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GEOLOGICAL, GEOCHEMICAL, AND  
 GEOPHYSICAL REPORT ON THE  
 ICE 1,2,3, AND 4 CLAIM GROUP

SUB-RECORDER RECEIVED	
NOV 9 1990	
M.R. #	\$
VANCOUVER, B.C.	

Skeena Mining Division  
 British Columbia  
 for

SUB-RECORDER RECEIVED	
JAN 25 1991	
M.R. #	\$
VANCOUVER, B.C.	

Navarre Resources Corporation  
 201-744 W. Hastings St.  
 Vancouver, B.C.

by  
 Andris Kikauka, B.Sc., F.G.A.C.

Oct. 25, 1990

GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

20,429

**SUB-RECORDER**  
RECEIVED

JAN 25 1991

M.R. # ..... \$ ..... ITEMIZED COST STATEMENT

VANCOUVER, B.C.

Ice 1, 2, 3, 4 Claim Group- Aug. 1-14, 20-31, 1990

Field crew;

Geologist-	Andris Kikauka 16X350	5,600.00	
Geotechnician-	Ian Rose 16X125	2,000.00	
"	Kent Antoniak 14X125	1,750.00	
"	Chris Antoniak 7X100	700.00	
"	Harry Ball 7X100	700.00	
Driller-	Gene Harris 6X250	1,500.00	
	Shawn Kelly 6X175	1,050.00	
Drillers helper-	Vince Painchaud 6X125	750.00	
	Barry Watt 6X125	<u>750.00</u>	
	sub-total		14,800.00

Geophysical survey contract;

Scott Geophysics Ltd., Vancouver, B.C. 7,750.00

Field costs;

Helicopter charters (V.I.H. Stewart base)	5,770.00
Room and board \$45/day X 84 man days	3,780.00
Lab analysis (Eco-tech labs, Stewart, B.C.)	
121 soil, 33 rock samples	2,000.000
Report writing	<u>1,000.00</u>

total \$35,000.00

## SUMMARY:

The Ice Claim Group consists of four contiguous mineral claims comprising 72 units. The property is situated in the Skeena Mining Division approximately 10 km. north of Stewart, B.C. and 2 km. east of the Silbak-Premier Mine.

The property is underlain by Lower and Middle Jurassic volcanics and sediments of the Unuk River Formation and Betty Creek Formation. This sequence is locally altered by secondary development of quartz-pyrite-sericite. A series of northwest trending Tertiary dykes cut the volcanics, sediments, and alteration zones.

Zones of pervasive quartz-sericite-pyrite are developed across an area of 1.5 by 0.3 km. over the central portion of the Main Grid (Fig. 4). A replacement zone of quartz-pyrite-graphite is developed over the east portion of the Ice B grid (Fig. 4). A trenched rock chip sample from this replacement zone assayed 205.6 g/t Ag across a width of 0.8 m. Soil samples from this area (approximately 150 by 300 m.) returned average values in excess of 20 ppm Ag and 0.1 ppm Au. A quartz-sulphide vein zone located immediately south of the carbonaceous quartz-sulphide replacement zone assayed 2.93 g/t Au, 896.0 g/t Ag, 1.35% Pb, and 7.56% Zn. A diamond drill hole was positioned to cut this zone, but was stopped short of the projected target due mechanical problems. The 99 m. long hole did however intersect quartz-sphalerite-galena in the final 15 cm. of core that assayed 1.79 g/t Au, 343.0 g/t Ag, 9.24% Zn, 0.37% Pb. The contact zone of the vein and replacement zone are targets for high tonnage-low grade and low tonnage- high grade gold-silver deposits.

Another quartz-sulphide vein and replacement zone exist in the southwest corner of the Main Grid. A line of geochemical soil samples returned Ag values up to 199.8 ppm and 1835 ppb Au from this zone.

A geophysical Pulse-EM survey over the Main Grid (Fig. 4) failed to identify defined conductor axes. The survey was conducted over glacial ice testing an obscure quartz-sericite-pyrite alteration zone that extends northwest from the lower elevations to the crest of the Bear River Ridge, where only small 50-100 m. wide exposures of the zone come through the ice.

Previous work in the vicinity of Mt. Shorty Stevenson indicates the presence of high-grade mineralization. Assessment reports give assay values of 7.2 g/t Au, 5,848.2 g/t Ag, 12.6% Pb, 30.2% Zn, across a width of 35 cm. taken from a quartz vein immediately south of Mt. Shorty Stevenson.

The property is relatively close to the mining infrastructure

of the Westmin Gold Project, which includes a 2,000 tpd mill. The presence of quartz-sulphide vein and replacement zones across widths in excess of 200 m. with significant gold-silver-lead-zinc values indicate excellent potential for the discovery of new zones. Coupled with the fact that new exposures of outcrop are constantly appearing from rapidly retreating glacial ice and the claim group is relatively accessible, additional work is recommended.

A follow-up Phase II program of diamond drilling, trenching, and geological mapping is recommended. Approximate cost would be \$225,000.



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## 1.0 INTRODUCTION

This report summarizes geological, geochemical, and geophysical surveys carried out between Aug. 1 and Aug. 31, 1990. The author Mr. A. Kikauka planned and supervised all field work and was project geologist on the subject claims from Aug. 1-14 and Aug. 20-31, 1990.

## 2.0 LOCATION, ACCESS, PHYSIOGRAPHY:

The Ice 1,2,3,4 Claim Group is located 10-15 km. north of the town of Stewart, B.C. along the crest of the Bear River Ridge. The property lies within the Skeena Mining Division on map sheet 104 A/4 W (Fig. 2).

Elevations on the claim group range from 1150 m. to 1950 m. The slopes are moderate to steep on the west slope of the Bear River Ridge and steep on the east side. Approximately half of the claim group is covered by glacial ice and the other half is generally bare with thin overburden/talus cover.

The area of detailed field work is located in the central portion of the Ice 2 and 3 claims.

Access is achieved by helicopter from Stewart. There is an open creek bed free of vegetation that originates at Mt. Shorty Stevenson and can be negotiated by hiking a total horizontal distance of 3.6 km. and a vertical distance of 1.5 km. that ends up directly at the Westmin Mill via Cooper Creek.

## 3.0 PROPERTY STATUS:

The Ice 1,2,3,4 Claim Group consists of four contiguous claims located in the Skeena Mining Division. The claims are owned by Navarre Resources Corp. (Fig. 2).

Claim Name	# of units	Record #	Record date	Expiry date
Ice 1	18	5662	Sept. 5, 86	Sept. 5, 93
Ice 2	18	5663	Sept. 5, 86	Sept. 5, 93
Ice 3	18	5664	Sept. 5, 86	Sept. 5, 93
Ice 4	18	5665	Sept. 5, 86	Sept. 5, 93

The total area of the claim group, allowing for overlap of previous claims, is approximately 1100 hectares.

## 4.0 AREA HISTORY:

The M.C. Showing located 200 m. south of the Ice 4 claim, on the crest of the Bear River Ridge, has been periodically examined. Pyrite-galena-sphalerite-tetrahedrite in a gangue of quartz-carbonate, 5-12 m. long up to 2 m. wide with assay values up to .16 oz/t Au, 550.0 oz/t Ag, 1.47% Cu, 35.15% Pb,

19.18% Zn (Grove, 1971)

The Silbak-Premier Mine located 2.4 km. west of Mt. Shorty Stevenson, includes past production of 1.8 million ounces gold, 40.9 million ounces silver, 83.9 thousand tons copper, lead, and zinc. The old glory hole site is currently being open pit mined by Westmin Res. at a rate of approximately 1000 tons/day. Mineralization occurs as a transgressive vein-replacement-breccia quartz-polymetallic sulphide deposit emplaced in deformed, metasomatized Lower Jurassic epiclastic rocks (Grove, 1970).

Other active exploration and mining is being carried out on many of the 500 gold-silver-base metal prospects and deposits within the Stewart Complex. This area continues to be one of the most active mineral exploration areas of North America as demonstrated by numerous projects being carried out by major and junior mining companies within the "Golden Triangle".

#### **5.0 PROPERTY HISTORY:**

The Minister of Mines, B.C. Annual Report, 1929 states that quartz-carbonate lenses, north and northwest trending steeply dipping veins are found on the Bear River Ridge north of the M.C. Showing in areas just appearing under the ice. In the late 1920's and 1930's diamond drilling and hand trenching were performed on a vein on a ridge immediately south of Mt. Shorty Stevenson. No reports of this work can be located. A 15 inch chip sample across this quartz vein (taken by E.D.Dodson, 1968) assayed 7.2 g/t Au, 5,848.2 g/t Ag, 12.6% Pb, 30.2% Zn (M.P.Stadyck, 1970). A shipment of several hundred pounds of this high-grade material was shipped by helicopter to Stewart.

#### **6.0 GENERAL GEOLOGY:**

The Stewart Complex includes a thick sequence of mainly late Triassic to late Middle Jurassic volcanic, sedimentary, and metamorphic rocks. These have been intruded and cut by a mainly granitic to syenitic suite of Lower Jurassic through Tertiary plutons which together form part of the Coast Plutonic Complex. Deformation, in part related to intrusive activity has produced complex fold structures along the main intrusive contacts with simple open folds and warps dominant along the east side of the complex. Cataclasis marked by strong north-south structures are prominent structural features that cut all the pre-Jurassic units.

Country rocks in the general Stewart area comprise mainly Hazleton Group strata which includes the Lower Jurassic Unuk River Formation and the Middle Jurassic Betty Creek and Salmon River Formation and the Upper Jurassic Nas Formation (Grove,

1971, 1986). In the general Stewart area the Unuk River strata include mainly fragmental andesitic volcanics, epiclastic volcanics and minor and minor volcanic flows. Widespread Aalenian uplift and erosion was followed by deposition of the partly marine volcanoclastic Betty Creek Formation, the mixed Salmon River Formation, and the dominantly shallow marine Nass Formation.

Intrusive activity in the Stewart area has been marked by Lower to Middle Jurassic Texas Creek granodiorite with which the Silbak-Premier, Big Missouri, and many small ore deposits are associated. Younger intrusions include the extensive Hyder Quartz Monzonite and the many Tertiary dyke swarms which form a large part of the Coast Plutonic Complex. Mineral deposits such as the B.C. Molybdenum mine at Alice Arm and a host of smaller deposits are localized in or related to these 48 to 52 m.y. plutons which include dykes forming part of the regionally extensive Portland Canal Dyke Swarm (Grove, 1986).

#### Stewart District Mineral Deposits

More than 700 mineral deposits and showings have now been discovered in a large variety of rocks and structural traps in the Stewart District. The famous Silbak-Premier mine which has been reactivated as an open pit operation by Westmin Resources represents a telescoped epithermal gold-silver-base metal deposit localized along a complex, steep fracture system in Lower Jurassic volcanoclastics overlain by shallow dipping Middle Jurassic sedimentary rocks. In this example, the shallow dipping younger rock units formed a dam, trapping bonanza type gold-silver mineralization at a relatively shallow depth. Mineralization at the Silbak-Premier, Big Missouri, and a number of other deposits in the area have been related to early Middle Jurassic regional plutonic events (Grove, 1971, 1986). Younger high grade mineralization found localized in various members of the Portland Canal Dyke Swarm, particularly in the Stewart area, have also been related to the Cretaceous and Tertiary plutonic-volcanic events. Overall at least four major episodes of mineralization involving gold-silver, base metals, molybdenum and tungsten dating from early Lower Middle Jurassic through to Tertiary have been recorded throughout the Stewart Complex.

### **7.0 1990 FIELD PROGRAM**

#### **7.1 SCOPE AND PURPOSE**

From August 1-14, 1990, a geologist, geophysicist and 3 geotechnicians carried out geological mapping, soil sampling and a Pulse-EM horizontal loop survey. From Aug. 20-31, 1990, a geologist, and 3 geotechnicians carried out mapping, sampling, trenching and drill site preparation. From Aug. 26-31, 1990 4

drillers performed core drilling.

The purpose of this program was:

- a) to cover the property with detailed geological, geochemical, and geophysical surveys in order to evaluate mineral deposits.
- b) to evaluate the physical parameters of mineralization.
- c) systematically sample mineralization.

## 7.2 METHODS AND PROCEDURES

Utilizing a compass and hip chain a flagged grid was established over the central portion of the Ice 2 claim. The grid area covered an area 1.5 by 1.0 km. The lines perpendicular to the baseline were spaced at 100 m. A total of 16 km. of line grid was surveyed on the Main Grid (Fig. 4). A second grid covers the central portion of the Ice 3 claim and is centered on the peak of Mt. Shorty Stevenson, elevation 1950 m. Lines were spaced at 50 m. and coverage was restricted to areas free of snow and ice. A total of 3 km. line grid was surveyed on the Ice B Grid.

Using a grub hoe, soil samples were collected from talus fines. Sample depths averaged 25 cm. A total of 95 soil samples were collected from the Ice B Grid and 26 soil samples were taken from the Ice Main Grid.

The geophysical survey on the Main Grid covered an area 800 by 700 m. Readings were taken at 25 m. intervals along the grid lines. The horizontal loop was placed outside of the grid survey area to better assess the vertical component of the primary pulse as well as secondary magnetic field. The equipment used was a 2000 watt Crone Transmitter and Crone Digital Receiver.

An Atlas Copco Cobra was used to drill trench holes using 70% forcite to blast trench sites. A total of 28 rock chip samples, averaging 2 kg., were collected on the grid areas (Fig.5). Rock samples were assayed for Au, Ag and geochemically analyzed for 30 elements using ICP. All soil samples were geochemically analyzed for Au and 30 elements using ICP. The analysis was performed by Eco-Tech Labs, Stewart and Kamloops, B.C. Their lab procedures are given in the appendix.

A Boyles B-20 diamond drill was mobilized to a site 170 m. southwest of Mt. Shorty Stevenson. The drill was set up on a talus slope near the edge of a glacier.

## 8.0 RESULTS

### 8.1 GEOLOGY AND MINERALIZATION

Geological mapping of the Ice 1,2,3,4 Claim Group indicates

that the Lower Jurassic Unuk River Formation (consisting of green, red, and purple volcanic breccias, conglomerate, sandstone, and siltstone) form a moderately west dipping homocline. Middle Jurassic volcanics of the Betty Creek Formation occurs on the peak of Mt. Shorty Stevenson and can be traced northwest. This sequence locally forms a rhyolite breccia (at Monitor Lake 2 km. northwest of Mt. Shorty Stevenson). Middle Jurassic Texas Creek granodiorite occurs on the east edge of the claim group. Tertiary dykes of intermediate composition cut all of the above units.

A northwest trending belt of mineralized, deformed volcanoclastics occurs in the central portion of the Ice 2 claim. This deformation follows a major shear zone that can be traced from the confluence of Bear R. and Bitter Ck. to Monitor Lake. As a result a 100-200 m. wide band of pyritic, bleached altered rock can be traced intermittently for approximately 1 km. through the Ice 2 claim (Fig.6). Adjacent, parallel shear zones contain erratic quartz-carbonate sulphide lenses that contain significant gold-silver values. One such zone was identified at 10+00S 4+50W, grid coordinates of the Main Grid. The width of mineralization varied from 0.3 to 1.0 m. and trended NNW with a steep west dip. Yick  
30

A relatively large scale quartz-sulphide replacement zone occurs over the middle lower portion of the Ice 3 claim. This zone is centered 300 m. southeast of Mt. Shorty Stevenson. The main zone gave soil geochemical values that averaged over 20 ppm Ag and 100 ppb Au. This zone covers an area of 200 by 250 m. Mineralization in this zone consists of grey-black coloured quartz, disseminated and vein pyrite, graphite, sphalerite, galena, and tetrahedrite. A 0.7 m. wide quartz-sulphide vein within this zone assayed 2.93 g/t Au, 896.0 g/t Ag, 1.35% Pb, 7.56% Zn. The grey-black quartz within the replacement zone is due to fine grain carbonaceous material forming up to 1% of the rock. The relatively unaltered rock at the edge of this zone consists of red, green, and brown coloured sandstone, siltstone, and volcanic breccia of the Unuk River Formation. This relatively thick and contorted formation is unconformably overlain by the relatively well preserved and locally thin Betty Creek Formation. The Betty Creek consists of rhyolite to andesite composition volcanic tuffs and flows with minor sandstone, siltstone, and chert. This relatively flat lying unit contrasts the contorted Unuk River Formation suggesting that Middle Jurassic plutonism (Texas Creek granodiorite) was responsible for warping the Unuk R. Fm. Well preserved primary flow and ash fall textures are present in the Betty Creek Fm. whereas very little original texture is preserved in the Unuk R. Fm. Mineralization on the claim group is hosted by the Unuk R. Fm. immediately below the unconformity of the overlying Betty Creek Fm. 14  
38

Detailed examination of mineralization reveals 3 distinct styles of sulphide-quartz distribution and emplacement:

- 1) Structurally controlled quartz-sulphide veins occurring along shear zones across widths of 0.1 to 2.0 m.
- 2) Quartz-sulphide replacement zones silicification and pyrite developed across widths of 100 to 300 m.
- 3) Bleached country rock with secondary sericite, quartz, and pyrite developed adjacent to zones of cataclasis.

Trenching and rock chip channel sampling of the 3 types of mineralization revealed higher gold and silver values were obtained in the quartz-sulphide vein. The observed veins appear to increase their frequency and width in areas where faults interact with quartz-sulphide replacement zones, i.e. where mineral type 1) intersects type 2). Trenching results confirm an increase of gold and silver values in the quartz-sulphide veins adjacent to the quartz-sulphide replacement zone 300-500 m. southeast of Mt. Shorty Stevenson.

## 8.2 GEOCHEMISTRY

Geochemical samples listed in appendix C are talus fines, i.e. weathered C horizon. Little or no soil is developed above 1200 m. elevation. Sampling in this program was done at 1500-1900 m. elevation. Different styles of mineralization gave specific geochemical signatures; 1) Quartz-sulphide vein zones gave erratic, above average gold and silver values up to 1835 ppb Au and 199.8 ppm Ag, with above average Cu, Pb, Zn values and spot highs of As (up to 1120 ppm), Sb (up to 95 ppm). The quartz-sulphide replacement zone gave relatively consistent above average metal values with exceptionally high Ag values. An area approximately 150 by 300 m. contained average silver values of 20 ppm located 300-500 m. southeast of Mt. Shorty Stevenson. Relatively high Pb-Zn values were associated with this silver zone. The geochemical anomaly is directly related to the presence of sphalerite-galena-tetrahedrite mineralization that was observed in the geological mapping.

The bleached quartz-sericite-pyrite zone located at the center of the Ice Main Grid returned relatively low Cu-Pb-Zn-Ag-Au values with somewhat elevated As (up to 545 ppm).

## 8.3 GEOPHYSICS

A Pulse-EM survey was performed to test for conductive sulphide zones along a major shear zone approximately 1.5 km. north of Mt. Shorty Stevenson. This zone was located by following the mineral trend within the Rock of Ages crown granted claims located 0.7 km. east of Mt. Shorty Stevenson, and carries on through to Monitor Lk. 2.5 km. northwest of Mt. Shorty Stevenson. The advantage of the Pulse-EM system is the ability of this survey to scan underneath the glacial ice. An area 0.8



by 0.7 km. was surveyed on the Ice Main Grid between L3+00S and 5+00N. This area is approximately 90% ice. The hub of this grid was located on a rock island within the glacier. This outcrop (approximately 50 by 150 m.) consists of bleached, altered rock with abundant sericite, silica, and pyrite.

The objective of the survey was to test extension of the known mineral trend and to identify conductive zones near the alteration zone located near the center of the survey area.

The parameters of the survey are given in appendix A. A total of 4.525 km. of line grid was surveyed at 25 m. station intervals. The horizontal loop for this area covered a perimeter of 400 by 800 m. immediately east of the surveyed portion of the grid. The location of the loop outside of the survey area would enhance reception of vertical conductors.

A change from negative to positive readings indicate a conductive response. The 12 channel readings give an extra dimension to the interpretation of strength and attitude of the conductive zone.

There is a general channel 1 response, i.e. change from negative to positive, at stations 2+75E to 3+75E between L4+00N and L3+00S. This corresponds to the east edge of the grid where there is a lithological boundary within the Betty Ck. Fm. i.e. rhyodacitic tuffs/flows are overlain by an argillaceous siltstone. There is a minor amount of carbonaceous material and graphite within the sediments which probably account for the weak conductive response. The survey failed to identify any conductive zones under the glacier.

The survey was originally planned to cover the southern portion of the Main Grid and the Ice B Grid however the steep terrain and glacial ice proved too difficult for this type of survey. An airborne EM survey could cover these areas.

#### **8.4 DIAMOND DRILLING**

A proposal of drilling 3 holes from a setup 150 m. south of Mt. Shorty Stevenson was stopped short due to mechanical problems with the drill. The objective was to intersect the quartz-sulphide replacement-vein zone located 200 m. horizontally and 140 m. vertically from the drill collar. Projected to cut this zone at 200-275 m. depth, only a 99 m. depth was attained. Two other holes were planned to cut mineralized shear zones that are part of the same zone.

The 99 m. drill hole intersected 2 mineral zones within a sequence of Lower Jurassic volcanics and sediments. The final 15 cm. of this hole intersected carbonaceous quartz gangue with disseminated sphalerite and traces of fine grain galena. This

core assayed 1.79 g/t Au, 343.0 g/t Ag, 9.24% Zn, 0.37% Pb.

## 9.0 CONCLUSION

The author believes that the Ice Claim Group has potential for hosting an economic Ag-Au-Zn-Pb deposit for the following reasons:

- 1) Rock samples from trenches returned significant silver, gold, zinc, and lead values. Geological mapping identified replacement and vein mineralization across significant widths and strike length.
- 2) Three distinct episodes of mineral emplacement created a quartz-sulphide vein-replacement network of zones that contain relatively high concentrations of precious metals. The quartz-sulphide zones occur adjacent to shear zones. In areas of complex cross cutting episodes of mineralization there is a significant potential for a large system of sulphides to occur at depth.
- 3) Soil sampling indicates relatively high Ag-Au-Zn-Pb values over the east portion of the Ice B Grid and the southwest portion of the Main Grid.
- 4) The claim group contains relatively large quartz-sulphide replacement and alteration zones that were probably emplaced in the Mid-Jurassic. The age of emplacement coincides with the age of ore at the Silbak-Premier which is located a relatively short distance from the Ice Claim Group.
- 5) High grade silver and gold ore is reported in previous reports on the property.
- 6) Although stopped short, diamond drilling intersected significant Ag-Au-Zn values.
- 7) The nearby producing mines have a well established mining and milling infrastructure which is relatively accessible.

For these reasons further exploration work is warranted.

## 10.0 RECOMMENDATIONS

- a) A fence pattern of diamond drill holes to test the depth extension of surface trenching. A series of 100-250 m. drill holes at 50 m. spacing could be collared 50-100 m. southwest of the quartz-sulphide replacement-vein zone in the east portion of the Ice B Grid. Angle holes could be directed northeast to intersect this zone (Fig. 7). A total of 950 m. of core drilling is recommended.
- b) Detailed geological mapping in the area of the drill program. Regional mapping and prospecting to cover entire claim group.
- c) Airborne EM geophysical survey to test conductive zones in the vicinity of Mt. Shorty Stevenson.

d) Further trenching to test extensions of known showings and exposures of new zones.

## 11.0 PROPOSED BUDGET

Mob/demob, project preparation	\$ 8,000
Field Crew	24,000
Field costs	18,000
Helicopter charters	20,000
Geophysics	10,000
Diamond drilling	95,000
Lab analysis	14,000
Trenching	4,000
Report	2,000
Administration	30,000
	<hr/>
total	225,000

Respectfully submitted;



Andris Kikauka, B.Sc., F.G.A.C.

Oct. 25, 1990

**REFERENCES:**

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Standyk, M.P., 1970, Report on Geochemical and Geophysical Surveys on the Mineral Lease 224, Mt. Shorty Stevenson. Min. of E.M.&P. Res., Assessment Report # 2754.

## STATEMENT OF QUALIFICATIONS

I, Andris Kikauka, do hereby declare that;

- I graduated from Brock University, Faculty of Geological Sciences, St. Catharines, Ontario, 1979, receiving Honours B.Sc., First Class.
- From 1976-79 have performed geological fieldwork for uranium on the Canadian Shield.
- From 1979-90 have performed geological fieldwork for precious metal and base metal on the cordillera of Western Canada.
- I am a fellow in good standing with the Geological Association of Canada.
- Personally participated in the field work of this report, reviewed and assessed the data.
- I have no direct interest in the subject claims or the securities of Navarre Resources Corp.
- I consent to the use of this report in a Prospectus of material facts for the purpose of private or public financing.



Andris Kikauka, B.Sc., F.G.A.C.

Oct. 25, 1990

BRITISH COLUMBIA

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1 : 7 500 000

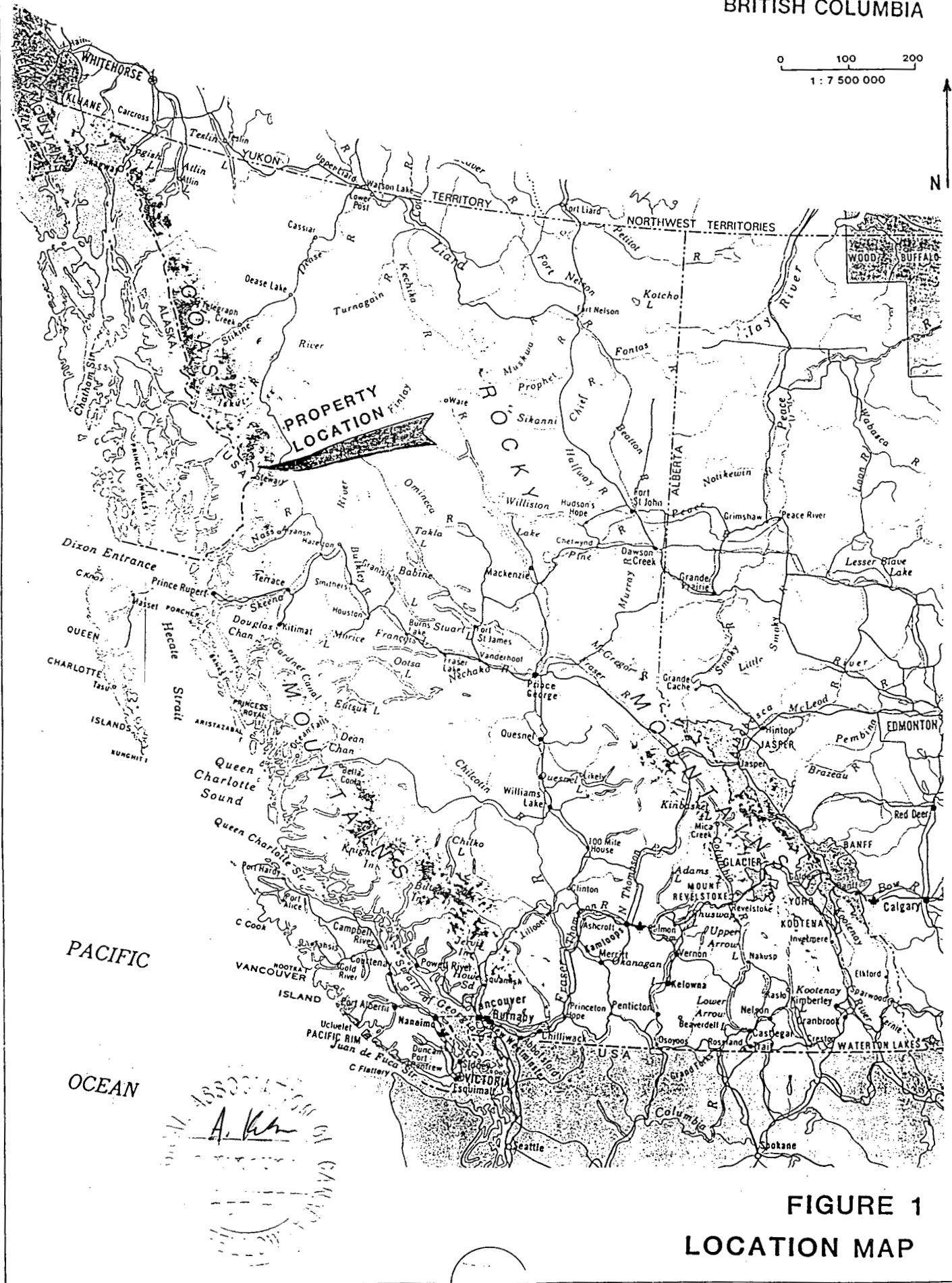


FIGURE 1  
LOCATION MAP

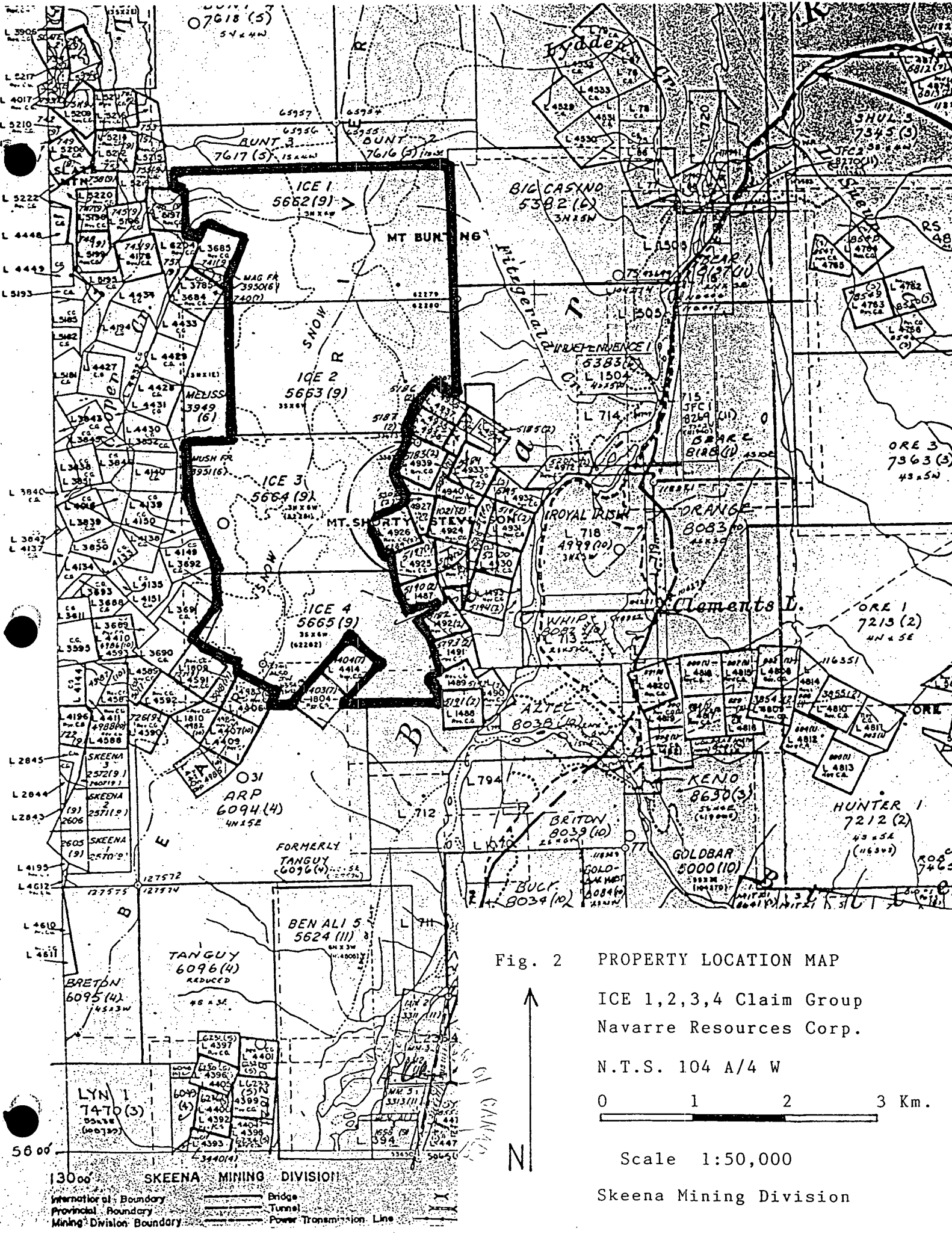


Fig. 2 PROPERTY LOCATION MAP  
 ICE 1,2,3,4 Claim Group  
 Navarre Resources Corp.  
 N.T.S. 104 A/4 W  
 0 1 2 3 Km.  
 Scale 1:50,000  
 Skeena Mining Division



Crown Grants

ICE 1  
ICE 2

ICE 2  
ICE 3

Axis of Bear R. Ridge

Crown Grants

Mt. Shorty Stevenson

I-90-1  
-55



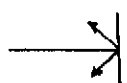
ICE 3  
ICE 4

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,429

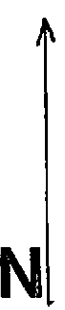
A. K. W.

DIAMOND DRILL HOLE-SOIL SAMPLE LOCATIONS FIG. 3  
Navarre Resources Corp. Aug., 1990

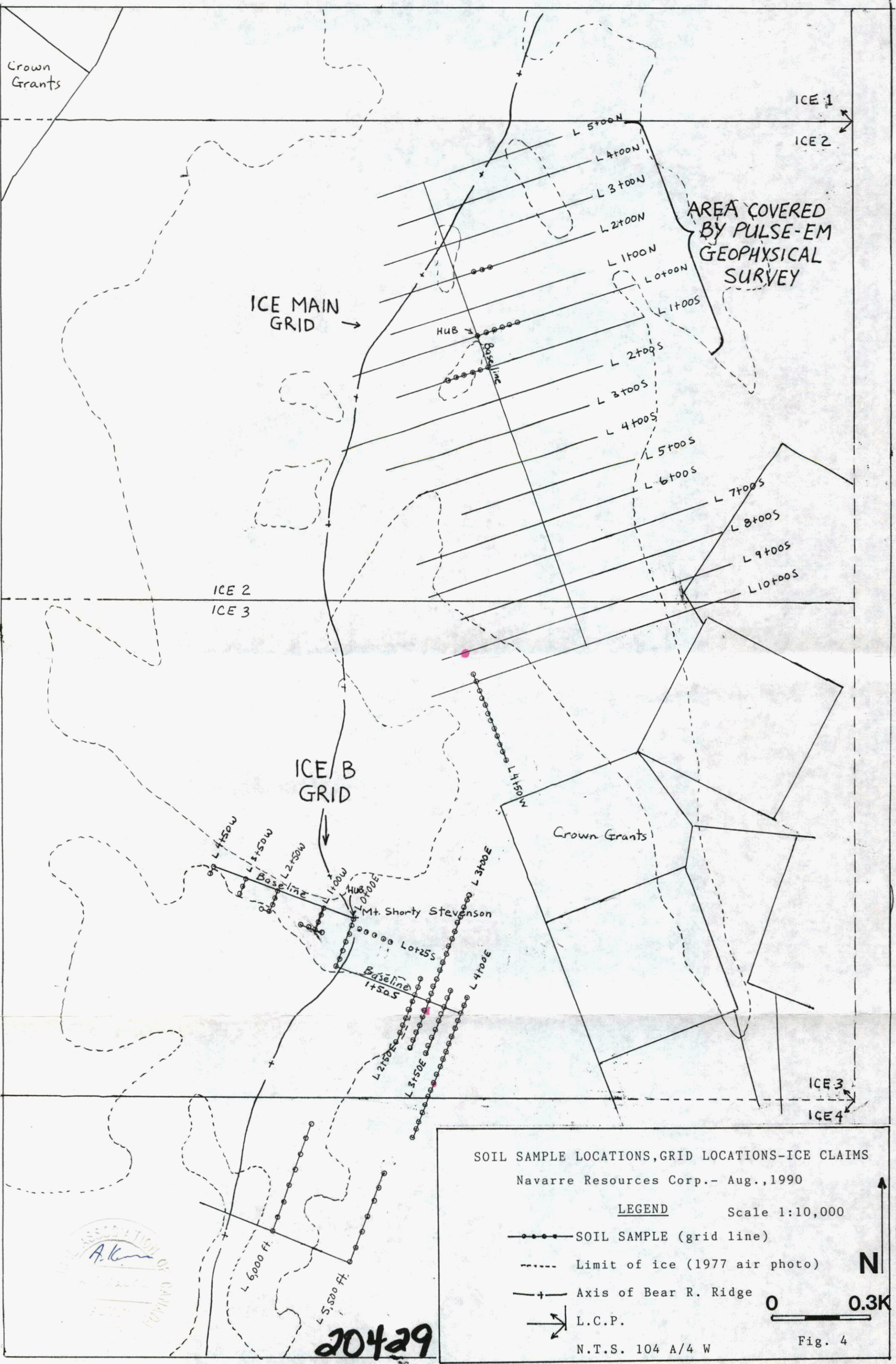
-  Diamond drill hole
-  Soil sample
-  L.C.P.

0 0.1 0.2 0.3 km

Scale 1:10,000







SOIL SAMPLE LOCATIONS, GRID LOCATIONS-ICE CLAIMS  
 Navarre Resources Corp.- Aug., 1990

LEGEND

Scale 1:10,000

- SOIL SAMPLE (grid line)
- Limit of ice (1977 air photo)
- +— Axis of Bear R. Ridge
- L.C.P.

0 0.3K

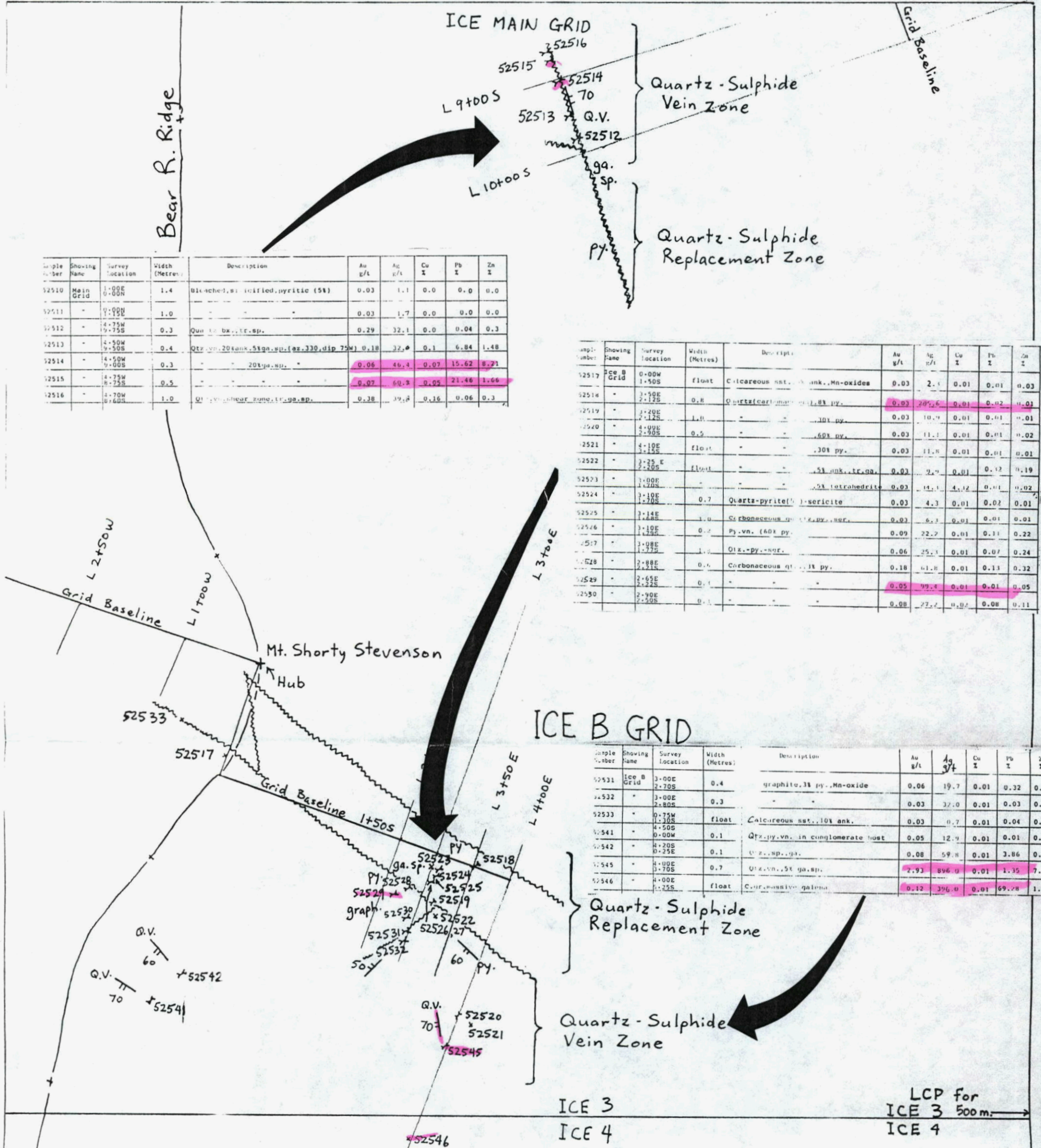
Fig. 4

N.T.S. 104 A/4 W

20429







Sample Number	Showing Name	Survey Location	Width (Metres)	Description	Au g/t	Ag g/t	Cu %	Pb %	Zn %
52510	Main Grid	3-00E 0-00N	1.4	bleached, silicified, pyritic (5%)	0.03	1.1	0.0	0.0	0.0
52511	"	3-00E 0-00N	1.0	"	0.03	1.7	0.0	0.0	0.0
52512	"	4-75W 0-75S	0.3	Quartz vein, tr. sp.	0.29	32.1	0.0	0.04	0.3
52513	"	4-50W 0-50S	0.4	Qtz. vn. 20% ank. 5% ga. sp. (az. 330, dip 75W)	0.18	32.0	0.1	6.84	1.48
52514	"	4-50W 0-00S	0.3	" 20% ga. sp. "	0.06	46.4	0.07	15.62	8.71
52515	"	4-75W 0-75S	0.5	"	0.07	69.3	0.05	21.46	1.66
52516	"	4-70W 0-60S	1.0	Qtz. vn. linear zone, tr. ga. sp.	0.38	39.2	0.16	0.06	0.3

Sample Number	Showing Name	Survey Location	Width (Metres)	Description	Au g/t	Ag g/t	Cu %	Pb %	Zn %
52517	Ice B Grid	0-00W 1-50S	float	Calcareous sst., ank., Mn-oxides	0.03	2.1	0.01	0.01	0.03
52518	"	3-50E 2-12S	0.8	Quartz (carbonaceous), 8% py.	0.03	70.2	0.01	0.02	0.01
52519	"	3-20E 2-12S	1.0	" 10% py.	0.03	10.9	0.01	0.01	0.01
52520	"	4-00E 2-90S	0.5	" 60% py.	0.03	11.1	0.01	0.01	0.02
52521	"	4-10E 1-15S	float	" 30% py.	0.03	11.8	0.01	0.01	0.01
52522	"	3-25 E 2-20S	float	" 5% ank. tr. ga.	0.03	9.9	0.01	0.12	0.19
52523	"	3-10E 1-20S	"	" 5% tetrahedrite	0.03	14.1	4.12	0.01	0.02
52524	"	3-10E 1-20S	0.7	Quartz-pyrite (1) -sericite	0.03	4.3	0.01	0.02	0.01
52525	"	3-14E 1-48S	1.0	Carbonaceous quartz, py., ser.	0.03	6.3	0.01	0.01	0.01
52526	"	3-10E 1-25S	0.2	Py. vn. (60% py.)	0.09	22.7	0.01	0.11	0.22
52527	"	3-08E 1-77S	1.0	Qtz.-py.-ser.	0.06	25.1	0.01	0.07	0.24
52528	"	2-88E 2-51S	0.6	Carbonaceous quartz, py.	0.18	41.8	0.01	0.13	0.32
52529	"	2-65E 2-22S	0.1	"	0.05	99.4	0.01	0.01	0.05
52530	"	2-90E 2-50S	0.1	"	0.08	27.2	0.01	0.08	0.11

Sample Number	Showing Name	Survey Location	Width (Metres)	Description	Au g/t	Ag g/t	Cu %	Pb %	Zn %
52531	Ice B Grid	3-00E 2-70S	0.4	graphite, 3% py., Mn-oxide	0.06	19.7	0.01	0.32	0.57
52532	"	3-00E 2-80S	0.3	"	0.03	32.0	0.01	0.03	0.08
52533	"	0-75W 1-30S	float	Calcareous sst., 10% ank.	0.03	0.7	0.01	0.04	0.03
52541	"	4-50W 0-00W	0.1	Qtz.-py. vn. in conglomerate host	0.05	12.9	0.01	0.01	0.01
52542	"	4-20S 0-25E	0.1	Qtz.-sp.-qtz.	0.08	59.8	0.01	3.86	0.6
52545	"	4-00E 1-70S	0.7	Qtz. vn., 5% ga. sp.	2.93	896.0	0.01	1.35	7.56
52546	"	4-00E 1-25S	float	Carbonaceous galena	0.12	396.0	0.01	69.28	1.44

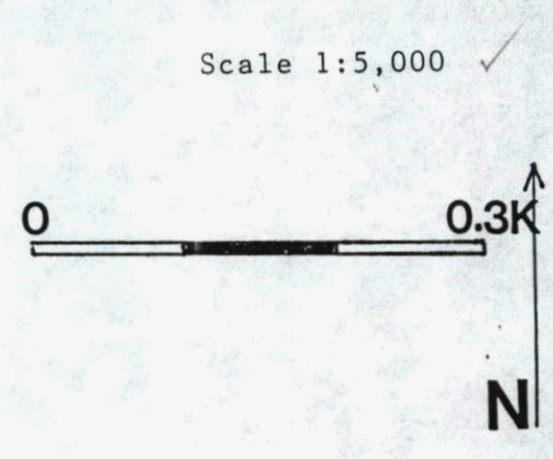
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,429**

A. Kinn  
NICHOLSON SUPERVISOR  
NAVARRA COUNTY  
TARRANT, TEXAS

TRENCH LOCATIONS, CHANNEL SAMPLE LOCATIONS  
Ice Claim Group- Navarre Resources Corp., Aug., 1990

- LEGEND**
- x Float sample
  - x Trench sample
  - ~~~~ Fault
  - Vein
  - Q.V. Quartz vein
  - py. Pyrite
  - ga. Galena
  - sp. Sphalerite
  - graph. Graphite





Crown Grants

ICE 1  
ICE 2

Fig. 6 CLAIM GEOLOGY- ICE CLAIM GRP.  
Navarre Resources Corp.- Aug., 90

LEGEND

Intrusive Rocks (Tertiary)

3a Dacitic dykes, 1-5% hornblende

Sediments and Volcanics (Lower and middle Jurassic)

2d Rhyolite-dacite mixed tuff

2c Argillaceous siltstone, sandstone

2b Andesite-dacite tuffs/flows

2a Rhyodacite, tuffs/flows, chert

1d Bleached, altered country rock, secondary silica, sericite, diss. and vein sulphides

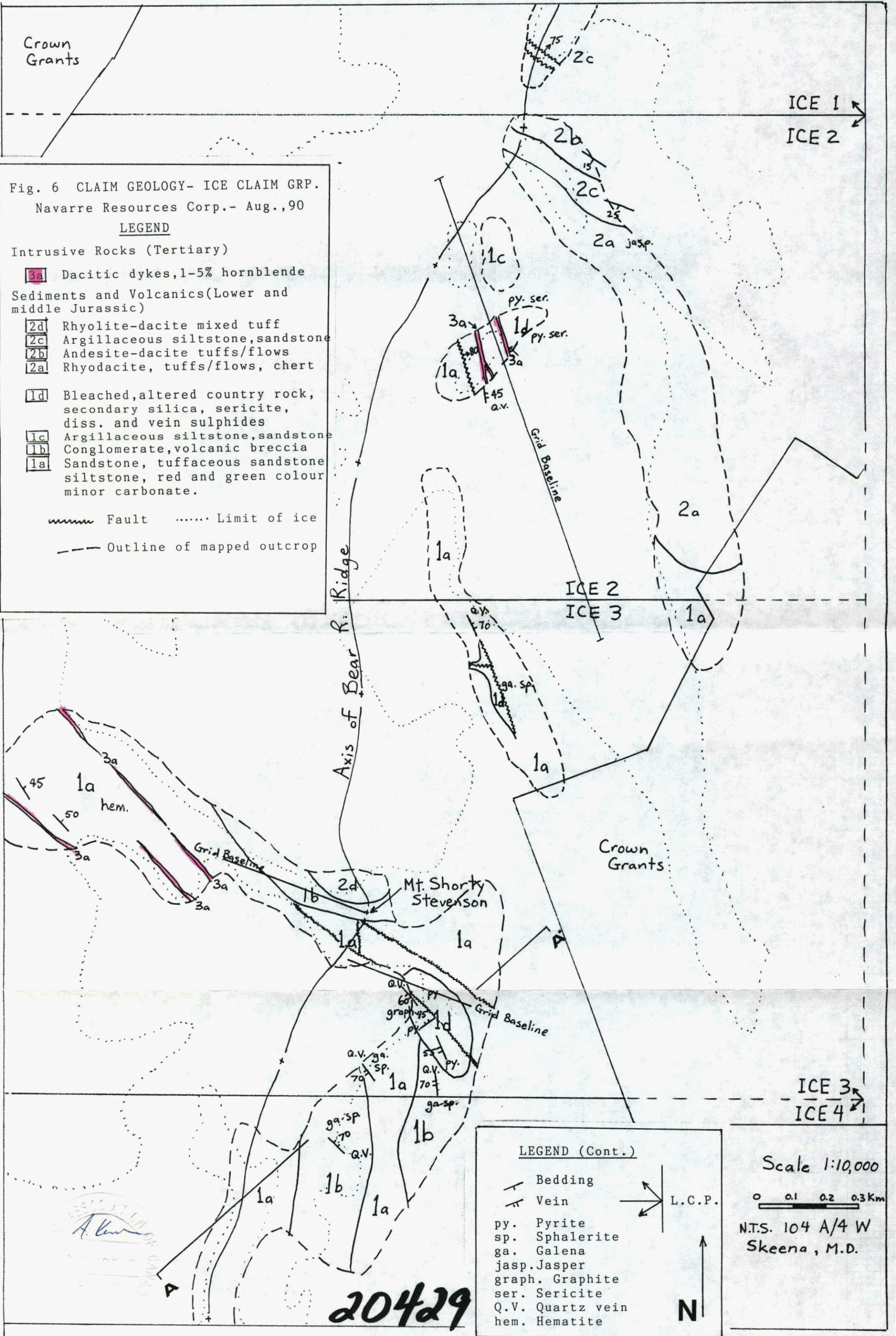
1c Argillaceous siltstone, sandstone

1b Conglomerate, volcanic breccia

1a Sandstone, tuffaceous sandstone siltstone, red and green colour minor carbonate.

~~~~~ Fault      ..... Limit of ice

----- Outline of mapped outcrop



LEGEND (Cont.)

— Bedding

— Vein

py. Pyrite

sp. Sphalerite

ga. Galena

jasp. Jasper

graph. Graphite

ser. Sericite

Q.V. Quartz vein

hem. Hematite

L.C.P.

N

Scale 1:10,000

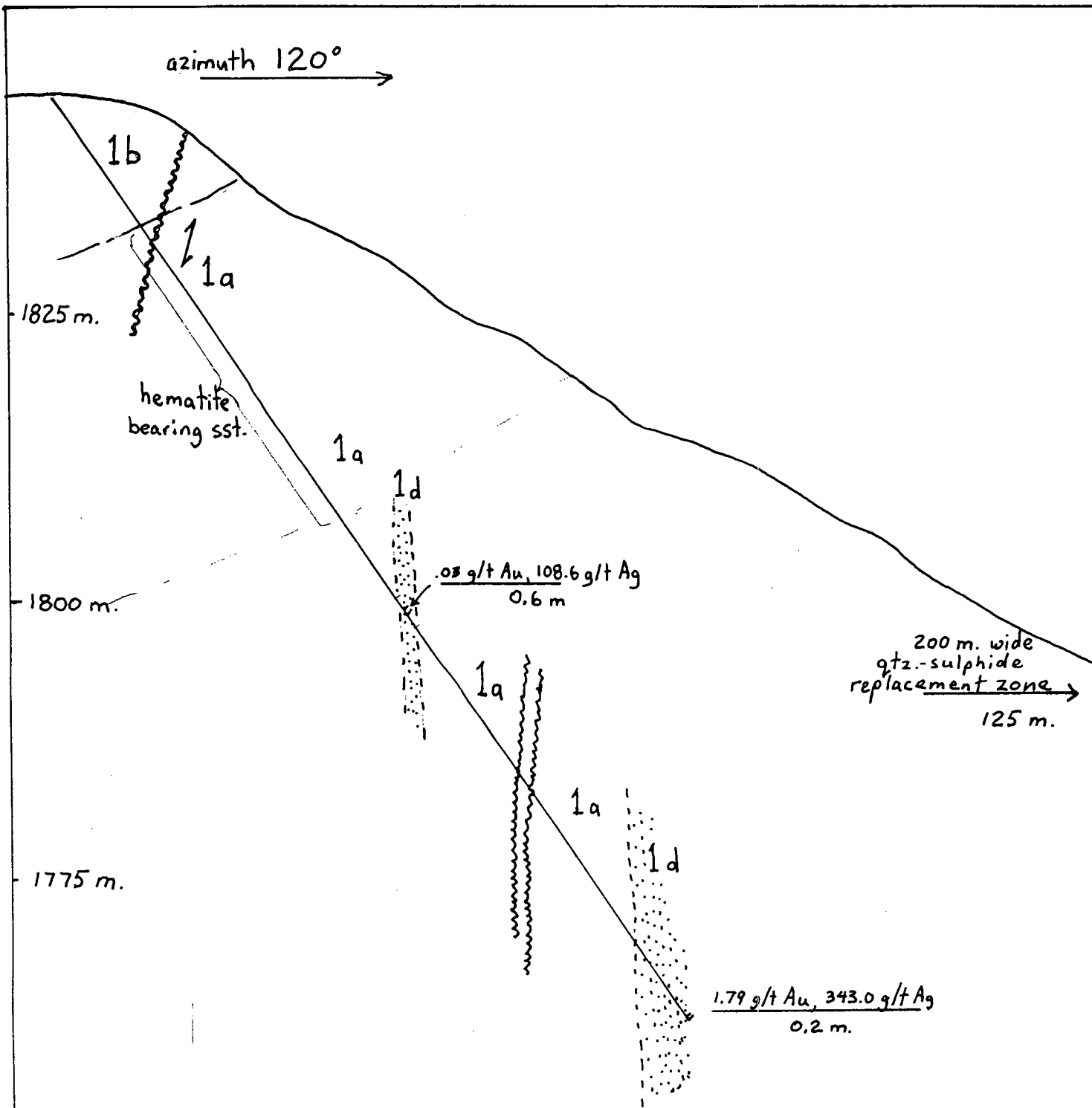
0 0.1 0.2 0.3 Km

N.T.S. 104 A/4 W  
Skeena, M.D.

20429

ASSOCIATION OF  
A. L...








Diamond Drill Hole Cross Section - Ice Claim Group - I-90-1  
 Navarre Res. Corp. - Aug., 1990



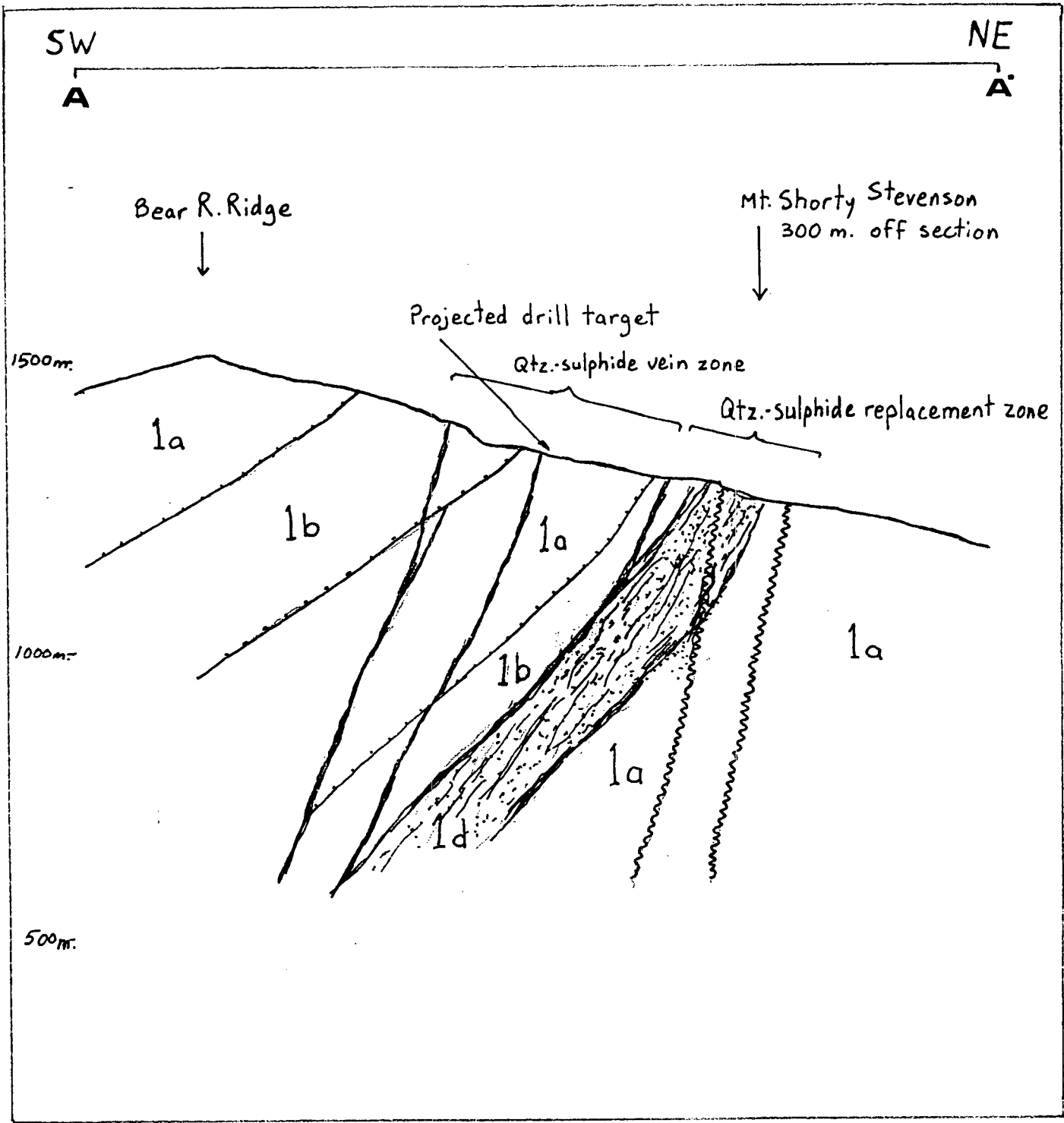
Scale 1:500

Legend





-  Foliation
-  Fault
-  Disseminated sulphides

*A. Kuhn*  
 DATE

Fig. 7



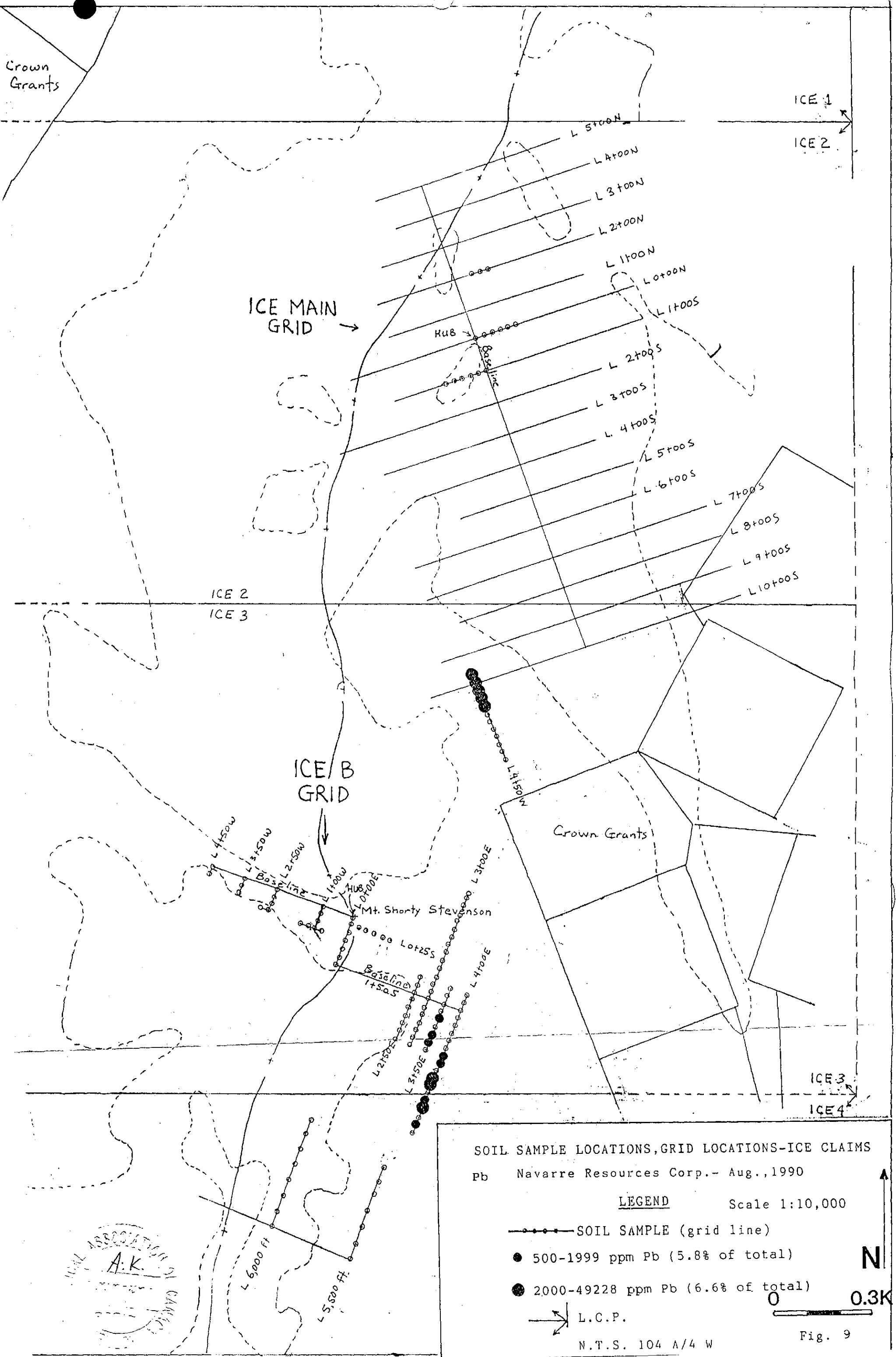
SW-NE CROSS-SECTION 300 m. SE OF MT. SHORTY STEVENSON

- Legend
-  Lithological contact
  -  Qtz.-sulphide vein
  -  Disseminated sulphides
  -  Fault

*A. K. ...*  
*...*

0 0.1 0.2 0.3 K  
 Scale 1:10,000

Fig. 8



SOIL SAMPLE LOCATIONS, GRID LOCATIONS-ICE CLAIMS

Pb Navarre Resources Corp.- Aug., 1990

LEGEND

Scale 1:10,000

—●— SOIL SAMPLE (grid line)

● 500-1999 ppm Pb (5.8% of total)

● 2000-49228 ppm Pb (6.6% of total)

→ L.C.P.

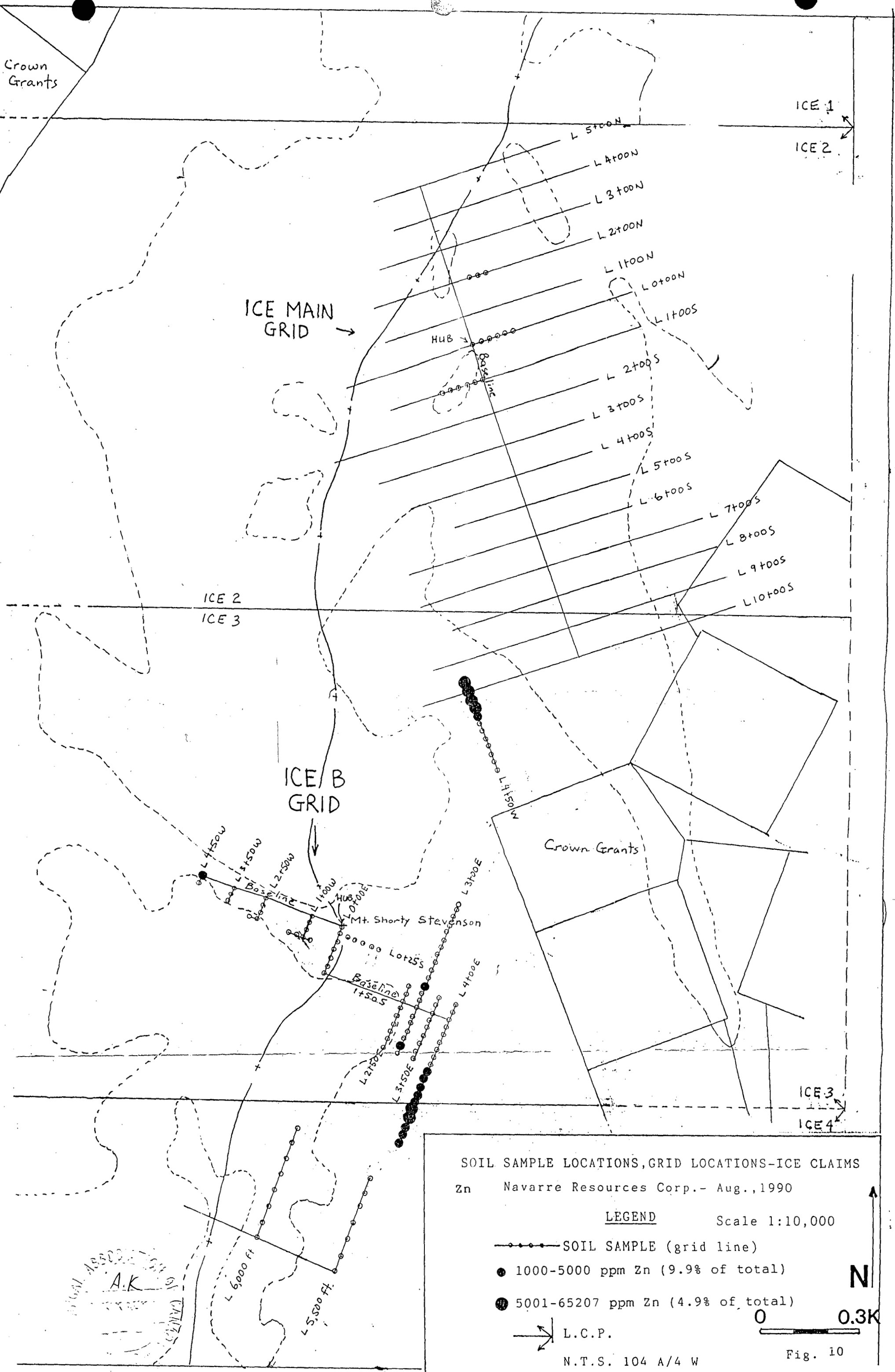
0 0.3K

N

N.T.S. 104 A/4 W

Fig. 9

MINING ASSOCIATION OF CALIFORNIA  
A.K.  
CAMPBELL



SOIL SAMPLE LOCATIONS, GRID LOCATIONS-ICE CLAIMS  
 Zn Navarre Resources Corp. - Aug., 1990

**LEGEND**

Scale 1:10,000

—●— SOIL SAMPLE (grid line)

● 1000-5000 ppm Zn (9.9% of total)

● 5001-65207 ppm Zn (4.9% of total)

↗ L.C.P.

0 0.3K

N

N.T.S. 104 A/4 W

Fig. 10

AK  
 1000' ASSOCIATION  
 1000' ASSOCIATION



Crown Grants

ICE 1

ICE 2

ICE MAIN GRID

HUB

Baseline

ICE 2

ICE 3

ICE/B GRID

Crown Grants

Mt. Sharty Stevenson

Baseline

ICE 3

ICE 4

SOIL SAMPLE LOCATIONS, GRID LOCATIONS-ICE CLAIMS

Ag Navarre Resources Corp.- Aug., 1990

LEGEND

Scale 1:10,000

—●— SOIL SAMPLE (grid line)

● 10-20 ppm Ag (12.3% of total)

● 20.1-199.8 ppm Ag (12.3% of total)

→ L.C.P.

0 0.3K

N

N.T.S. 104 A/4 W

Fig. 11

A.K. (handwritten)

L 6000 FT.

L 5500 FT.

L 5+00N

L 4+00N

L 3+00N

L 2+00N

L 1+00N

L 0+00N

L 1+00S

L 2+00S

L 3+00S

L 4+00S

L 5+00S

L 6+00S

L 7+00S

L 8+00S

L 9+00S

L 10+00S

L 4+50W

L 4+50W

L 3+50W

L 2+50W

L 1+50W

L 0+00E

L 1+25S

L 2+50E

L 3+50E

L 4+00E

L 3+50E

L 2+50E

L 1+50E

L 0+00E

L 1+50S

L 2+50S

L 3+50S

L 4+00S

L 5+00S

L 6+00S

L 7+00S

L 8+00S

L 9+00S

L 10+00S

L 11+00S

L 12+00S

L 13+00S

L 14+00S

L 15+00S



## APPENDIX A

### Introduction

Surface "DEEPEM" PEM surveys were conducted by Scott Geophysics Limited, 4013 West 14th Avenue, Vancouver, on behalf of Navarre Resources on their Ice Claims and Silver Crown Grids, Stewart area, B.C.

Both the in - line and vertical component of the secondary magnetic field was measured as well as the Primary Pulse.

### Equipment

A Standard 2000 Watt Crone Transmitter and Crone Digital Receiver were used for all surveys.

### Survey Parameters

#### ICE CLAIMS

##### LOOP

3+00S TO 5+00N, 5+00E TO 9+00E  
#12 AWG wire

##### Transmitter / Receiver Settings

Ramp : 1.0ms  
Time Base : 8.33ms  
Current : 10 Amps  
Stacking : 2048  
ZTS : 1003.5  
Sync. : Radio

L300S - 2+25W TO 4+00E  
L200S - 2+75W TO 4+50E  
L100S - 2+50W TO 4+50E  
L0 - 2+00W TO 4+50E  
L100N - 2+50W TO 3+50E  
L250N - 2+75W TO 4+00E  
L400N - 1+00W TO 4+50E

25m sample interval

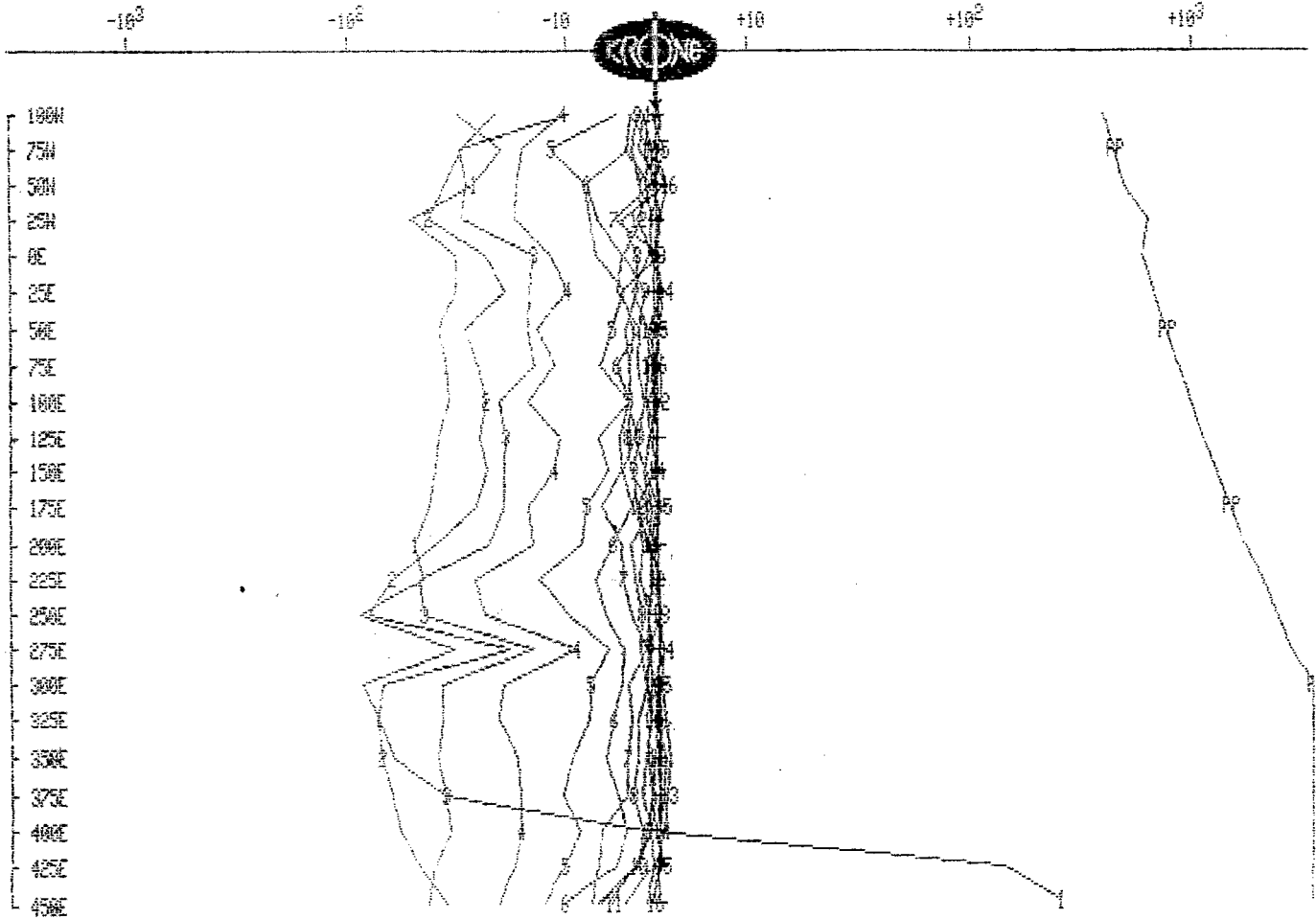
Lines 200N and 300N were only about 50m apart. Line 200N was estimated to be midway between lines 100N and 400N so it was called 250N.

CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L4N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L4NL1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

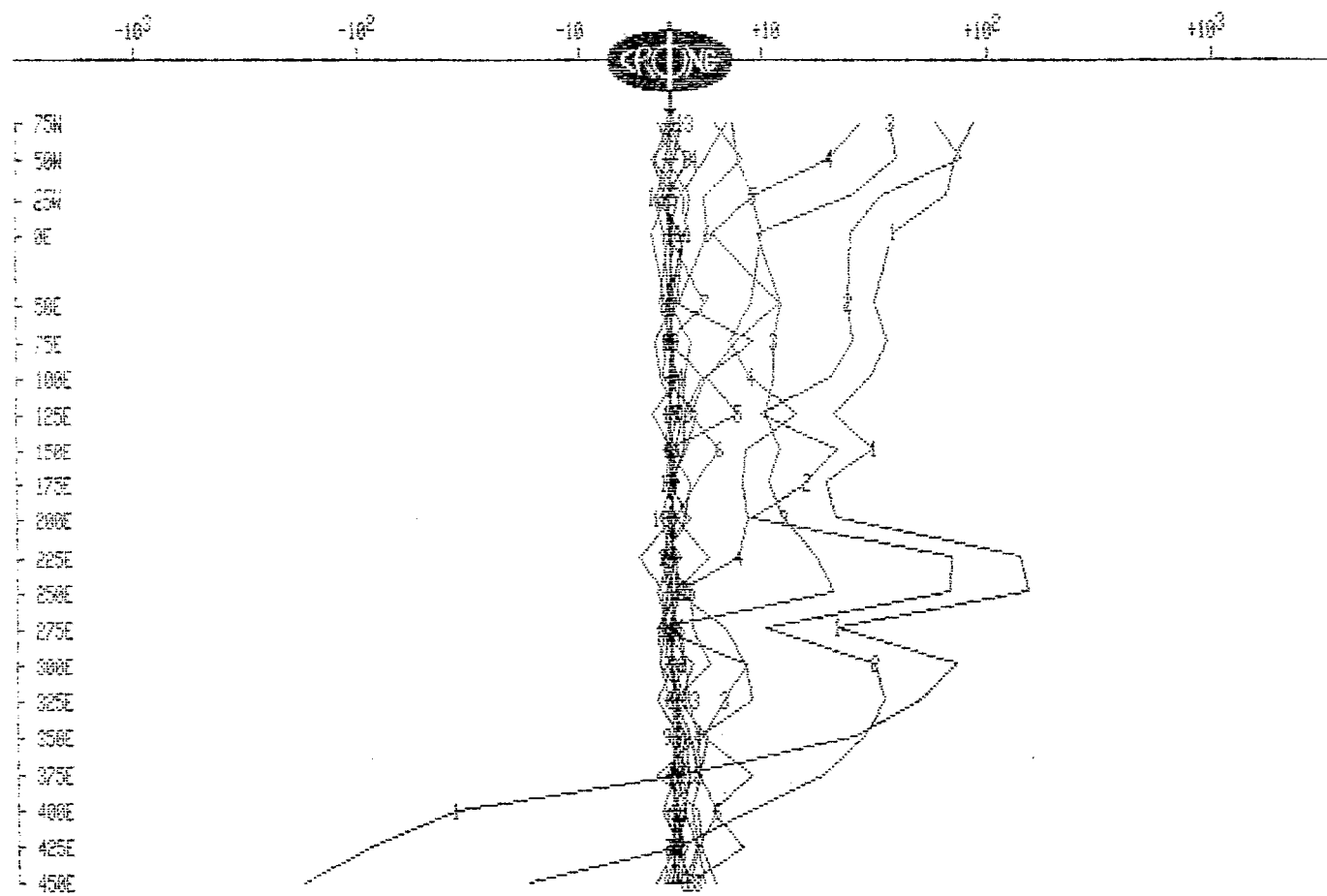


# SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L4N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L4NL1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels

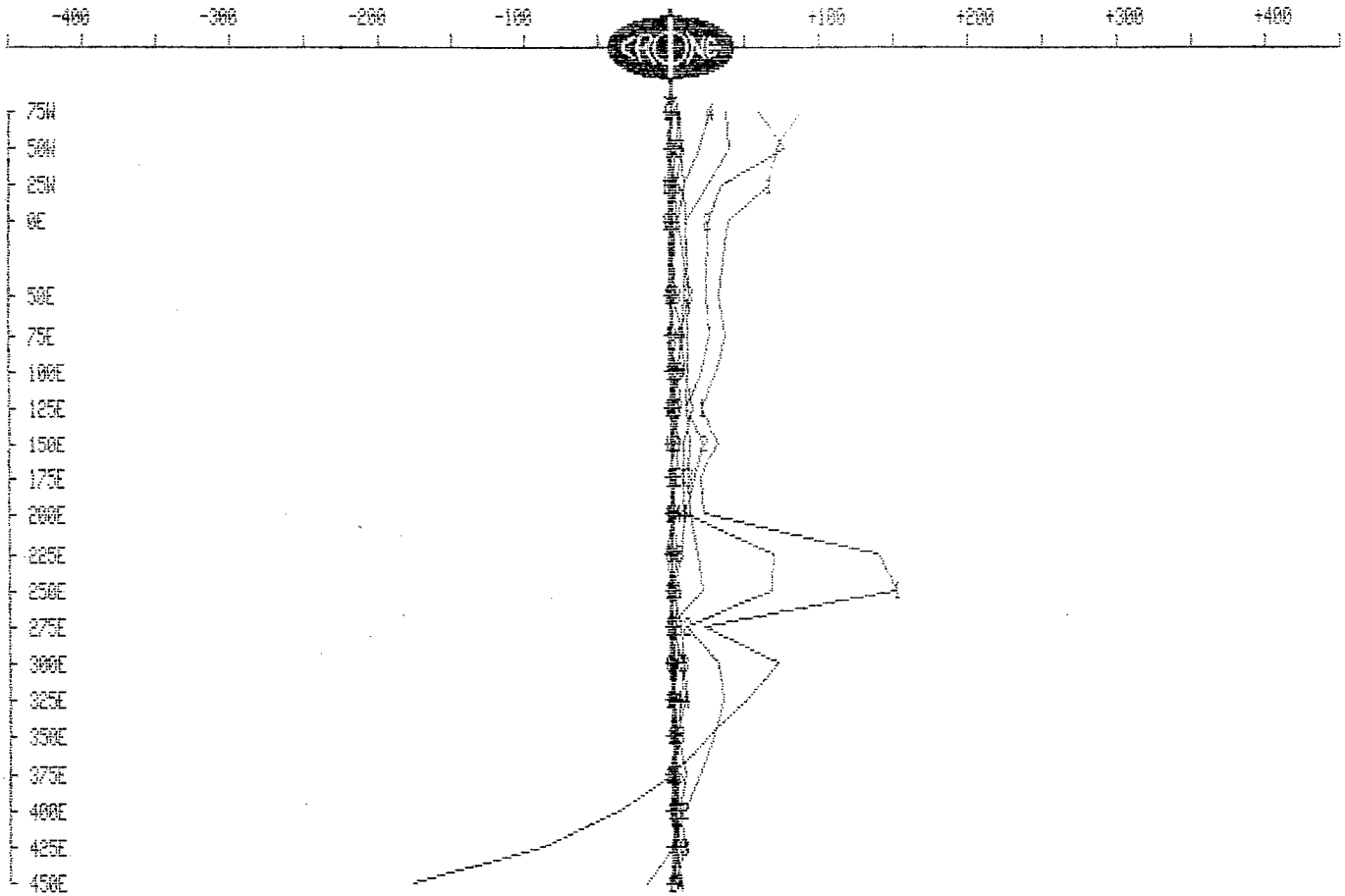


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L4N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L4NL1.PEM  
Unit Scale: 1cm = 50 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels

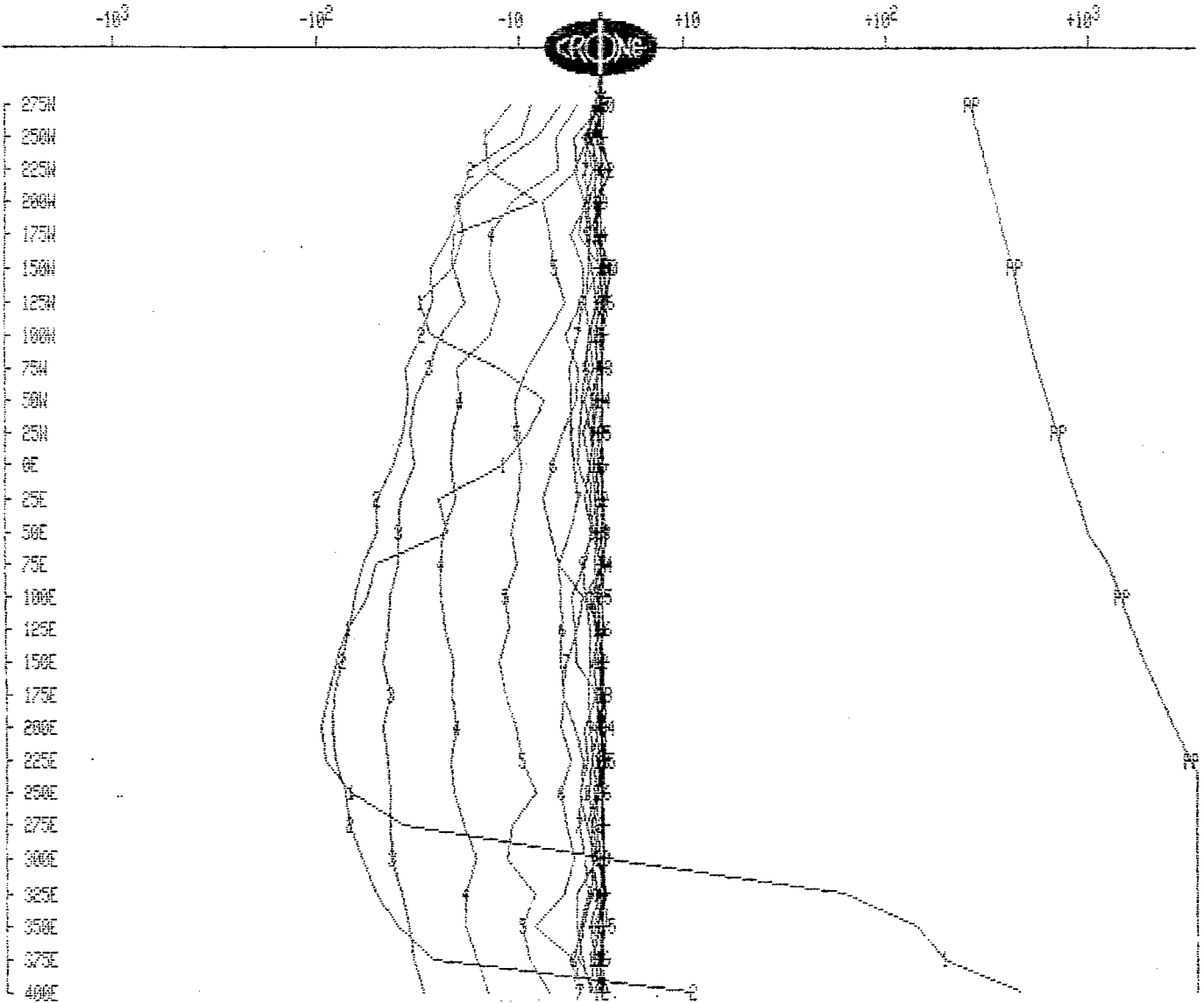


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L250N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L250NL1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

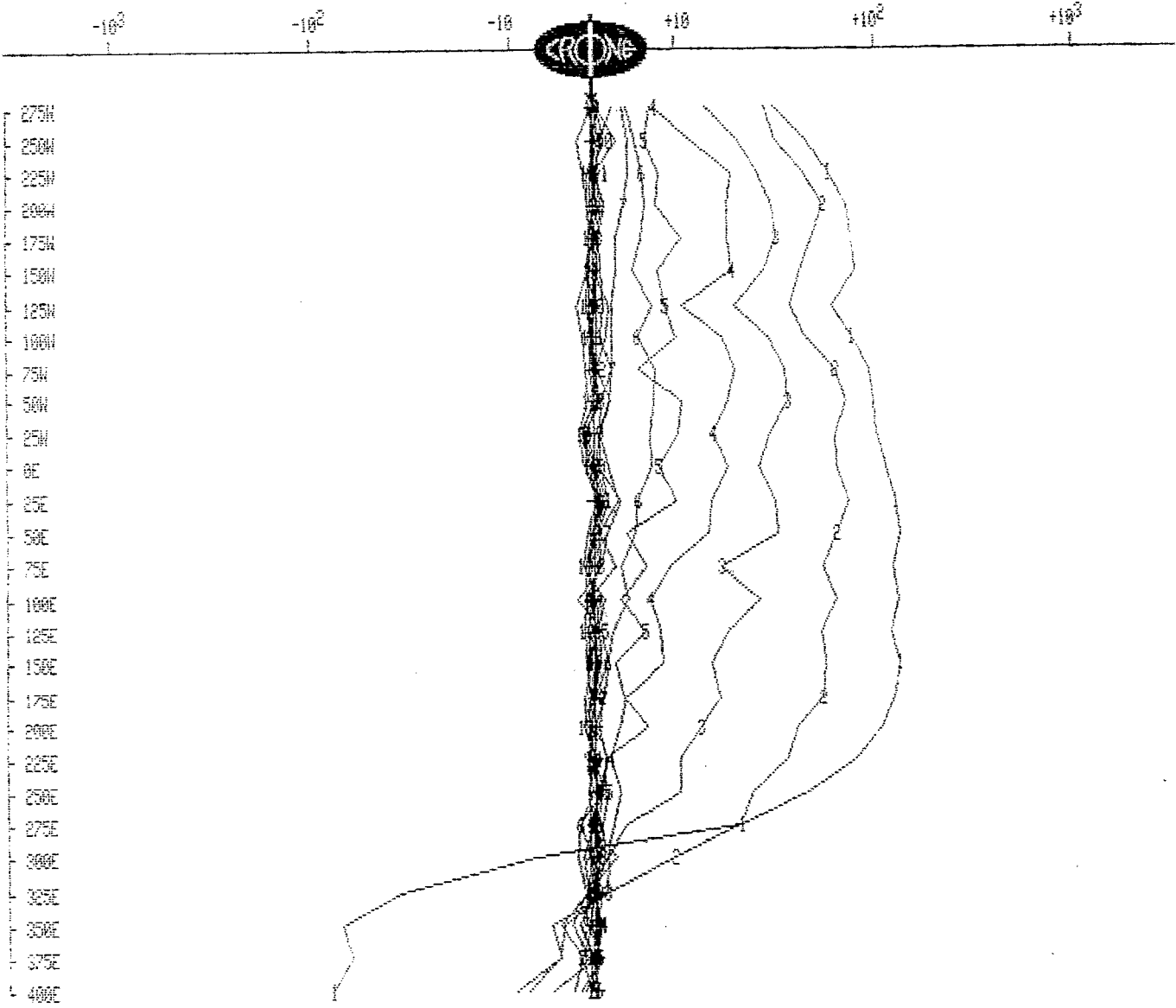


# CRONE GEOPHYSICS & EXPLORATION SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.88 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L250N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L250NL1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels



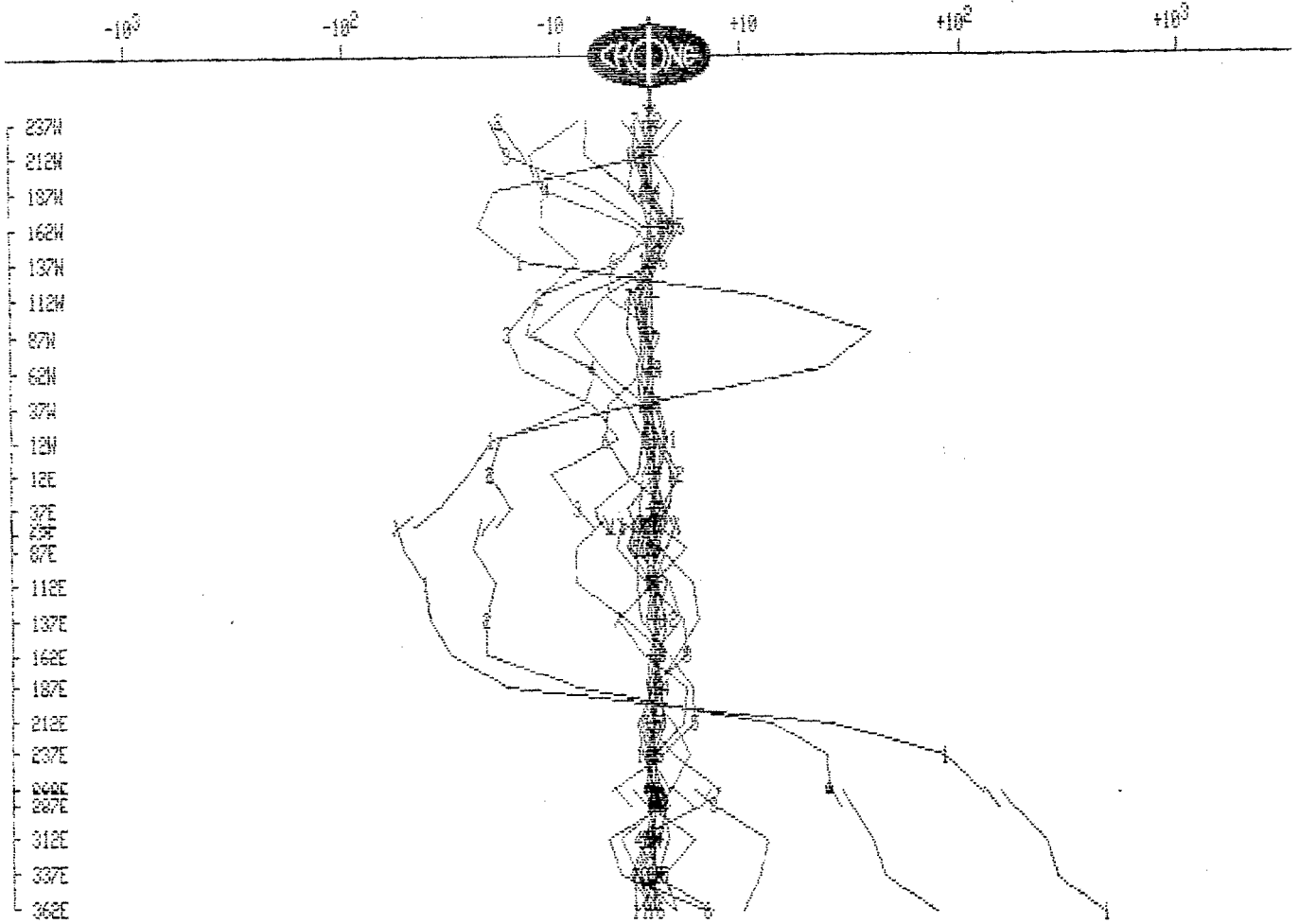


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 0.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L250N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L250NL1.PEM

25m FRASER FILTER  
VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels

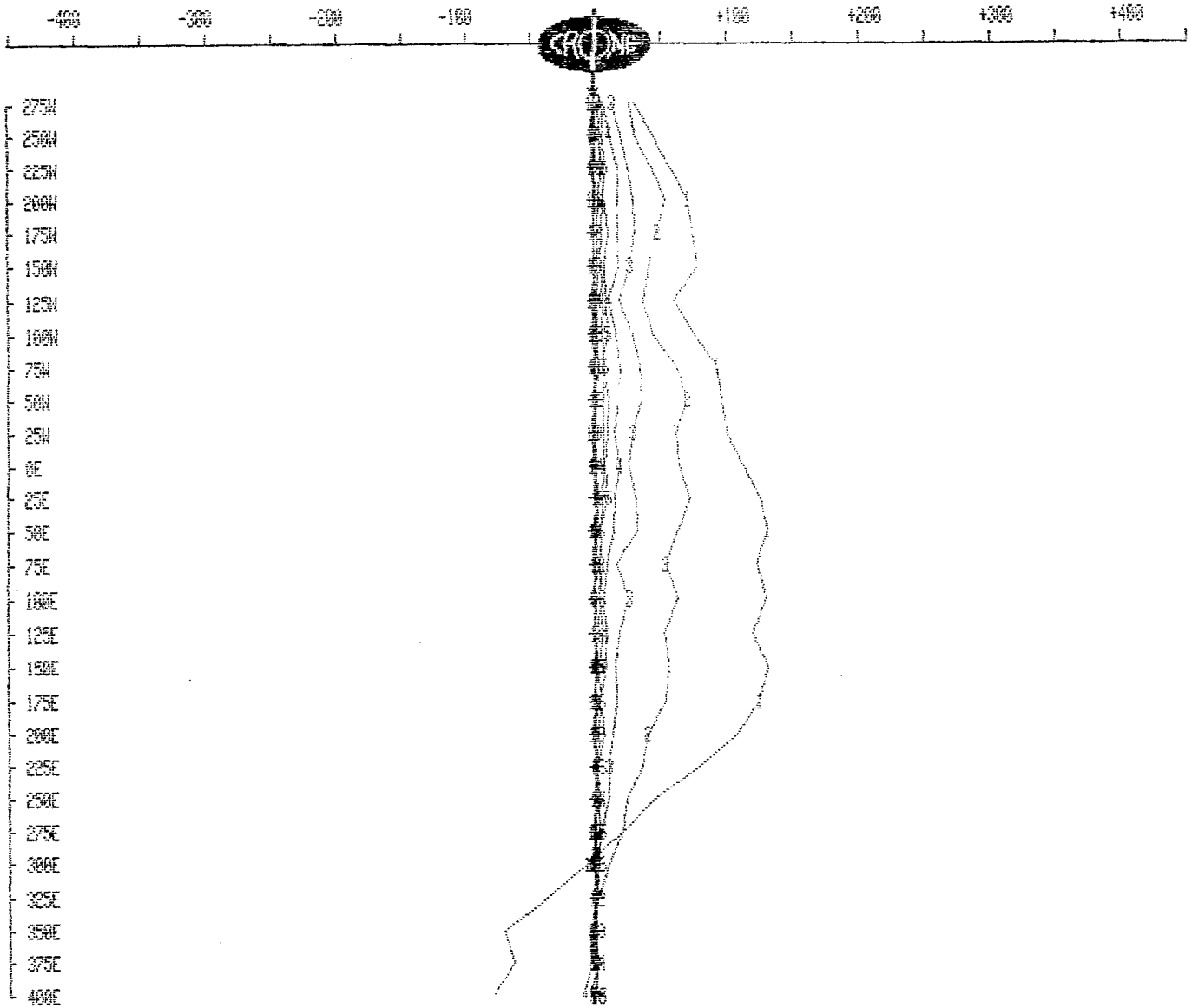


# SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L250N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L250NL1.PEM  
Unit Scale: 1cm = 50 nT/s

IN-LINE HORIZONTAL COMPONENT  $dBx/dt$  nanoTesla/sec - 16 channels

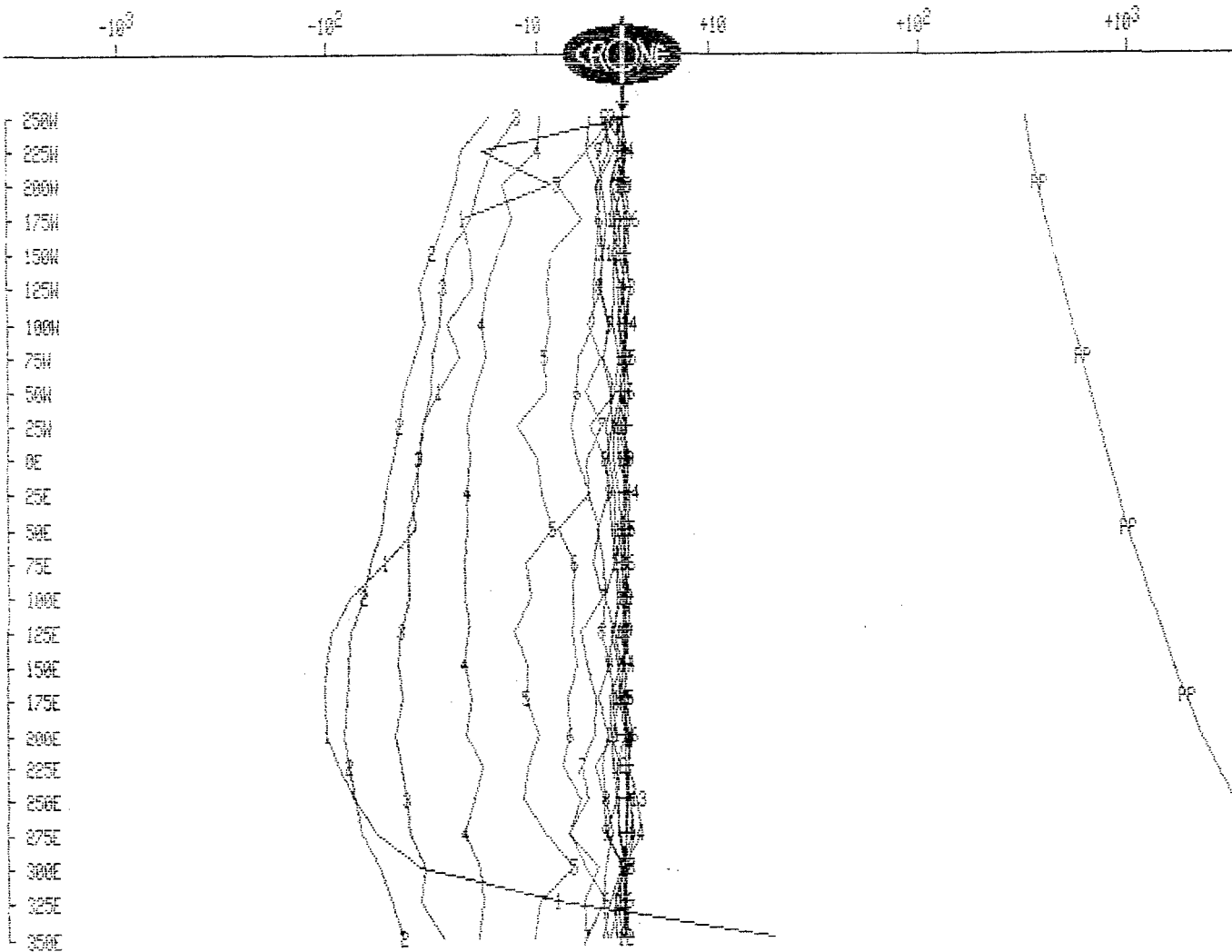


# SURFACE FEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : LIN  
Tx Loop : L-1  
Date : Aug 18, 1990  
File : LINL1.FEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

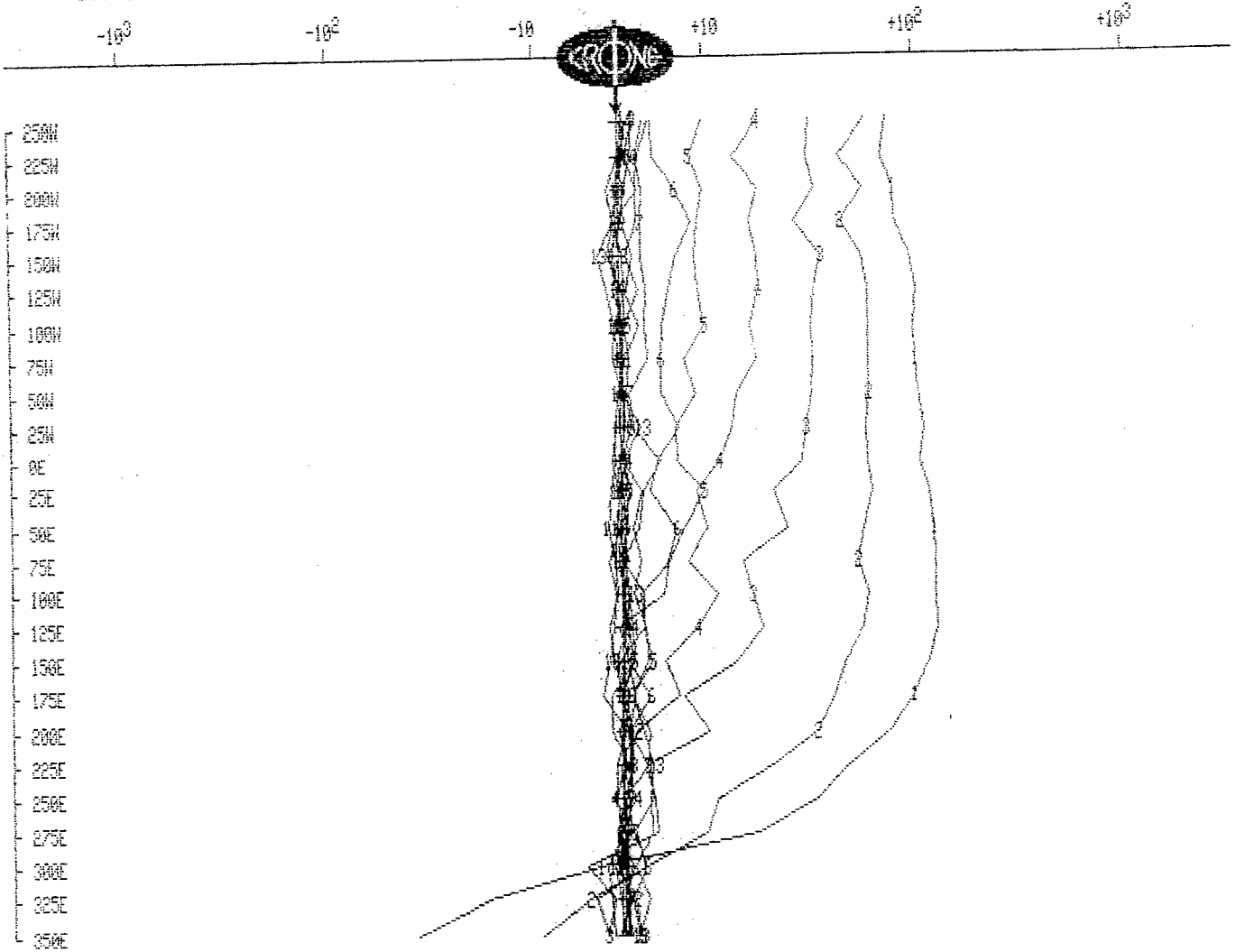


CORNE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : LIN  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : LINL1.FEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels

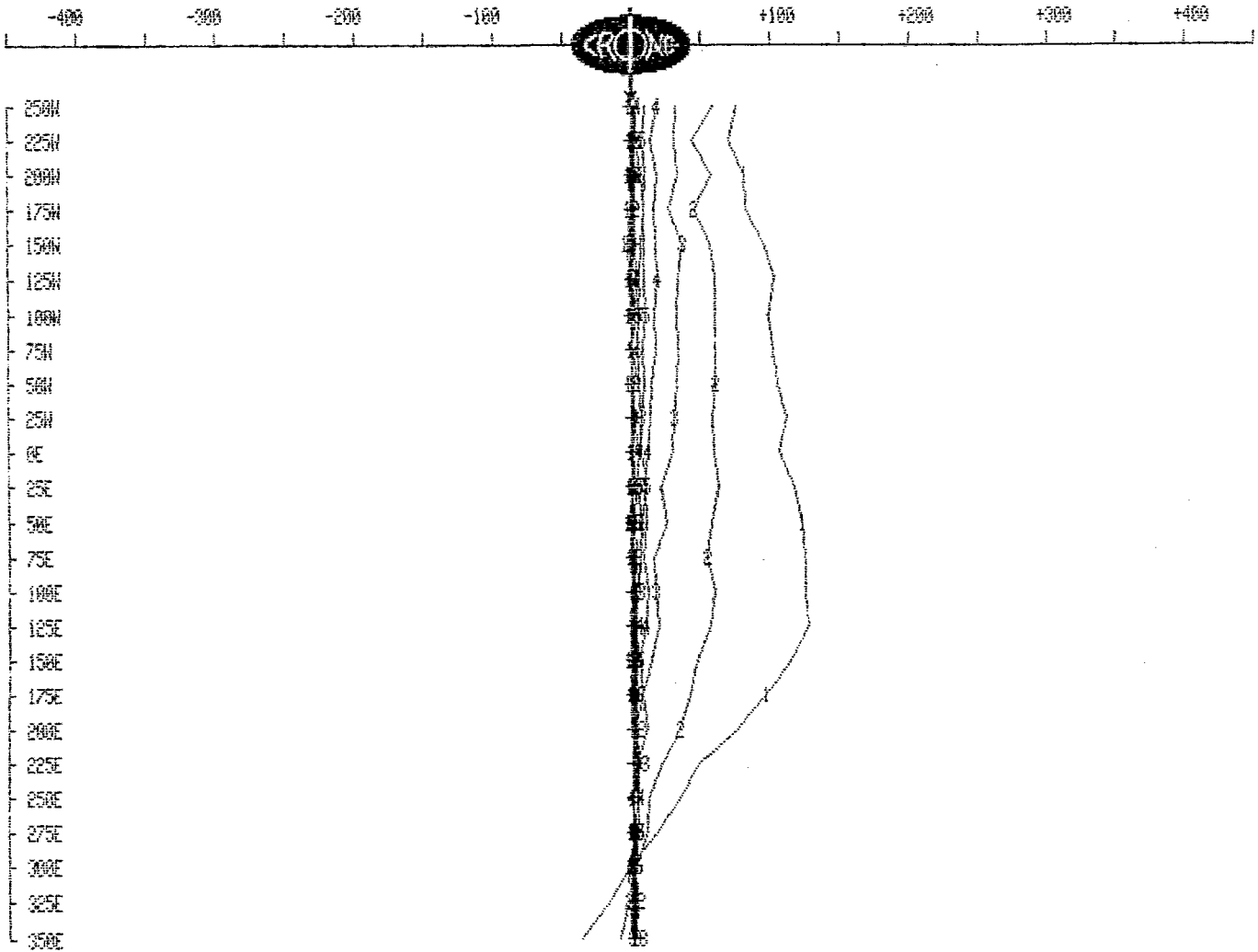


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L1N  
Tx Loop : L-1  
Date : Aug 13, 1990  
File : L1NLI.FEM  
Unit Scale: 1cm = 50 nT/s

IN-LINE HORIZONTAL COMPONENT  $dBx/dt$  nanoTesla/sec - 16 channels

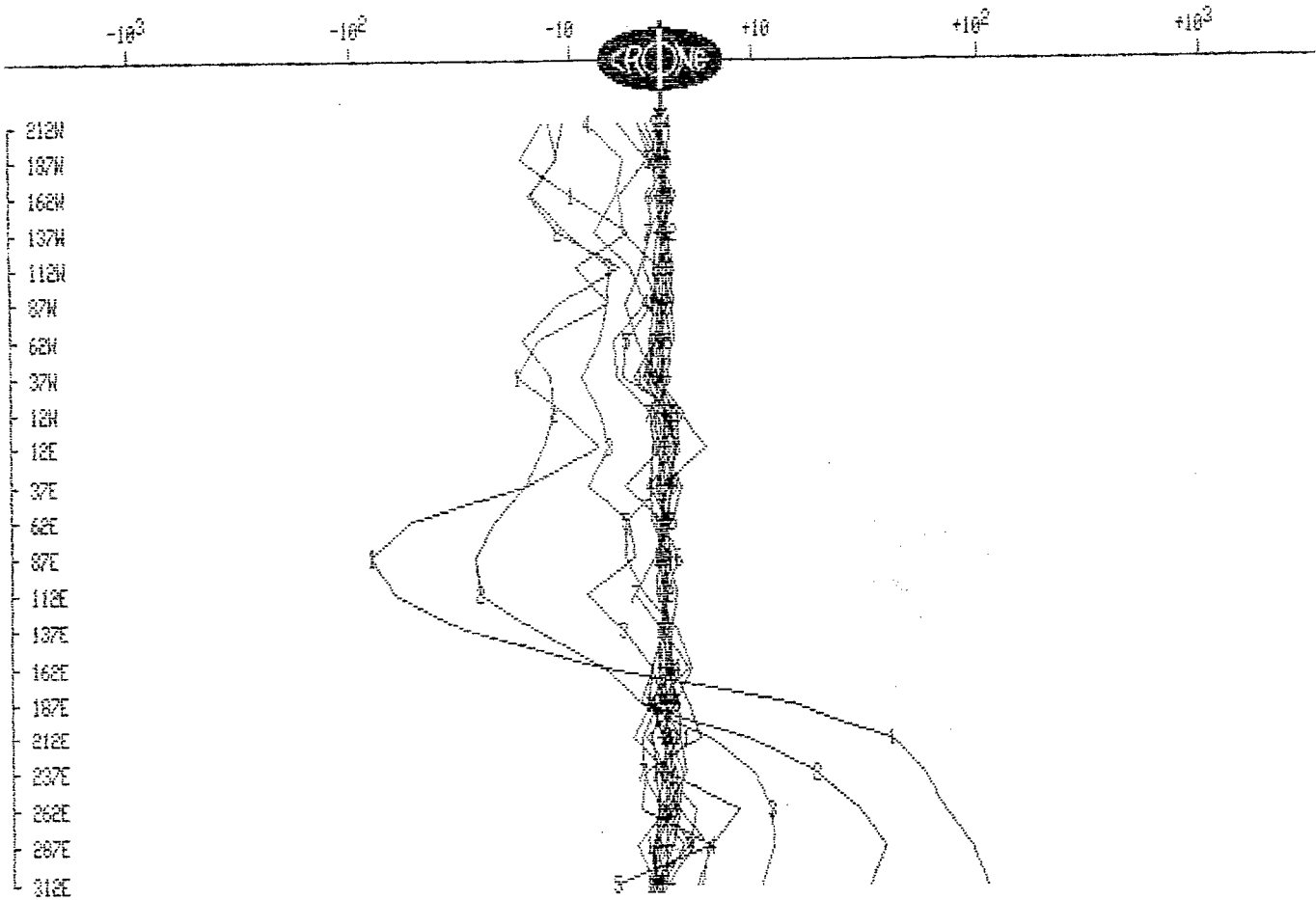


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE FEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.98 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L1N  
Tx Loop : L-1  
Date : Aug 18, 1990  
File : L1NLI.FEM

25m FRASER FILTER  
VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels

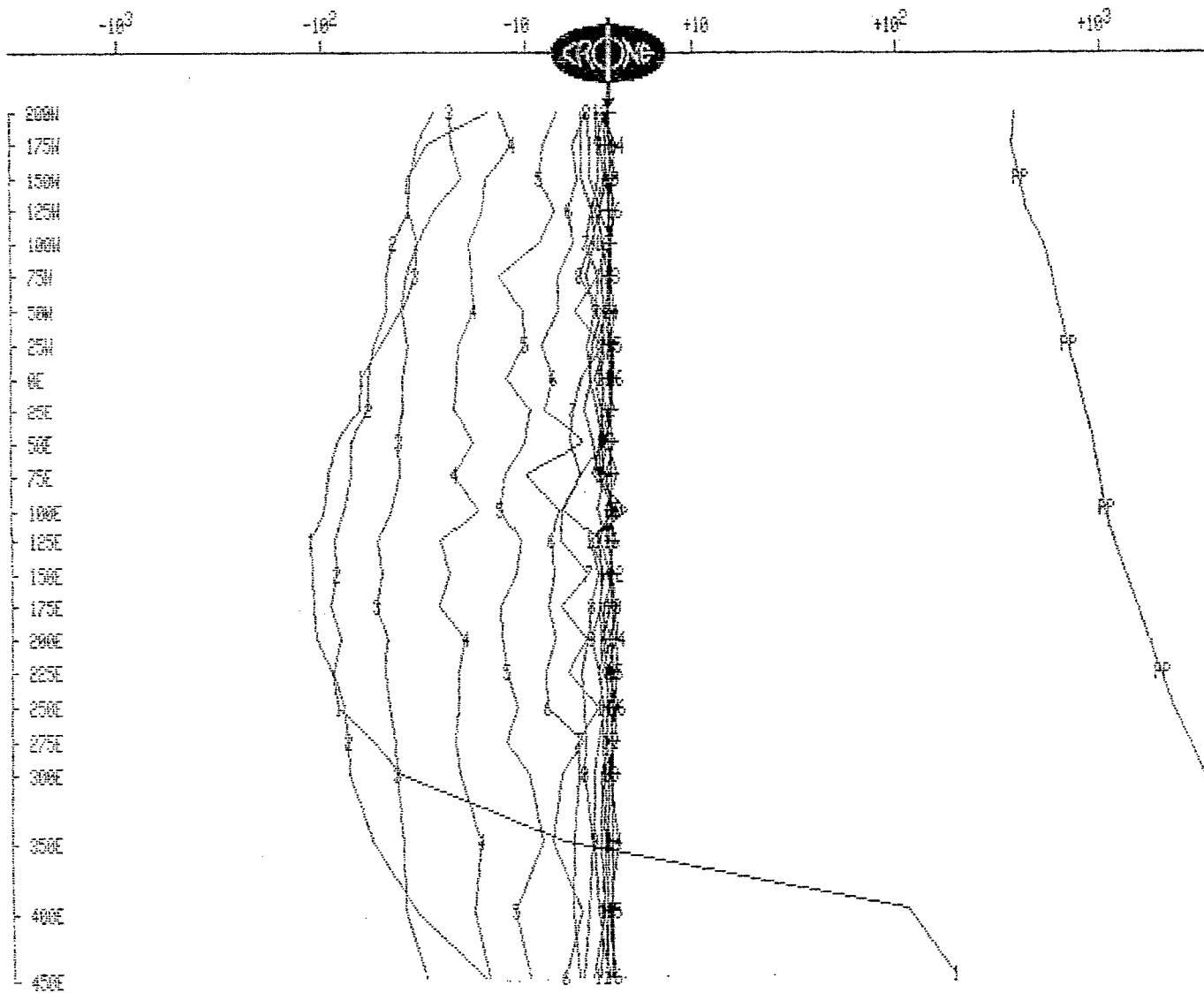


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L0  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : LOL1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PF

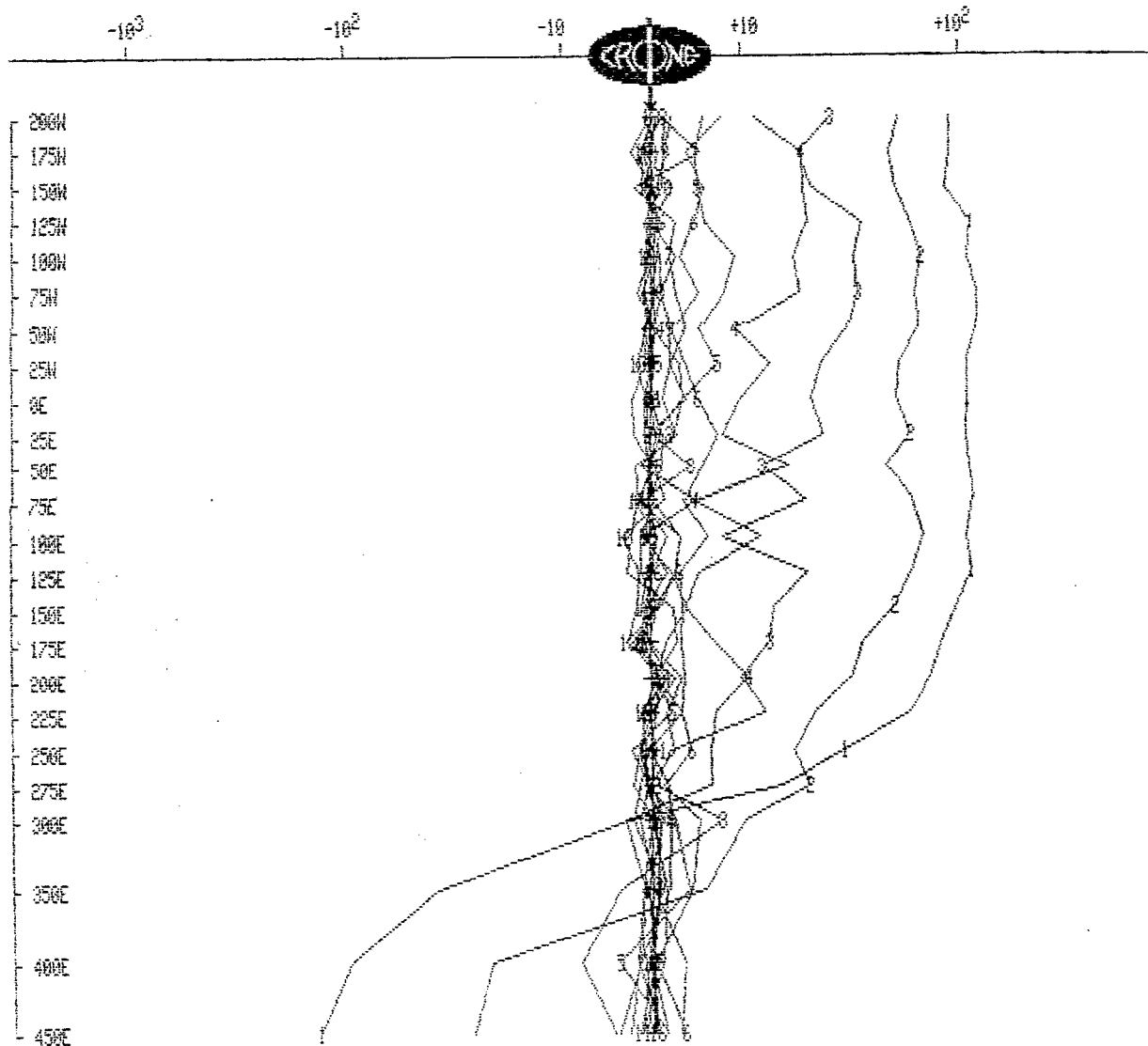


# CRONE GEOPHYSICS & EXPLORATION SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L0  
Tx Loop : L-1  
Date : Aug 12  
File : LOL1.P

IN-LINE HORIZONTAL COMPONENT  $\text{dBx}/\text{dt}$  nanoTesla/sec - 16 chan



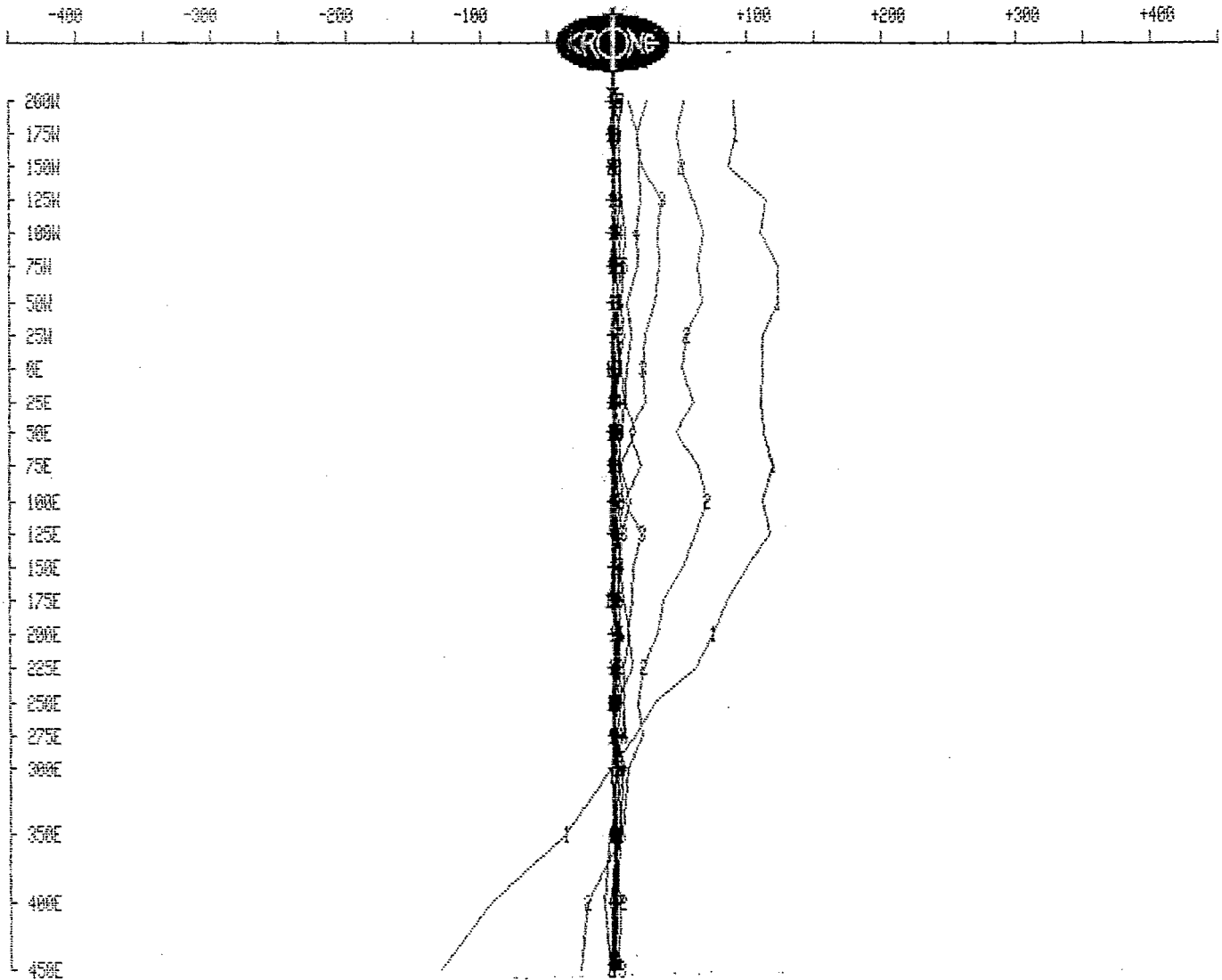


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L0  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : LOL1.PEM  
Unit Scale: 1cm = 50 nT/s

IN-LINE HORIZONTAL COMPONENT  $dBx/dt$  nanoTesla/sec - 16 channels

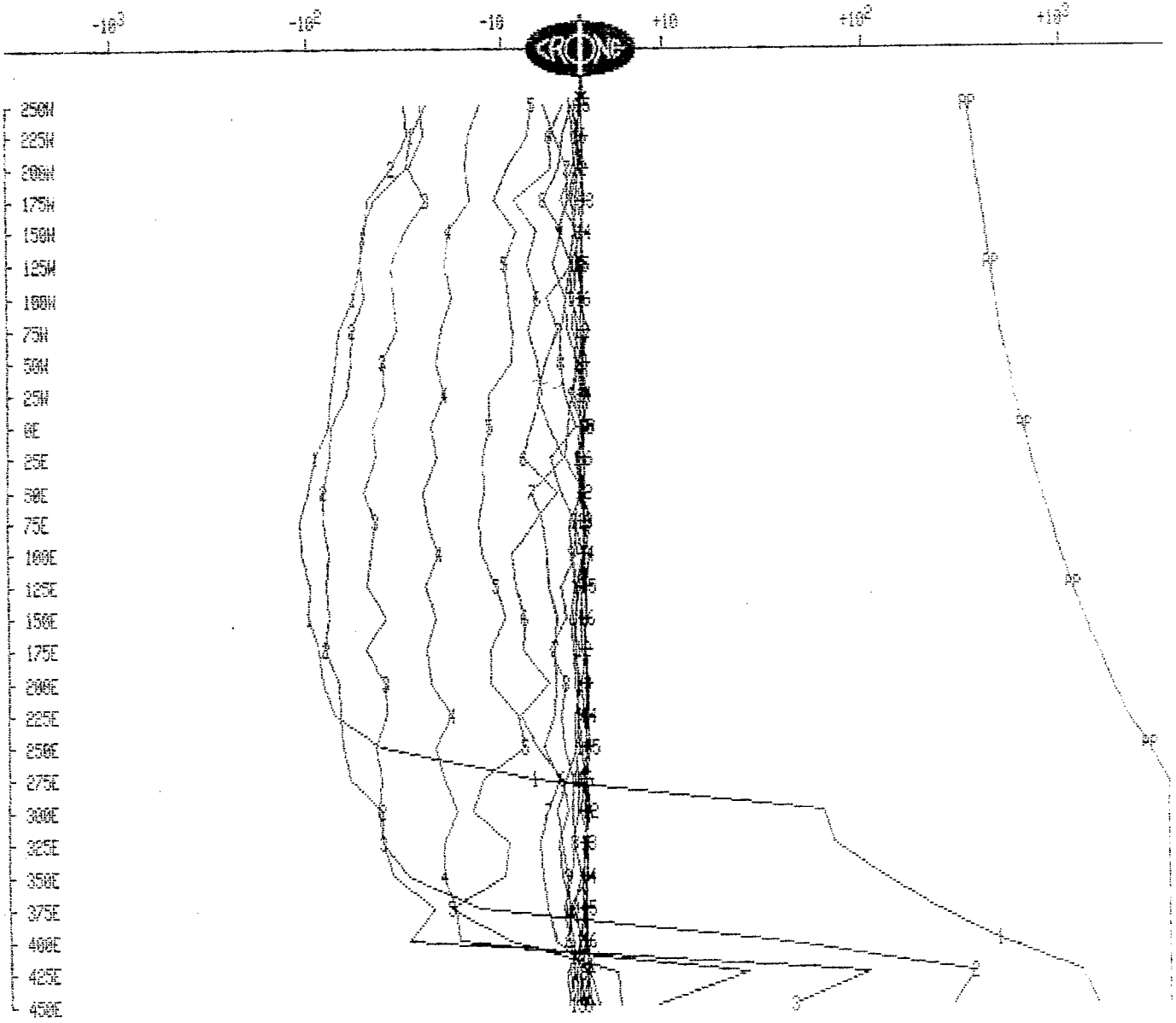


SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L19  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L1SL1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

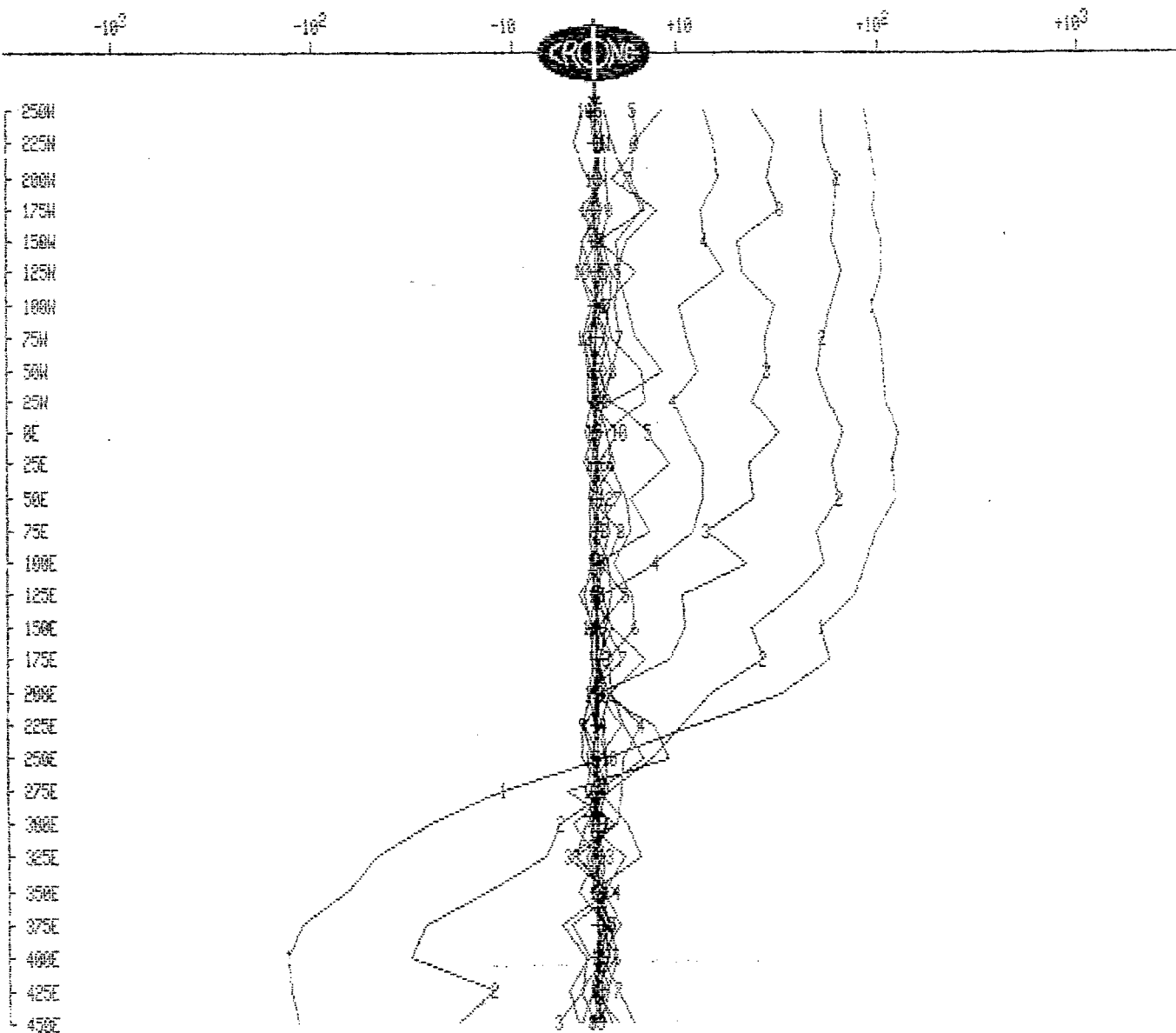


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L15  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L15L1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels

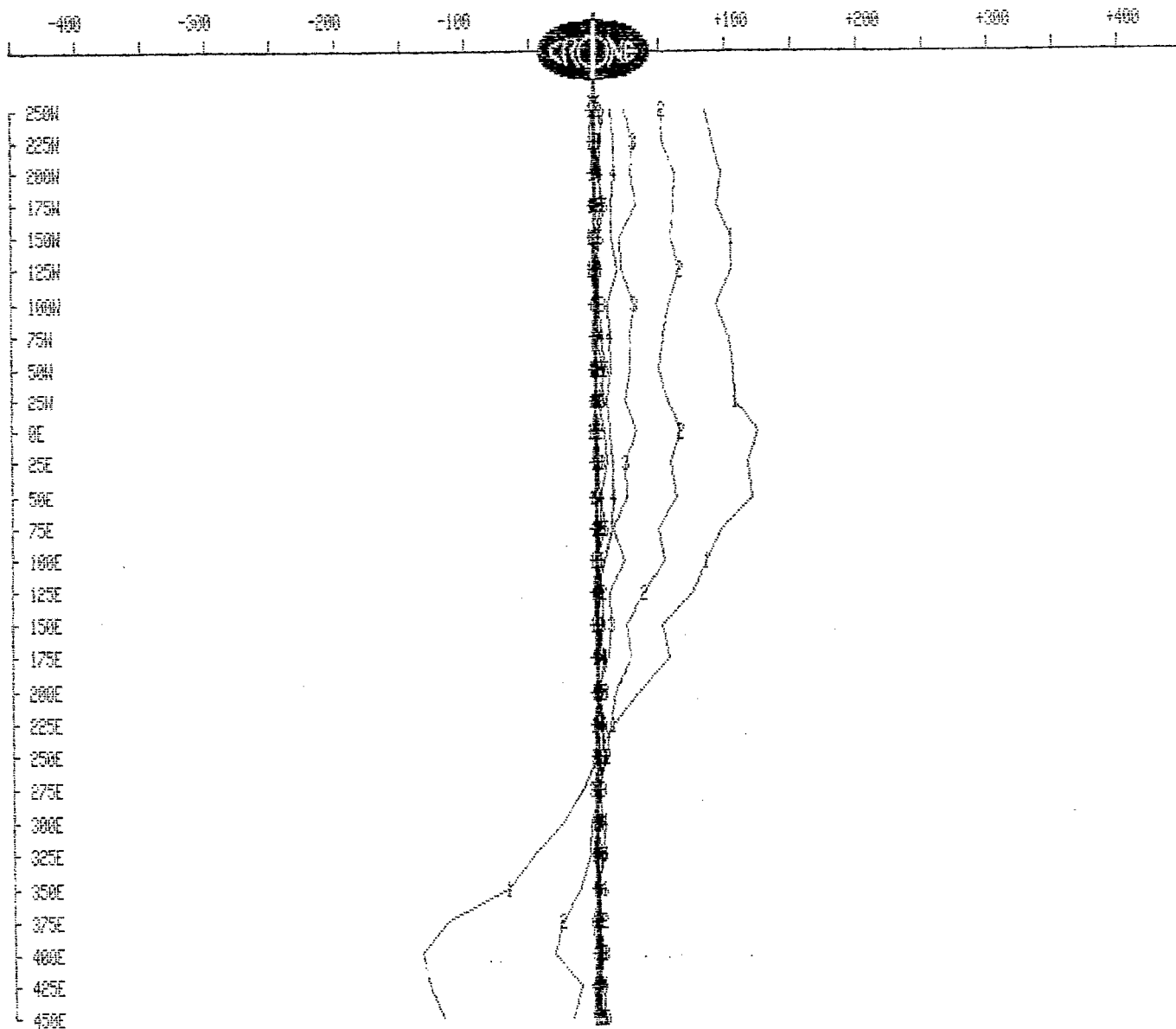


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L18  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L18L1.PEM  
Unit Scale: 1cm = 50 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels

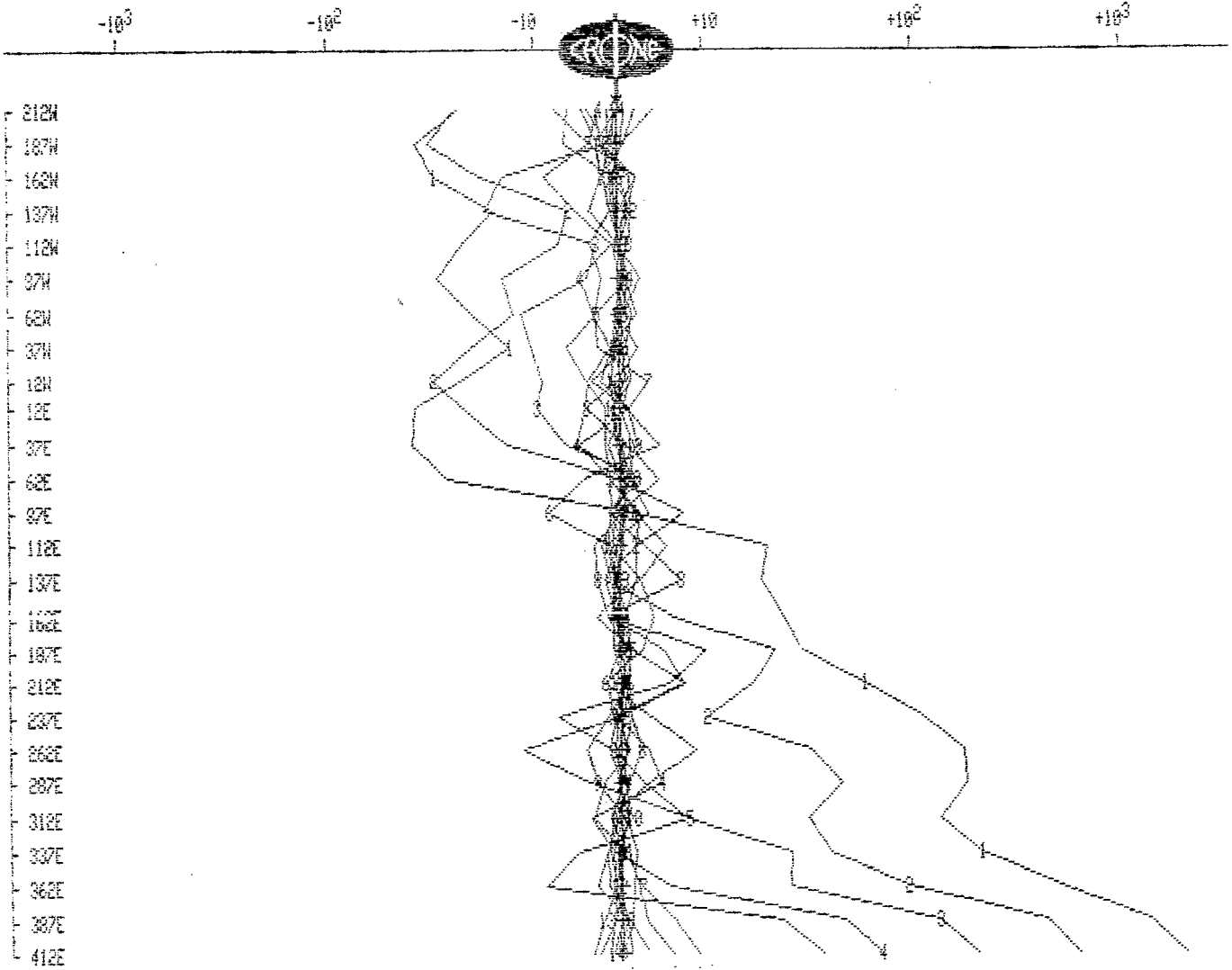


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.98 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L15  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L15L1.PEM

25m FRASER FILTER  
VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels

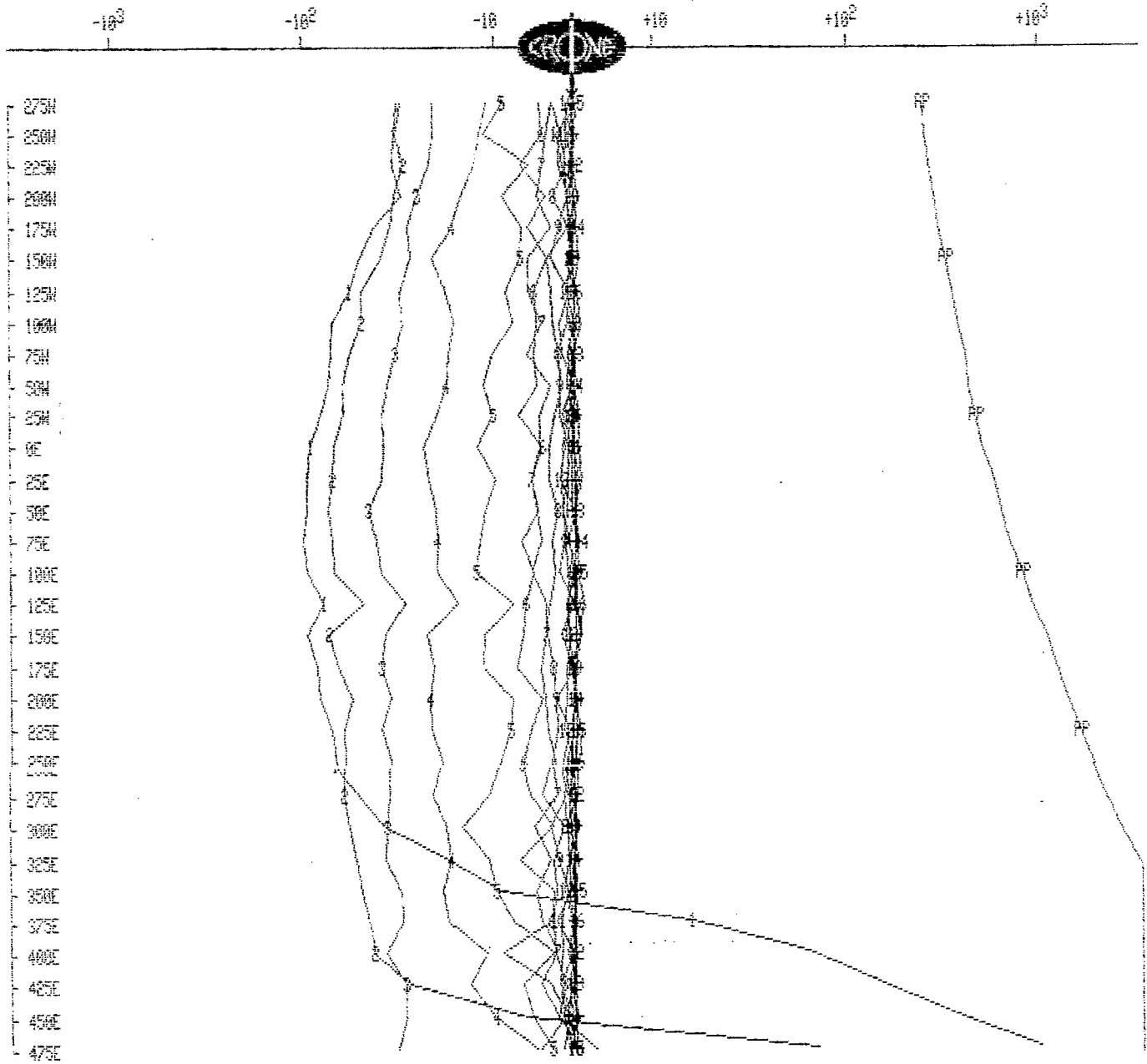


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L2S  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L2SL1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

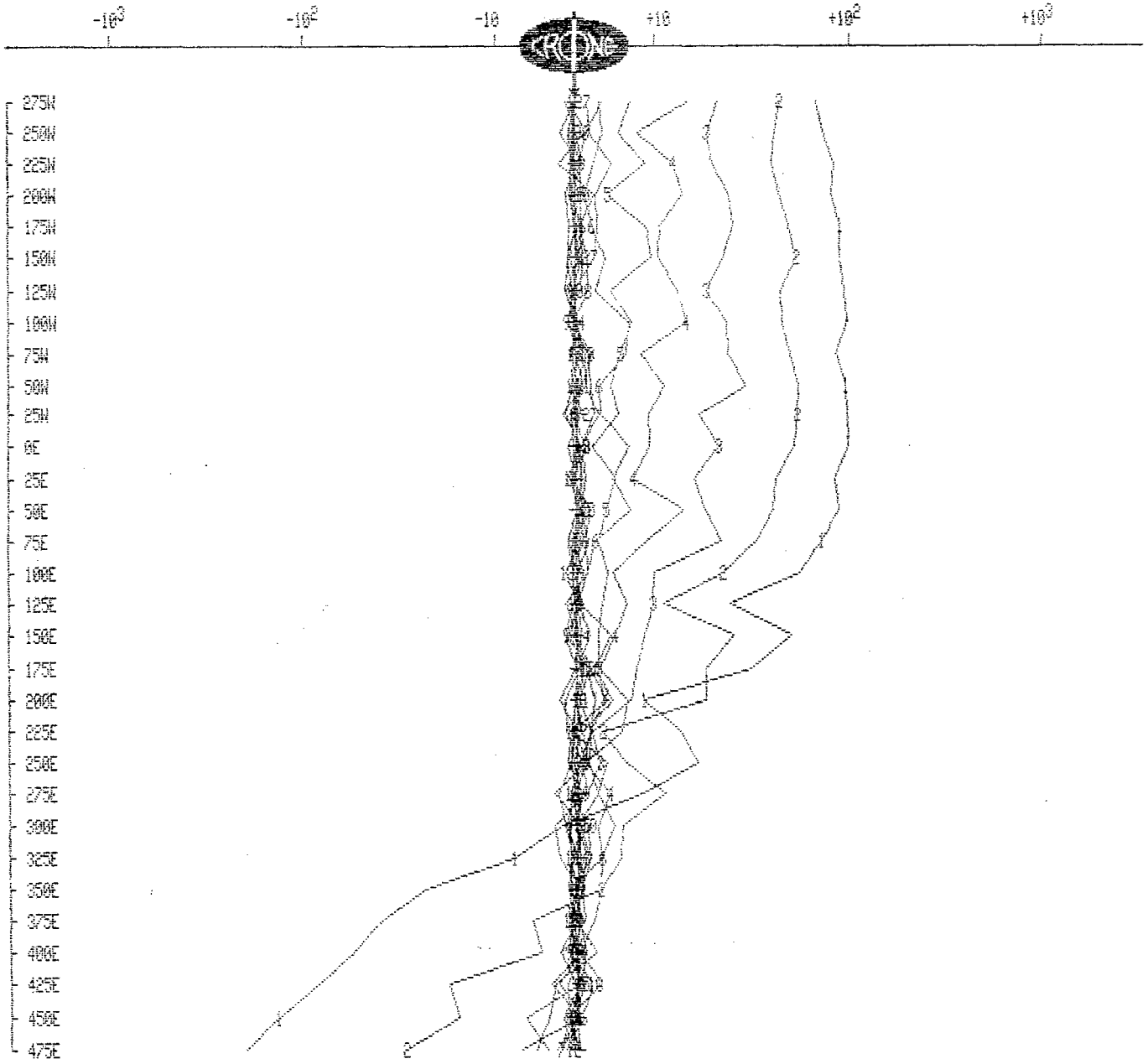


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L25  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L25L1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels

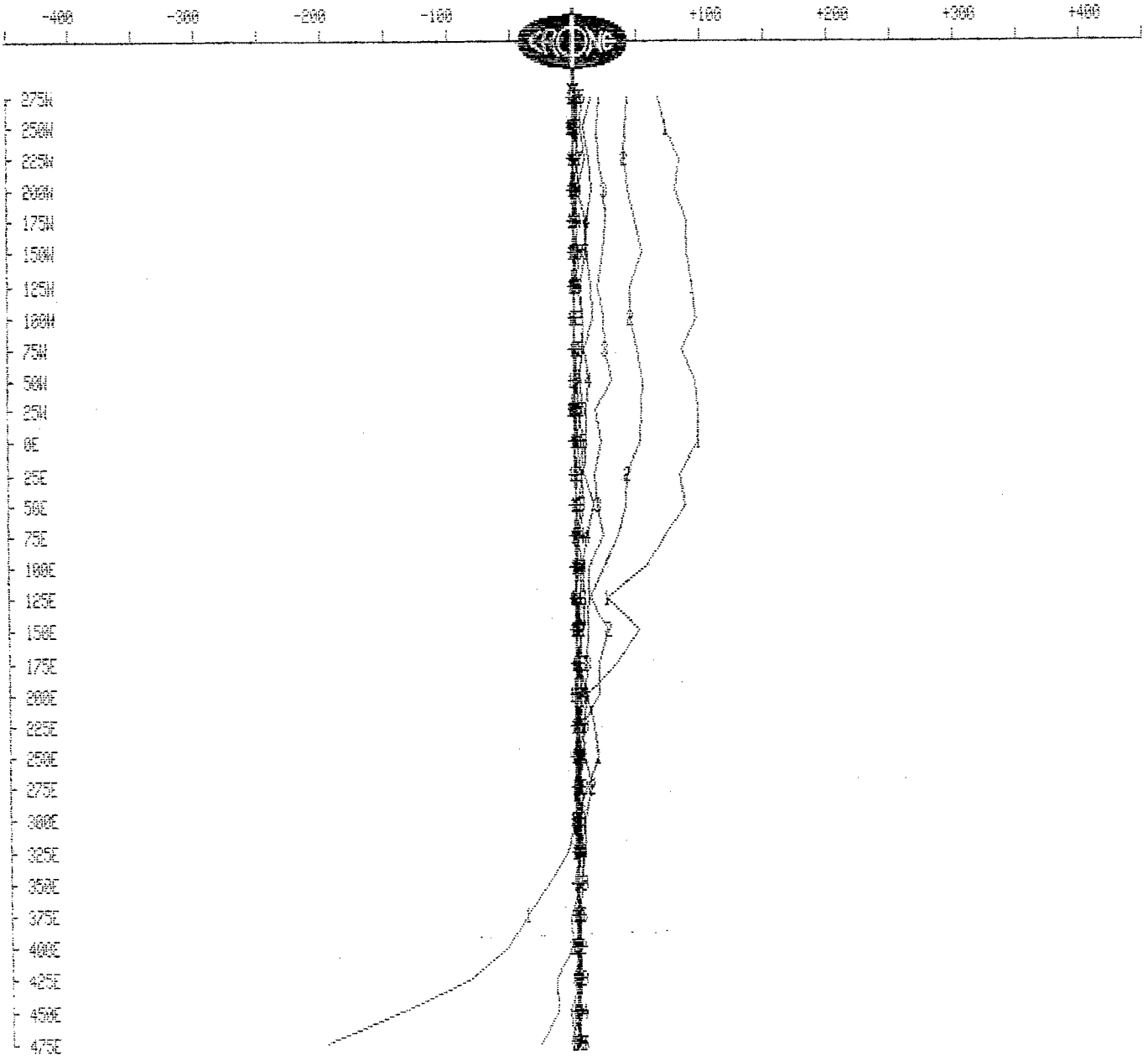


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L25  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L25L1.PEM  
Unit Scale: 1cm = 50 nT/s

IN-LINE HORIZONTAL COMPONENT  $dBx/dt$  nanoTesla/sec - 16 channels



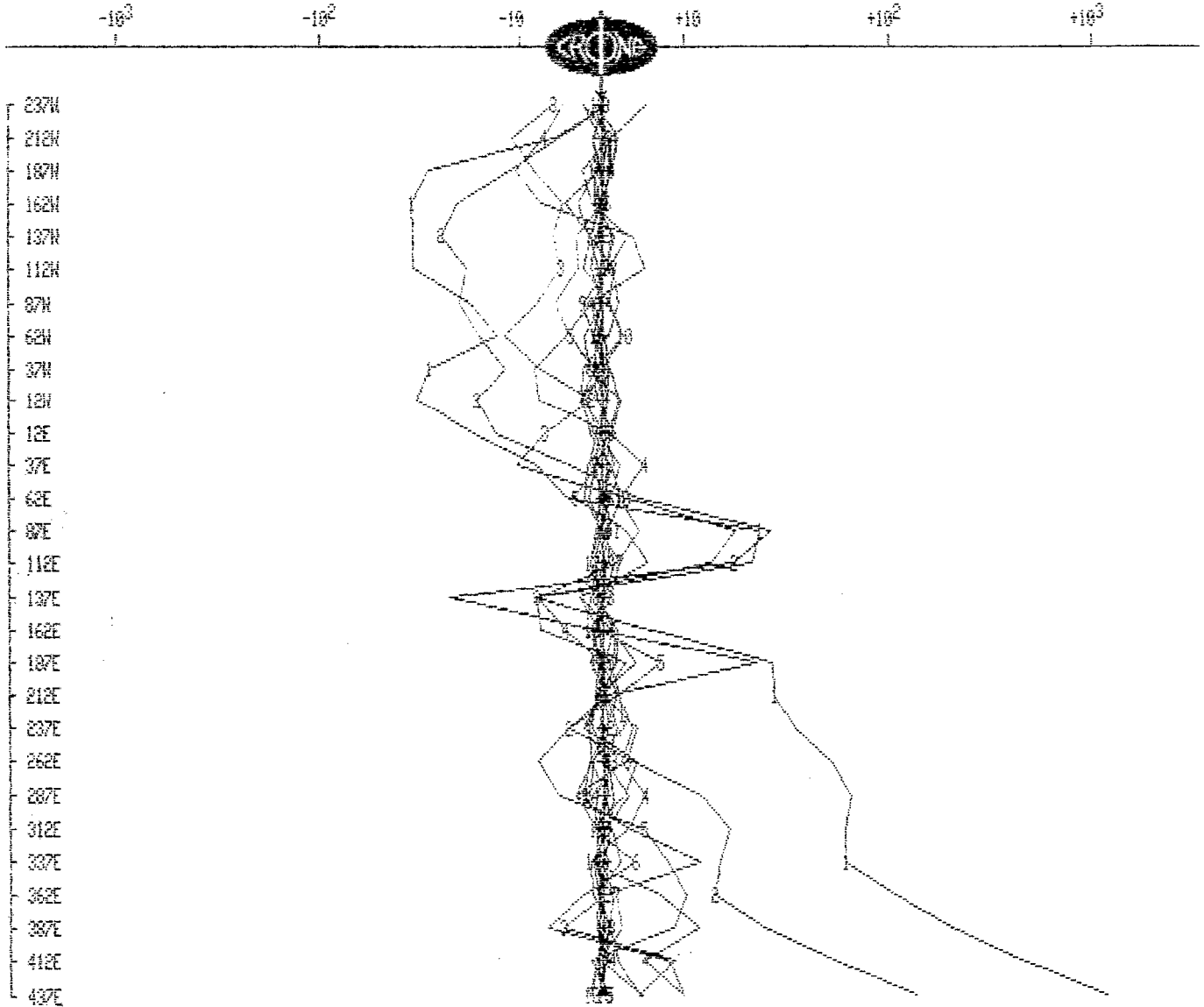


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 0.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L2S  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L2SL1.PEM

25m FRASER FILTER  
VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels

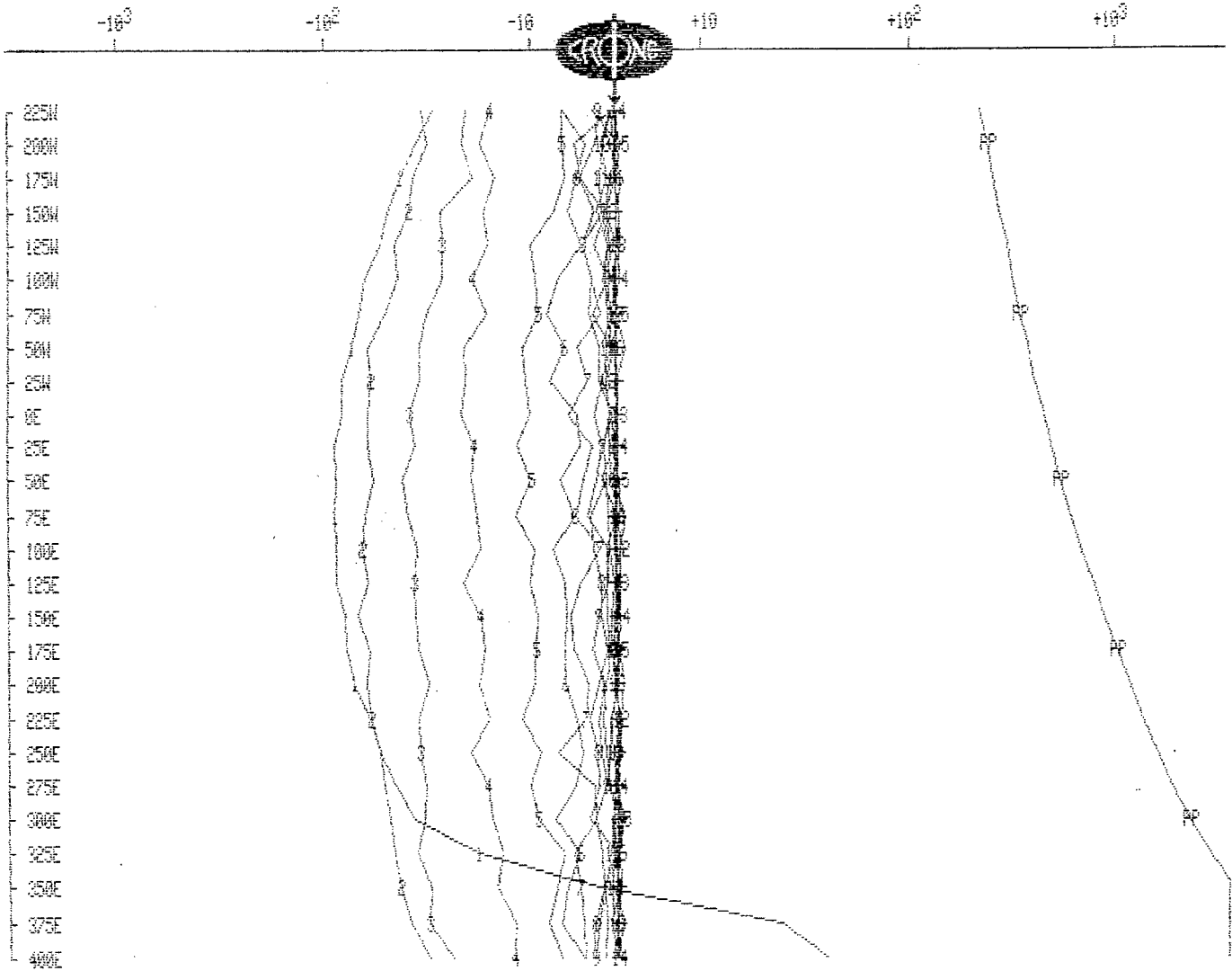


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 0.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L39  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L39L1.FEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PF

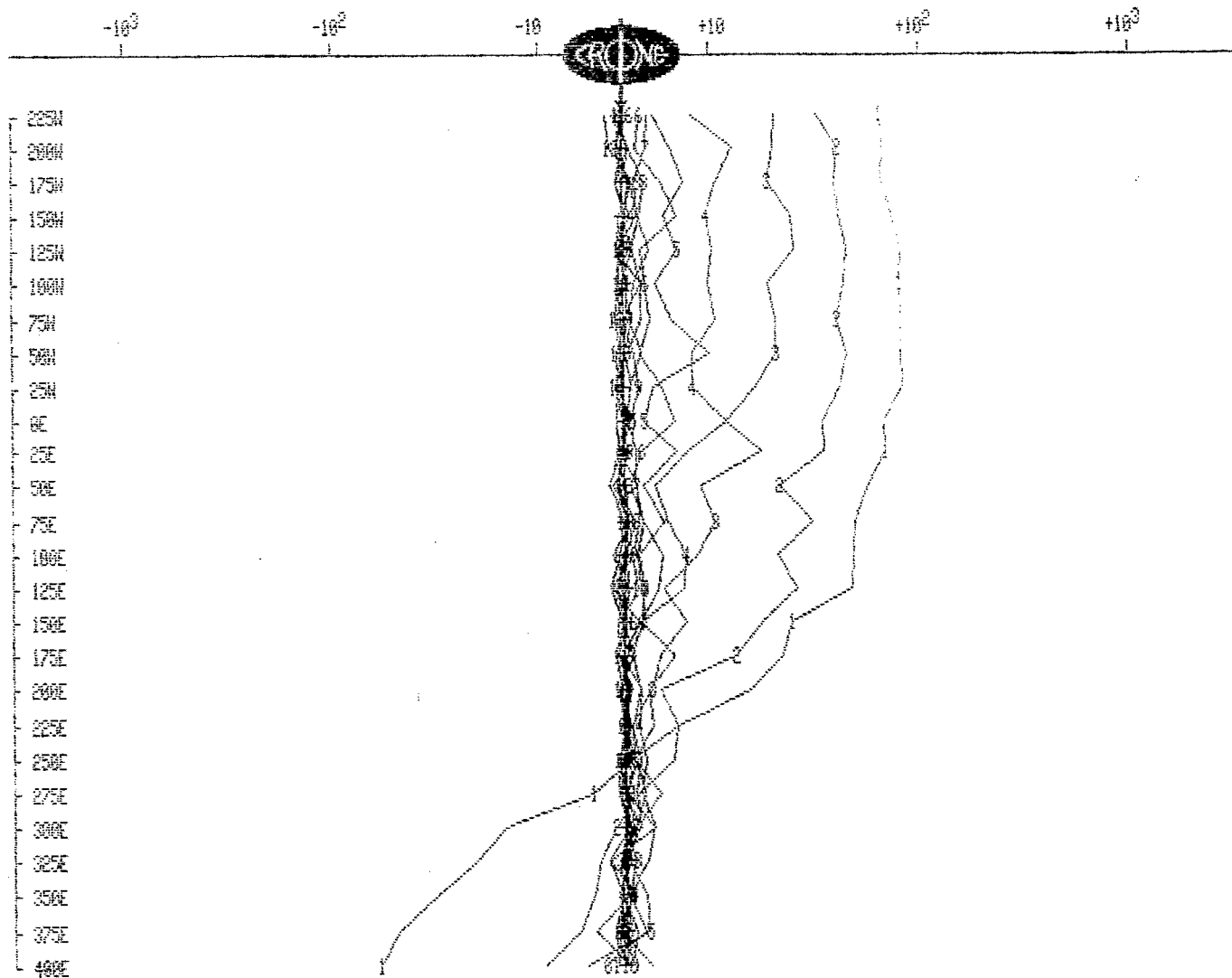


# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.38 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L3S  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L3SL1.PEM

IN-LINE HORIZONTAL COMPONENT  $dBx/dt$  nanoTesla/sec - 16 channels

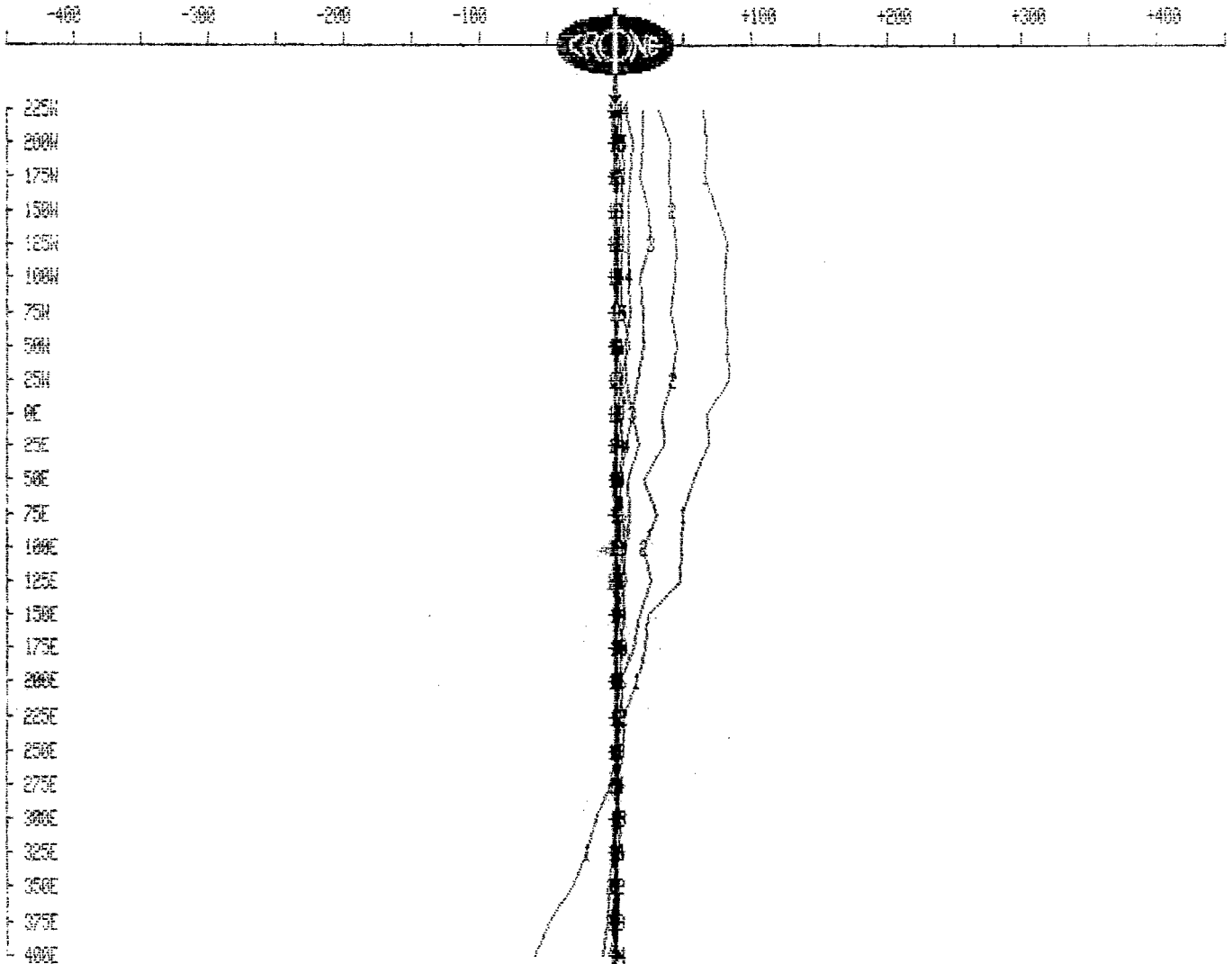


CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE FEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms  
Scale : 1:5000

Line : L95  
Tx Loop : L-1  
Date : Aug 12, 1990  
File : L3SL1.PEM  
Unit Scale: 1cm = 50 nT/s

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels



SURFACE FEM

Client : WHITECHANNEL

Line : L35

Grid

: ICE-CLAIMS

Tx Loop : L-1

Time Base : 3.33 ms

Date : Aug 12, 1990

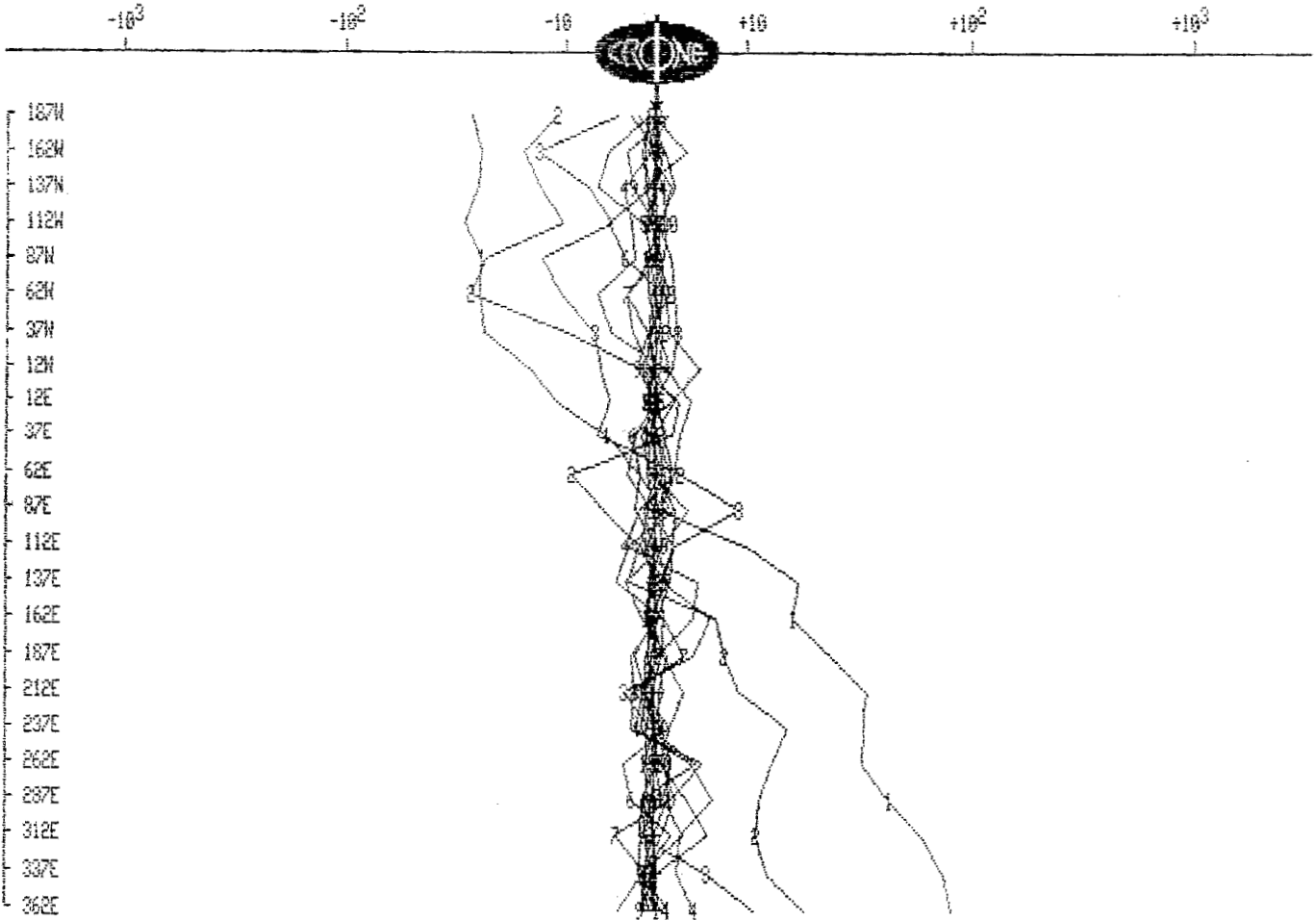
Ramp Time : 1.00 ms

File : L3SL1.FEM

Scale : 1:5000

25m FRASER FILTER

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels



# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.33 ms  
 Ramp Time : 1.00 ms

Line : L4N  
 Tx Loop : L-1  
 Date : Aug 13, 1990  
 File : L4NL1.PEM

| Station | Comp | Gains | ZTS    | Delay | Stack | Ovld | Rdg# | PP    | 1    | 2   | 3   | 4   | 5   | 6   | 7  | 8  | 9  | 10 | 11 | 12 |
|---------|------|-------|--------|-------|-------|------|------|-------|------|-----|-----|-----|-----|-----|----|----|----|----|----|----|
| 75N     | X    | 5 A7  | 1003.5 | 90    | 2048  | PP   | 370  | -453  | 68   | 60  | 37  | 28  | 7   | 5   | 6  | 0  | -1 | -1 | 0  | 1  |
| 50W     | X    | 5 A7  | 1003.5 | 90    | 1024  | PP   | 368  | -489  | 72   | 77  | 40  | 20  | 7   | 8   | 4  | -0 | 2  | 1  | -0 | -2 |
| 25W     | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 366  | -510  | 67   | 35  | 25  | 9   | 9   | 4   | 1  | 2  | -0 | -2 | -2 | -0 |
| 0E      | X    | 5 A7  | 1003.5 | 90    | 1024  | PP   | 364  | -552  | 39   | 25  | 1   | 10  | 5   | 4   | -0 | 2  | -0 | -1 | 1  | -2 |
| 50E     | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 361  | -662  | 32   | 24  | 12  | 9   | 12  | 1   | 4  | 1  | -1 | -0 | 0  | -0 |
| 75E     | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 359  | -719  | 36   | 26  | 11  | 7   | 7   | 9   | -0 | -1 | 0  | 2  | -2 | -0 |
| 100E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 357  | -761  | 31   | 20  | 11  | 9   | 4   | 4   | 3  | -1 | 0  | 2  | -1 | 1  |
| 125E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 355  | -794  | 21   | 1   | 10  | 14  | 7   | 2   | 2  | 3  | 1  | 1  | 1  | 1  |
| 150E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 353  | -876  | 31   | 22  | 12  | 8   | -0  | 5   | 1  | 2  | 2  | 1  | 0  | -0 |
| 175E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 351  | -944  | 19   | 16  | 11  | 8   | 2   | 3   | 0  | 0  | 0  | -0 | 1  | -0 |
| 200E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 349  | -1033 | 22   | 9   | 12  | 8   | 2   | 1   | 2  | 0  | 2  | 0  | -1 | 0  |
| 225E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 347  | -1212 | 139  | 69  | 17  | 7   | -1  | 4   | -1 | -3 | -1 | 0  | 1  | -0 |
| 250E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 345  | -1373 | 151  | 68  | 21  | 1   | 2   | 0   | -0 | -1 | -0 | 0  | 1  | -1 |
| 275E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 343  | -1514 | 21   | 10  | -2  | 6   | 2   | -1  | -1 | -1 | -1 | -1 | -0 | -1 |
| 300E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 341  | -1855 | 72   | 31  | 8   | 8   | 4   | 1   | -0 | -1 | 2  | -1 | 0  | 0  |
| 325E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 339  | -2427 | 50   | 35  | 6   | 9   | 0   | 1   | 1  | -0 | 1  | 1  | -2 | -0 |
| 350E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 337  | -2972 | 25   | 28  | 3   | 3   | 2   | 4   | 1  | 1  | -1 | 0  | 1  | 1  |
| 375E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 335  | -3456 | 1    | 19  | 9   | -2  | 3   | 3   | 1  | 2  | 2  | 0  | -0 | 1  |
| 400E    | X    | 5 A7  | 1003.5 | 90    | 2048  | PP   | 333  | -4625 | -37  | 8   | 4   | 3   | -1  | 5   | 1  | 1  | 1  | -1 | 1  | 0  |
| 425E    | X    | 5 A7  | 1003.5 | 90    | 2048  | PP   | 331  | -5688 | -69  | 1   | 8   | 3   | 0   | 3   | -0 | 3  | 1  | 1  | 1  | 0  |
| 450E    | X    | 4 A7  | 1003.5 | 90    | 2048  | PP   | 329  | -8661 | -177 | -17 | 2   | 5   | -2  | 4   | -1 | 1  | 2  | -1 | 2  | 0  |
| 100W    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 371  | 398   | -31  | -21 | -1  | -10 | -4  | -3  | -3 | -3 | -2 | -1 | -1 | -1 |
| 75W     | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 369  | 447   | -20  | -30 | -31 | -16 | -12 | -3  | -3 | -1 | -3 | -1 | -2 | -0 |
| 50W     | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 367  | 494   | -26  | -36 | -28 | -17 | -8  | -8  | -1 | 1  | -2 | -1 | 0  | -0 |
| 25W     | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 365  | 635   | -51  | -42 | -30 | -17 | -7  | -6  | -5 | -4 | -2 | -0 | -1 | -2 |
| 0E      | Z    | 5 A7  | 1003.5 | 90    | 1024  | PP   | 363  | 598   | -32  | -24 | -14 | -12 | -7  | -4  | 1  | -2 | -4 | -1 | -1 | -0 |
| 25E     | Z    | 5 A7  | 1003.5 | 90    | 2048  | PP   | 362  | 668   | -32  | -19 | -15 | -1  | -4  | -4  | -4 | -2 | -1 | -3 | 1  | -0 |
| 50E     | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 360  | 760   | -29  | -29 | -15 | -14 | -5  | -2  | -3 | -3 | -2 | -1 | -1 | -0 |
| 75E     | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 358  | 855   | -35  | -26 | -14 | -11 | -6  | -4  | -3 | -3 | -2 | 0  | -1 | -1 |
| 100E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 356  | 984   | -34  | -23 | -20 | -15 | -3  | -3  | -3 | -3 | -1 | -1 | -1 | 0  |
| 125E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 354  | 1097  | -39  | -25 | -19 | -11 | -6  | -2  | -4 | -3 | -2 | -0 | -1 | -1 |
| 150E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 352  | 1265  | -40  | -23 | -19 | -11 | -6  | -4  | -4 | -3 | -3 | -0 | -1 | -1 |
| 175E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 350  | 1449  | -43  | -26 | -19 | -15 | -8  | -3  | -6 | -1 | -2 | -2 | -1 | -0 |
| 200E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 348  | 1690  | -50  | -40 | -23 | -14 | -8  | -5  | -4 | -3 | -2 | -1 | -1 | -1 |
| 225E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 346  | 2031  | -45  | -63 | -47 | -26 | -13 | -7  | -4 | -2 | -2 | -0 | -1 | -0 |
| 250E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 344  | 2362  | -68  | -81 | -45 | -24 | -1  | -6  | -3 | -2 | -1 | -1 | -1 | 0  |
| 275E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 342  | 2724  | -33  | -18 | -15 | -9  | -5  | -4  | -1 | -2 | -1 | -1 | -1 | -1 |
| 300E    | Z    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 340  | 3447  | -87  | -69 | -37 | -20 | -8  | -4  | -3 | -1 | -1 | -1 | -1 | -0 |
| 325E    | Z    | 5 A7  | 1003.5 | 90    | 2048  | PP   | 338  | 4305  | -73  | -74 | -28 | -21 | -8  | -5  | -3 | -2 | -1 | -1 | -1 | -0 |
| 350E    | Z    | 5 A7  | 1003.5 | 90    | 2048  | PP   | 336  | 5489  | -62  | -70 | -39 | -17 | -1  | -6  | -4 | -2 | -1 | -1 | -1 | -0 |
| 375E    | Z    | 5 A7  | 1003.5 | 90    | 2048  | PP   | 334  | 7234  | -36  | -63 | -36 | -17 | -11 | -5  | -3 | -3 | -1 | -0 | -2 | -1 |
| 400E    | Z    | 4 A7  | 1003.5 | 90    | 2048  | PP   | 332  | 10220 | -1   | -39 | -35 | -17 | -9  | -4  | -6 | -2 | -1 | -1 | -1 | -1 |
| 425E    | Z    | 3 A7  | 1003.5 | 90    | 2048  | PP   | 330  | 14870 | 137  | -48 | -40 | -18 | -10 | -5  | -7 | -2 | -3 | -2 | -3 | -1 |
| 450E    | Z    | 3 A7  | 1003.5 | 90    | 2048  | PP   | 328  | 24060 | 248  | -36 | -43 | -21 | -13 | -10 | -7 | -7 | -6 | -6 | -5 | -4 |

**CRONE GEOPHYSICS & EXPLORATION LTD.**  
**SURFACE PEM**

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.89 ms  
 Ramp Time : 1.00 ms

Line : L4N  
 Tx Loop : L-1  
 Date : Aug 18, 1990  
 File : L4NL1.PEM

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Station Cap 13 14 15 16

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|        |    |    |    |    |
|--------|----|----|----|----|
| 75W X  | 1  | -0 | 1  | -0 |
| 50W X  | -2 | 2  | 0  | -2 |
| 25W X  | 2  | -0 | -0 | 0  |
| 0E X   | 2  | -0 | 1  | 0  |
| 50E X  | -0 | 0  | -0 | 0  |
| 75E X  | -0 | 0  | 0  | 0  |
| 100E X | 1  | 0  | 0  | -0 |
| 125E X | -2 | -0 | -0 | -0 |
| 150E X | 0  | -1 | -0 | -0 |
| 175E X | 0  | 0  | -0 | -0 |
| 200E X | -1 | -0 | 0  | -1 |
| 225E X | 1  | -1 | 0  | -0 |
| 250E X | -2 | -0 | 1  | -0 |
| 275E X | 1  | 1  | -0 | 0  |
| 300E X | 1  | 1  | 0  | 0  |
| 325E X | 2  | -0 | 1  | 0  |
| 350E X | 3  | 1  | 0  | 0  |
| 375E X | 3  | 0  | 0  | 0  |
| 400E X | 2  | 0  | 1  | 0  |
| 425E X | 3  | 1  | 1  | 1  |
| 450E X | 2  | 1  | 1  | -0 |
|        |    |    |    |    |
| 100W Z | 1  | -0 | 0  | 1  |
| 75W Z  | 0  | 1  | 0  | -0 |
| 50W Z  | -2 | -0 | -0 | 1  |
| 25W Z  | 0  | 1  | 0  | 0  |
| 0E Z   | -0 | -0 | 0  | 0  |
| 25E Z  | 0  | 1  | 0  | 0  |
| 50E Z  | -0 | 0  | 0  | 0  |
| 75E Z  | -1 | -1 | 0  | -0 |
| 100E Z | -1 | -0 | 0  | -0 |
| 125E Z | -3 | -0 | -1 | -0 |
| 150E Z | -1 | -0 | -0 | -0 |
| 175E Z | -1 | 0  | 0  | 0  |
| 200E Z | -1 | -0 | -0 | -1 |
| 225E Z | 0  | -0 | 0  | 0  |
| 250E Z | 0  | 0  | 0  | 0  |
| 275E Z | 0  | 1  | 1  | 0  |
| 300E Z | 0  | 0  | 0  | -0 |
| 325E Z | 1  | -0 | 0  | 0  |
| 350E Z | 1  | 1  | 0  | -0 |
| 375E Z | 1  | 1  | 0  | 0  |
| 400E Z | 1  | 0  | 0  | -0 |
| 425E Z | -0 | 0  | 0  | 0  |
| 450E Z | -1 | -1 | -1 | -1 |

CRONE GEOPHYSICS & SURFACE EXPLORATION LTD  
PEM

Client : WHITECHANNEL  
Grid : ICE-CLAIMS  
Time Base : 8.33 ms  
Ramp Time : 1.00 ms

Line : L250N  
7> Loop : L-1  
Date : Aug 18, 1990  
File : L250NLI.PEM

| Station | Cap | Gains | ZTS    | Delay | Stack | Ovld | Rdg# | PP    | 1   | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|---------|-----|-------|--------|-------|-------|------|------|-------|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| 275W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 273  | -133  | 81  | 28  | 14  | 8   | 7   | 4  | 4  | 2  | 1  | 1  | 1  | 0  |
| 250W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 275  | -150  | 45  | 32  | 21  | 12  | 5   | 5  | 4  | 1  | 2  | 1  | 0  | 0  |
| 225W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 277  | -176  | 58  | 44  | 26  | 19  | 8   | 6  | 4  | 1  | 0  | 0  | 1  | 0  |
| 200W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 279  | -196  | 72  | 55  | 30  | 18  | 8   | 6  | 4  | 1  | 1  | 1  | -0 | 0  |
| 175W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 281  | -206  | 75  | 49  | 32  | 18  | 11  | 6  | 3  | 1  | 1  | 1  | 0  | 0  |
| 150W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 283  | -226  | 79  | 42  | 28  | 19  | 8   | 5  | 3  | 1  | 0  | 1  | -1 | 0  |
| 125W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 285  | -247  | 61  | 37  | 20  | 11  | 9   | 7  | 2  | 1  | 2  | 0  | 0  | 0  |
| 100W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 287  | -278  | 75  | 44  | 29  | 17  | 10  | 5  | 2  | 1  | 2  | -0 | -1 | 0  |
| 75W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 289  | -299  | 94  | 62  | 35  | 20  | 5   | 5  | 2  | 2  | 0  | -0 | -0 | 1  |
| 50W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 291  | -333  | 98  | 71  | 36  | 18  | 11  | 7  | 2  | 1  | 2  | 1  | 1  | 0  |
| 25W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 293  | -388  | 101 | 62  | 30  | 15  | 10  | 7  | 1  | 1  | 1  | -1 | -2 | -1 |
| 0E      | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 295  | -424  | 113 | 64  | 26  | 13  | 8   | 7  | 0  | 2  | 1  | 0  | -0 | 0  |
| 25E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 297  | -470  | 124 | 73  | 32  | 15  | 10  | 5  | 3  | 3  | 2  | 1  | 1  | 1  |
| 50E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 299  | -521  | 131 | 63  | 33  | 13  | 4   | 5  | 2  | 1  | 1  | -0 | -0 | -0 |
| 75E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 301  | -582  | 123 | 54  | 17  | 9   | 6   | 2  | 1  | 1  | 3  | -1 | 0  | 1  |
| 100E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 303  | -746  | 130 | 64  | 26  | 7   | 3   | 4  | -2 | -1 | -1 | -1 | -0 | -1 |
| 125E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 305  | -829  | 120 | 52  | 18  | 6   | 6   | 2  | 1  | -1 | 0  | -1 | -1 | -0 |
| 150E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 307  | -872  | 132 | 56  | 15  | 3   | 3   | 2  | 2  | 1  | -1 | -1 | -0 | 0  |
| 175E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 309  | -1079 | 125 | 54  | 17  | 4   | 4   | 0  | 1  | -0 | 1  | -0 | -1 | 0  |
| 200E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 311  | -1183 | 108 | 40  | 12  | 3   | 6   | 0  | 1  | -1 | 0  | -0 | -1 | -0 |
| 225E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 313  | -1388 | 79  | 35  | 10  | 2   | 1   | 2  | 1  | -1 | -1 | -1 | -0 | -0 |
| 250E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 315  | -1627 | 45  | 24  | 10  | 3   | 1   | 1  | 1  | 2  | -1 | -0 | -1 | 0  |
| 275E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 317  | -2123 | 51  | 21  | 4   | 2   | -1  | -2 | -0 | 1  | -1 | -2 | -0 | -0 |
| 300E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 319  | -2257 | -7  | 1   | 2   | 1   | 3   | -2 | -1 | 1  | 2  | -0 | -2 | 0  |
| 325E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 321  | -2613 | -36 | 2   | 2   | -0  | -1  | -1 | 1  | 0  | -1 | -1 | -1 | -1 |
| 350E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 323  | -3294 | -70 | -5  | -4  | 1   | -4  | -3 | 0  | -2 | -1 | -0 | -2 | -1 |
| 375E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 325  | -3906 | -63 | -4  | -4  | 0   | -3  | -1 | 0  | -0 | 1  | -2 | -0 | 1  |
| 400E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 327  | -3545 | -75 | -1  | -2  | -5  | -2  | -0 | -1 | 0  | -2 | -1 | -0 | -1 |
| 275W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 272  | 265   | -11 | -3  | -5  | -3  | 0   | -1 | -0 | 0  | -0 | 1  | 1  | 0  |
| 250W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 274  | 288   | -15 | -1  | -3  | -3  | -2  | -1 | -2 | -2 | -2 | -1 | -1 | -0 |
| 225W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 276  | 321   | -14 | -17 | -14 | -5  | -2  | -3 | -2 | -0 | -1 | -0 | -1 | 1  |
| 200W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 278  | 351   | -3  | -20 | -20 | -11 | -7  | -2 | -2 | -1 | -3 | 0  | -1 | -0 |
| 175W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 280  | 383   | -21 | -22 | -19 | -14 | -6  | -3 | -4 | -1 | -3 | -1 | -1 | -0 |
| 150W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 282  | 423   | -21 | -27 | -21 | -14 | -6  | 0  | -2 | -1 | -1 | 1  | -0 | 0  |
| 125W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 284  | 464   | -31 | -27 | -19 | -12 | -4  | -3 | -2 | -2 | -0 | -0 | -0 | 0  |
| 100W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 286  | 505   | -27 | -30 | -24 | -14 | -6  | -4 | -3 | -1 | -2 | -1 | -1 | -1 |
| 75W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 288  | 550   | -13 | -36 | -23 | -20 | -9  | -3 | -4 | -2 | -2 | -0 | -1 | -0 |
| 50W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 290  | 623   | -7  | -36 | -33 | -20 | -10 | -3 | -4 | -2 | -1 | -1 | -2 | -0 |
| 25W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 292  | 696   | -9  | -38 | -35 | -21 | -10 | -5 | -4 | -3 | -2 | -1 | -1 | -1 |
| 0E      | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 294  | 774   | -12 | -42 | -32 | -22 | -1  | -6 | -2 | -3 | -1 | -1 | -1 | -1 |
| 25E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 296  | 833   | -25 | -51 | -39 | -21 | -10 | -7 | -2 | -1 | -2 | -1 | -1 | -0 |
| 50E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 298  | 991   | -23 | -50 | -40 | -24 | -11 | -6 | -4 | -1 | -1 | -1 | -1 | 1  |
| 75E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 300  | 1251  | -52 | -59 | -40 | -25 | -10 | -5 | -5 | -2 | -2 | -0 | -1 | 0  |
| 100E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 302  | 1426  | -57 | -65 | -44 | -25 | -12 | -5 | -2 | -4 | -2 | -1 | -0 | -1 |
| 125E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 304  | 1622  | -71 | -70 | -45 | -23 | -11 | -5 | -2 | -3 | -1 | -1 | -0 | -1 |
| 150E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 306  | 1873  | -81 | -75 | -47 | -21 | -13 | -5 | -4 | -3 | -1 | -0 | -1 | -0 |
| 175E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 308  | 2199  | -82 | -83 | -44 | -22 | -12 | -5 | -5 | -1 | -2 | -0 | -1 | -0 |
| 200E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 310  | 2619  | -96 | -85 | -47 | -21 | -10 | -5 | -3 | -2 | -1 | -1 | -0 | -0 |
| 225E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 312  | 3125  | -92 | -82 | -45 | -22 | -1  | -4 | -2 | -2 | -1 | -0 | -1 | 0  |
| 250E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 314  | 3958  | -68 | -73 | -44 | -21 | -8  | -5 | -3 | -3 | -1 | -1 | -2 | -0 |
| 275E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 316  | 4932  | -38 | -70 | -44 | -19 | -11 | -4 | -3 | -2 | -2 | -1 | -1 | -1 |
| 300E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 318  | 6316  | 0   | -61 | -42 | -16 | -12 | -2 | -2 | -1 | -1 | -1 | -1 | -0 |



# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.33 ms  
 Ramp Time : 1.00 ms

Line : L250N  
 Tx Loop : L-1  
 Date : Aug 13, 1990  
 File : L250NLI.PEM

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Station Cap 13 14 15 16

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|        |    |    |    |    |
|--------|----|----|----|----|
| 275W X | -0 | -0 | -0 | 0  |
| 250W X | -2 | -0 | 0  | 1  |
| 225W X | -1 | -0 | -0 | -1 |
| 200W X | -1 | 0  | -0 | -1 |
| 175W X | -0 | -0 | 0  | -0 |
| 150W X | -1 | -0 | -1 | -0 |
| 125W X | -2 | -0 | -1 | -0 |
| 100W X | -1 | -0 | -0 | 0  |
| 75W X  | -1 | -0 | 0  | 0  |
| 50W X  | -1 | 0  | 1  | 1  |
| 25W X  | -2 | -1 | -1 | -1 |
| 0E X   | -1 | -0 | -0 | -1 |
| 25E X  | 0  | 0  | 1  | 1  |
| 50E X  | -1 | -0 | 0  | 0  |
| 75E X  | -1 | -1 | -1 | -1 |
| 100E X | 1  | -0 | 0  | -0 |
| 125E X | 0  | 0  | 1  | -1 |
| 150E X | -1 | 0  | 1  | -0 |
| 175E X | -0 | -0 | -0 | 0  |
| 200E X | -1 | -1 | 0  | -0 |
| 225E X | 0  | -0 | 0  | -0 |
| 250E X | 0  | 0  | 1  | 0  |
| 275E X | 0  | -0 | 0  | -0 |
| 300E X | 1  | 1  | 0  | 0  |
| 325E X | -0 | -1 | -0 | 0  |
| 350E X | -1 | 0  | -0 | 0  |
| 375E X | 0  | -0 | -0 | 0  |
| 400E X | -0 | 0  | 0  | -0 |
|        |    |    |    |    |
| 275W Z | 0  | 1  | -0 | -1 |
| 250W Z | -0 | 0  | -0 | -1 |
| 225W Z | 1  | 1  | 1  | 1  |
| 200W Z | -0 | -0 | -0 | -1 |
| 175W Z | -0 | -0 | 0  | -0 |
| 150W Z | 1  | 1  | 1  | 0  |
| 125W Z | 1  | 1  | 1  | 1  |
| 100W Z | 0  | -0 | 0  | 0  |
| 75W Z  | 0  | 0  | 0  | 0  |
| 50W Z  | 0  | 0  | 0  | 0  |
| 25W Z  | 0  | 0  | 0  | -0 |
| 0E Z   | -0 | 0  | 0  | -0 |
| 25E Z  | 0  | 0  | 0  | -0 |
| 50E Z  | -0 | 0  | 1  | -1 |
| 75E Z  | 0  | 0  | 0  | -0 |
| 100E Z | -2 | -0 | 0  | 0  |
| 125E Z | -0 | -0 | 0  | 0  |
| 150E Z | 0  | 0  | 0  | -0 |
| 175E Z | 0  | -0 | 0  | 0  |
| 200E Z | -0 | 0  | 0  | 0  |
| 225E Z | 0  | 0  | 0  | -0 |
| 250E Z | -0 | 0  | 0  | -0 |
| 275E Z | -0 | 0  | 0  | -0 |

**CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM**

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.33 ms  
 Ramp Time : 1.00 ms

Line : L1N  
 Tx Loop : L-1  
 Date : Aug 13, 1990  
 File : L1NLI.PEM

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Station Cmp 13 14 15 16

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|      |   |    |    |    |    |
|------|---|----|----|----|----|
| 250W | X | 1  | 1  | 1  | 1  |
| 225W | X | 0  | 0  | 1  | 1  |
| 200W | X | -1 | -0 | 0  | -0 |
| 175W | X | -1 | 0  | 0  | -1 |
| 150W | X | -3 | -1 | -1 | -1 |
| 125W | X | -1 | -0 | 0  | 0  |
| 100W | X | -1 | 0  | 0  | 1  |
| 75W  | X | -1 | 0  | 0  | 0  |
| 50W  | X | 0  | 0  | 0  | 0  |
| 25W  | X | 3  | 0  | -0 | 0  |
| 0E   | X | 0  | 0  | 0  | 0  |
| 25E  | X | 2  | 1  | 0  | 0  |
| 50E  | X | 1  | -0 | 1  | -0 |
| 75E  | X | 2  | 0  | 0  | -0 |
| 100E | X | 1  | 1  | 0  | 0  |
| 125E | X | 3  | 1  | 0  | 0  |
| 150E | X | 3  | 1  | 1  | 0  |
| 175E | X | 1  | 0  | 1  | 0  |
| 200E | X | 2  | 1  | 1  | -0 |
| 225E | X | 4  | 1  | 1  | 0  |
| 250E | X | 3  | 1  | 0  | -0 |
| 275E | X | 3  | 0  | 0  | 0  |
| 300E | X | 1  | 0  | 0  | -0 |
| 325E | X | 3  | 0  | 0  | -0 |
| 350E | X | 2  | 0  | 1  | -0 |
|      |   |    |    |    |    |
| 250W | Z | -2 | -0 | -0 | -0 |
| 225W | Z | 1  | 0  | 1  | 0  |
| 200W | Z | -1 | -0 | -0 | 0  |
| 175W | Z | -0 | 0  | 0  | 1  |
| 150W | Z | -0 | 0  | 0  | 0  |
| 125W | Z | 0  | 1  | 1  | 1  |
| 100W | Z | -1 | 0  | 0  | 0  |
| 75W  | Z | 0  | 0  | 0  | 0  |
| 50W  | Z | 1  | 0  | 1  | 0  |
| 25W  | Z | 0  | -1 | -0 | -0 |
| 0E   | Z | -0 | 0  | 1  | 0  |
| 25E  | Z | -0 | 1  | 0  | 0  |
| 50E  | Z | -0 | 0  | 0  | 0  |
| 75E  | Z | -0 | 0  | -0 | 0  |
| 100E | Z | -0 | 0  | 1  | -0 |
| 125E | Z | -0 | 0  | 0  | -0 |
| 150E | Z | -0 | 0  | 1  | -0 |
| 175E | Z | -1 | 0  | -0 | 0  |
| 200E | Z | 1  | 1  | 0  | 0  |
| 225E | Z | 0  | 0  | 0  | 0  |
| 250E | Z | 1  | 0  | 1  | 0  |
| 275E | Z | 2  | 1  | 1  | 0  |
| 300E | Z | -0 | 0  | -0 | -0 |
| 325E | Z | 0  | -0 | -0 | -0 |
| 350E | Z | 0  | 0  | -0 | -0 |

**CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE FEM**

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 9.99 ms  
 Ramp Time : 1.00 ms

Line : L1N  
 Tx Loop : L-1  
 Date : Aug 19, 1990  
 File : L1NLI.FEM

| Station | Cap | Gains | ZTS    | Delay | Stack | Ovld | Rdgt | PP    | 1    | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|---------|-----|-------|--------|-------|-------|------|------|-------|------|-----|-----|-----|-----|----|----|----|----|----|----|----|
| 250W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 271  | -129  | 76   | 59  | 32  | 18  | 1   | 4  | 3  | 4  | 2  | 2  | 1  | 0  |
| 225W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 269  | -140  | 71   | 44  | 32  | 14  | 3   | 4  | 2  | 2  | 1  | 2  | 0  | 0  |
| 200W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 267  | -153  | 81   | 32  | 34  | 18  | 1   | 7  | 3  | 2  | 2  | 1  | -0 | -0 |
| 175W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 265  | -152  | 32   | 45  | 27  | 17  | 9   | 9  | 3  | 2  | -0 | 0  | -0 | -0 |
| 150W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 263  | -152  | 95   | 57  | 36  | 12  | 3   | 7  | 3  | 1  | 0  | 2  | 0  | -1 |
| 125W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 261  | -182  | 103  | 60  | 34  | 18  | 9   | 6  | 3  | 2  | 1  | 1  | -1 | -0 |
| 100W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 259  | -186  | 99   | 60  | 32  | 16  | 1   | 5  | 3  | 1  | 2  | -1 | 0  | -0 |
| 75W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 257  | -221  | 102  | 60  | 38  | 18  | 8   | 5  | 3  | 1  | 1  | -0 | 0  | 0  |
| 50W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 255  | -228  | 104  | 61  | 32  | 14  | 9   | 5  | 1  | 1  | 0  | 1  | -0 | -0 |
| 25W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 253  | -248  | 111  | 58  | 30  | 14  | 7   | 7  | 2  | 1  | -0 | 1  | -1 | -0 |
| 0E      | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 251  | -296  | 106  | 59  | 29  | 12  | 7   | 4  | 5  | 0  | 1  | -0 | -1 | -1 |
| 25E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 249  | -308  | 116  | 62  | 21  | 9   | 1   | 4  | 3  | 1  | -0 | -0 | -1 | -0 |
| 50E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 247  | -415  | 122  | 57  | 25  | 10  | 7   | 6  | 2  | 1  | -0 | -0 | -1 | 1  |
| 75E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 245  | -492  | 124  | 54  | 15  | 6   | 6   | 6  | 0  | 1  | -1 | -2 | -1 | -0 |
| 100E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 243  | -524  | 124  | 59  | 16  | 11  | 2   | 5  | 3  | 1  | 1  | -1 | -0 | 0  |
| 125E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 241  | -659  | 126  | 56  | 18  | 9   | 3   | -0 | 3  | 1  | 1  | -1 | -2 | 1  |
| 150E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 239  | -746  | 114  | 46  | 14  | 5   | 3   | 1  | -0 | 1  | 1  | -1 | -1 | -1 |
| 175E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 237  | -940  | 96   | 40  | 7   | 7   | 1   | 3  | 1  | -0 | -1 | -2 | -0 | 0  |
| 200E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 235  | -1040 | 75   | 33  | 10  | 2   | 3   | 1  | 0  | 1  | -1 | 0  | -0 | 1  |
| 225E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 233  | -976  | 47   | 20  | 3   | 1   | 3   | 3  | 0  | 1  | 1  | -1 | 0  | -0 |
| 250E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 231  | -1247 | 33   | 11  | 4   | -1  | 0   | 4  | 0  | 1  | 1  | -1 | -1 | -0 |
| 275E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 229  | -1491 | 17   | 1   | 4   | 1   | -0  | 1  | -1 | 1  | -1 | -0 | -0 | -0 |
| 300E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 227  | -1596 | -3   | 3   | -4  | 3   | -2  | 3  | -1 | -1 | 1  | -1 | -1 | -0 |
| 325E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 225  | -1755 | -17  | -4  | -1  | -3  | -1  | 1  | 1  | 1  | 0  | 1  | -0 | 1  |
| 350E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 223  | -2116 | -38  | -1  | -2  | -2  | -1  | 2  | -1 | 2  | 1  | -0 | 0  | 0  |
| 250W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 270  | 330   | 1    | -17 | -12 | -1  | -4  | -1 | -2 | -2 | -1 | -0 | -0 | -1 |
| 225W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 268  | -348  | -18  | -23 | -16 | -10 | -4  | -4 | -1 | -2 | -3 | -1 | -0 | -0 |
| 200W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 266  | 371   | -8   | -24 | -19 | -14 | -8  | -3 | -3 | -3 | -2 | -0 | -1 | -1 |
| 175W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 264  | 408   | -23  | -27 | -21 | -13 | -5  | -3 | -3 | -3 | -2 | -1 | -1 | -0 |
| 150W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 262  | 447   | -21  | -31 | -26 | -15 | -8  | -3 | -2 | -2 | -2 | -1 | -1 | -1 |
| 125W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 260  | 488   | -20  | -36 | -28 | -17 | -9  | -3 | -2 | -3 | -3 | -1 | -1 | -0 |
| 100W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 258  | 538   | -27  | -34 | -29 | -19 | -9  | -4 | -4 | -2 | -2 | -1 | -1 | -0 |
| 75W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 256  | 596   | -23  | -38 | -31 | -13 | -9  | -5 | -3 | -2 | -2 | -0 | -1 | 0  |
| 50W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 254  | 650   | -29  | -43 | -32 | -20 | -9  | -6 | -4 | -1 | -2 | -0 | -1 | -0 |
| 25W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 252  | 718   | -35  | -45 | -35 | -22 | -13 | -6 | -3 | -4 | -2 | -1 | -2 | -1 |
| 0E      | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 250  | 789   | -36  | -48 | -37 | -21 | -10 | -5 | -4 | -2 | -2 | -1 | -2 | -1 |
| 25E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 248  | 835   | -40  | -52 | -37 | -22 | -1  | -4 | -4 | -2 | -2 | -1 | -1 | 0  |
| 50E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 246  | 984   | -38  | -55 | -41 | -22 | -8  | -3 | -3 | -3 | -2 | -0 | -1 | -0 |
| 75E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 244  | 1101  | -53  | -62 | -41 | -22 | -11 | -6 | -4 | -2 | -1 | -1 | -1 | 0  |
| 100E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 242  | 1244  | -78  | -68 | -41 | -23 | -11 | -6 | -3 | -2 | -2 | -0 | -1 | -0 |
| 125E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 240  | 1426  | -95  | -77 | -45 | -21 | -13 | -6 | -5 | -3 | -1 | -1 | -1 | -0 |
| 150E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 238  | 1606  | -102 | -79 | -46 | -22 | -11 | -5 | -4 | -2 | -2 | -1 | -1 | 0  |
| 175E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 236  | 1846  | -102 | -80 | -44 | -21 | -11 | -7 | -3 | -3 | -1 | -1 | -2 | -1 |
| 200E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 234  | 2175  | -101 | -83 | -48 | -22 | -1  | -6 | -3 | -2 | -1 | -1 | -2 | 0  |
| 225E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 232  | 2588  | -89  | -79 | -45 | -18 | -11 | -7 | -5 | -3 | -4 | -1 | -1 | -1 |
| 250E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 230  | 3090  | -75  | -75 | -42 | -20 | -12 | -5 | -4 | -2 | -2 | -1 | -1 | -1 |
| 275E    | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP   | 228  | 3731  | -59  | -69 | -41 | -22 | -9  | -6 | -7 | -1 | -2 | -1 | -2 | -1 |
| 300E    | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP   | 226  | 4503  | -36  | -56 | -35 | -19 | -6  | -5 | -3 | -2 | -0 | -0 | -0 | 0  |
| 325E    | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP   | 224  | 5592  | -8   | -50 | -36 | -19 | -1  | -2 | -5 | -3 | -2 | -1 | -1 | -1 |
| 350E    | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP   | 222  | 7074  | 20   | -44 | -28 | -19 | -11 | -5 | -5 | -2 | -3 | -1 | -2 | -0 |

LUN LTD

## SURFACE PEM

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.88 ms  
 Ramp Time : 1.00 ms

Line : L0  
 Tx Loop : L-1  
 Date : Aug 12, 1990  
 File : LOL1.PEM

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Station Cap 13 14 15 16

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|      |   |    |    |    |    |
|------|---|----|----|----|----|
| 200W | X | -0 | 0  | 1  | 0  |
| 175W | X | -2 | -1 | 0  | -1 |
| 150W | X | 1  | -1 | -1 | 0  |
| 125W | X | 1  | 1  | -0 | 1  |
| 100W | X | 1  | 1  | -1 | -0 |
| 75W  | X | 0  | 0  | 1  | -1 |
| 50W  | X | -1 | 1  | -0 | 0  |
| 25W  | X | -0 | 0  | 0  | 1  |
| 0E   | X | -2 | -1 | -0 | 0  |
| 25E  | X | -2 | -1 | -1 | 1  |
| 50E  | X | 0  | 1  | -0 | 0  |
| 75E  | X | -1 | -2 | -0 | -0 |
| 100E | X | 4  | 1  | -0 | 1  |
| 125E | X | 3  | 0  | 2  | 0  |
| 150E | X | 1  | 1  | -0 | -0 |
| 175E | X | -3 | -1 | -0 | -2 |
| 200E | X | 3  | 1  | 2  | 1  |
| 225E | X | 0  | 1  | -1 | -1 |
| 250E | X | -1 | -1 | -1 | -1 |
| 275E | X | -2 | -0 | -1 | -0 |
| 300E | X | 0  | 0  | 1  | 0  |
| 350E | X | -1 | -0 | 1  | 1  |
| 400E | X | -2 | 0  | 0  | 0  |
| 450E | X | 1  | 0  | -1 | 0  |

|      |   |    |    |    |    |
|------|---|----|----|----|----|
| 200W | Z | -1 | -0 | -0 | -0 |
| 175W | Z | 1  | 1  | 0  | 0  |
| 150W | Z | -0 | 0  | 0  | 0  |
| 125W | Z | -0 | -0 | 1  | 0  |
| 100W | Z | 0  | -0 | 0  | 0  |
| 75W  | Z | 0  | -0 | 0  | 0  |
| 50W  | Z | -1 | -0 | 0  | -0 |
| 25W  | Z | 0  | -0 | 0  | 0  |
| 0E   | Z | 0  | -0 | 0  | 0  |
| 25E  | Z | -0 | 0  | -0 | 0  |
| 50E  | Z | -1 | -1 | -0 | -0 |
| 75E  | Z | -4 | -1 | 0  | 1  |
| 100E | Z | -6 | -2 | -0 | -1 |
| 125E | Z | -1 | -0 | 0  | -0 |
| 150E | Z | -0 | -0 | -1 | 0  |
| 175E | Z | -0 | 0  | 1  | 0  |
| 200E | Z | -1 | 0  | -0 | 1  |
| 225E | Z | -1 | 1  | 0  | -0 |
| 250E | Z | -1 | 0  | -0 | 0  |
| 275E | Z | -1 | -0 | 0  | -0 |
| 300E | Z | -0 | -0 | 0  | -0 |
| 350E | Z | -0 | 0  | 0  | 1  |
| 400E | Z | -1 | -0 | -0 | -0 |
| 450E | Z | -1 | -0 | 0  | -0 |

**CRONE GEOPHYSICS & EXPLORATION LTD  
SURFACE PEM**

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.33 ms  
 Ramp Time : 1.00 ms

Line : L0  
 Tx Loop : L-1  
 Date : Aug 12, 1990  
 File : LOL1.PEM

| Station | Cap | Gains | ZTS    | Delay | Stack | Ovid   | Rdg#  | PP   | 1   | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|---------|-----|-------|--------|-------|-------|--------|-------|------|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| 200W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 175 | -91   | 91   | 54  | 26  | 12  | 6   | 8   | 1  | 2  | 2  | 2  | -1 | 1  |    |
| 175W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 177 | -77   | 92   | 48  | 18  | 19  | 5   | 4   | 6  | -1 | 2  | 1  | 1  | -1 |    |
| 150W    | X   | 5 A7  | 1003.5 | 90    | 2048  | PP 179 | -110  | 87   | 51  | 21  | 19  | 5   | 6   | -2 | 2  | 1  | 1  | -0 | -0 |    |
| 125W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 181 | -132  | 115  | 60  | 36  | 20  | 6   | 5   | 3  | 0  | 0  | -1 | 0  | 0  |    |
| 100W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 183 | -141  | 110  | 68  | 34  | 18  | 9   | 3   | 2  | 2  | 1  | 1  | -0 | -1 |    |
| 75W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 185 | -145  | 123  | 64  | 34  | 19  | 8   | 5   | 3  | 1  | 1  | -1 | -1 | -1 |    |
| 50W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 187 | -144  | 122  | 66  | 31  | 1   | 6   | 3   | 4  | 0  | 2  | -0 | 1  | 0  |    |
| 25W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 189 | -182  | 111  | 54  | 24  | 14  | 8   | 4   | 2  | 3  | 2  | -1 | 0  | 0  |    |
| 0E      | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 191 | -165  | 111  | 52  | 21  | 10  | 4   | 5   | 4  | 4  | 1  | -0 | 0  | 0  |    |
| 25E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 193 | -253  | 110  | 60  | 24  | 8   | 3   | 8   | -0 | 0  | 3  | -0 | 1  | 2  |    |
| 50E     | X   | 5 A7  | 1003.5 | 90    | 2048  | PP 195 | -330  | 112  | 47  | 13  | 17  | -1  | 6   | -0 | 4  | -2 | 0  | -0 | 1  |    |
| 75E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 197 | -414  | 119  | 63  | 20  | 5   | 5   | 4   | 0  | -1 | -1 | 2  | 1  | 0  |    |
| 100E    | X   | 5 A7  | 1003.5 | 90    | 1024  | PP 199 | -548  | 111  | 69  | 8   | 13  | -1  | 7   | 3  | 2  | -2 | -3 | -1 | 1  |    |
| 125E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 201 | -686  | 116  | 62  | 21  | 5   | 2   | 3   | 3  | 0  | -2 | -1 | -1 | -0 |    |
| 150E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 203 | -700  | 99   | 51  | 14  | 4   | 4   | 4   | 1  | -0 | 3  | -1 | 0  | -1 |    |
| 175E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 205 | -798  | 85   | 37  | 14  | 7   | 2   | 3   | -0 | -1 | 3  | -2 | -1 | -1 |    |
| 200E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 207 | -881  | 74   | 32  | 10  | 11  | 1   | 4   | 4  | 2  | 1  | 1  | 1  | 1  |    |
| 225E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 209 | -1130 | 61   | 22  | 13  | 7   | 2   | 4   | 2  | 1  | 3  | -0 | -0 | -1 |    |
| 250E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 211 | -1227 | 30   | 18  | 2   | 7   | -2  | 5   | 3  | -0 | -0 | -1 | 1  | -1 |    |
| 275E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 213 | -1404 | 16   | 21  | 1   | 7   | -0  | 1   | -0 | 2  | -1 | -0 | 0  | -0 |    |
| 300E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 215 | -1542 | -3   | 10  | 8   | -3  | 3   | 5   | -1 | 2  | -2 | 1  | 1  | 0  |    |
| 350E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 217 | -2062 | -37  | 6   | -3  | -1  | 4   | 5   | 0  | 2  | 1  | 1  | -0 | 2  |    |
| 400E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP 219 | -2303 | -94  | -21 | -8  | -1  | -4  | 0   | 4  | -1 | -0 | -0 | 0  | 1  |    |
| 450E    | X   | 5 A7  | 1003.5 | 90    | 2048  | PP 221 | -3245 | -131 | -26 | -4  | -4  | 2   | 4   | 3  | -3 | 2  | -1 | -1 | -1 |    |
| 200W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 174 | 386   | -15  | -28 | -23 | -13 | -6  | -3  | -3 | -3 | -2 | -1 | -1 | -0 |    |
| 175W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 176 | 373   | -30  | -34 | -23 | -12 | -8  | -4  | -3 | -2 | -1 | -1 | -1 | -0 |    |
| 150W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 178 | 403   | -38  | -37 | -21 | -16 | -8  | -4  | -3 | -2 | -1 | 0  | -1 | -0 |    |
| 125W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 180 | 440   | -37  | -38 | -23 | -16 | -7  | -5  | -2 | -1 | -2 | -1 | -2 | -1 |    |
| 100W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 182 | 530   | -34  | -44 | -34 | -19 | -8  | -4  | -3 | -2 | -2 | 0  | -1 | -1 |    |
| 75W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 184 | 584   | -33  | -43 | -35 | -19 | -14 | -6  | -1 | -4 | -3 | -1 | -1 | -0 |    |
| 50W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 186 | 632   | -41  | -43 | -41 | -13 | -10 | -6  | -4 | -1 | -2 | -2 | -1 | -0 |    |
| 25W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 188 | 692   | -52  | -36 | -33 | -22 | -10 | -8  | -1 | -2 | -3 | -1 | -1 | -2 |    |
| 0E      | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP 190 | 765   | -64  | -59 | -41 | -22 | -13 | -7  | -4 | -2 | -2 | -2 | -1 | -1 |    |
| 25E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 192 | 826   | -65  | -60 | -41 | -23 | -1  | -8  | -5 | -2 | -3 | -1 | -1 | -1 |    |
| 50E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 194 | 914   | -84  | -72 | -42 | -18 | -10 | -3  | -5 | -1 | -2 | -1 | -1 | 0  |    |
| 75E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 196 | 972   | -93  | -72 | -42 | -23 | -13 | -10 | -4 | -2 | -1 | -1 | -1 | -1 |    |
| 100E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 198 | 1041  | -97  | -78 | -46 | -17 | -14 | -6  | -6 | 2  | 0  | 0  | 0  | 0  |    |
| 125E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 200 | 1148  | -115 | -88 | -54 | -27 | -11 | -7  | -6 | -3 | -1 | -1 | -2 | -1 |    |
| 150E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 202 | 1258  | -112 | -86 | -52 | -24 | -11 | -7  | -3 | -2 | -1 | -1 | -1 | 0  |    |
| 175E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 204 | 1480  | -110 | -91 | -55 | -27 | -14 | -8  | -6 | -3 | -1 | -2 | -2 | -1 |    |
| 200E    | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP 206 | 1669  | -108 | -82 | -49 | -20 | -14 | -7  | -3 | -3 | -2 | -0 | -1 | -1 |    |
| 225E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 208 | 1913  | -90  | -89 | -50 | -22 | -13 | -8  | -5 | -4 | -2 | -1 | -1 | 0  |    |
| 250E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 210 | 2212  | -85  | -79 | -48 | -22 | -11 | -8  | -2 | -3 | -1 | 0  | -1 | 1  |    |
| 275E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 212 | 2631  | -57  | -76 | -44 | -23 | -13 | -3  | -4 | -3 | -2 | 1  | -1 | -0 |    |
| 300E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP 214 | 3092  | -42  | -75 | -44 | -22 | -1  | -6  | -4 | -3 | -2 | -1 | -1 | -1 |    |
| 350E    | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP 216 | 4436  | -6   | -57 | -40 | -17 | -8  | -7  | -5 | -2 | -2 | -1 | -1 | -1 |    |
| 400E    | Z   | 5 A7  | 1003.5 | 90    | 2048  | PP 218 | 6944  | 112  | -35 | -40 | -19 | -12 | -4  | -5 | -3 | -2 | -1 | -1 | -1 |    |
| 450E    | Z   | 4 A7  | 1003.5 | 90    | 2048  | PP 220 | 11650 | 188  | -17 | -32 | -16 | -1  | -6  | -4 | -3 | -1 | -2 | -1 | -0 |    |

# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.33 ms  
 Ramp Time : 1.00 ms

Line : L15  
 Tx Loop : L-1  
 Date : Aug 12, 1990  
 File : L1SL1.PEM

| Station | Cap | Gains | ZFS    | Delay | Stack | Ovld | Rdg# | PP    | 1    | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|---------|-----|-------|--------|-------|-------|------|------|-------|------|-----|-----|-----|-----|----|----|----|----|----|----|----|
| 250W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 173  | -66   | 86   | 52  | 24  | 14  | 5   | 8  | 1  | 0  | 1  | -1 | -1 | -1 |
| 225W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 171  | -65   | 91   | 58  | 31  | 15  | 5   | 5  | 2  | 1  | 1  | -2 | 1  | 0  |
| 200W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 169  | -93   | 97   | 63  | 28  | 16  | 2   | 5  | 4  | 2  | 1  | -1 | -0 | -0 |
| 175W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 167  | -99   | 94   | 61  | 32  | 13  | 8   | 6  | 6  | 2  | -2 | 1  | 1  | 1  |
| 150W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 164  | -102  | 103  | 59  | 20  | 14  | 4   | 0  | 3  | 1  | 1  | 0  | -2 | -1 |
| 125W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 163  | -117  | 105  | 66  | 21  | 17  | 3   | 5  | 3  | 2  | 1  | -2 | -0 | -2 |
| 100W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 161  | -156  | 92   | 57  | 31  | 10  | 4   | 1  | 3  | -0 | -0 | -0 | 0  | 1  |
| 75W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 159  | -232  | 103  | 58  | 27  | 11  | 5   | 2  | 3  | 1  | 2  | -1 | -1 | -1 |
| 50W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 157  | -245  | 106  | 49  | 28  | 13  | 8   | 6  | 2  | 2  | 1  | -1 | 1  | -0 |
| 25W     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 155  | -276  | 107  | 55  | 23  | 9   | 2   | 3  | 1  | 0  | 1  | -1 | -1 | -0 |
| 0E      | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 153  | -409  | 124  | 66  | 32  | 11  | 6   | 1  | 1  | 1  | -0 | 3  | 0  | -1 |
| 25E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 151  | -409  | 117  | 58  | 23  | 13  | 9   | 2  | -0 | 2  | -1 | 0  | -1 | 0  |
| 50E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 149  | -457  | 120  | 62  | 24  | 13  | 4   | 4  | 3  | -1 | 1  | -1 | -1 | 1  |
| 75E     | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 147  | -528  | 96   | 48  | 14  | 12  | 6   | 4  | -0 | 3  | -1 | 1  | -1 | 2  |
| 100E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 145  | -531  | 83   | 52  | 22  | 7   | 0   | 2  | 1  | 1  | 1  | -1 | -1 | 1  |
| 125E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 143  | -538  | 74   | 37  | 10  | 1   | 4   | 4  | 2  | -1 | -2 | -0 | -0 | 0  |
| 150E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 141  | -642  | 51   | 23  | 11  | 2   | 0   | 5  | 1  | 2  | -0 | 1  | -1 | 1  |
| 175E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 139  | -931  | 55   | 26  | 9   | 6   | 2   | 1  | 3  | 0  | -1 | 0  | -0 | 0  |
| 200E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 137  | -969  | 32   | 14  | 0   | 2   | -1  | 2  | -1 | 0  | 1  | 1  | -0 | 1  |
| 225E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 135  | -1113 | 12   | 10  | 7   | 5   | -0  | 3  | -2 | 3  | -2 | 1  | -0 | -1 |
| 250E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 133  | -1336 | 1    | 7   | 9   | 3   | -0  | 6  | -2 | 0  | -0 | 1  | 1  | 0  |
| 275E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 131  | -1422 | -11  | 1   | -4  | 3   | 1   | 0  | 1  | 1  | -1 | 1  | -1 | -1 |
| 300E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 129  | -1696 | -26  | -5  | 2   | 2   | -3  | 4  | -1 | -1 | 1  | -1 | -1 | -0 |
| 325E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 127  | -2241 | -49  | -6  | -4  | -3  | -0  | 5  | 3  | -3 | -1 | -0 | -0 | -0 |
| 350E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 125  | -2715 | -69  | -14 | 1   | 2   | -0  | -1 | 1  | 1  | -0 | -2 | 1  | 1  |
| 375E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 123  | -3148 | -115 | -27 | -4  | -3  | 2   | 2  | 3  | -0 | 2  | 1  | 1  | 0  |
| 400E    | X   | 5 A7  | 1003.5 | 90    | 2048  | PP   | 121  | -3925 | -136 | -33 | -1  | -1  | 1   | 2  | 0  | 3  | 0  | 1  | -0 | -0 |
| 425E    | X   | 5 A7  | 1003.5 | 90    | 2048  | PP   | 119  | -4489 | -131 | -13 | -2  | -4  | -1  | -1 | 2  | 1  | 1  | -0 | -1 | -0 |
| 450E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 117  | -3623 | -119 | -19 | -5  | -2  | 2   | -2 | 4  | -1 | 0  | 2  | 1  | -0 |
| 250W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 172  | 342   | -34  | -31 | -26 | -13 | -6  | -2 | -5 | -1 | -1 | -1 | -0 | 0  |
| 225W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 170  | 361   | -29  | -31 | -25 | -15 | -7  | -4 | -3 | -2 | -1 | -0 | -0 | -1 |
| 200W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 168  | 376   | -31  | -37 | -30 | -15 | -9  | -4 | -2 | -3 | -1 | -1 | -0 | -0 |
| 175W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 166  | 398   | -45  | -49 | -25 | -15 | -11 | -8 | -2 | -5 | -2 | -3 | -1 | -1 |
| 150W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 165  | 418   | -32  | -50 | -31 | -19 | -8  | -6 | -3 | -2 | -3 | -1 | -1 | -1 |
| 125W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 162  | 438   | -54  | -54 | -37 | -20 | -1  | -7 | -1 | -4 | -1 | -1 | -2 | -0 |
| 100W    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 160  | 467   | -59  | -52 | -36 | -18 | -9  | -6 | -4 | -2 | -2 | -1 | -1 | -0 |
| 75W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 158  | 491   | -70  | -50 | -35 | -21 | -9  | -7 | -3 | -3 | -2 | -1 | -1 | -0 |
| 50W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 156  | 540   | -72  | -50 | -42 | -22 | -9  | -6 | -5 | -3 | -1 | -1 | -0 | -0 |
| 25W     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 154  | 578   | -77  | -54 | -41 | -20 | -12 | -5 | -6 | -2 | -1 | -1 | -2 | -0 |
| 0E      | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 152  | 638   | -75  | -76 | -47 | -24 | -12 | -6 | -4 | -1 | -2 | 0  | -0 | -0 |
| 25E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 150  | 700   | -93  | -78 | -45 | -22 | -13 | -8 | -2 | -4 | -2 | -1 | -1 | -1 |
| 50E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 148  | 780   | -100 | -84 | -52 | -26 | -13 | -3 | -6 | -3 | -0 | -1 | -1 | -0 |
| 75E     | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 146  | 876   | -110 | -84 | -46 | -25 | -13 | -6 | -5 | -1 | -2 | 0  | -1 | 1  |
| 100E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 144  | 962   | -110 | -79 | -48 | -22 | -13 | -9 | -5 | -1 | -2 | -0 | -0 | -0 |
| 125E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 142  | 1114  | -99  | -82 | -51 | -25 | -11 | -9 | -5 | -3 | -1 | -1 | -1 | -0 |
| 150E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 140  | 1273  | -100 | -79 | -41 | -23 | -1  | -7 | -3 | -2 | -2 | -1 | -1 | -1 |
| 175E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 138  | 1438  | -90  | -83 | -51 | -25 | -12 | -8 | -4 | -4 | -1 | -1 | -1 | -0 |
| 200E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 136  | 1772  | -66  | -71 | -41 | -24 | -12 | -4 | -4 | -2 | -1 | -1 | -1 | 0  |
| 225E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 134  | 2113  | -74  | -69 | -41 | -19 | -8  | -8 | -4 | -3 | -1 | -1 | -1 | -0 |
| 250E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 132  | 2658  | -43  | -68 | -46 | -23 | -7  | -6 | -5 | -3 | -1 | -0 | -1 | 0  |
| 275E    | Z   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 130  | 3285  | -6   | -62 | -43 | -21 | -13 | -3 | -3 | -2 | -2 | -0 | -1 | 0  |
| 300E    | Z   | 5 A7  | 1003.5 | 90    | 1024  | PP   | 128  | 4163  | 61   | -43 | -44 | -18 | -15 | -2 | -5 | -2 | -3 | -1 | -1 | 0  |

# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE FEM

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 3.33 ms  
 Ramp Time : 1.00 ms

Line : L15  
 Tx Loop : L-1  
 Date : Aug 12, 1990  
 File : L15L1.FEM

| Station | Cap | 13 | 14 | 15 | 16 |
|---------|-----|----|----|----|----|
| 250W    | X   | -0 | 0  | -0 | 0  |
| 225W    | X   | -0 | 0  | 0  | 0  |
| 200W    | X   | 1  | 0  | 0  | 1  |
| 175W    | X   | -1 | -0 | -0 | -0 |
| 150W    | X   | -1 | 0  | 0  | 0  |
| 125W    | X   | 2  | 1  | 1  | 1  |
| 100W    | X   | 2  | 1  | -0 | 0  |
| 75W     | X   | 1  | 0  | -1 | -1 |
| 50W     | X   | -0 | -0 | 0  | -0 |
| 25W     | X   | -0 | 0  | 1  | 0  |
| 0E      | X   | 0  | -0 | -0 | -0 |
| 25E     | X   | 0  | -0 | 0  | 0  |
| 50E     | X   | 0  | -0 | -1 | -0 |
| 75E     | X   | 0  | -0 | 0  | -0 |
| 100E    | X   | -1 | -0 | -1 | -0 |
| 125E    | X   | -1 | 0  | -0 | -0 |
| 150E    | X   | -1 | -0 | 0  | 0  |
| 175E    | X   | -1 | 0  | -0 | -0 |
| 200E    | X   | -1 | -0 | 0  | -0 |
| 225E    | X   | -2 | 0  | 0  | -0 |
| 250E    | X   | -1 | 0  | -1 | -1 |
| 275E    | X   | -0 | -0 | 1  | -0 |
| 300E    | X   | -0 | 1  | 0  | 0  |
| 325E    | X   | 1  | -1 | 0  | 0  |
| 350E    | X   | 1  | -0 | -1 | 0  |
| 375E    | X   | 0  | 1  | 1  | -0 |
| 400E    | X   | 1  | 0  | 0  | 0  |
| 425E    | X   | -2 | -0 | -0 | 0  |
| 450E    | X   | -0 | -0 | -0 | 0  |
|         |     |    |    |    |    |
| 250W    | Z   | -1 | -0 | 0  | -0 |
| 225W    | Z   | -0 | 0  | 0  | -0 |
| 200W    | Z   | 0  | 0  | 0  | 0  |
| 175W    | Z   | 0  | 0  | -0 | 0  |
| 150W    | Z   | -0 | 0  | 0  | 0  |
| 125W    | Z   | -1 | 0  | -0 | -0 |
| 100W    | Z   | -2 | -0 | -0 | -0 |
| 75W     | Z   | 0  | 1  | 0  | 0  |
| 50W     | Z   | -1 | -0 | -0 | 0  |
| 25W     | Z   | -0 | -0 | 1  | 0  |
| 0E      | Z   | 0  | 0  | 0  | -0 |
| 25E     | Z   | -1 | 0  | 0  | -0 |
| 50E     | Z   | -0 | -0 | -0 | -0 |
| 75E     | Z   | -0 | 1  | 0  | 0  |
| 100E    | Z   | -0 | 0  | 1  | 0  |
| 125E    | Z   | 0  | -0 | 0  | 0  |
| 150E    | Z   | 0  | 0  | 0  | 0  |
| 175E    | Z   | -0 | -0 | -0 | 0  |
| 200E    | Z   | -0 | 0  | 0  | 0  |
| 225E    | Z   | -0 | 0  | 0  | 0  |
| 250E    | Z   | 0  | 0  | 1  | -0 |
| 275E    | Z   | -1 | -0 | 0  | 0  |

# E GEOPHYSICS & EXPLORATION LTD SURFACE FEM

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.33 ms  
 Ramp Time : 1.00 ms

Line : L26  
 Tx Loop : L-1  
 Date : Aug 12, 1990  
 File : L26L1.FEM

| Station | Cap | Bains | ZTS    | Delay | Stack | Ovid | Rdg# | PP    | 1    | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|---------|-----|-------|--------|-------|-------|------|------|-------|------|-----|-----|-----|-----|----|----|----|----|----|----|----|
| 275W    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 55   | -59   | 68   | 44  | 21  | 15  | 7   | 3  | 2  | 3  | -1 | -1 | 0  | -0 |
| 250W    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 57   | -67   | 73   | 41  | 19  | 8   | 6   | 3  | 2  | 1  | 0  | 1  | -2 | -0 |
| 225W    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 59   | -63   | 84   | 40  | 20  | 12  | 9   | 2  | 3  | -2 | 1  | 1  | 0  | -0 |
| 200W    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 61   | -62   | 80   | 43  | 24  | 14  | 4   | 1  | 3  | 2  | -0 | 1  | -1 | -1 |
| 175W    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 63   | -98   | 89   | 48  | 25  | 11  | 9   | 2  | 3  | 1  | 1  | 1  | 0  | -0 |
| 150W    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 65   | -110  | 98   | 52  | 22  | 10  | 1   | 4  | 2  | 2  | 1  | 1  | 0  | 1  |
| 125W    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 67   | -146  | 93   | 44  | 18  | 13  | 5   | 3  | -0 | 2  | 1  | -0 | -1 | -1 |
| 100W    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 69   | -120  | 96   | 44  | 33  | 14  | 7   | 7  | -0 | -0 | -1 | -1 | 0  | -0 |
| 75W     | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 71   | -202  | 85   | 49  | 23  | 8   | 6   | 6  | 2  | 2  | 2  | 1  | 1  | -0 |
| 50W     | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 73   | -235  | 95   | 54  | 29  | 11  | 4   | 3  | 2  | 1  | 1  | 1  | 1  | 0  |
| 25W     | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 75   | -270  | 97   | 53  | 17  | 9   | 5   | 3  | 2  | -1 | 2  | -1 | -2 | 1  |
| 0E      | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 77   | -264  | 97   | 52  | 31  | 9   | 2   | 7  | 1  | 2  | 1  | -0 | 1  | -1 |
| 25E     | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 79   | -308  | 83   | 41  | 16  | 7   | 5   | 5  | 1  | -0 | -1 | -1 | 1  | -0 |
| 50E     | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 81   | -356  | 87   | 40  | 18  | 14  | 4   | 7  | 1  | 2  | 2  | 1  | 0  | 1  |
| 75E     | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 83   | -359  | 71   | 33  | 22  | 9   | 3   | 2  | 2  | 1  | -0 | -0 | -0 | 0  |
| 100E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 85   | -352  | 55   | 22  | 1   | 5   | 4   | 1  | 0  | 1  | -0 | 1  | -0 | -1 |
| 125E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 87   | -492  | 24   | 11  | 1   | 6   | 3   | -1 | 0  | 0  | 1  | -0 | -0 | 0  |
| 150E    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 89   | -603  | 50   | 25  | 9   | 5   | 3   | 0  | 4  | 2  | -1 | 0  | 0  | -1 |
| 175E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 91   | -575  | 31   | 12  | 8   | 3   | 3   | 2  | 2  | -0 | 2  | 1  | -0 | 1  |
| 200E    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 93   | -713  | 2    | 18  | 7   | 6   | 2   | 4  | 4  | -2 | 0  | 2  | 0  | -0 |
| 225E    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 95   | -820  | 13   | 3   | 2   | 6   | 2   | -1 | 1  | -0 | 2  | 2  | 0  | -1 |
| 250E    | X   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 97   | -933  | 16   | 6   | 3   | 1   | 2   | 4  | 1  | 1  | 1  | 0  | 1  | -1 |
| 275E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 99   | -1150 | 3    | 11  | 1   | 4   | 3   | 3  | -0 | -3 | 1  | -1 | 0  | 1  |
| 300E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 101  | -1233 | -2   | 6   | -3  | 3   | 0   | 3  | -1 | 0  | -1 | 1  | 1  | -0 |
| 325E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 103  | -1415 | -6   | 5   | -2  | 2   | 1   | 3  | 0  | 2  | -1 | 2  | -1 | 0  |
| 350E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 105  | -1734 | -23  | 2   | 0   | -1  | -0  | 3  | 0  | -0 | -1 | 1  | -1 | -0 |
| 375E    | X   | 6 A7  | 1003.5 | 90    | 4096  | PP   | 107  | -2088 | -40  | -6  | -0  | -1  | 0   | 2  | -1 | 0  | -1 | 1  | -0 | -0 |
| 400E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 109  | -3155 | -56  | -4  | 2   | 1   | 1   | 0  | -1 | 0  | -1 | -1 | 1  | -2 |
| 425E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 111  | -3751 | -84  | -18 | -3  | -3  | 1   | 3  | 0  | -2 | 0  | 2  | -1 | -0 |
| 450E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 113  | -5484 | -140 | -16 | -4  | 0   | -7  | -1 | -1 | 1  | -2 | 0  | -1 | -0 |
| 475E    | X   | 6 A7  | 1003.5 | 90    | 2048  | PP   | 115  | -5888 | -199 | -30 | -5  | -7  | -4  | -0 | -2 | -1 | -1 | -3 | 0  | -1 |
| 275W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 54   | 252   | -32  | -30 | -21 | -11 | -9  | -4 | -3 | -3 | -0 | -1 | 1  | -1 |
| 250W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 56   | 260   | -33  | -32 | -21 | -12 | -11 | -4 | -3 | -1 | -2 | -1 | -2 | -0 |
| 225W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 58   | 274   | -34  | -35 | -22 | -13 | -6  | -6 | -4 | -1 | -2 | -1 | -1 | 0  |
| 200W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 60   | 290   | -30  | -33 | -25 | -15 | -9  | -3 | -4 | -2 | -1 | -1 | -1 | -1 |
| 175W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 62   | 305   | -42  | -34 | -22 | -17 | -7  | -6 | -3 | -1 | -2 | -1 | -0 | -0 |
| 150W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 64   | 327   | -50  | -39 | -27 | -21 | -7  | -3 | -6 | -3 | -3 | -0 | -0 | -1 |
| 125W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 66   | 355   | -57  | -49 | -31 | -19 | -8  | -5 | -6 | -3 | -1 | -1 | -1 | -1 |
| 100W    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 68   | 360   | -70  | -49 | -30 | -16 | -8  | -5 | -4 | -3 | -1 | -2 | 0  | -0 |
| 75W     | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 70   | 416   | -71  | -57 | -33 | -17 | -10 | -3 | -6 | -2 | -2 | -1 | -1 | -1 |
| 50W     | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 72   | 432   | -73  | -61 | -36 | -18 | -12 | -5 | -3 | -1 | -2 | 0  | -0 | -1 |
| 25W     | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 74   | 466   | -81  | -61 | -33 | -20 | -10 | -7 | -4 | -2 | -2 | -1 | -1 | -0 |
| 0E      | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 76   | 509   | -92  | -59 | -38 | -23 | -12 | -4 | -4 | -3 | -1 | -2 | -0 | -1 |
| 25E     | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 78   | 536   | -95  | -70 | -38 | -22 | -1  | -3 | -5 | -3 | -1 | -2 | -1 | -2 |
| 50E     | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 80   | 632   | -95  | -73 | -45 | -20 | -11 | -4 | -5 | -2 | -1 | -1 | -1 | 0  |
| 75E     | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 82   | 702   | -10  | -70 | -41 | -20 | -12 | -7 | -4 | -3 | -1 | -1 | -1 | -1 |
| 100E    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 84   | 812   | -34  | -63 | -39 | -20 | -13 | -5 | -5 | -3 | -2 | -0 | -1 | 0  |
| 125E    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 86   | 903   | -73  | -48 | -30 | -16 | -8  | -6 | -4 | -3 | -0 | -1 | -0 | -1 |
| 150E    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 88   | 1079  | -95  | -73 | -37 | -23 | -11 | -7 | -4 | -4 | -2 | -1 | -2 | -1 |
| 175E    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 90   | 1229  | -85  | -66 | -40 | -21 | -12 | -7 | -4 | -3 | -0 | -1 | -0 | -0 |
| 200E    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 92   | 1388  | -82  | -56 | -35 | -22 | -3  | -4 | -4 | -3 | -3 | -1 | -0 | -0 |
| 225E    | Z   | 6 A7  | 1003.5 | 90    | 1024  | PP   | 94   | 1606  | -71  | -61 | -39 | -22 | -8  | -6 | -3 | -2 | -1 | -1 | -0 | -0 |



**CRONE GEOPHYSICS & EXPLORATION LTD**  
**SURFACE FEM**

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.33 ms  
 Ramp Time : 1.00 ms

Line : L2S  
 Tx Loop : L-1  
 Date : Aug 12, 1990  
 File : L2SL1.FEM

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| Station | Cap | 13 | 14 | 15 | 16 |
|---------|-----|----|----|----|----|
| 275W    | X   | 0  | -0 | 0  | 0  |
| 250W    | X   | -0 | -0 | -1 | -0 |
| 225W    | X   | -0 | -0 | -0 | 1  |
| 200W    | X   | -1 | -1 | 0  | -1 |
| 175W    | X   | 1  | -1 | 0  | 0  |
| 150W    | X   | 0  | -1 | -1 | -1 |
| 125W    | X   | -0 | -1 | 0  | -0 |
| 100W    | X   | -1 | 0  | -0 | 0  |
| 75W     | X   | 0  | -0 | -0 | 1  |
| 50W     | X   | 1  | -0 | -0 | -0 |
| 25W     | X   | -0 | -0 | -1 | 0  |
| 0E      | X   | 1  | 0  | 0  | 0  |
| 25E     | X   | 0  | -1 | 1  | -0 |
| 50E     | X   | 0  | 1  | 1  | 0  |
| 75E     | X   | -1 | 1  | -0 | 1  |
| 100E    | X   | -0 | -0 | 0  | 0  |
| 125E    | X   | -0 | 0  | 0  | 0  |
| 150E    | X   | -2 | 1  | -0 | -0 |
| 175E    | X   | 0  | 0  | 1  | 1  |
| 200E    | X   | -0 | -1 | 0  | 0  |
| 225E    | X   | -0 | -1 | -0 | 1  |
| 250E    | X   | -1 | 1  | -1 | -0 |
| 275E    | X   | -2 | -1 | -0 | -1 |
| 300E    | X   | -1 | -1 | 0  | 0  |
| 325E    | X   | -0 | -1 | 0  | 0  |
| 350E    | X   | -1 | -0 | 1  | 1  |
| 375E    | X   | -1 | -1 | -1 | -0 |
| 400E    | X   | 0  | -0 | -0 | -0 |
| 425E    | X   | -0 | 1  | 0  | -0 |
| 450E    | X   | -0 | -0 | -1 | -0 |
| 475E    | X   | -2 | -1 | -0 | 0  |
| 275W    | Z   | -0 | 0  | 0  | 0  |
| 250W    | Z   | 0  | -0 | 0  | -0 |
| 225W    | Z   | -0 | -0 | 0  | -0 |
| 200W    | Z   | -0 | 0  | 1  | 0  |
| 175W    | Z   | 0  | 0  | 0  | -0 |
| 150W    | Z   | -0 | 1  | -0 | -1 |
| 125W    | Z   | 0  | 0  | 1  | 0  |
| 100W    | Z   | -0 | 0  | 1  | 0  |
| 75W     | Z   | 0  | 0  | 0  | -0 |
| 50W     | Z   | -0 | 0  | 0  | -0 |
| 25W     | Z   | 0  | 1  | -0 | -0 |
| 0E      | Z   | -0 | 1  | -0 | -0 |
| 25E     | Z   | 1  | 1  | 0  | -0 |
| 50E     | Z   | 0  | 0  | 0  | -0 |
| 75E     | Z   | 0  | 1  | 1  | 0  |
| 100E    | Z   | -0 | 0  | 0  | -0 |
| 125E    | Z   | 0  | 0  | 1  | 0  |
| 150E    | Z   | 1  | 1  | 1  | 0  |
| 175E    | Z   | -0 | -0 | -1 | 0  |
| 200E    | Z   | -0 | -0 | 0  | -0 |

# CRONE GEOPHYSICS & EXPLORATION LTD SURFACE PEM

Client : WHITECHANNEL  
 Grid : ICE-CLAIMS  
 Time Base : 8.82 ms  
 Ramp Time : 1.00 ns.

Line : L38  
 Tx Loop : L-1  
 Date : Aug 12, 1990  
 File : LSSL1.PEM

| Station | Comp | Gains | ZFS    | Delay | Stack | Ovid | Rdg# | PP    | 1   | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|---------|------|-------|--------|-------|-------|------|------|-------|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| 225W    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 32   | -87   | 66  | 33  | 21  | 8   | 4   | 2  | 2  | -1 | 0  | -1 | -0 | -2 |
| 200W    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 31   | -91   | 65  | 41  | 20  | 12  | 6   | 2  | 2  | 1  | -0 | 1  | 1  | -1 |
| 175W    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 44   | -82   | 67  | 40  | 19  | 11  | 7   | 4  | 2  | 2  | 1  | -1 | 0  | 1  |
| 150W    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 47   | -71   | 75  | 42  | 25  | 1   | 5   | 4  | 2  | 2  | 0  | 0  | 0  | -0 |
| 125W    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 45   | -91   | 62  | 45  | 26  | 10  | 5   | 2  | 2  | 1  | -1 | -0 | 1  | -1 |
| 100W    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 43   | -10   | 61  | 44  | 19  | 1   | 4   | 2  | 1  | 2  | 2  | -0 | -0 | -1 |
| 75W     | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 41   | -145  | 52  | 41  | 21  | 11  | 1   | 2  | 1  | 2  | 0  | 0  | -0 | -1 |
| 50W     | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 29   | -158  | 22  | 45  | 21  | 3   | 10  | 2  | 2  | 0  | 1  | 0  | 0  | -0 |
| 25W     | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 37   | -162  | 34  | 42  | 17  | 5   | 4   | 1  | 1  | -1 | 2  | 1  | -1 | -0 |
| 0E      | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 35   | -170  | 63  | 34  | 18  | 12  | 3   | 4  | 1  | 1  | 1  | 0  | -0 | 0  |
| 25E     | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 32   | -152  | 45  | 35  | 12  | 8   | 6   | 2  | 1  | 1  | -0 | -0 | -0 | 0  |
| 50E     | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 31   | -145  | 37  | 31  | 9   | 4   | 2   | 1  | 1  | -1 | 2  | -1 | -2 | -0 |
| 75E     | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 29   | -210  | 49  | 31  | 11  | 5   | 3   | 2  | 2  | 1  | 2  | -1 | 1  | 1  |
| 100E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 27   | -252  | 42  | 21  | 5   | 7   | 2   | 4  | 2  | 0  | 1  | 1  | -1 | -0 |
| 125E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 25   | -327  | 47  | 35  | 3   | 7   | 2   | 4  | 2  | 0  | -1 | 2  | 0  | 0  |
| 150E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 23   | -310  | 24  | 12  | 7   | 2   | 2   | 2  | 2  | 0  | 2  | -0 | 0  | -1 |
| 175E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 21   | -400  | 33  | 15  | 4   | -0  | 1   | 2  | 0  | -1 | -0 | 1  | -1 | -1 |
| 200E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 19   | -425  | 15  | 4   | 2   | 2   | 2   | 2  | 0  | 0  | 1  | -1 | -0 | 1  |
| 225E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 17   | -452  | 5   | 1   | 1   | 2   | 1   | 2  | 0  | 0  | -1 | -0 | -0 | 0  |
| 250E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 15   | -520  | 1   | 5   | 2   | 2   | 1   | 1  | 1  | 0  | 1  | -1 | 1  | -0 |
| 275E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 13   | -742  | -4  | 2   | 1   | 2   | 4   | 0  | 2  | -0 | 0  | 0  | 0  | -0 |
| 300E    | X    | 6 A7  | 1003.5 | 90    | 2048  | PP   | 11   | -893  | -15 | -1  | 2   | 4   | 1   | 2  | 1  | 2  | 0  | 0  | 1  | 0  |
| 325E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 9    | -1250 | -20 | -2  | -1  | -2  | 0   | 3  | -1 | 0  | 1  | -2 | 0  | -1 |
| 350E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 7    | -1543 | -31 | -4  | 1   | 1   | 2   | 0  | 1  | -1 | 1  | -0 | -0 | -0 |
| 375E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 5    | -2099 | -42 | -5  | -2  | -1  | 2   | 2  | -1 | -0 | -0 | -1 | -1 | 1  |
| 400E    | X    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 3    | -2539 | -59 | -9  | 0   | -0  | -5  | -2 | 3  | 1  | 1  | -1 | -1 | 1  |
|         |      |       |        |       |       |      |      |       |     |     |     |     |     |    |    |    |    |    |    |    |
| 225W    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 52   | 222   | -30 | -34 | -20 | -16 | -6  | -6 | -0 | -2 | -2 | -0 | -0 | -0 |
| 200W    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 50   | 229   | -35 | -31 | -21 | -17 | -6  | -3 | -5 | -2 | -0 | -2 | -1 | -0 |
| 175W    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 48   | 257   | -42 | -37 | -19 | -15 | -6  | -5 | -4 | -4 | 0  | -1 | -2 | -0 |
| 150W    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 46   | 273   | -49 | -39 | -27 | -17 | -7  | -6 | -1 | -2 | -1 | -2 | -2 | -1 |
| 125W    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 44   | 298   | -52 | -45 | -27 | -16 | -1  | -4 | -4 | -4 | -3 | -1 | -1 | -1 |
| 100W    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 42   | 315   | -64 | -44 | -27 | -19 | -9  | -7 | -3 | -3 | -1 | -1 | -1 | -1 |
| 75W     | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 40   | 342   | -67 | -50 | -32 | -16 | -9  | -2 | -2 | -3 | -3 | -0 | -1 | -1 |
| 50W     | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 38   | 274   | -73 | -62 | -35 | -21 | -11 | -6 | -5 | -2 | -1 | -1 | -1 | -0 |
| 25W     | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 36   | 401   | -82 | -50 | -34 | -21 | -11 | -8 | -3 | -2 | -2 | -1 | -1 | -1 |
| 0E      | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 34   | 447   | -82 | -62 | -39 | -22 | -10 | -5 | -5 | -0 | -2 | -1 | -0 | -1 |
| 25E     | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 32   | 452   | -88 | -61 | -36 | -19 | -12 | -4 | -3 | -1 | -2 | -2 | -0 | -1 |
| 50E     | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 30   | 529   | -87 | -58 | -42 | -19 | -10 | -6 | -4 | -1 | -2 | -1 | -2 | -1 |
| 75E     | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 28   | 593   | -89 | -63 | -40 | -18 | -12 | -5 | -5 | -2 | -3 | -1 | 0  | 0  |
| 100E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 26   | 668   | -98 | -65 | -36 | -18 | -1  | -7 | -2 | -3 | -1 | -1 | -1 | 0  |
| 125E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 24   | 754   | -87 | -61 | -37 | -21 | -10 | -6 | -4 | -2 | -1 | -0 | -1 | -0 |
| 150E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 22   | 860   | -20 | -59 | -36 | -18 | -9  | -6 | -5 | -2 | -2 | -1 | -1 | -0 |
| 175E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 20   | 996   | -78 | -61 | -35 | -17 | -9  | -6 | -5 | -1 | -3 | -1 | -1 | 0  |
| 200E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 18   | 1140  | -72 | -62 | -32 | -18 | -1  | -6 | -3 | -2 | -2 | -0 | -1 | -0 |
| 225E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 16   | 1324  | -61 | -59 | -35 | -16 | -11 | -5 | -4 | -3 | -2 | -1 | -2 | 0  |
| 250E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 14   | 1555  | -54 | -54 | -35 | -20 | -9  | -4 | -7 | -2 | -2 | -1 | -1 | -0 |
| 275E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 12   | 1817  | -45 | -52 | -33 | -16 | -10 | -5 | -3 | -2 | -1 | -1 | -1 | 0  |
| 300E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 10   | 2212  | -37 | -48 | -33 | -15 | -9  | -7 | -2 | -3 | -2 | 0  | -0 | -1 |
| 325E    | Z    | 6 A7  | 1003.5 | 90    | 512   | PP   | 9    | 2770  | -18 | -46 | -36 | -14 | -6  | -4 | -5 | -0 | -2 | -0 | -1 | -0 |
| 350E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 6    | 3544  | -2  | -43 | -31 | -15 | -7  | -6 | -4 | -2 | -2 | 0  | -1 | -1 |
| 375E    | Z    | 6 A7  | 1003.5 | 90    | 1024  | PP   | 4    | 4669  | 24  | -39 | -32 | -12 | -8  | -7 | -4 | -3 | -2 | -1 | -1 | -1 |







ECO-TECH LABORATORIES LTD.

NAVARRE RES. CORP. - ETS 90-9036

APPENDIX C

10041 EAST TRANS CANADA HWY.  
KAMLOOOPS, B.C. V2C 2J3  
PHONE - 604-573-5700  
FAX - 604-573-4557

201-744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

AUGUST 16, 1990

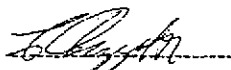
VALUES IN PPM UNLESS OTHERWISE REPORTED

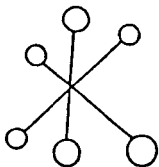
PROJECT: ICE MAIN GRID  
26 SOIL SAMPLES RECEIVED AUGUST 8, 1990

| ET#       | DESCRIPTION      | AU(ppb) | AG AL(Z) | AS   | B    | BA | BI CA(Z) | CG | CO  | CR  | CU FE(Z) | K(Z) | LA MG(Z) | MN    | MO NA(Z) | NZ  | P    | PB   | SB | SH  | SR TI(Z) | U    | V     | W  | Y   | ZN |      |     |     |     |    |       |
|-----------|------------------|---------|----------|------|------|----|----------|----|-----|-----|----------|------|----------|-------|----------|-----|------|------|----|-----|----------|------|-------|----|-----|----|------|-----|-----|-----|----|-------|
| 9036 - 1  | L0 + 00N 0+ 25E  | 5       | .6       | 1.43 | 305  | 6  | 85       | <5 | .02 | <1  | 10       | 4    | 23       | 4.89  | .09      | 50  | .40  | 553  | 46 | .02 | 9        | 740  | 46    | 15 | <20 | 5  | .02  | <10 | 20  | 10  | 6  | 122   |
| 9036 - 2  | L0 + 00N 0+ 50E  | 10      | 1.2      | 1.41 | 545  | 8  | 80       | <5 | .02 | <1  | 20       | 6    | 31       | 6.18  | .08      | 30  | .47  | 1056 | 35 | .03 | 15       | 910  | 44    | 30 | <20 | 5  | .02  | <10 | 22  | 20  | 5  | 203   |
| 9036 - 3  | L0 + 00N 0+ 75E  | 10      | .8       | 1.30 | 405  | 6  | 130      | <5 | .01 | <1  | 15       | 5    | 28       | 6.01  | .08      | 30  | .52  | 567  | 27 | .02 | 12       | 830  | 46    | 40 | <20 | 6  | .01  | <10 | 21  | 10  | 6  | 163   |
| 9036 - 4  | L0 + 00N 1+ 00E  | 25      | 2.4      | 1.09 | 160  | 6  | 70       | <5 | .03 | <1  | 6        | 5    | 36       | 9.37  | .07      | <10 | .78  | 464  | 17 | .02 | 9        | 1570 | 32    | 20 | <20 | 5  | .01  | 10  | 27  | 10  | 2  | 166   |
| 9036 - 5  | L0 + 00N 1+ 25E  | 55      | 2.2      | 1.12 | 165  | <2 | 105      | <5 | .05 | <1  | 7        | 5    | 53       | 11.07 | .07      | <10 | .81  | 497  | 12 | .02 | 10       | 1340 | 30    | 20 | <20 | 9  | .01  | 10  | 31  | 20  | 3  | 178   |
| 9036 - 6  | L1 + 00S 0+ 00W  | 15      | .2       | .16  | 240  | 8  | 25       | <5 | .01 | <1  | 3        | <1   | 8        | 3.75  | .03      | <10 | .04  | 79   | 13 | .02 | 2        | 400  | 54    | 10 | <20 | 2  | <.01 | <10 | 6   | <10 | 1  | 47    |
| 9036 - 7  | L1 + 00S 0+ 25W  | <5      | .6       | .93  | 510  | 6  | 185      | <5 | .03 | <1  | 35       | <1   | 40       | 6.26  | .13      | 60  | .21  | 3547 | 15 | .01 | 13       | 710  | 74    | 25 | <20 | 8  | .01  | <10 | 10  | 30  | 7  | 566   |
| 9036 - 8  | L1 + 00S 0+ 50W  | 35      | 1.0      | .93  | 115  | <2 | 160      | <5 | .04 | <1  | 30       | <1   | 40       | 4.62  | .10      | 40  | .34  | 2447 | 16 | .02 | 9        | 590  | 120   | 10 | <20 | 8  | .01  | <10 | 14  | 30  | 7  | 340   |
| 9036 - 9  | L1 + 00S 0+ 75W  | 45      | 1.0      | 1.15 | 110  | 4  | 225      | <5 | .12 | <1  | 36       | <1   | 53       | 4.07  | .11      | 30  | .49  | 3845 | 11 | .02 | 10       | 590  | 78    | 15 | <20 | 10 | .01  | <10 | 18  | 20  | 6  | 272   |
| 9036 - 10 | L1 + 00S 1+ 00W  | <5      | 2.4      | .71  | 110  | 6  | 105      | <5 | .06 | <1  | 31       | <1   | 26       | 3.68  | .10      | 50  | .28  | 1898 | 11 | .02 | 13       | 440  | 142   | 15 | <20 | 6  | .01  | <10 | 14  | 20  | 6  | 463   |
| 9036 - 11 | L1 + 00S 1+ 25W  | 5       | 1.4      | 1.09 | 45   | 6  | 110      | <5 | .36 | <1  | 17       | 2    | 39       | 3.94  | .10      | 40  | .57  | 1135 | 5  | .02 | 8        | 960  | 88    | 5  | <20 | 18 | .03  | <10 | 31  | 20  | 7  | 239   |
| 9036 - 12 | L2 + 00N 0+ 50E  | 10      | .2       | 2.64 | 90   | 4  | 105      | <5 | .02 | <1  | 25       | 14   | 71       | 7.49  | .06      | 20  | 1.34 | 941  | 9  | .02 | 55       | 1680 | 26    | 10 | <20 | 4  | .01  | <10 | 44  | 30  | 7  | 274   |
| 9036 - 13 | L2 + 00N 0+ 75E  | 35      | 4.2      | 2.76 | 45   | 6  | 100      | <5 | .18 | <1  | 37       | 23   | 77       | 6.90  | .07      | 20  | 1.41 | 914  | 11 | .02 | 74       | 2020 | 34    | 10 | <20 | 9  | .02  | <10 | 50  | 10  | 10 | 280   |
| 9036 - 14 | L2 + 00N 1+ 00E  | 5       | .6       | 2.36 | 75   | 4  | 105      | <5 | .06 | <1  | 14       | 18   | 62       | 7.19  | .06      | 20  | 1.31 | 635  | 5  | .02 | 49       | 1420 | 30    | 15 | <20 | 5  | .01  | 10  | 48  | 20  | 4  | 213   |
| 9036 - 15 | L4 + 50W 9+ 75S  | 335     | 30.0     | 1.32 | 30   | 20 | 245      | <5 | .31 | 104 | 42       | 15   | 717      | 4.18  | .05      | 80  | .97  | 4204 | 39 | .01 | 4        | 980  | 49228 | 95 | <20 | 24 | .03  | 10  | 89  | 10  | 33 | 65207 |
| 9036 - 16 | L4 + 50W 10+ 00S | 160     | 16.8     | 2.07 | 35   | 2  | 845      | <5 | .59 | 78  | 41       | 9    | 163      | 5.58  | .11      | 60  | 1.33 | 4367 | 22 | .02 | 6        | 1330 | 3400  | 20 | <20 | 56 | .03  | <10 | 95  | <10 | 26 | 9946  |
| 9036 - 17 | L4 + 50W 10+ 25S | 45      | 8.0      | 2.25 | 40   | <2 | 315      | <5 | .47 | 59  | 38       | 4    | 512      | 5.59  | .10      | 50  | 1.30 | 4573 | 9  | .02 | 7        | 1500 | 2020  | 5  | <20 | 23 | .04  | <10 | 83  | 20  | 19 | 8028  |
| 9036 - 18 | L4 + 50W 10+ 50S | 1835    | 30.0     | 2.37 | 40   | 4  | 290      | <5 | .27 | 77  | 47       | 7    | 6407     | 7.45  | .13      | 80  | 1.04 | 4404 | 22 | .01 | 5        | 5310 | 18454 | 50 | <20 | 16 | .02  | <10 | 88  | 10  | 32 | 14727 |
| 9036 - 19 | L4 + 50W 10+ 75S | 345     | 10.6     | 1.87 | 35   | 4  | 370      | <5 | .24 | 20  | 60       | 5    | 166      | 6.20  | .08      | 30  | .87  | 4586 | 5  | .02 | 5        | 1540 | 2278  | 15 | <20 | 22 | .03  | <10 | 106 | <10 | 11 | 2172  |
| 9036 - 20 | L4 + 50W 11+ 00S | 230     | 5.4      | 1.45 | 30   | <2 | 210      | <5 | .17 | 4   | 48       | 1    | 69       | 5.75  | .09      | 20  | .78  | 4767 | 6  | .02 | 6        | 1460 | 302   | 5  | <20 | 18 | .03  | <10 | 75  | 20  | 6  | 800   |
| 9036 - 21 | L4 + 50W 11+ 25S | 30      | 2.4      | 1.83 | 20   | 4  | 345      | <5 | .28 | 16  | 42       | 4    | 74       | 4.80  | .09      | 30  | .74  | 4209 | 4  | .02 | 5        | 1360 | 186   | 5  | <20 | 18 | .02  | <10 | 72  | 10  | 12 | 907   |
| 9036 - 22 | L4 + 50W 11+ 50S | 40      | 1.6      | 1.47 | 25   | 10 | 235      | <5 | .22 | 4   | 28       | 3    | 38       | 4.71  | .08      | 20  | .68  | 3346 | 4  | .02 | 2        | 1160 | 98    | <5 | <20 | 15 | .03  | <10 | 64  | 20  | 6  | 432   |
| 9036 - 23 | L4 + 50W 11+ 75S | 20      | 1.2      | 1.49 | 20   | 4  | 210      | <5 | .23 | 4   | 29       | 3    | 32       | 4.21  | .08      | 20  | .74  | 3268 | 3  | .02 | 3        | 1120 | 138   | 5  | <20 | 12 | .02  | <10 | 51  | 20  | 6  | 546   |
| 9036 - 24 | L4 + 50W 12+ 00S | 135     | 4.6      | 1.96 | 30   | 8  | 70       | <5 | .07 | <1  | 19       | 6    | 54       | 4.71  | .09      | 20  | .76  | 2046 | 7  | .02 | 4        | 1360 | 178   | 5  | <20 | 7  | .02  | <10 | 54  | 10  | 5  | 850   |
| 9036 - 25 | L4 + 50W 12+ 25S | 130     | 4.0      | 1.63 | 320  | 6  | 140      | <5 | .02 | 3   | 40       | 7    | 59       | 6.59  | .10      | 30  | .60  | 4233 | 13 | .02 | 3        | 2270 | 258   | 5  | <20 | 9  | .03  | <10 | 55  | 10  | 3  | 796   |
| 9036 - 26 | L4 + 50W 12+ 50S | 115     | 2.8      | 1.76 | 1120 | 4  | 155      | <5 | .01 | 2   | 163      | 6    | 69       | 10.60 | .07      | 20  | .53  | 4146 | 12 | .02 | 5        | 3430 | 302   | 10 | <20 | 8  | .02  | <10 | 65  | 10  | 6  | 676   |

NOTE: < = LESS THAN

FAX: ANDRIX KITANKA 636-2850 DR. E. W. GROVE 658-5289  
cc. DR. E. W. GROVE  
4581 BOULDERWOOD DR. VICTORIA, B.C.  
5C90/NAVARRE

  
ECO-TECH LABORATORIES LTD.  
FRANK J. PEZZOTTI, A.S.C.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 16, 1990

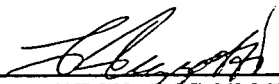
CERTIFICATE OF ANALYSIS ETS 90-9036A

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NAVARRE RES. CORP.  
201 - 744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

SAMPLE IDENTIFICATION: 26 SOIL samples received AUGUST 8, 1990  
----- PROJECT: ICE MAIN GRID

| ET#    | Description      | AG<br>(g/t) |
|--------|------------------|-------------|
| 9036 - | 15 L4+50W 9+75S  | 103.2       |
| 9036 - | 18 L4+50W 10+50S | 199.8       |

  
\_\_\_\_\_  
ECO-TECH LABORATORIES LTD.  
FRANK J. PEZZOTTI A.S.C.T.  
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658-5289

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4581 BOULDERWOOD DR.  
VICTORIA, B.C.

SC90/NAVARRE

ECO-TECH LABORATORIES LTD.

NAVARRE RES. CORP. - ETS 90-9044

10041 EAST TRANS CANADA HWY.  
 KAMLOOPS, B.C. V2C 2J3  
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201-744 W. HASTINGS ST.  
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 V6C 1A5

AUGUST 21, 1990

VALUES IN PPM UNLESS OTHERWISE REPORTED

Page 1

PROJECT: ICE B  
 59 SOIL SAMPLES RECEIVED AUGUST 13, 1990

| ET#       | DESCRIPTION     | AU(ppb) | AG AL(Z)  | AS | B  | BA  | BI CA(Z) | CD | CO | CR | CU FE(Z)  | K(Z) | LA MG(Z)      | MN | MO NA(Z) | NI      | P   | PB | SB  | SN | SR TI(Z) | U   | V   | W   | Y  | ZN  |
|-----------|-----------------|---------|-----------|----|----|-----|----------|----|----|----|-----------|------|---------------|----|----------|---------|-----|----|-----|----|----------|-----|-----|-----|----|-----|
| 9044 - 1  | L0 + 00W 0+ 25S | <5      | .4 1.43   | 15 | 26 | 235 | <5 .25   | <1 | 19 | 5  | 38 4.95   | .06  | 20 1.01 2096  | 1  | .01      | 3 1130  | 24  | 10 | <20 | 8  | .05      | <10 | 44  | <10 | 12 | 131 |
| 9044 - 2  | L0 + 00W 0+ 50S | <5      | .2 1.26   | 15 | 28 | 275 | <5 .23   | <1 | 1  | 6  | 124 4.57  | .08  | <10 1.49 1955 | 2  | .02      | 6 1490  | 16  | 10 | <20 | 6  | .09      | <10 | 71  | <10 | 16 | 126 |
| 9044 - 3  | L0 + 00W 0+ 75S | <5      | 1.4 .82   | 10 | 26 | 360 | <5 .46   | <1 | 41 | 2  | 54 8.34   | .17  | 30 .25 3438   | <1 | .02      | <1 1920 | 42  | 10 | <20 | 17 | .01      | <10 | 64  | <10 | 14 | 266 |
| 9044 - 4  | L0 + 25S 0+ 25E | <5      | 1.0 1.84  | 45 | 28 | 555 | <5 .28   | <1 | 34 | 7  | 97 7.29   | .07  | 30 1.38 4130  | 2  | .02      | 7 1280  | 68  | 10 | <20 | 14 | .06      | <10 | 65  | <10 | 26 | 249 |
| 9044 - 5  | L0 + 25S 0+ 50E | 115     | 1.6 1.36  | 55 | 34 | 740 | <5 .41   | <1 | 59 | 6  | 104 9.03  | .08  | 30 .87 4033   | <1 | .02      | 7 1740  | 54  | 15 | <20 | 23 | .03      | <10 | 75  | <10 | 27 | 265 |
| 9044 - 6  | L0 + 25S 0+ 75E | <5      | 1.0 1.92  | 35 | 26 | 620 | <5 .54   | <1 | 37 | 5  | 109 6.81  | .09  | 30 1.12 4034  | <1 | .02      | 5 1600  | 38  | 5  | <20 | 20 | .04      | <10 | 97  | <10 | 21 | 165 |
| 9044 - 7  | L0 + 00W 1+ 00S | <5      | 11.2 1.48 | 20 | 26 | 460 | <5 .60   | <1 | 29 | 3  | 148 7.69  | .11  | 30 .86 4094   | <1 | .02      | 1 1910  | 78  | 10 | <20 | 25 | .03      | <10 | 72  | <10 | 14 | 254 |
| 9044 - 8  | L0 + 00W 1+ 25S | 15      | 5.6 1.40  | 20 | 22 | 900 | <5 .49   | <1 | 32 | 4  | 207 10.44 | .08  | 30 .97 4006   | <1 | .02      | <1 1430 | 68  | 30 | <20 | 15 | .04      | <10 | 80  | <10 | 16 | 249 |
| 9044 - 9  | L0 + 00W 1+ 50S | 15      | 6.4 1.50  | 15 | 24 | 305 | <5 .50   | <1 | 27 | 3  | 91 7.53   | .09  | 30 .93 3317   | <1 | .02      | <1 1750 | 78  | 5  | <20 | 17 | .03      | <10 | 76  | <10 | 16 | 250 |
| 9044 - 10 | L0 + 25S 1+ 00E | <5      | .6 2.24   | 15 | 20 | 385 | <5 .69   | <1 | 27 | 5  | 74 5.99   | .1   | 10 1.52 3652  | <1 | .02      | 2 1690  | 12  | 5  | <20 | 17 | .07      | <10 | 90  | <10 | 12 | 102 |
| 9044 - 11 | L0 + 25S 1+ 25E | 10      | .8 2.69   | 35 | 26 | 300 | <5 1.00  | <1 | 34 | 5  | 102 6.05  | .1   | 10 1.34 3148  | <1 | .02      | 3 1160  | 36  | 5  | <20 | 17 | .04      | <10 | 117 | <10 | 15 | 138 |
| 9044 - 12 | L0 + 25S 1+ 50E | <5      | 2.8 2.25  | 25 | 22 | 215 | <5 .54   | <1 | 29 | 7  | 65 5.74   | .12  | 20 1.37 2343  | <1 | .02      | 3 1720  | 22  | 5  | <20 | 16 | .06      | <10 | 100 | <10 | 11 | 135 |
| 9044 - 13 | L0 + 75W 0+ 75S | 50      | 2.4 1.00  | 15 | 14 | 450 | <5 .66   | <1 | 28 | 2  | 51 6.57   | .13  | 20 .56 3162   | <1 | .02      | 1 1760  | 22  | 5  | <20 | 20 | <.01     | <10 | 54  | <10 | 13 | 154 |
| 9044 - 14 | L1 + 00W 0+ 00S | <5      | .2 2.65   | 15 | 18 | 125 | <5 .23   | <1 | 26 | 10 | 41 5.85   | .08  | 20 1.17 2269  | <1 | .03      | 7 1790  | 16  | 5  | <20 | 12 | .05      | <10 | 94  | <10 | 9  | 130 |
| 9044 - 15 | L1 + 00W 0+ 25S | <5      | .2 2.42   | 15 | 12 | 130 | <5 .23   | <1 | 24 | 8  | 42 5.47   | .07  | 20 1.28 2077  | 1  | .02      | 6 1560  | 14  | 5  | <20 | 14 | .03      | <10 | 88  | <10 | 9  | 110 |
| 9044 - 16 | L1 + 00W 0+ 50S | 10      | .2 2.02   | 20 | 18 | 185 | <5 .33   | <1 | 30 | 6  | 47 5.56   | .07  | 30 1.23 1971  | <1 | .02      | 3 1640  | 10  | 5  | <20 | 17 | .03      | <10 | 73  | <10 | 11 | 101 |
| 9044 - 17 | L1 + 00W 0+ 75S | 5       | 1.2 1.33  | 15 | 8  | 560 | <5 .50   | <1 | 41 | 3  | 67 7.38   | .09  | 30 .75 4072   | 1  | .01      | 2 2010  | 18  | 10 | <20 | 20 | .01      | <10 | 74  | <10 | 16 | 169 |
| 9044 - 18 | L1 + 25W 0+ 75S | <5      | 1.2 1.34  | 15 | 10 | 510 | <5 .53   | <1 | 37 | 2  | 57 7.25   | .1   | 30 .70 4067   | <1 | .02      | 1 2200  | 28  | 5  | <20 | 19 | <.01     | <10 | 64  | <10 | 14 | 158 |
| 9044 - 19 | L1 + 50W 0+ 75S | 10      | 1.0 1.27  | 10 | 8  | 620 | <5 .53   | <1 | 34 | 4  | 97 7.20   | .1   | 30 .78 4234   | <1 | .02      | <1 2130 | 18  | 10 | <20 | 19 | .01      | <10 | 77  | <10 | 15 | 158 |
| 9044 - 20 | L2 + 50E 0+ 00S | 10      | 3.8 1.48  | 15 | 8  | 490 | <5 .42   | <1 | 36 | 4  | 71 6.94   | .09  | 30 .99 3353   | 1  | .2       | <1 1750 | 36  | 5  | <20 | 19 | .02      | <10 | 84  | <10 | 12 | 242 |
| 9044 - 21 | L2 + 50E 0+ 25S | 5       | 2.2 1.62  | 20 | 10 | 315 | <5 .48   | <1 | 26 | 2  | 60 6.13   | .08  | 20 1.13 2631  | 2  | .1       | 3 1700  | 42  | 10 | <20 | 17 | .04      | <10 | 61  | <10 | 10 | 169 |
| 9044 - 22 | L2 + 50E 0+ 50S | 10      | 6.6 1.64  | 20 | 22 | 725 | <5 .53   | <1 | 35 | 3  | 77 7.36   | .13  | 30 .88 3616   | 2  | .02      | 4 1750  | 58  | 15 | <20 | 26 | .03      | <10 | 64  | <10 | 13 | 209 |
| 9044 - 23 | L2 + 50W 0+ 25S | 30      | .8 2.34   | 10 | 2  | 310 | <5 .19   | <1 | 21 | 7  | 119 5.29  | .08  | 20 .98 2264   | 2  | .01      | 7 1570  | 22  | 5  | <20 | 14 | .02      | <10 | 71  | <10 | 10 | 102 |
| 9044 - 24 | L2 + 50W 0+ 50S | 50      | 3.8 2.08  | 30 | <2 | 650 | <5 .29   | <1 | 34 | 3  | 77 9.53   | .06  | 40 .80 3453   | 5  | .01      | 6 2230  | 102 | 20 | <20 | 22 | .01      | <10 | 70  | <10 | 27 | 302 |
| 9044 - 25 | L2 + 50W 0+ 75S | 110     | 2.8 .80   | 10 | <2 | 660 | <5 .47   | <1 | 32 | 4  | 96 8.02   | .12  | 20 .44 3239   | 2  | .01      | 7 1680  | 18  | 15 | <20 | 17 | .01      | <10 | 46  | <10 | 17 | 177 |
| 9044 - 26 | L2 + 50E 1+ 50S | 70      | 12.4 .77  | 20 | <2 | 175 | <5 .20   | <1 | 21 | 1  | 51 4.41   | .18  | 30 .24 1923   | 5  | .02      | 4 1130  | 174 | 5  | <20 | 57 | <.01     | <10 | 18  | <10 | 5  | 393 |



ECO-TECH LABORATORIES LTD.

NAVARRRE RES. CORP. - ETS 90-9044

PAGE 2

| ET#       | DESCRIPTION     | AU(ppb) | AG AL(Z) | AS   | B  | BA | BI CA(Z) | CD | CO  | CR | CU FE(Z) | K(Z) | LA MG(Z) | MN   | MO NA(Z) | NI | P    | PB   | SB | SN  | SR TI(Z) | U    | V   | W  | Y   | ZN |      |     |     |     |    |      |
|-----------|-----------------|---------|----------|------|----|----|----------|----|-----|----|----------|------|----------|------|----------|----|------|------|----|-----|----------|------|-----|----|-----|----|------|-----|-----|-----|----|------|
| 9044 - 27 | L2 + 50E 1+ 75S | 60      | 26.4     | 1.31 | 40 | <2 | 145      | <5 | .33 | <1 | 24       | 3    | 65       | 5.57 | .12      | 20 | .67  | 2834 | 5  | .01 | 5        | 1610 | 154 | 10 | <20 | 16 | .01  | <10 | 45  | <10 | 7  | 349  |
| 9044 - 28 | L2 + 50E 2+ 00S | 45      | 12.0     | 1.13 | 60 | <2 | 320      | <5 | .36 | <1 | 27       | 4    | 56       | 6.14 | .08      | 20 | .69  | 3460 | 5  | .01 | 5        | 1550 | 92  | 10 | <20 | 20 | .02  | <10 | 59  | <10 | 9  | 386  |
| 9044 - 29 | L2 + 50E 2+ 25S | 75      | 22.2     | .81  | 45 | <2 | 150      | <5 | .36 | <1 | 26       | 4    | 64       | 6.15 | .07      | 20 | .41  | 3446 | 6  | .02 | 6        | 1570 | 218 | 10 | <20 | 22 | .01  | <10 | 45  | 10  | 9  | 785  |
| 9044 - 30 | L2 + 50W 0+ 00S | 85      | 2.6      | 2.01 | 10 | <2 | 180      | <5 | .33 | <1 | 22       | 10   | 81       | 5.58 | .08      | 20 | 1.14 | 1159 | 2  | .02 | 11       | 1360 | 18  | 10 | <20 | 20 | .03  | <10 | 81  | <10 | 13 | 151  |
| 9044 - 31 | L2 + 75S 0+ 75S | <5      | 1.6      | .70  | 5  | <2 | 1125     | <5 | .66 | <1 | 50       | 2    | 72       | 9.51 | .16      | 30 | .31  | 3460 | 2  | .01 | 7        | 2020 | 12  | 20 | <20 | 17 | .01  | <10 | 72  | <10 | 15 | 247  |
| 9044 - 32 | L3 + 00E 1+ 00S | 60      | 6.0      | .93  | 15 | <2 | 265      | <5 | .46 | <1 | 21       | 3    | 51       | 4.36 | .09      | 20 | .53  | 2182 | 1  | .01 | 3        | 1760 | 82  | 5  | <20 | 24 | .01  | <10 | 43  | <10 | 7  | 251  |
| 9044 - 33 | L3 + 00E 1+ 25S | 20      | 8.8      | 1.26 | 20 | <2 | 555      | <5 | .39 | <1 | 46       | 2    | 173      | 8.33 | .11      | 30 | .67  | 3458 | 19 | .01 | 4        | 1760 | 90  | 15 | <20 | 26 | .01  | <10 | 72  | <10 | 11 | 266  |
| 9044 - 34 | L3 + 00E 1+ 50S | 10      | 6.0      | 1.35 | 20 | <2 | 200      | <5 | .48 | <1 | 24       | 3    | 84       | 5.50 | .09      | 20 | .68  | 2532 | 3  | .02 | 4        | 1850 | 54  | 5  | <20 | 19 | .02  | <10 | 40  | <10 | 8  | 290  |
| 9044 - 35 | L3 + 00E 2+ 00S | 30      | 16.2     | .96  | 60 | <2 | 450      | <5 | .24 | <1 | 26       | 3    | 47       | 6.36 | .08      | 30 | .46  | 3445 | 8  | .02 | 4        | 1770 | 110 | 10 | <20 | 18 | <.01 | <10 | 41  | 10  | 8  | 532  |
| 9044 - 36 | L3 + 00E 2+ 25S | 720     | 24.6     | .79  | 80 | <2 | 305      | <5 | .14 | 5  | 36       | 3    | 67       | 7.98 | .07      | 20 | .43  | 3403 | 11 | .02 | 4        | 2350 | 130 | 15 | <20 | 17 | .01  | <10 | 51  | 10  | 8  | 816  |
| 9044 - 37 | L3 + 00E 2+ 75S | 60      | 16.2     | 1.11 | 50 | <2 | 280      | <5 | .46 | <1 | 18       | 5    | 63       | 5.69 | .08      | 20 | .68  | 3455 | 4  | .02 | 4        | 1470 | 118 | 10 | <20 | 22 | .01  | <10 | 63  | 20  | 8  | 1101 |
| 9044 - 38 | L3 + 50E 1+ 00S | 50      | 2        | 3.73 | 15 | 8  | 155      | <5 | .28 | <1 | 29       | 2    | 56       | 6.05 | .11      | 10 | .52  | 3695 | 2  | .01 | 5        | 1860 | 130 | 5  | <20 | 22 | .07  | <10 | 42  | <10 | 10 | 354  |
| 9044 - 39 | L3 + 50E 1+ 25S | 35      | 7.6      | 1.54 | 15 | 8  | 620      | <5 | .53 | 2  | 37       | 2    | 134      | 6.61 | .12      | 30 | .72  | 2445 | 9  | .01 | 3        | 2070 | 142 | 5  | <20 | 25 | .01  | <10 | 61  | <10 | 12 | 342  |
| 9044 - 40 | L3 + 50E 1+ 75S | 40      | 10.4     | 1.44 | 35 | 8  | 270      | <5 | .35 | 4  | 32       | 3    | 69       | 5.87 | .09      | 30 | .68  | 2467 | 4  | .01 | 2        | 2300 | 258 | 5  | <20 | 18 | .01  | <10 | 42  | 10  | 8  | 579  |
| 9044 - 41 | L3 + 50E 2+ 00S | <5      | 12.8     | .64  | 95 | 4  | 175      | <5 | .04 | 2  | 12       | 2    | 27       | 5.86 | .22      | 20 | .20  | 1693 | 42 | .01 | <1       | 2390 | 618 | 10 | <20 | 18 | .01  | <10 | 20  | <10 | 3  | 353  |
| 9044 - 42 | L3 + 50E 2+ 25S | 80      | 11.8     | .86  | 45 | 2  | 125      | <5 | .13 | 3  | 20       | 1    | 29       | 5.10 | .11      | 20 | .40  | 2104 | 6  | .01 | 1        | 1690 | 246 | 5  | <20 | 10 | <.01 | <10 | 27  | <10 | 4  | 301  |
| 9044 - 43 | L3 + 50E 2+ 50S | 60      | 28.6     | .82  | 85 | 4  | 245      | <5 | .21 | 10 | 25       | 2    | 51       | 5.43 | .07      | 20 | .44  | 2049 | 6  | .01 | 2        | 1730 | 516 | 10 | <20 | 12 | <.01 | <10 | 37  | 10  | 7  | 706  |
| 9044 - 44 | L3 + 50E 2+ 75S | 160     | 20.6     | .94  | 40 | 2  | 300      | <5 | .35 | 7  | 22       | 3    | 68       | 5.22 | .07      | 20 | .61  | 2041 | 8  | .02 | 2        | 1760 | 720 | 5  | <20 | 18 | .01  | <10 | 44  | 10  | 9  | 793  |
| 9044 - 45 | L3 + 50E 0+ 00S | <5      | .2       | 2.06 | 10 | 4  | 40       | <5 | .24 | <1 | 15       | 3    | 28       | 3.93 | .06      | 20 | 1.12 | 665  | 1  | .01 | 2        | 1270 | 14  | 5  | <20 | 11 | .01  | <10 | 36  | <10 | 4  | 92   |
| 9044 - 46 | L3 + 50W 0+ 50S | <5      | 3.8      | 2.01 | 10 | 4  | 115      | <5 | .26 | <1 | 21       | 7    | 39       | 4.70 | .07      | 20 | 1.20 | 1363 | <1 | .01 | 6        | 1230 | 18  | 5  | <20 | 13 | .02  | <10 | 56  | <10 | 8  | 122  |
| 9044 - 47 | L3 + 50W 1+ 25S | <5      | 2.2      | 1.88 | 10 | 4  | 115      | <5 | .35 | <1 | 17       | 5    | 35       | 4.14 | .08      | 10 | 1.08 | 1063 | 1  | .02 | 3        | 1400 | 18  | 5  | <20 | 14 | .04  | <10 | 46  | <10 | 6  | 99   |
| 9044 - 48 | L4 + 00W 0+ 00S | <5      | 1.0      | 2.28 | 10 | <2 | 230      | <5 | .32 | <1 | 27       | 7    | 78       | 5.65 | .09      | 20 | 1.03 | 2080 | 2  | .01 | 8        | 1950 | 16  | 10 | <20 | 13 | .01  | <10 | 79  | <10 | 20 | 154  |
| 9044 - 49 | L4 + 00E 1+ 00S | 15      | 4.6      | 1.13 | 20 | 4  | 520      | <5 | .40 | 2  | 24       | 2    | 50       | 5.29 | .12      | 30 | .57  | 2059 | 2  | .01 | 2        | 1540 | 130 | 5  | <20 | 19 | .01  | <10 | 42  | <10 | 9  | 329  |
| 9044 - 50 | L4 + 00E 1+ 25S | 205     | 5.4      | 1.12 | 10 | 4  | 440      | <5 | .49 | <1 | 24       | 2    | 68       | 5.19 | .1       | 20 | .59  | 2070 | 2  | .01 | 2        | 1700 | 134 | 5  | <20 | 23 | .02  | <10 | 46  | <10 | 9  | 281  |
| 9044 - 51 | L4 + 00E 1+ 50S | 15      | 5.6      | 1.24 | 20 | 4  | 275      | <5 | .43 | 2  | 23       | 2    | 49       | 5.20 | .09      | 20 | .57  | 2078 | 2  | .01 | 2        | 1590 | 198 | 5  | <20 | 15 | .01  | <10 | 35  | <10 | 8  | 290  |
| 9044 - 52 | L4 + 00E 1+ 75S | <5      | 6.8      | 1.11 | 20 | 4  | 265      | <5 | .42 | <1 | 23       | 2    | 58       | 4.57 | .1       | 20 | .54  | 2078 | 3  | .01 | 1        | 1760 | 178 | 5  | <20 | 16 | .01  | <10 | 28  | <10 | 8  | 355  |
| 9044 - 53 | L4 + 00E 2+ 00S | <5      | .2       | 3.18 | 15 | 6  | 180      | <5 | .43 | <1 | 22       | 11   | 55       | 4.58 | .09      | 10 | 1.79 | 1630 | 2  | .02 | 8        | 1400 | 14  | 5  | <20 | 12 | .10  | <10 | 107 | <10 | 8  | 95   |
| 9044 - 54 | L4 + 00E 2+ 50S | <5      | .8       | 3.73 | 25 | 4  | 165      | <5 | .28 | 3  | 30       | 13   | 133      | 5.32 | .08      | 20 | 1.86 | 2109 | 1  | .02 | 12       | 1990 | 24  | 5  | <20 | 22 | .07  | <10 | 137 | <10 | 15 | 143  |
| 9044 - 55 | L4 + 00E 2+ 75S | 85      | 22.0     | 1.11 | 55 | 8  | 310      | <5 | .36 | <1 | 23       | 4    | 56       | 5.49 | .08      | 20 | .66  | 2490 | 10 | .01 | 3        | 1850 | 390 | 10 | <20 | 18 | .01  | <10 | 50  | 10  | 9  | 960  |
| 9044 - 56 | L4 + 00E 3+ 00S | 90      | 20.8     | .74  | 75 | 6  | 155      | <5 | .09 | <1 | 20       | 2    | 62       | 6.93 | .16      | 20 | .34  | 2498 | 2  | .01 | 1        | 1940 | 650 | 10 | <20 | 14 | .01  | <10 | 37  | 10  | 4  | 944  |
| 9044 - 57 | L4 + 00E 3+ 25S | 65      | 21.6     | 1.30 | 65 | 6  | 195      | <5 | .27 | <1 | 35       | 3    | 161      | 7.07 | .11      | 20 | .59  | 2460 | 2  | .02 | 3        | 1880 | 910 | 15 | <20 | 17 | .01  | <10 | 58  | 20  | 9  | 1188 |
| 9044 - 58 | L4 + 50W 0+ 00S | 30      | 10.2     | 1.10 | 50 | 8  | 310      | <5 | .28 | 9  | 29       | 2    | 51       | 5.97 | .11      | 40 | .43  | 2475 | 7  | .01 | 3        | 2020 | 314 | 10 | <20 | 21 | .01  | <10 | 27  | 10  | 11 | 1110 |
| 9044 - 59 | L4 + 50W 0+ 25S | 35      | 26.6     | 1.03 | 75 | 8  | 275      | <5 | .31 | <1 | 29       | 2    | 57       | 6.13 | .11      | 30 | .48  | 2486 | 7  | .01 | 3        | 2030 | 258 | 5  | <20 | 15 | .01  | <10 | 39  | 10  | 9  | 714  |

NOTE: < = LESS THAN  
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*Jutta Jealous*  
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SEPTEMBER 14, 1990

CONCENTRATIONS IN PPM UNLESS OTHERWISE REPORTED

SEE 1

PROJECT: ICE B  
 35 SOIL SAMPLES RECEIVED SEPTEMBER 6, 1990

| #  | DESCRIPTION            | AU(ppb) | AG  | AL(Z) | AS | B  | BA   | BI | CA(Z) | CD | CO | CR | CU  | FE(Z) | K(Z) | LA | PG(Z) | MN    | MO | NA(Z) | NI | P    | PB  | SE | SN  | SR | TI(Z) | U   | V   | W   | Y  | ZN   |
|----|------------------------|---------|-----|-------|----|----|------|----|-------|----|----|----|-----|-------|------|----|-------|-------|----|-------|----|------|-----|----|-----|----|-------|-----|-----|-----|----|------|
| 89 | - 1 1B 1+000S 5,500 FT | 5       | 2.9 | .89   | 15 | 6  | 675  | <5 | .41   | <1 | 15 | <1 | 23  | 4.35  | .10  | 35 | .48   | 4713  | <1 | <.01  | 2  | 1509 | 32  | <5 | <20 | 19 | .01   | <10 | 38  | <10 | 11 | 213  |
| 89 | - 2 1B 5+00S 6,000 FT  | 130     | 4.9 | 1.36  | 28 | 11 | 212  | <5 | .36   | 3  | 17 | 9  | 66  | 5.72  | .07  | 22 | .31   | 4482  | <1 | <.01  | 9  | 1165 | 210 | <5 | <20 | 16 | .03   | <10 | 83  | <10 | 12 | 589  |
| 89 | - 3 1B 5+50S 6,000 FT  | 15      | 4.3 | 1.41  | 31 | 13 | 478  | <5 | .55   | 1  | 21 | 8  | 59  | 6.79  | .06  | 23 | .89   | 7247  | 1  | <.01  | 7  | 1214 | 106 | <5 | <20 | 21 | .03   | <10 | 35  | <10 | 16 | 398  |
| 89 | - 4 1B 6+00S 6,000 FT  | 10      | 2.5 | 1.30  | 23 | 14 | 672  | <5 | .56   | 2  | 18 | 4  | 34  | 6.02  | .10  | 32 | .79   | 9146  | 2  | <.01  | 5  | 1281 | 86  | <5 | <20 | 27 | .02   | <10 | 70  | <10 | 15 | 350  |
| 89 | - 5 1B 6+50S 6,000 FT  | 10      | 2.1 | 1.96  | 53 | 10 | 1439 | <5 | .50   | 2  | 33 | <1 | 19  | 10.27 | .13  | 21 | .58   | 11678 | 1  | <.01  | 3  | 1294 | 113 | <5 | <20 | 38 | <.01  | <10 | 137 | <10 | 17 | 914  |
| 89 | - 6 1B 7+00S 5,500 FT  | 10      | 1.5 | 2.36  | 14 | 10 | 368  | <5 | .49   | <1 | 17 | 13 | 31  | 5.54  | .17  | 28 | 1.18  | 3724  | <1 | .03   | 21 | 1644 | 78  | <5 | <20 | 23 | .13   | <10 | 79  | <10 | 22 | 393  |
| 89 | - 7 1B 7+50S 5,500 FT  | 5       | 1.4 | 1.33  | 12 | 11 | 546  | <5 | .32   | <1 | 16 | 6  | 21  | 5.49  | .07  | 29 | .79   | 4529  | <1 | <.01  | 6  | 1203 | 81  | <5 | <20 | 14 | .03   | <10 | 59  | <10 | 13 | 265  |
| 89 | - 8 1B 7+50S 6,000 FT  | 15      | 2.2 | 1.26  | 14 | 9  | 460  | <5 | .37   | <1 | 15 | 4  | 20  | 5.20  | .07  | 22 | .77   | 5447  | <1 | <.01  | 4  | 1174 | 73  | <5 | <20 | 19 | .02   | <10 | 72  | <10 | 12 | 312  |
| 89 | - 9 1B 8+00S 5,500 FT  | 15      | 2.3 | 1.36  | 18 | 13 | 353  | <5 | .24   | <1 | 17 | 5  | 20  | 5.93  | .07  | 24 | .74   | 5105  | <1 | <.01  | 5  | 1082 | 64  | <5 | <20 | 15 | .02   | <10 | 76  | <10 | 12 | 327  |
| 89 | - 10 1B 8+00S 6,000 FT | 15      | 2.8 | 1.55  | 15 | 8  | 495  | <5 | .43   | <1 | 18 | 4  | 24  | 5.86  | .11  | 22 | 1.02  | 5172  | <1 | <.01  | 3  | 1315 | 42  | <5 | <20 | 24 | .02   | <10 | 75  | <10 | 13 | 298  |
| 89 | - 11 1B 8+50S 5,500 FT | 10      | 2.0 | 1.43  | 13 | 8  | 232  | <5 | .22   | <1 | 14 | 7  | 23  | 5.09  | .07  | 22 | .76   | 2939  | <1 | .02   | 5  | 1013 | 71  | <5 | <20 | 14 | .03   | <10 | 74  | <10 | 11 | 245  |
| 89 | - 12 1B 8+50S 6,000 FT | 10      | 2.9 | .81   | 13 | 11 | 615  | <5 | .46   | <1 | 17 | 3  | 21  | 4.99  | .08  | 20 | .47   | 4774  | <1 | <.01  | 2  | 1565 | 56  | <5 | <20 | 20 | .01   | <10 | 54  | <10 | 13 | 301  |
| 89 | - 13 1B 9+00S 5,500 FT | 5       | 2.1 | .98   | 14 | 9  | 586  | <5 | .35   | <1 | 18 | 3  | 20  | 5.55  | .03  | 23 | .51   | 4330  | <1 | <.01  | 4  | 1387 | 45  | <5 | <20 | 15 | .02   | <10 | 60  | <10 | 13 | 294  |
| 89 | - 14 1B 9+00S 6,000 FT | <5      | 1.8 | .64   | 21 | 12 | 1088 | <5 | .36   | <1 | 21 | <1 | 14  | 5.25  | .08  | 24 | .31   | 7088  | <1 | <.01  | 3  | 1289 | 43  | <5 | <20 | 29 | .01   | <10 | 37  | <10 | 12 | 221  |
| 89 | - 15 1B 9+50S 5,500 FT | 10      | 3.1 | .90   | 10 | 8  | 786  | <5 | .38   | 1  | 17 | <1 | 19  | 4.86  | .13  | 27 | .42   | 4837  | <1 | <.01  | 2  | 1379 | 58  | <5 | <20 | 21 | .01   | <10 | 38  | <10 | 12 | 354  |
| 89 | - 16 L3 +00E 0+25 N    | 5       | .9  | 3.22  | <5 | 6  | 295  | <5 | .36   | <1 | 15 | 11 | 85  | 4.61  | .08  | 17 | 1.11  | 3589  | <1 | <.01  | 5  | 1830 | 57  | <5 | <20 | 44 | .03   | <10 | 103 | <10 | 9  | 147  |
| 89 | - 17 L3 +00E 0+50 N    | 30      | 3.6 | 2.91  | 10 | 6  | 432  | <5 | .62   | <1 | 17 | 7  | 199 | 5.14  | .08  | 23 | 1.47  | 5218  | 1  | <.01  | 5  | 1082 | 94  | <5 | <20 | 58 | .04   | <10 | 120 | <10 | 24 | 172  |
| 89 | - 18 L3 +00E 0+75 N    | 65      | 4.3 | 1.73  | 5  | 9  | 1132 | <5 | .69   | <1 | 14 | 3  | 121 | 4.09  | .06  | 26 | .93   | 9471  | 9  | <.01  | 3  | 1561 | 44  | <5 | <20 | 28 | .01   | <10 | 59  | <10 | 25 | 134  |
| 89 | - 19 L3 +00E 1+00 N    | 15      | 2.0 | 2.72  | 16 | 9  | 439  | <5 | .44   | <1 | 26 | 6  | 95  | 4.89  | .10  | 27 | 1.03  | 4592  | 2  | <.41  | 6  | 1321 | 43  | <5 | <20 | 16 | .02   | <10 | 81  | <10 | 24 | 137  |
| 89 | - 20 L3 +00E 1+25 N    | 10      | .5  | 2.96  | 9  | 7  | 207  | <5 | .22   | <1 | 20 | 7  | 48  | 4.87  | .08  | 16 | 1.08  | 2404  | <1 | <.01  | 6  | 1262 | 26  | <5 | <20 | 10 | .02   | <10 | 71  | <10 | 10 | 122  |
| 89 | - 21 L3 +00E 1+50 N    | 30      | 1.1 | 2.88  | 10 | 10 | 199  | <5 | .24   | <1 | 19 | 8  | 65  | 4.98  | .10  | 21 | 1.23  | 3490  | <1 | <.01  | 7  | 1415 | 37  | <5 | <20 | 17 | .04   | <10 | 75  | <10 | 16 | 137  |
| 89 | - 22 L3 +00E 1+75 N    | 10      | 2.1 | 2.32  | 7  | 7  | 283  | <5 | .44   | <1 | 21 | 6  | 129 | 5.25  | .10  | 23 | 1.49  | 2975  | <1 | <.01  | 6  | 1219 | 31  | <5 | <20 | 22 | .04   | <10 | 80  | <10 | 20 | 145  |
| 89 | - 23 L3 +00E 0+00 S    | 50      | .9  | 2.57  | 7  | 5  | 318  | <5 | .31   | <1 | 14 | 9  | 86  | 4.62  | .10  | 19 | .95   | 2110  | <1 | <.01  | 5  | 1650 | 59  | <5 | <20 | 18 | .01   | <10 | 81  | <10 | 10 | 156  |
| 89 | - 24 L3 +00E 0+25 S    | 55      | 2.1 | 2.57  | 10 | 6  | 357  | <5 | .31   | <1 | 15 | 6  | 92  | 5.54  | .10  | 26 | .93   | 2667  | <1 | <.01  | 5  | 1662 | 37  | <5 | <20 | 19 | .01   | <10 | 93  | <10 | 19 | 167  |
| 89 | - 25 L3 +00E 0+50 S    | 5       | 1.0 | 2.57  | <5 | 6  | 369  | 9  | .32   | <1 | 15 | 6  | 63  | 6.63  | .10  | 20 | .70   | 2330  | <1 | <.01  | 5  | 1533 | 27  | <5 | <20 | 19 | <.01  | <10 | 89  | <10 | 15 | 152  |
| 89 | - 26 L3 +00E 0+75 S    | 90      | 3.6 | 1.30  | <5 | 11 | 1106 | 14 | .40   | 15 | 29 | 2  | 91  | 10.07 | .09  | 19 | .75   | 8721  | <1 | <.01  | 5  | 1268 | 395 | <5 | <20 | 23 | .02   | <10 | 55  | <10 | 18 | 1102 |

ECO-TECH LABORATORIES LTD.

NAVARRE RES. CORP. - ETS 90-9089

| SE 2  | DESCRIPTION    | AU (ppb) | AG AL (C) | AS   | B  | BA | BI   | CA (C) | CD  | CD | CR | CU   | FE (C) | K (C) | LA  | MG (C) | MN   | MO    | NA (C) | NI   | P | PB   | SB   | SE | SR  | TI (C) | U    | V   | W  | Y   | ZN |      |
|-------|----------------|----------|-----------|------|----|----|------|--------|-----|----|----|------|--------|-------|-----|--------|------|-------|--------|------|---|------|------|----|-----|--------|------|-----|----|-----|----|------|
| 89-27 | L4 +GCE 3x50 S | 165      | 32.0      | .93  | 56 | 9  | 251  | 12     | .24 | 12 | 22 | 2    | 67     | 9.73  | .07 | 14     | .44  | 7623  | 4      | <.01 | 5 | 1401 | 428  | 9  | <20 | 15     | <.01 | <10 | 45 | <10 | 10 | 1119 |
| 89-28 | L4 +GCE 3x75 S | 235      | 25.3      | 1.34 | 17 | 15 | 465  | 14     | .31 | 38 | 18 | 4    | 60     | 10.05 | .06 | 21     | .75  | 16463 | 3      | <.01 | 5 | 1175 | 2198 | 7  | <20 | 27     | .02  | <10 | 61 | <10 | 15 | 2325 |
| 89-29 | L4 +GCE 4x00 S | 175      | 45.1      | 1.34 | 16 | 9  | 421  | 12     | .37 | 23 | 22 | 2    | 83     | 8.48  | .08 | 20     | .69  | 14901 | 3      | <.01 | 4 | 1338 | 3884 | 7  | <20 | 22     | .01  | <10 | 54 | <10 | 13 | 2019 |
| 89-30 | L4 +GCE 4x25 S | 80       | 15.4      | .92  | 27 | 9  | 130  | 12     | .80 | 13 | 21 | 3    | 111    | 8.64  | .08 | 12     | .43  | 8855  | 2      | <.01 | 5 | 1225 | 494  | 5  | <20 | 15     | .01  | <10 | 55 | <10 | 10 | 1625 |
| 89-31 | L4 +GCE 4x50 S | 255      | 14.7      | 1.04 | 28 | 11 | 1020 | 23     | .18 | 54 | 24 | <.01 | 108    | 19.77 | .09 | 10     | .30  | 13161 | 6      | <.01 | 3 | 1098 | 1555 | 5  | <20 | 32     | .01  | <10 | 41 | 19  | 8  | 6140 |
| 89-32 | L4 +GCE 4x75 S | 430      | 27.2      | 1.09 | 23 | 5  | 255  | 15     | .39 | 49 | 24 | 2    | 183    | 10.51 | .09 | 15     | .49  | 11363 | 2      | <.01 | 4 | 1007 | 3889 | 5  | <20 | 15     | <.01 | <10 | 61 | 18  | 11 | 6291 |
| 89-33 | L4 +GCE 5x00 S | 75       | 5.0       | 1.08 | 10 | 10 | 709  | 8      | .46 | 17 | 21 | 4    | 36     | 5.55  | .08 | 27     | .61  | 10327 | 11     | <.01 | 4 | 1403 | 299  | 5  | <10 | 24     | .02  | <10 | 62 | <10 | 15 | 1309 |
| 89-34 | L4 +GCE 5x25 S | 60       | 18.9      | 1.46 | 39 | 11 | 381  | 11     | .37 | 12 | 23 | 4    | 54     | 7.99  | .04 | 23     | .81  | 9179  | 1      | <.01 | 4 | 1205 | 617  | 5  | <20 | 16     | .02  | <10 | 96 | <10 | 14 | 1417 |
| 89-35 | L4 +GCE 5x50 S | 195      | 6.6       | .99  | 12 | 10 | 557  | 8      | .35 | 11 | 18 | 3    | 24     | 5.84  | .07 | 18     | .55  | 7400  | 1      | <.01 | 3 | 1503 | 421  | 5  | <20 | 14     | .02  | <10 | 60 | <10 | 12 | 1220 |
| 89-36 | NO CODE NUMBER | 35       | .4        | 3.14 | 5  | 8  | 262  | 6      | .37 | <1 | 15 | 11   | 49     | 5.03  | .11 | 17     | 1.24 | 2026  | 11     | <.01 | 5 | 1400 | 26   | 5  | <20 | 15     | .06  | <10 | 67 | <10 | 16 | 132  |

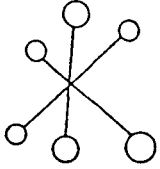
FE: < = LESS THAN

664-5130  
 ANDRIS KIVAKA  
 STEWART LAB  
 DR. E. W. GROVE  
 658-5285

*Jutta Jemouse*  
 ECO-TECH LABORATORIES LTD.  
 JUTTA JEMOUSE  
 B.C. CERTIFIED ASSAYER

DR. E. W. GROVE  
 4565 BOULDERWOOD DR.  
 VICTORIA, B.C.

07/NAVARRE



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

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

AUGUST 15, 1990

## CERTIFICATE OF ANALYSIS ETS 90-9035A

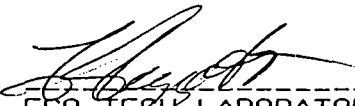
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NAVARRE RES. CORP.  
201 - 744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

SAMPLE IDENTIFICATION: 7 ROCK samples received AUGUST 8, 1990  
----- PROJECT: ICE

| ET#      | Description | AU<br>(g/t) | AU<br>(oz/t) | AG<br>(g/t) | PB<br>(%) | ZN<br>(%) |
|----------|-------------|-------------|--------------|-------------|-----------|-----------|
| 9035 - 1 | 52510       | <.03        | <.001        | 1.1         |           |           |
| 9035 - 2 | 52511       | <.03        | <.001        | 1.7         |           |           |
| 9035 - 3 | 52512       | .29         | .008         | 32.1        |           |           |
| 9035 - 4 | 52513       | .18         | .005         | 32.0        | 6.84      | 1.48      |
| 9035 - 5 | 52514       | .06         | .002         | 46.4        | 15.62     | 8.21      |
| 9035 - 6 | 52515       | .07         | .002         | 60.3        | 21.46     | 1.66      |
| 9035 - 7 | 52516       | .38         | .011         | 39.8        |           |           |

NOTE: < = LESS THAN

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

FAX: ANDRIX KITANKA  
636-2850  
DR. E. W. GROVE  
658-5289

cc. DR. E. W. GROVE  
4581 BOULDERWOOD DR.  
VICTORIA, B.C.

SC90/NAVARRE

ECO-TECH LABORATORIES LTD.

NAVARRE RES. CORP. - ETS 90-9035

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

201-744 W. HASTINGS ST.  
 VANCOUVER, B.C.  
 V6C 1A5

AUGUST 15, 1990

VALUES IN PPM UNLESS OTHERWISE REPORTED

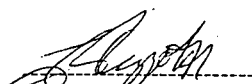
PROJECT: ICE  
 7 ROCK SAMPLES RECEIVED AUGUST 8, 1990

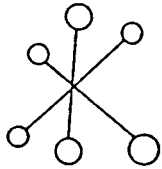
| ET#      | DESCRIPTION | AG    | AL(Z) | AS | B  | BA  | BI | CA(Z) | CD  | CO | CR  | CU   | FE(Z) | K(Z) | LA  | MG(Z) | MN   | MO | NA(Z) | NI | P    | PB     | SB | SN  | SR | TI(Z) | U   | V  | W   | Y | ZN     |
|----------|-------------|-------|-------|----|----|-----|----|-------|-----|----|-----|------|-------|------|-----|-------|------|----|-------|----|------|--------|----|-----|----|-------|-----|----|-----|---|--------|
| 9035 - 1 | 52510       | 1.0   | .21   | 35 | 6  | 15  | <5 | .01   | <1  | 3  | 132 | <1   | 4.00  | .16  | 10  | .02   | 82   | 11 | .01   | 1  | 80   | 12     | 10 | <20 | 3  | <.01  | <10 | 3  | <10 | 1 | 2      |
| 9035 - 2 | 52511       | 1.6   | .15   | 45 | 6  | 5   | <5 | <.01  | <1  | 4  | 116 | 1    | 8.12  | .11  | <10 | .01   | 206  | 11 | .03   | 2  | 120  | 8      | 5  | <20 | 1  | <.01  | <10 | 3  | <10 | 1 | 33     |
| 9035 - 3 | 52512       | >30.0 | .61   | 5  | 6  | 40  | <5 | .02   | 26  | 5  | 157 | 14   | 2.73  | .06  | <10 | .32   | 1038 | 11 | .01   | <1 | 350  | 4166   | 10 | <20 | 3  | <.01  | <10 | 35 | 10  | 1 | 2969   |
| 9035 - 4 | 52513       | >30.0 | 1.19  | 10 | 8  | 145 | <5 | 1.55  | 72  | 10 | 128 | 955  | 3.93  | .07  | <10 | .79   | 3035 | 17 | .02   | 4  | 720  | >10000 | 55 | <20 | 14 | .01   | <10 | 73 | 10  | 4 | >10000 |
| 9035 - 5 | 52514       | >30.0 | .39   | 30 | 28 | 55  | <5 | .80   | 117 | 8  | 149 | 726  | 2.79  | .06  | <10 | .17   | 1318 | 39 | .02   | 2  | 700  | >10000 | 65 | <20 | 14 | .01   | <10 | 29 | 10  | 2 | >10000 |
| 9035 - 6 | 52515       | >30.0 | .65   | 10 | 12 | 35  | <5 | .03   | 105 | 2  | 143 | 533  | 2.56  | .07  | 10  | .06   | 309  | 22 | .02   | 1  | 1190 | >10000 | 90 | <20 | 41 | <.01  | <10 | 48 | <10 | 1 | >10000 |
| 9035 - 7 | 52516       | >30.0 | 1.72  | 20 | 4  | 95  | <5 | .05   | 16  | 6  | 113 | 1627 | 5.15  | .11  | <10 | .76   | 2348 | 14 | .01   | 1  | 960  | 6416   | 15 | <20 | 3  | <.01  | <10 | 80 | 10  | 1 | 3022   |

NOTE: < = LESS THAN

FAX: ANDRIX KITANKA  
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cc. DR. E. W. GROVE  
 4581 BOULDERHOOD DR.  
 VICTORIA, B.C.  
 SC90/NAVARRE

  
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 FRANK J. PEZZOTTI, A.S.C.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 22, 1990

## CERTIFICATE OF ANALYSIS ETS 90-9043

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NAVARRE RES. CORP.  
201 - 744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

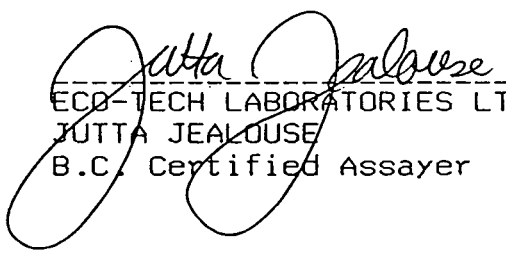
### A S S A Y S

SAMPLE IDENTIFICATION: 17 ROCK samples received AUGUST 13, 1990  
----- PROJECT: ICE B

| ET#       | Description | AU<br>(g/t) | AU<br>(oz/t) | AG<br>(g/t) | AG<br>(oz/t) | CU<br>(%) |
|-----------|-------------|-------------|--------------|-------------|--------------|-----------|
| 9043 - 1  | 52517       | <.03        | <.001        | 2.3         | .07          |           |
| 9043 - 2  | 52518       | <.03        | <.001        | 205.6       | 6.00         |           |
| 9043 - 3  | 52519       | <.03        | <.001        | 10.9        | .32          |           |
| 9043 - 4  | 52520       | <.03        | <.001        | 11.1        | .32          |           |
| 9043 - 5  | 52521       | <.03        | <.001        | 11.8        | .34          |           |
| 9043 - 6  | 52522       | <.03        | <.001        | 9.9         | .29          |           |
| 9043 - 7  | 52523       | <.03        | <.001        | 34.3        | 1.00         | 4.32      |
| 9043 - 8  | 52524       | <.03        | <.001        | 4.3         | .13          |           |
| 9043 - 9  | 52525       | <.03        | <.001        | 6.3         | .18          |           |
| 9043 - 10 | 52526       | .09         | .003         | 22.2        | .65          |           |
| 9043 - 11 | 52527       | .06         | .002         | 25.3        | .74          |           |
| 9043 - 12 | 52528       | .18         | .005         | 61.8        | 1.80         |           |
| 9043 - 13 | 52529       | .05         | .001         | 99.4        | 2.90         |           |
| 9043 - 14 | 52530       | .08         | .002         | 27.2        | .79          |           |
| 9043 - 15 | 52531       | .06         | .002         | 19.7        | .58          |           |
| 9043 - 16 | 52532       | <.03        | <.001        | 32.0        | .93          |           |
| 9043 - 17 | 52533       | <.03        | <.001        | .7          | .02          |           |

NOTE: < = LESS THAN

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JUTTA JEALOUSE  
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SC90/NAVARRE

ECO-TECH LABORATORIES LTD.

NAVARRE RES. CORP. - ETS 90-9043

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

201-744 W. HASTINGS ST.  
 VANCOUVER, B.C.  
 V6C 1A5

AUGUST 22, 1990

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT: ICE B  
 17 ROCK SAMPLES RECEIVED AUGUST 13, 1990

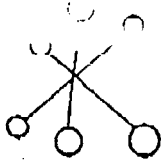
| ET#      | DESCRIPTION | AG   | AL(%) | AS  | B  | BA   | BI | CA(%) | CO | CO | CR  | CU    | FE(%) | K(%) | LA  | MG(%) | MN   | MO | NA(%) | NI | P     | PB   | SB | SN  | SR  | TI(%) | U   | V  | W   | Y  | ZN   |
|----------|-------------|------|-------|-----|----|------|----|-------|----|----|-----|-------|-------|------|-----|-------|------|----|-------|----|-------|------|----|-----|-----|-------|-----|----|-----|----|------|
| 9043 - 1 | 52517       | 3.4  | .53   | 10  | 10 | 190  | (5 | 5.04  | (1 | 9  | 37  | 18    | 2.86  | .14  | 10  | .16   | 1437 | 2  | .02   | (1 | 870   | 42   | (5 | (20 | 34  | (.01  | (10 | 26 | (10 | 4  | 387  |
| 9043 - 2 | 52518       | 30.0 | .25   | 20  | 8  | 100  | (5 | 2.92  | (1 | 5  | 146 | 9     | 1.17  | .03  | 10  | .23   | 1101 | 9  | .01   | 1  | 170   | 166  | (5 | (20 | 24  | (.01  | (10 | 9  | (10 | 1  | 105  |
| 9043 - 3 | 52519       | 13.4 | .12   | 60  | 6  | 5    | (5 | .02   | (1 | 2  | 37  | 3     | 6.49  | .09  | (10 | .01   | 5    | 8  | .01   | (1 | 250   | 29   | 25 | (20 | 2   | (.01  | 10  | 4  | (10 | (1 | 33   |
| 9043 - 4 | 52520       | 13.6 | .16   | 100 | 8  | 5    | (5 | .01   | (1 | 4  | 50  | 5     | 6.52  | .13  | (10 | .01   | 18   | 8  | .01   | (1 | 220   | 114  | 20 | (20 | 1   | (.01  | (10 | 4  | (10 | (1 | 184  |
| 9043 - 5 | 52521       | 14.4 | .64   | 160 | 8  | 15   | 5  | .15   | (1 | 11 | 55  | 16    | 6.51  | .1   | (10 | .32   | 729  | 66 | .01   | (1 | 910   | 39   | 25 | (20 | 4   | (.01  | (10 | 29 | (10 | 2  | 164  |
| 9043 - 6 | 52522       | 13.2 | .09   | 10  | 8  | 165  | (5 | 2.82  | 26 | 10 | 136 | 29    | 2.65  | .03  | 10  | .03   | 2456 | 9  | .01   | 3  | 150   | 3190 | 5  | (20 | 18  | (.01  | (10 | 6  | 30  | 3  | 1979 |
| 9043 - 7 | 52523       | 30.0 | .64   | 15  | 8  | 90   | (5 | .46   | (1 | 2  | 162 | 10000 | 3.38  | .07  | (10 | .14   | 274  | 13 | .01   | 1  | 10000 | 50   | (5 | (20 | 113 | (.01  | (10 | 73 | 20  | 1  | 248  |
| 9043 - 8 | 52524       | 6.4  | .13   | 20  | 10 | 10   | (5 | .05   | (1 | 5  | 117 | 92    | 4.00  | .11  | (10 | (.01  | 121  | 45 | .01   | (1 | 100   | 194  | 10 | (20 | 3   | (.01  | (10 | 4  | (10 | (1 | 194  |
| 9043 - 9 | 52525       | 8.8  | .15   | 30  | 10 | 10   | (5 | (.01  | (1 | 2  | 86  | 79    | 4.08  | .15  | (10 | .01   | 23   | 45 | .01   | (1 | 150   | 122  | 5  | (20 | 3   | (.01  | (10 | 5  | (10 | (1 | 107  |
| 9043 -10 | 52526       | 28.6 | .20   | 45  | 8  | (5   | (5 | .01   | 15 | 3  | 72  | 30    | 6.57  | .14  | (10 | .01   | 15   | 43 | .01   | (1 | 260   | 1148 | 15 | (20 | 2   | (.01  | (10 | 5  | 30  | (1 | 2217 |
| 9043 -11 | 52527       | 24.8 | .23   | 35  | 8  | 10   | (5 | .01   | 22 | 4  | 78  | 24    | 4.34  | .16  | (10 | .03   | 26   | 24 | .01   | (1 | 120   | 680  | 15 | (20 | 2   | (.01  | (10 | 6  | 40  | (1 | 2412 |
| 9043 -12 | 52528       | 30.0 | .09   | 40  | 10 | 35   | (5 | .03   | 23 | 3  | 199 | 77    | 2.25  | .06  | (10 | .01   | 165  | 19 | .01   | 2  | 240   | 1302 | 15 | (20 | 8   | (.01  | (10 | 7  | 50  | (1 | 3231 |
| 9043 -13 | 52529       | 30.0 | .09   | 25  | 8  | 350  | (5 | .01   | (1 | 3  | 153 | 77    | 1.38  | .02  | (10 | .02   | 457  | 19 | .01   | (1 | 170   | 750  | 10 | (20 | 6   | (.01  | (10 | 5  | 10  | (1 | 519  |
| 9043 -14 | 52530       | 27.2 | .21   | 20  | 10 | 70   | (5 | .07   | (1 | 3  | 221 | 218   | 1.26  | .02  | (10 | .09   | 1679 | 15 | .01   | 3  | 220   | 765  | 5  | (20 | 10  | (.01  | (10 | 11 | 10  | 1  | 1131 |
| 9043 -15 | 52531       | 19.6 | .55   | 25  | 12 | 100  | (5 | 1.91  | 41 | 7  | 143 | 115   | 2.44  | .03  | (10 | .32   | 2521 | 12 | .01   | 3  | 400   | 3152 | 15 | (20 | 20  | (.01  | (10 | 37 | 100 | 1  | 5705 |
| 9043 -16 | 52532       | 30.0 | .26   | 50  | 10 | 60   | (5 | .80   | 15 | 6  | 72  | 23    | 6.53  | .07  | (10 | .07   | 730  | 13 | .01   | 4  | 330   | 424  | 35 | (20 | 21  | (.01  | (10 | 13 | 10  | 1  | 793  |
| 9043 -17 | 52533       | .6   | .45   | 25  | 10 | 1035 | (5 | 11.87 | 4  | 35 | 4   | 3     | 6.53  | .06  | 10  | .51   | 2442 | 5  | .01   | 1  | 430   | 38   | 10 | (20 | 347 | (.01  | (10 | 66 | (10 | 7  | 317  |

NOTE: ( = LESS THAN

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 636-2850  
 DR. E. W. GROVE  
 658-5289

CC: DR. E. W. GROVE  
 4581 BOULDERWOOD DR.  
 VICTORIA, B.C.  
 SC90/NAVARRE

*Jutta Jealrose*  
 ECO-TECH LABORATORIES LTD.  
 JUTTA JEALROSE  
 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 573-4657

SEPTEMBER 7, 1990

**CERTIFICATE OF ANALYSIS ETS 90-9076A**

NAVARRE RES. CORP.  
201 - 744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

SAMPLE IDENTIFICATION: 2 ROCK samples received AUGUST 30, 1990  
----- PROJECT: ICE

| ET#      | Description | AU<br>(g/t) | AU<br>(o/t) | AG<br>(g/t) | AG<br>(oz/t) | PB<br>(%) |
|----------|-------------|-------------|-------------|-------------|--------------|-----------|
| 9076 - 1 | 52541       | .05         | .001        | 12.9        | .376         |           |
| 9076 - 2 | 52542       | .08         | .002        | 59.8        | 1.744        | 3.86      |

*Jutta Jealouse*  
-----  
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B.C. Certified Assayer

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4581 BOULDERWOOD DR.  
VICTORIA, B.C.

SC90/NAVARRE



ECO-TECH LABORATORIES LTD.

NAVARRE RES. CORP. - ETS 90-9076

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

201-744 WEST HASTINGS ST.  
 VANCOUVER, B.C.  
 V6C 1A5

SEPTEMBER 7, 1990

VALUES IN PPM UNLESS OTHERWISE REPORTED

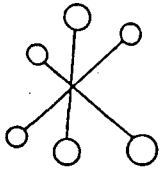
PROJECT: ICE PROJECT  
 2 ROCK SAMPLES RECEIVED AUGUST 30, 1990

| ET#      | 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   |
|----------|-------------|-------|-------|------|----|----|----|-------|-------|----|----|----|-------|------|-----|-------|------|----|-------|----|-----|--------|----|-----|----|-------|-----|----|------|----|------|
| 9076 - 1 | 52541       | 13.6  | .11   | 1325 | 54 | 10 | <5 | .08   | 46    | 19 | 89 | 80 | 5.66  | .02  | <10 | .06   | 244  | 8  | .04   | 5  | 110 | 62     | 35 | <20 | 1  | <.01  | <10 | 11 | <10  | <1 | 39   |
| 9076 - 2 | 52542       | >30.0 | .20   | 30   | 88 | 5  | <5 | 1.66  | >1000 | 10 | 93 | 52 | 2.54  | .01  | <10 | .34   | 2293 | 46 | .04   | 2  | 10  | >10000 | 35 | <20 | 13 | <.01  | <10 | 26 | 1750 | 1  | 6045 |

NOTE: < = LESS THAN  
 > = GREATER THAN

*Jutta Jealouse*  
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 JUTTA JEALOUSE  
 B.C. CERTIFIED ASSAYER

SC90/K1



# ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

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

SEPTEMBER 13, 1990


## CERTIFICATE OF ANALYSIS ETS 90-9088A

=====

NAVARRE RES. CORP.  
201 - 744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

SAMPLE IDENTIFICATION: 5 ROCK/CORE samples received SEPTEMBER 6, 1990  
----- PROJECT: ICE

| ET#      | Description | AU<br>(g/t) | AU<br>(oz/t) | AG<br>(g/t) | AG<br>(oz/t) | PB<br>(%) | ZN<br>(%) |
|----------|-------------|-------------|--------------|-------------|--------------|-----------|-----------|
| 9088 - 1 | 52545       | 2.93        | .085         | 896.0       | 26.13        | 1.35      | 7.56      |
| 9088 - 2 | 52546       | .12         | .003         | 396.0       | 11.55        | 69.28     | 1.44      |
| 9088 - 3 | 52551       | <.03        | <.001        | 17.7        | .52          |           |           |
| 9088 - 4 | 52552       | .03         | .001         | 108.6       | 3.17         |           |           |
| 9088 - 5 | 52553       | <.03        | <.001        | 12.5        | .37          |           |           |

  
-----  
ECO-TECH LABORATORIES LTD.  
JUTTA JEALOUSE  
B.C. Certified Assayer

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4581 BOULDERWOOD DR.  
VICTORIA, B.C.

SC90/NAVARRE1

ECO-TECH LABORATORIES LTD.

NAVARRE RES. CORP. - ETS 90-9088

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

201-744 W. HASTINGS ST.  
 VANCOUVER, B.C.  
 V6C 1A5

SEPTEMBER 13, 1990

VALUES IN PPM UNLESS OTHERWISE REPORTED

PROJECT: ICE PROJECT  
 5 ROCK/CORE SAMPLES RECEIVED SEPTEMBER 6, 1990

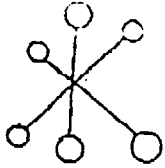
| ET#      | DESCRIPTION | AG    | AL(%) | AS | B  | BA | BI | CA(%) | CD  | CO | CR | CU | FE(%) | K(%) | LA  | MG(%) | MN   | MO | NA(%) | NI | P    | PB     | SB  | SN  | SR | TI(%) | U   | V  | W   | Y  | ZN     |
|----------|-------------|-------|-------|----|----|----|----|-------|-----|----|----|----|-------|------|-----|-------|------|----|-------|----|------|--------|-----|-----|----|-------|-----|----|-----|----|--------|
| 9088 - 1 | S2545       | >30.0 | .97   | 6  | <2 | 96 | <5 | 3.66  | 369 | 6  | 25 | 42 | 3.08  | <.01 | <10 | .63   | 4006 | 3  | <.01  | <1 | 25   | 8722   | <5  | <20 | <1 | <.01  | <10 | 31 | 160 | <1 | >10000 |
| 9088 - 2 | S2546       | >30.0 | .03   | <5 | <2 | 17 | <5 | .07   | 381 | 1  | 15 | 7  | .41   | <.01 | <10 | .03   | 139  | 3  | <.01  | <1 | <10  | >10000 | 265 | <20 | 23 | <.01  | <10 | 2  | <10 | <1 | >10000 |
| 9088 - 3 | S2551       | 17.3  | .68   | 21 | <2 | 51 | <5 | 2.27  | 2   | 14 | 15 | 41 | 3.85  | .18  | 14  | .90   | 1649 | <1 | <.01  | 4  | 1205 | 394    | 8   | <20 | 78 | <.01  | <10 | 21 | <10 | 6  | 197    |
| 9088 - 4 | S2552       | >30.0 | .74   | 34 | <2 | 36 | <5 | 1.56  | 5   | 15 | 29 | 37 | 3.86  | .19  | 12  | .79   | 1231 | 2  | <.01  | 4  | 1039 | 709    | <5  | <20 | 64 | <.01  | <10 | 20 | <10 | 4  | 481    |
| 9088 - 5 | S2553       | 10.6  | 1.08  | 17 | 3  | 35 | <5 | 1.39  | <1  | 16 | 28 | 23 | 4.25  | .20  | 15  | 1.01  | 1229 | <1 | <.01  | 5  | 1152 | 95     | <5  | <20 | 54 | <.01  | <10 | 34 | <10 | 4  | 179    |

NOTE: < = LESS THAN

FAX: ANDRIS KIKAUKA  
 604-5135  
 DR. E. W. GROVE  
 658-5289  
 STEWART OFFICE

*Jutta Jealouse*  
 ECO-TECH LABORATORIES LTD.  
 JUTTA JEALOUSE  
 B.C. CERTIFIED ASSAYER

cc. DR. E. W. GROVE



**ECO-TECH LABORATORIES LTD.**

ASSAYING • ENVIRONMENTAL TESTING

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

OCTOBER 5, 1990

CERTIFICATE OF ANALYSIS ETS 90-9141

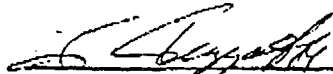
NAVARRE RESOURCES CORP.  
201 - 744 W. HASTINGS  
VANCOUVER, B.C.

**A S S A Y S**

SAMPLE IDENTIFICATION: 2 CORE samples received SEPTEMBER 28, 1990  
----- ICE PROJECT

| ET#      | Description | AU<br>(g/t) | AU<br>(oz/t) | AG<br>(g/t) | AG<br>(oz/t) | ZN<br>(%) |
|----------|-------------|-------------|--------------|-------------|--------------|-----------|
| 9141 - 2 | 52567       | 1.79        | .052         | 343.0       | 10.00        | 9.24      |

FAX: 684-5135  
ATTENTION: A. KIKUAKA  
& STEWART LAB

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

cc: DR. E. W. GROVE  
FAX: 658-5289  
4581 BOULDERWOOD DR.  
VICTORIA, B.C.

SC90/NAVARRE#4

ECO-TECH LABORATORIES LTD.

NAVARRE RES CORP ETS 90-9141

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

201-744 WEST HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

SEP 5, 1990

µ IN PPM UNLESS OTHERWISE REPORTED

PROJECT: ICE PROJECT  
2 CORE SAMPLES RECEIVED SEPTEMBER 28, 1990

| DESCRIPTION | AG AL(%) | AS    | B   | BA | BI CA(%)      | CO  | CD | CR | CU FE(%) | K(%) | LA MG(%)    | MN | MO NI(%) | NI | P   | PB   | SB | SM  | SR TI(%) | U   | V  | W   | Y   | ZN    |
|-------------|----------|-------|-----|----|---------------|-----|----|----|----------|------|-------------|----|----------|----|-----|------|----|-----|----------|-----|----|-----|-----|-------|
| 1 52566     | 50       | 20.9  | .17 | 20 | (2 8 18 2.55  | 9   | 10 | 27 | 24 4.70  | .08  | 13 .36 2790 | 11 | (.01     | 1  | 680 | 309  | 15 | (20 | 37 (.08  | (10 | 16 | 8   | 3   | 669   |
| 2 52567     | >1000    | >30.0 | .41 | 10 | (2 34 28 5.40 | 246 | 4  | 56 | 299 4.65 | .03  | 12 .75 4715 | 21 | (.01     | (1 | 81  | 3664 | 21 | (20 | 87 (.08  | (10 | 2) | 169 | (1) | 10000 |

( = LESS THAN  
) = GREATER THAN

44-5135  
HEWART LAB  
E.W. GROVE 658-5289

E.W. GROVE  
4581 BOULDERWOOD  
VICTORIA, B.C.

AVARRE#3

  
ECO-TECH LABORATORIES LTD.  
FRANK PEZZOTTI, A.S.C.T.  
CERTIFIED ASSAYER

Appendix D

NAVARRE RESOURCES LTD. - ICE PROJECTS - DRILL HOLE REPORT

HOLE-ID: I-90-1

EASTING: 17209.7    NORTHING: 25788.8    ELEVATION: 1845.0    DIP: -55.0    LENGTH: 98.8

| SURVEY DATA | FROM (M) | TO   | AZIMUTH | DIP   |
|-------------|----------|------|---------|-------|
|             | .0       | 98.8 | 120.0   | -55.0 |

LITHOLOGY DATA

| FROM (M) | TO   | CODE | ROCK-A/N | ROCK DESCRIPTION                                                                                                                                                                                 |
|----------|------|------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| .0       | 4.6  | 0    | OB       | CASING                                                                                                                                                                                           |
| 4.6      | 13.4 | 0    | T        | TUFF<br>Lapilli tuff, green to light grey matrix, 1-40 mm red hematitic clasts (reaction rims bleached white).                                                                                   |
| 13.4     | 15.5 | 0    | SS       | SANDSTONE<br>Maroon tuffaceous sandstone, hematitic redbed.                                                                                                                                      |
| 15.5     | 16.1 | 0    | FT       | FAULT<br>Fault with quartz ankerite veinlets, quartz-ankerite blebs to 5.0 cm at 36.57 to 38.1 m; weak foliation at 50 deg to core axis; 1-2 mm quartz veinlets.                                 |
| 16.1     | 46.9 | 0    | SS       | SANDSTONE<br>Maroon tuffaceous sandstone, hematitic redbed.                                                                                                                                      |
| 46.9     | 51.8 | 0    | SS       | SANDSTONE<br>Green dacitic tuffaceous sandstone, 1-8 mm quartz veinlets at 20-30 deg to core axis.                                                                                               |
| 51.8     | 51.8 | 0    | FT       | WEAK FAULT                                                                                                                                                                                       |
| 51.8     | 73.2 | 0    | SS       | SANDSTONE<br>Green dacitic tuffaceous sandstone, 1-8 mm quartz veinlets at 20-30 deg to core axis.                                                                                               |
| 73.2     | 73.5 | 0    | FT       | STRONG FAULT (mud)                                                                                                                                                                               |
| 73.5     | 74.7 | 0    | SS       | SANDSTONE<br>Green dacitic tuffaceous sandstone, as above.                                                                                                                                       |
| 74.7     | 75.3 | 0    | FT       | STRONG FAULT (mud)                                                                                                                                                                               |
| 75.3     | 91.4 | 0    | SS       | SANDSTONE<br>Green dacitic tuffaceous sandstone, as above.                                                                                                                                       |
| 91.4     | 98.8 | 0    | F        | FELSITE<br>Felsite, bleached, fine grain, pyritic, sericitic, grey-green colour, probably an altered volcanoclastic relict breccia texture visible.<br>NQ Core, logged by A.Kikauka, END OF HOLE |

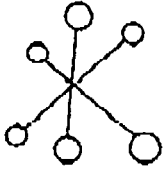
ASSAY DATA

-----  
 FROM (M) TO AU G/T AG G/T PB PPM ZN PPM SAMPLE NO MINERALIZATION  
 -----

-----  
 GC-XPLOR VERSION 1.30 \*\*\* NAVARRE RESOURCES CORP. - STEWART DISTRICT PROJECTS \*\*\* EW Grove Consultants  
 Exploration Data Manager \*\*\* & ICE CLAIMS \*\*\* 11: 4:18 Serial no: 22396  
 by GEMCOM SERVICES INC. 4/12/90 Page : 2  
 -----

|      |      |      |        |        |          |       |                                           |
|------|------|------|--------|--------|----------|-------|-------------------------------------------|
| 53.6 | 55.2 | .02  | 17.70  | 394.00 | 197.00   | 52551 | 5% diss. py 1-2 mm blebs, 1-3 mm qtz vnl  |
| 55.2 | 55.8 | .03  | 108.60 | 709.00 | 481.00   | 52552 | 8% diss py, 4-12 cm qtz vnlt at 30 deg    |
| 55.8 | 56.7 | .02  | 12.50  | 95.00  | 179.00   | 52553 | 5% diss py 1-2 mm blebs, 1-5 mm qtz vnlt  |
| 97.5 | 98.6 | .01  | 20.90  | 309.00 | 669.00   | 52566 | 1-3cm qtz vns @ 45 deg, 2% py, tr galena  |
| 98.6 | 98.8 | 1.79 | 343.00 | 81.00  | 92400.00 | 52567 | 40% grey/bl qtz, 4% galena, tetrahedrite? |

END OF HOLE: I-90-1



APPENDIX E  
**ECO-TECH LABORATORIES LTD.**

ASSAYING - ENVIRONMENTAL TESTING  
 10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4667

**GEOCHEMICAL LABORATORY METHODS**

**SAMPLE PREPARATION (STANDARD)**

1. **Soil or Sediment:** Samples are dried and then sieved through 80 mesh nylon sieves.
2. **Rock, Core:** Samples dried (if necessary), crushed, riffled to pulp size and pulverized to approximately -140 mesh.
3. **Heavy Mineral Separation:**  
 Samples are screened to -20 mesh, washed and separated in Tetrabromothane.  
 (SG 2.96)

**METHODS OF ANALYSIS**

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

1. **Multi-Element Cd, Cr, Co, Cu, Fe (acid soluble), Pb, Mn, Ni, Ag, Zn, Mo**

**Digestion**

Hot aqua-regia

**Finish**

Atomic Absorption, background correction applied where appropriate

**A) Multi-Element ICP**

**Digestion**

Hot aqua-regia

**Finish**

ICP

**2. Antimony**

**Digestion**

Hot aqua regia

**Finish**

Hydride generation - A.A.S.

**3. Arsenic**

**Digestion**

Hot aqua regia

**Finish**

Hydride generation - A.A.S.

**4. Barium**

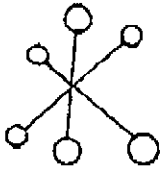
**Digestion**

Lithium Metaborate Fusion

**Finish**

I.C.P.



**ECO-TECH LABORATORIES LTD.**

ASSAYING - ENVIRONMENTAL TESTING

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

**5. Beryllium**Digestion

Hot aqua regia

Finish

Atomic Absorption

**6. Bismuth**Digestion

Hot aqua regia

Finish

Atomic Absorption

**7. Chromium**Digestion

Sodium Peroxide Fusion

Finish

Atomic Absorption

**8. Fluorine**Digestion

Lithium Metaborate Fusion

Finish

Ion Selective Electrode

**9. Mercury**Digestion

Hot aqua regia

FinishCold vapor generation -  
A.A.S.**10. Phosphorus**Digestion

Lithium Metaborate Fusion

Finish

I.C.P. finish

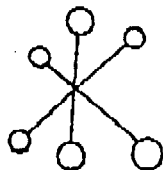
**11. Selenium**Digestion

Hot aqua regia

Finish

Hydride generation - A.A.S.

**12. Tellurium**DigestionHot aqua regia  
Potassium Bisulphate FusionFinishHydride 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 (604) 573-5700 Fax 573-4557

**13. Tin**Digestion

Ammonium Iodide Fusion

Finish

Hydride generation - A.A.S.

**14. Tungsten**Digestion

Potassium Bisulphate Fusion

Finish

Colorimetric or I.C.P.

**15. Gold**Digestion

- a) Fire Assay Preconcentration  
followed by Aqua Regia

Finish

Atomic Absorption

- b) 10g sample is roasted at 600°C then digested with hot  
Aqua Regia. The gold is extracted by MIBK and  
determined by A.A.

**16. Platinum, Palladium, Rhodium**DigestionFire Assay Preconcentration  
followed by Aqua RegiaFinish

Graphite Furnace - A.A.S.