK-91-4	18+90S, 6+87W	900 m	03S	-70	520.3 m	1
Total					1873.8 m	39
1992 DIAMOND DRILLING						
TK-92-6	23+94N, 5+90E	1170 m	040	-73	204.82m	6
TK-92-10	14+78N, 2+30W	825 m	010	-50	157.28m	3
TK-92-13	44+85N, 1+80W	1170 m	03S	-70	102.1m	2
Total					464.2m	11

Objectives of the drill program were:

1) To define and trace Cominco's Bend massive sulphide horizon northwest onto the MGM property.

2) To examine the magnetometer anomaly, north of Cummins River, as defined by previous and the current investigation.

The target stratigraphy, the Kinbasket and Tsar Creek Formations were intersected within drill holes TK-92-6 and TK-92-13. Numerous minor folds were observed within all horizons.

I) Results

Complete drill logs are included in Appendix E. A brief description of each drill hole with best mineralized intersections follows.

A) Hole TK-92-6 (Figure 16)

Objective: To test the sulphide horizon, as expressed by the up-dip edge of the EM conductor just off the northwest end of the Cominco Bend claim group.

Result:

0-30.5m; Overburden.

30.5-89.6m; Grey micritic limestone to micaceous limestone with interbedded calcareous garnet-mica schists from 64.7-75.4m.

89.6-113.9m; Calcareous garnet-cordierite-mica schist.

113.9-144.25m; Grey micritic limestone to micaceous limestone with interbedded calcareous garnet-cordierite-mica schists.

144.25-193.16m; Grey calcareous garnet-cordierite-mica schist with interbedded calcareous mica schists and limestones.

193.16-193.7m; Mineralized band of massive Po, Py and minor Sph and Gal associated with 30cm quartz band @192.9-193.2m.

193.7-204.8m; Argillaceous garnet-biotite schist with interbedded narrow cherty bands.

Best results include:

Sample No.	From	To	Length	%Zn	%Pb	g/tAg
81741	193.16	193.51	0.35	1.62	0.76	23.65
81742	193.51	193.7	0.19	5.9	1.84	32.23

B) Hole TK-92-10 (Figure 17)

Objective: To test the strong mag anomaly striking roughly 110-120° degrees observed from line 13+00N to line 35+00N.

Result:

0-15.85m; Overburden.

15.85-25.92m; A series of very fine grained banded green-brown to creamy white cherts with a fine grained pelitic component and minor interbed of garnet-biotite schist from 16.7-18.9m.

25.92-27.21m; Fine grained, dark green chloritic schist originally a mafic to int. tuff.

27.21-53.18m; Banded, green-brown pelitic cherts with minor interbedded garnet

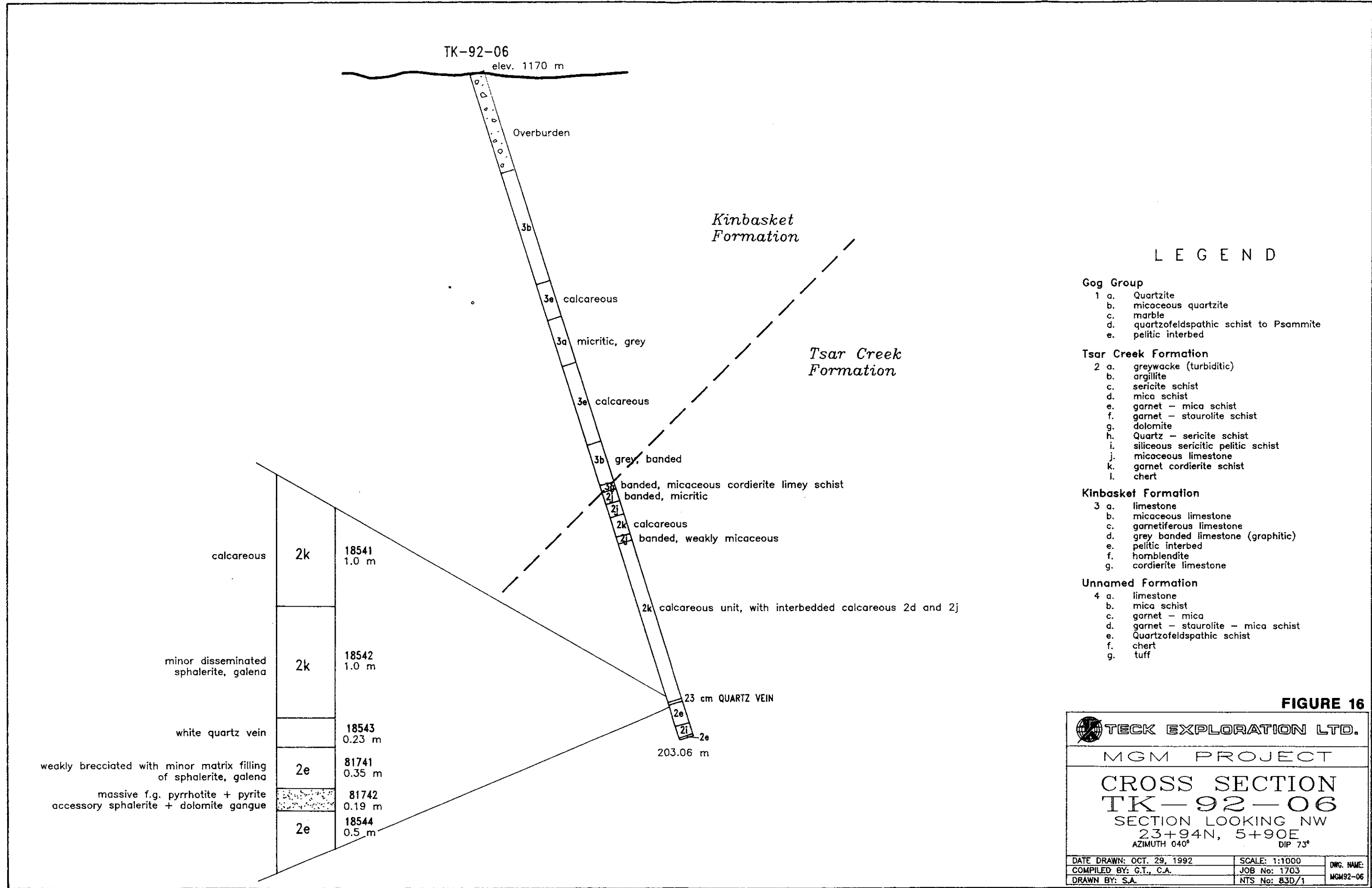


FIGURE 16

TECK EXPLORATION LTD.		
MGM PROJECT		
CROSS SECTION		
TK-92-06		
SECTION LOOKING NW		
23+94N, 5+90E		
AZIMUTH 040° DIP 73°		
DATE DRAWN: OCT. 29, 1992	SCALE: 1:1000	DWG. NAME:
COMPILED BY: G.T., C.A.	JOB No: 1703	MGM92-06
DRAWN BY: S.A.	NTS No: 83D/1	

schist.

53.18-76.7m; Biotite garnet schist.

76.7-83.5m; Turbidite sequence (silt-argillite) with minor chert.

83.5-113.1m; Banded, green-brown pelitic chert with minor interbedded limestone and biotite-garnet.

113.1-117.8m; Dark green chloritic schist (mafic to intermediate metatuff) with minor magnetite bands.

117.8-126.9m; Pelitic cherts, micaceous schist with a quartz flooded breccia from 120.6-121.6.

126.9-135.3m; Dark green metatuff with pervasive magnetite bands.

135.3-157.3m; Siliceous biotite-garnet schist (weakly magnetic 135.3-141.1).

Best results include:

No evidence of a repetition of strata hosting a similar sequence to the Bend massive sulphide horizon existed within the core and no significant sulphides were encountered. Gold geochem of the magnetite bearing horizons produced ≈ 5 ppb Au.

C) Hole TK-92-13 (Figure 18)

Objective: To test the strike extent and potential of the north road showing.

Results:

0-31.98m; Calcareous garnet-biotite schist.

31.98-55.4m; Interbedded and intercalated light grey limestone and calcareous garnet-cordierite-biotite schist.

55.4-65.0m; Banded, calcareous garnet-cordierite-biotite schist.

65-66.09m; Yellowish-grey, laminated sericitic siliceous schist with minor sphalerite towards bottom of unit.

66.09-74.5m; Banded dark grey-light grey, garnet-biotite schists.

74.5-78.19m; Broken, iron-carb. altered siliceous schist.

78.19-102.1m; Light grey biotite-garnet schist. Biotite segregated into 1-2.5cm pseudo-rhomboidal aggregates or 'booklets'.

Best results include:

Sample No.	From	To	Length	Zn(ppm)	Pb(ppm)	g/tAg
18618	65.64	66.02	0.38	5946	384	0.9

II) Mineralization and Geochemistry

A crudely stratiform sulphide horizon is contained primarily within the manganiferous dolomite and quartz-sericite schists of the Tsar Creek Formation. Current and previous drill efforts have proven the existence of the sulphide bearing horizon over a 4.5Km strike length and over 900m of down-dip extent.

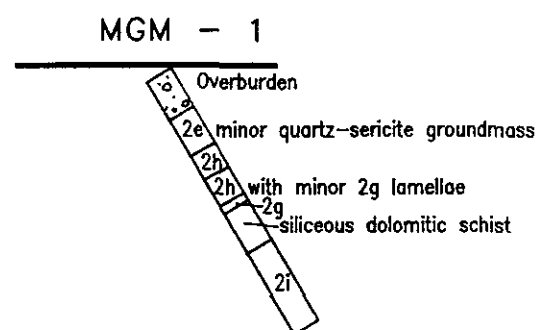
Dominant sulphides are pyrrhotite, pyrite, sphalerite and galena with minor occurrences of chalcopyrite.

Sulphides typically occur as;

- 1) massive very fine grained bands of primarily pyrrhotite with lesser sphalerite yielding approximately 1.5-8.0% Zn, 0.5-2.3% Pb and 7-30 g/t Ag.
- 2) 0.3-1.0cm laminated bands of pyrite, sphalerite and minor galena yielding approximately 0.15-1.4% Zn, 0.05-0.35% Pb and 1.5-4.5 g/t Ag.
- 3) stringers of pyrite, galena and minor sphalerite within quartz veins/bands yielding approximately 0.2-0.4% Zn, 0.1-0.25% Pb and 1.5-5.3 g/t Ag.
- 4) massive bands of coarse grained pyrite with interstitial sphalerite yielding approximately 1.0-5.0% Zn, 0.25-1.25% Pb and 2.0-25 g/t Ag.

Current and previous drilling by Teck has, to date, revealed widths ranging from 0.2-6.0m for the dolomite horizon and 0.2-1.0m for the massive sulphide horizon across the MGM property. Within the area of the North Road trenches the dolomite horizon appears to be relatively thin despite the trenched surface showings. Examination of DDH TK-92-13 and re-examination of the Esso Mineral Core from holes MGM-1 (Figure 19) and MGM-2 (Figure 20) reveal typical hanging and footwall lithologies, however, the dolomite horizon displays only weak mineralization and ranges in width from trace to 0.53m. The surface North Rd. showings may reflect structural thickening within anti and synformal structures or enhanced widths due to the dip-slope attitude of the horizon. Sampling of the trenches and drill holes within the area have revealed:

- 1) 0.13-0.55% Zn, 0.1-0.12% Pb and 1.2-2.4 g/t Ag within the North Rd. trench massive coarse pyrite bands.
- 2) 0.15% Zn, 0.02% Pb and 2.0 g/t Ag: grab sample from MGM-1.
- 3) 30cm of 0.59% Zn, 0.03% Pb and 0.1 g/t Ag: TK-92-13.



L E G E N D

Gog Group

- 1 a. Quartzite
- b. micaceous quartzite
- c. marble
- d. quartzofeldspathic schist to Psammite
- e. pelitic interbed

Tsar Creek Formation

- 2 a. greywacke (turbiditic)
- b. argillite
- c. sericite schist
- d. mica schist
- e. garnet - mica schist
- f. garnet - staurolite schist
- g. dolomite
- h. Quartz - sericite schist
- i. siliceous sericitic pelitic schist
- j. micaceous limestone
- k. garnet cordierite schist
- l. chert

Kinbasket Formation

- 3 a. limestone
- b. micaceous limestone
- c. garnetiferous limestone
- d. grey banded limestone (graphitic)
- e. pelitic interbed
- f. hornblende
- g. cordierite limestone

Unnamed Formation

- 4 a. limestone
- b. mica schist
- c. garnet - mica
- d. garnet - staurolite - mica schist
- e. Quartzofeldspathic schist
- f. chert
- g. tuff

FIGURE 19

 **TECK EXPLORATION LTD.**

MGM PROPERTY

MGM - 1
ESSO MINERALS LTD.

DATE DRAWN: SEPT. 4, 1991	SCALE: 1: 10,000	DWG. NAME:
COMPILED BY: C.A.	JOB No: 1703	MGM-E1
DRAWN BY: S.A.	NTS No: 830/1	

11. DISCUSSIONS

The sulphide horizon and host lithologies of the MGM are indicative of a sedimentary exhalative deposit type. Geological mapping, geophysics and drill efforts have all succeeded in defining a folded sheet-like sulphide horizon of considerable strike length and down dip extent.

Mineralization is usually contained within the quartz-sericite schist and manganiferous dolomite horizons. Typical of 'sedex' style mineralization, the lateral dimensions of the sulphide zone have proven to be much greater than its thickness.

To date, the character (grade and/or thickness) of the sulphide horizon has been subeconomic, it is necessary to examine the acquired data in order to locate areas which could produce economic width and/or grades of mineralization.

Favourable areas for increased sulphide potential within 'sedex' deposits usually occur within second order (sub-basins) and/or proximal to the exhalative source.

Within first order basins, abrupt changes in sedimentary facies and thicknesses reflect the presence of sub basins. Typically, the whole sequence containing the stratiform mineralization is thickest at a point adjacent to the massive sulphide ore.

Lateral and/or vertical zonation of Pb-Zn may exist as a result of rapid cooling and dilution of the hydrothermal solution by sea water near the discharge zone and the consequent precipitation of minerals in a sequence according to their solubilities. Subsequently, a lateral zonation of Cu-Pb-Zn-(Ba) and a vertical zonation of Cu-Zn-Pb-(Ba) away from the discharge zone is observed. The Zn/Pb ratio gradually increases distally.

Thus observing facies thicknesses and chemical ratios present two possible methods for locating areas of increased potential for the hosting of economic lead-zinc mineralization.

Individual facies thicknesses for most of the Tsar Creek Formation have proven difficult to estimate due to structural deformation. A true thickness, longitudinal section of hanging and foot wall lithologies immediate to the mineralized dolomite unit for all MGM drill intersections is illustrated in Figure 21. Apparent from the section is that the hanging wall quartz-sericite schist becomes thicker toward the south and the mineralized dolomite horizon appears to be thickest near to the canyon and thin towards the north and south. The thickening of the quartz sericite schist, a unit thought to be derived from muddy cherts, may reflect a basinward direction for the Tsar Creek stratigraphy.

Chemical parameters controlling the origin and deposition of 'sedex' style deposits are discussed by Lydon (1983). Table 5 presents a sample of metal ratio data from MGM

11. DISCUSSIONS

The sulphide horizon and host lithologies of the MGM are indicative of a sedimentary exhalative deposit type. Geological mapping, geophysics and drill efforts have all succeeded in defining a folded sheet-like sulphide horizon of considerable strike length and down dip extent.

Mineralization is usually contained within the quartz-sericite schist and manganese dolomite horizons. Typical of 'sedex' style mineralization, the lateral dimensions of the sulphide zone have proven to be much greater than its thickness.

To date, the character (grade and/or thickness) of the sulphide horizon has been subeconomic, it is necessary to examine the acquired data in order to locate areas which could produce economic width and/or grades of mineralization.

Favourable areas for increased sulphide potential within 'sedex' deposits usually occur within second order (sub-basins) and/or proximal to the exhalative source.

Within first order basins, abrupt changes in sedimentary facies and thicknesses reflect the presence of sub basins. Typically, the whole sequence containing the stratiform mineralization is thickest at a point adjacent to the massive sulphide ore.

Lateral and/or vertical zonation of Pb-Zn may exist as a result of rapid cooling and dilution of the hydrothermal solution by sea water near the discharge zone and the consequent precipitation of minerals in a sequence according to their solubilities. Subsequently, a lateral zonation of Cu-Pb-Zn-(Ba) and a vertical zonation of Cu-Zn-Pb-(Ba) away from the discharge zone is observed. The Zn/Pb ratio gradually increases distally.

Thus observing facies thicknesses and chemical ratios present two possible methods for locating areas of increased potential for the hosting of economic lead-zinc mineralization.

Individual facies thicknesses for most of the Tsar Creek Formation have proven difficult to estimate due to structural deformation. A true thickness, longitudinal section of hanging and foot wall lithologies immediate to the mineralized dolomite unit for all MGM drill intersections is illustrated in Figure 21. Apparent from the section is that the hanging wall quartz-sericite schist becomes thicker toward the south and the mineralized dolomite horizon appears to be thickest near to the canyon and thin towards the north and south. The thickening of the quartz sericite schist, a unit thought to be derived from muddy cherts, may reflect a basinward direction for the Tsar Creek stratigraphy.

Chemical parameters controlling the origin and deposition of 'sedex' style deposits are discussed by Lydon (1983). Table 5 presents a sample of metal ratio data from MGM

drill intersections. The ratios, with the exception of DDH TK-92-13, are calculated from the fine grained, pyrrhotitic massive sulphide horizons encountered within the MGM drill holes. This horizon was chosen as it may represent one complete exhalative episode.

Table 5. Metal ratios for the MGM sulphide horizon

Hole	Sample	Rock Description	Zn	Pb	Fe	Ag	Zn/Pb	Zn/ Zn+Pb	Fe/ Fe+Zn	Fe/ Fe+Zn+ Pb	Pb/ Pb+(Ag* 1000)
91-1	114211	Msv sulph.	9.36	4.22	--	65.6	2.22	0.69	--	--	0.39
91-3	114233	Msv sulph.	2.26	0.51	8.18	10.7	4.43	0.82	0.78	0.75	0.32
91-4	114239	Msv sulph. in Qtz-ser schist	5.82	0.76	4.54	8.0	7.66	0.88	0.44	0.41	0.49
92-6	81742	Msv sulph. in dolomite	5.9	1.84	27.4	32.23	3.21	0.76	0.82	0.78	0.36
92-13	18618	Siliceous Schist	5946 ppm	384 ppm	25500 ppm	0.9	15.4	0.94	0.81	0.8	0.99

The Zn/Pb ratios are plotted along with the facies thickness on the longitudinal section (see Figure 21) and display an inverse correlation with thickness of dolomite. The Zn/Pb ratios are lowest (reflecting a proximal source) near to the canyon and increase (reflecting a distal environment) toward the north and south. This correlation suggests that the area about the Cummins River canyon may hold the best potential for economic mineralization.

Zn/Zn+Pb ratios for the sulphide horizon are noted to generally fall within the range from 0.7-0.9. Lydon (1983) accredits such a range to deposits of medium size formed from hydrothermal solutions mobilized from maturely-leached reservoirs. Deposits with Zn/Zn+Pb ratios less than 0.7 tend give rise to deposits with the highest quantities of ore.

The Pb/Pb+(Ag*1000) ratios tend to be relatively constant for the property which may indicates the general dependency of silver on the abundance of lead.

Fluid temperature, oxygen fugacity, sulphur fugacity, brine salinity, availability of reduced sulphur and metal content of source rocks are some of the numerous variables that should be considered in assessing the sulphide body. However, within the scope of our investigation, facies thickness and metal ratios appear to act as a reasonable predictor for results.

11. CONCLUSIONS

The conformable sequence of Kinbasket Limestones, Tsar Creek metapelites and Gog Group lithologies is correlatable across the property, south to Tsar Creek, a strike length of 16 kilometres.

A ground Pulse E-M survey delineated an open-ended E-M anomaly extending between lines 16+00S through the Cominco Bend claims, northward to line 24+00N. The anomaly strikes 130°, approximately coplanar with observed stratigraphy.

Narrow, strong conductive horizons coincident with the mineralized horizons were recognized by the downhole EM survey of holes TK-91-1 and TK-91-3. The surface EM anomaly appears to correlate with mineralization encountered in the drill holes

A strong linear Mag anomaly striking approximately 110-120° was defined by geophysical surveys conducted over re-established grid lines north of the Cummins River.

Drilling confirmed the presence of the sulphide horizon, similar to that observed within the canyon showing, north from Cummins River to Line 20+00S a strike length of approximately 3.0Kms.

DDH TK-92-10 intersected two magnetite bearing tuffaceous layers of mafic to intermediate composition. These horizons well explain the strong linear magnetometer anomaly observed north of the Cummins River canyon and thus the anomaly is not related to the main sulphide bearing horizon.

The geological characteristics of the sulphide horizon are consistent with a large basin controlled style of mineralization with generally decreasing width and increasing Zn/Pb ratios away from the Cummins Canyon.

12. REFERENCES

- Alford, C. and Lormand, C. 1992. Report on the Diamond Drilling and Downhole Geophysics on the MGM Property. Golden Mining Division. Teck Exploration Ltd.
- Alford, C. and Thomson, G. 1992. Report on the Geology, Geochemistry and Geophysics of the MGM Property. Golden Mining Division. Teck Exploration Ltd.
- Dodson, E.D., 1971. Report on a Geochemical Survey on the Bend No.1 Mineral Claim. Golden Mining Division. MacDonald Consultants Ltd. Assessment Report 2991.
- Dodson, E.D., 1971. Report on a Geochemical Survey on the Bend 17-26 Mineral Claims. Golden Mining Division. MacDonald Consultants Ltd. Assessment Report 2992.
- Jenks, J., 1985. Drilling report - MGM Property. Golden Mining Division. Esso Minerals Canada. Assessment Report 15251.
- Large, D.E., 1980. Geological Parameters Associated with Sediment-Hosted, Submarine Exhalative Pb-Zn Deposits: An Empirical Model for Mineral Exploration, Geol. Jb. D40, p. 59-129.
- Leask, J.M., 1981. Geology of the MGM Property, Big Bend District, East Central British Columbia. Assessment Report No. 9994.
- Lydon, J.W., 1983. Chemical parameters controlling the origin and deposition of sediment-hosted, stratiform lead-zinc deposits, in Short Course in Sedimentary Stratiform Lead Zinc Deposits, D.F. Sangster, (ed.), Min. Assoc. of Canada, p. 175-250.
- Marr, J.M., Oliver, J.L. and Melnyk, W.D., 1986. MGM Project 1985. Esso Minerals of Canada Ltd. (in house report)
- Mawer, A.B., 1987. Geological - Access road and Drill site construction report. Bend Group, Golden Mining District, Cummins River Area. Cominco Ltd. Assessment Report No. 16544.
- Mawer, A.B., 1991. 1991 Year End Report, Diamond Drilling Report - Bend Group. Golden Mining District, Cummins River Area. Cominco Ltd.
- Reddy, D.G. and Godwin, C.I. 1986. Geology of the Bend Zinc-Lead-Silver Massive Sulphide Prospect Southeastern British Columbia, British Columbia Ministry of Energy, Mines and Resources, Geological Fieldwork, Paper 1987-1, p.47-52.

Spence, C.D., 1983. Geophysics and Geochemistry. Riocanex. Assessment Report 12155.

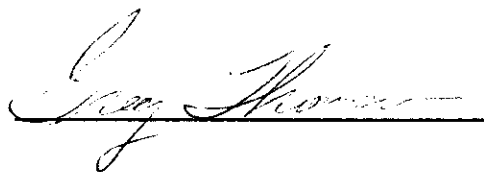
Walcott, P.E. and Associates, 1983. A Geophysical Report on Electromagnetic and Magnetic Surveys. McNaughton Lake, British Columbia. Riocanex Inc. Assessment Report 11565.

APPENDIX A

Statement of Qualifications

I Greg Thomson, do certify that:

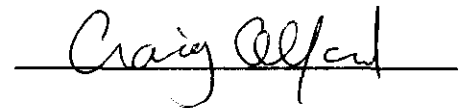
1. I am a geologist and have practiced my profession continuously from 1970 - 1974 and 1983 to present.
2. I graduated from the University of British Columbia in 1970 with a B.Sc. in Geology.
3. I was actively involved in property management and core logging on the M.G.M. property and co-authored the report contained herein.
4. All data contained within this report and conclusions drawn from it are true and accurate to the best of my knowledge.
5. I hold no personal interest, direct or indirect in the M.G.M. Property, which is the subject of this report.

A handwritten signature in cursive script, reading "Greg Thomson", is written over a horizontal line.

Greg Thomson
Geologist
November, 1992

I, Craig Alford, do hereby certify that:

1. I am a geologist and have practised my profession continuously since graduation.
2. I graduated in 1988 from Lakehead University with a M.Sc. in Geology.
3. I was actively involved in the mapping of the MGM Property and co-authored the report contained herein.
4. All data contained within this report and conclusions drawn from it are true and accurate to the best of my knowledge.
5. I hold no personal interest, direct or indirect in the MGM Property which is the subject of this report.

A handwritten signature in cursive script, reading "Craig Alford", is written over a solid horizontal line.

Craig Alford
Geologist
November, 1992

APPENDIX B

Cost Statement

EXPLORATION COSTS
(June 1 - October 31, 1992)

A) ADMINISTRATION - F. Daley		
2 days @ 311.20/day		622.40
B) SALARIES		
G. Thomson (Geol)		
45 days @ 250.86	11288.95	
C. Alford (Geol)		
49 days @ 246.50	12078.50	
B. Lovang (Geochem.Tech)		
13 days @ 236.90	2980.45	
K. Chubb (Geoph.Tech)		
15 days @ 217.72	3265.92	
H. Norris (Cook)		
31 days @ 244.74	7587.50	
D. Nikirk (Helper)		
2 days @ 195.80	391.59	
S. Archibald (Drafting)	1054.34	
	Salaries Total	39269.65
C) CONTRACTORS		
Pacific Geophysical Limited	36778.56	
Minconsult	4684.40	
Gottler Trucking	425.60	
Lone Ranger Diamond Drilling	40777.82	
O.W. Braisher Contracting & R.B. Contracting	7683.66	
	Contractor Total	90350.04
D) GEOCHEMICAL ANALYSES		
- 185 soils (30 element I.C.P.)		
- 13 rock (Ag,Pb,Zn + 30 I.C.P.)		1571.50
E) LIVING EXPENSES		
- camp rental (June-Sept), groceries, fuel, misc. motel and restaurant meals		15769.38

F) TRANSPORTATION	
- Cana Rentals: 3, 4x4 pickups (4 mos.)	
- Mica Marine barge service	
- gasoline, diesel	16871.87
G) CHARTERED AIRCRAFT	
Canadian Helicopters	1712.42
H) FIELD COSTS	562.12
I) TELEPHONE	195.92
J) EQUIPMENT RENTALS, REPAIRS	
Falcon Research(radio telephones)	
boat rental, generator	4741.35
K) MAPS, PRINTS	2023.44
(includes base map prep.)	
L) COMPUTER SUPPLIES	34.13
M) DRILLING SUPPLIES	
Prolite Pipe, Edmonton	2926.45
Property Total	\$176,028.27

APPENDIX C

Certificates of Analyses

Soil Analyses

ECO-TECH LABORATORIES LTD.
 10041 EAST TRANS CANADA HWY.
 KAMLOOPS, B.C. V2C 2J3
 PHONE - 604-573-5700
 FAX - 604-573-4557

TRUCK EXPLORATION LTD. ETK 92-254
 # 350, 272 Victoria Street
 KAMLOOPS, B.C.
 V2C 2A2

JUNE 23, 1992

ATTENTION: FRED DALEY

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT NUMBER: 1703
 51 SOIL SAMPLES RECEIVED JUNE 18, 1992

HT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1	30+00N B/L	<.2	1.28	<5	<2	40	<5	.12	<1	12	15	12	2.57	.11	10	.60	190	<1	<.01	20	510	<2	<5	<20	7	.02	<10	10	<10	4	36
2	30+00N 0 +25E	<.2	1.50	15	<2	60	<5	.12	<1	11	15	10	2.53	.09	10	.60	241	<1	<.01	20	380	<2	5	<20	7	.02	<10	12	<10	4	43
3	30+00N 0 +50E	<.2	1.50	<5	<2	60	<5	.11	<1	12	16	13	2.75	.14	10	.63	270	<1	<.01	20	440	<2	<5	<20	9	.02	<10	11	<10	5	39
4	30+00N 0 +75E	<.2	1.57	<5	<2	95	<5	.08	<1	9	13	6	2.32	.06	10	.47	181	<1	<.01	14	1110	<2	<5	<20	6	.04	<10	13	<10	4	66
5	30+00N 1 +00E	<.2	2.08	<5	<2	155	<5	.12	<1	11	16	9	2.83	.10	10	.53	247	<1	<.01	19	1890	<2	<5	<20	10	.04	<10	15	<10	5	68
6	30+00N 1 +25E	.2	1.26	<5	<2	135	<5	.15	<1	8	11	4	1.74	.06	<10	.32	1225	<1	<.01	10	1430	<2	<5	<20	12	.04	<10	18	<10	4	69
7	30+00N 1 +50E	<.2	.97	5	<2	55	<5	.08	<1	7	12	5	1.83	.08	<10	.49	343	<1	<.01	12	300	<2	<5	<20	5	.01	<10	8	<10	2	37
8	30+00N 1 +75E	.2	2.38	<5	<2	105	<5	.10	<1	9	10	4	2.01	.06	<10	.22	413	<1	<.01	10	1070	<2	<5	<20	9	.07	<10	17	<10	6	66
9	30+00N 2 +00E	<.2	3.09	<5	<2	120	<5	.11	<1	10	14	6	2.50	.07	<10	.31	377	<1	<.01	13	1370	2	<5	<20	10	.09	<10	25	<10	7	67
10	30+00N 2 +25E	<.2	2.59	<5	<2	185	<5	.15	<1	11	15	7	2.69	.10	<10	.35	176	<1	<.01	17	1720	2	<5	<20	14	.08	<10	22	<10	7	75
11	30+00N 2 +50E	<.2	1.86	<5	<2	95	<5	.11	<1	8	10	4	1.79	.06	<10	.24	227	<1	<.01	10	1210	2	<5	<20	10	.05	<10	16	10	4	49
12	30+00N 2 +75E	<.2	1.92	<5	<2	115	<5	.10	<1	11	15	9	2.24	.10	<10	.43	111	<1	<.01	16	290	4	<5	<20	14	.02	<10	12	<10	3	42
13	30+00N 3 +00E	<.2	1.45	<5	<2	65	<5	.07	<1	9	11	6	2.24	.05	<10	.35	136	<1	<.01	15	650	<2	<5	<20	7	.03	<10	11	<10	3	43
14	30+00N 3 +25E	<.2	2.19	<5	<2	95	<5	.18	<1	11	15	6	2.37	.11	<10	.40	149	<1	.01	18	820	4	<5	<20	14	.07	<10	18	<10	6	50
15	30+00N 3 +50E	.2	3.08	<5	<2	75	<5	.11	<1	9	10	5	2.14	.04	<10	.20	85	<1	<.01	12	1310	4	<5	<20	10	.10	<10	20	<10	7	38
16	30+00N 3 +75E	<.2	1.92	<5	<2	65	<5	.15	<1	8	10	4	1.96	.05	<10	.24	153	<1	.01	12	590	2	<5	<20	12	.08	<10	20	<10	6	33
17	30+00N 4 +00E	<.2	2.06	<5	<2	105	<5	.24	<1	12	15	5	2.33	.08	<10	.37	188	<1	.01	18	440	4	<5	<20	18	.07	<10	22	<10	6	58
18	29+00N BL	<.2	1.68	<5	2	95	<5	.15	<1	9	15	6	1.96	.13	<10	.46	154	1	<.01	16	470	16	<5	<20	12	.04	<10	16	20	4	126
19	29+00N 0 +25E	.2	1.29	<5	<2	145	<5	.14	<1	6	10	3	1.37	.07	<10	.20	2012	<1	<.01	8	1410	8	<5	<20	14	.04	<10	15	<10	4	102
20	29+00N 0 +50E	<.2	1.97	<5	<2	160	<5	.17	<1	12	16	5	2.21	.08	<10	.38	370	<1	.01	16	1410	4	<5	<20	14	.07	<10	18	<10	8	86
21	29+00N 0 +75E	<.2	2.02	<5	<2	140	<5	.16	<1	7	10	4	1.99	.05	<10	.22	723	<1	<.01	10	2440	2	<5	<20	11	.07	<10	19	<10	5	51
22	29+00N 1 +00E	<.2	1.68	5	<2	110	<5	.10	<1	9	11	4	2.05	.07	<10	.30	299	<1	<.01	16	740	2	<5	<20	8	.04	<10	14	<10	3	38
23	29+00N 1 +25E	<.2	3.04	<5	<2	160	<5	.38	<1	16	12	9	3.59	.12	<10	.28	193	<1	.01	29	1460	2	<5	<20	27	.07	<10	20	<10	9	46
24	29+00N 1 +50E	<.2	2.24	<5	2	135	<5	.13	<1	14	24	8	2.81	.13	10	.71	212	1	<.01	23	720	6	<5	<20	12	.04	<10	20	10	4	69
25	29+00N 1 +75E	<.2	2.88	<5	<2	125	<5	.35	<1	12	16	7	2.41	.09	<10	.43	262	<1	.01	22	1040	4	<5	<20	24	.12	<10	20	<10	10	68
26	29+00N 2 +00E	<.2	1.75	<5	<2	90	<5	.10	<1	10	14	6	2.22	.09	<10	.39	203	<1	<.01	17	430	10	<5	<20	11	.05	<10	16	<10	5	72
27	29+00N 2 +25E	<.2	4.06	<5	<2	130	<5	.29	<1	15	25	9	3.31	.12	<10	.60	270	<1	.01	25	1350	28	<5	<20	24	.12	<10	30	<10	10	159
28	29+00N 2 +50E	<.2	1.75	<5	<2	130	<5	.13	<1	10	13	4	2.41	.08	<10	.32	192	<1	<.01	12	790	4	<5	<20	13	.05	<10	15	<10	3	73
29	29+00N 2 +75E	<.2	3.75	<5	<2	170	<5	.25	<1	14	20	9	3.41	.12	<10	.45	157	<1	.01	23	1190	8	<5	<20	20	.11	<10	30	<10	8	160

RT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BY	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SW	SR	TI(%)	U	V	W	Y	ZN
30	- L 29+00N 3 +00E	.2	2.78	<5	<2	120	<5	.22	<1	12	11	5	2.81	.05	<10	.22	159	<1	.01	13	2280	12	<5	<20	13	.13	<10	25	<10	9	74
31	- L 29+00N 3 +25E	<.2	1.99	<5	<2	90	<5	.17	<1	11	17	7	2.47	.08	<10	.49	144	<1	<.01	20	280	8	<5	<20	15	.05	<10	16	<10	4	77
32	- L 29+00N 3 +50E	<.2	2.28	<5	<2	100	<5	.14	<1	15	16	9	2.93	.00	<10	.44	128	<1	<.01	23	320	2	<5	<20	13	.05	<10	19	<10	4	41
33	- L 29+00N 3 +75E	<.2	3.63	<5	<2	150	<5	4.11	<1	17	34	17	3.32	.46	10	1.09	387	<1	.06	28	470	4	5	<20	146	.07	<10	29	20	12	57
34	- L 29+00N 4 +00E	<.2	1.65	5	<2	55	<5	.37	<1	16	19	14	3.30	.14	20	.68	436	<1	.01	27	530	<2	<5	<20	22	.02	<10	11	<10	8	43
35	- L 28+00N B/L	<.2	1.51	<5	<2	80	<5	.10	<1	7	9	3	1.77	.06	<10	.26	136	<1	<.01	11	630	<2	<5	<20	9	.05	<10	13	<10	3	56
36	- L 28+00N 0 +25E	<.2	1.29	5	<2	85	<5	.09	<1	9	12	5	2.30	.07	20	.40	122	<1	<.01	15	820	4	<5	<20	8	.02	<10	10	<10	3	45
37	- L 28+00N 0 +50E	<.2	1.67	5	<2	80	<5	.20	<1	14	19	12	2.94	.18	20	.59	429	<1	<.01	24	410	<2	<5	<20	14	.03	<10	12	<10	10	40
38	- L 28+00N 0 +75E	<.2	1.04	<5	<2	60	<5	.08	<1	6	10	2	1.52	.06	<10	.31	227	<1	<.01	10	300	<2	<5	<20	11	.02	10	8	<10	2	31
39	- L 28+00N 1 +00E	<.2	1.32	5	<2	50	<5	.28	<1	13	15	11	2.74	.12	10	.53	315	<1	<.01	20	620	2	<5	<20	13	.02	<10	9	<10	7	34
40	- L 28+00N 1 +25E	<.2	1.40	<5	<2	50	<5	.10	<1	11	15	8	2.68	.08	10	.52	267	<1	<.01	19	340	<2	<5	<20	9	.02	<10	10	<10	3	34
41	- L 28+00N 1 +50E	<.2	1.62	5	<2	75	<5	.38	<1	17	18	15	3.38	.18	20	.64	441	<1	<.01	28	620	<2	<5	<20	18	.03	<10	11	<10	11	41
42	- L 28+00N 1 +75E	<.2	2.91	<5	<2	120	<5	.71	<1	18	28	19	3.49	.21	10	.92	423	<1	.02	31	700	16	<5	<20	51	.06	<10	23	<10	8	80
43	- L 28+00N 2 +00E	<.2	3.30	<5	4	120	<5	.33	<1	20	28	21	3.79	.17	10	.75	210	4	.01	34	780	18	5	<20	26	.07	<10	23	20	9	73
44	- L 28+00N 2 +25E	<.2	2.07	<5	<2	85	<5	.75	<1	15	25	15	2.65	.21	10	.73	259	<1	.02	25	440	10	<5	<20	52	.05	<10	18	<10	9	76
45	- L 28+00N 2 +50E	<.2	2.00	5	<2	75	<5	.84	<1	16	21	20	3.29	.22	20	.73	499	<1	.02	28	600	4	<5	<20	40	.04	<10	14	<10	12	51
46	- L 28+00N 2 +75E	<.2	1.98	5	<2	80	<5	2.70	<1	15	20	22	2.93	.26	10	.83	415	<1	.02	23	650	<2	5	<20	63	.04	<10	14	<10	9	45
47	- L 28+00N 3 +00E	<.2	2.23	<5	<2	85	<5	4.31	<1	14	21	15	2.80	.32	10	.85	390	<1	.03	23	560	<2	5	<20	92	.04	<10	17	<10	9	42
48	- L 28+00N 3 +25E	<.2	1.67	5	<2	65	<5	.37	<1	19	19	15	3.36	.16	18	.66	343	<1	.01	27	630	<1	<5	<20	20	.03	<10	12	<10	5	44
49	- L 28+00N 3 +50E	<.2	3.07	5	<2	130	<5	1.70	<1	18	31	19	3.29	.37	<10	1.01	405	<1	.04	29	620	4	5	<20	92	.06	<10	28	<10	10	54
50	- L 28+00N 3 +75E	<.2	1.72	5	<2	70	<5	.25	<1	15	19	12	2.98	.14	10	.62	282	<1	<.01	24	390	<2	<5	<20	16	.03	<10	13	<10	5	41
51	- L 28+00N 4 +00E	<.2	1.71	5	<2	70	<5	.49	<1	16	19	15	3.34	.18	10	.70	454	<1	.01	25	550	<2	<5	<20	24	.03	<10	12	<10	8	44

QC DATA

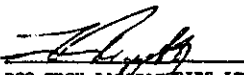
REPEAT #:

27	- L4+00E 2 +25E	.2	4.12	<5	<2	130	<5	.29	<1	15	26	10	3.37	.12	<10	.62	269	<1	.01	25	1330	26	<5	<20	25	.12	<10	31	<10	10	162
43	- L5+00E 2 +00E	<.2	3.24	<5	4	120	5	.32	<1	20	28	20	3.64	.17	10	.72	202	4	.01	34	750	16	<5	<20	26	.07	<10	23	20	8	69

GEO STANDARDS:

STANDARD 1991	1.0	1.82	50	<2	165	<5	1.82	<1	20	51	70	4.04	.33	<10	.88	672	<1	<.01	20	680	12	5	<20	59	.11	<10	76	<10	10	62
STANDARD 1991	1.2	1.86	50	2	175	<5	1.85	<1	18	53	75	4.10	.31	20	.85	687	<1	.01	19	610	12	5	<20	58	.12	<10	78	<10	12	64
STANDARD 1991	1.0	1.85	55	2	165	<5	1.80	<1	18	55	77	4.06	.33	<10	.90	665	<1	.01	19	640	10	5	<20	58	.12	<10	80	<10	11	64

NOTE: < = LESS THAN


 ECO-TECH LABORATORIES LTD.
 FRANK J. PEZZOTTI, A.Sc.T.
 B.C. Certified Assayer

ECO-TECH LABORATORIES LTD.
 10041 EAST TRANS CANADA HWY.
 KAMLOOPS, B.C. V2C 2J3
 PHONE - 604-573-5700
 FAX - 604-573-4557

TECK EXPLORATION LTD. ETK 92-269
 # 350, 272 Victoria Street
 KAMLOOPS, B.C.
 V2C 2A2

JULY 1, 1992

VALUES IN PPM UNLESS OTHERWISE REPORTED

PAGE 1

COPY

ATTENTION: GREG THOMSON
 215 SOIL SAMPLES received June 24, 1992
 PROJECT NO. 1703

HT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
1	- L 31+00N B/L	<.2	1.85	<5	<2	120	<5	.18	<1	9	15	5	2.10	.11	10	.34	299	<1	.01	14	1130	8	<5	<20	16	.07	<10	20	<10	6	74
2	- L 31+00N 0 + 25K	<.2	4.03	5	2	250	<5	.18	<1	15	22	11	3.85	.16	<10	.46	189	1	.01	32	3290	14	<5	<20	14	.11	<10	30	<10	8	104
3	- L 31+00N 0 + 50K	<.2	3.62	<5	<2	200	<5	.15	<1	13	19	9	3.12	.11	<10	.36	147	<1	.01	21	1500	10	<5	<20	15	.10	<10	27	<10	9	65
4	- L 31+00N 0 + 75K	<.2	1.68	5	<2	70	<5	.10	<1	13	21	12	3.12	.13	20	.70	168	<1	<.01	21	520	4	<5	<20	8	.03	<10	12	<10	5	45
5	- L 31+00N 1 + 00K	<.2	3.64	5	<2	305	<5	.20	<1	17	30	14	3.43	.19	10	.72	212	<1	.01	27	620	14	<5	<20	28	.07	<10	28	<10	7	83
6	- L 31+00N 1 + 25K	<.2	3.70	5	<2	165	<5	.16	<1	14	21	7	3.18	.12	<10	.43	154	<1	.01	21	550	12	<5	<20	15	.10	<10	27	<10	9	124
7	- L 31+00N 1 + 50K	<.2	4.07	5	<2	205	<5	.12	<1	13	21	9	3.55	.12	<10	.45	158	<1	.01	19	500	10	<5	<20	13	.10	<10	29	<10	8	105
8	- L 31+00N 1 + 75K	<.2	3.00	5	<2	180	<5	.13	<1	12	21	8	2.75	.17	10	.46	406	<1	.01	20	1120	10	<5	<20	17	.07	<10	23	<10	7	65
9	- L 31+00N 2 + 00K	<.2	2.74	<5	<2	180	<5	.13	<1	12	22	7	2.66	.15	10	.49	364	<1	.01	21	790	8	<5	<20	18	.07	<10	23	<10	6	74
10	- L 31+00N 2 + 25K	<.2	3.58	5	<2	230	<5	.24	<1	14	24	10	3.07	.15	<10	.53	212	<1	.01	26	830	10	<5	<20	25	.08	<10	23	<10	7	75
11	- L 31+00N 2 + 50K	<.2	2.58	5	<2	125	<5	.20	<1	10	16	4	2.66	.10	<10	.32	153	<1	.01	15	1380	6	<5	<20	17	.08	<10	23	<10	6	56
12	- L 31+00N 2 + 75K	<.2	2.65	<5	<2	150	<5	.12	<1	11	17	6	2.55	.12	10	.35	347	<1	.01	16	1160	6	<5	<20	15	.08	<10	21	<10	7	61
13	- L 31+00N 3 + 00K	<.2	3.33	5	<2	130	<5	.27	<1	12	18	8	2.71	.11	10	.40	205	<1	.02	19	1140	14	<5	<20	23	.08	<10	23	<10	10	67
14	- L 31+00N 3 + 25K	<.2	1.50	<5	<2	95	<5	.12	<1	8	11	3	1.77	.05	<10	.19	682	<1	.01	8	950	6	<5	<20	14	.07	<10	28	<10	6	54
15	- L 31+00N 3 + 50K	<.2	2.02	<5	<2	200	<5	.17	<1	10	13	4	2.25	.06	<10	.27	785	<1	.01	10	2650	6	<5	<20	16	.06	<10	21	<10	5	86
16	- L 31+00N 3 + 75K	<.2	3.99	<5	<2	125	<5	.22	<1	11	11	5	2.70	.05	<10	.20	319	<1	.01	8	3960	8	<5	<20	15	.13	<10	24	<10	9	64
17	- L 31+00N 4 + 00K	<.2	2.74	<5	<2	170	<5	.19	<1	12	18	8	2.63	.09	10	.41	629	<1	.01	19	1410	12	<5	<20	19	.06	<10	20	10	5	86
18	- L 41+00N B/L	<.2	3.60	5	8	155	5	.67	<1	20	33	16	3.61	.23	10	.78	527	8	.03	31	770	130	<5	<20	55	.08	<10	31	60	8	211
19	- L 41+00N 0 + 25K	<.2	4.13	5	<2	200	<5	.61	<1	19	32	20	3.69	.28	10	.80	260	<1	.04	29	430	96	<5	<20	78	.08	<10	28	<10	14	203
20	- L 41+00N 0 + 50K	<.2	3.35	5	<2	175	<5	.24	<1	14	24	8	2.98	.13	<10	.45	490	<1	.02	21	610	76	<5	<20	26	.11	<10	29	<10	9	249
21	- L 41+00N 0 + 75K	<.2	4.21	<5	<2	185	<5	.99	<1	20	34	19	3.68	.32	10	.83	460	<1	.04	31	420	56	5	<20	91	.09	<10	29	<10	15	106
22	- L 41+00N 1 + 00K	<.2	4.52	<5	<2	195	<5	.79	<1	22	37	22	4.07	.31	10	.95	491	<1	.04	37	450	120	5	<20	84	.09	<10	33	<10	12	129
23	- L 41+00N 1 + 25K	<.2	4.32	<5	<2	175	<5	1.34	<1	21	37	21	3.86	.28	10	1.04	393	<1	.07	34	720	158	<5	<20	121	.08	<10	28	<10	11	110
24	- L 41+00N 1 + 50K	.2	4.48	<5	<2	225	<5	.48	<1	22	38	21	4.24	.23	<10	.94	272	<1	.03	38	330	36	<5	<20	56	.12	<10	37	10	11	120
25	- L 41+00N 1 + 75K	<.2	4.02	<5	<2	200	<5	.64	<1	19	32	11	3.61	.13	<10	.74	1256	<1	.05	29	860	12	<5	<20	64	.13	<10	40	<10	10	139
26	- L 41+00N 2 + 00K	<.2	5.13	<5	2	150	<5	.29	<1	15	25	8	3.52	.09	<10	.49	154	<1	.02	21	900	12	<5	<20	30	.12	<10	34	<10	9	80

JULY 1, 1992

ECO-TECH LABORATORIES LTD.

HT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MO(%)	MR	MO	NA(%)	NI	P	PB	SB	SW	SR	TI(%)	U	V	W	Y	ZN
27	L 41+00N 0 + 25W	.2	3.35	<5	<2	155	<5	.93	<1	16	30	16	3.21	.26	10	.74	802	<1	.04	24	390	84	<5	<20	86	.06	<10	24	<10	10	193
28	L 41+00N 0 + 50W	<.2	3.50	<5	2	140	<5	1.19	<1	19	30	21	3.49	.32	10	.81	460	2	.05	30	440	90	<5	<20	105	.07	<10	26	20	14	139
29	L 41+00N 0 + 75W	<.2	4.60	<5	6	235	<5	.51	<1	19	36	18	3.65	.23	10	.88	337	5	.03	30	380	78	5	<20	77	.10	<10	34	50	14	259
30	L 41+00N 1 + 00W	<.2	4.82	<5	<2	250	<5	1.15	<1	20	37	21	3.95	.29	10	.93	546	<1	.05	34	410	96	5	<20	117	.09	<10	30	<10	16	256
31	L 41+00N 1 + 25W	<.2	4.02	<5	<2	190	<5	2.30	1	16	34	18	3.26	.33	10	.91	902	<1	.06	27	460	56	<5	<20	141	.08	<10	28	<10	12	248
32	L 41+00N 1 + 50W	<.2	4.51	<5	<2	295	<5	.71	<1	18	37	17	3.68	.26	10	.90	498	<1	.04	30	390	60	5	<20	68	.11	<10	34	<10	11	266
33	L 41+00N 1 + 75W	<.2	6.12	<5	2	350	<5	.62	<1	24	53	25	4.73	.35	<10	1.44	352	1	.04	40	560	56	5	<20	69	.14	<10	50	<10	12	253
34	L 41+00N 2 + 00W	<.2	5.03	<5	2	165	<5	1.12	<1	31	20	9	4.46	.12	<10	1.25	930	<1	.03	24	2040	16	5	<20	51	.19	<10	105	<10	16	133
35	L 41+00N 2 + 25W	<.2	4.96	<5	<2	245	5	1.07	<1	20	36	12	4.12	.20	10	1.00	462	<1	.05	30	560	62	5	<20	86	.13	<10	43	<10	18	213
36	L 41+00N 2 + 50W	<.2	7.02	<5	2	235	<5	1.39	<1	23	51	17	4.96	.24	<10	1.76	449	<1	.08	32	920	20	5	<20	111	.19	<10	50	<10	19	155
37	L 41+00N 2 + 75W	<.2	3.17	<5	<2	230	<5	.24	<1	15	28	9	2.80	.21	10	.71	593	<1	.02	25	530	10	<5	<20	26	.11	<10	28	<10	9	121
38	L 41+00N 3 + 00W	<.2	5.22	<5	<2	275	<5	.89	<1	20	42	14	3.89	.23	<10	1.14	254	<1	.05	32	500	28	5	<20	96	.13	<10	40	<10	13	123
39	L 41+00N 3 + 25W	<.2	4.46	<5	<2	285	<5	.47	<1	18	31	13	3.74	.17	<10	.74	344	<1	.03	29	930	32	<5	<20	44	.14	<10	37	<10	11	166
40	L 41+00N 3 + 50W	<.2	3.44	<5	<2	270	<5	.38	<1	17	36	11	3.14	.31	10	.90	731	<1	.02	27	620	44	<5	<20	36	.09	<10	31	<10	8	242
41	L 41+00N 3 + 75W	.2	3.72	<5	<2	290	<5	.31	<1	15	26	11	2.83	.26	10	.69	289	<1	.02	26	500	48	<5	<20	33	.10	<10	25	<10	10	237
42	L 41+00N 4 + 00W	<.2	63.00	3	<2	170	<5	.32	<1	14	23	9	2.82	.19	10	.60	328	<1	.01	22	730	26	<5	<20	24	.08	<10	25	<10	8	159
43	L 42+00N B/L	.2	3.62	10	<2	180	<5	.32	<1	17	30	18	3.49	.25	10	.69	358	<1	.02	28	380	106	<5	<20	40	.08	<10	27	60	11	278
44	L 42+00N 0 + 25E	<.2	4.90	<5	2	310	<5	.56	<1	24	41	27	4.36	.20	10	.99	300	<1	.03	42	490	48	5	<20	66	.10	<10	33	<10	11	118
45	L 42+00N 0 + 50E	<.2	3.74	<5	<2	130	<5	.21	<1	13	21	5	2.99	.07	<10	.37	221	<1	.02	17	500	20	<5	<20	24	.12	<10	34	<10	9	86
46	L 42+00N 0 + 75E	<.2	3.76	<5	<2	155	<5	.32	<1	16	25	9	3.34	.10	<10	.54	226	<1	.02	26	810	22	<5	<20	33	.11	<10	32	<10	9	104
47	L 42+00N 1 + 00E	<.2	4.55	<5	<2	155	<5	.47	<1	17	26	12	3.40	.15	<10	.62	175	<1	.03	30	570	46	<5	<20	43	.12	<10	30	<10	11	96
48	L 42+00N 1 + 25E	<.2	4.22	<5	<2	175	<5	.38	<1	19	29	13	3.63	.17	<10	.65	359	<1	.03	32	540	30	5	<20	41	.10	<10	33	<10	10	91
49	L 42+00N 1 + 50E	<.2	3.85	<5	<2	160	<5	.38	<1	19	31	15	3.44	.18	<10	.74	192	<1	.02	33	450	14	5	<20	39	.09	<10	31	<10	8	78
50	L 42+00N 1 + 75E	.2	3.84	<5	2	215	<5	.67	<1	16	30	12	3.16	.22	<10	.62	1296	<1	.02	26	950	12	<5	<20	56	.10	<10	35	<10	9	111
51	L 42+00N 2 + 00E	<.2	4.43	<5	<2	140	<5	1.41	<1	19	31	19	3.90	.20	<10	.90	188	<1	.08	30	510	16	<5	<20	153	.08	<10	28	<10	13	70
52	L 42+00N 0 + 25W	<.2	3.76	<5	<2	125	5	.24	<1	12	23	5	3.09	.08	<10	.44	307	<1	.01	19	910	30	<5	<20	22	.10	<10	35	<10	9	152
53	L 42+00N 0 + 50W	.4	3.72	<5	<1	190	<5	.88	<1	17	30	22	3.60	.35	10	.75	846	<1	.04	27	490	256	<5	<20	93	.07	<10	25	<10	15	484
54	L 42+00N 0 + 75W	<.2	5.85	<5	2	295	<5	.85	<1	23	54	23	4.46	.24	10	1.21	894	<1	.05	38	550	88	5	<20	84	.12	<10	44	<10	12	375
55	L 42+00N 1 + 00W	<.2	4.74	<5	<2	380	<5	.55	<1	19	41	18	3.96	.25	10	1.04	337	<1	.03	33	370	82	5	<20	67	.10	<10	35	<10	10	369
56	L 42+00N 1 + 25W	<.2	4.25	<5	<2	210	<5	.33	<1	18	34	11	3.70	.18	<10	.74	332	<1	.02	29	540	38	<5	<20	29	.13	<10	41	<10	10	261
57	L 42+00N 1 + 50W	<.2	4.77	<5	8	205	5	.54	<1	20	37	16	3.87	.16	10	.88	241	9	.03	28	550	54	<5	<20	66	.12	<10	38	90	12	222

JULY 1, 1992

ECO-TECH LABORATORIES LTD.

RT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
58	- L 42+00N 1 + 75W	<.2	3.25	<5	2	120	<5	.69	<1	12	20	7	2.45	.16	<10	.46	578	<1	.03	18	390	24	<5	<20	45	.10	<10	29	<10	11	162
59	- L 42+00N 2 + 00W	<.2	3.61	10	<2	205	<5	.80	<1	17	32	17	3.42	.39	10	.86	637	<1	.04	27	450	52	5	<20	82	.10	<10	32	<10	13	226
60	- L 42+00N 2 + 25W	<.2	2.82	<5	4	150	<5	.22	<1	14	24	6	2.64	.16	<10	.45	986	5	.02	19	380	32	<5	<20	25	.12	<10	36	50	10	152
61	- L 42+00N 2 + 50W	<.2	3.32	<5	<2	190	<5	.24	<1	18	36	11	3.30	.22	10	.97	268	<1	.02	29	280	20	5	<20	30	.10	<10	32	<10	9	137
62	- L 42+00N 2 + 75W	<.2	3.48	<5	<2	175	<5	.36	<1	20	40	13	3.62	.26	10	1.00	566	<1	.02	29	940	14	<5	<20	32	.12	<10	35	<10	10	135
63	- L 42+00N 3 + 00W	.2	2.45	<5	4	145	10	.18	<1	18	24	10	3.03	.12	10	.57	280	5	.01	31	870	14	<5	<20	17	.06	<10	22	40	6	92
64	- L 42+00N 3 + 25W	<.2	2.57	<5	<2	165	<5	.18	<1	15	23	6	2.61	.16	10	.51	505	<1	.01	21	490	12	5	<20	19	.09	<10	26	<10	8	115
65	- L 42+00N 3 + 50W	<.2	3.83	<5	<2	200	<5	.26	<1	16	28	10	3.03	.21	<10	.65	257	<1	.02	24	550	26	<5	<20	26	.12	<10	32	10	10	166
66	- L 42+00N 3 + 75W	<.2	3.54	5	<2	210	5	.41	<1	18	34	10	3.14	.20	<10	.81	560	<1	.03	26	900	28	<5	<20	37	.12	<10	37	<10	12	193
67	- L 42+00N 4 + 00W	<.2	4.58	5	<2	195	<5	.44	<1	17	36	6	3.53	.14	<10	.87	498	<1	.03	24	780	16	<5	<20	40	.16	<10	47	<10	12	150
85	- L 18+00N 0 + 75W	<.2	1.67	<5	<2	90	<5	.37	<1	11	14	13	2.18	.20	10	.46	457	<1	.01	20	290	4	<5	<20	22	.05	<10	14	<10	9	36
86	- L 18+00N 0 + 50W	<.2	2.92	5	4	190	<5	.18	<1	15	19	14	3.45	.19	10	.41	184	5	.01	29	570	14	<5	<20	19	.08	<10	26	30	8	62
87	- L 18+00N 0 + 75W	<.2	1.60	5	<2	100	<5	.21	<1	13	16	10	2.75	.17	20	.50	328	<1	.01	23	430	4	<5	<20	16	.04	<10	13	<10	8	40
88	- L 18+00N 1 + 00W	<.2	3.92	5	2	215	<5	1.00	<1	18	37	17	3.33	.22	10	.87	370	<1	.06	41	940	8	<5	<20	94	.11	<10	33	<10	11	60

JULY 1, 1992

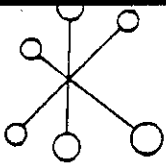
ECO-TECH LABORATORIES LTD.

BT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MH	MO	NA(%)	NI	P	PB	SB	SH	SR	TI(%)	U	V	W	Y	ZN
89	- L 18+00N 1 + 25W	<.2	1.43	<5	<2	75	<5	.11	<1	8	10	3	2.30	.08	<10	.25	167	<1	<.01	8	1790	8	<5	<20	10	.11	<10	20	<10	8	47
90	- L 18+00N 1 + 50W	<.2	2.26	10	<2	250	<5	.16	<1	15	16	12	3.38	.17	10	.40	209	<1	.01	28	1230	6	<5	<20	13	.10	<10	22	<10	9	83
91	- L 18+00N 1 + 75W	<.2	3.00	<5	6	130	10	.15	<1	12	17	4	3.05	.06	<10	.30	148	7	.01	13	2050	16	<5	<20	16	.12	<10	30	50	9	84
92	- L 18+00N 2 + 00W	<.2	3.35	10	<2	220	<5	.26	<1	13	18	9	2.95	.13	<10	.33	1022	<1	.01	22	900	10	<5	<20	17	.14	<10	32	<10	13	71
93	- L 18+00N 2 + 25W	<.2	2.04	10	<2	105	<5	.11	<1	10	16	6	2.75	.04	<10	.28	269	<1	.01	13	1250	6	<5	<20	10	.10	<10	30	<10	8	62
94	- L 18+00N 2 + 50W	<.2	3.68	10	<2	235	<5	.48	<1	16	26	14	3.52	.16	10	.59	239	<1	.01	27	950	16	<5	<20	24	.11	<10	33	40	12	130
95	- L 18+00N 2 + 75W	<.2	1.98	5	<2	130	<5	.30	<1	11	17	6	2.41	.10	10	.39	545	<1	.01	14	730	4	<5	<20	15	.08	<10	24	<10	8	50
96	- L 18+00N 3 + 00W	<.2	2.27	5	<2	140	<5	.26	<1	12	21	8	2.75	.16	10	.57	284	<1	.01	20	560	6	<5	<20	18	.08	<10	25	<10	9	46
97	- L 18+00N 3 + 25W	<.2	1.14	<5	<2	75	<5	.13	<1	7	11	3	1.88	.07	10	.26	757	<1	<.01	9	380	2	<5	<20	9	.06	<10	19	<10	6	33
98	- L 18+00N 3 + 50W	<.2	1.99	5	<2	135	<5	.21	<1	11	17	6	2.54	.11	10	.40	727	<1	.01	14	750	6	<5	<20	13	.09	<10	25	<10	9	50
99	- L 18+00N 3 + 75W	<.2	2.38	5	<2	130	<5	.40	<1	12	19	8	2.66	.16	10	.49	503	<1	.01	16	820	10	<5	<20	23	.09	<10	26	20	10	50
100	- L 18+00N 4 + 00W	<.2	2.91	5	<2	175	<5	.69	<1	16	28	13	3.27	.27	10	.77	447	<1	.02	22	770	8	<5	<20	46	.10	<10	30	<10	12	57
101	- L 16+00N B/L	<.2	2.34	10	<2	155	<5	.44	<1	21	21	12	3.51	.20	20	.56	566	<1	.01	27	520	4	<5	<20	22	.05	<10	18	<10	9	78
102	- L 16+00N 0 + 25W	.2	3.93	5	<2	115	<5	1.02	<1	11	10	13	2.35	.07	20	.22	941	<1	.01	15	560	10	<5	<20	30	.12	<10	16	<10	21	48
103	- L 16+00N 0 + 50W	<.2	1.09	5	<2	45	<5	.10	<1	7	10	4	2.15	.07	10	.26	129	<1	<.01	11	210	2	<5	<20	8	.04	<10	15	<10	4	37
104	- L 16+00N 0 + 75W	.2	1.97	<5	<2	110	<5	.20	<1	10	11	5	2.65	.06	<10	.26	347	<1	<.01	12	770	6	<5	<20	19	.05	<10	12	<10	5	65
105	- L 16+00N 1 + 00W	<.2	2.40	<5	<2	125	<5	.32	<1	14	17	9	2.90	.11	10	.43	569	<1	.02	23	888	5	<5	<20	26	.08	<10	17	<10	11	112
106	- L 16+00N 1 + 25W	<.2	2.45	5	<2	145	<5	.26	<1	16	22	10	3.23	.14	10	.56	232	<1	<.01	22	880	4	<5	<20	15	.08	<10	25	<10	8	91
107	- L 16+00N 1 + 50W	<.2	1.98	5	<2	120	<5	.23	<1	13	17	10	3.33	.20	10	.46	359	<1	.01	16	890	2	<5	<20	15	.07	<10	23	<10	7	72
108	- L 16+00N 1 + 75W	<.2	2.26	5	<2	130	<5	.26	<1	13	20	8	3.27	.16	10	.59	274	<1	.01	19	550	4	<5	<20	18	.08	<10	27	<10	8	107
109	- L 16+00N 2 + 00W	<.2	4.03	5	2	260	<5	.51	<1	13	21	15	3.44	.17	10	.40	1461	<1	.02	24	980	8	<5	<20	33	.12	<10	38	<10	16	91
110	- L 16+00N 2 + 25W	<.2	4.42	5	<2	245	<5	.75	<1	15	27	22	3.77	.24	20	.55	489	<1	.01	33	750	10	<5	<20	35	.12	<10	32	<10	26	69
111	- L 16+00N 2 + 50W	.2	5.21	<5	2	425	<5	1.05	<1	20	37	32	4.67	.41	30	.74	917	1	.02	42	550	12	<5	<20	63	.12	<10	41	<10	31	75
112	- L 16+00N 2 + 75W	.2	6.32	<5	2	430	<5	.86	<1	20	39	40	5.24	.47	30	.69	1203	<1	.02	49	980	14	<5	<20	53	.13	<10	48	10	33	125
113	- L 16+00N 3 + 00W	<.2	3.27	<5	<2	225	<5	.34	<1	13	23	14	3.22	.20	10	.49	372	<1	.02	25	430	12	<5	<20	31	.09	<10	37	50	11	77
114	- L 16+00N 3 + 25W	<.2	3.09	<5	<2	255	<5	.55	<1	15	26	15	3.35	.27	20	.68	1114	<1	.02	28	400	6	<5	<20	40	.09	<10	28	<10	17	64
115	- L 16+00N 3 + 50W	<.2	2.69	<5	<2	105	<5	.42	<1	11	16	4	2.85	.08	<10	.33	175	<1	.01	12	1800	8	<5	<20	21	.12	<10	28	<10	9	56
116	- L 16+00N 3 + 75W	<.2	2.09	<5	<2	140	<5	.25	<1	10	16	10	2.41	.15	10	.36	283	1	.01	17	690	6	<5	<20	22	.07	<10	19	<10	9	43
117	- L 16+00N 4 + 00W	<.2	2.55	<5	2	135	<5	.12	<1	15	19	9	3.39	.14	10	.42	134	1	.01	33	570	10	<5	<20	15	.09	<10	26	10	9	53
118	- L 16+00N 0 + 25E	<.2	1.20	<5	<2	45	<5	.25	<1	5	6	3	2.05	.03	<10	.13	84	<1	<.01	8	360	4	<5	<20	11	.06	<10	16	<10	5	25
119	- L 16+00N 0 + 50E	<.2	2.21	<5	<2	90	<5	.45	<1	12	15	6	3.42	.07	10	.33	146	<1	.01	18	360	4	<5	<20	22	.07	<10	24	<10	6	66

JULY 1, 1992

RT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MM	MO	NA(%)	NI	P	PB	SE	SN	SR	TI(%)	U	V	W	Y	ZN
13	L 15+00N B/L	<.2	1.69	5	<2	50	<5	.09	<1	10	13	7	2.35	.05	10	.35	96	<1	<.01	17	250	2	<5	<20	7	.05	<10	16	<10	5	38
14	L 15+00N 0 + 25K	<.2	2.72	5	<2	60	<5	.10	<1	12	14	6	2.97	.06	<10	.30	112	<1	<.01	14	470	6	<5	<20	8	.12	<10	25	<10	9	81
15	L 15+00N 0 + 50K	<.2	4.49	5	<2	95	<5	.46	<1	11	15	11	3.28	.05	<10	.27	123	<1	<.01	16	650	12	<5	<20	21	.14	<10	26	<10	13	98
144	L 14+00N 0 + 75K	<.2	3.06	<5	<2	150	<5	.33	<1	12	18	6	2.69	.07	10	.38	163	1	.01	19	200	12	<5	<20	28	.09	<10	20	10	10	88
145	L 14+00N 1 + 00K	<.2	3.46	<5	<2	55	<5	.30	<1	9	13	4	2.96	.03	<10	.20	67	<1	<.01	12	150	16	<5	<20	17	.12	<10	22	<10	9	55
142	L 14+00N 0 + 25K	<.2	2.47	<5	<2	105	<5	.70	<1	13	20	11	2.75	.14	10	.50	430	<1	.02	18	580	10	<5	<20	44	.08	<10	25	<10	11	78
143	L 14+00N 0 + 50K	<.2	2.34	<5	<2	95	<5	.76	<1	12	19	9	2.43	.12	10	.46	641	<1	.02	19	360	10	<5	<20	56	.07	<10	22	<10	11	72
170	L 14+00N B/L	<.2	2.87	<5	2	145	<5	.61	<1	19	37	25	3.69	.22	20	.77	429	<1	.01	32	290	12	<5	<20	31	.10	<10	41	20	16	104
171	L 14+00N 0 + 25W	<.2	1.51	<5	<2	70	<5	.51	<1	11	20	13	2.18	.17	10	.45	277	<1	.01	18	510	4	<5	<20	26	.07	<10	22	<10	11	37
172	L 14+00N 0 + 50W	<.2	5.87	<5	2	450	<5	.91	<1	19	33	35	4.76	.27	20	.61	1351	<1	.02	53	560	12	<5	<20	55	.13	<10	44	<10	28	106
173	L 14+00N 0 + 75W	<.2	2.11	5	<2	110	<5	.32	<1	9	12	6	2.54	.08	<10	.19	367	<1	.01	11	1020	6	<5	<20	15	.11	<10	32	<10	9	88
174	L 14+00N 1 + 00W	<.2	2.76	<5	<2	155	<5	.67	<1	15	28	9	3.38	.17	10	.71	514	<1	.02	25	270	6	<5	<20	39	.10	<10	29	<10	11	72
175	L 14+00N 1 + 25W	<.2	1.98	<5	2	55	5	.11	<1	7	7	3	1.81	.03	<10	.08	196	1	.01	6	740	6	<5	<20	10	.09	<10	27	10	8	36
176	L 14+00N 1 + 50W	<.2	3.09	<5	<2	115	<5	.16	<1	13	20	8	3.25	.09	10	.39	133	<1	.01	16	1400	8	<5	<20	12	.11	<10	27	<10	11	65
177	L 14+00N 1 + 75W	<.2	2.48	<5	<2	160	<5	.19	<1	14	23	9	3.15	.14	10	.62	129	<1	.01	23	520	4	<5	<20	14	.09	<10	23	<10	9	76
178	L 14+00N 2 + 00W	<.2	2.50	<5	<2	150	<5	.37	<1	11	20	7	2.71	.12	10	.52	192	<1	.01	19	260	6	<5	<20	25	.09	<10	22	<10	12	53
179	L 14+00N 2 + 25W	<.2	4.99	<5	2	205	5	.43	<1	13	23	13	3.27	.14	<10	.34	153	1	.01	22	870	16	<5	<20	28	.11	<10	34	20	14	65
180	L 14+00N 2 + 50W	<.2	2.40	<5	<2	140	<5	.61	<1	15	24	13	3.07	.26	20	.68	439	<1	.02	23	760	6	<5	<20	45	.09	<10	24	<10	15	47
181	L 14+00N 2 + 75W	<.2	4.01	<5	4	310	<5	.84	<1	18	29	20	3.58	.18	20	.60	1348	2	.02	34	450	12	<5	<20	51	.12	<10	33	10	23	54
182	L 14+00N 3 + 00W	<.2	3.22	<5	2	175	<5	.57	<1	16	22	12	3.12	.15	10	.47	447	1	.02	24	740	8	<5	<20	27	.12	<10	39	10	12	75
183	L 14+00N 3 + 25W	<.2	2.75	<5	<2	135	<5	.21	<1	16	21	8	2.98	.12	<10	.52	205	<1	.01	21	1000	6	<5	<20	12	.13	<10	33	<10	11	65
184	L 14+00N 3 + 50W	<.2	3.29	<5	<2	215	<5	.18	<1	15	16	12	3.17	.08	10	.25	144	<1	.01	26	910	12	<5	<20	16	.13	<10	29	<10	15	64
185	L 14+00N 3 + 75W	<.2	3.60	<5	<2	115	<5	.21	<1	17	17	9	3.23	.07	<10	.40	194	<1	.01	26	1020	16	<5	<20	15	.15	<10	31	30	13	51
186	L 14+00N 4 + 00W	.2	3.53	<5	<2	255	<5	.69	<1	16	22	22	3.42	.24	30	.38	2798	<1	.01	33	820	10	<5	<20	39	.09	<10	29	<10	27	80
187	L 13+00N B/L	<.2	2.07	5	<2	95	<5	.22	<1	12	19	8	3.25	.07	10	.43	169	<1	<.01	19	230	8	<5	<20	16	.09	<10	27	<10	9	114
188	L 13+00N 0 + 25K	<.2	2.86	<5	<2	95	<5	.63	<1	14	22	8	3.00	.08	10	.49	1044	<1	.01	20	310	10	<5	<20	43	.09	<10	28	<10	12	78
189	L 13+00N 0 + 50K	<.2	2.23	<5	<2	125	<5	.14	<1	10	15	5	2.34	.05	10	.32	852	<1	.01	14	370	6	<5	<20	12	.09	<10	25	<10	9	87
190	L 13+00N 0 + 75K	<.2	2.45	<5	<2	135	<5	.18	<1	14	24	11	4.06	.09	10	.54	267	<1	<.01	22	1740	10	<5	<20	14	.09	<10	33	<10	8	85
191	L 13+00N 1 + 00K	.2	2.67	<5	<2	70	3	.07	<1	12	14	5	2.48	.04	<10	.22	155	1	.01	11	930	12	<5	<20	8	.14	<10	26	<10	13	86
192	L 13+00N 1 + 25K	<.2	3.49	<5	<2	110	<5	.13	<1	11	14	6	2.44	.05	10	.26	171	<1	.01	13	890	8	<5	<20	10	.11	<10	23	<10	11	79

Rock Analyses



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JULY 7, 1992

CERTIFICATE OF ASSAY ETK 92-276

=====

TECK EXPLORATION

350, 272 Victoria Street


KAMLOOPS, B.C.

V2C 2A2

SAMPLE IDENTIFICATION: 19 ROCK samples received JUNE 26, 1992

----- PROJECT: 1703

ET#	Description	Ag (g/t)	Ag (oz/t)	Pb (%)	Zn (%)
1-	106001	<.1	<.01	<.01	.01



ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

ECO-TECH LABORATORIES LTD.
 10041 EAST TRANS CANADA HWY.
 KAMLOOPS, B.C. V2C 2J3
 PHONE - 604-573-5700
 FAX - 604-573-4557

JULY 7, 1992

TECK EXPLORATION ETX 92-276
 # 350, 272 Victoria Street
 KAMLOOPS, B.C.
 V2C 2A2

ATTENTION: FRED DALEY

PROJECT NUMBER: 1703


19 ROCK SAMPLES RECEIVED JUNE 26, 1992

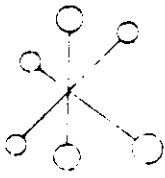
RT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SH	SR	TI(%)	U	V	W	Y	ZN
1	- 106001	<.2	.83	5	<2	5	<5	.55	<1	5	142	2	2.65	.01	20	.46	248	4	<.01	5	1090	4	<5	<20	20	.01	<10	5	<10	9	16

PLEASE NOTE: W detection limits are higher than normal due to massive Zn interference

NOTE: < = LESS THAN

> = GREATER THAN


 ECO-TECH LABORATORIES LTD.
 FRANK J. PREZOTTI, A.Sc.T.
 B.C. Certified Assayer



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy. Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

AUGUST 7 , 1992

CERTIFICATE OF ASSAY ETK 92-373

=====

TECK EXPLORATION

350, 272 Victoria Street
KAMLOOPS, B.C.
V2C 2A2

SAMPLE IDENTIFICATION: 12 ROCK samples received AUGUST 5, 1992

----- PROJECT: 1703

ET#	Description	Ag (g/t)	Ag (oz/t)	Pb (%)	Zn (%)
-----	-------------	-------------	--------------	-----------	-----------

=====

8-	81708	23.2	.68	2.39	7.06
----	-------	------	-----	------	------

COPY

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

HCO-TECH LABORATORIES LTD.
 10041 EAST TRANS CANADA HWY.
 KAMLOOPS, B.C. V2C 2J3
 PHONE - 604-573-5700
 FAX - 604-573-4557

AUGUST 7, 1992

VALUES IN PPM UNLESS OTHERWISE REPORTED

TECK EXPLORATION LTD. NTK 92-373
 # 350, 272 Victoria Street
 KAMLOOPS, B.C.
 V2C 2A2

ATTENTION: FRED DALEY/GREG THOMPSON
 PROJECT #: 1703

12 ROCK SAMPLES RECEIVED AUGUST 5, 1992

KT#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	NH	MO	NA(%)	NI	P	PS	SB	SE	SR	TI(%)	U	V	W	Y	ZN
8	- 81708	22.8	.42	15	<2	20	10	1.04	119	13	81	90	6.20	.15	<10	.56	6023	9	<.01	14	410	>10000	<5	<20	13	.03	10	<1	<10	7	>10000

NOTE: < = LESS THAN
 > = GREATER THAN

SC/TECK2

COPY

HCO-TECH LABORATORIES LTD.
 FRANK J. PEZZOTTI, A.Sc.T.
 B.C. Certified Assayer

Drill Core Analyses

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

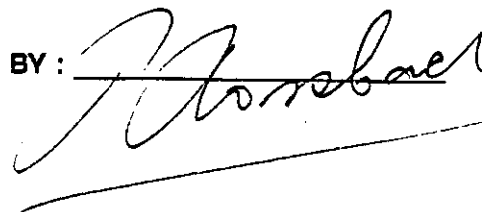
2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1703
Type of Analysis: Assay

Certificate: 92333
Invoice: 30410
Date Entered: 92-08-25
File Name: TEK92333
Page No.: 1

PRE		oz/t	oz/t	%	%	%
FIX	SAMPLE NAME	Au	Ag	Pb	Zn	Fe
A	81741		0.68	0.76	1.62	
A	81742	0.010	0.94	1.84	5.90	27.40

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

To: **TECK EXPLORATIONS LTD.**
 # 350 272 VICTORIA STREET
 KAMLOOPS, B.C.

Project: **1783**

Type of Analysis: **ICP**

2225 Springer Ave., Burnaby,
 British Columbia, Can. V5B 3N1
 Ph:(604)299-6910 Fax:299-6262

Certificate: **92333 I**
 Invoice: **30410**
 Date Entered: **92-08-30**
 File Name: **TEK92333.I**
 Page No.: **1**

PRE FIX	SAMPLE NAME	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	HG	SR	CD	SB	BI	V	CA	P	EA	CR	MG	BA	TI	AL	NA	K	SI	W	BE
A	81741	2	75	7195	14444	11.4	22	22	892	6.24	8	5	ND	ND	47	23	8	4	14	2.61	0.08	3	71	0.81	148	0.05	1.41	0.01	0.10	0.01	5	1
A	81742	5	271	18982	50485	27.4	83	80	1407	23.93	44	5	ND	ND	25	77	23	6	8	2.16	0.13	4	15	0.60	93	0.01	0.54	0.01	0.12	0.02	4	1

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

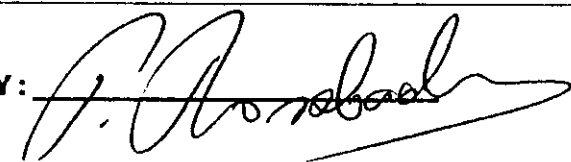
To : TECK EXPLORATIONS LTD.
 # 350 272 VICTORIA STREET
 KAMLOOPS, B.C.

Project: 1723
 Type of Analysis: ICP

2225 Springer Ave., Burnaby,
 British Columbia, Can. V5B 3N1
 Ph:(604)299-6910 Fax:299-6252

Certificate: 92333 I
 Invoice: 30410
 Date Entered: 92-08-30
 File Name: TEK92333.I
 Page No.: 1

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% K	% SI	PPM W	PPM BE
A	81741	2	75	7195	14444	11.4	22	22	892	6.24	8	5	ND	ND	47	23	8	4	14	2.61	0.08	3	71	0.81	148	0.05	1.41	0.01	0.10	0.01	5	1
A	81742	5	271	18982	50485	27.4	83	80	1407	23.93	44	5	ND	ND	25	77	23	6	5	2.16	0.13	4	15	0.80	93	0.01	0.54	0.01	0.12	0.02	4	1

CERTIFIED BY: 

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-8252

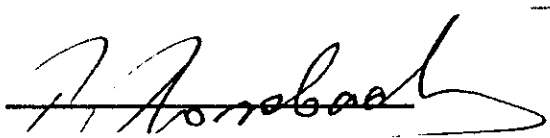
To: TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1703
Type of Analysis: ICP

Certificate: 92384 A
Invoice: 30460
Date Entered: 92-09-26
File Name: TEK92384.I
Page No.: 1

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% NG	PPM BA	% TI	% AL	% NA	% K	% SI	PPM W	PPM BE
A	18538	1	28	14	79	0.1	27	9	378	5.87	20	5	ND	ND	10	1	1	1	29	0.34	0.19	20	40	1.03	133	0.21	2.11	0.02	1.93	0.06	1	2
A	18539	1	15	17	76	0.1	19	6	528	8.81	11	5	ND	ND	17	1	1	1	30	0.58	0.22	25	58	0.93	121	0.16	1.72	0.01	1.56	0.04	1	2
A	18540	1	7	7	63	0.1	15	7	371	5.57	5	5	ND	ND	13	1	1	1	27	0.43	0.21	27	53	0.75	132	0.16	1.47	0.01	1.36	0.05	1	2
A	18541	3	21	94	146	0.3	33	1	710	2.88	6	5	ND	ND	347	1	1	1	59	9.53	0.06	9	64	1.29	218	0.09	5.43	0.57	1.00	0.05	1	2
A	18542	2	24	227	167	0.5	30	2	765	2.94	18	5	ND	ND	227	1	1	1	50	6.22	0.06	7	72	1.25	283	0.10	4.93	0.46	1.05	0.06	7	2
A	18543	1	5	18	12	0.1	5	2	67	0.29	29	5	ND	ND	7	1	2	1	2	0.33	0.01	1	155	0.03	6	0.01	0.11	0.01	0.01	0.06	2	1
A	18544	1	11	220	112	0.4	42	12	289	3.30	16	5	ND	ND	10	1	1	1	15	0.29	0.04	22	50	0.87	94	0.09	1.80	0.01	1.07	0.05	1	1
A	18618	3	25	384	5946	0.9	16	5	1154	2.55	15	5	ND	ND	14	13	1	1	4	0.84	0.18	12	67	0.40	36	0.01	0.44	0.01	0.22	0.03	1	1
A	18619	1	6	20	286	0.1	6	2	506	0.83	5	5	ND	ND	3	1	1	1	2	0.11	0.04	11	85	0.11	20	0.01	0.25	0.01	0.08	0.04	1	1

CERTIFIED BY:



ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

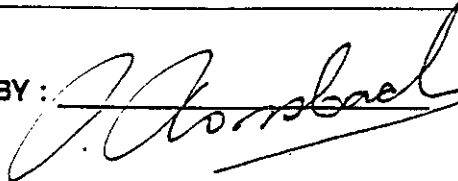
To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1723 1703

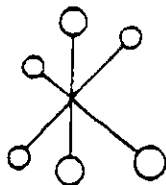
Type of Analysis: Geochemical

Certificate: 92384 G
Invoice: 30476
Date Entered: 92-10-04
File Name: TEK92384.G
Page No.: 1

PRE FIX	SAMPLE NAME	PPB Au
P	18538	5
P	18239	5
P	18540	5

CERTIFIED BY : 

APPENDIX D
Analytical Procedures



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4867

GEOCHEMICAL LABORATORY METHODS

SAMPLE PREPARATION (STANDARD)

1. Soil or Sediment: Samples are dried and then sieved through 80 mesh sieves.
2. Rock, Core: Samples dried (if necessary), crushed, riffled to pulp size and pulverized to approximately -140 mesh.
3. Humus/Vegetation: The dry sample is ashed at 550 C. for 5 hours.

METHODS OF ANALYSIS

All methods have either canmet certified or in-house standards carried through entire procedure to ensure validity of results.

1. MULTI ELEMENT ANALYSES

- (a) ICP Packages (6,12,30 element).

Digestion -----	Finish -----
Hot Aqua Regia	ICP

- (b) ICP - Total Digestion (24 element).

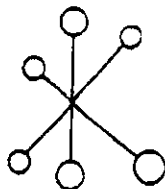
Digestion -----	Finish -----
Hot HClO ₄ /HNO ₃ /HF	ICP

- (c) Atomic Absorption (Acid Soluble)
Ag*, Cd*, Cr, Co*, Cu, Fe, Pb*, Mn, Mo, Ni*, Zn.

Digestion -----	Finish -----
Hot Aqua Regia	Atomic Absorption * = Background corrected

- (d) Whole Rock Analyses.

Digestion -----	Finish -----
Lithium Metaborate fusion	ICP

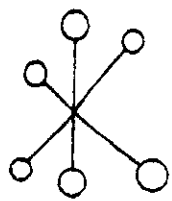


ECO-TECH LABORATORIES LTD

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-6700 Fax 573-

- | | | |
|------------------------------|---|--|
| 2. Antimony | | |
| Digestion | Finish | |
| ----- | ----- | |
| Hot aqua regia | ICP | |
| 3. Arsenic | | |
| Digestion | Finish | |
| ----- | ----- | |
| Hot aqua regia | Hydride generation - A.A.S. | |
| 4. Barium | | |
| Digestion | Finish | |
| ----- | ----- | |
| Lithium Metaborate | ICP | |
| 5. Beryllium | | |
| Digestion | Finish | |
| ----- | ----- | |
| Hot aqua regia | Atomic Absorption | |
| 6. Bismuth | | |
| Digestion | Finish | |
| ----- | ----- | |
| Hot aqua regia | Atomic Absorption
(Background Corrected) | |
| 7. Chromium | | |
| Digestion | Finish | |
| ----- | ----- | |
| Sodium Peroxide
Fusion | Atomic Absorption | |
| 8. Flourine | | |
| Digestion | Finish | |
| ----- | ----- | |
| Lithium Metaborate
Fusion | Ion Selective Electrode | |



ECO-TECH LABORATORIES LTI

ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573

- 9. Gallium

Digestion -----	Finish -----
Hot HClO4/HNO3/HF	Atomic Absorption

- 10. Germanium

Digestion -----	Finish -----
Hot HClO4/HNO3/HF	Atomic Absorption

- 11. Mercury

Digestion -----	Finish -----
Hot aqua regia	Cold vapor generation - A.A.S.

- 12. Phosphorus

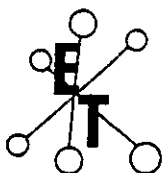
Digestion -----	Finish -----
Lithium Metaborate Fusion	ICP finish

- 13. Selenium

Digestion -----	Finish -----
Hot aqua regia	Hydride generation - A.A.S.

- 14. Tellurium

Digestion -----	Finish -----
Hot aqua regia Potassium Bisulphate Fusion	Hydride generation - A.A.S. Colorimetric or I.C.P.



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 573-5700 Fax 573-4557

GEOCHEMICAL LABORATORY METHODS

Multi Element ICP Analyses

Digestion: 1 gram sample is digested with 6 ml dilute aqua regia in a waterbath at 90°C for 90 minutes and diluted to 20 ml.

Analysis: Inductively coupled Plasma.

Jan. 1990.

GEOCHEMICAL ANALYTICAL METHODS CURRENTLY IN USE AT
ROSSBACHER LABORATORY LTD.

A. SAMPLE PREPARATION

1. Geochem. Soil and Silt:

Samples are dried and sifted to minus 80 Mesh, through stainless steel or nylon screens.

2. Geochem. Rock:

Samples are dried, crushed to minus 1/4 inch, split, and pulverized to minus 100 mesh.

B. METHODS OF ANALYSIS

1. Multi element: (Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb, Cd, As):

0.50 Gram sample is digested for four hours with a 15:85 mixture of Nitric-Perchloric acid. The resulting extract is analyzed by Atomic Absorption spectroscopy, using Background Correction where appropriate.

2. Antimony:

0.50 Gram sample is fused with Ammonium Iodide and dissolved. The resulting solution is extracted into TOPO/MIBK and analyzed by Atomic Absorption spectroscopy.

3. Arsenic: (Generation Method)

0.25 Gram sample is digested with Nitric-Perchloric acid. Arsenic from the solution is converted to arsine, which in turn reacts with silver D.D.C. The resulting solution is analyzed by colorimetry.

4. Barium:

0.20 Gram sample is repeatedly digested with HClO_4 - HNO_3 and HF. The solution is analyzed by atomic absorption spectroscopy.

5. Biogeochemical:

Samples are dried and ashed at 550°C. The resulting ash analyzed as in #1, Multielement Analysis.

6. Bismuth:

0.50 Gram sample is digested with Nitric acid. The solution is analysed by Atomic absorption spectroscopy.

METHODS OF ANALYSIS (CONT'D)

7. Chromium:

0.25 Gram sample is fused with Sodium Peroxide. The solution is analyzed by atomic absorption spectroscopy.

8. Fluorine:

0.50 Gram sample is fused with Carbonate Flux, and dissolved. The solution is analysed for Fluorine by use of an Ion Selective Electrode.

9. Gold AR/AAS:

10.0 Gram sample is roasted at 550°C and dissolved in Aqua Regia. The resulting solution is subjected to a MIBK extraction, and the extract is analyzed for Gold using Atomic Absorption spectroscopy.

9A Gold FA:

10.0 Gram sample is fused with appropriate fluxes, and the resulting lead button is cupelled to produce a gold/silver bead. The bead is dissolved in Aqua Regia and analyzed for gold by AAS.

10. Mercury:

1.00 Gram sample is digested with Nitric and Sulfuric acids. The solution is analyzed by Atomic Absorption spectroscopy, using a cold vapor generation technique.

11. Partial Extraction and Fe/Mn oxides:

0.50 Gram sample is extracted using one of the following: hot or cold 0.5 N. HCl, 2.5% E.D.T.A., Ammonium citrate, or other selected organic acids. The solution is analyzed by use of Atomic Absorption spectroscopy.

12. pH:

An aqueous suspension of soil, or silt is prepared, and its pH is measured by use of a pH meter.

13. Rapid Silicate Analysis:

0.10 Gram sample is fused with Lithium Metaborate, and dissolved in HNO₃. The solution is analyzed by Atomic Absorption for SiO₂, Al₂O₃, Fe₂O₃, MgO, CaO, Na₂O, K₂O, TiO₂, TiO₃, P₂O₅, and MnO.

14. Tin:

0.50 Gram sample is sublimated by fusion with Ammonium Iodide, and dissolved. The resulting solution is extracted into TOPO/MIBK and analysed by atomic absorption spectroscopy.

15. Tungsten:

1.00 Gram sample is sintered with a carbonate flux, and dissolved. The resulting extract is analyzed colorimetrically, after reduction with Stannous Chloride, by use of Potassium Thiocyanate.

16. ICP :

0.5 Gram sample is digested with Aqua Regia, and analyzed using a JOBIN YVON MODEL JY 32 1987 ICP Emission Spectrophotometer for Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, La, Mg, Mo, Mn, Ni, P, Pb, Sb, Si, Sr, Ti, U, V, W, Zn.

APPENDIX E

Drill Hole Logs

APPENDIX F
Geophysical Report

PACIFIC GEOPHYSICAL LIMITED
REPORT ON THE
TIME DOMAIN ELECTRO-MAGNETIC SURVEY
ON THE
MGM PROJECT
GOLDEN MINING DIVISION, B.C.
FOR TECK EXPLORATION LTD.

BY
PAUL A. CARTWRIGHT, P. Geo.
GEOPHYSICIST

TABLE OF CONTENTS

	Page
1. Introduction	1
2. Survey Specifications	1
3. Instrument Specifications	2
4. Discussion of Results	2
5. Conclusions	5
6. Recommendations	5

APPENDIX I Statement of Qualifications

APPENDIX II Data Sections

1. INTRODUCTION

Surface and borehole time domain electro-magnetic (TDEM) surveying have been completed on the MGM Project on behalf of Teck Exploration Ltd. by Pacific Geophysical Ltd.

The MGM Property is located approximately 120 kilometers north-west of Golden, British Columbia, on the east side of Kinbasket (McNaughton) Lake. Access to the property is by logging road to either Bush Harbour or Sullivan River Camp and then via barge to the Tsar Creek Logging Camp.

Previous work in the area consisted of geological mapping, soil sampling, trenching, line cutting and horizontal loop EM surveying, as well as diamond drilling and limited borehole EM surveying (2 holes).

The objective of the present (June/July 1992) surface TDEM survey was to map the extent of the massive sulphide horizon seen in the walls of the Cummins River canyon and intersected in the previous diamond drill holes. The present (July 1992) borehole EM surveys were carried out in 2 holes primarily to test for the possible presence of conductive mineralization located close to, but not actually intersected by the holes in question. Both of these holes were drilled in 1991, but could not be re-entered at the time of the 1991 program due to blockage. Plastic casing was used in the holes during the 1992 program to insure that the holes were accessible for the downhole work.

2. SURVEY SPECIFICATIONS

The surface TDEM measurements were made at 25 meter intervals, with the exception of Line 24+00N (north of Cummins River) which used 50 meter readings. Downhole survey work used a 20 meter reading interval from the surface to a point mid-way down the hole, and then a 10 meter interval until reaching the vicinity of the intersected mineralization, whereupon readings were taken every 5 meters.

Relatively large transmitter loops were employed to make the surface measurements. A typical loop size was 600m X 800m. In every case the loops were placed over the hanging wall side of the hoped-for conductor to increase coupling with a relatively shallow dipping target. The borehole program use four 200m X 200m loops to energize each of DDH TK-91-1 and TK-91-3 in order to better ascertain the direction from which any anomalous response originated from.

3. INSTRUMENT SPECIFICATIONS

A Crone Digital Pulse EM system was used to make both the surface and borehole measurements. This time domain electromagnetic (TDEM) method employs an alternating pulsed primary current, with a controlled shutoff ramp, connected to a closed loop of wire (transmitter loop) laid on the surface. Typical loop currents were in the order of 8 amperes. The rate of decay of any induced secondary field is then measured across a series of time windows during the off time of the waveform, using a small portable receiving coil connected to the receiver unit. The receiver coil was moved along survey lines located both inside the loop and to the east of the transmitter loop. Two components were measured at each station; X - horizontal and Y - vertical. As much of the survey area consisted of moderately to steeply inclined west facing slopes, the receiver components were measured approximately parallel (X comp.) and perpendicular (Z comp.) to the average slopes. Transmitter On time was 16.66ms, with a turnoff 'ramp' of 1.0ms. Twenty receiver channels were recorded at every station, yielding a total measurement interval of 77 micro-sec. to 14.5 milli-sec.

It should be noted that, in every case, the so-called DEEPEM convention was used with regard to the sign of the response. This results in the primary field being signed negative (downwards) in the center of the loop, for both the surface and borehole work.

The downhole surveys measured a single component, parallel to the long axes of the drill holes.

4. DISCUSSION OF RESULTS

I) Surface Surveys

The TDEM ground survey was conducted concurrently over both the MGM Property and the Cominco Bend claims.

South of the Cummins River, TDEM surveying was completed over Line 4+00S to Line 16+00S. Portions of Lines 4+00N to 2+00S extended off the Cominco Bend claims onto the MGM and are included in the line profiles (Figure 9 - MGM Report). Three loops were utilized to make the measurements, with eastern edges of all loops being positioned along the 125° baseline. The western edges of all of the loops were along the western limit of the grid lines (lower road).

Two transmitter loops were used to survey the grid north of the Cummins River, with the eastern loop edges coincident with the 5+00E tieline and the western loop edges lying along the 140° baseline. Results for line 24+00N and portions of lines 13+00N, 14+00N and 15+00N are included.

While there is a wide range of magnitudes evident in the secondary field data collected on the various TDEM lines, all exhibit the same basic signature; X component data display prominent cross-overs from negative to positive as one moves from west to east, while Z component data are marked by well defined negative troughs, which eventually cross over to lower magnitude positive values as one moves further eastward. There does not appear to be any significant amount of overburden or conductive half-space response in the TDEM data set. This is consistent with a very resistive terrain, covered with only a sporadic, thin, poorly conducting overburden layer. The exception is the grid north of Cummins River where the effects of a somewhat thicker overburden layer can be seen, as evidenced by an elevated channel one response.

Conductive thin plate modelling confirms that the above signature is indicative of a conductive plate dipping in the order of 20° - 50° towards the west under the loop(s). The model data included with this report (X & Z components, Figures 1 & 2) is not specific to any particular line profile. The modelling, which closely approximates the field data, used a plate buried 100 meters at its upper edge and dips 25° from the slope horizon towards the west. As this model does not take into account the topographic slope, one must add the average topographic slope to the model dip to obtain the true dip from the horizontal.

In the case of the area surveyed south of Cummins River, the most anomalous results occur in the data recorded from Lines 4+00S and 6+00S, an area where diamond drill holes have intersected the massive sulphide horizon. In general, it seems that within this area the target is relatively shallow (probably in the order of 200 meter sub-surface as a minimum) and relatively uniform. To the south, beyond Line 6+00S, the zone appears to deepen significantly, as indicated by lower magnitude results and wider, smoother curve shapes.

A similar profile shape exists on line 24+00N, north of the Cummins River, indicating that the target may to plunge shallowly towards the northwest toward line 24+00N. This results indicates the presence of the massive sulphide horizon over 4.5 kilometers of strike length.

Also evident in the computed models is the fact that the position of the upper edge of the conductive plate is closely marked by the positive peak of the X component curves and also by the west to east, negative to positive cross-over of the Z component curves. Using this information, one is able to map the approximate position of the upper edge of the conductive sheet. If the sheet has a shallow enough dip and a large enough depth extent, the position of the downdip edge can also be estimated, primarily from the location of the X component negative maximum.

By using the above techniques, one can definitely outline the upper edge of the conductor detected both north and south of Cummins River. In addition, a major dislocation is evident in the data south of Cummins River, in the vicinity of Line 10+00N, where the leading edge of the conductor is displaced eastward on the most southern part of the geophysical grid.

User : Crone Geophysics Ltd.

System: Crone Digital Pulse EM

File : mgm5.syn

Scale: 1:5000

Unit Scale: Compressed Lin-Log

X - Component

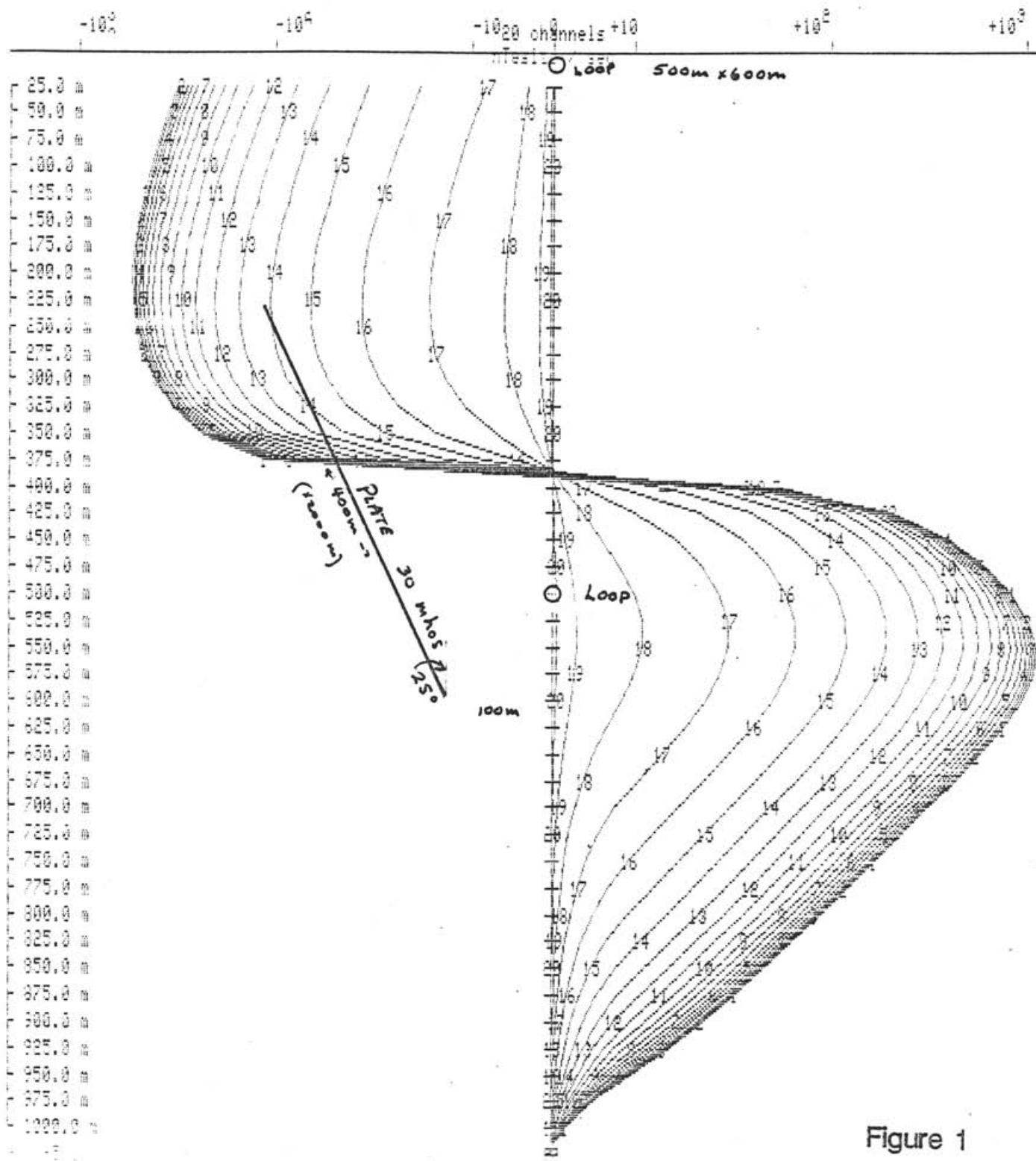


Figure 1

User : ~~CRONE~~ PACIFIC Geophysics Ltd.

System: Crone Digital Pulse EM

File : mgm5.syn

Scale: 1:5000

Unit Scale: Compressed Lin-Log

Z - Component

20 channels
nTeslas / sec

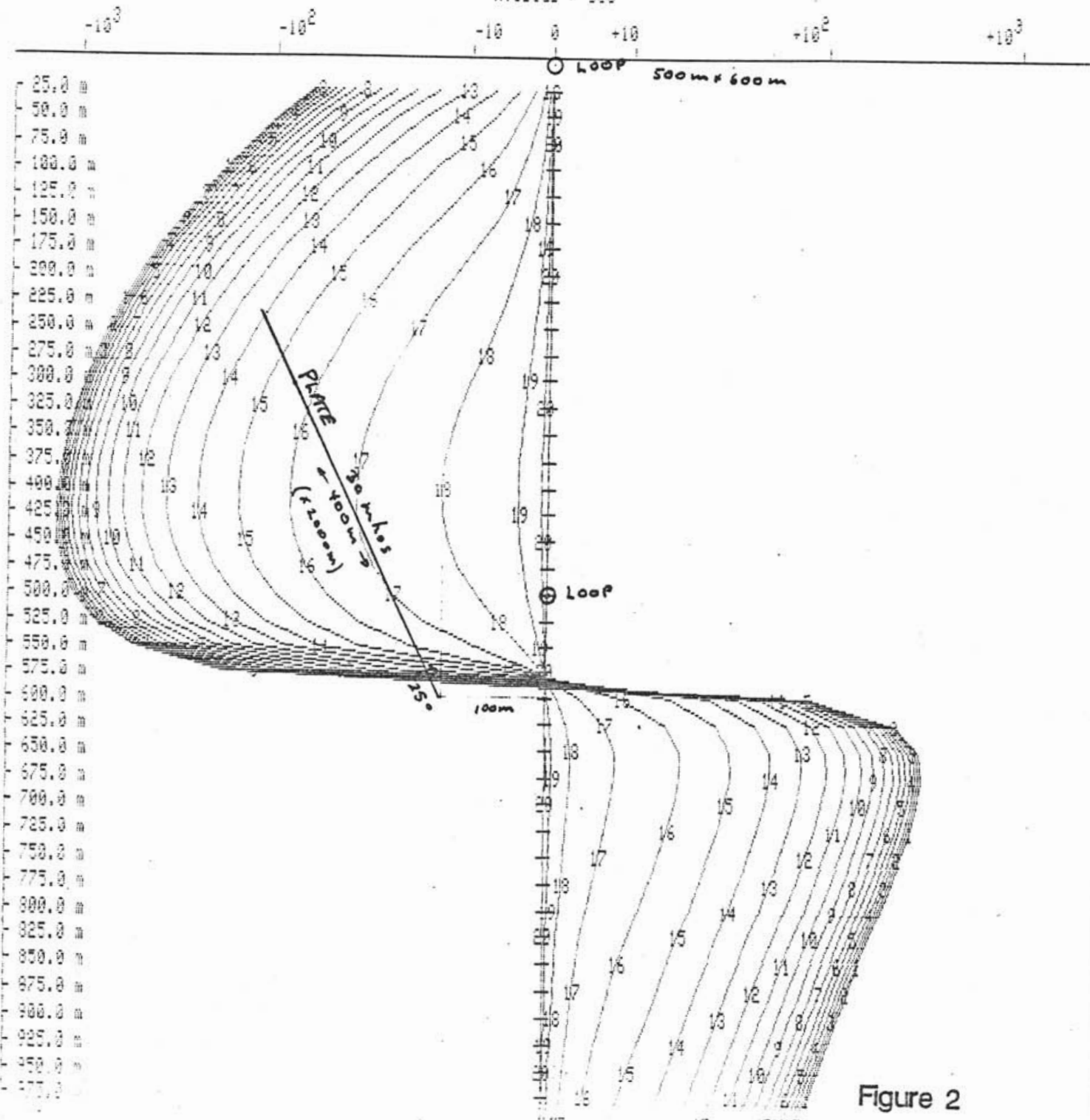


Figure 2

II) Borehole Surveys

Two diamond drill holes were surveyed using the downhole TDEM technique; DDH TK-91-1 and TK-91-3.

As would be expected, there is good correlation between the mineralization intersected in the various holes and the measured downhole logs. Of potentially greater interest are the off-hole response interpreted to be present in the data recorded from both holes. TK-91-3 exhibits by far the highest amplitude anomaly.

Four separate 200 meter X 200 meter transmitter loops were positioned around DDH TK-91-3, with one loop roughly centered on the hole collar and the other three each having one common edge with this central loop in the northern, eastern and southern quadrants. The central and eastern loop downhole logs yielded the most interesting results, while the other two gave rise to amplitudes approximately 50% of the first two. The most likely cause of such a signature is a conductor located either east or west of the hole, with the former being more likely. Distance of the conductor away from the hole is probably not greater than 50 meters.

DDH TK-91-1 was surveyed using four loops in exactly the same manner as TK-91-3. In this case, very weakly anomalous off-hole type anomalies are noted in only the data recorded from the central and northern loops, with the northern loop response being slightly more anomalous. The source could be a somewhat northerly dipping fold limb located either to the north or south of the hole, with the former the most probable. Distance from the hole is probably less than 50 meters.

5. CONCLUSIONS

Surface and downhole TDEM surveys have been carried out on the MGM Project as part of an on-going program to further define massive sulphide mineralization initially discovered in the Cummins River canyon.

Model studies of the TDEM results indicate that a conductive sheet-like body, having a dip in the range of 20° to 50° and burial depth in the order of 100 meters or more, is the primary source of the anomalous EM results.

Therefore, the surface TDEM survey has outlined the downdip extension of the sulphide zone. The near-surface mineralization is apparently not conductive enough or thick enough to be detected with EM methods. At some point downdip, however, the mineralization becomes thick enough, and/or well enough connected to give rise to a surface EM response.

The borehole TDEM survey data has been interpreted to indicate that a significant off-hole conductor may be present up to 50 meters east of DDH TK-91-3. This conductor probably takes the form of a sharp fold within the mineralized horizon. Another, much less significant off-hole conductive response is also interpreted in the downhole data recorded in DDH TK-91-1. In this case the target is thought to be located to the north and within 50 meters of the hole. As was the case of TK-91-3, this conductor is probably a folded structure lying within the massive sulphide horizon.

6. RECOMMENDATIONS

Drilling should be carried out to test the TDEM zone outlined north of Cummins River. With regard to the area south of Cummins River, it is recommended that DDH TK-91-3 be wedged off and re-drilled such that the new hole passes through the mineralized horizon approximately 25 meters east of the existing intersection. Provision should also be made to allow the re-logging of the wedged hole using the TDEM technique.

APPENDIX I


Statement of Qualifications

CERTIFICATE

I, Paul A. Cartwright, of the City of Vancouver, Province of British Columbia, do hereby certify:

1. I am a geophysicist residing at 4238 West 11th Avenue, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia, with a B.Sc. degree (1970).
3. I am a member of the Society of Exploration Geophysicists, the European Society of Exploration Geophysicists and the Canadian Society of Exploration Geophysicists.
4. I have been practising my profession for 22 years.
5. I am a Professional Geophysicist licensed in the Province of Alberta, and I am a Professional Geoscientist registered in the Province of British Columbia.

Dated at Vancouver, British Columbia this 11th day of August, 1992.



Paul A. Cartwright, P. Geo.

CERTIFICATE

I, Michael J. Cormier, of the City of Vancouver, Province of British Columbia, do hereby certify:

1. I am a geophysicist residing at 5512 Kings Road, Vancouver, British Columbia.
2. I am a graduate of McGill University, Montreal, Quebec with a B.Sc. degree (1981).
3. I have been practising my profession for 10 years.
4. I have no direct or indirect interest, nor do I expect to receive any interest, directly or indirectly, in the property or securities of Teck Explorations Ltd. or any affiliates.
5. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Vancouver, British Columbia this 11th day of August, 1992.

Michael J. Cormier per *MAC*
Michael J. Cormier, B.Sc.

APPENDIX II
Data Sections

Surface Pulse E.M.
Linear and Log Plots

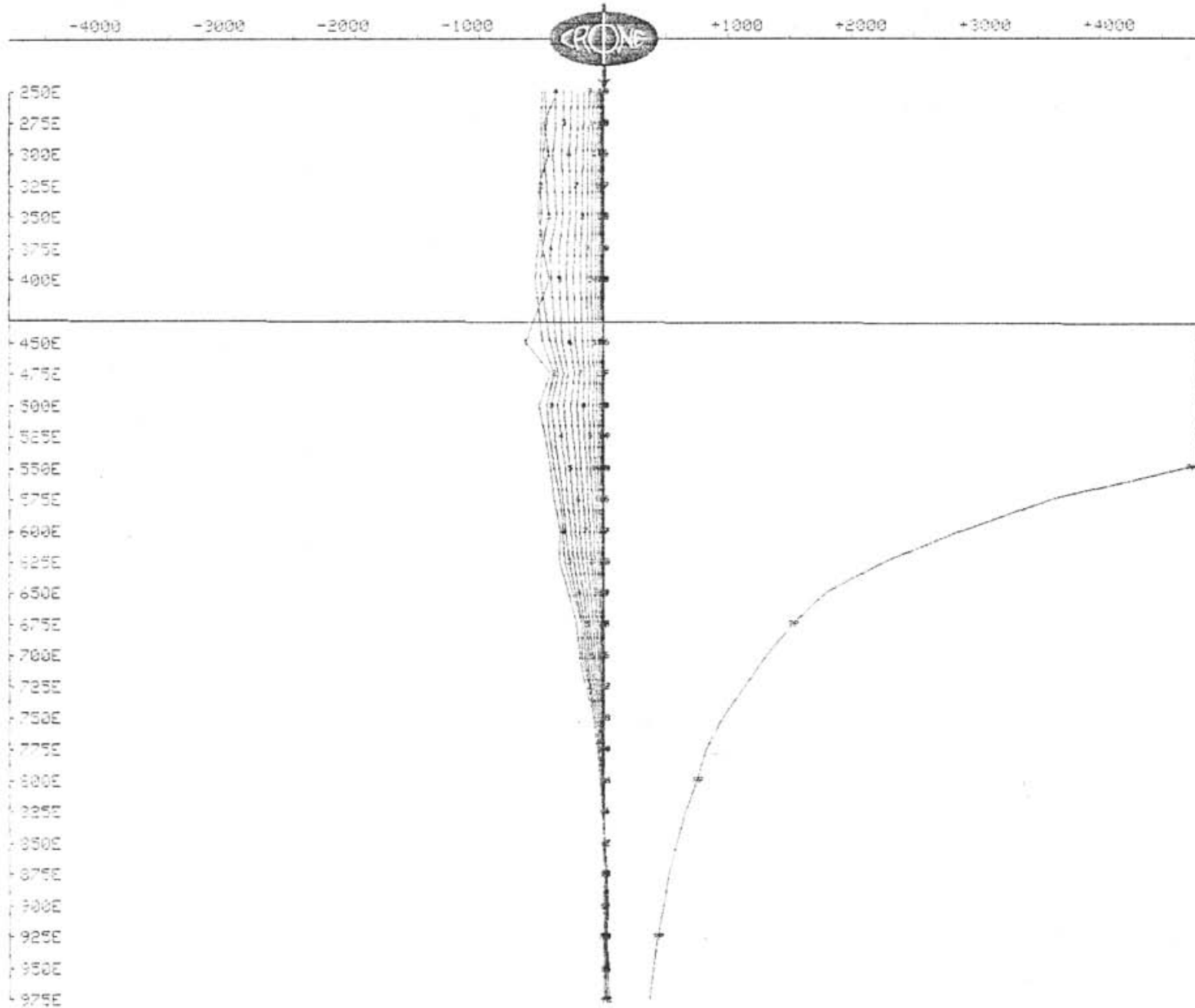
CRONE GEOPHYSICS & EXPLORATION LTD

SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGMN
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L2400N
Tx Loop : N5
Date : Jul 24, 1992
File : L2400N.PEM
Unit Scale: 1cm = 500 nT/s

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP



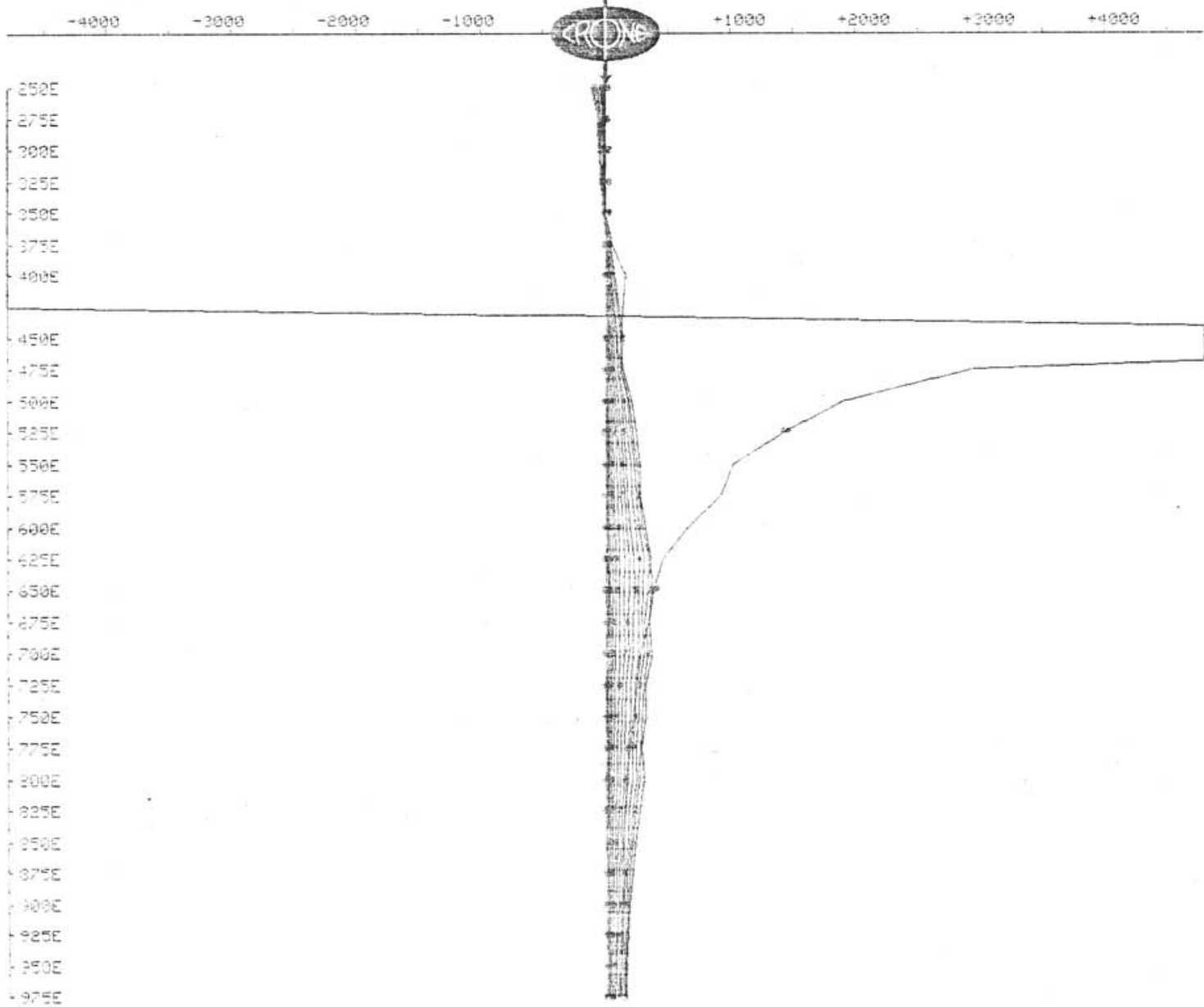
CRONE GEOPHYSICS & EXPLORATION LTD

SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGMN
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L2400N
Tx Loop : N5
Date : Jul 24, 1992
File : L2400N.PEM
Unit Scale: 1cm = 500 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP



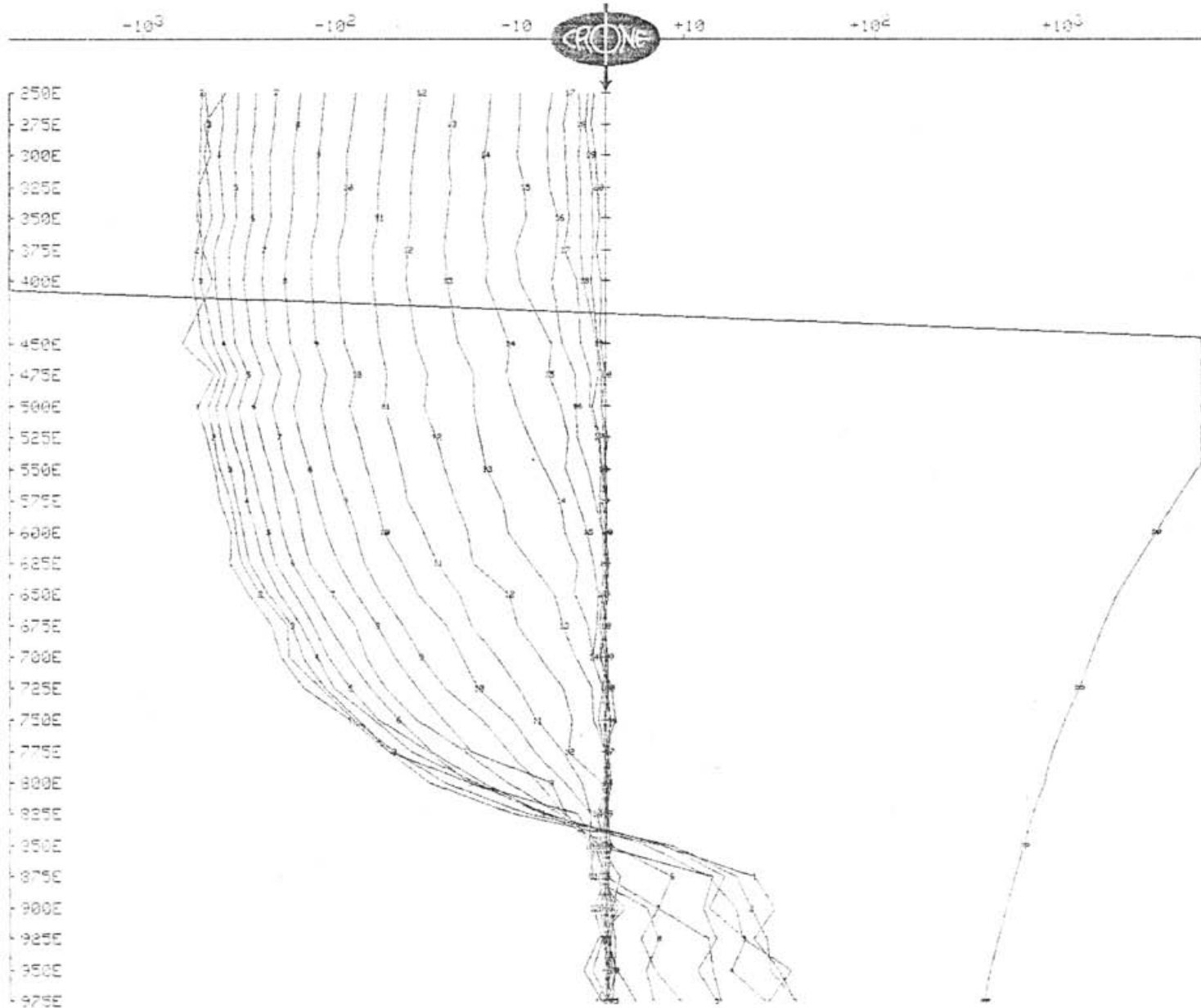
CRONE GEOPHYSICS & EXPLORATION LTD

SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGMN
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L2400N
Tx Loop : N5
Date : Jul 24, 1992
File : L2400N.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP



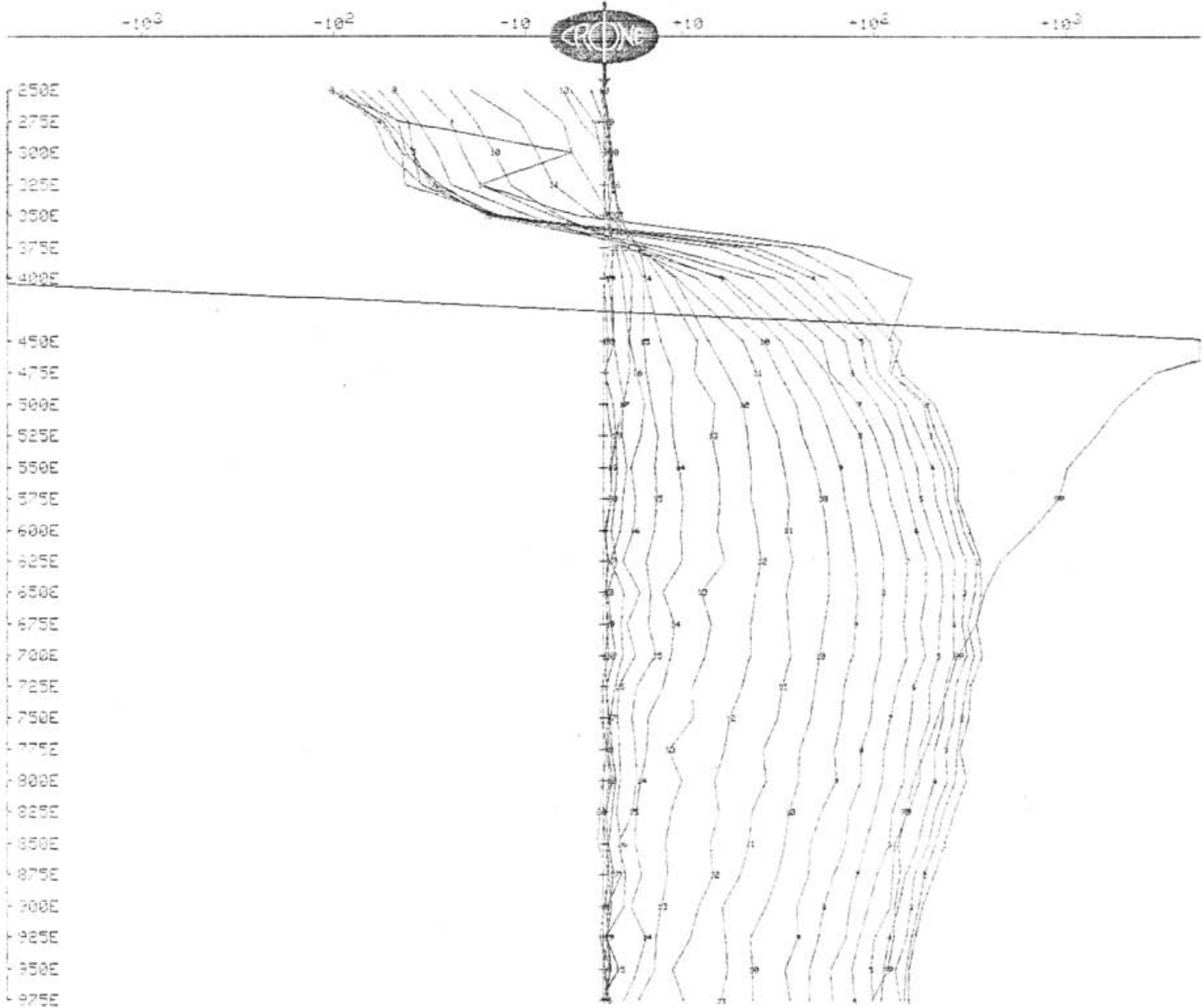
CRONE GEOPHYSICS & EXPLORATION LTD

SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGMN
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L2400N
Tx Loop : N5
Date : Jul 24, 1992
File : L2400N.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

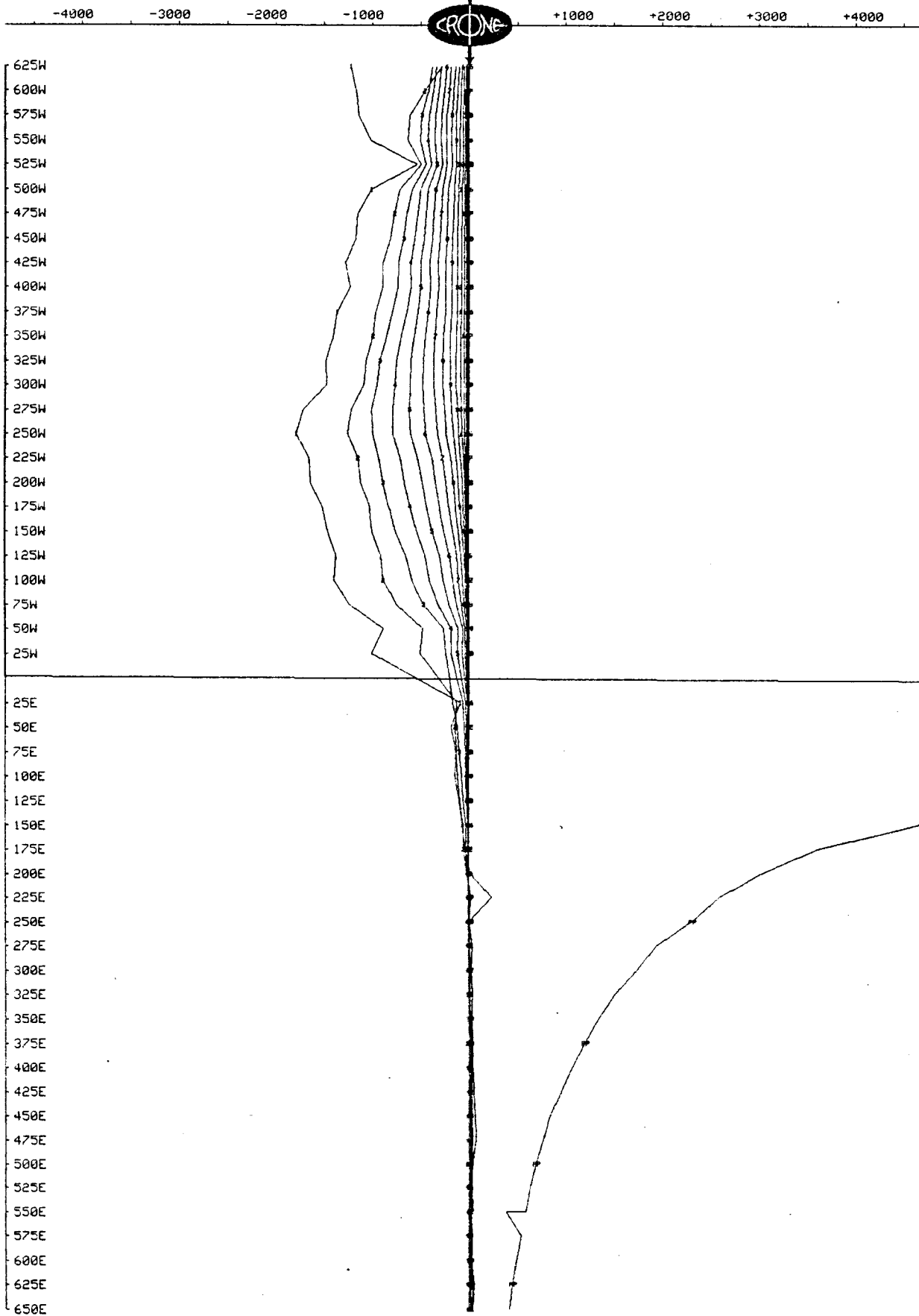


CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L400S
Tx Loop : N1
Date : Jun 28, 1992
File : L400S.PEM
Unit Scale: 1cm = 500 nT/s

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

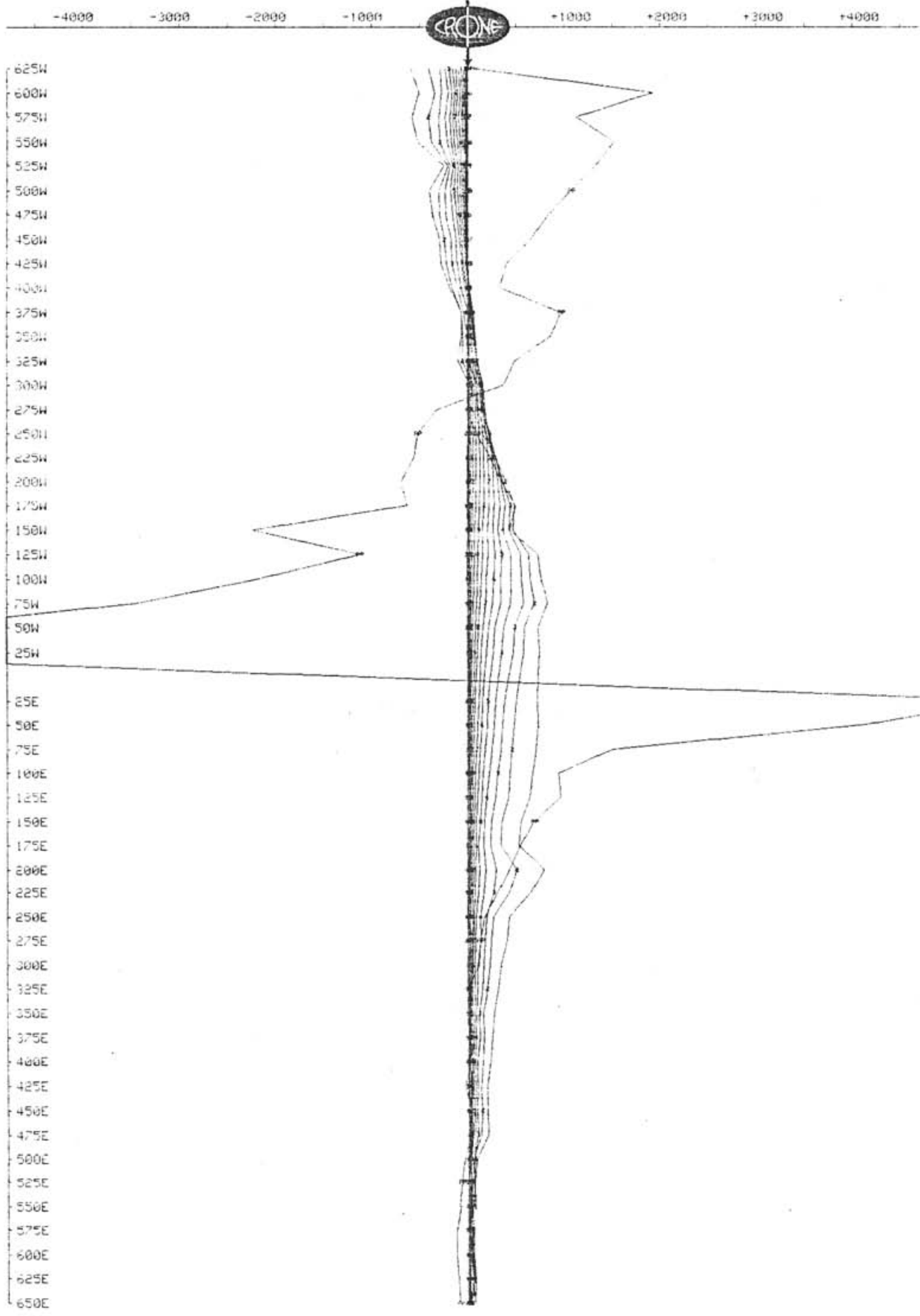


CRONE GEOPHYSICS & EXPLORATION LTD
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L400S
Tx Loop : N1
Date : Jun 28, 1992
File : L400S.PEM
Unit Scale: 1cm = 500 nT/s

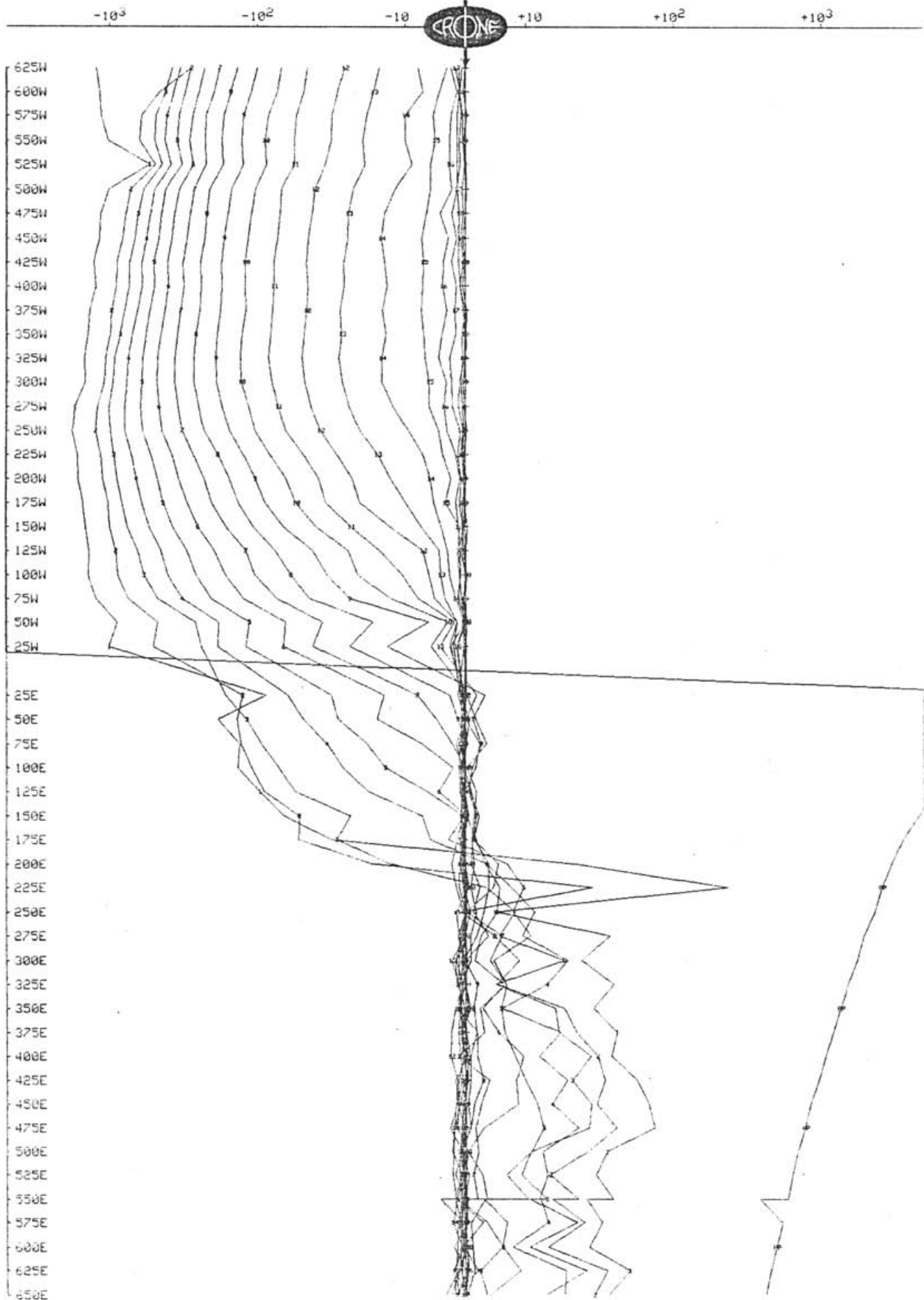
IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP



Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L400S
Tx Loop : N1
Date : Jun 28, 1992
File : L400S.PEM

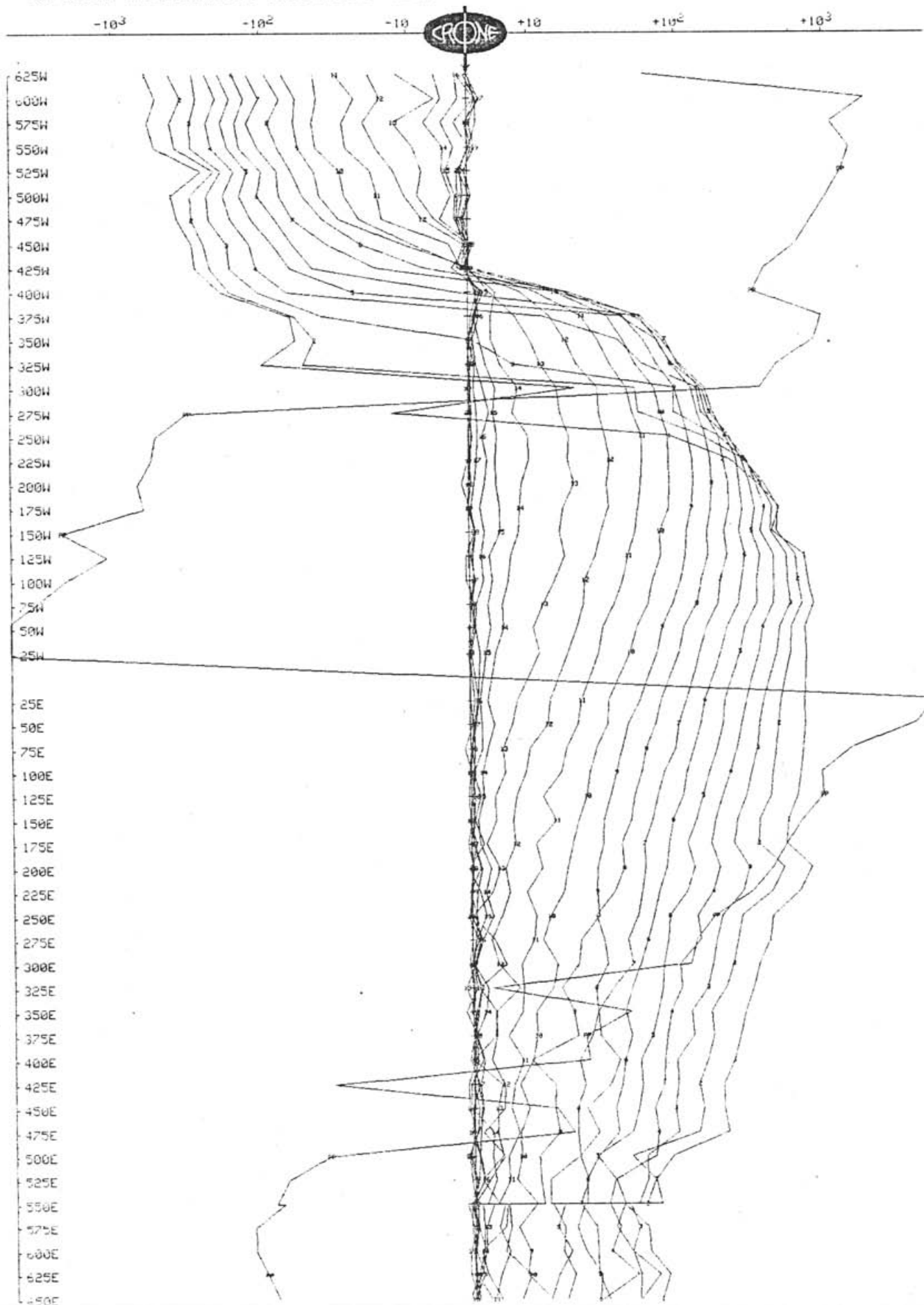
VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP



Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L400S
Tx Loop : N1
Date : Jun 28, 1992
File : L400S.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

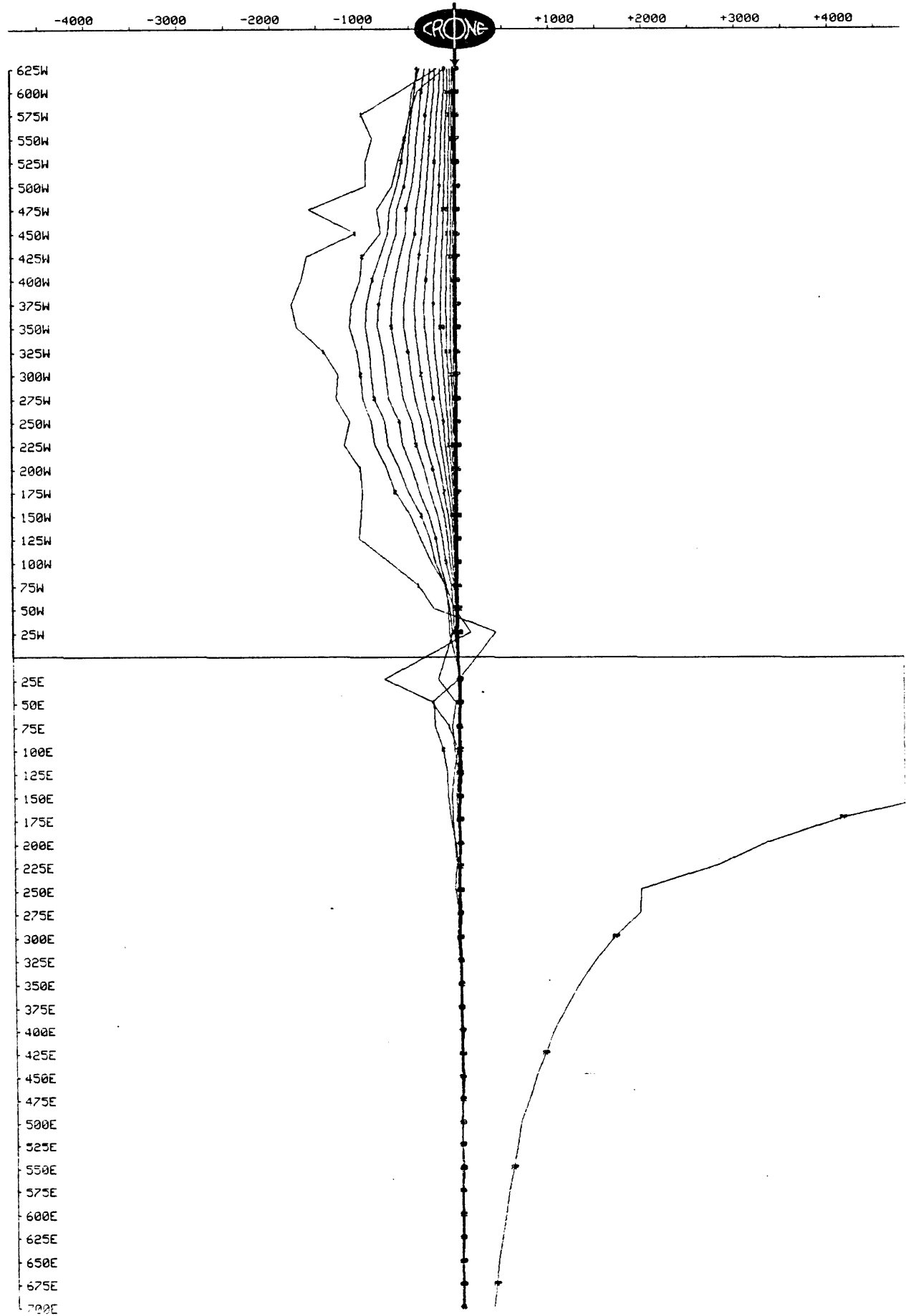


CRONE GEOPHYSICS & EXPLORATION LTD
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L600S
Tx Loop : N1
Date : Jul 6, 1992
File : L600S.PEM
Unit Scale: 1cm = 500 nT/s

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP



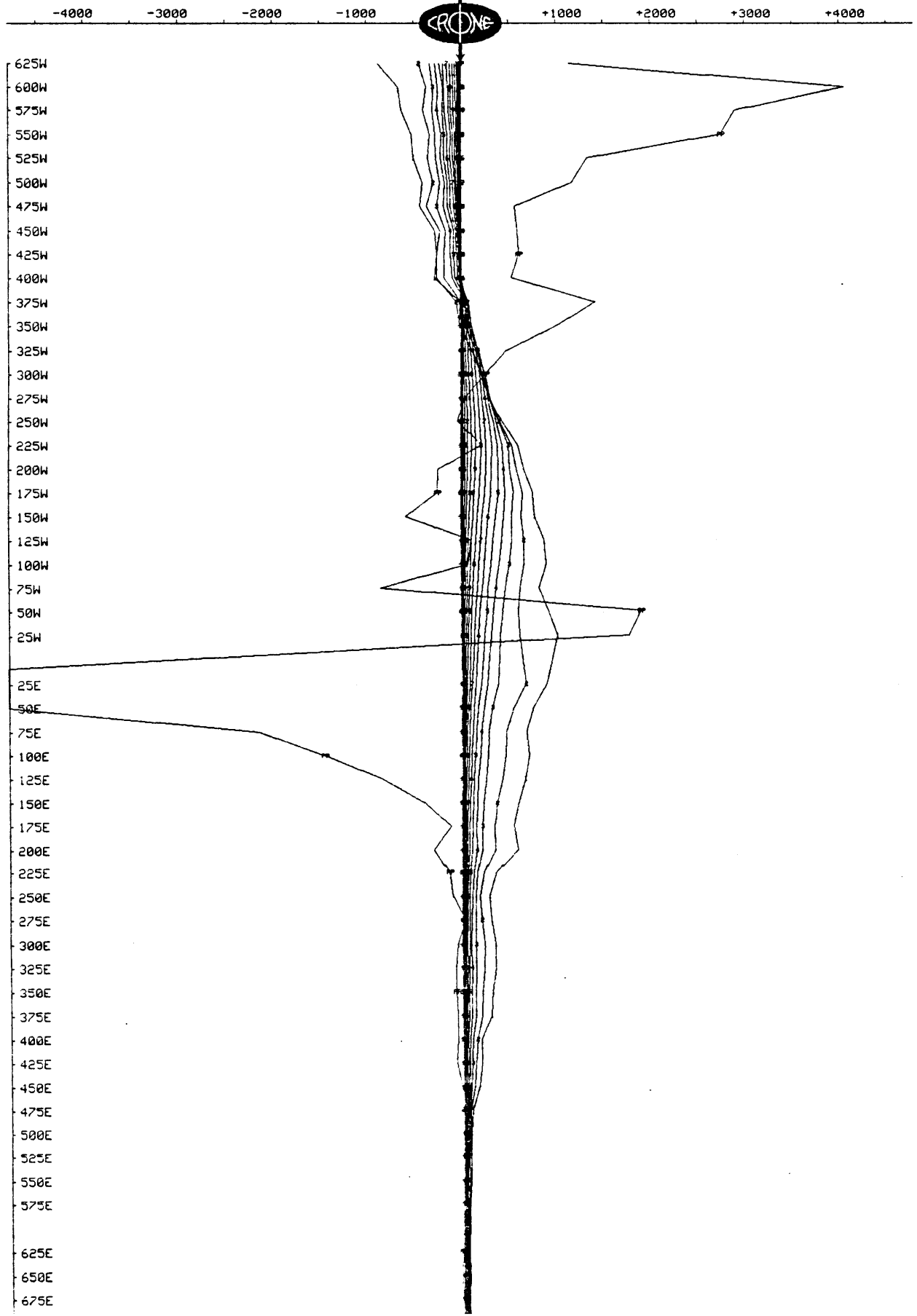
CRONE GEOPHYSICS & EXPLORATION LTD

SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L600S
Tx Loop : N1
Date : Jul 6, 1992
File : L600S.PEM
Unit Scale: 1cm = 500 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

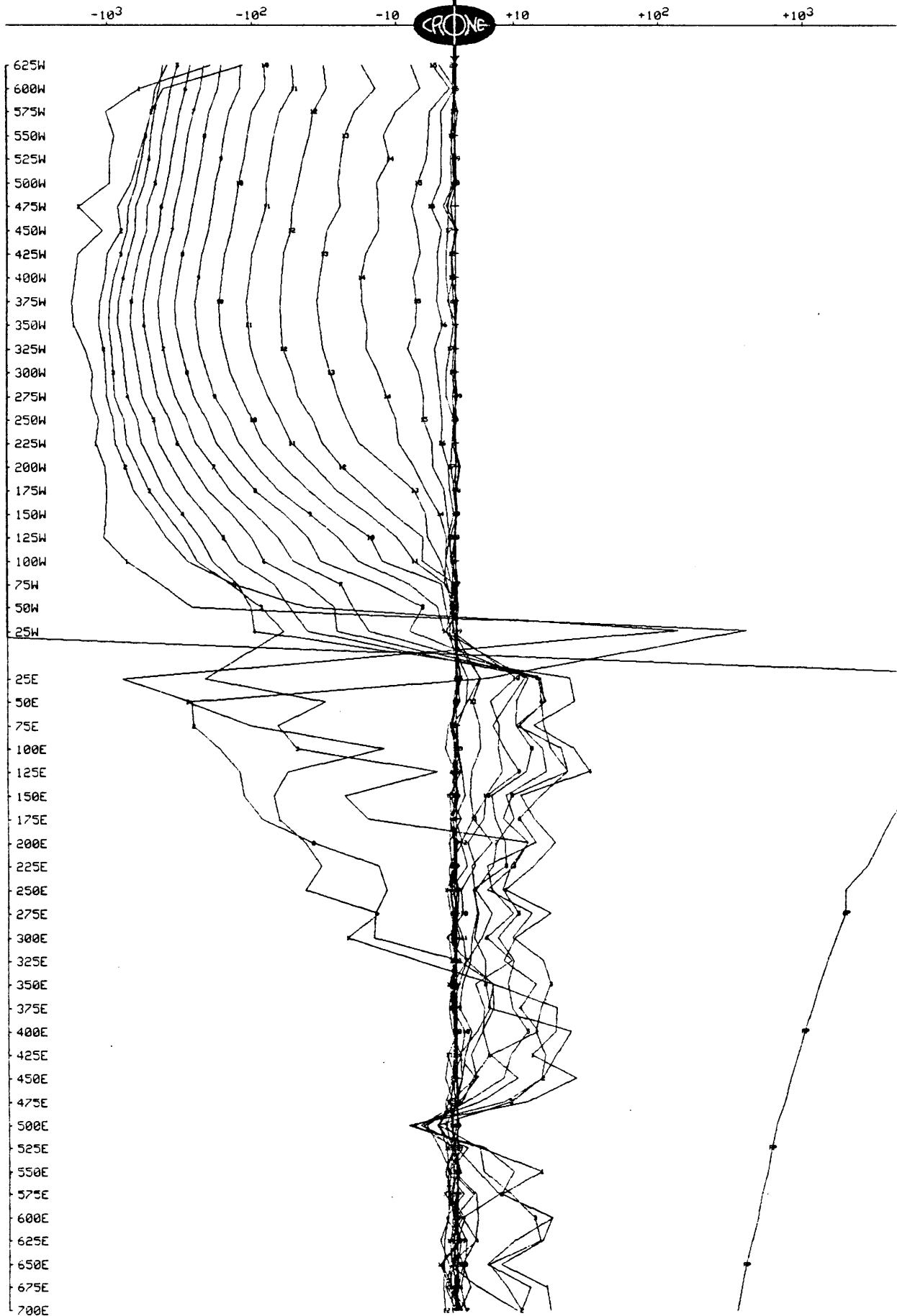


SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L600S
Tx Loop : N1
Date : Jul 6, 1992
File : L600S.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

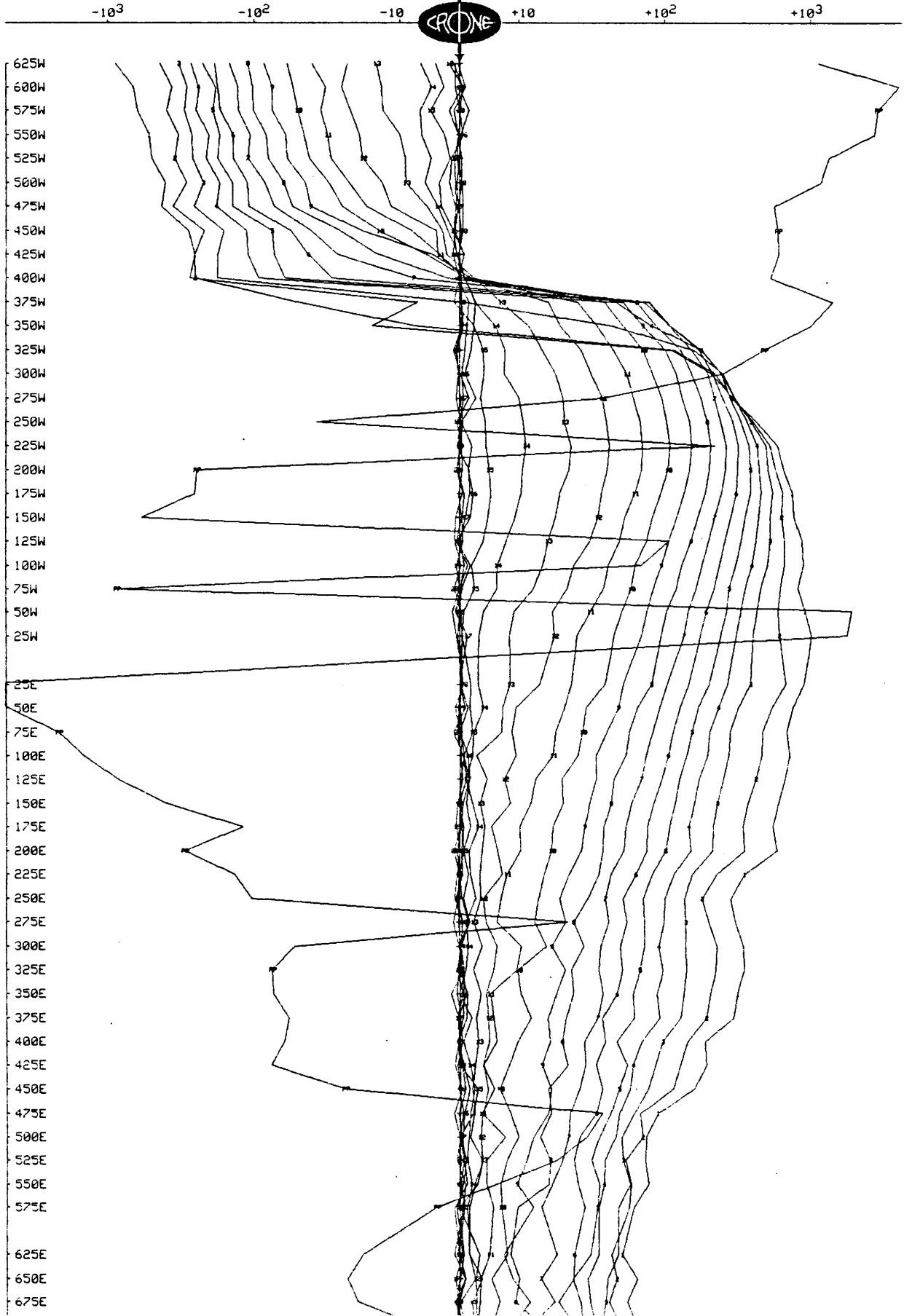


CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L600S
Tx Loop : N1
Date : Jul 6, 1992
File : L600S.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

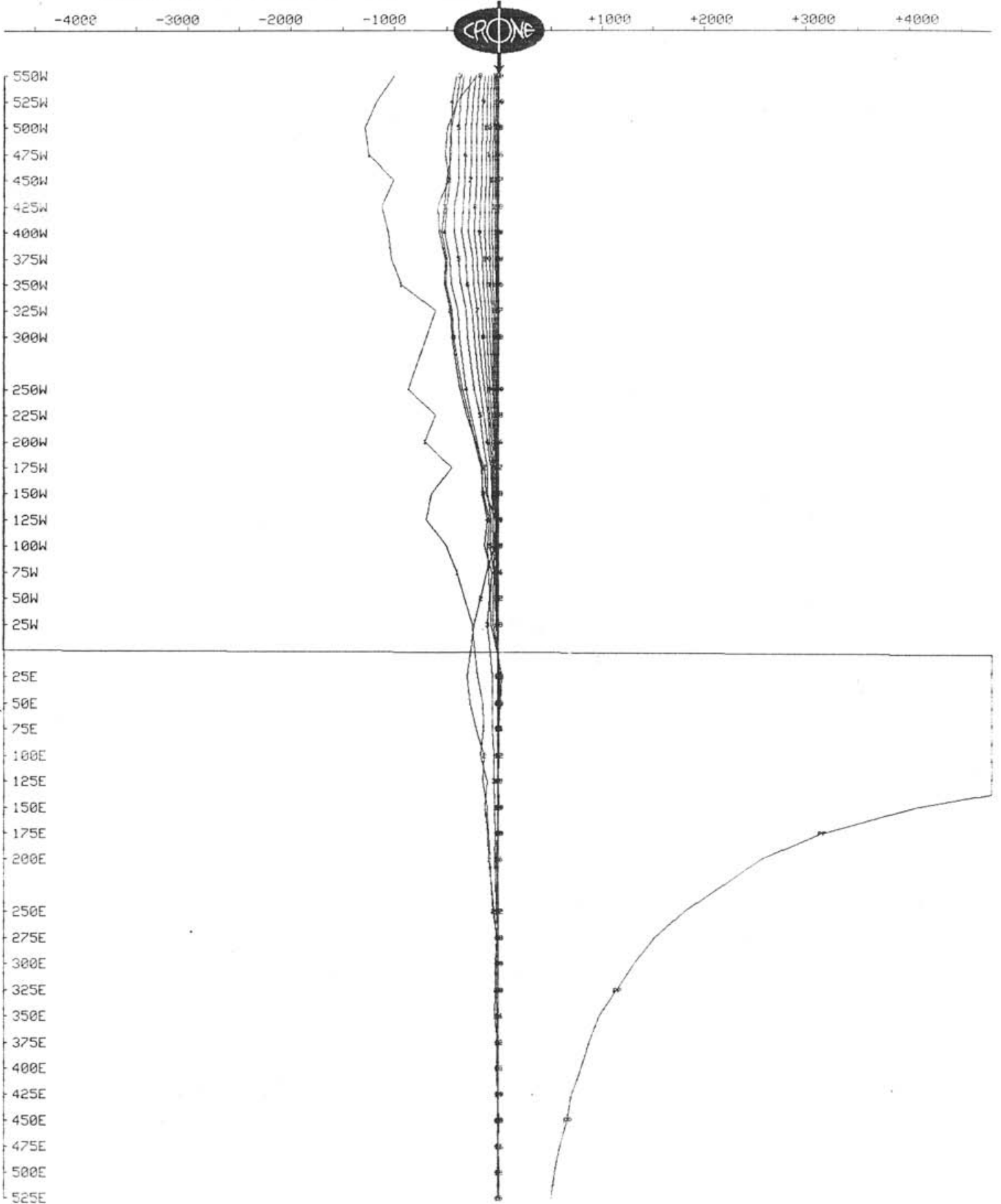


CRONE GEOPHYSICS & EXPLORATION LTD
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L800S
Tx Loop : N1
Date : Jul 6, 1992
File : L800S.PEM
Unit Scale: 1cm = 500 nT/s

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

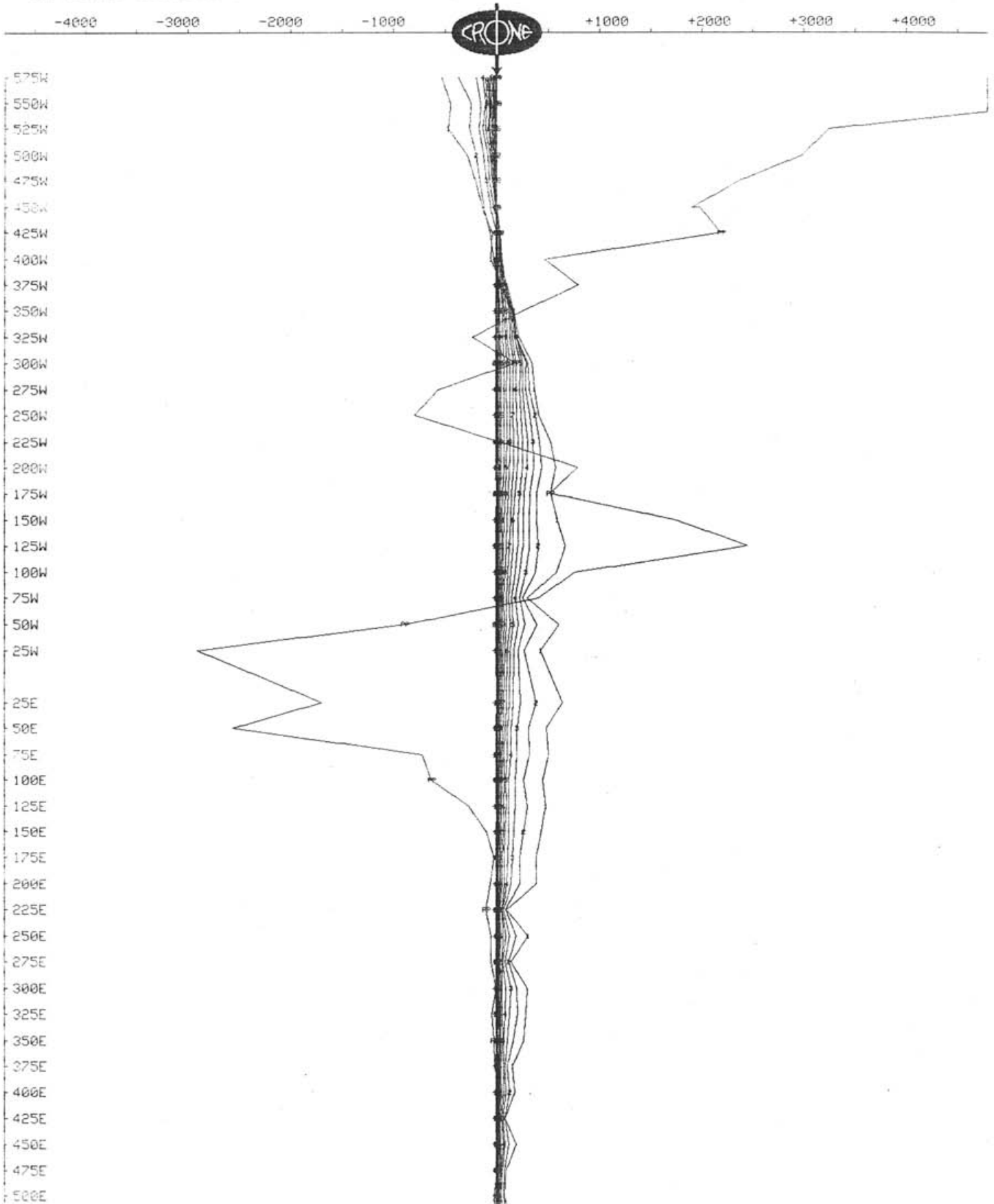


CROME GEOPHYSICS & EXPLORATION LTD
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L800S
Tx Loop : N1
Date : Jul 6, 1992
File : L800S.PEM
Unit Scale: 1cm = 500 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

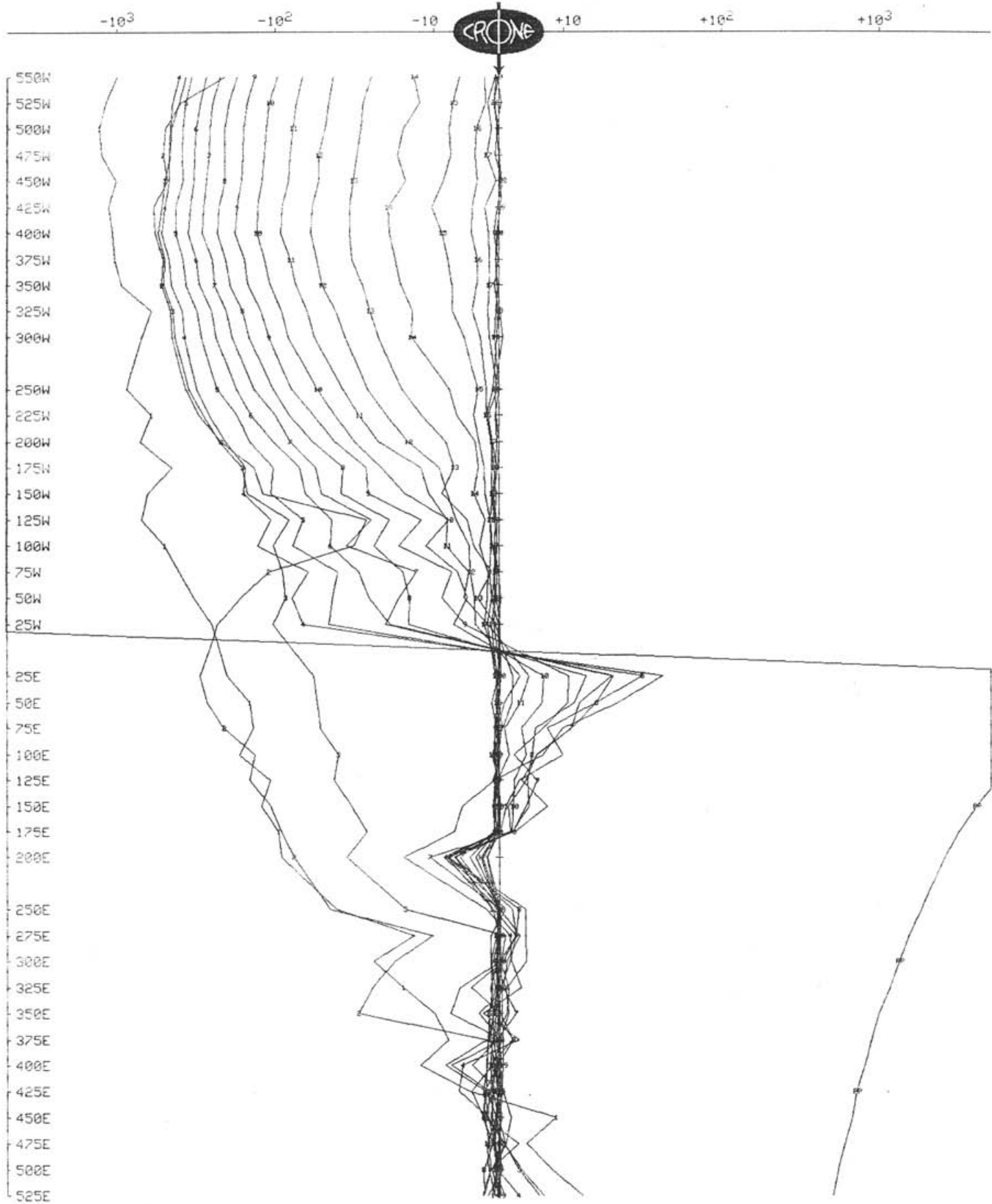


CROME GEOPHYSICS & LABORATION LTD
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L800S
Tx Loop : N1
Date : Jul 6, 1992
File : L800S.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

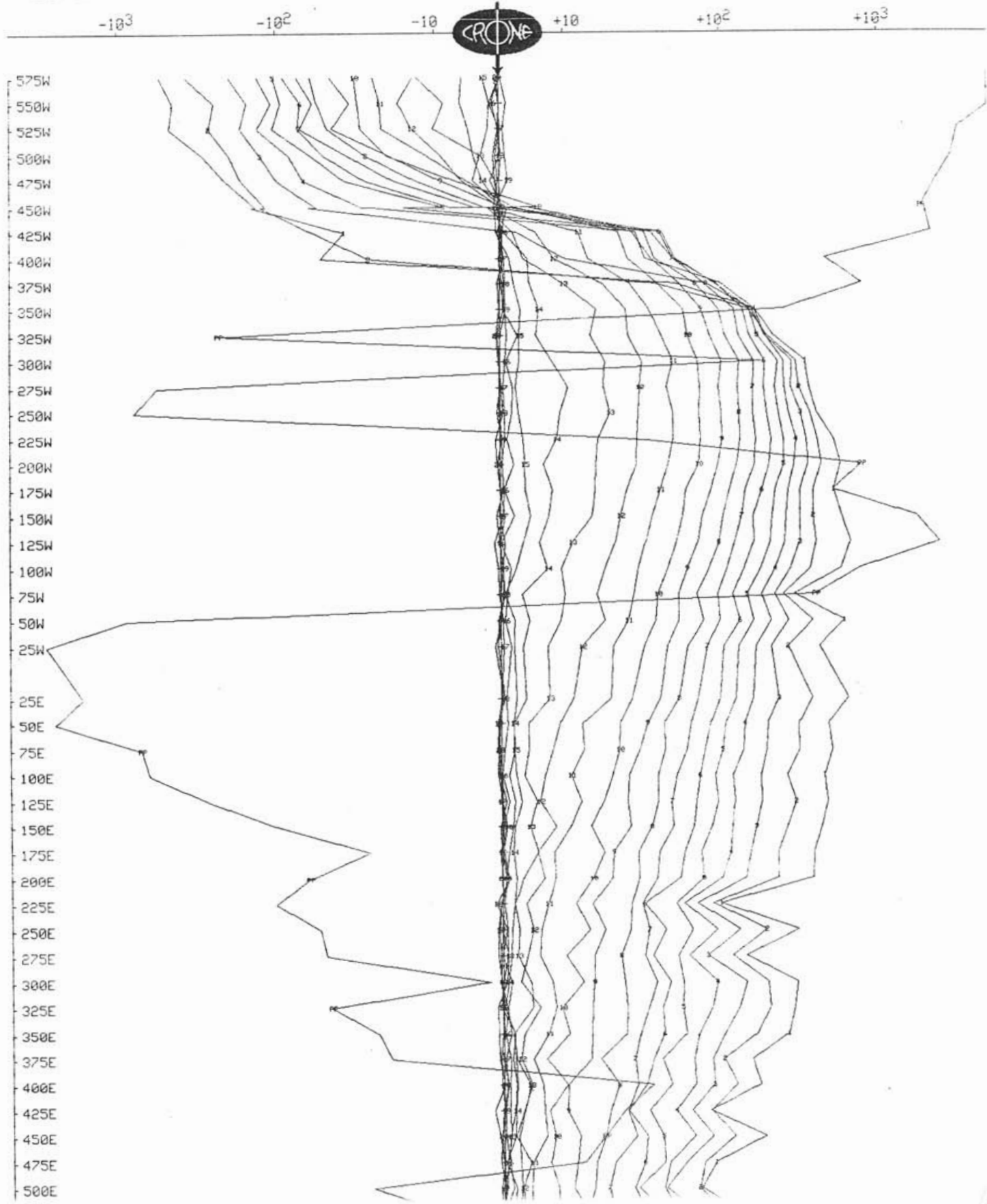


SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L800S
Tx Loop : N1
Date : Jul 6, 1992
File : L800S.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

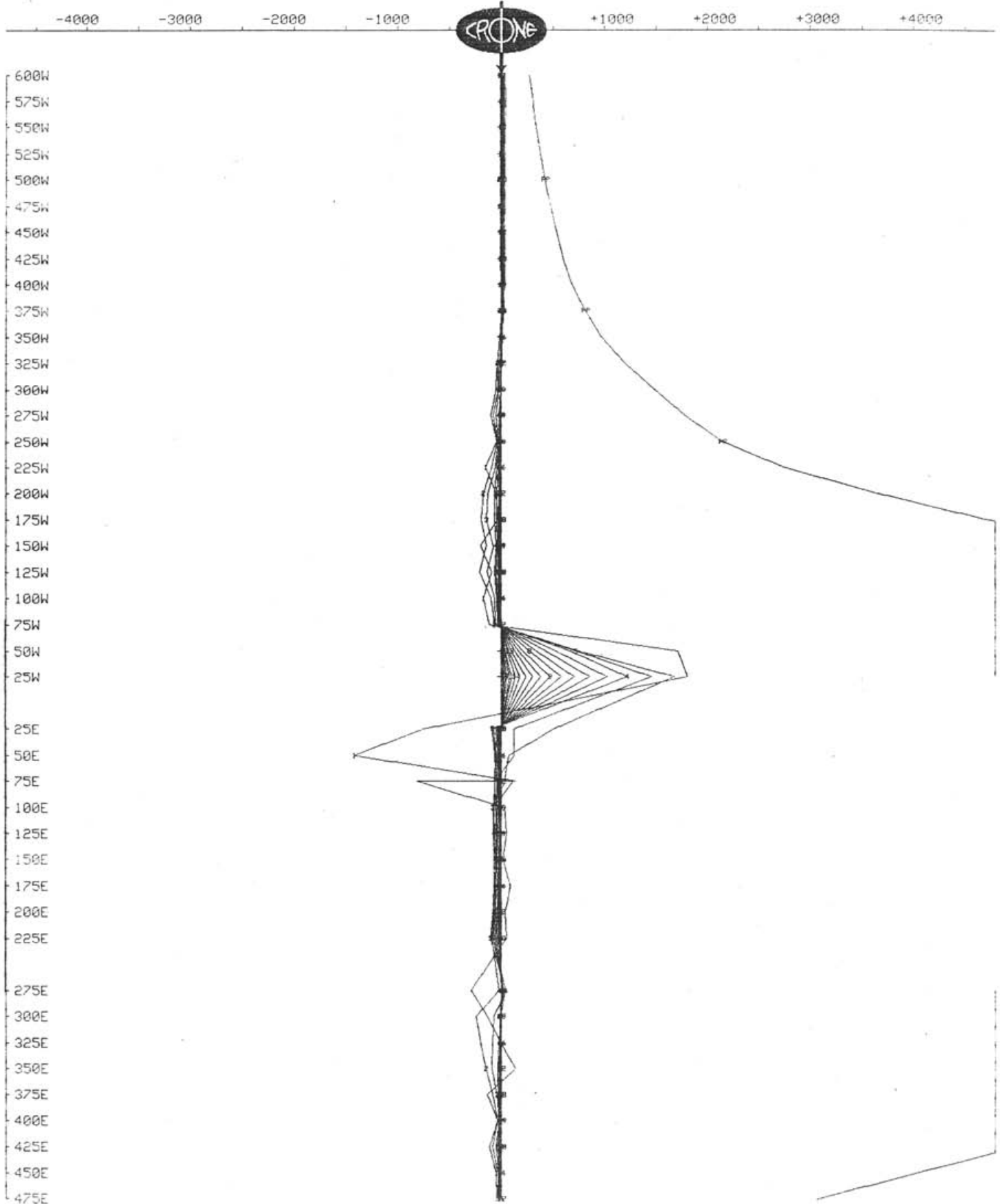


CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : TECK
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L800S
Tx Loop : N3
Date : Jul 13, 1992
File : 800S.PEM
Unit Scale: 1cm = 500 nT/s

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

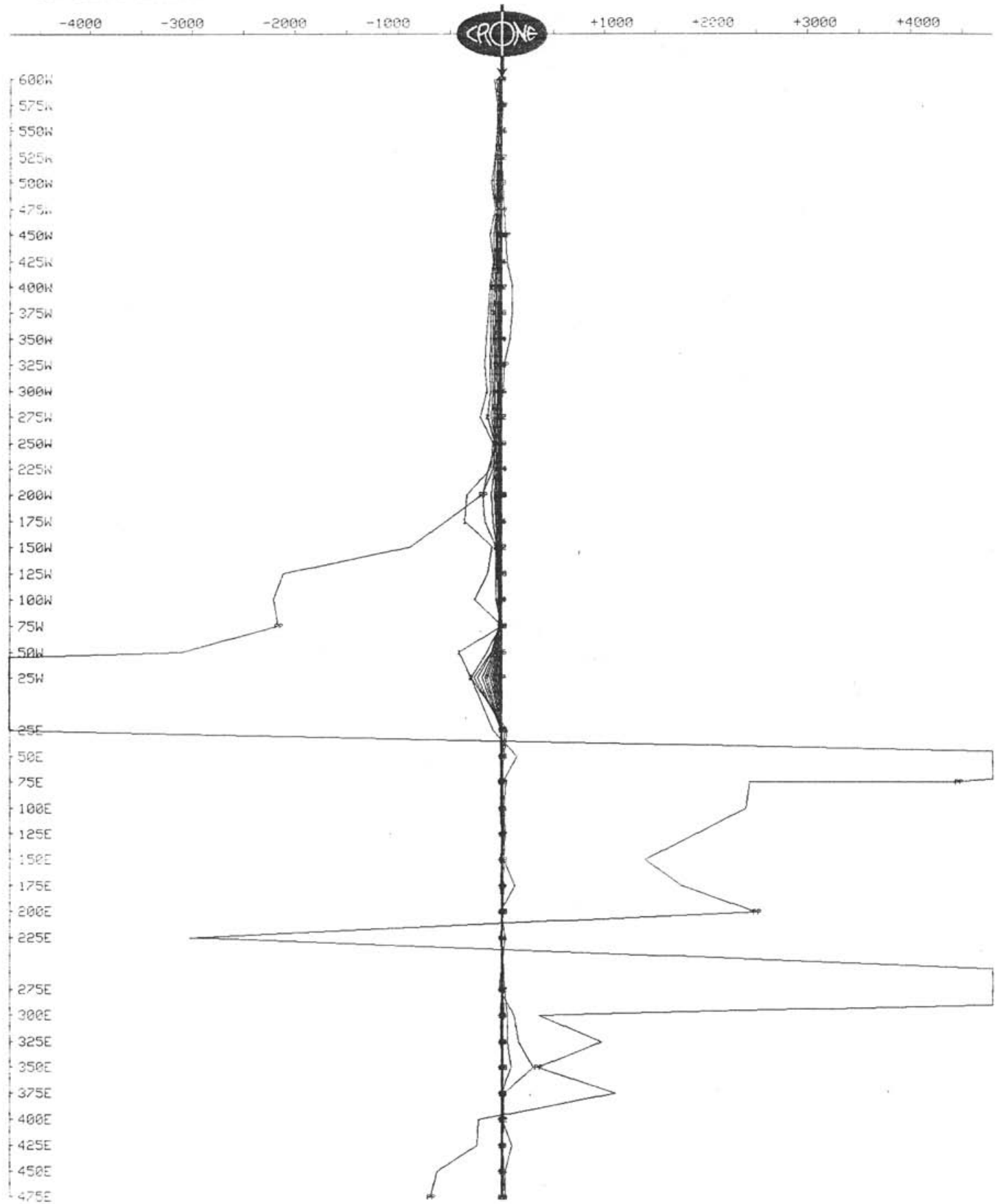


CORNE GEOPHYSICS & EXPLORATION LTD
SURFACE PEM

Client : TECK
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L800S
Tx Loop : N3
Date : Jul 13, 1992
File : 800S.PEM
Unit Scale: 1cm = 500 nT/s

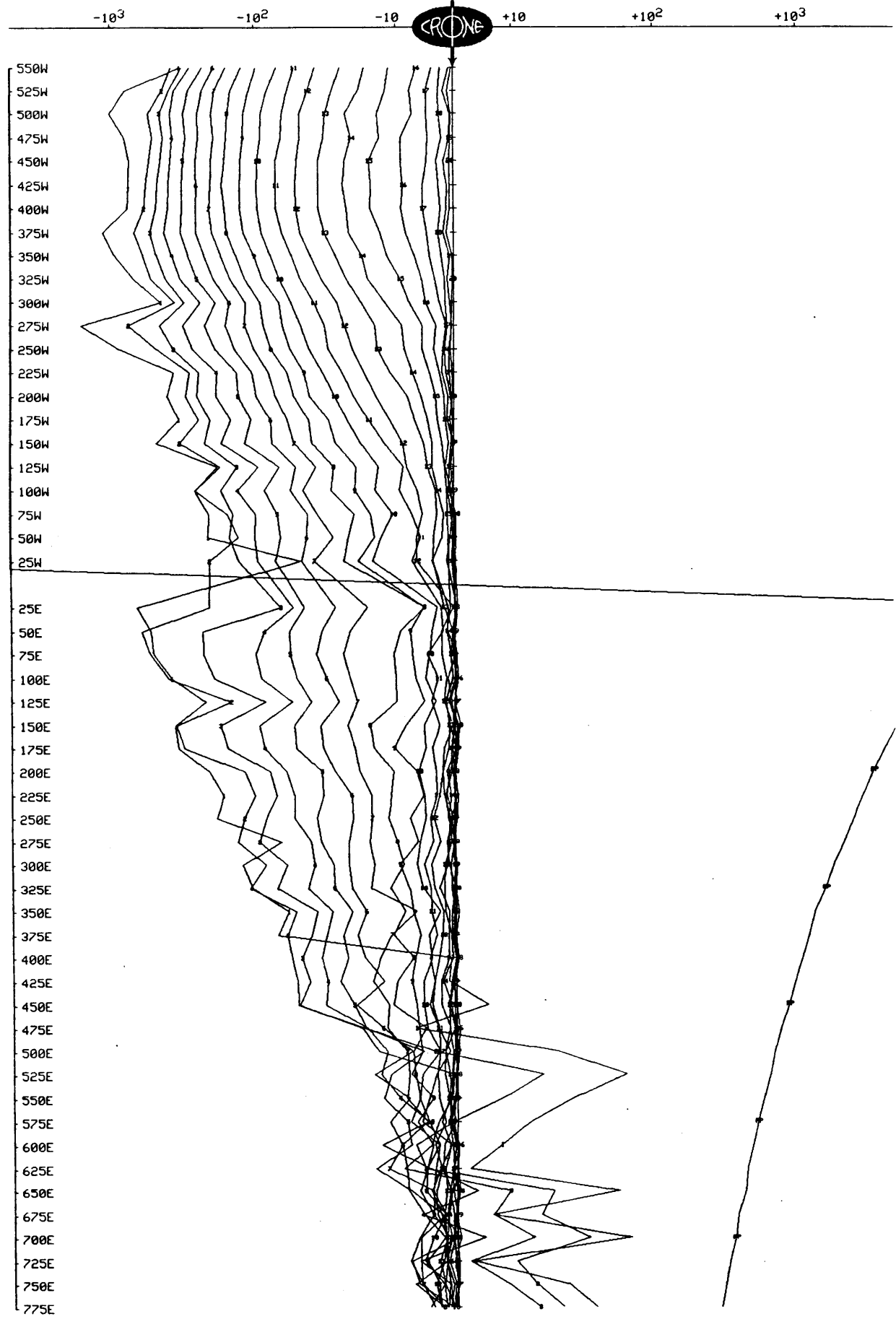
IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP



Client : TECK/Pacific Geoph.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1200S
Tx Loop : N2
Date : Jul 8, 1992
File : L1200S.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

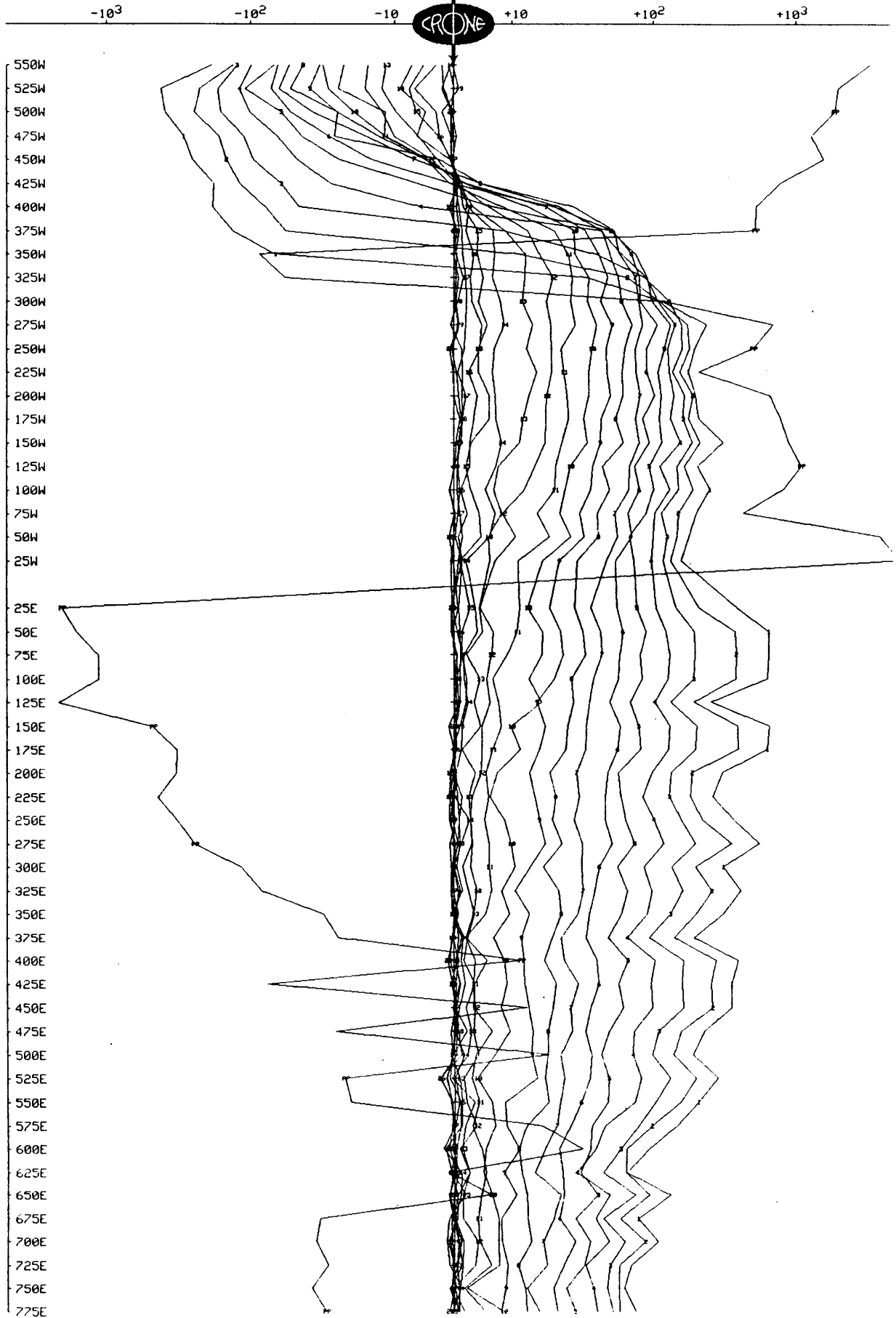


SURFACE PEM

Client : TECK/Pacific Geoph.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1200S
Tx Loop : N2
Date : Jul 8, 1992
File : L1200S.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

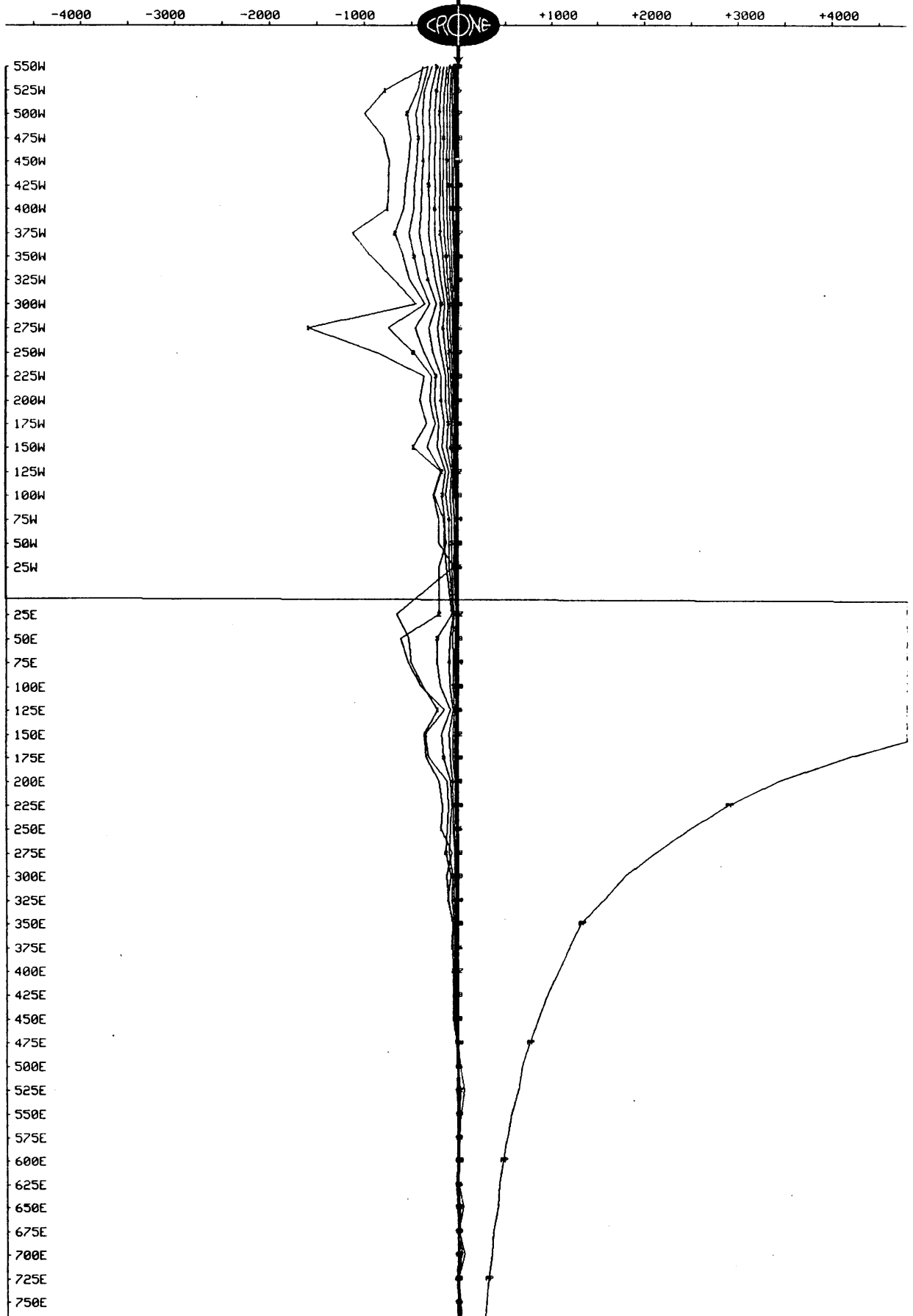


CRONE GEOPHYSICS & EXPLORATION LTD
SURFACE PEM

Client : TECK/Pacific Geoph.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1200S
Tx Loop : N2
Date : Jul 8, 1992
File : L1200S.PEM
Unit Scale: 1cm = 500 nT/s

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

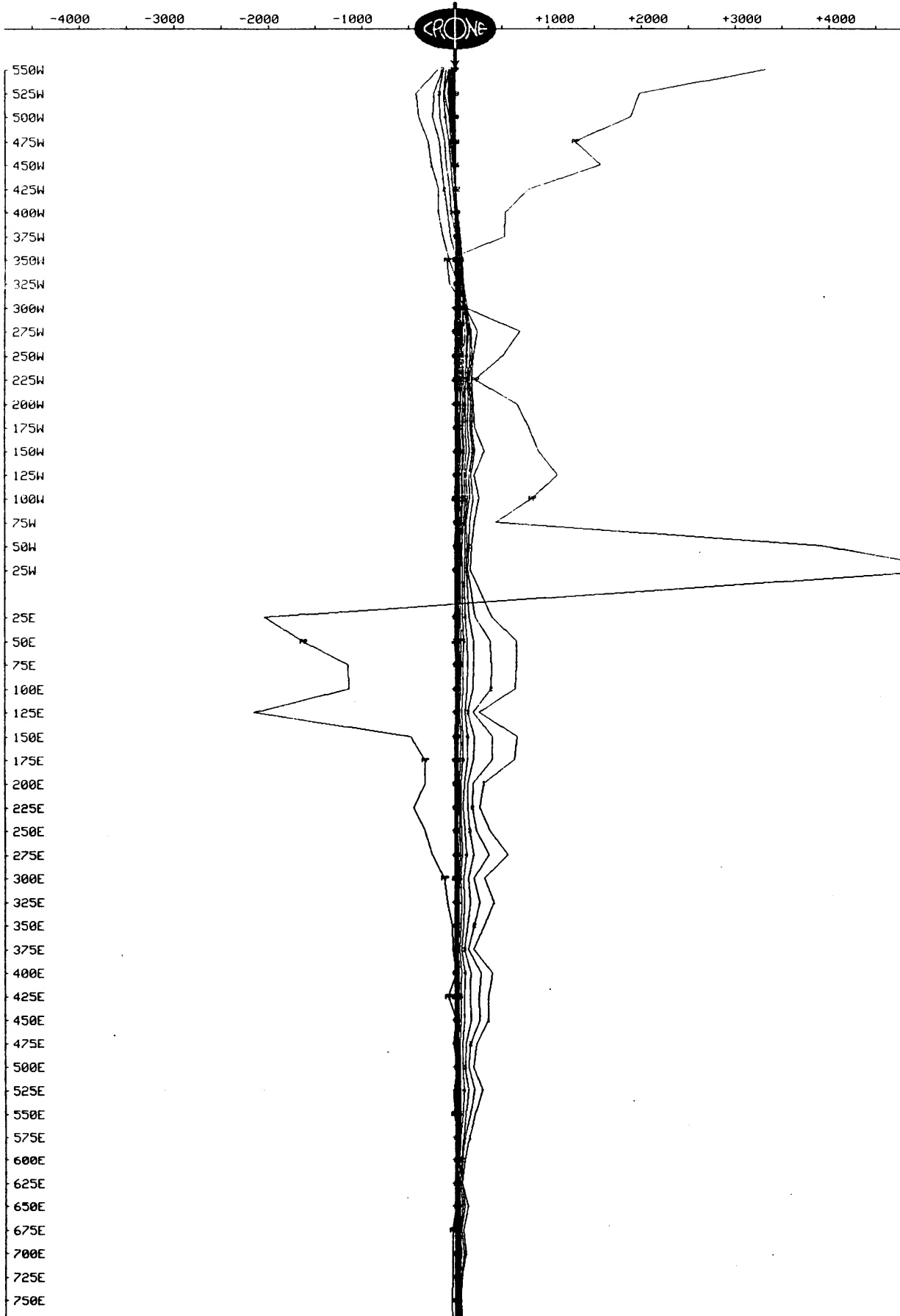


CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : TECK/Pacific Geoph.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1200S
Tx Loop : N2
Date : Jul 8, 1992
File : L1200S.PEM
Unit Scale: 1cm = 500 nT/s

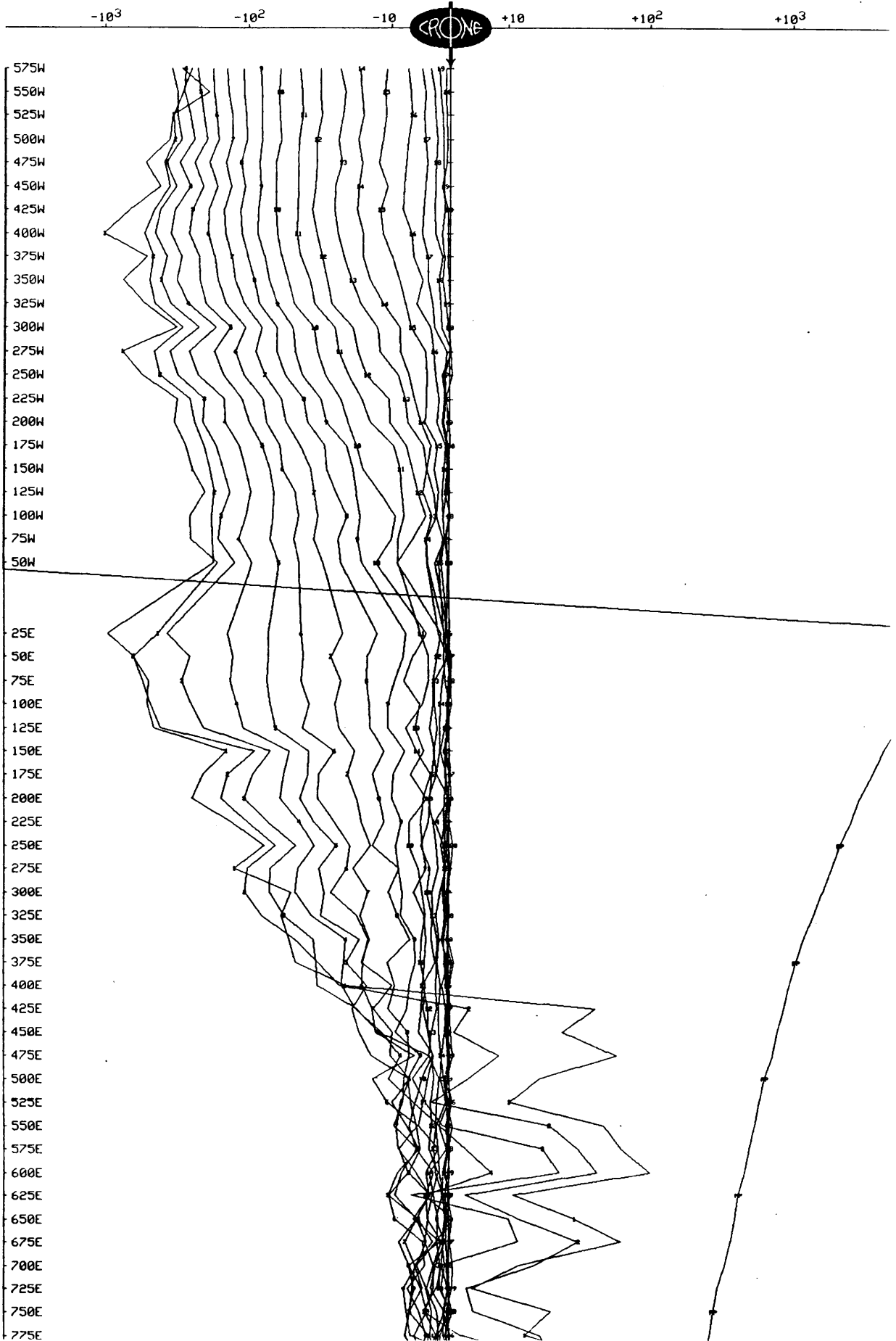
IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP



Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1400S
Tx Loop : N2
Date : Jul 8, 1992
File : L1400S.PEM

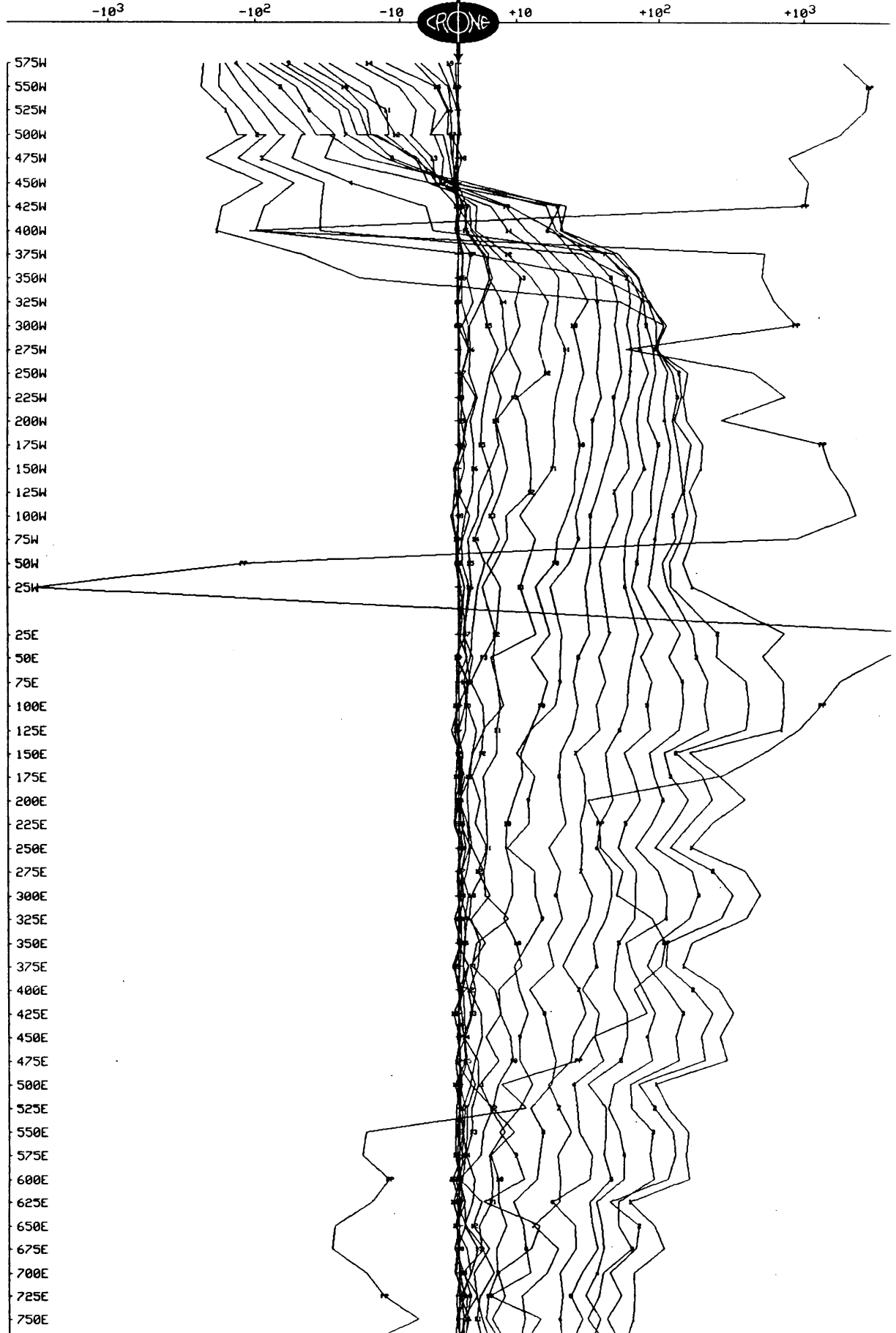
VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP



Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1400S
Tx Loop : N2
Date : Jul 8, 1992
File : L1400S.PEM

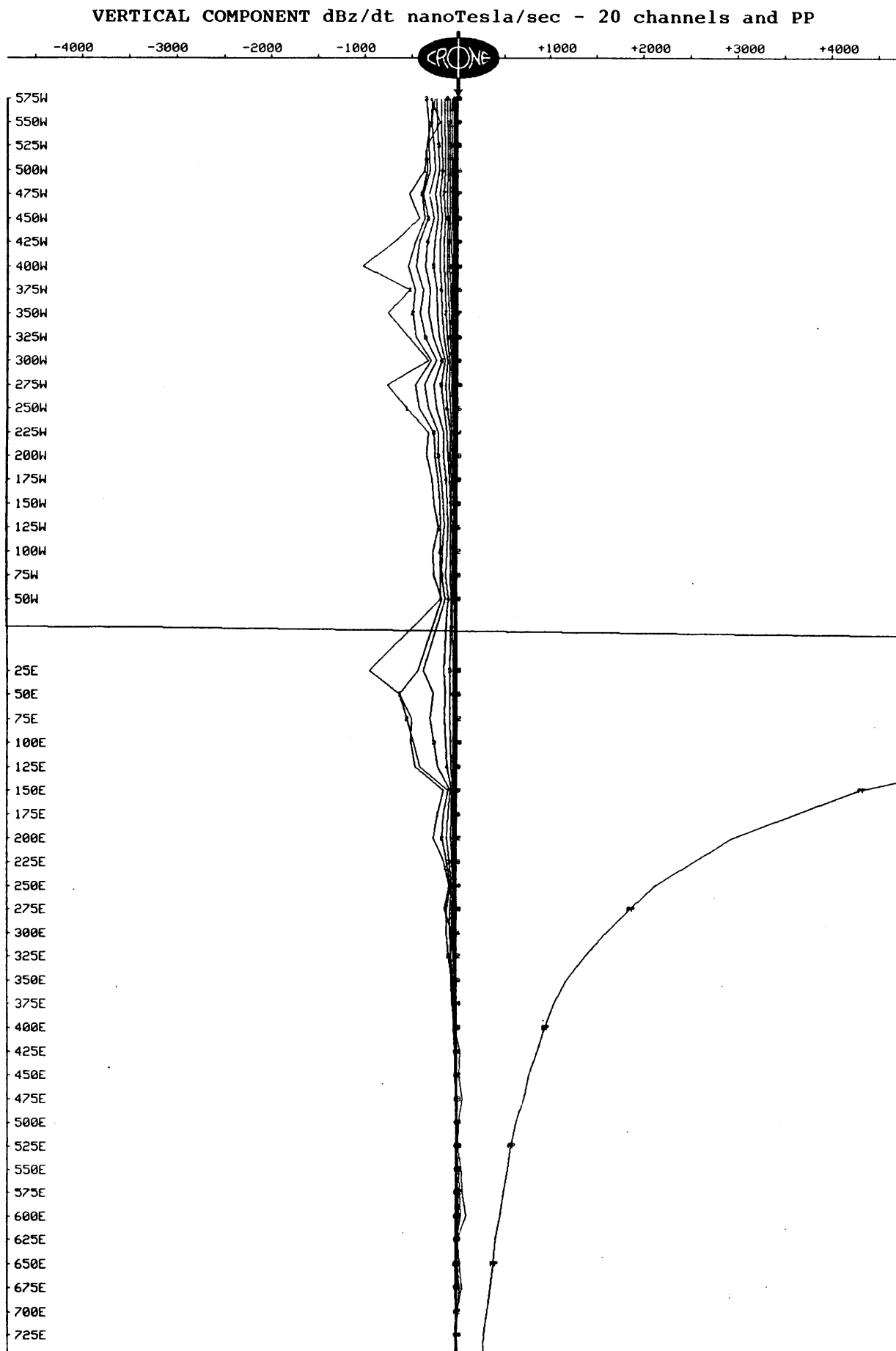
IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP



VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1400S
Tx Loop : N2
Date : Jul 8, 1992
File : L1400S.PEM
Unit Scale: 1cm = 500 nT/s

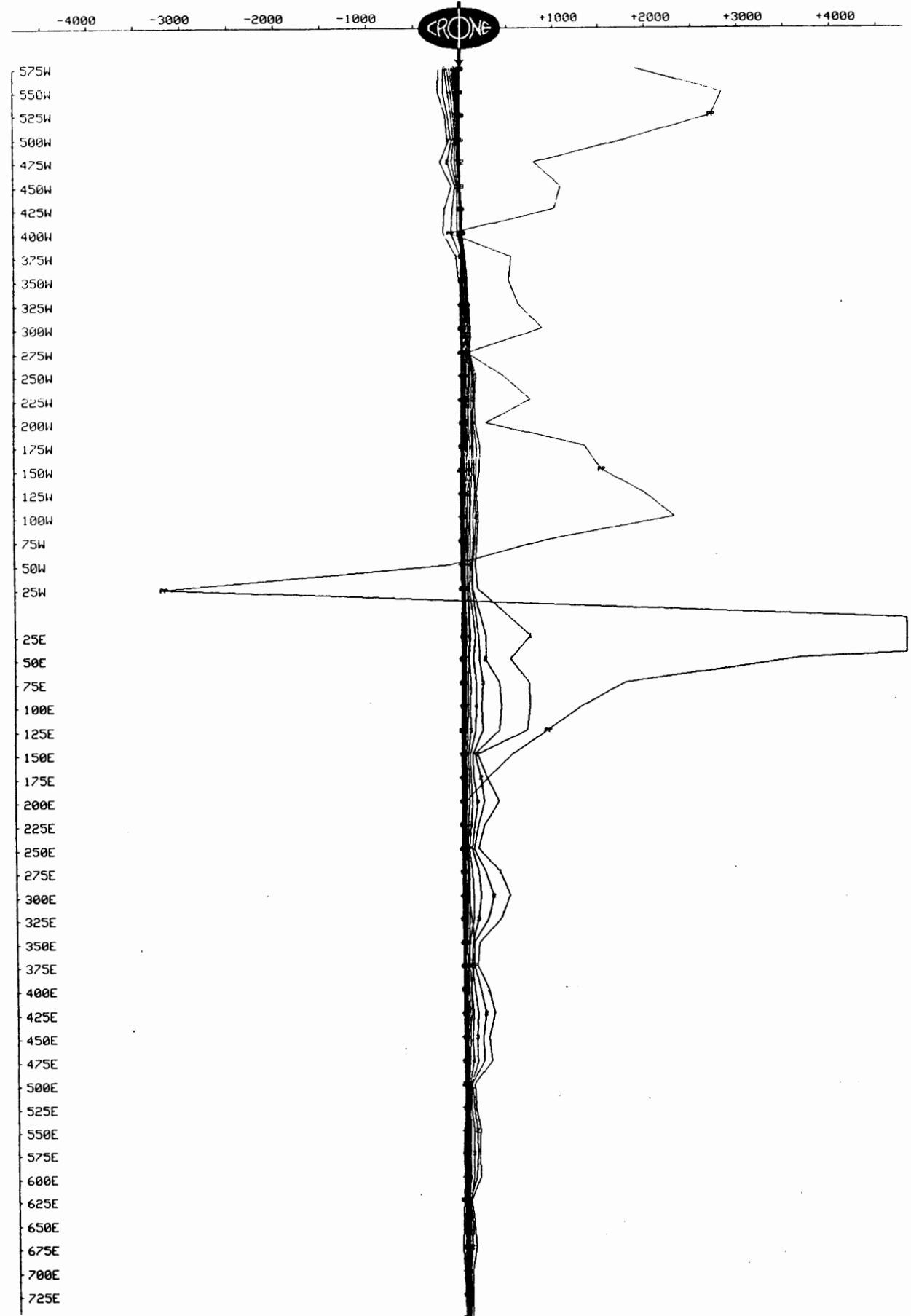


CRONE GEOPHYSICS & ELECTROMAGNETIC SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1400S
Tx Loop : N2
Date : Jul 8, 1992
File : L1400S.PEM
Unit Scale: 1cm = 500 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

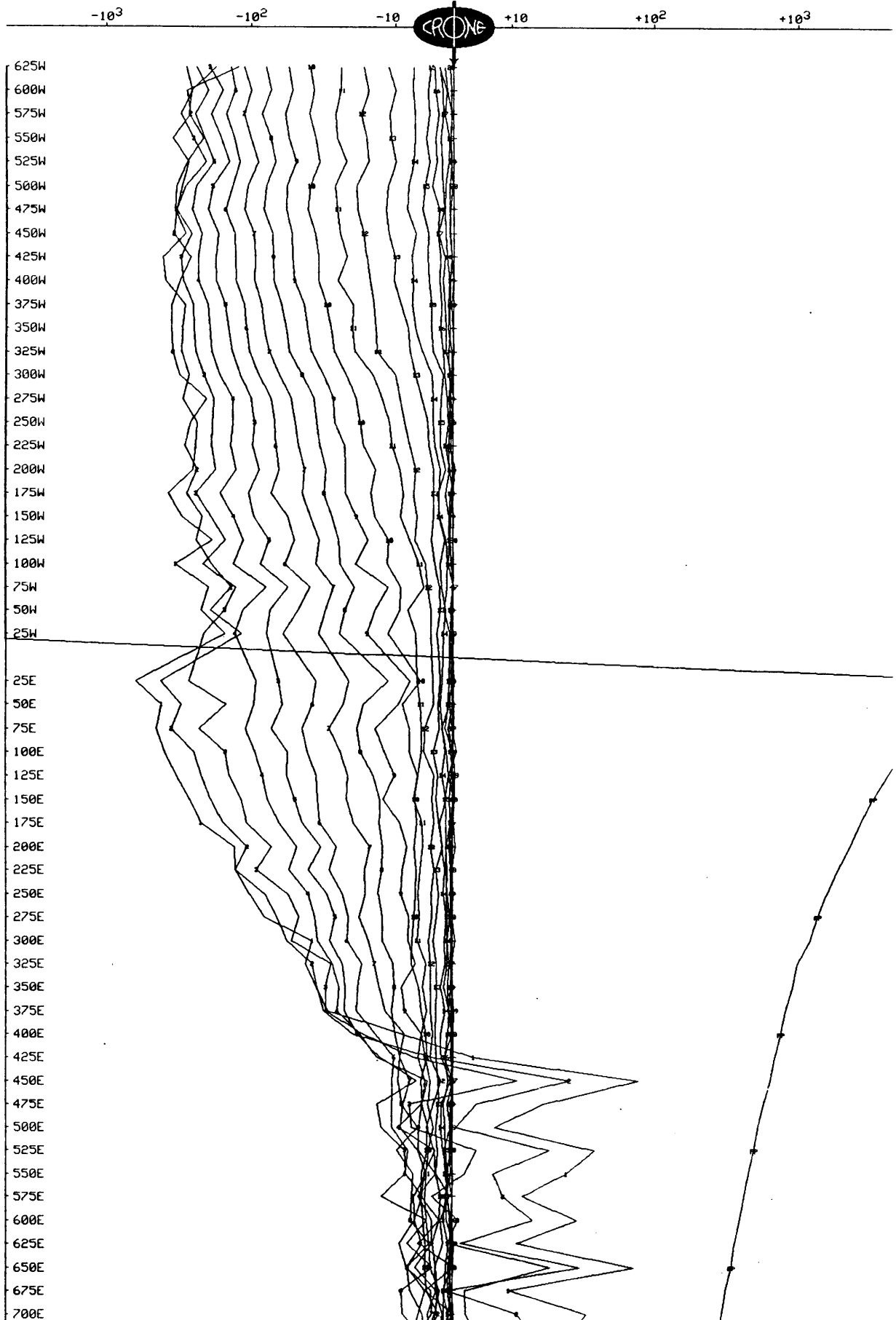


SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1600S
Tx Loop : N2
Date : Jul 12, 1992
File : L1600S.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

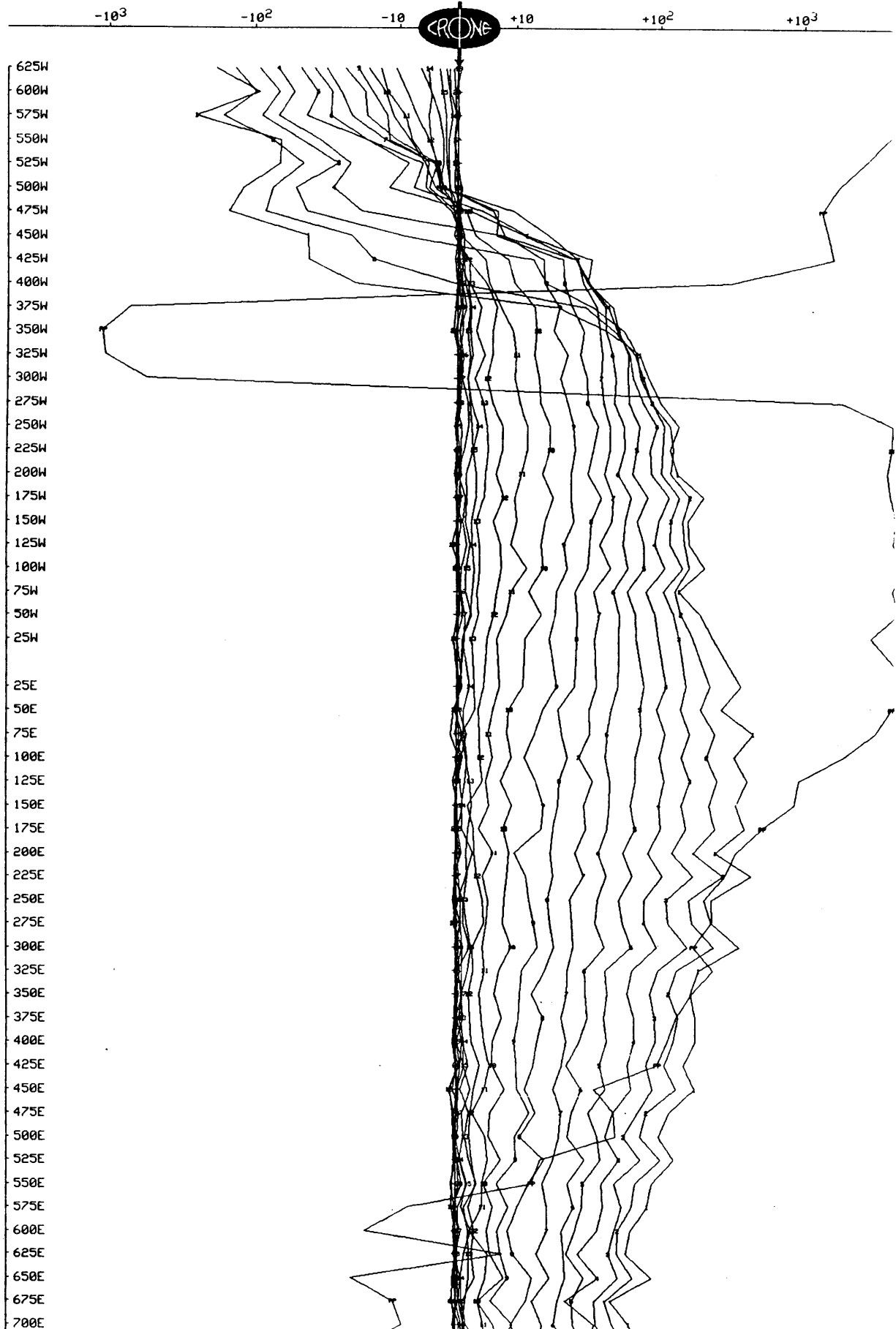


SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1600S
Tx Loop : N2
Date : Jul 12, 1992
File : L1600S.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

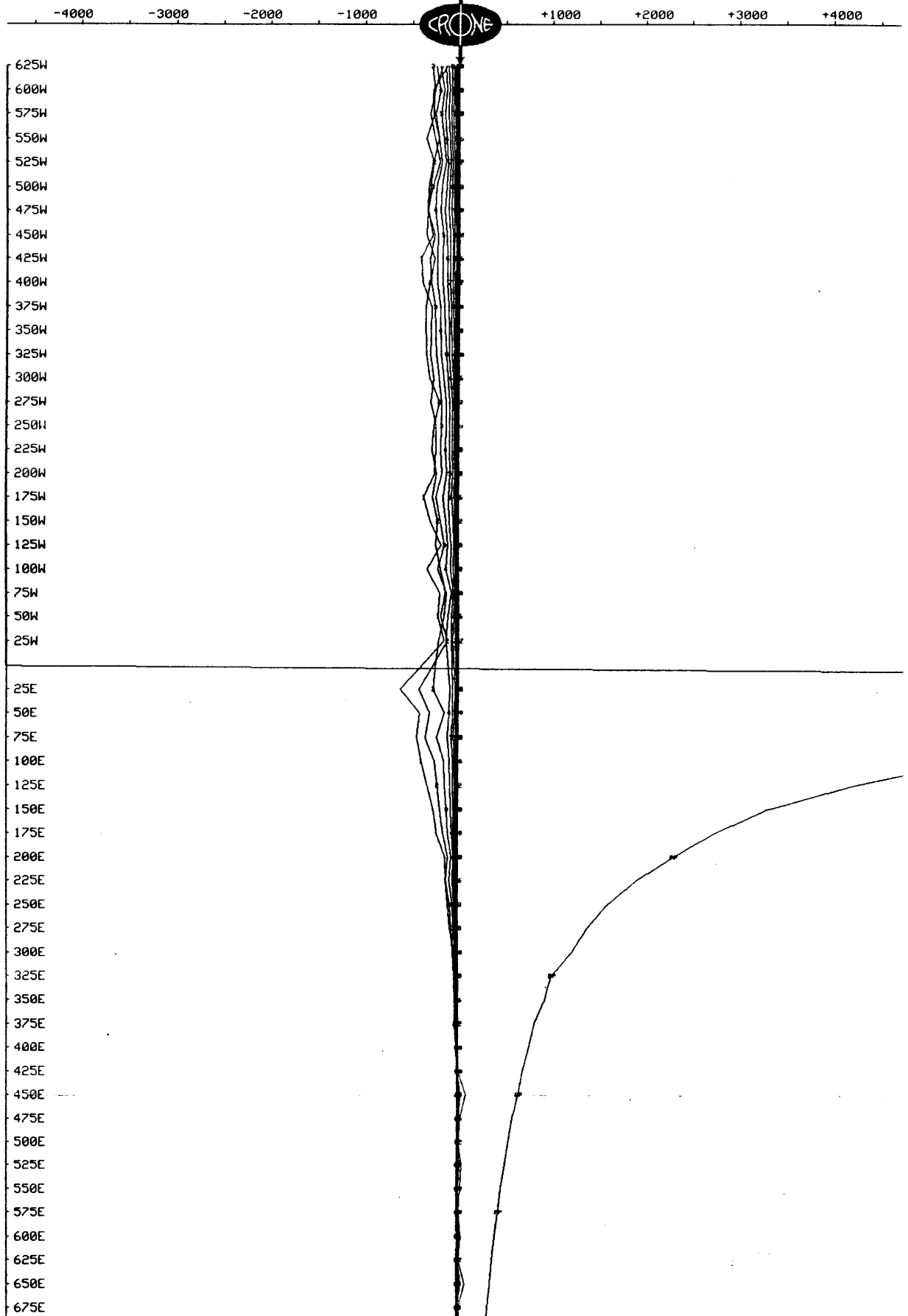


CRONE GEOPHISICS & EXPLORATION LTD
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1600S
Tx Loop : N2
Date : Jul 12, 1992
File : L1600S.PEM
Unit Scale: 1cm = 500 nT/s

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 20 channels and PP

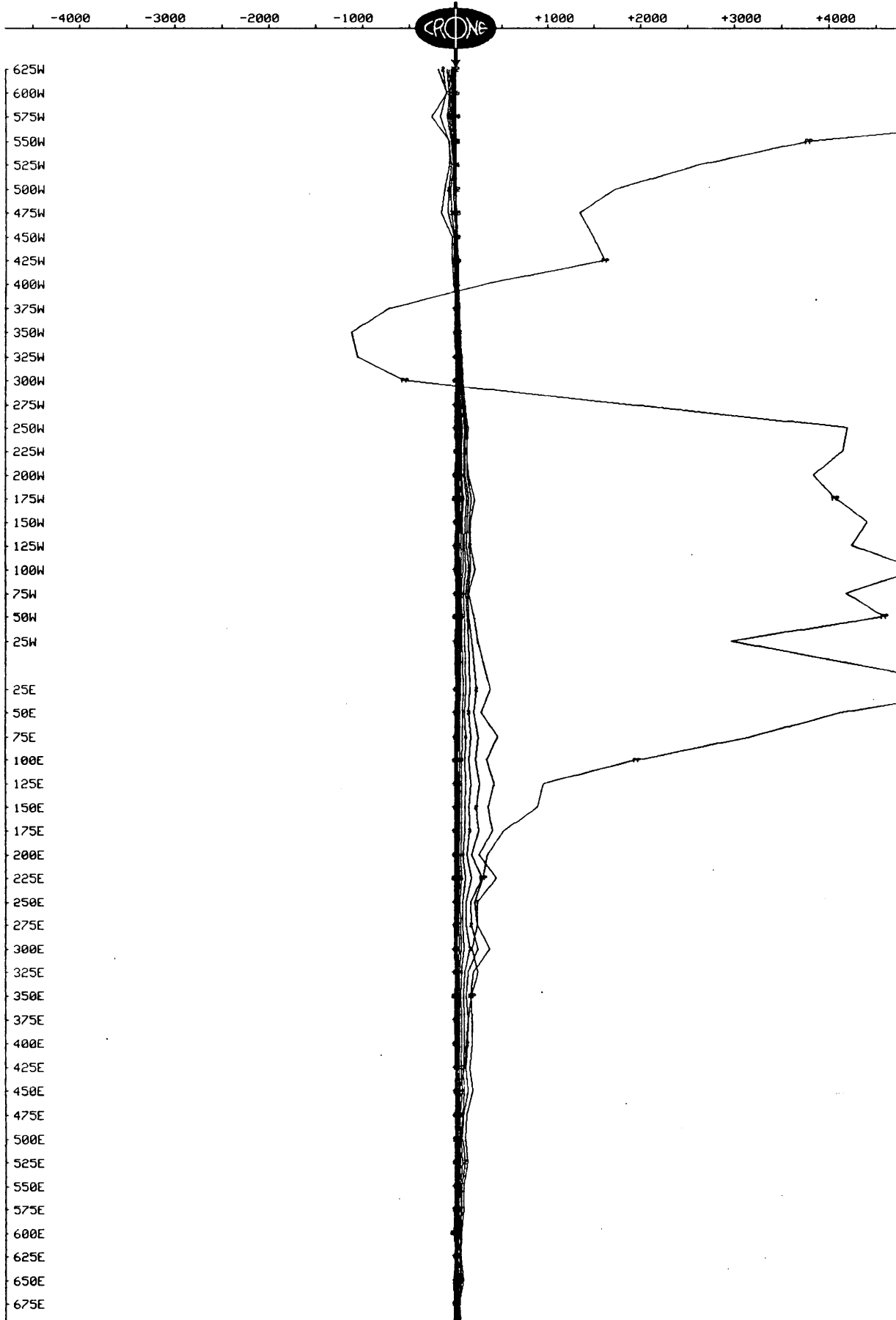


CORONA GEOPHYSICALS & EXPLORATION LTD
SURFACE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Time Base : 16.66 ms
Ramp Time : 1.00 ms
Scale : 1:5000

Line : L1600S
Tx Loop : N2
Date : Jul 12, 1992
File : L1600S.PEM
Unit Scale: 1cm = 500 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP



Downhole Pulse E.M
Linear and Log Plots

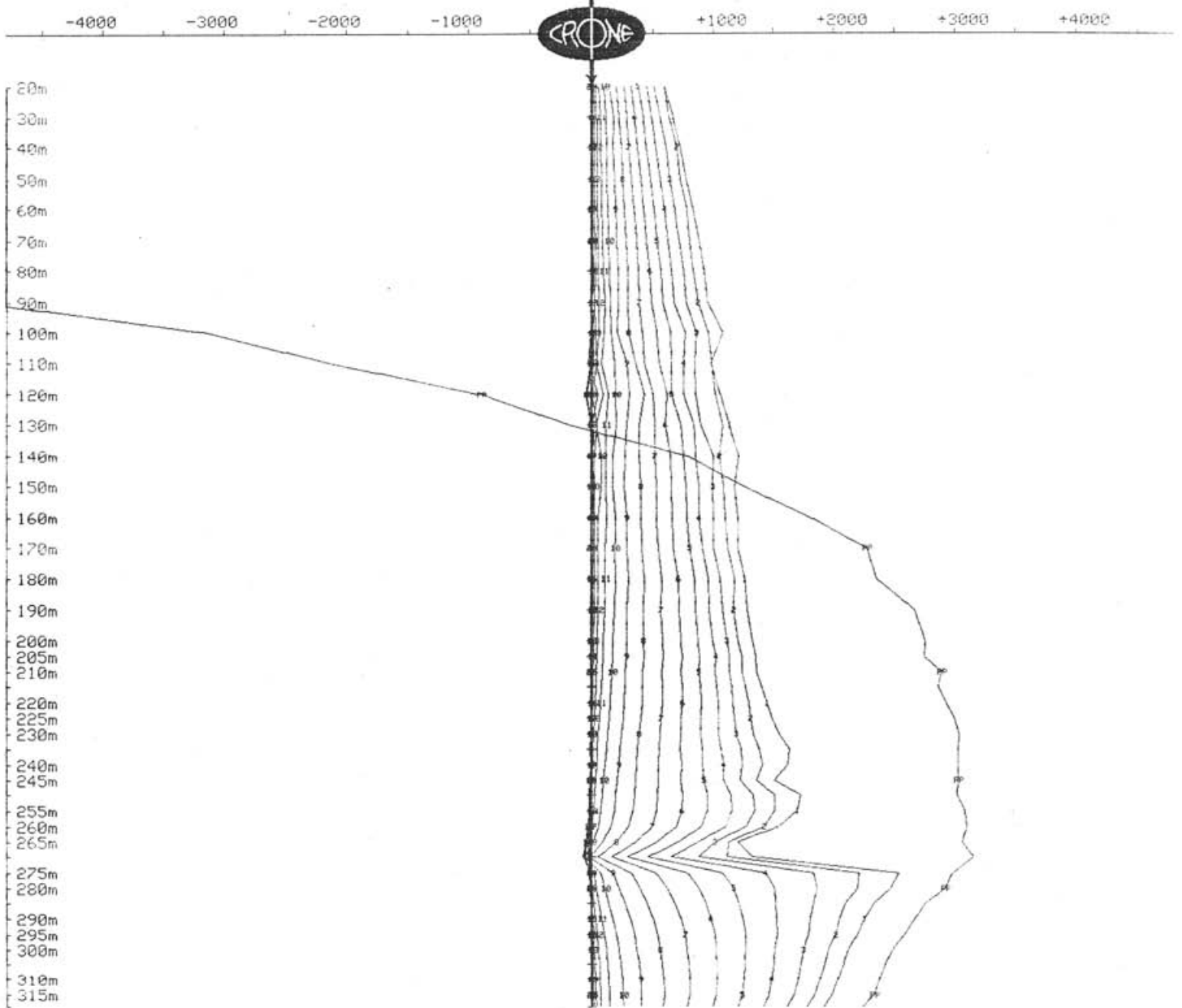
CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 18, 1992

Hole : H911
Tx Loop : H911S
File name : H911S.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000 Unit Scale: 1cm = 500 nT/s



CRONE GEOPHYSICS & EXPLORATION LTD

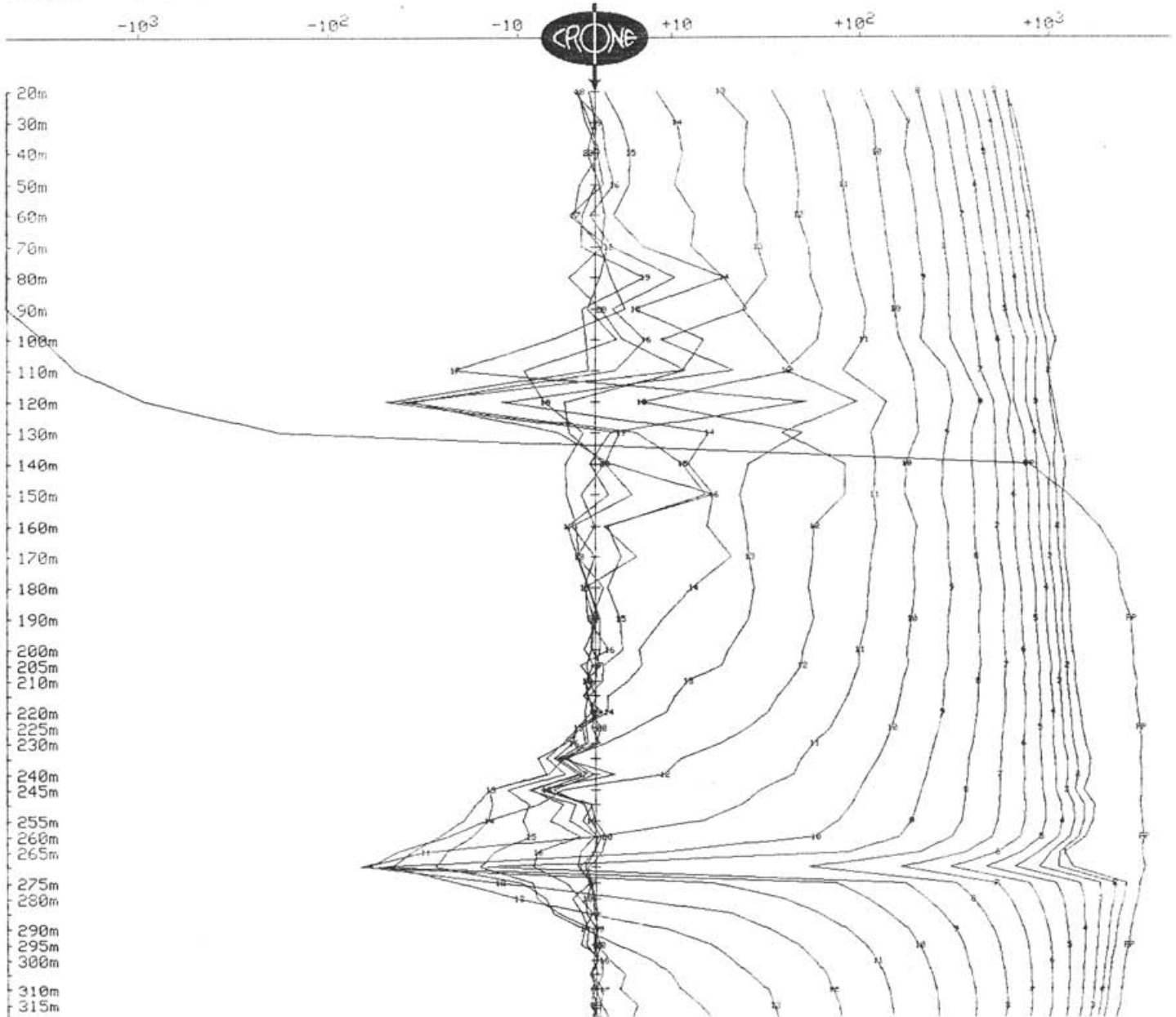
BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 18, 1992

Hole : H911
Tx Loop : H911S
File name : H911S.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

Scale: 1:2000



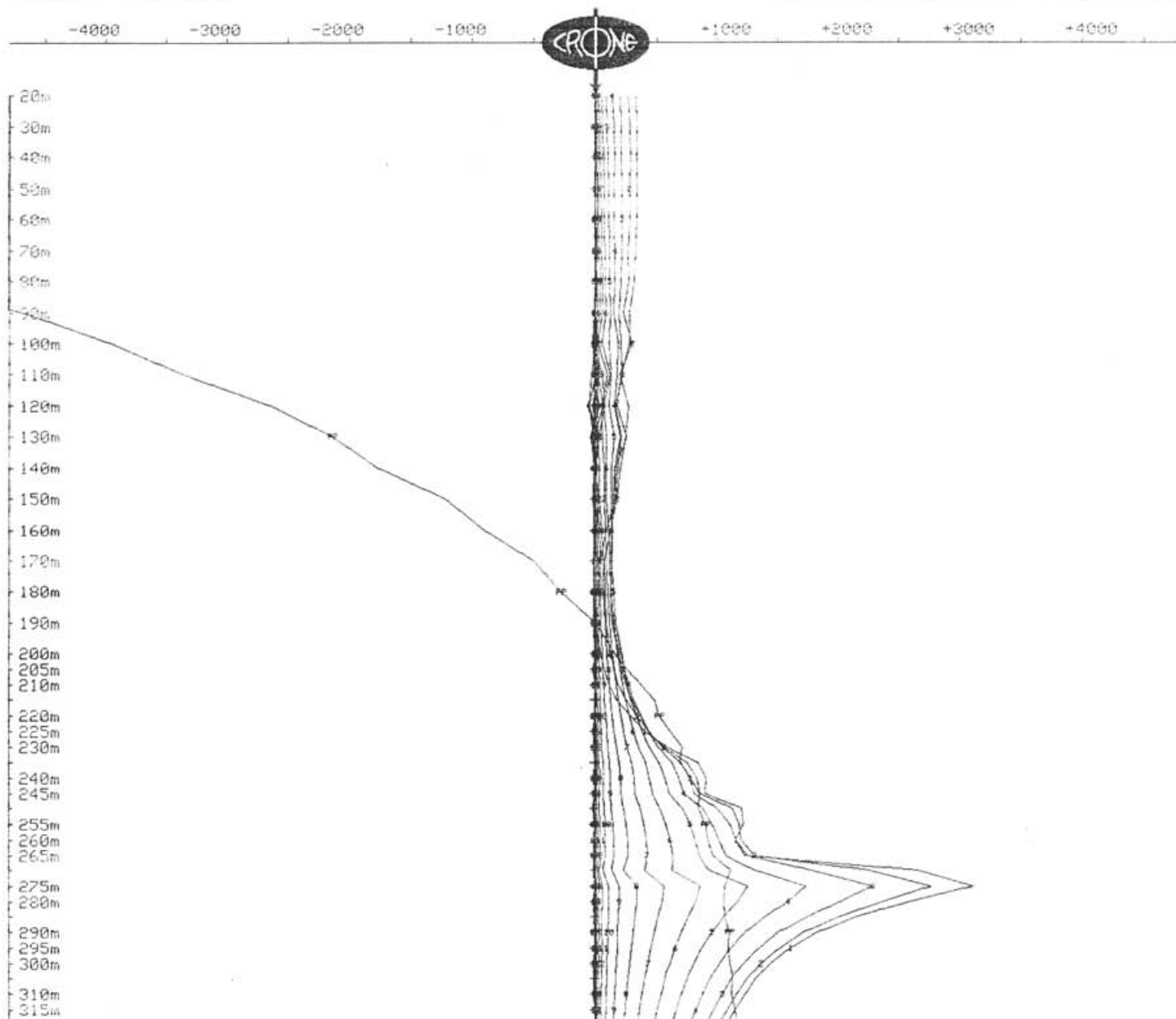
CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 18, 1992

Hole : H911
Tx Loop : H911E
File name : H911E.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000 Unit Scale: 1cm = 500 nT/s



CRONE GEOPHYSICS & EXPLORATION LTD

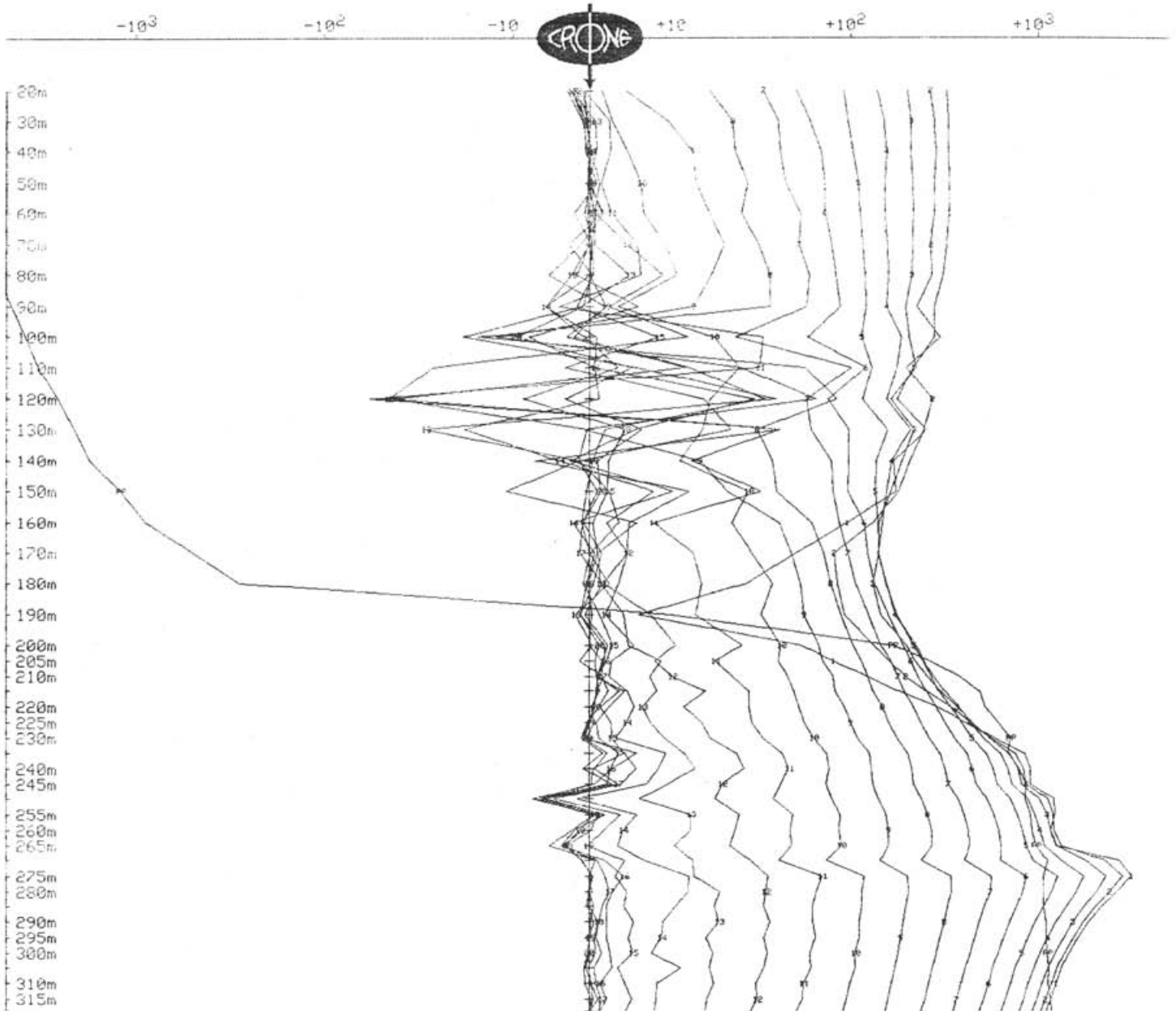
BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 18, 1992

Hole : H911
Tx Loop : H911E
File name : H911E.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

Scale: 1:2000

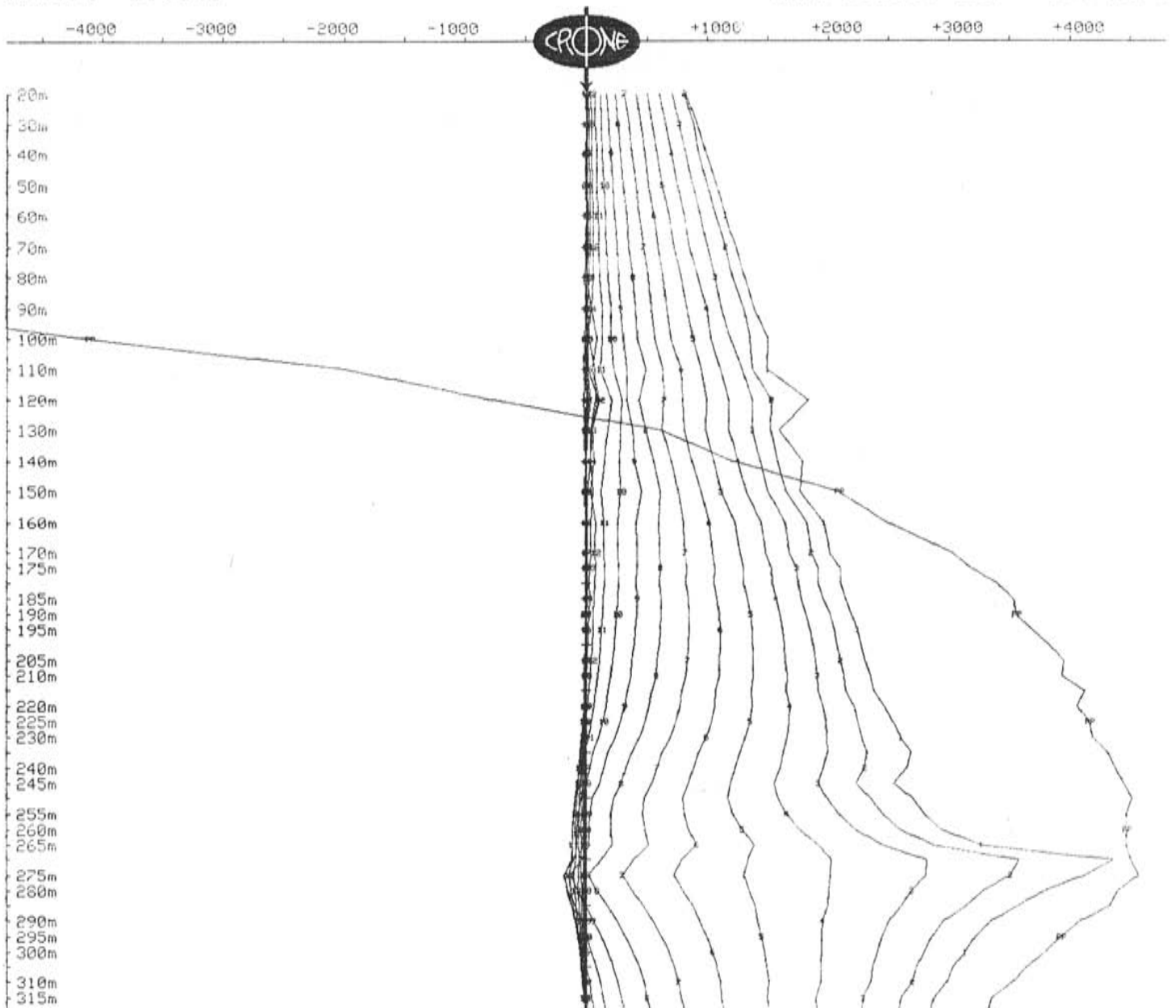


CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 18, 1992

Hole : H911
Tx Loop : H911N
File name : H911N.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000 Unit Scale: 1cm = 500 nT/s



CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

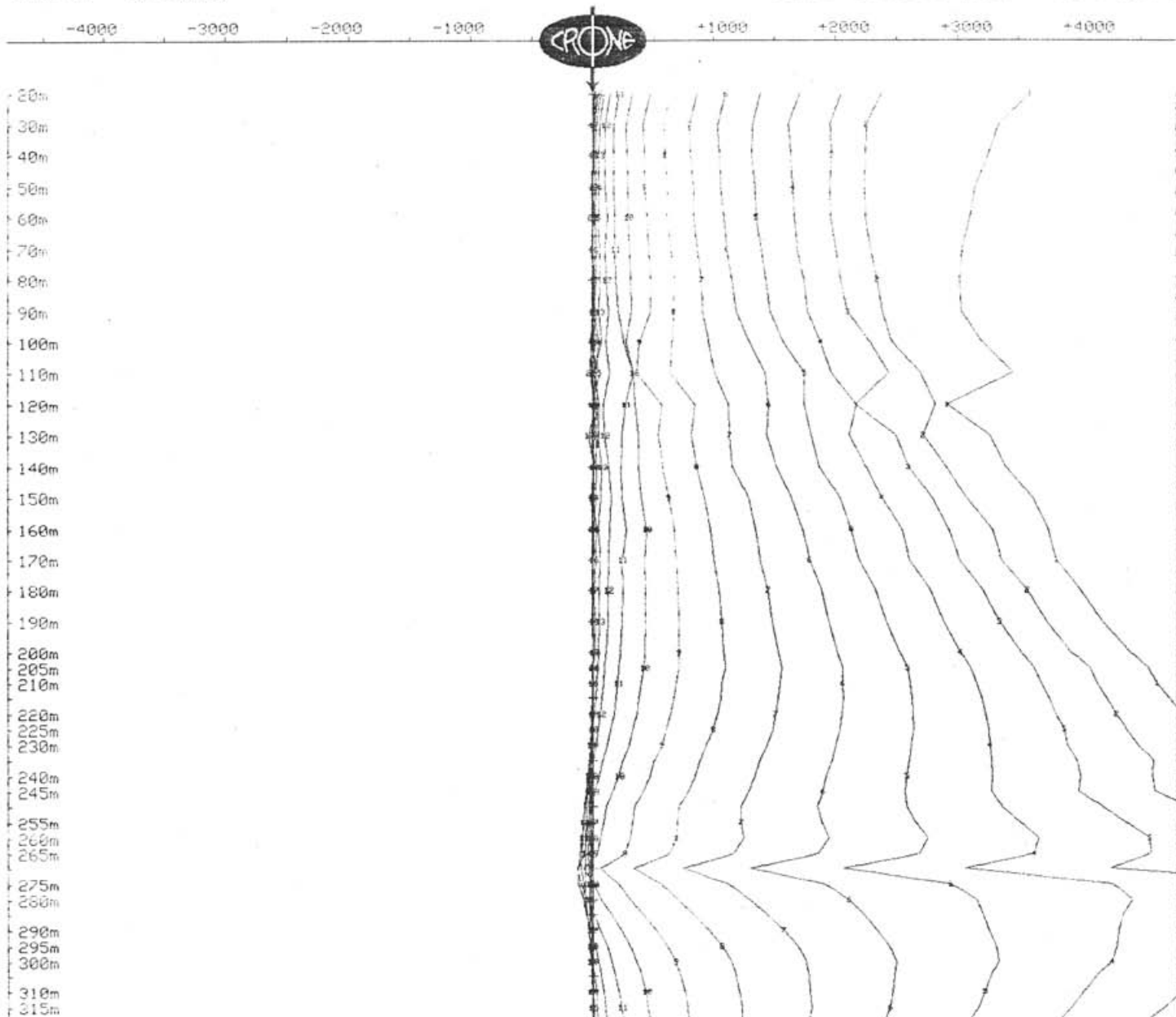
Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 17, 1992

Hole : H911
Tx Loop : H911C
File name : H911C.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

Scale: 1:2000

Unit Scale: 1cm = 500 nT/s



CRONE GEOPHYSICS & EXPLORATION LTD

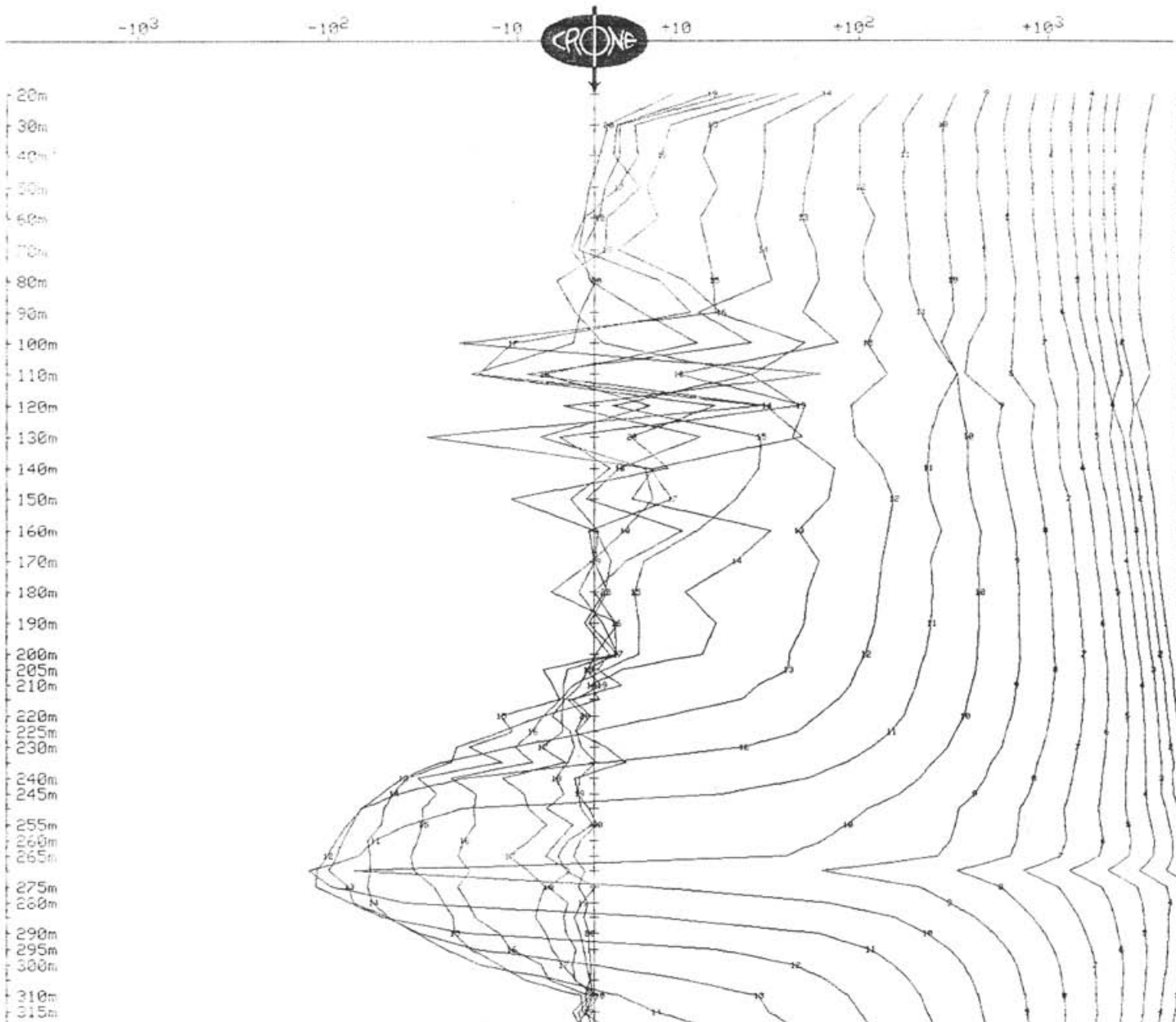
BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 17, 1992

Hole : H911
Tx Loop : H911C
File name : H911C.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

Scale: 1:2000

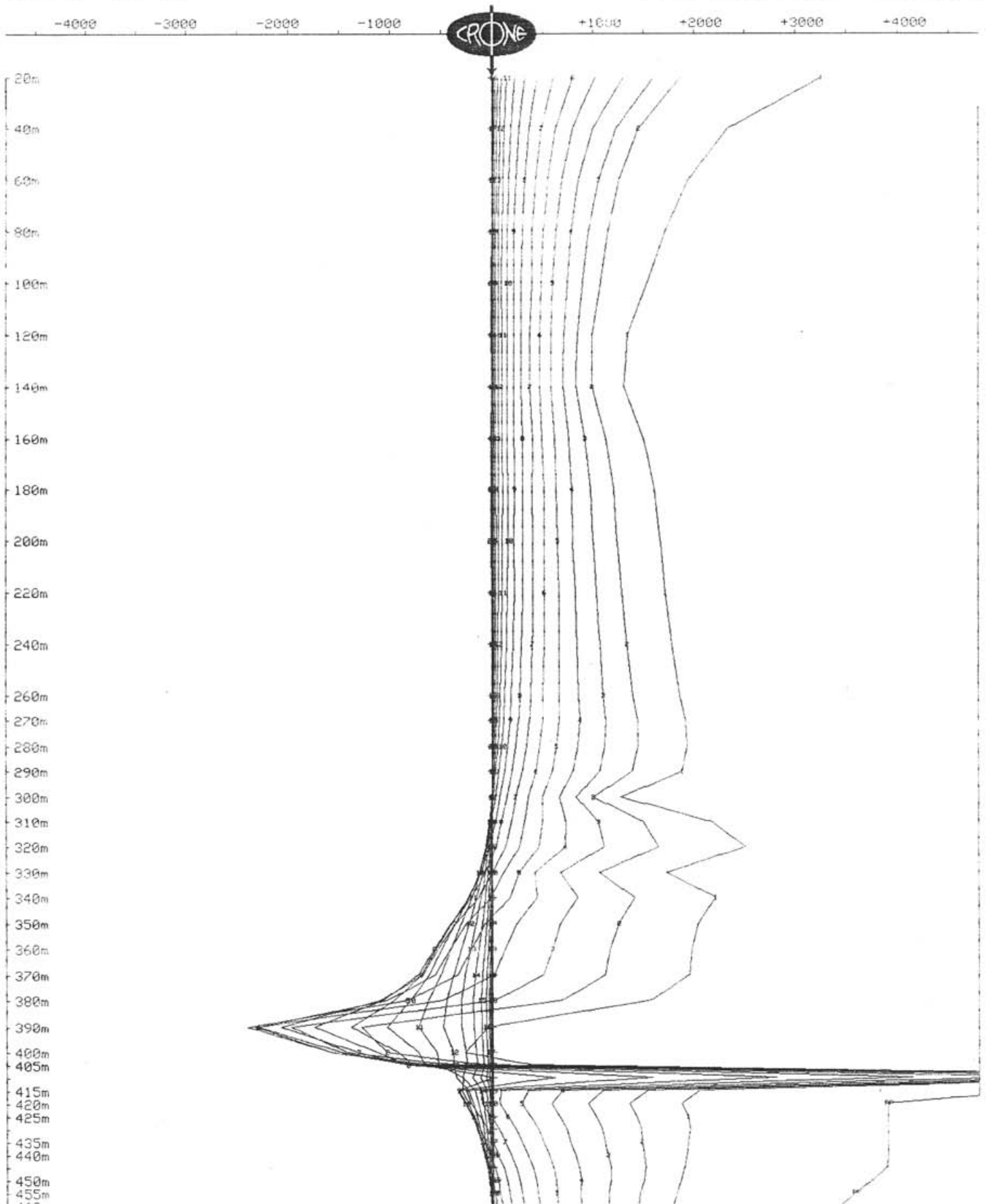


CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 19, 1992

Hole : H913
Tx Loop : H913C
File name : H913C.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000 Unit Scale: 1cm = 500 nT/s



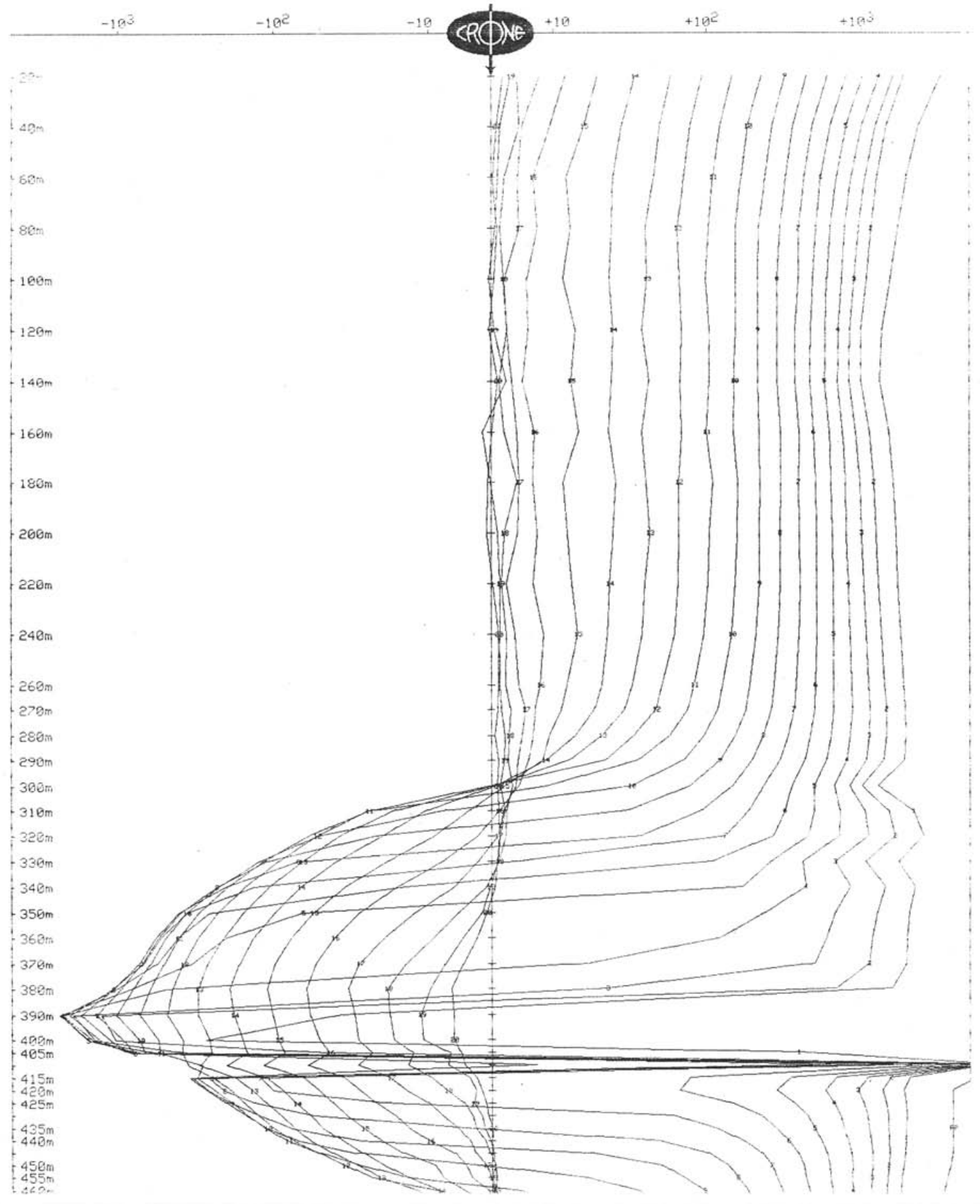
CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 19, 1992

Hole : H913
Tx Loop : H913C
File name : H913C.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

Scale: 1:2000

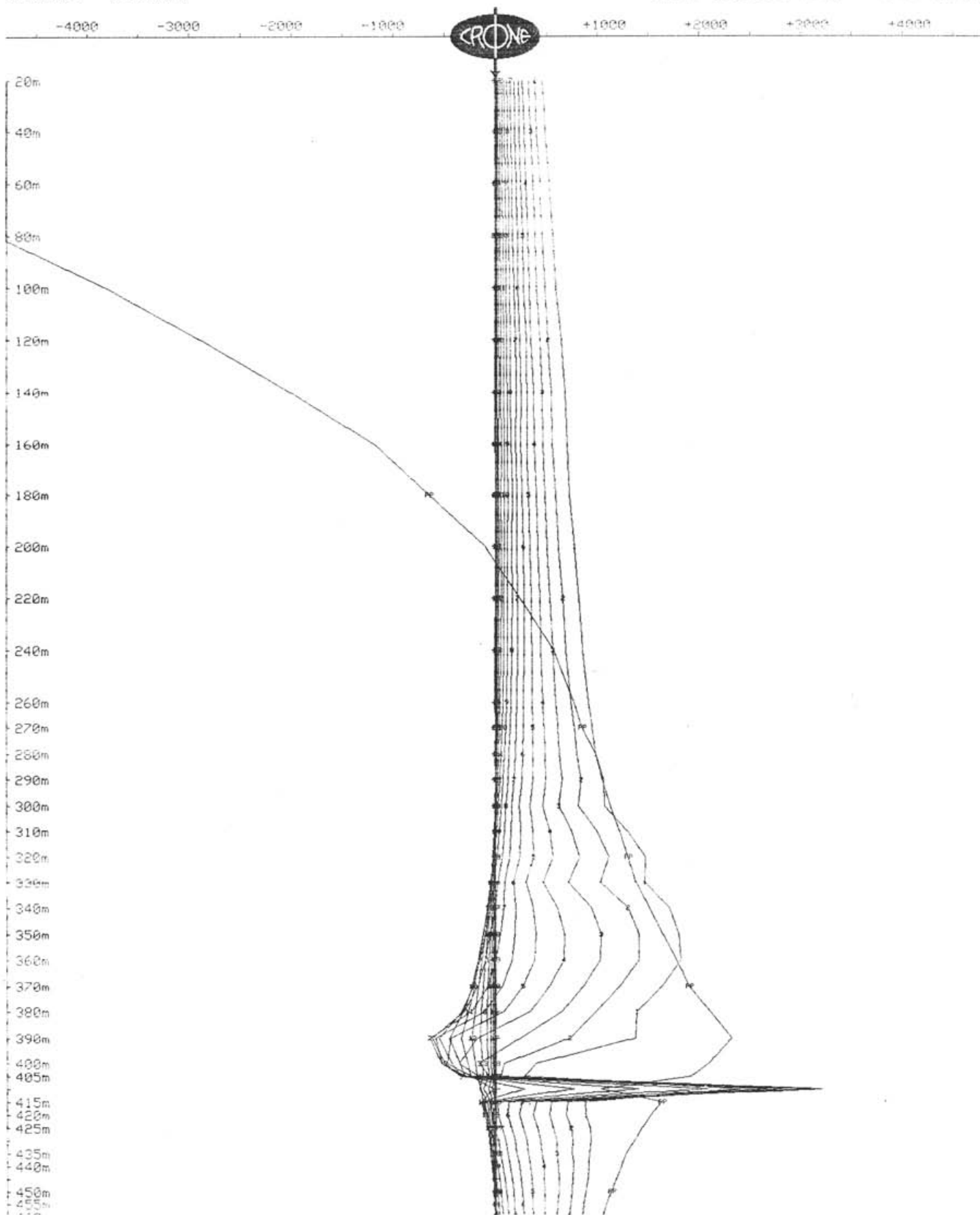


CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 19, 1992

Hole : H913
Tx Loop : H913N
File name : H913N.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000 Unit Scale: 1cm = 500 nT/s

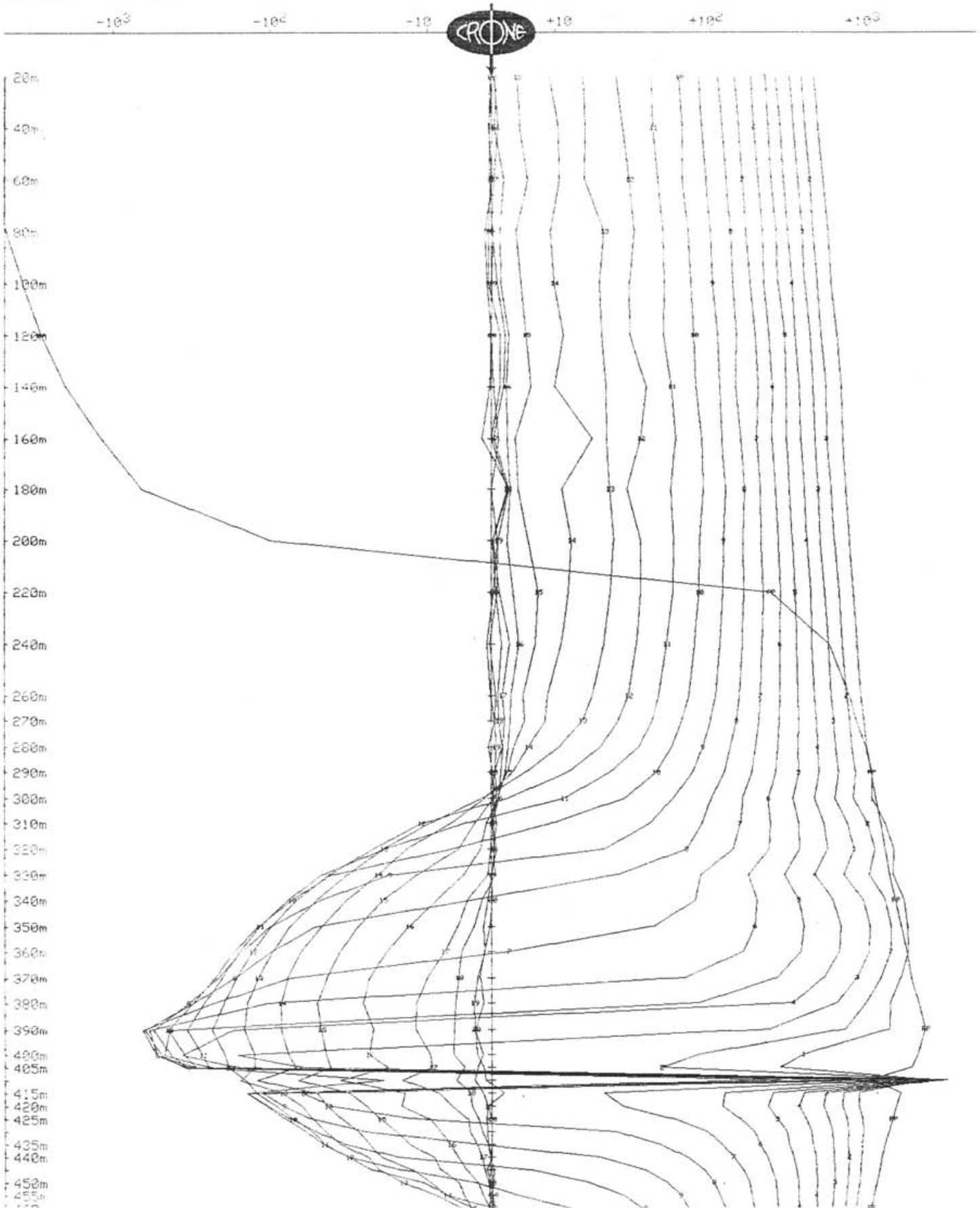


CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 19, 1992

Hole : H913
Tx Loop : H913N
File name : H913N.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000

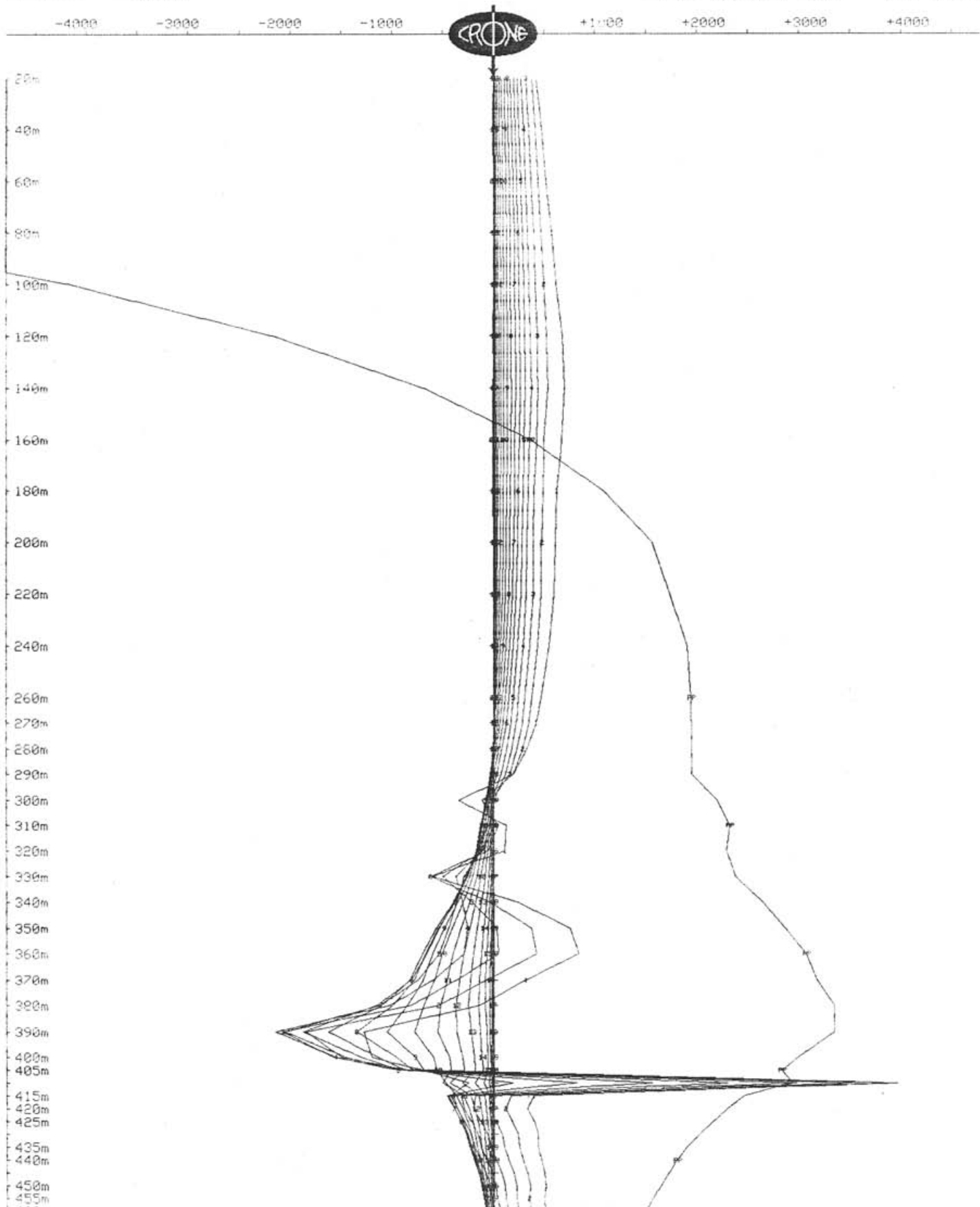


CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 19, 1992

Hole : H913
Tx Loop : H913E
File name : H913E.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000 Unit Scale: 1cm = 500 nT/s



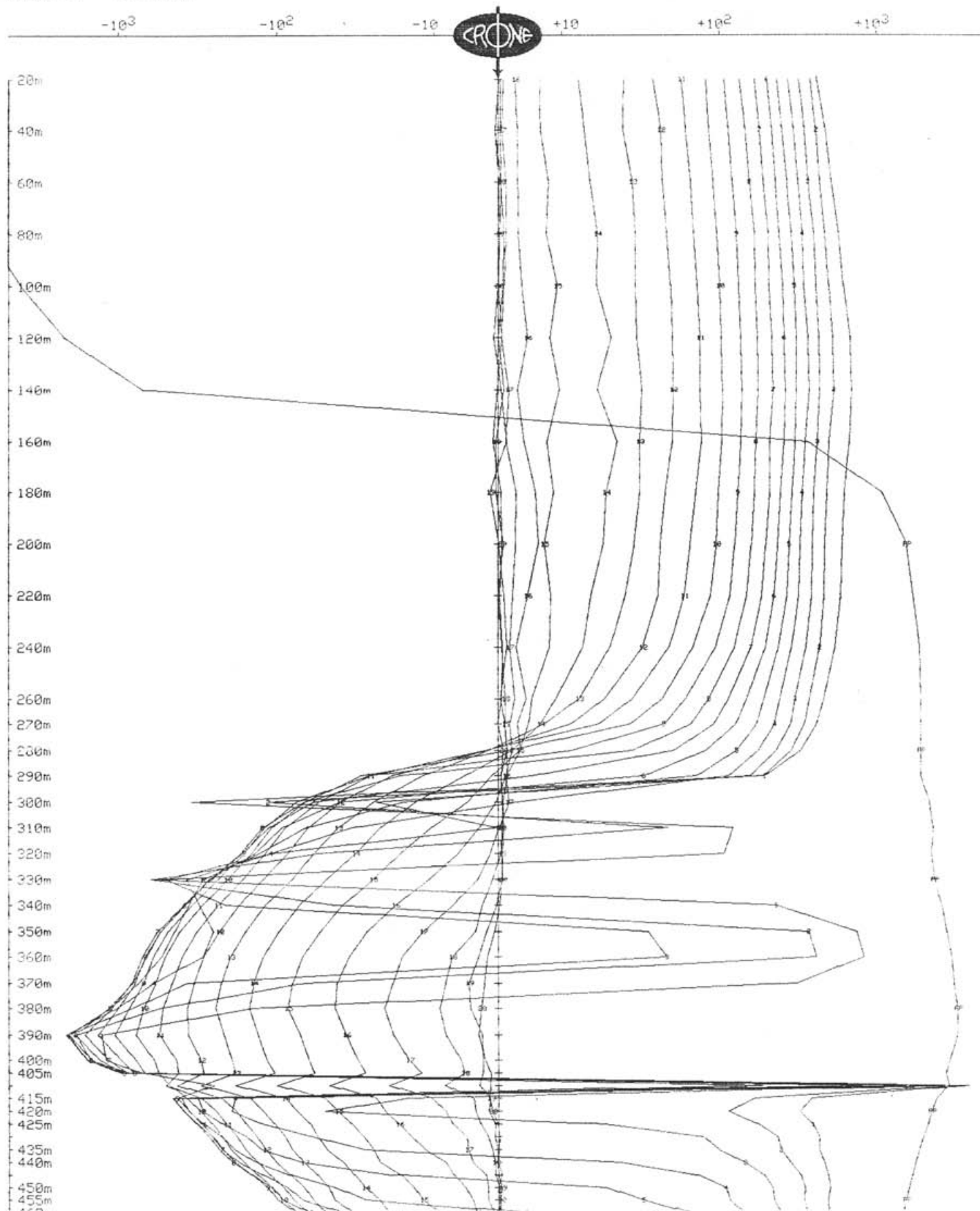
CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 19, 1992

Hole : H913
Tx Loop : H913E
File name : H913E.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

Scale: 1:2000

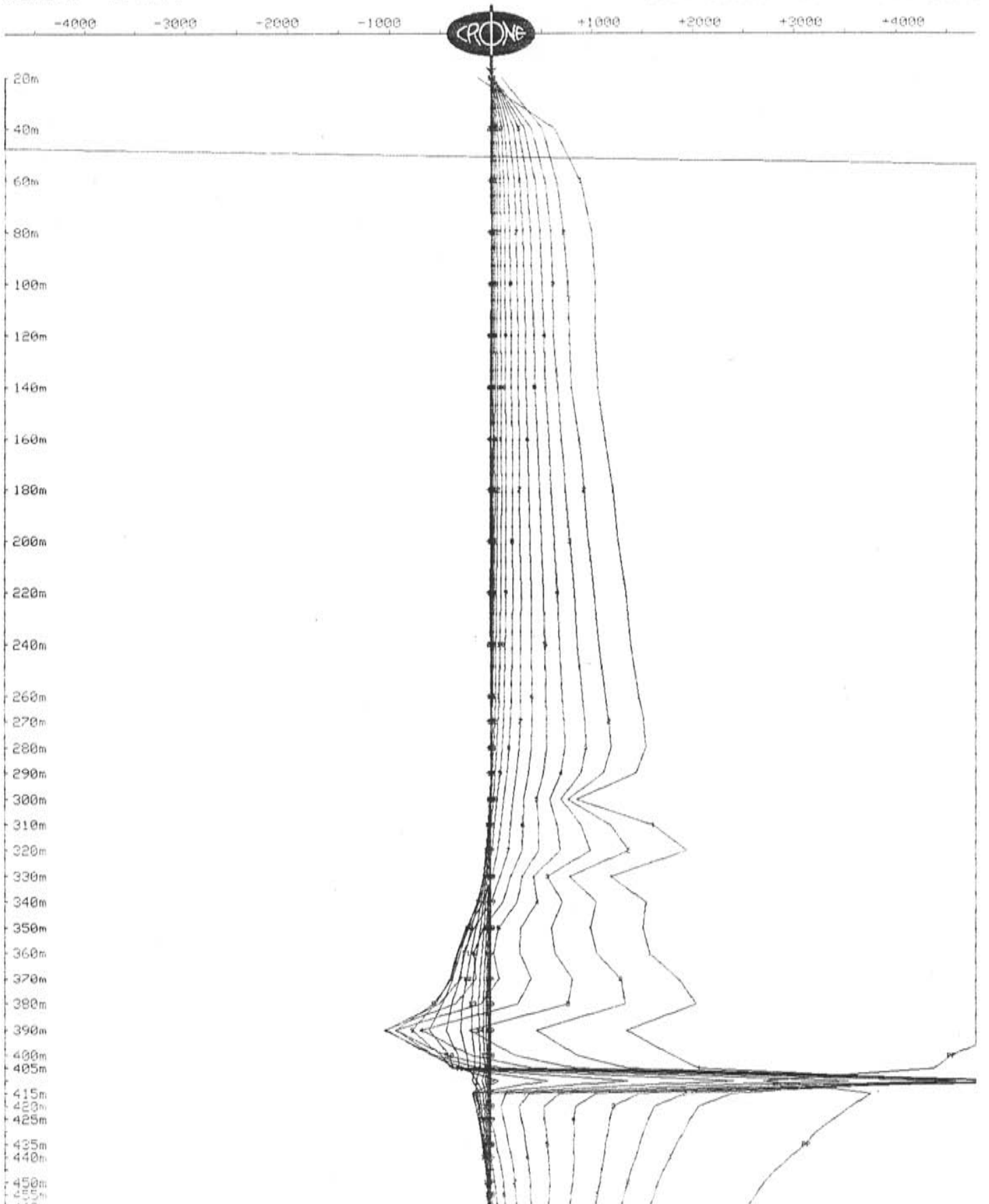


CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 20, 1992

Hole : H913
Tx Loop : H913S
File name : H913S.PEM

X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP
Scale: 1:2000 Unit Scale: 1cm = 500 nT/s



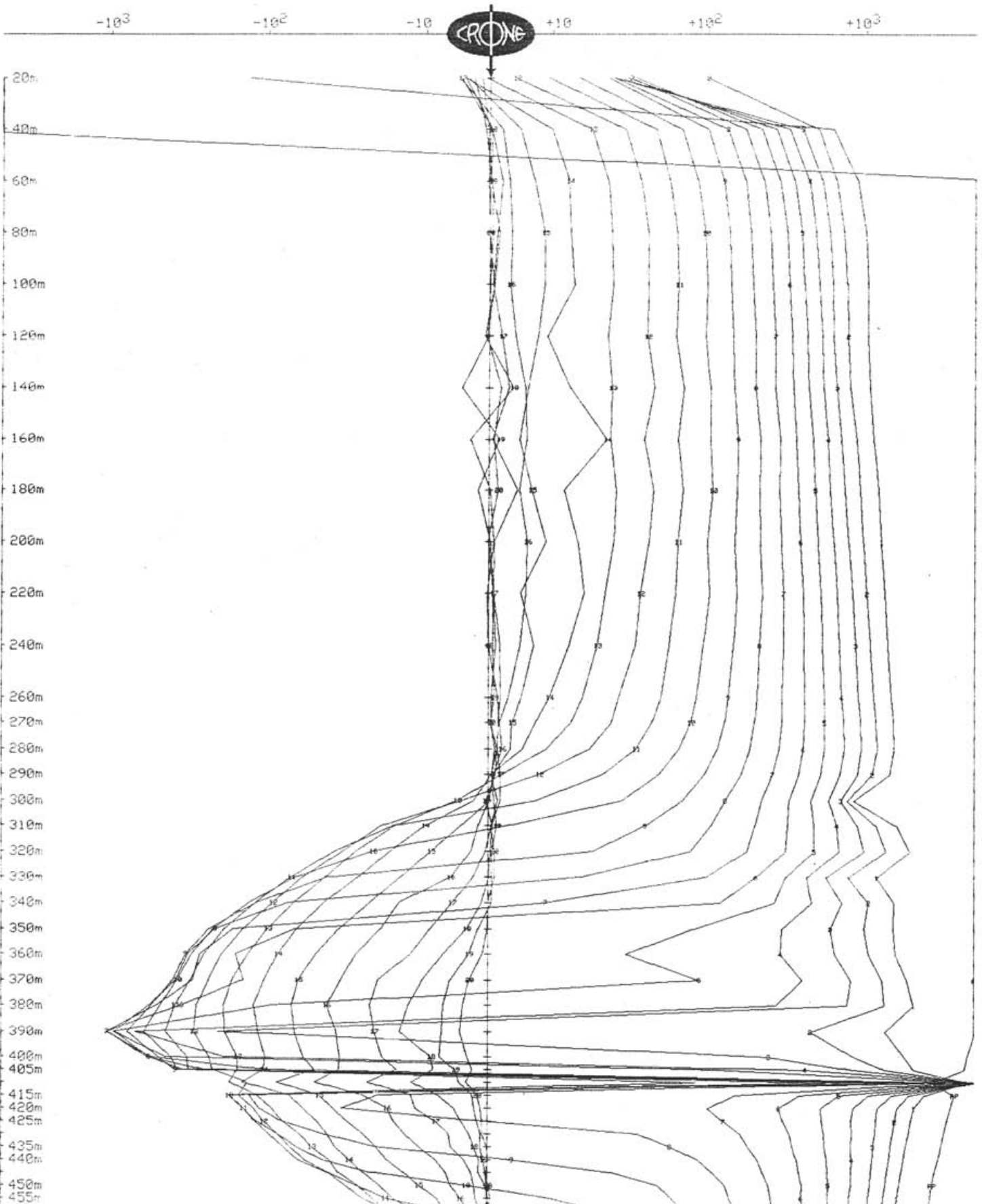
CRONE GEOPHYSICS & EXPLORATION LTD BOREHOLE PEM

Client : TECK/Pacific Geophy.
Grid : MGM
Date : Jul 20, 1992

Hole : H913
Tx Loop : H913S
File name : H913S.PEM

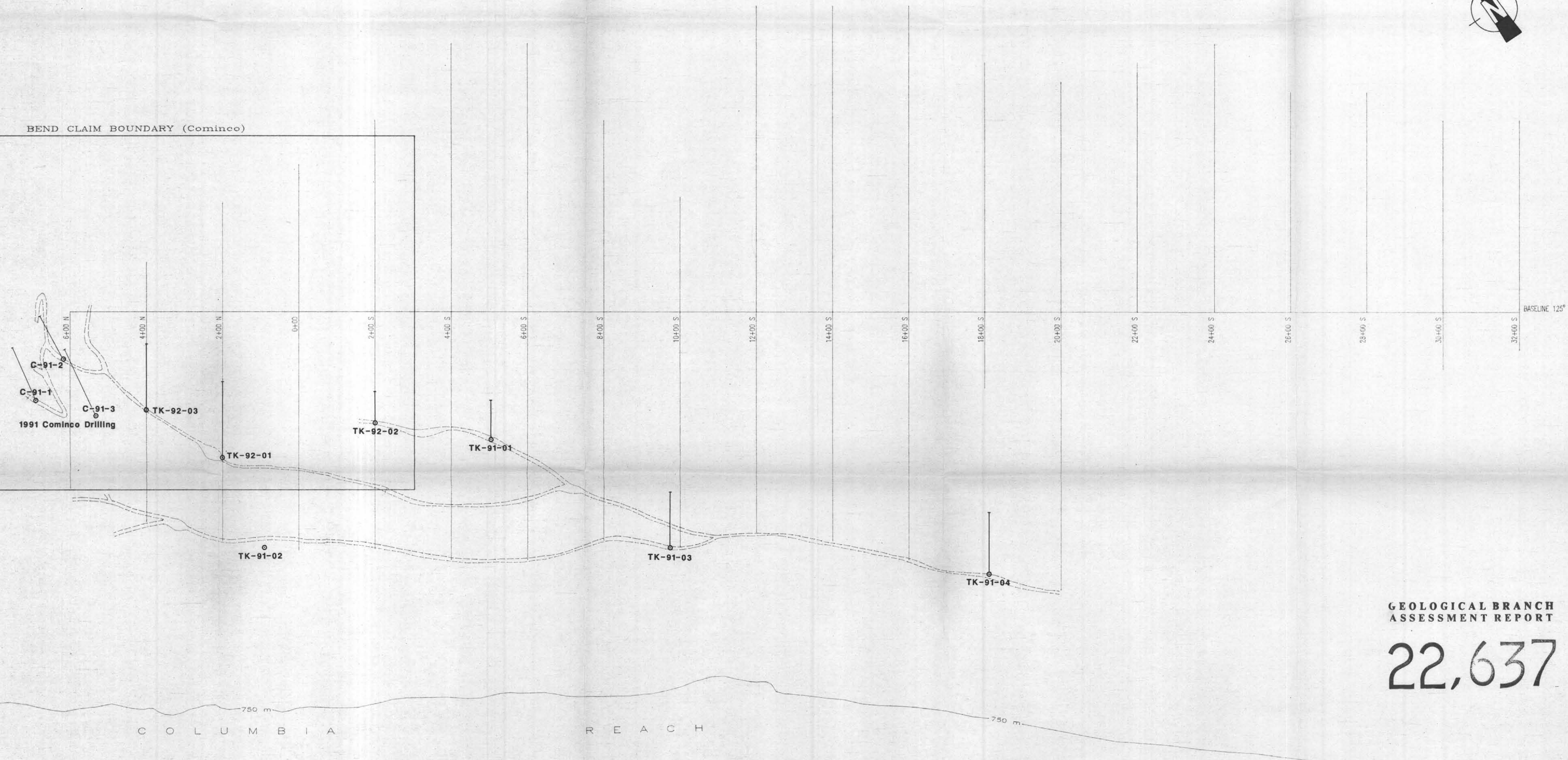
X COMPONENT dBx/dt nanoTesla/sec - 20 channels and PP

Scale: 1:2000





BEND CLAIM BOUNDARY (Cominco)





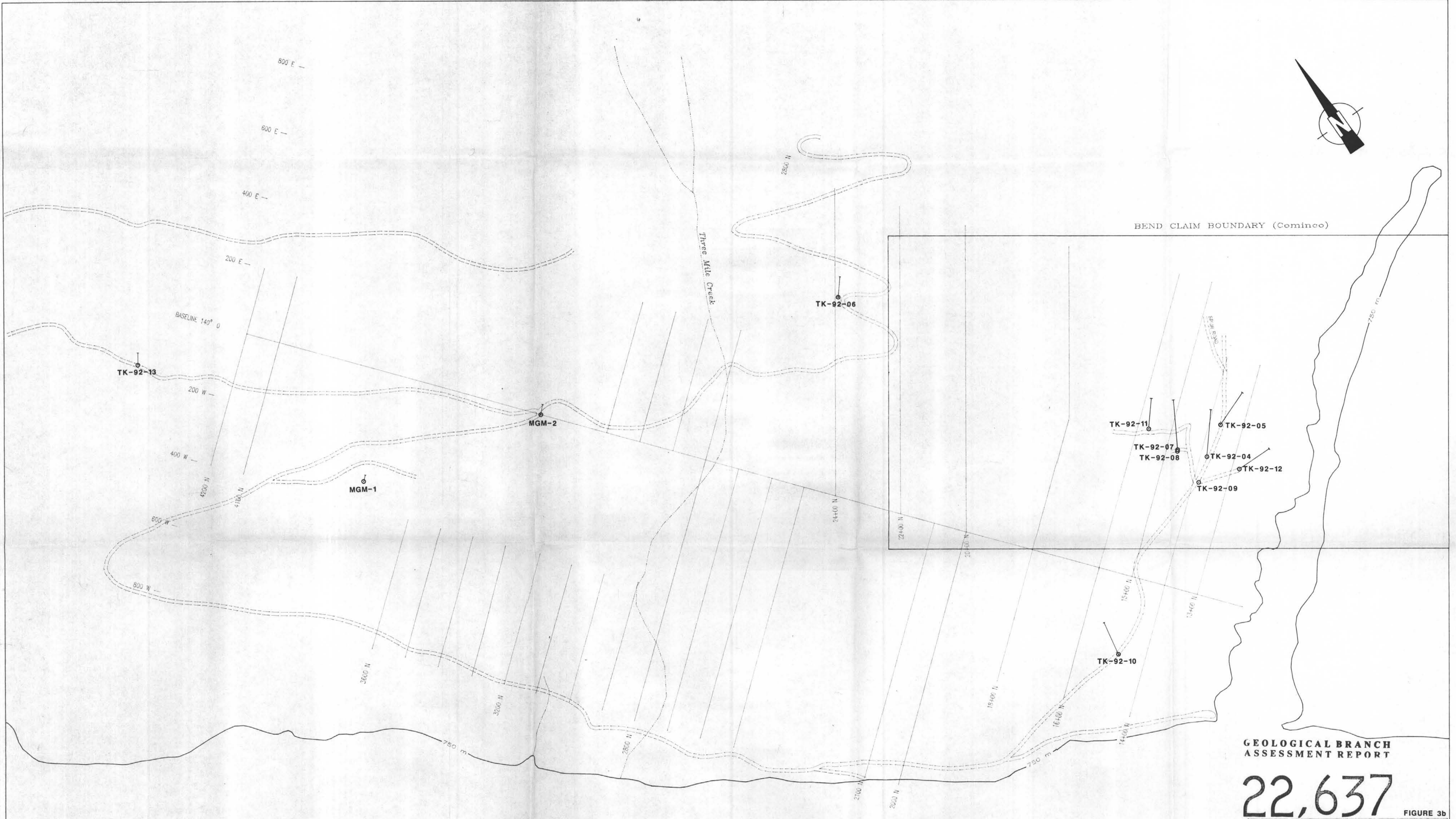
BASELINE 125°

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,637

FIGURE 3a

 TECK EXPLORATION LTD.		
MGM PROJECT		
DRILL HOLE LOCATION MAP		
		
DATE DRAWN: OCT. 30, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: C.A.	JOB No: 1703	
DRAWN BY: S.A.	INTS. No: 83D/1	



BEND CLAIM BOUNDARY (Cominco)

Three Mile Creek

C O L U M B I A R E A C H

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,637

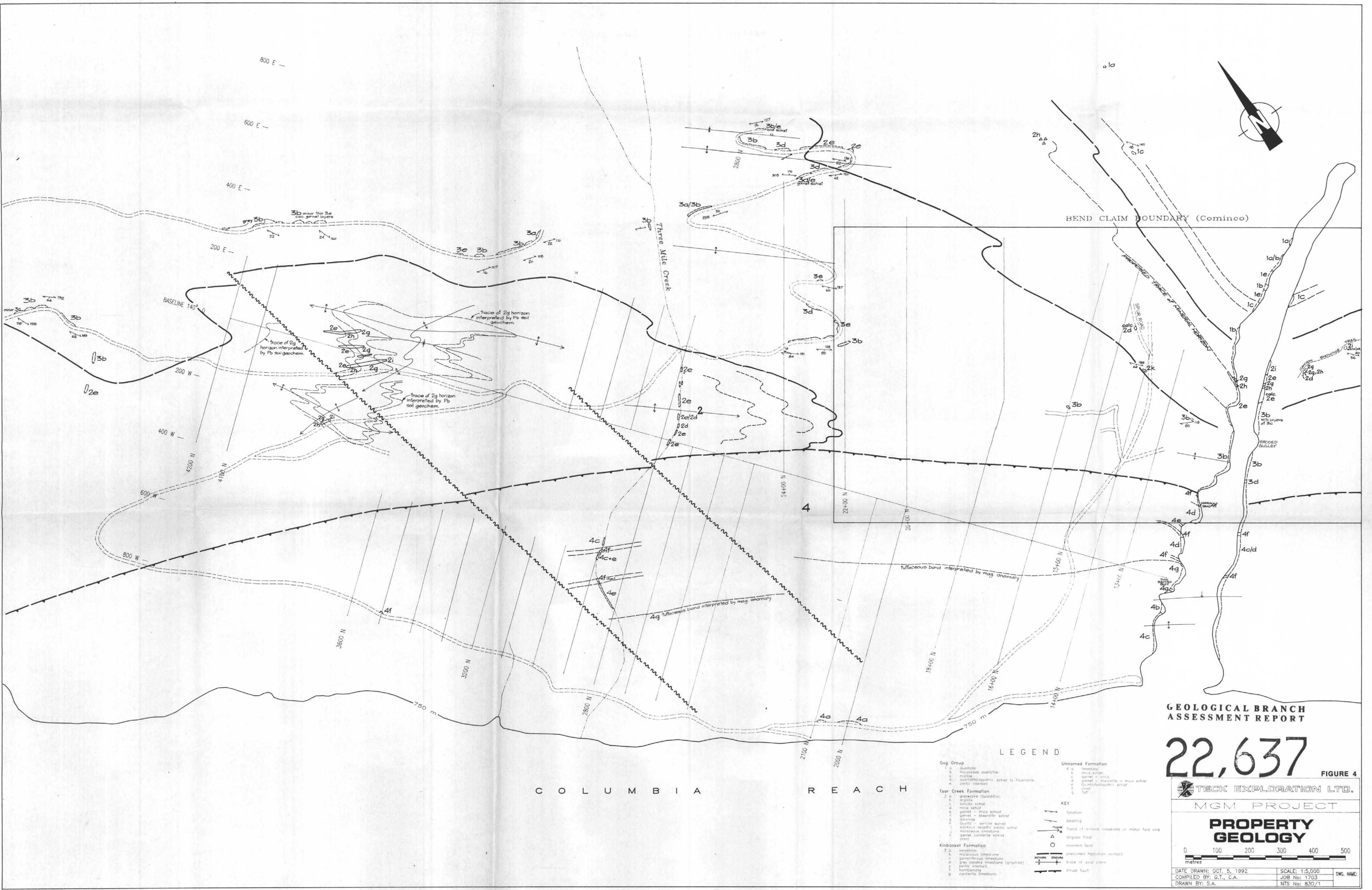
FIGURE 3b

TECK EXPLORATION LTD.
MGM PROJECT
DRILL HOLE LOCATION MAP

0 100 200 300 400 500
metres

DATE DRAWN: OCT. 5, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: G.T., C.A.	JOB No: 1703	
DRAWN BY: S.A.	NTS No: 8307.1	

NOTE: MGM-1 & MGM-2 DRILLED BY
ESSO MINERALS (1985)



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,637

FIGURE 4

TECK EXPLORATION LTD.
MGM PROJECT

**PROPERTY
GEOLOGY**



DATE DRAWN: OCT. 5, 1992 SCALE: 1:5,000 DWG. NAME:
 COMPILED BY: G.T., C.A. JOB No: 1703
 DRAWN BY: S.A. NTS No: 83D/1



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,637

FIGURE 5

TECK EXPLORATION LTD.
MGM PROJECT
SOIL GEOCHEMISTRY
Zn ppm

0 100 200 300 400 500
metres

DATE DRAWN: OCT. 5, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: G.T., C.A.	JOB No: 1703	MGM-ZN
DRAWN BY: S.A.	NTS No: 830/1	

KEY for Colour Ranges
 0 - 34 ppm
 35 - 74 ppm
 75 - 149 ppm
 >149



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,637 **FIGURE 6**

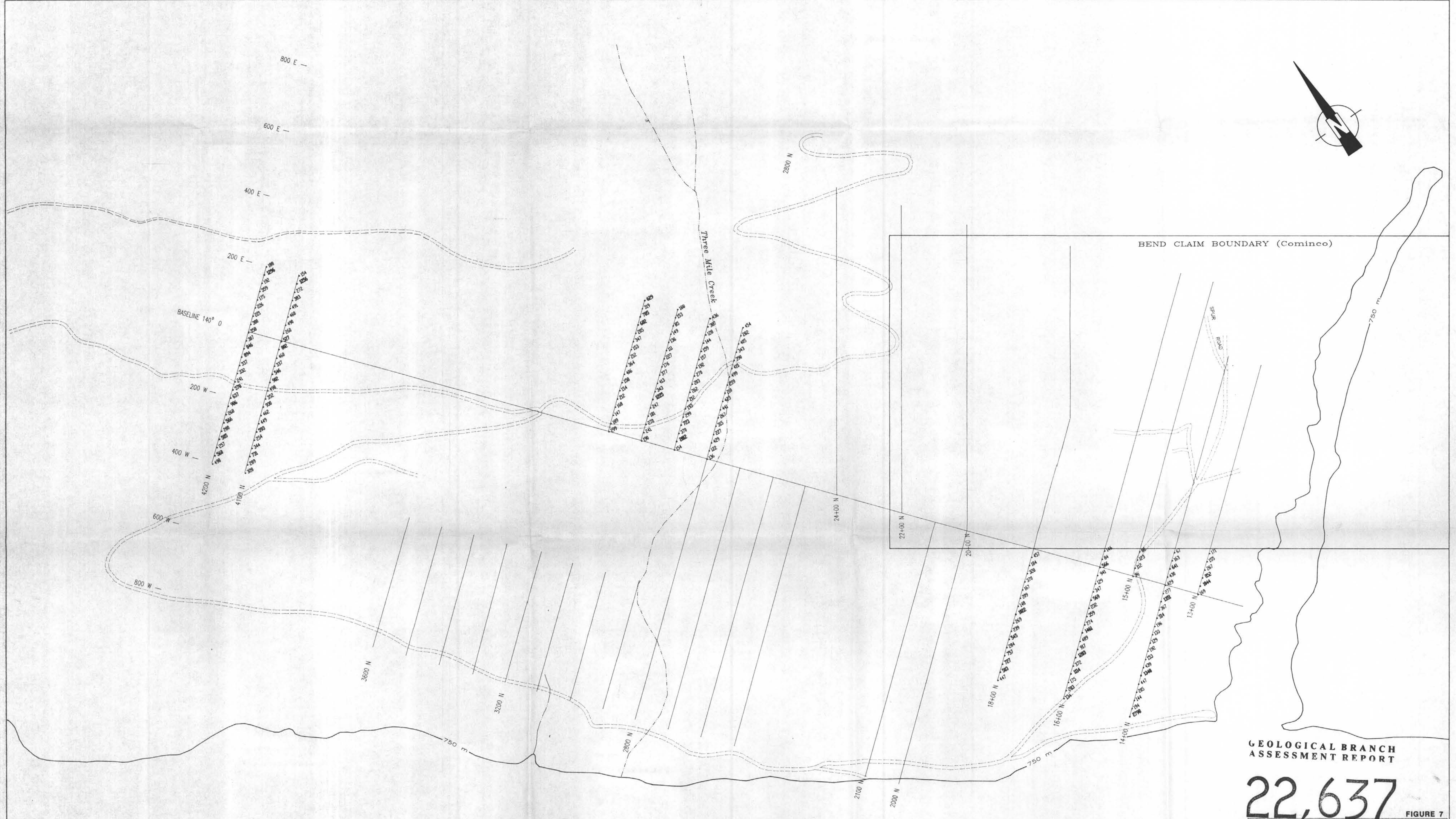
TECK EXPLORATION LTD.
MGM PROJECT
SOIL GEOCHEMISTRY
Pb ppm

0 100 200 300 400 500
metres

DATE DRAWN: OCT. 5, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: G.T., C.A.	JOB No: 1703	MGM-PB
DRAWN BY: S.A.	NTS No: 830/1	

KEY for Colour Ranges
0 - 9 ppm
10 - 19 ppm
>19 ppm

C O L U M B I A R E A C H



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,637 FIGURE 7

TECK EXPLORATION LTD.

MGM PROJECT

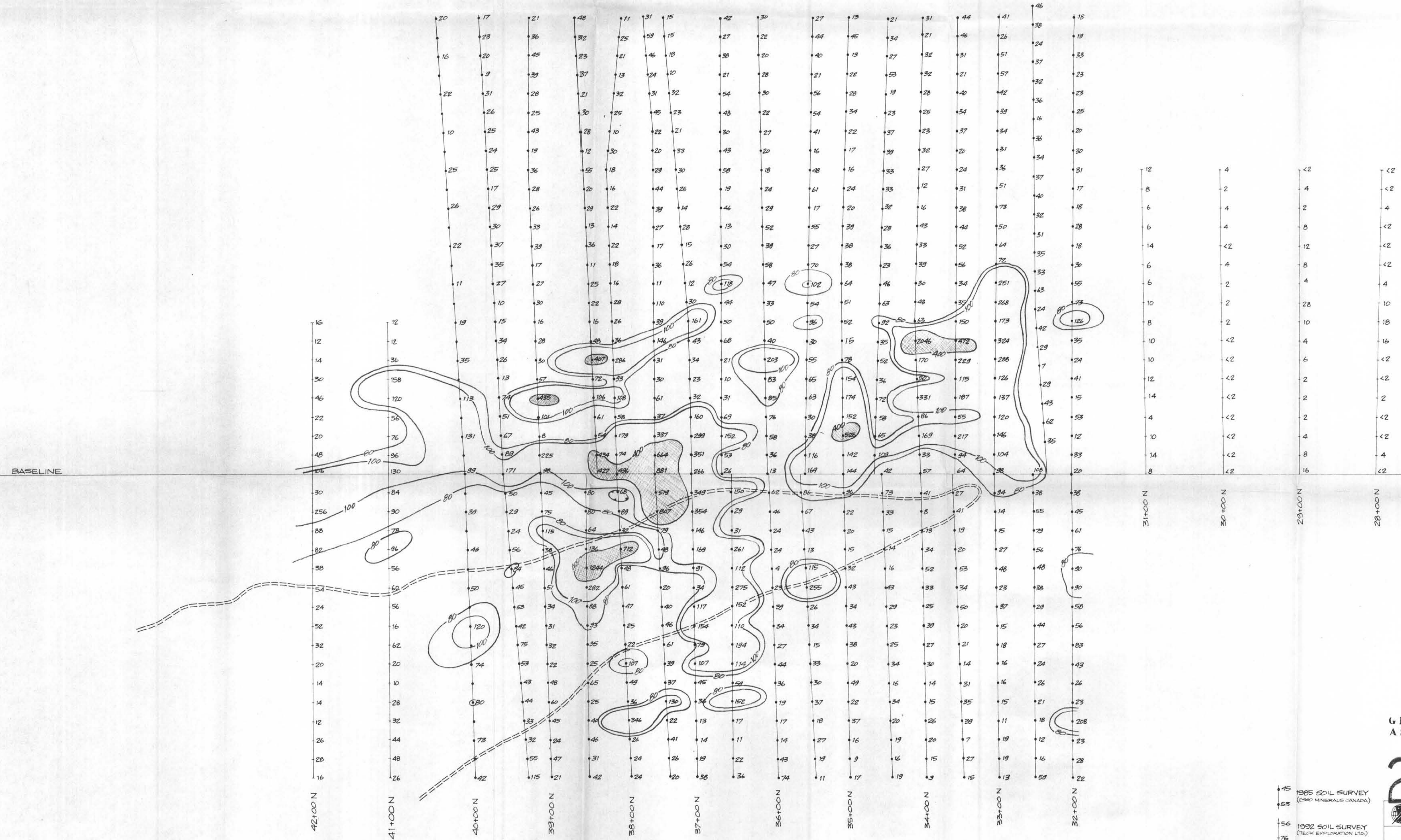
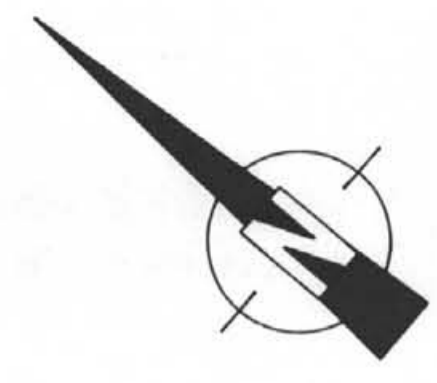
SOIL GEOCHEMISTRY
Mn ppm



KEY for Colour Ranges

- 0 - 499 ppm
- 500 - 749 ppm
- 750 - 999 ppm
- >999 ppm

DATE DRAWN: OCT. 5, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: G.T., C.A.	JOB No: 1703	MGM-MN
DRAWN BY: S.A.	NTS No: 830/1	



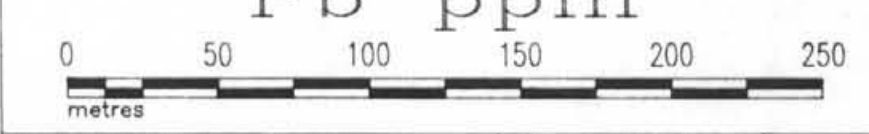
GEOLOGICAL BRANCH
ASSESSMENT REPORT

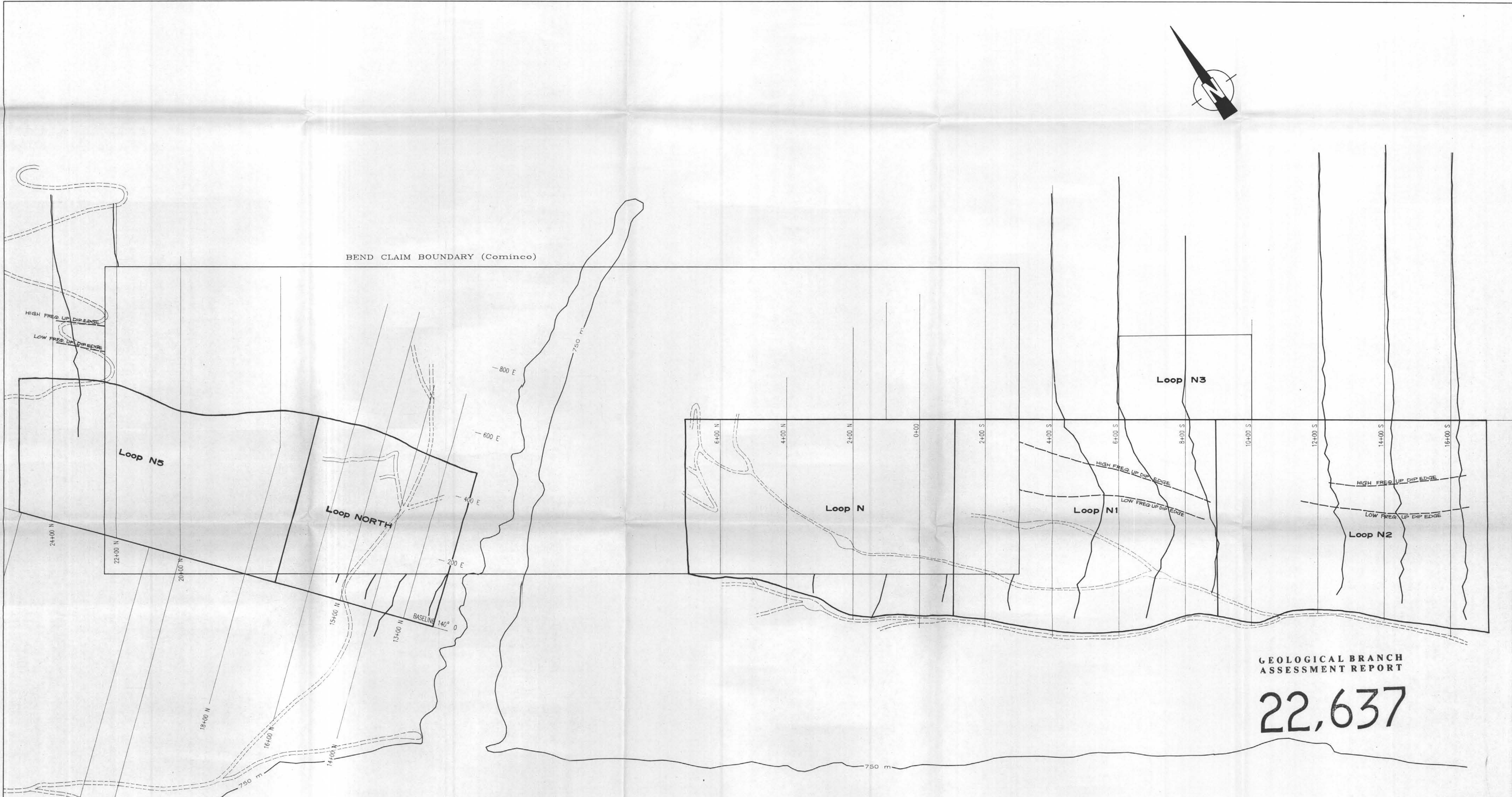
22,637 FIGURE 8

TECK EXPLORATION LTD.
MGM PROJECT
NORTH ROAD ZONE
SOIL GEOCHEMISTRY
Pb ppm

DATE DRAWN: OCT. 9, 1992 SCALE: 1:2,500 DWG. NAME:
COMPILED BY: G.T., C.A. JOB No: 1703
DRAWN BY: S.A. NTS. No: 83D/1

- 45 1985 SOIL SURVEY (ES&O MINERALS CANADA)
 - 53
 - 56 1992 SOIL SURVEY (TECK EXPLORATION LTD.)
 - 76
- Contour Interval
- 80 - 90
 - 90 - 100
 - 100 - 400
 - >400





GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,637

C O L U M B I A R E A C H

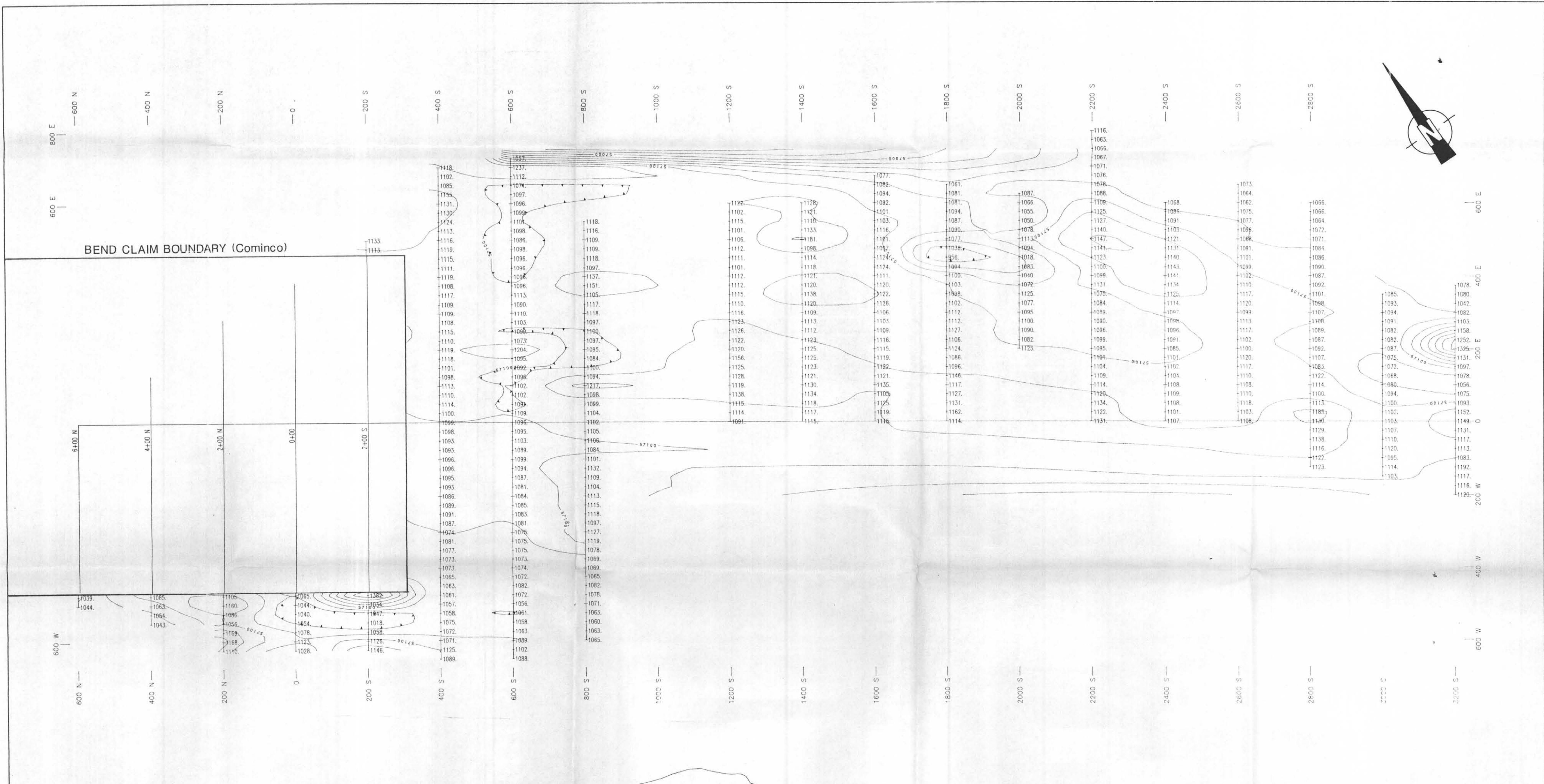
INSTRUMENT: CRONE DIGITAL PEM
COMPONENT: dBz/dt, Channel 4
PROFILE SCALE: 250 nt/s per cm

TECK EXPLORATION LTD.
MGM PROJECT
PULSE EM SURVEY
Z Comp Ch 4 Profiles

0 100 200 300 400 500
metres

DATE DRAWN: OCT. 15, 1992 SCALE: 1:5,000 DWG. NAME:
COMPILED BY: G.T., C.A. JOB No: 1703
DRAWN BY: S.A. NTS No: 830/1

FIGURE 9



C O L U M B I A R E A C H

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,637

FIGURE 10

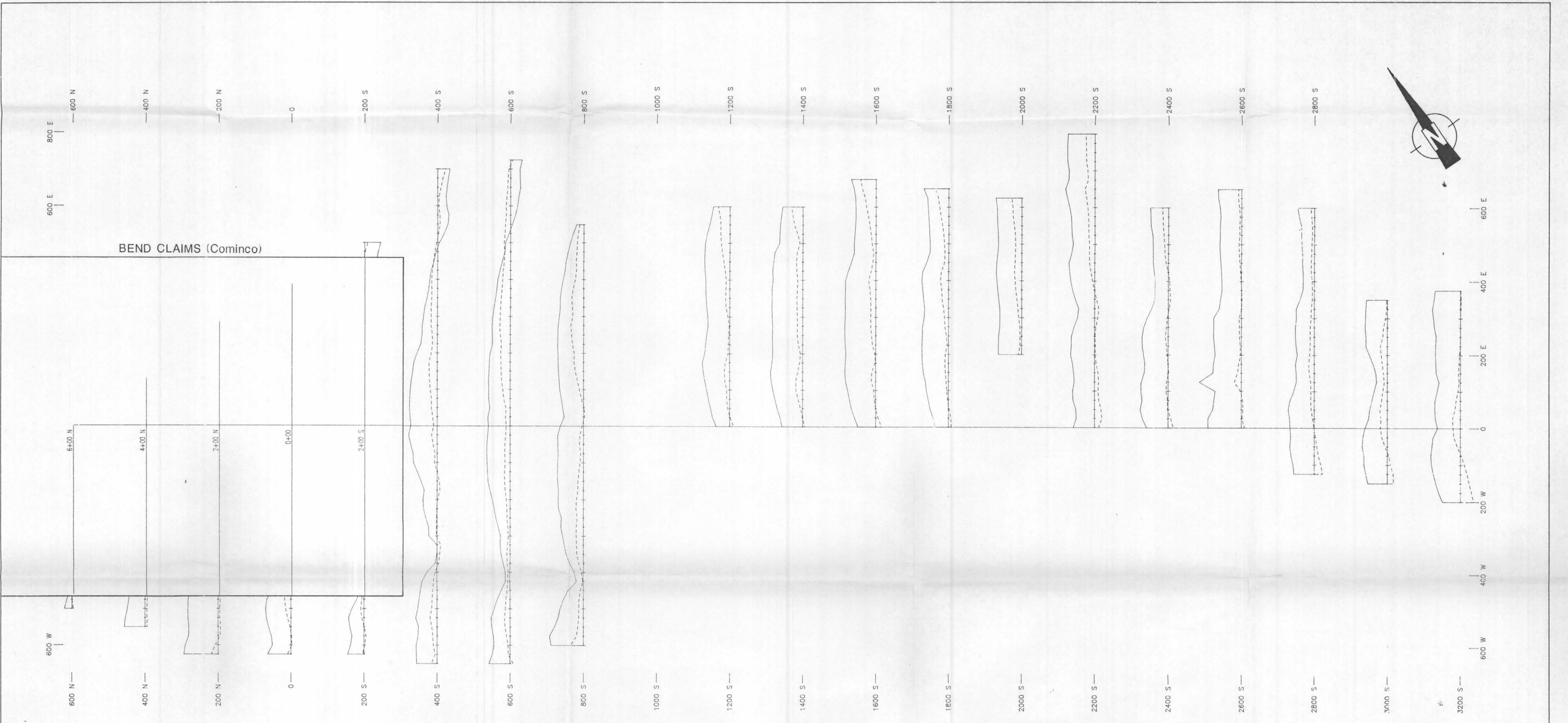
TECK EXPLORATION LTD.

MGM PROJECT

Total Field
Magnetometer Survey



DATE DRAWN: OCT 26, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: K.C.	JOB No: 1703	
DRAWN BY: K.C.S.A.	NTS No: 830/1	



GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,637

30% IN-PHASE
-30% QUADRATURE

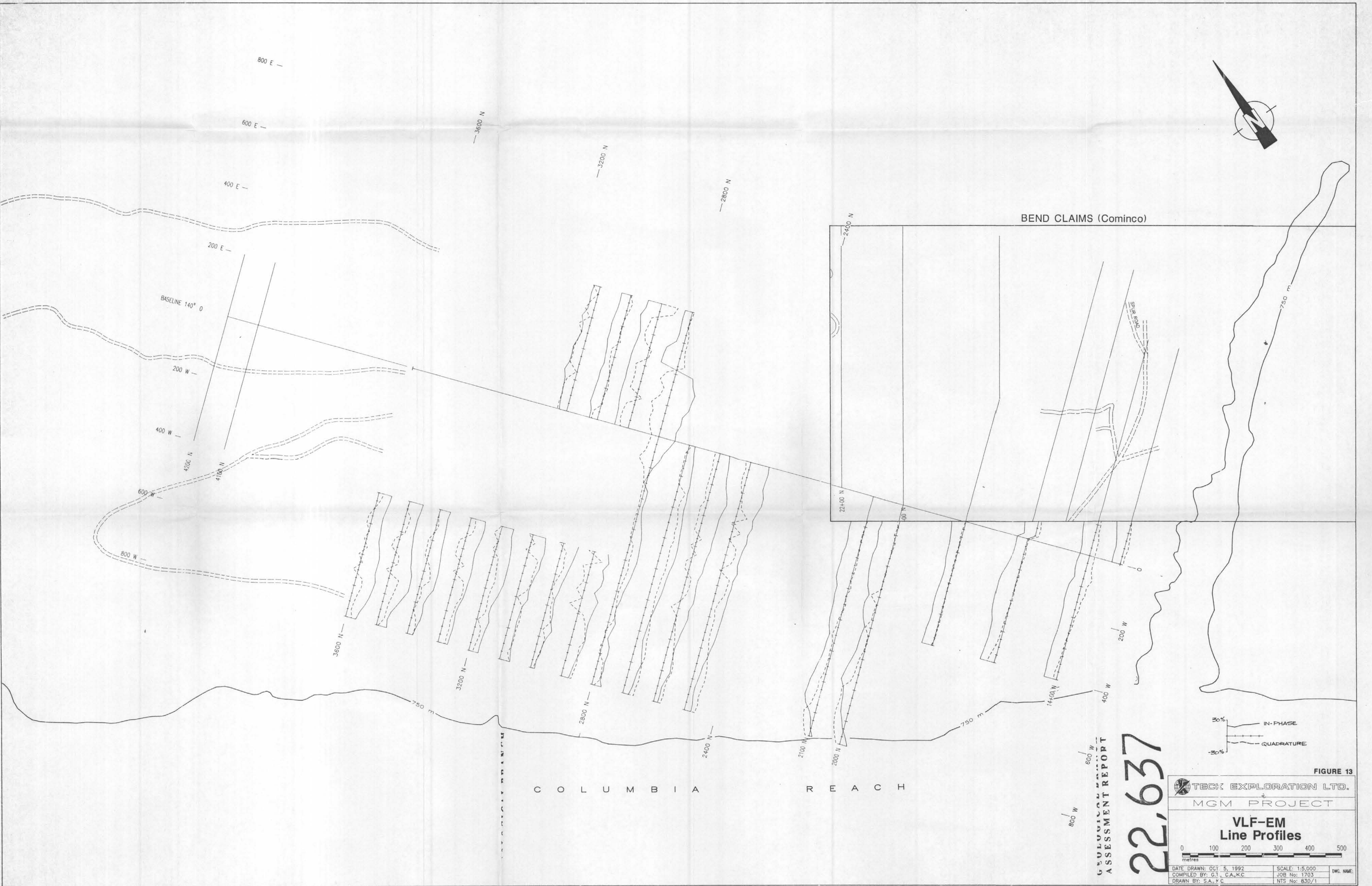
FIGURE 12

TECK EXPLORATION LTD.
MGM PROJECT

**VLF-EM
Line Profiles**

0 100 200 300 400 500
metres

DATE DRAWN: OCT 26, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: K.C.	JOB No: 1703	
DRAWN BY: K.C., S.A.	NTS No: 830/1	



BEND CLAIMS (Cominco)

C O L U M B I A R E A C H

22,637

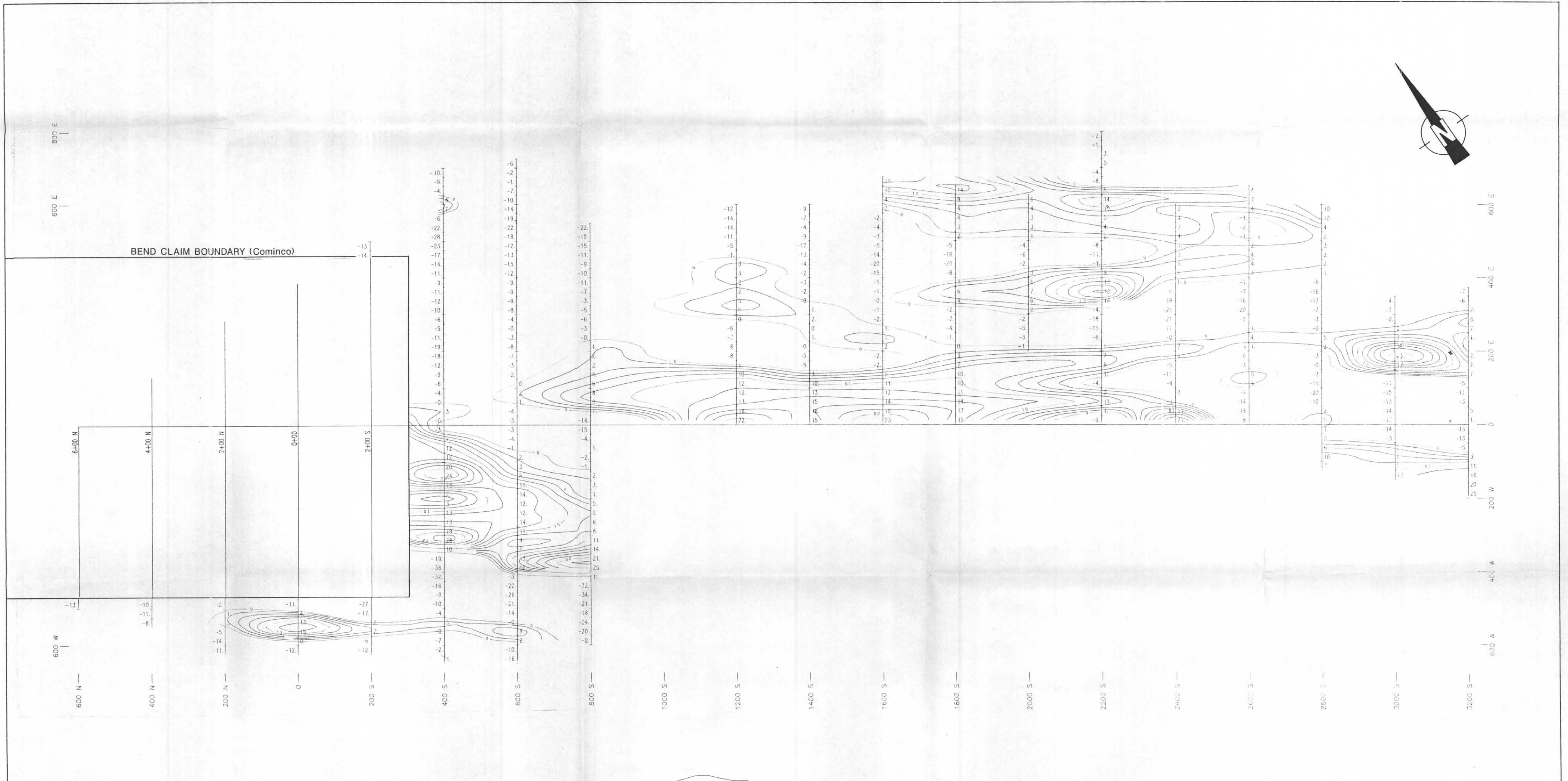
TECK EXPLORATION LTD.
MGM PROJECT

**VLF-EM
Line Profiles**

0 100 200 300 400 500
metres

DATE DRAWN: OCT 5, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: G.I. C.A., K.C.	JOB No: 1703	
DRAWN BY: S.A., Y.C.	NTS No: 830/1	

FIGURE 13



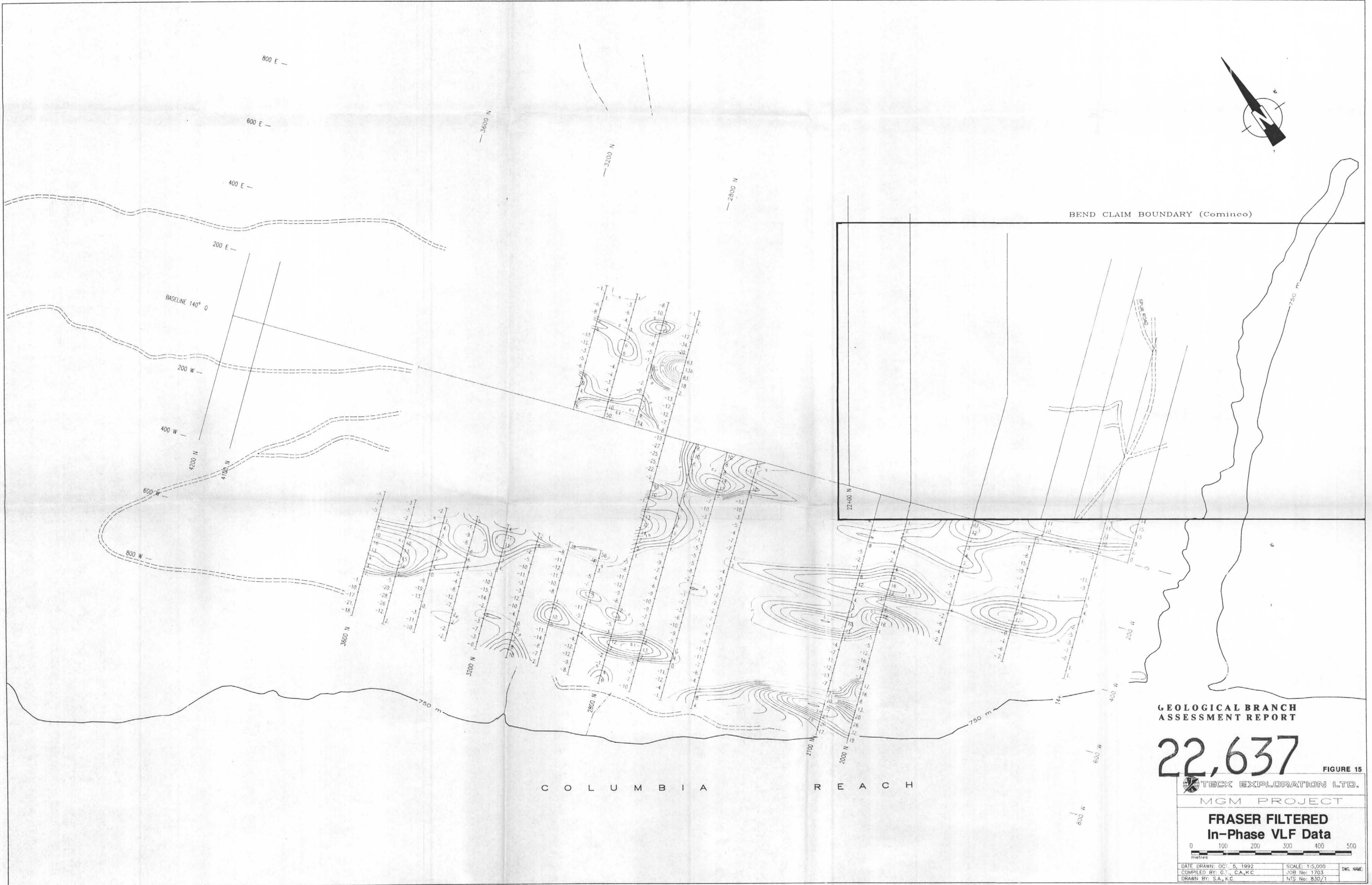
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,637 FIGURE 14

TECK EXPLORATION LTD.
MGM PROJECT
**FRASER FILTERED
In-Phase VLF Data**

0 100 200 300 400 500
metres

DATE DRAWN: OC 26, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: K.C.	JOB No: 1703	
DRAWN BY: K.C. & A.	NTS No: 830/1	



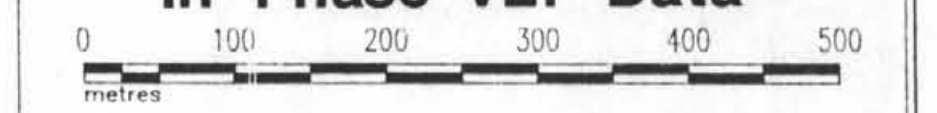
GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,637

FIGURE 15

TECK EXPLORATION LTD.
MGM PROJECT

**FRASER FILTERED
In-Phase VLF Data**



DATE DRAWN: OCT. 5, 1992	SCALE: 1:5,000	DWG. NAME:
COMPILED BY: G.J. CA, K.C.	JOB No: 1703	
DRAWN BY: S.A., K.C.	N/S No: 830/1	

