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**GEOPHYSICAL REPORT ON**  
**GROUND MAGNETIC SURVEY AND VLF-EM SURVEY**  
**OVER DOG CLAIM GROUP**  
**CANNELL CREEK**  
**KAMLOOPS MINING DIVISION**  
**BRITISH COLUMBIA**

**SUB-RECORDER**  
**RECEIVED**  
 OCT 18 1989  
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 VANCOUVER, B.C.

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**PROPERTY:** 28 km N35 W of Kamloops, B.C. on Cannell Creek  
 50 52' North Latitude  
 120 34' West Longitude  
 N.T.S. 92I/15E

**WRITTEN FOR:** TRANS-ARCTIC EXPLORATIONS LTD.  
 #815-850 West Hastings Street  
 Vancouver, B.C. V6C 1E2

**WRITTEN BY:** Andrew Rybaltowski, Geophysicist

**DATED:** October 15, 1989

**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**

**19,218**

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## INTRODUCTION

This Report describes procedures and results of the geophysical programme consisting of Ground Magnetic Survey and VLF-EM Survey. Both surveys were carried out over the Dog Claim Group located on Cannell Creek within the Kamloops Mining District from July 11 to July 16, 1989.

The surveys were conducted by a crew of three men under the supervision of Eugene Dodd of Trans-Arctic Explorations Ltd. with the aid of Erin Dodd and Pat Crook.

The main purpose of the above surveys was to delineate geological structures as fault and shear zones which could contain gold mineralization. Initial assumption of possibility of gold mineralization on the Dog Claim Group was justified by the presence of auriferous quartz veins containing sulphides and/or porphyritic dykes on the nearby Allies showing. In addition, results of both surveys were used to map the geological structure of the property in order to prepare background for further development.

## CONCLUSIONS

A combined VLF-EM and magnetic surveys over the Dog Claim Group revealed complex picture of EM conductors and magnetic structures. VLF-EM anomalies A, B, and C are considered to be of particular interest.

Although the strike direction of the anomalies does not coincide with the strike of known auriferous porphyry dykes on the property, the encountered EM conductors present promising exploration targets.

However, 100 m separation of the survey lines is too large for the positive cross-line correlation of some of magnetic and VLF-EM anomalies.

## RECOMMENDATIONS

A two stage geophysical programme is recommended for the Dog Claim Group property.

As the stage one, a combination of VLF-EM and magnetic survey should be applied. Those surveys should be performed along fill-in lines on the existing grid in order to resolve cross line correlation problems for VLF-EM and magnetic anomalies. The distance of 50 m between survey lines seems sufficient to resolve question of continuity for the majority of structures encountered on the property.

As the stage two of the geophysical programme, an Induced Polarization-Resistivity survey with dipole-dipole array is recommended. The IP-Resistivity survey should be directed by results of combined VLF-EM and magnetic surveys. The above approach to the exploration of the property could greatly reduce the cost of the programme by targeting only promising VLF-EM conductors.

Due to the relation of two stages of the recommended programme, an immediate interpretation of inflowing data will be necessary.

## PROPERTY AND OWNERSHIP

The property consists of 3 claims totalling 16 units as outlined below:

<u>Claim Name</u>	<u>No. Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Dog #2	8	8657 (7)	July 11, 1990
Dog #3	4	4119 (7)	July 19, 1989
Dog #4	4	6343 (8)	August 15, 1989

The above mineral claims were grouped in the month of July 1989 under the name of Dog Claim Group.

The expiry dates shown above do not take into account the 1989 magnetic and VLF-EM surveys discussed here as being accepted for assessment credits.

The property is beneficially owned by Trans-Arctic Explorations Ltd. and registered in the name of Mr. Eugene A. Dodd.

## LOCATION AND ACCESS

The Dog Claim Group property is located in south-central British Columbia, about 25 km northwest of the City of Kamloops, on Cannel Creek at the Tranquille Plateau.

The geographical coordinates of the property are 50 52' North latitude and 120 34' West longitude.

The property is accessible by the Pass Lake dirt road from Kamloops. This road begins at the Batchelor Hills turn-off in North Kamloops and continues along the West bank of North Thompson River to Pass Lake. From the agricultural research station at Pass Lake the road goes northwest for about 1 km then turns West and goes another 8.5 km northwest to reach the Allies showing. Total distance from North Kamloops to the property is approximately 30 km.

Pass Lake Road is open all year around and a two-wheel drive vehicle can be driven here. However, a four-wheel drive vehicle is recommended from Pass Lake to the property. During the winter on this portion of the road use of a skidoo is necessary.



## PHYSIOGRAPHY

The Dog Claim Group property lies at the southern edge of the Tranquille Plateau being a part of the physiographic division known as the Thompson Plateau System.

A gently rolling upland area with elevation peaking at 1,530 meters above sea level at the northwest corner of the Dog 1 claim is bisected by the valley of Cannell Creek trending northwest. Elevation of the valley varies from 1,020 meters above sea level at the southern property boundary to about 1,450 meters above sea level at the northern end of the valley.

The main water source is Cannell Creek and its tributaries which are crossing the property. It is also important to note that the area is poorly drained which causes heavy depositing of clay-rich glacial material throughout the valley.

The terrain is heavily wooded with fir, spruce and pine in the valley of Cannell Creek. The forest cover varies from closely growing immature stands to widely spaced mature stands. Upland areas and southern slopes are more open and forested mainly by pine. There are also sporadic meadows.

## HISTORY OF PREVIOUS WORK

The Dog Claim Group property was previously known as the Allies Group. In the 1920' and 1930' some exploration for gold was done which included prospecting, sampling and trenching. In 1933-1934 an extensive underground exploration was carried out in an attempt to find and delineate the source of the gold bearing porphyry floats. Several shafts and adits were dug out at various locations. However, the source of the high grade floats was not found.

The property was staked as the Dog Claims in 1969-1970 and again in 1973. In 1972 and 1973 the property was controlled by Bon-Val Mines Ltd. The company proceeded with magnetic and VLF-EM surveys as well as limited geochemical soil sampling.

In 1976 further geochemical soil sampling was carried out. About 800 samples were analyzed for gold and copper but results returned only few gold "highs". That could be caused by the heavy, clay-rich overburden that covers Cannell Creek valley.

In 1978 drilling programme consisting of 3 diamond drill holes was completed. It did not encounter mineralization.

Part of the described work was carried out over present Dog 2 and Dog 3 claims. In 1983 Stryder Explorations Ltd. proceeded with airborne magnetic and VLF-EM surveys over those two claims. The magnetic survey has revealed that most of the Dog 1 and Dog 3 and part of Dog 2 claims are underlined by serpentine, sediments and, possibly, volcanics of the Cache Creek Group.

In 1985 Trans-Arctic Explorations Ltd. conducted preliminary VLF-EM survey which has established rather complex conductors that are indicative of cross-structure.

In 1987 a soil geochemistry survey was conducted over the portion of the Dog Claim Group by Trans-Arctic Explorations Ltd.

**GEOLOGY AND MINERALIZATION**  
(largely after Cockfield 1948)

Most of the Dog Claim Group area is covered by Miocene Plateau basalts. The Plateau basalts are black, fine grained, occasionally amygdaloidal and showing characteristic columnar jointing.

Pre-Miocene rocks occurring on the property consist of picrite, Nicola greenstones and felsic dykes which are confined to small erosional-tectonic window in Tertiary volcanics. Exposures of the above rock types are limited to areas of workings. Felsic, porphyritic dykes are cutting older picrite and Nicola volcanics.

Surface observations and limited drilling suggest East to NorthEast strike direction and steep southern dip of the porphyry dikes.

At the Dodd's Showing (referred to in J. Dawson Jan./86 Drilling/Assessment Report # 15807), the dykes occur as a cluster 20 to 30 m wide. Individual dykes are separated by chloritized country rock.

The mineralization on the property was originally found in boulders of dark, quartz veined porphyry. Quartz veins and stringers of variable width (1 to 20 centimeters) are carrying disseminated pyrite, blebs of chalcopyrite and minor galena. Average value 0.1 oz/t of gold has been returned from grab samples of mineralized boulders (J.M. Dawson 1986). Occasional values as high as 1.42 oz/t of gold have also been reported.

## INSTRUMENTATION AND SURVEY PROCEDURES

A proton precession magnetometer manufactured by GEM Systems was used for the magnetic survey. The instrument measures the intensity of a Total Magnetic Field by means of observing the precession frequency of hydrogen nuclei in hydrocarbon rich fluid.

For the VLF-EM observations a VLF-EM receiver Model 27 manufactured by Sabre Electronics was utilized.

During the EM survey, the in phase vertical magnetic component (dip angle) of electromagnetic field was recorded. Dip angle (tilt of major axis of the polarization ellipse) results totally from the anomalous current flow. Dip angle is the most often used parameter in VLF-EM prospecting.

During the EM survey on Dog Claim Group, a signal from two VLF transmitting stations was used. These two were:

- Annapolis, Maryland (NSS) operating at 21.4 kHz
- Lualualei, Hawaii (NPM) operating at 23.4 kHz

The Hawaiian transmitter was off air during a small part of the survey affecting data collection on lines 0S and 1S.

For both surveys, the distance between survey lines was 100 m and the survey station separation was 25 m.

In order to observe daily variations of the Magnetic Field and introduce diurnal corrections to recorded values, a looping method of measurements was applied.

## COMPILATION OF DATA

Analysis of the magnetic readings at control stations along the base line suggests that daily variations of the magnetic field did not exceed 150 gamma for the duration of the survey. Part of the observed variations might be attributed to a presence of strong, local magnetic gradients and imprecise positioning of the sensor at the control points.

Considering the above and high amplitude of variations of the Total Magnetic Field along the survey lines (in excess of 3000 gamma), durnal corrections were not included. A constant value of 55500 gamma was subtracted from all recorded readings of the Total Magnetic Field. The resulting values were contoured with 500 gamma interval and presented on the Map 3.

For the purpose of direct correlation with VLF-EM profiles, the magnetic data are also presented in a profile form for each of the survey lines (please see Appendix A).

The results of the VLF-EM survey are presented in a form of profiles, separately for each of the two recorded stations (Maps 3 and 4). Readings of a dip angle were Fraser filtered. Profile graphs combining raw and filtered data are presented in the Appendix A.

The numeric values of all geophysical measurements under discussion in this Report are listed in Appendix B.

## DISCUSSION OF RESULTS

Magnetic survey over the Dog Claim Group has shown very strong variations of the Total Magnetic Field. Amplitude of variations over the length of survey lines exceeds 4000 gamma. This occurrence is illustrated on Magnetic Profiles included in Appendix A.

High frequency of variations of the magnetic field suggests a rapid sequence of geological strata and (or?) strong influence of tectonic activity. Profile plots of the magnetic field reveal that majority of sharp, separate anomalies has a width not exceeding 150 m. Correlation of such narrow anomalies on survey lines separated by the distance of 100 m is very ambiguous. Thus, a comparatively large contour interval of 500 gamma was selected for the contour map of the magnetic field (Map 3) to reflect only the major magnetic features.

A directional trend of the magnetic field is noticeable in the following areas of survey grid:

- 0W to 300W where magnetic low located around 0+50W extends almost directly NS throughout the survey grid and is accompanied by NNW - SSE striking intermediate magnetic high to the West. Area East of the base line shows NNE - SSW magnetic trend limited to survey lines 0S and 1S.
- 300W to 450W where NNW - SSE trending magnetic "plateau" is encountered. This "plateau" is internally disrupted by a sequence of magnetic lows and believably reflects comparatively undisturbed, nonvolcanic geology.

The western part of the property contains a series of magnetic highs representing believably subcrops of serpentinized volcanic rocks.

100 m separation between survey lines complicates positive correlation of EW trending magnetic structures. Quite possibly, this kind of structure exists between 1300W on L 0S and 750W on L 2S, disrupting NS trending magnetic highs.

The results of VLF-EM survey over the Dog Claim Group are presented on Maps 4, 5 and 6 as well as in Profile plots included in Appendix A.

VLF-EM survey revealed existence of very complex conductors on the property. VLF-EM conductors on Dog Claims are expected mainly to reflect geological structures such as fault, shear or breccia zones.

A comparatively wide separation between the survey lines limits the possibility of cross line correlation of EM conductors to only strong anomalies of the preferred NS strike. All correlated as well as apparently discontinuous VLF-EM conductors are presented on Map 6. Conductors are coded alphabetically in order of importance.

The conductor A striking approximately NW - SE is located within western part of the survey area. This conductor is believably continuing to NW of Line 1S 1450W and intersecting Line 0S around 1550W - please, compare VLF-EM Profiles plots in Appendix A with Maps 4 and 6. The conductor A is located entirely within magnetic high and thus it has a distinctively different character from all other VLF-EM conductors encountered on the property.

The conductor B runs approximately NW - ES between Lines 1S and 3S and changes (?) its strike to NS between Lines 1S and



0S. The relation of this conductor to magnetic low located west of the base line is not clear.

The conductor C encountered on Lines 0S, 1S and 2S is rapidly changing its strike direction at Line 1S. In the case of this conductor a doubtful cross line correlation of VLF-EM response seems to be confirmed by results of the magnetic survey.

On the Dog Claims, the VLF-EM response for Hawaii station is much harder to correlate than the response for Annapolis transmitter. The conductor D serves as a good example of that problem. This conductor encountered on Lines 1S, 2S and 3S is striking NE - SW and crossing indiscriminately NS and NW - SE trending magnetic structures. Cross line correlation for conductor D, although questionable, seems to be confirmed by relation of its strike direction to direction to the Hawaiian transmitter.

VLF-EM conductors encountered on the property require an additional geophysical survey along fill-in lines spaced at 50 m in order to resolve cross-line correlation problem.

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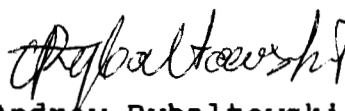
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## GEOPHYSICIST'S CERTIFICATE

I, Andrew Rybaltowski, hereby certify:

1. That I am a practising geophysicist with residence at #205-1445 Pendrell St., Vancouver, B.C. V6G 1S3.
2. That I am a graduate of The University of Mining and Metallurgy in Poland (1980) and hold a M.Sc. degree in Geophysics.
3. That I have been practising my profession for the past nine years and have been active in the mining industry for the past fourteen years.
4. That this Report is compiled from data gathered during ground magnetic and VLF-EM surveys carried out by the crew of Trans-Arctic Explorations Ltd. during the period of July 11th to July 16th, 1989.
5. That I do not hold any interest in Trans-Arctic Exploration Ltd.

  
Andrew Rybaltowski  
Geophysicist

Vancouver, October 15, 1989

## AFFIDAVIT OF EXPENSES

The ground magnetic and VLF-EM surveys were carried out from July 11th to July 16th, 1989 on the Dog2, Dog3 and Dog 4 claims on Cannell Creek, Kamloops Mining Division, B.C. to the value of the following:

FIELD:

Crew chief	6 days	@ \$180.00 a day	\$ 1,080.00
Surveyor's Assistant	6 days	@ \$150.00 a day	900.00
Supervisor	2 days	@ \$200.00 a day	400.00
4 x 4 3/4 ton truck	2 days	@ \$ 90.00 a day	180.00
4 x 4 3/4 ton truck	6 days	@ \$ 90.00 a day	540.00
GEM Systems Proton Magnetometer instrument rental	6 days	@ \$ 50.00 a day	300.00
Sabre mod #27 VLF-EM instrument rental	6 days	@ \$ 30.00 a day	180.00
Room & board for 1 man	2 days	@ \$ 35.00 a day	70.00
Room & board for 2 men	6 days	@ \$ 70.00 a day	420.00
Survey supplies			280.00

Total Field Costs \$ 4,350.00

OFFICE:

Report compilation and interpretation	\$ 1,200.00
Drafting	350.00

Total Office Costs \$ 1,550.00

GRAND TOTAL \$ 5,900.00

Respectfully submitted,  
TRANS-ARCTIC EXPLORATIONS LTD.

R.S. SIMPSON  
General Manager

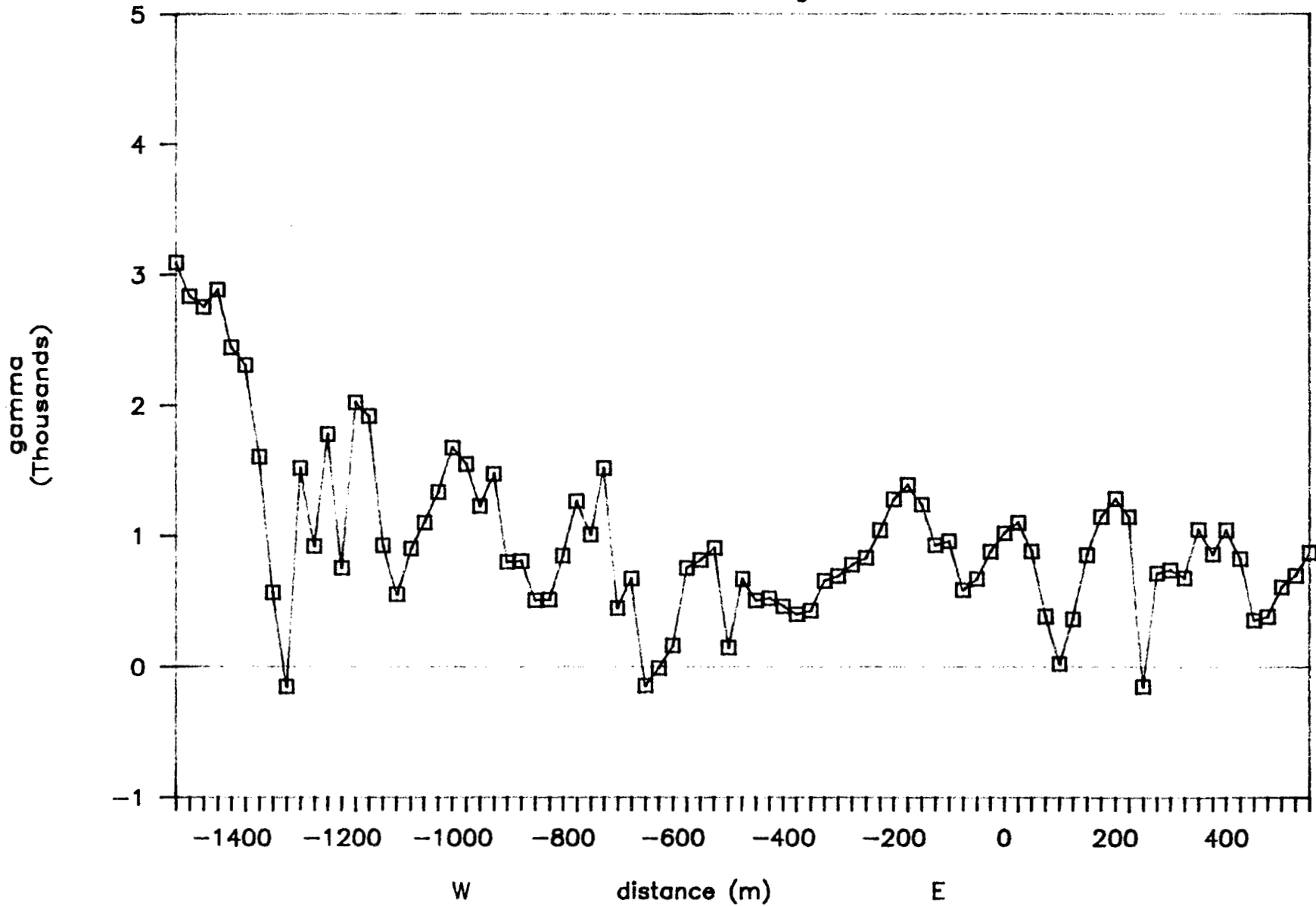
APPENDIX A

Magnetic Profiles for Lines: 0S, 1S, 2S, 3S

VLF-EM Profiles (raw and Fraser filtered data) for Lines: 0S,  
1S, 2S, 3S

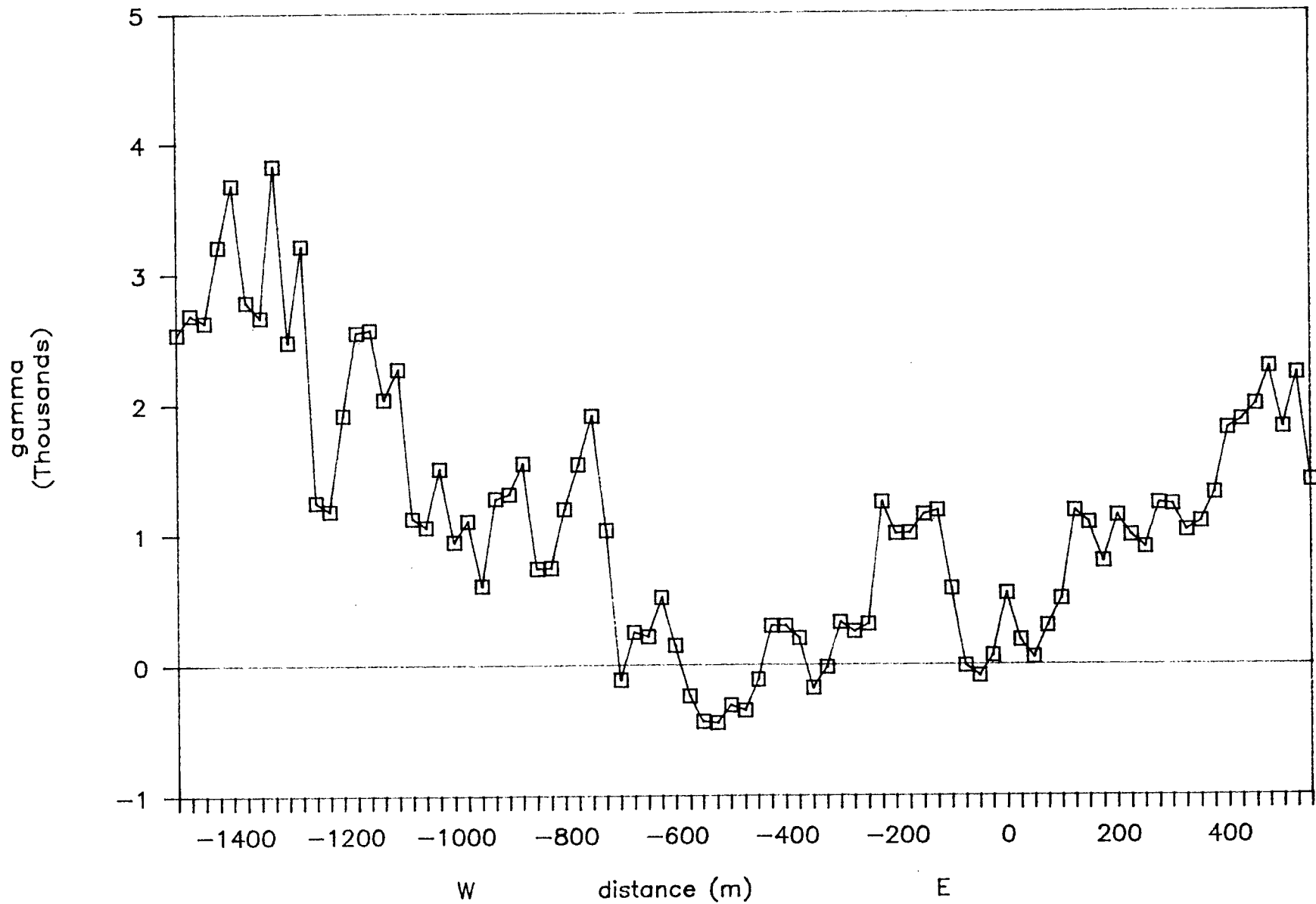
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LINE 05 TFM — 55500gamma



# DOG CLAIM GROUP — MAGNETIC SURVEY 1989

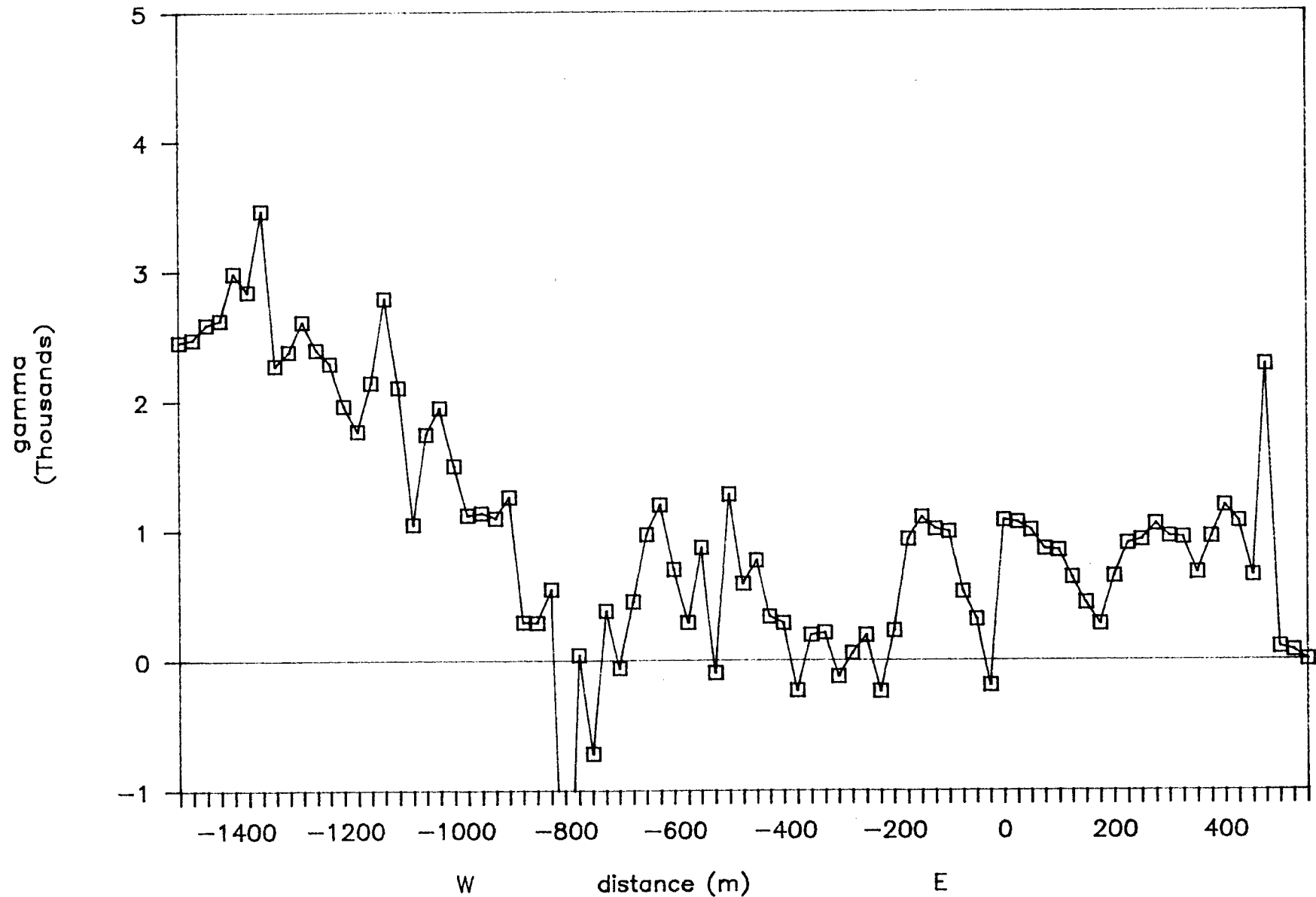
LINE 1S TFM — 55500gamma





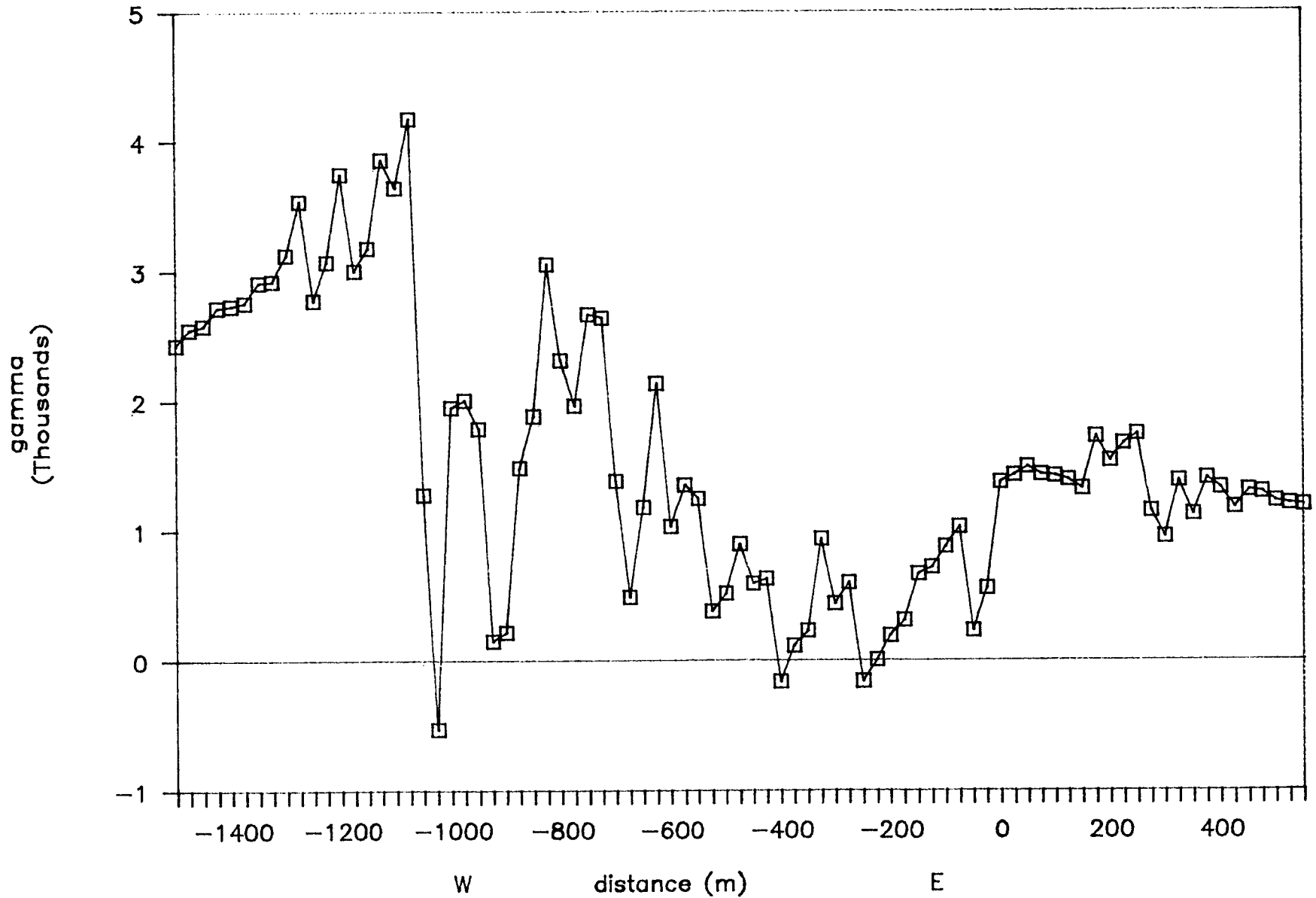
# DOG CLAIM GROUP — MAGNETIC SURVEY 1989

LINE 2S TFM — 55500gamma



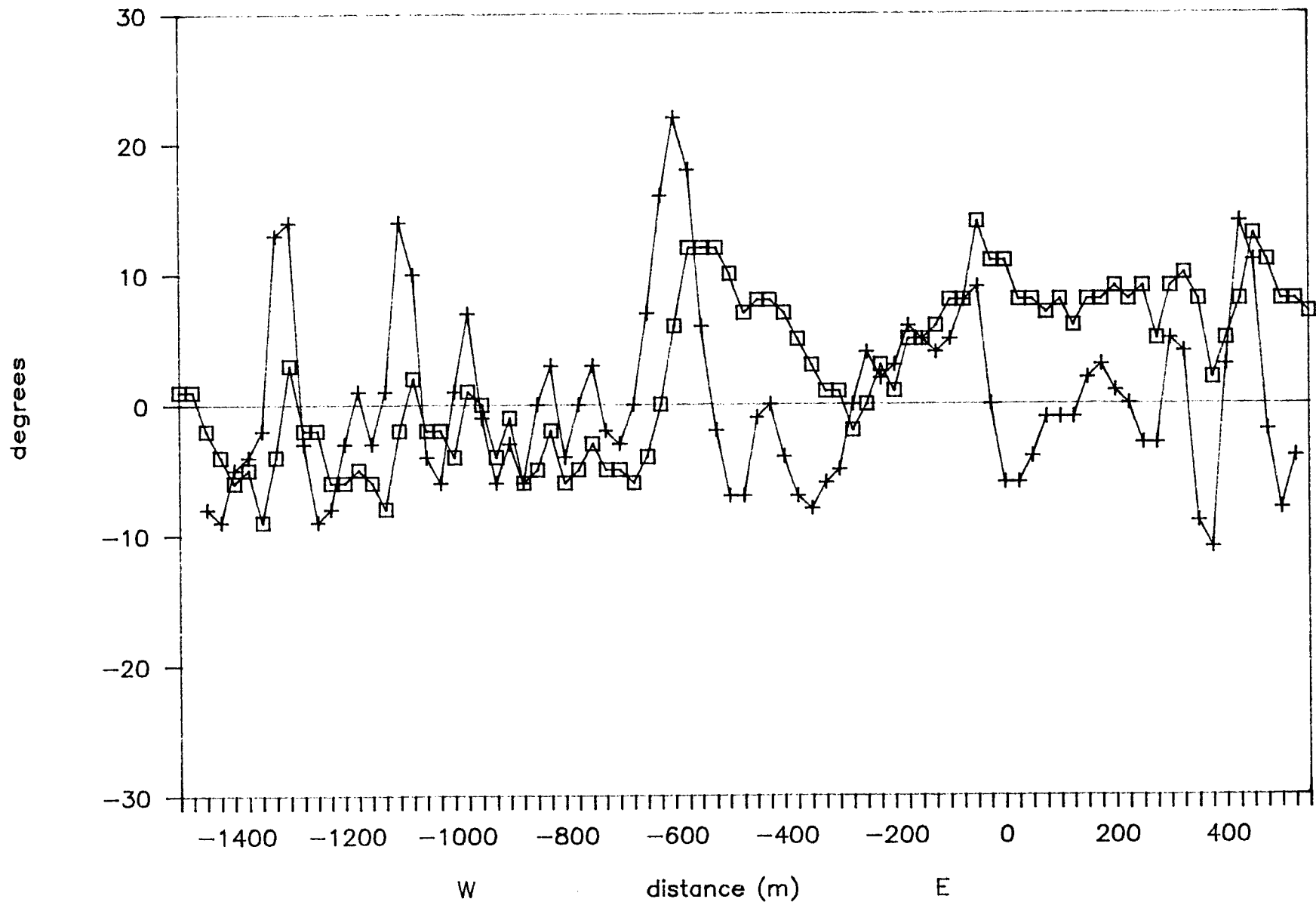
# DOG CLAIM GROUP — MAGNETIC SURVEY 1989

LINE 3S TFM — 55500gamma



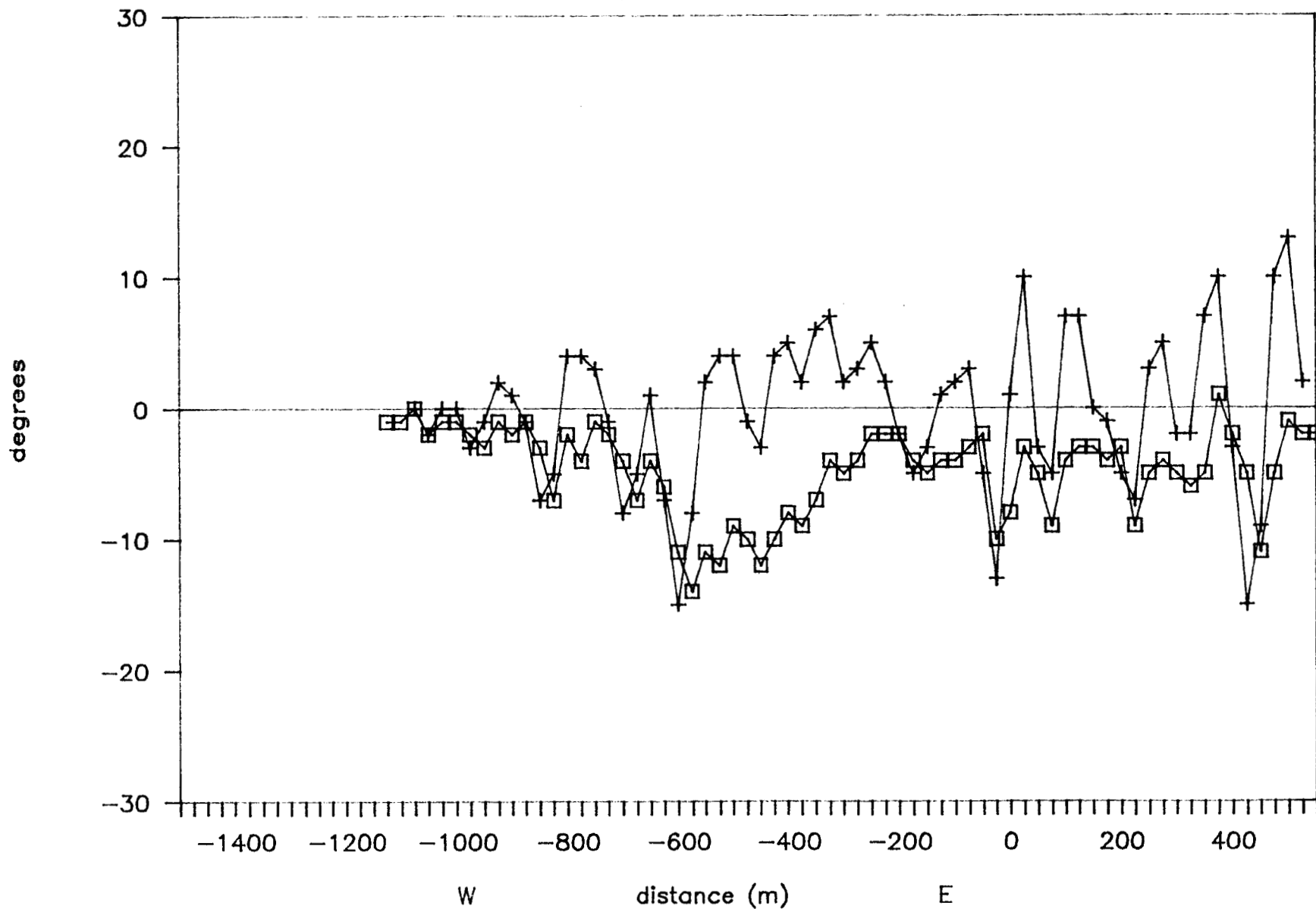
# DOG CLAIM GROUP — VLF EM SURVEY 1989

LINE 05 ANNAPOLIS



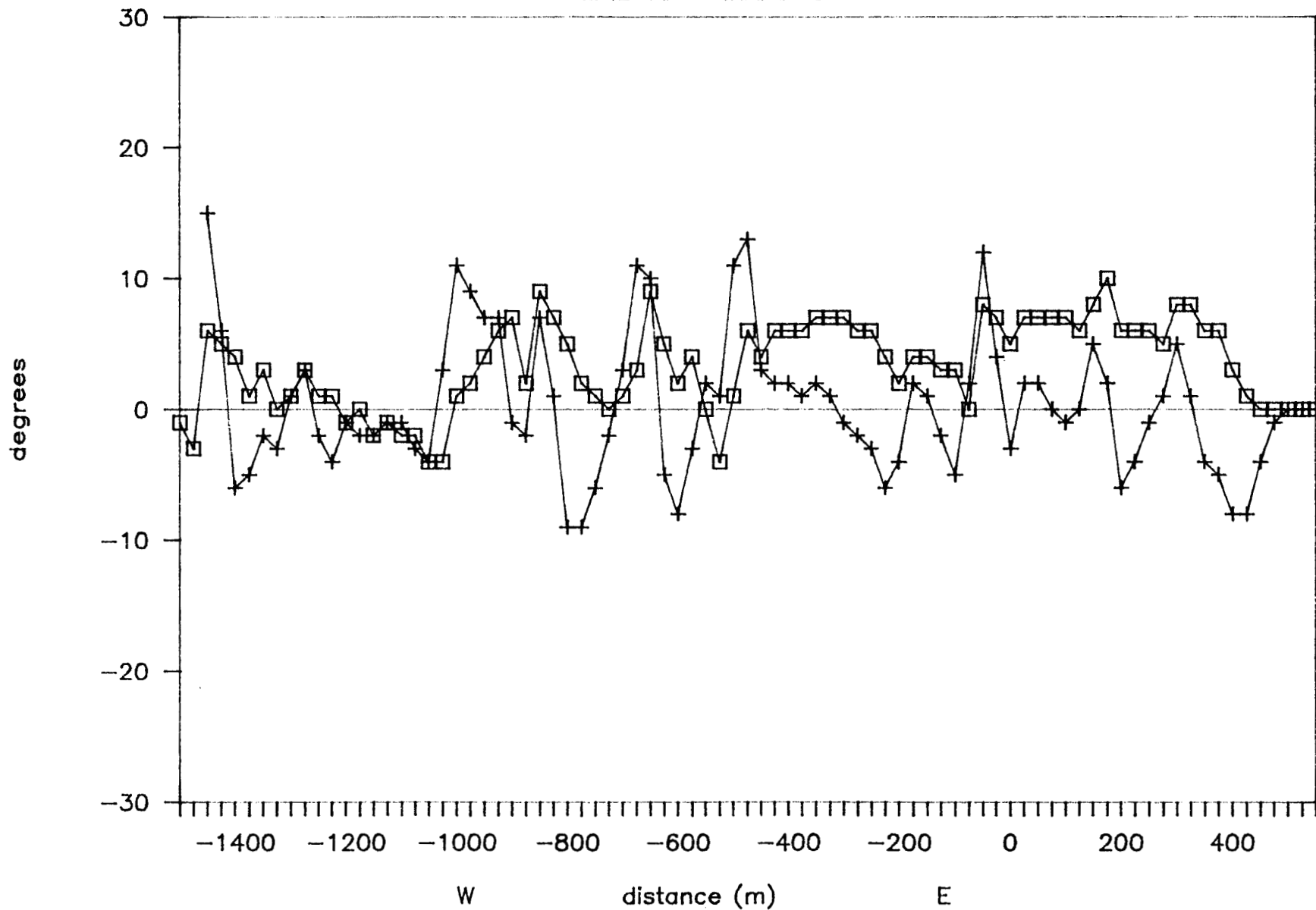
# DOG CLAIM GROUP — VLF EM SURVEY 1989

LINE OS HAWAII



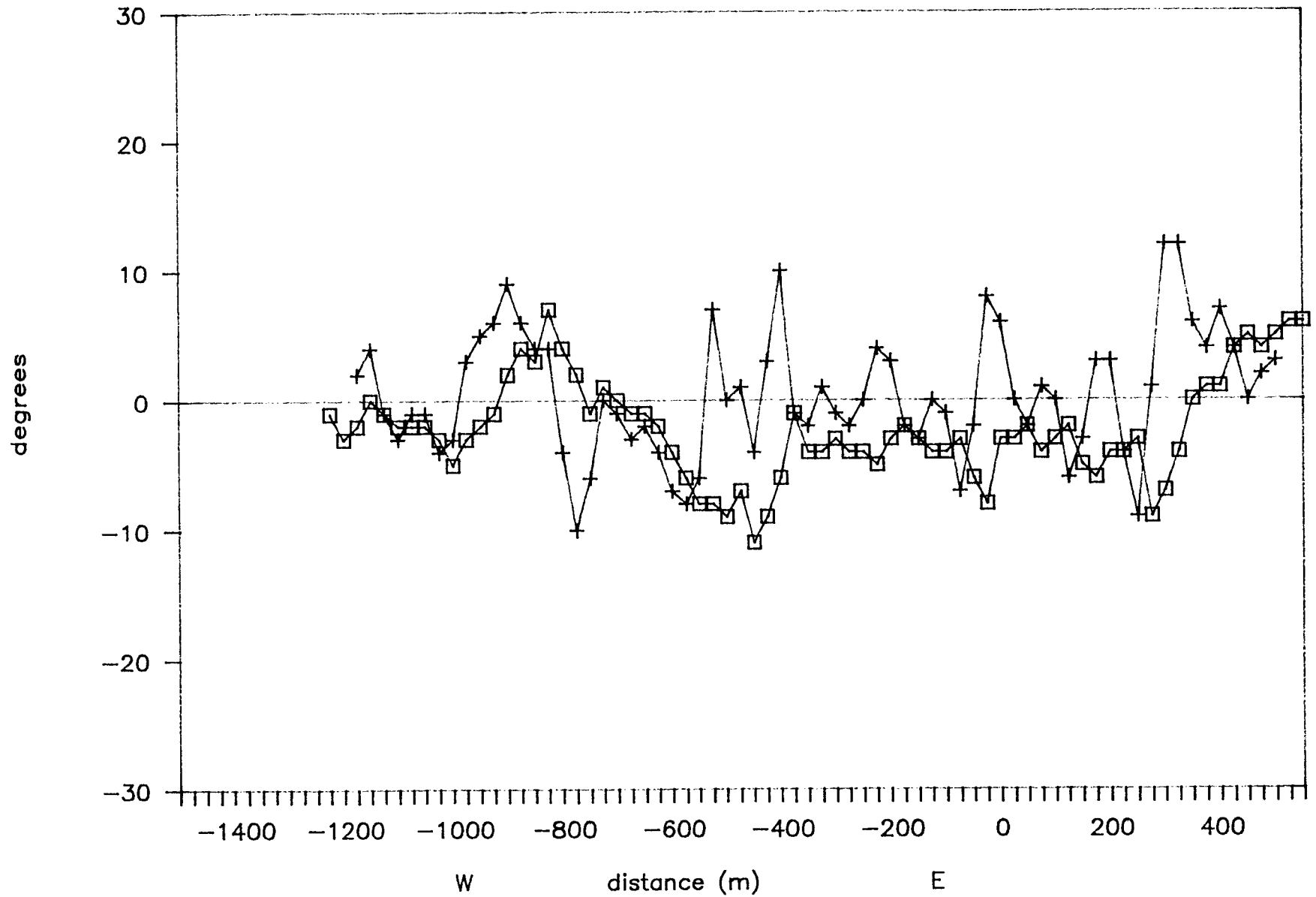
# DOG CLAIM GROUP — VLF EM SURVEY 1989

LINE 1S ANNAPOLIS



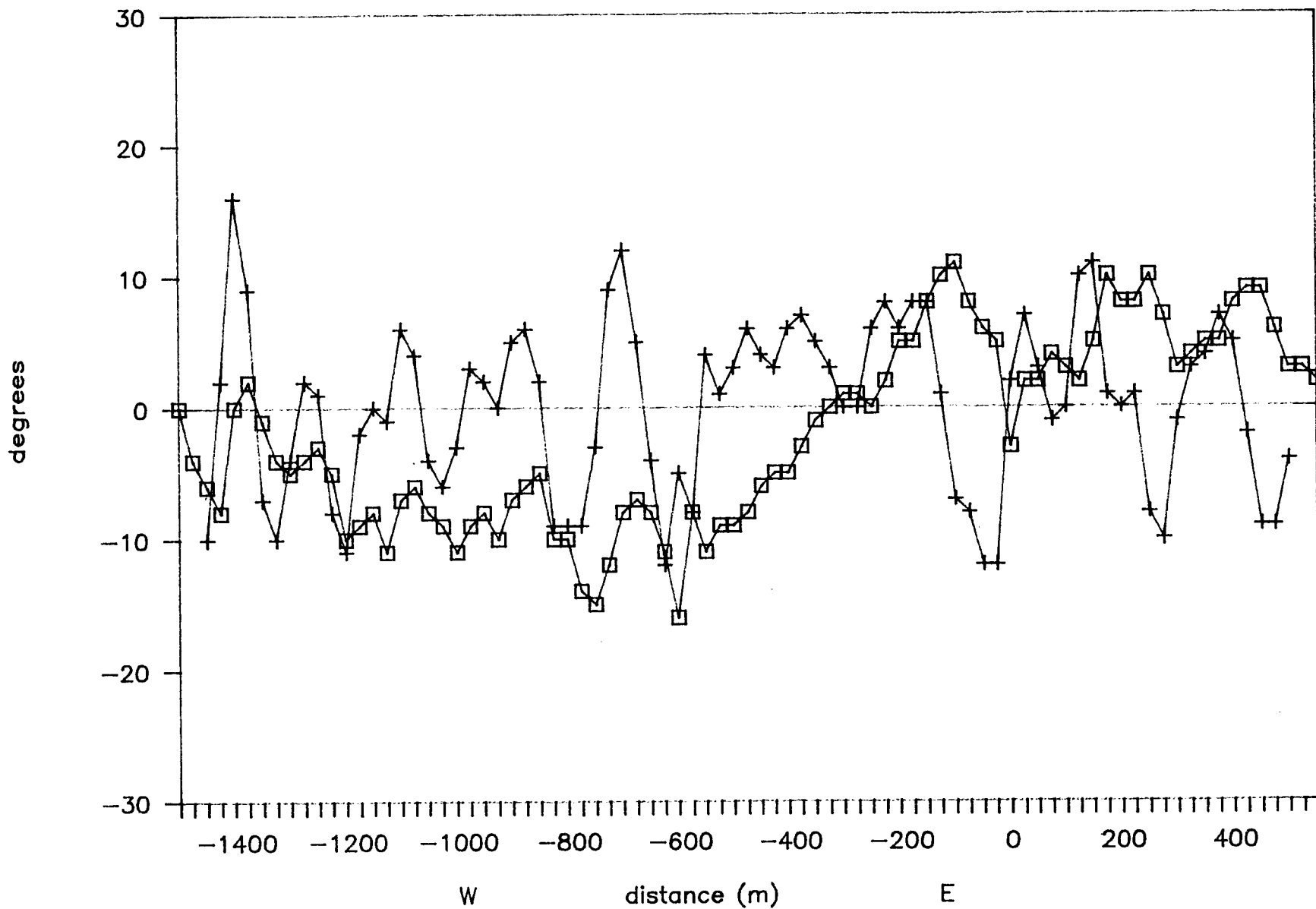
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LINE 1S HAWAII



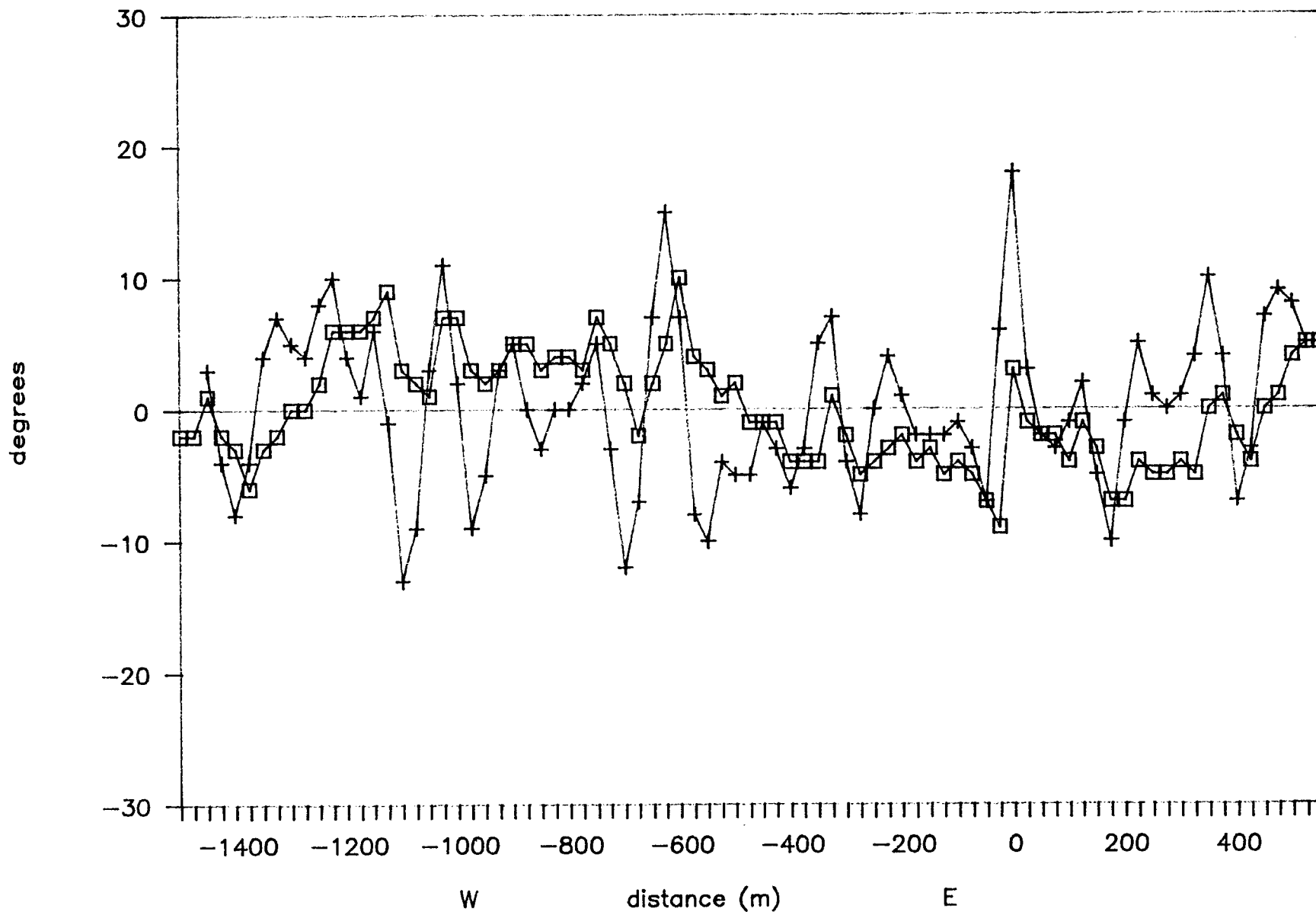
# DOG CLAIM GROUP — VLF EM SURVEY 1989

LINE 2S ANNAPOLIS



# DOG CLAIM GROUP - VLF EM SURVEY 1989

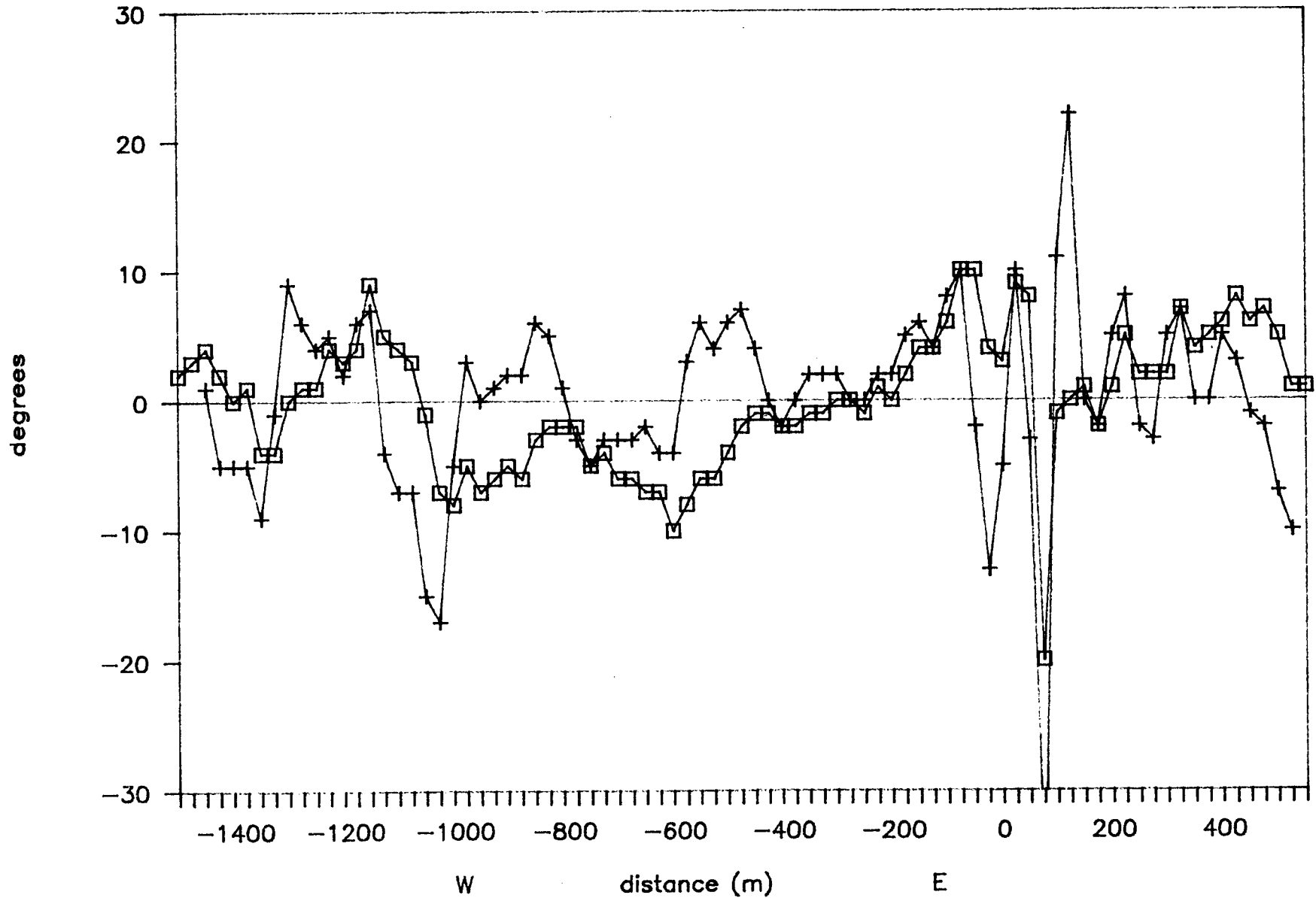
LINE 2S HAWAII





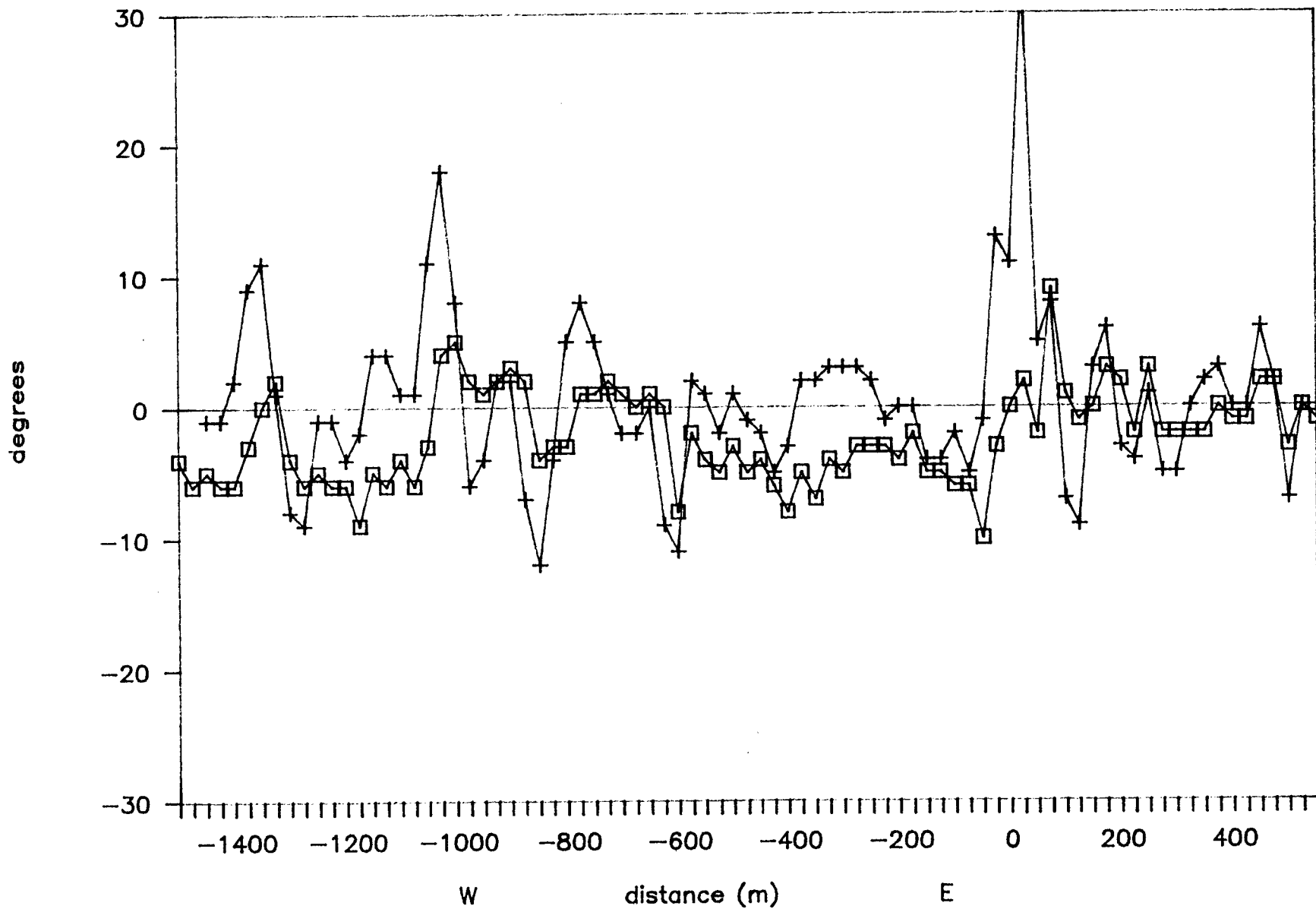
# DOG CLAIM GROUP — VLF EM SURVEY 1989

LINE 3S ANNAPOLIS



# DOG CLAIM GROUP — VLF EM SURVEY 1989

LINE 3S HAWAII



APPENDIX B

List of numeric values of geophysical measurements for Lines: 0S,  
1S, 2S, 3S

DOG CLAIMS GROUP  
MAGNETIC & VLF-EM SURVEYS 1989

LINE 0S

Station	Annapolis	Hawaii	TFM -55500 gamma	Annapolis Fraser filtered	Hawaii Fraser filtered
-1500	1		3093		
-1475	1		2835		
-1450	-2		2755	-8	
-1425	-4		2888	-9	
-1400	-6		2445	-5	
-1375	-5		2310	-4	
-1350	-9		1610	-2	
-1325	-4		569	13	
-1300	3		-150	14	
-1275	-2		1520	-3	
-1250	-2		924	-9	
-1225	-6		1781	-8	
-1200	-6		755	-3	
-1175	-5		2025	1	
-1150	-6		1919	-3	
-1125	-8	-1	929	1	
-1100	-2	-1	553	14	
-1075	2	0	906	10	0
-1050	-2	-2	1105	-4	-2
-1025	-2	-1	1335	-6	0
-1000	-4	-1	1675	1	0
-975	1	-2	1552	7	-3
-950	0	-3	1233	-1	-1
-925	-4	-1	1476	-6	2
-900	-1	-2	804	-3	1
-875	-6	-1	810	-6	-1
-850	-5	-3	510	0	-7
-825	-2	-7	515	3	-5
-800	-6	-2	849	-4	4
-775	-5	-4	1267	0	4
-750	-3	-1	1013	3	3
-725	-5	-2	1520	-2	-1
-700	-5	-4	448	-3	-8
-675	-6	-7	675	0	-5
-650	-4	-4	-145	7	1
-625	0	-6	-10	16	-7
-600	6	-11	163	22	-15
-575	12	-14	755	18	-8
-550	12	-11	818	6	2
-525	12	-12	908	-2	4
-500	10	-9	145	-7	4
-475	7	-10	673	-7	-1
-450	8	-12	506	-1	-3
-425	8	-10	524	0	4
-400	7	-8	464	-4	5
-375	5	-9	402	-7	2
-350	3	-7	430	-8	6

-325	1	-4	660	-6	7
-300	1	-5	694	-5	2
-275	-2	-4	780	0	3
-250	0	-2	835	4	5
-225	3	-2	1046	2	2
-200	1	-2	1283	3	-2
-175	5	-4	1393	6	-5
-150	5	-5	1240	5	-3
-125	6	-4	931	4	1
-100	8	-4	961	5	2
-75	8	-3	589	8	3
-50	14	-2	673	9	-5
-25	11	-10	881	0	-13
0	11	-8	1022	-6	1
25	8	-3	1105	-6	10
50	8	-5	883	-4	-3
75	7	-9	385	-1	-5
100	8	-4	23	-1	7
125	6	-3	365	-1	7
150	8	-3	853	2	0
175	8	-4	1146	3	-1
200	9	-3	1286	1	-5
225	8	-9	1146	0	-7
250	9	-5	-151	-3	3
275	5	-4	715	-3	5
300	9	-5	740	5	-2
325	10	-6	677	4	-2
350	8	-5	1050	-9	7
375	2	1	861	-11	10
400	5	-2	1045	3	-3
425	8	-5	827	14	-15
450	13	-11	360	11	-9
475	11	-5	385	-2	10
500	8	-1	611	-8	13
525	8	-2	698	-4	2
550	7	-2	873		

DOG CLAIMS GROUP  
MAGNETIC & VLF-EM SURVEYS 1989

LINE 1S

Station	Annapolis	Hawaii	TFM -55500 gamma	Annapolis Fraser filtered	Hawaii Fraser filtered
-1500	-1		2541		
-1475	-3		2687		
-1450	6		2629	15	
-1425	5		3211	6	
-1400	4		3682	-6	
-1375	1		2784	-5	
-1350	3		2668	-2	
-1325	0		3830	-3	
-1300	1		2477	1	
-1275	3		3215	3	
-1250	1		1250	-2	
-1225	1	-1	1180	-4	
-1200	-1	-3	1915	-1	
-1175	0	-2	2551	-2	2
-1150	-2	0	2568	-2	4
-1125	-1	-1	2038	-1	-1
-1100	-2	-2	2270	-1	-3
-1075	-2	-2	1125	-3	-1
-1050	-4	-2	1056	-4	-1
-1025	-4	-3	1505	3	-4
-1000	1	-5	945	11	-3
-975	2	-3	1105	9	3
-950	4	-2	608	7	5
-925	6	-1	1275	7	6
-900	7	2	1309	-1	9
-875	2	4	1545	-2	6
-850	9	3	741	7	4
-825	7	7	746	1	4
-800	5	4	1195	-9	-4
-775	2	2	1538	-9	-10
-750	1	-1	1910	-6	-6
-725	0	1	1033	-2	0
-700	1	0	-115	3	-1
-675	3	-1	250	11	-3
-650	9	-1	218	10	-2
-625	5	-2	516	-5	-4
-600	2	-4	150	-8	-7
-575	4	-6	-239	-3	-8
-550	0	-8	-433	2	-6
-525	-4	-8	-445	1	7
-500	1	-9	-310	11	0
-475	6	-7	-350	13	1
-450	4	-11	-113	3	-4
-425	6	-9	297	2	3
-400	6	-6	298	2	10
-375	6	-1	205	1	-1
-350	7	-4	-176	2	-2

-325	7	-4	-20	1	1
-300	7	-3	325	-1	-1
-275	6	-4	255	-2	-2
-250	6	-4	310	-3	0
-225	4	-5	1244	-6	4
-200	2	-3	1002	-4	3
-175	4	-2	1004	2	-2
-150	4	-3	1149	1	-3
-125	3	-4	1182	-2	0
-100	3	-4	580	-5	-1
-75	0	-3	-8	2	-7
-50	8	-6	-85	12	-2
-25	7	-8	68	4	8
0	5	-3	545	-3	6
25	7	-3	187	2	0
50	7	-2	55	2	-2
75	7	-4	294	0	1
100	7	-3	500	-1	0
125	6	-2	1174	0	-6
150	8	-5	1083	5	-3
175	10	-6	787	2	3
200	6	-4	1137	-6	3
225	6	-4	985	-4	-4
250	6	-3	893	-1	-9
275	5	-9	1231	1	1
300	8	-7	1222	5	12
325	8	-4	1023	1	12
350	6	0	1090	-4	6
375	6	1	1310	-5	4
400	3	1	1805	-8	7
425	1	4	1867	-8	4
450	0	5	1987	-4	0
475	0	4	2272	-1	2
500	0	5	1811	0	3
525	0	6	2221	0	
550	0	6	1402		

DOG CLAIMS GROUP  
MAGNETIC & VLF-EM SURVEYS 1989

LINE 2S

Station	Annapolis	Hawaii	TFM -55500 gamma	Annapolis Fraser filtered	Hawaii Fraser filtered
-1500	0	-2	2455		
-1475	-4	-2	2476		
-1450	-6	1	2591	-10	3
-1425	-8	-2	2622	2	-4
-1400	0	-3	2984	16	-8
-1375	2	-6	2843	9	-4
-1350	-1	-3	3465	-7	4
-1325	-4	-2	2273	-10	7
-1300	-5	0	2381	-4	5
-1275	-4	0	2609	2	4
-1250	-3	2	2395	1	8
-1225	-5	6	2290	-8	10
-1200	-10	6	1962	-11	4
-1175	-9	6	1767	-2	1
-1150	-8	7	2140	0	6
-1125	-11	9	2788	-1	-1
-1100	-7	3	2105	6	-13
-1075	-6	2	1050	4	-9
-1050	-8	1	1745	-4	3
-1025	-9	7	1945	-6	11
-1000	-11	7	1500	-3	2
-975	-9	3	1121	3	-9
-950	-8	2	1138	2	-5
-925	-10	3	1096	0	3
-900	-7	5	1258	5	5
-875	-6	5	296	6	0
-850	-5	3	291	2	-3
-825	-10	4	546	-9	0
-800	-10	4	-2863	-9	0
-775	-14	3	42	-9	2
-750	-15	7	-716	-3	5
-725	-12	5	382	9	-3
-700	-8	2	-58	12	-12
-675	-7	-2	453	5	-7
-650	-8	2	969	-4	7
-625	-11	5	1197	-12	15
-600	-16	10	700	-5	7
-575	-8	4	290	-8	-8
-550	-11	3	868	4	-10
-525	-9	1	-95	1	-4
-500	-9	2	1277	3	-5
-475	-8	-1	591	6	-5
-450	-6	-1	768	4	-1
-425	-5	-1	338	3	-3
-400	-5	-4	289	6	-6
-375	-3	-4	-232	7	-3
-350	-1	-4	198	5	5



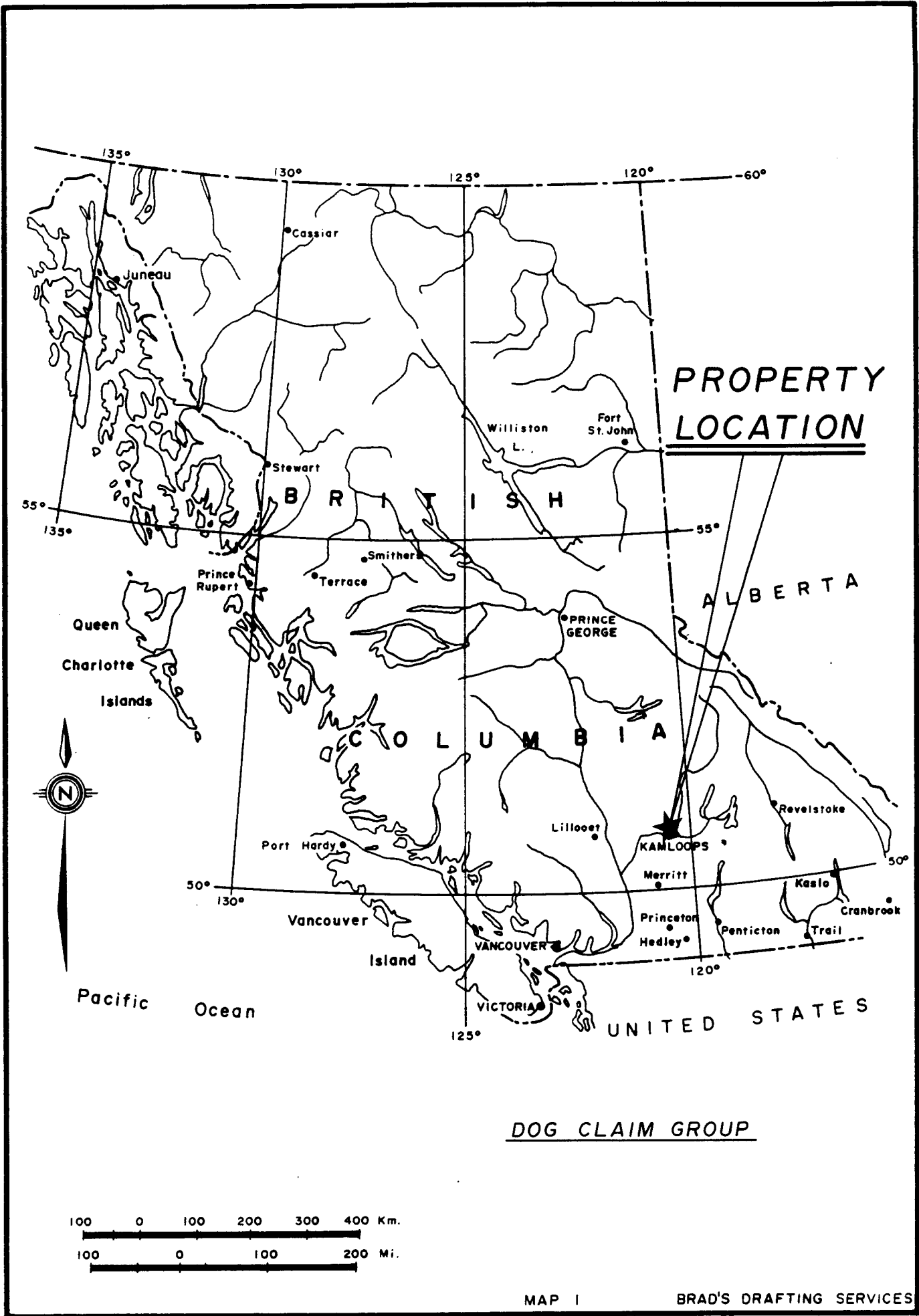
-325	0	1	214	3	7
-300	1	-2	-122	0	-4
-275	1	-5	56	0	-8
-250	0	-4	194	6	0
-225	2	-3	-237	8	4
-200	5	-2	226	6	1
-175	5	-4	930	8	-2
-150	8	-3	1100	8	-2
-125	10	-5	1010	1	-2
-100	11	-4	988	-7	-1
-75	8	-5	526	-8	-3
-50	6	-7	313	-12	-7
-25	5	-9	-190	-12	6
0	-3	3	1075	2	18
25	2	-1	1058	7	3
50	2	-2	1000	3	-2
75	4	-2	854	-1	-3
100	3	-4	843	0	-1
125	2	-1	636	10	2
150	5	-3	441	11	-5
175	10	-7	277	1	-10
200	8	-7	645	0	-1
225	8	-4	899	1	5
250	10	-5	924	-8	1
275	7	-5	1046	-10	0
300	3	-4	953	-1	1
325	4	-5	942	3	4
350	5	0	673	4	10
375	5	1	947	7	4
400	8	-2	1187	5	-7
425	9	-4	1066	-2	-3
450	9	0	653	-9	7
475	6	1	2273	-9	9
500	3	4	100	-4	8
525	3	5	73		5
550	2	5	2		

DOG CLAIMS GROUP  
MAGNETIC & VLF-EM SURVEYS 1989

LINE 3S

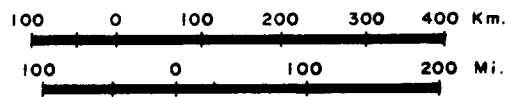
Station	Annapolis	Hawaii	TFM -55500 gamma	Annapolis Fraser filtered	Hawaii Fraser filtered
-1500	2	-4	2430		
-1475	3	-6	2551		
-1450	4	-5	2581	1	-1
-1425	2	-6	2719	-5	-1
-1400	0	-6	2731	-5	2
-1375	1	-3	2754	-5	9
-1350	-4	0	2911	-9	11
-1325	-4	2	2921	-1	1
-1300	0	-4	3123	9	-8
-1275	1	-6	3537	6	-9
-1250	1	-5	2771	4	-1
-1225	4	-6	3070	5	-1
-1200	3	-6	3747	2	-4
-1175	4	-9	3002	6	-2
-1150	9	-5	3177	7	4
-1125	5	-6	3857	-4	4
-1100	4	-4	3643	-7	1
-1075	3	-6	4173	-7	1
-1050	-1	-3	1275	-15	11
-1025	-7	4	-527	-17	18
-1000	-8	5	1947	-5	8
-975	-5	2	2002	3	-6
-950	-7	1	1783	0	-4
-925	-6	2	150	1	2
-900	-5	3	217	2	2
-875	-6	2	1480	2	-7
-850	-3	-4	1880	6	-12
-825	-2	-3	3050	5	-4
-800	-2	-3	2310	1	5
-775	-2	1	1959	-3	8
-750	-5	1	2665	-5	5
-725	-4	2	2636	-3	1
-700	-6	1	1380	-3	-2
-675	-6	0	486	-3	-2
-650	-7	1	1178	-2	0
-625	-7	0	2133	-4	-9
-600	-10	-8	1028	-4	-11
-575	-8	-2	1350	3	2
-550	-6	-4	1245	6	1
-525	-6	-5	380	4	-2
-500	-4	-3	513	6	1
-475	-2	-5	895	7	-1
-450	-1	-4	590	4	-2
-425	-1	-6	627	0	-5
-400	-2	-8	-163	-2	-3
-375	-2	-5	111	0	2
-350	-1	-7	228	2	2

-325	-1	-4	934	2	3
-300	0	-5	437	2	3
-275	0	-3	597	0	3
-250	-1	-3	-160	0	2
-225	1	-3	3	2	-1
-200	0	-4	189	2	0
-175	2	-2	309	5	0
-150	4	-5	666	6	-4
-125	4	-5	715	4	-4
-100	6	-6	875	8	-2
-75	10	-6	1025	10	-5
-50	10	-10	230	-2	-1
-25	4	-3	555	-13	13
0	3	0	1370	-5	11
25	9	2	1424	10	33
50	8	-2	1487	-3	5
75	-20	9	1426	-38	8
100	-1	1	1418	11	-7
125	0	-1	1387	22	-9
150	1	0	1319	0	3
175	-2	3	1719	-2	6
200	1	2	1536	5	-3
225	5	-2	1667	8	-4
250	2	3	1742	-2	1
275	2	-2	1147	-3	-5
300	2	-2	948	5	-5
325	7	-2	1379	7	0
350	4	-2	1119	0	2
375	5	0	1399	0	3
400	6	-1	1326	5	0
425	8	-1	1173	3	0
450	6	2	1304	-1	6
475	7	2	1293	-2	2
500	5	-3	1222	-7	-7
525	1	0	1201	-10	0
550	1	-1	1191		

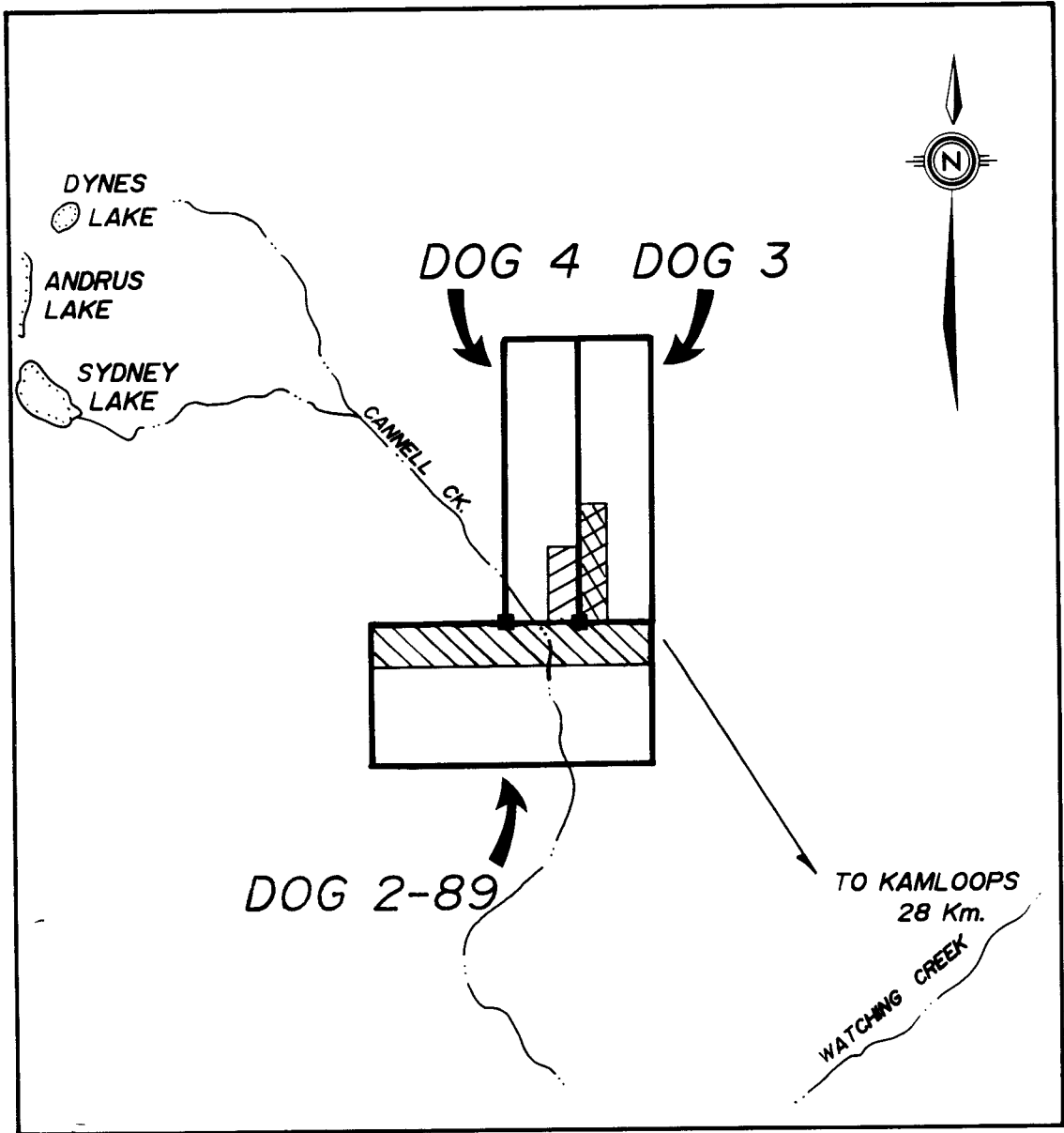


**PROPERTY  
LOCATION**

**DOG CLAIM GROUP**



120°34'



50°52'

MAP 2

VLF-EM & MAGNETIC SURVEYS 1989



GEOCHEM SURVEY 1988



GEOCHEM SURVEY 1987



TRANS-ARCTIC EXPLORATIONS LTD.

DOG CLAIM GROUP

CANNELL CREEK, KAMLOOPS AREA

KAMLOOPS M.D., B.C.

CLAIM MAP

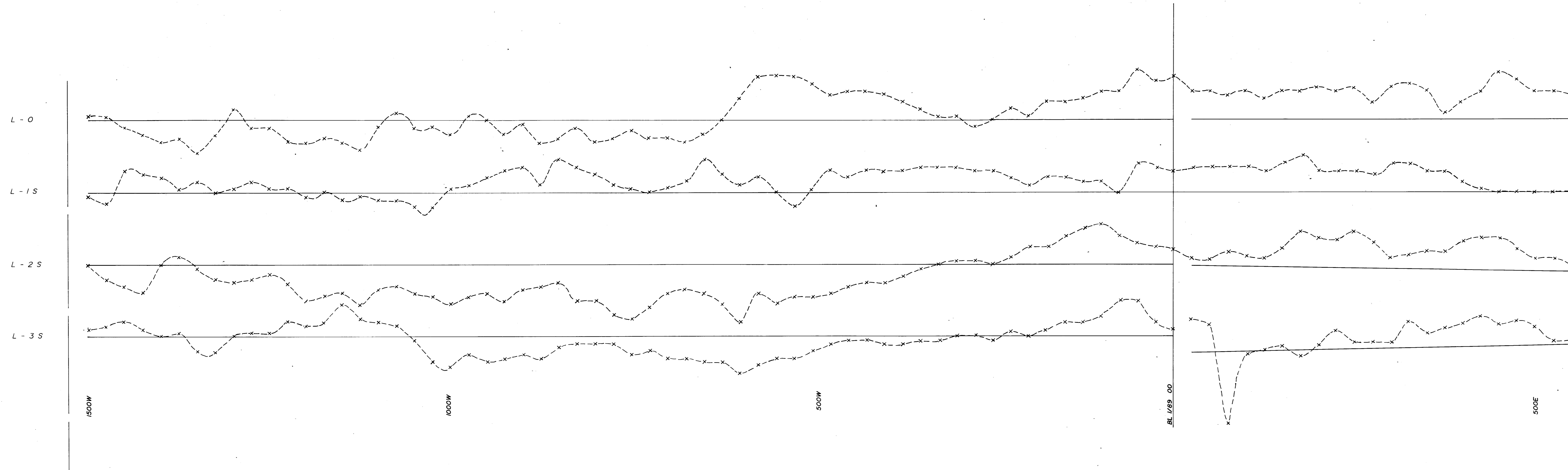


SCALE  
1 : 50 000

DATE  
OCT 89

N.T.S.  
92 1/15 E

DRAFTED  
BDS/km

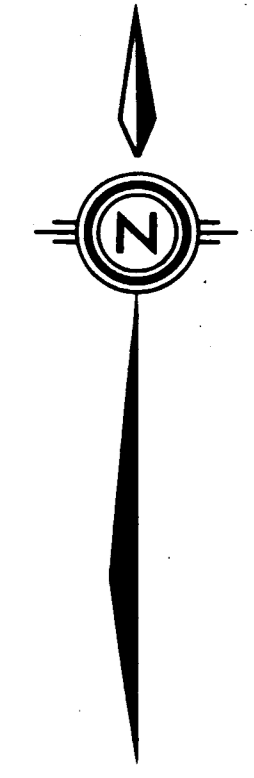


VLF-EM Annapolis

Annapolis (NSS) 21.4 kHz  
Transmitter

Instrument: Sabre Electronics Model 27

+15°  
+10°  
+5°  
-5°  
-10°  
-15°

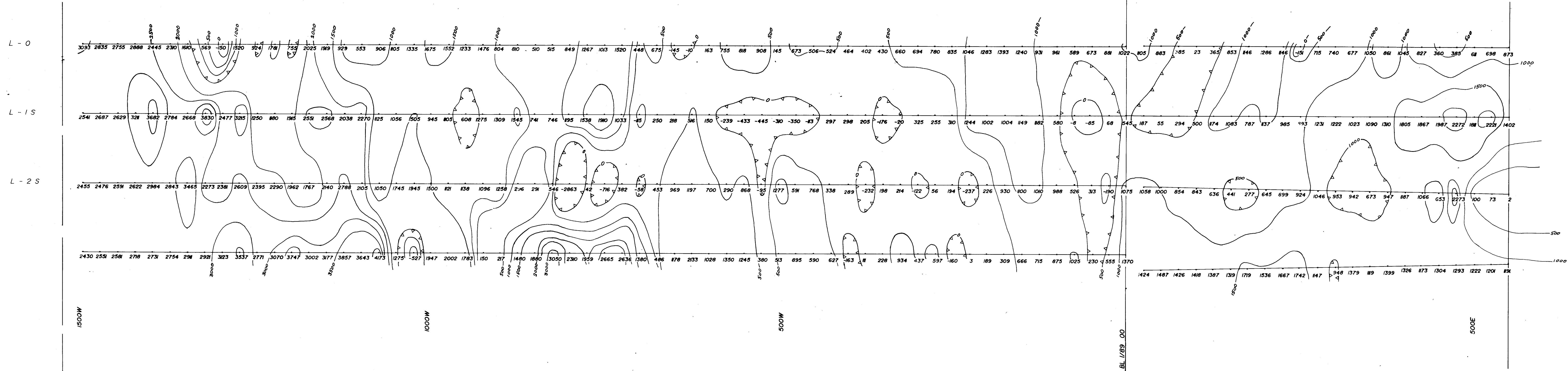
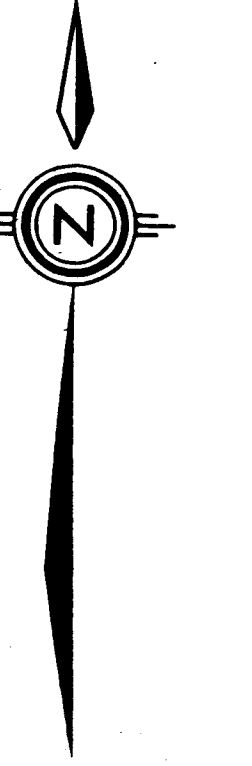


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**19,218**

To accompany report by Andrew RYBALTOWSKI, Geophysicist

TRANS - ARCTIC EXPLORATION LTD.			
DOG CLAIM GROUP CANNELL CREEK, KAMLOOPS AREA KAMLOOPS M.D., B.C.			
VLF - EM SURVEY PROFILES			
SCALE: 1: 2500	DATE: OCT. 1989	NTS: 92 III E	DRAWN BY: E.R. MAP NO: 4



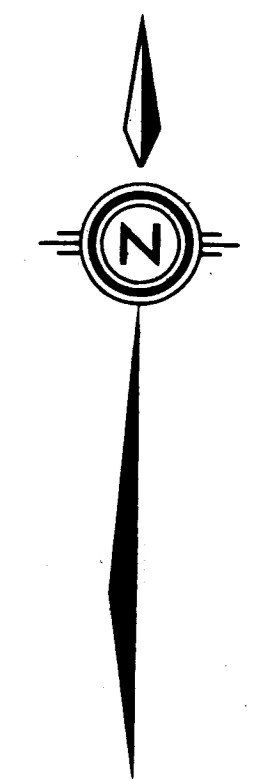
CONTOUR INTERVAL 500 gamma

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,218

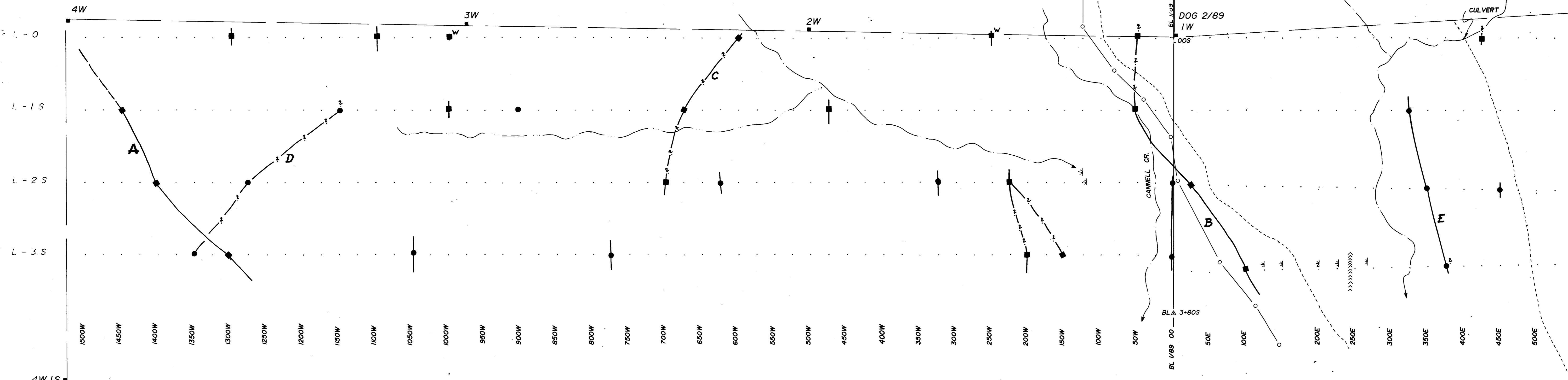
To accompany report by: Andrew RYBALTOWSKI, Geophysicist

TRANS - ARCTIC EXPLORATION LTD.			
DOG CLAIM GROUP CANNELL CREEK, KAMLOOPS AREA KAMLOOPS M.D., B.C.			
MAGNETIC SURVEY DATA AND CONTOURS TOTAL FIELD - 55500 gamma			
SCALE: 1 : 2500	DATE: OCT. 1989	NTS: 92 115 E	DRAWN BY: E.R.
			MAP NO: 3



DOG CLAIM 4

DOG CLAIM 3



- LEGEND**
- CORNER POST
  - ~ FLOWING CREEK
  - - - INTERMITTENT CREEK
  - BARBWIRE FENCE
  - - - ROAD
  - \*\*\* SWAMP
  - <<<<<< RIDGE
  - ..... SURVEY LINE AT 25M INTERVALS
  - CLAIM BOUNDARY
  - ANAPOLIS
  - HAWAII
  - W WEAK
  - ⊕ QUESTIONABLE

To accompany report by: Andrew RYBAL TOWSKI, Geophysicist

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,218

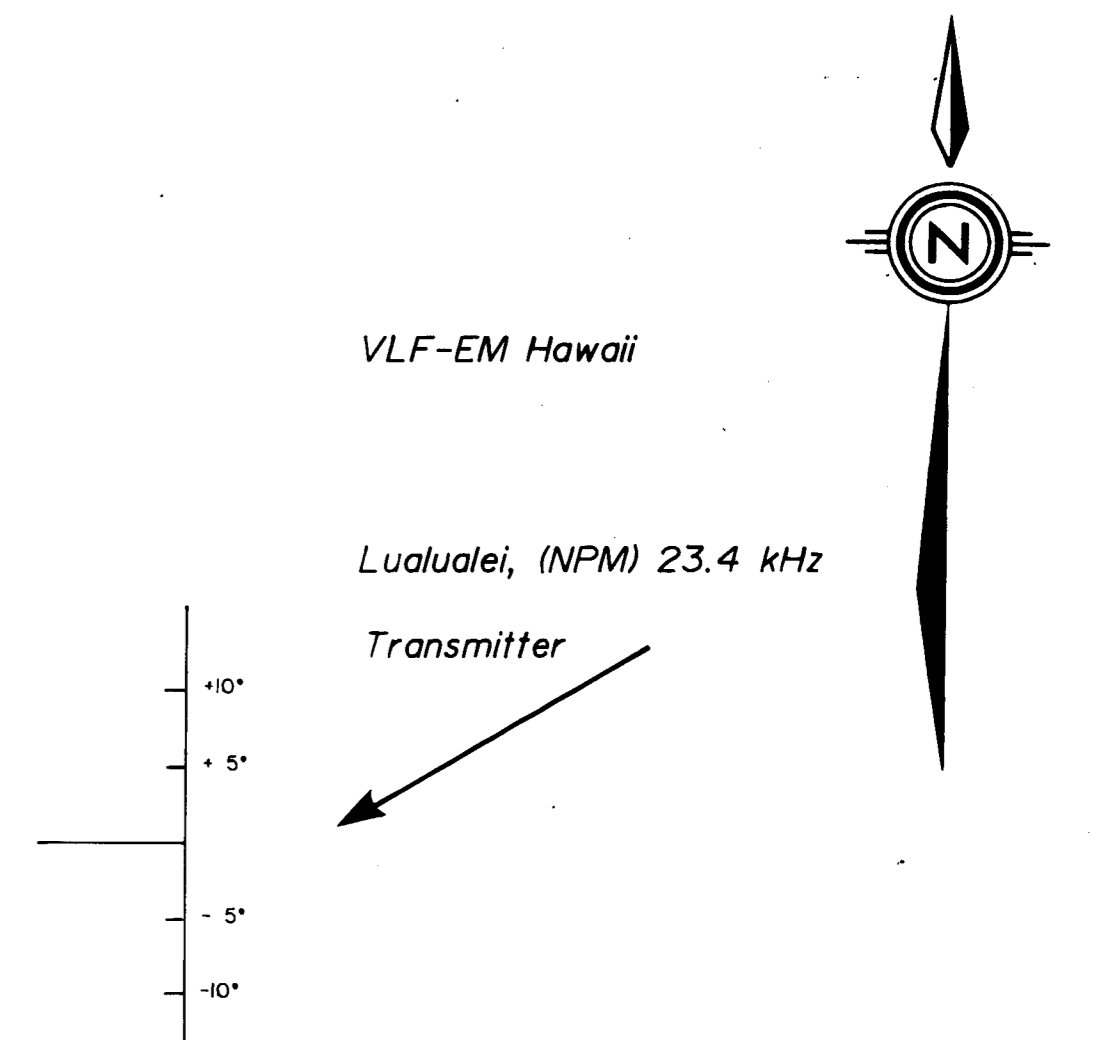
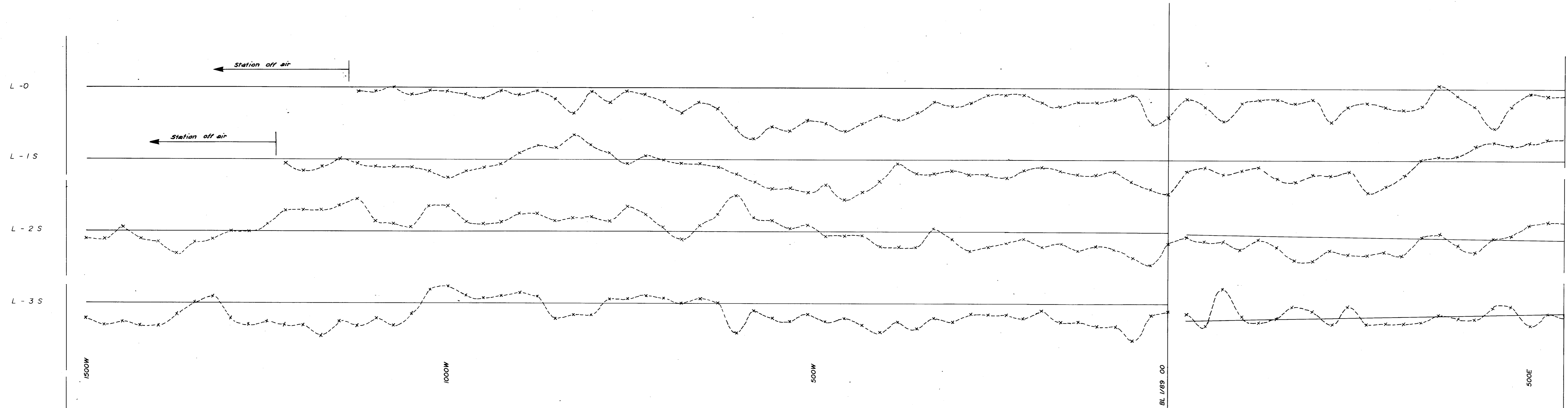
TRANS - ARCTIC EXPLORATION LTD.

DOG CLAIM GROUP  
CANNELL CREEK, KAMLOOPS AREA  
KAMLOOPS M.D., B.C.

VLF - EM CONDUCTORS

SCALE: 1 : 2500	DATE: OCT. 1989	NTS: 92 115 E	DRAWN BY: E.R.	MAP NO: 6.
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GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**19,218**

To accompany report by: Andrew RYBALTOWSKI, Geophysicist

TRANS - ARCTIC EXPLORATION LTD.				
DOG CLAIM GROUP CANNELL CREEK, KAMLOOPS AREA KAMLOOPS M.D., B.C.				
VLF - EM SURVEY PROFILES				
SCALE: 1 : 2500	DATE: OCT: 1989	NTS: 92 115 E	DRAWN BY: E.R.	MAP NO: 5