MAR 3 0 1978
WHITEHORSE
Yukon Territory

AQUITAINE COMPANY OF CANADA LTD.

Trenching, Geophysical, Geochemical, and Geological Surveys Performed Between May 1 and August 20, 1977

on the BON Claims
Dawson Mining District
Yukon Territory

The BON Claims lie centered about

68° 17' N Longitude
137° 50' W Latitude

on Claim Sheet 117A/7W

by
D. Noakes

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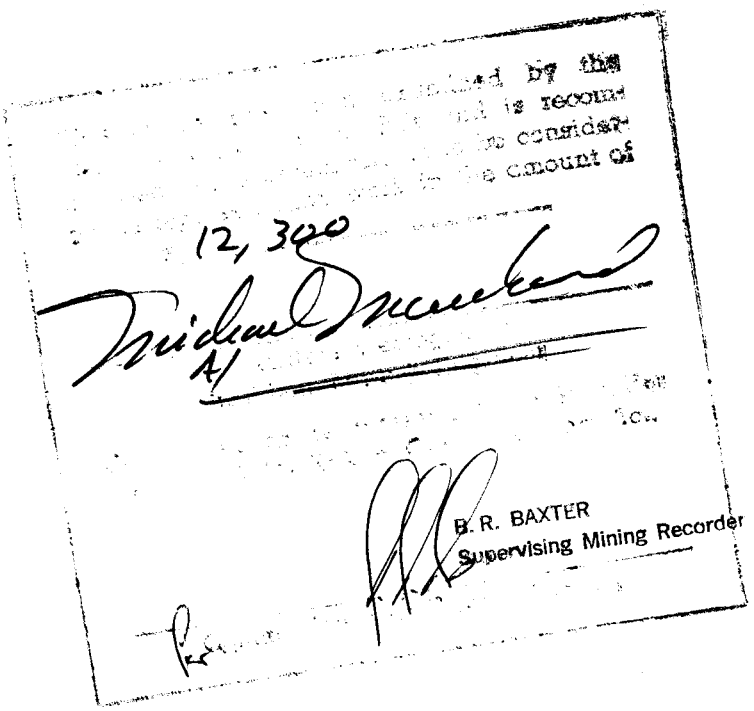
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1.0 Introduction

Aquitaine Company of Canada Ltd., over the summer of 1977, operated active mineral exploration programs examining the BON Claims in the Dawson Mining District in the Yukon Territory, acquired under the regulations of the Yukon Quartz Mining Act. Included in the exploration programs were geophysical, geochemical, geologic and trenching investigations and this report serves to document representation work performed under these titles.

2.0 Location and Status of the BON Claims

The BON Claims, 1 to 270 inclusive, were recorded August 26, 1976. Figure 1 shows the location of these claims.

Applications to group mineral claims were filed August 19, 1977 for the following three claim groups:

Claim Number	Tag Number	Group
BON 46	YA 9231	1
BON 48	YA 9233	
BON 50	YA 9235	
BON 52	YA 9237	
BON 54	YA 9239	
BON 56	YA 9241	
BON 58	YA 9243	
BON 65	YA 9250	
BON 70	YA 9255	
BON 87	YA 9272	
BON 89	YA 9274	
BON 91	YA 9276	
BON 88	YA 9273	2
BON 90	YA 9275	
BON 91	YA 9276	
BON 92	YA 9277	
BON 94	YA 9279	
BON 96	YA 9281	
BON 98	YA 9283	
BON 100	YA 9285	

BON 60	YA 9245	3
BON 71	YA 9256	
to	to	
BON 80	YA 9265	
BON 91	YA 9276	
BON 93	YA 9278	
BON 95	YA 9280	
BON 97	YA 9282	
BON 99	YA 9284	

Application for certificate of work was filed for each group on August 19, 1977, to renew each claim group for 3 years.

Application for a certificate of work was filed to renew the below listed claims for 1 year:

Claim Number	Tag Number
BON 208	YA 9393
BON 210	YA 9395
BON 212	YA 9397
BON 214	YA 9399
BON 227	YA 9412
BON 229	YA 9414
BON 231	YA 9416
BON 233	YA 9418

All other BON Claims were allowed to lapse.

3.0 Trenching Report

3.1 Introduction

The BON Claims were staked on the basis of radiometric anomalies, described in detail in the attached geophysical and geological survey reports. During June and July of 1977 one of these anomalous areas was trenched. Costs incurred in trenching have been claimed as representation work for the three BON Claim groups, such that each claim receives an equal share.

3.2 Location and Description of Trenching

Three trenches were excavated on BON 91 (YA 9276) and their locations are plotted on Figure 2. The distance and direction of trenches from BON 91 No. 2 post are as follows:

Trench	Distance From No. 2 BON 91	Direction From No. 2 BON 91
A	80 meters (87.49 yds.)	N 40° E
B	40 meters (43.74 yds.)	N 110° E
C	115 meters (125.77 yds.)	N 30° E

Trenching of the frozen fragmental and solid rock required drilling and the use of explosives and all work was done by hand. Dimensions of the trenches are as outlined below.

Dimensions of Trenches on the BON Claims
(all dimensions in yards)

Trench	Length	Width	Depth
A	10	3	2
B	10	2	1
C	10	2	1.5

3.3 Assays of Trenched Materials

Grab samples from Trench A gave the following assays:

Sample	oz/ton Au	oz/ton Ag	chemical % U_3O_8	chemical % ThO_2	% Cu
MBW 932	trace	0.14	0.026	-	-
MBW 933	trace	0.38	0.021	-	-
MBW 934	.005	0.18	0.033	-	-

To date, no chemical assays have been made on material from Trench B or C.

4.0 Geophysical Survey Report

4.1 Introduction

Geophysical surveys were conducted on the BON Claims in an effort to evaluate the known radiometric anomalies and to recognize new anomalies. This report describes the work performed on the claims held by Aquitaine Company of Canada Ltd., listed in section 2.0 and is intended to substantiate claims of representation work credits for all of the BON Claims retained.

Three types of geophysical surveys were used to evaluate the BON Claims. The primary reconnaissance method involved airborne gamma-ray spectrometry and areas of interest thus outlined were subjected to ground scintillometer surveys. In addition, one area of mineralization encompassing portions of BON 91, 92, 93 and 94 was gridded, trenched, and surveyed using scintillometers and radon detection equipment. Airborne surveying work credits were applied to the claims generally, as outlined in Appendix 2, as were scintillometer surveys of anomalies found through airborne

spectrometry as outlined in Appendix 3.

Scintillometer and radon surveys performed on the grid over the showing were claimed as representation work to be applied only to the three BON Claims groups, as detailed in Appendix 4.

4.2 Airborne Gamma-Ray Spectrometry

4.2.1 A Description of the Survey and Equipment

Gamma-Ray spectrometer profiles were flown over the BON Claims on a regular pattern to detect radioactive anomalies. Surveys were conducted on July 12 and 13, 1977, using the following instrument package mounted in a Bell 206B

1) Exploranium DGRS - 1002 Gamma-Ray Spectrometer
2) Mars - 6 - Six Channel Recorder
3) Detector Package (2-9.375 x 4 crystals, 552 cu. in.)

Output records display four channels; Total Count, Uranium, Thorium and Potassium gamma radiation levels. Survey lines were flown at a terrain clearance of 150 feet and a forward speed of 60 m.p.h. In addition, to the pilot, a single operator and two navigators were involved in the survey.

Flight lines have been plotted as shown on Figure 3. Profiles obtained from the survey are matched to these flight lines through the use of fiducials which are simultaneously marked on the flight line and spectrometer record, thus enabling positioning of acquired data values.

4.2.2 Results and Interpretation

The spectrometer profiles (Figure 28) obtained through the procedure outlined in the previous section were evaluated to outline anomalies of interest. The procedure for choosing anomalies was as follows: background or normal values were established for each of the four channels of the record and any values which significantly exceeded those levels were noted as anomalous. Thus, radiometric values for areas other than those listed have been regarded as normal, or background and unworthy or further investigation.

Radiometric data and a description of each anomaly are listed in Table 1, and anomaly locations are plotted on Figure 3. Comparison of the geology of the BON claims (Figure 4) and anomaly locations (Figure 3) reveals that although anomalies lie in all geologic units, the most significant group of anomalies lies over the previously recognized anomalies which have been trenched, as described in section 3.0. Most other anomalies occur over outcrop, and noting that substantial areas of the BON Claims are covered by thick surficial deposits, it is likely that many buried anomalies exist which have not been detected.

4.2.3 Conclusions and Recommendations

The airborne gamma-ray spectrometer survey of the BON Claims has been interpreted to locate areas that produced anomalous radiometric values. The magnitude of radiometric values can be used generally as a measure of the relative importance of an anomaly, within the limitations imposed by varying thickness and extent of overburden. It is of note that

the anomalies producing the highest uranium response occurred over previously located and trenched showings.

Anomalies have been plotted in all geologic units mapped, and on the BON Claims a high proportion of the bedrock is masked by surficial deposits. Thus it is not recommended that any units be excluded from further study. It is recommended that at least a brief examination be made of each anomalous area prior to concentrating exploration efforts on specific units.

4.3 Scintillometer Surveys (Non-Gridded) of Spectrometer Anomalies

4.3.1 Description and Location of the Surveys

Ground investigations and scintillometer surveys were conducted on the BON Claims, to examine the anomalies identified by airborne gamma-ray spectrometry surveys, described in section 4.2.

Once an anomaly was relocated, using the same airborne package that was used in the initial airborne survey, one or more persons equipped with Saphymo - Stel SPP-2 NF type scintillometers traversed the anomalous area. Notes were made on lithologies and radiometric response encountered on each traverse. As scintillometer surveys were conducted to assess spectrometer defined anomalies, the locations of traverses correspond to the anomaly locations, as shown in Figure 3. Table 2 is a list of traverses matched to the anomalies they were designed to investigate.

4.3.2 Results and Interpretation

Although scintillometer surveys of the BON Claims provided extensive ground radiometric coverage, no new showings were found. Detailed results of scintillometer surveys are listed in Table 2 in the form of both scintillometer measurements and lithological explanations of the anomalous area.

4.3.3 Conclusions and Recommendations

Scintillometer surveys of the anomalous areas delineated by airborne gamma-ray spectrometry surveys, provided suitable explanations for those anomalies not already regarded as showings. The geologic environment having potential for significant mineralization appears to be limited to the situation found on the showings on BON 91 (see attached geologic report) and other geologic units should be disregarded as potential targets. Thus, it is recommended that future radiometric examinations of the BON Claims area be confined to anomalies found within the claims retained.

4.4 Scintillometer Grid Survey

4.4.1 Description and Location of the Survey

Potentially significant uranium mineralization was recognized on BON 91, 92, 93 and 94 claims, as shown by trench locations in Figure 2. It was decided that in order to obtain detailed information about the showing, a gridded scintillometer survey would be run.

The program was initiated by the surveying of a 400 by 600 metre grid over the showing, as illustrated in Figure 5. Measurements from a Saphymo-Stel SPP-2 NF type scintillometer were recorded at ten metre intervals over the grid producing 2400 data points. Five additional lines (see Figure 7) were run using the extrapolations of grid lines as control. Representation Work Credits being claimed are detailed in Appendix 4.

4.4.2 Results and Interpretation

Scintillometer measurements of the gridded survey have been plotted and contoured as shown on Figure 6. Anomalous zones are well defined and though spotty, are localized in an area conforming to the mapped location of the mineralized unit (see Geological Survey Report). The five additional scintillometer profiles plotted on Figures 8 to 13 serve to emphasize that radiometric values generally decline toward the margins of the surveyed grid. It must be recognized, however, that the thickness of surficial deposits, vegetation and soil cover also increase toward the margins of the grid, and thus the displayed results must be viewed as incomplete data.

4.4.3 Conclusions and Recommendations

Scintillometer surveys on a grid pattern over a showing on the BON Claims have located irregularly spaced small, but significant, anomalies. Both radiometric values and amount of exposure decline toward the margins of the survey, indicating that interpretation of the results

may be ambiguous. It must be concluded though, since the anomalous areas define the mineralized unit, that exploration efforts should attempt to locate the extensions of this mineralized unit in addition to detailed probing of the anomalies outlined by the scintillometer survey.

4.5 Radon Surveys

4.5.1 Description and Location of the Surveys

In conjunction with scintillometer surveys, radon surveys were carried out to map, radiometrically, a showing on BON 91, 92, 93 and 94 claims. Two types of radon detection equipment were used in the surveys; Model RD 200 Portable Radon Detector, manufactured by EDA Electronics Ltd., and Alpha Meters, manufactured by the Alpha Nuclear Company of Canada.

The EDA radon detector, operated by two men, analyzed a soil gas sample obtained with a hollow soil probe. Radon concentrations were calculated by averaging one and two minute consecutive readings. Alpha Meters were buried at survey points and radon levels were calculated using these instruments by averaging measurements made over two consecutive 24 hour recording periods.

A single profile and a small grid were surveyed with the EDA radon detector (see Figure 22) while five profiles and a larger, rectilinear grid was produced using Alpha Meters (see Figure 14). All data points were located using the same 400 x 600 metre grid as did the scintillometer survey.

Representation work credits being claimed are detailed in Appendix 4.

4.5.2 Results and Interpretation

Data from radon surveys is presented in Figures 15 to 21 and 23 to 25 in the form of grids and profiles. Correlation between survey methods on common profiles is excellent. Both surveys indicate significant radon anomalies near and beyond the east and southern boundaries of the surveyed grid, in contrast to anomaly locations defined by scintillometer surveys.

When juxtaposed with a map of the geology of the showing (see Figure 4), radon anomaly locations appear to lie over the mineralized unit, apparent extensions of this unit and units in which no mineralization has been recognized. Evaluating the importance of these anomalies is difficult as they occur at the base of slopes where groundwater might pool, but as soil and overburden mask bedrock exposure, these anomalies should not be ignored and might represent radon concentrations displaced from a bedrock source.

4.5.3 Conclusions and Recommendations

Radon anomalies were located near and outside the borders of the surveyed grid where no anomalies were indicated by scintillometer surveys. As no bedrock is exposed at anomaly sites, their importance is unknown and should be assessed by detailed investigations.

5.0 Geochemical Survey Report

5.1 Introduction

Geochemical exploration techniques were used, in conjunction with other exploration methods described in this report, in an attempt to outline radiometric anomalies on the BON Claims. While airborne gamma-ray spectrometry methods are adequate to detect radiometric anomalies over outcrop, much of the area of the claims is covered by accummulations of surficial materials, ofter deeply weathered, necessitating the use of indirect detection methods. The value of representation work being claimed for the BON Claims in general is detailed in Appendix 5.

5.2 Description and Location of The Survey

Geochemical surveys were conducted on streams throughout the BON Claims as illustrated on Figure 26. All sampling was done in the summer of 1977 prior to August 19.

Streambed sediment samples were collected at 200-metre intervals on the streams indicated. Sample preparation and flourimetric analysis for uranium were done by Loring Laboratories of Calgary.

5.3 Results and Interpretation

The uranium concentration in geochemical samples from streambeds on the BON Claims showed a relatively small amount of variation and no significant anomalies were recognized. Values above 2.0 ppm uranium can be explained as being derived from high background uranium concentrations in shale units which have been mapped in Figure 4. This interpretation is supported by data, noted in the attached Geophysical Survey Report, from detailed scintillometer and lithologic surveys designed to check

anomalies found through airborne spectrometry.

5.4 Conclusions and Recommendations

Uranium analysis of sediment samples from selected streams on the BON Claims outlines several weak anomalies. Information from geologic maps, confirmed by scintillometer and geologic surveys, implies that the anomalies are not significant. Thus, on the basis of available information, further examination of anomalies indicated by geochemical surveys is not warranted.

6.0 Geological Survey Report

6.1 Introduction

In conjunction with other exploration methods employed on the BON Claims, one showing was mapped, geologically, at large scale. The geology of the claims as a whole is taken from G.S.C. Open File 499 by D.K. Norris (see Figure 4 and G.S.C. Open File 499) which updates G.S.C. Open File 399 and G.S.C. Map 10-1963.

The value of representation work being submitted for the grouped BON Claims is detailed in Appendix 6.

6.2 Geology of a Showing on the BON Claims

The showing lies on the upper flanks of a prominent height

of land and while primarily on BON 91, encompasses portions of BON 92, 93 and 94 (YA 9276 to YA 9279) as shown by the grid surveyed over the showing in Figure 7. Figure 27 depicts the geology of the showing and the positioning grid shown can be used to locate the geology by referring to the attached index map.

The site was recognized initially as a radiometric anomaly, and assays of trenched material and spectrometer measurements indicate that radioactivity is due primarily to uranium mineralization that is not visible to the naked eye. Scintillometer surveys indicate that anomalous radioactive values are restricted to the unit mapped as white chert. This unit is not seen in outcrop but is abundantly represented in felsenmeer, and comprises some chert pebble conglomerate and brecciated chert as detailed in the description of units attached to Figure 27. Radioactive values in this zone, best illustrated in Figure 6, are 5 to 10 times background levels. Extensions of the chert unit are not exposed and the attitude of the unit is difficult to estimate.

Correlation of geologic units mapped on this showing with formations mapped and described in Figure 4 has not been possible, as outlined in the table of geologic formations mapped on the BON Claims showing, Table 3. Descriptions of members of the Kayak and Kingak Formations do not match those of the units mapped on this showing, however, the Formation descriptions might have been generalized and thus cannot be applied literally to this area.

6.3 Conclusions and Recommendations

Preliminary geologic mapping of a showing on the BON Claims has indicated that mineralization occurs throughout the host unit. The thickness and areal extent of this unit are masked by overburden and further geophysical and geological exploration should be undertaken to determine its extension beneath this overburden. In addition, further efforts should be made to correlate the geology of the showing with formally recognized stratigraphy.

Table 1

Anomalies Defined by Airborne Gamma Ray Spectrometry Over the BON Claims

Yukon Territories
July, 1977

Anomaly (Flight Line Number/Location With Respect to Fiducials)	Peak Uranium Value/ Background Uranium Value	Shape of Uranium, Potassium and Thorium Peaks
125/1.0±	28/10	broad weak U high K & Th
125/6.0	36/14	broad U medium K & Th
125/14.8 - 13.9	30/18	several sharp, weak U, high K
125/18.9 - 19.5	29-20/10	weak U, high K
125/21.5-20.5	30-18/20	weak U, high K
125/29.1-28.5	30-20/20	weak U, high K
125/39.4	30/14	weak U, high K
125/39.2	28/16	weak U, high K
125/45.8	34/15	broad, weak U. Several weak peaks in area, high K
125/47.0	28/12	weak U, high K & Th
125/50.9	27/10	weak, broad peak preceeded by gradual increase in background weak K & Th
125/52.9-53.5	28-20/14	several weak U in area of increased background high K & Th
125/58.3-58.7	30-18/14	several weak U high K increased Th
125/64.3-65.1	36-18/10	several weak U high K & Th
125/67.1-66.1	30-16/11	several weak peaks, high K & Th
125/73.0	31/12	broad, weak U, increased K & Th
125/75.0	29/11	weak U, very high K & high Th
125/77.6-77.2	32-20/10	several weak U, high K & Th

Anomalies Defined by Airborne Gamma Ray Spectrometry Over the BON Claims

Yukon Territories
July, 1977

Anomaly (Flight Line Number/Location With Respect to Fiducials)	Peak Uranium Value/ Background Uranium Value	Shape of Uranium, Potassium and Thorium Peaks
126/5.4-6.0	28-20/12	several weak U higher K & Th
126/9.0	32/9	weak, broad U, low K, weak Th
126/17.25	64/10	high U, low K & Th
126/17.7	52/15	high distinct U, low K & Th
126/21.25	30/12	weak, broad U, weak K & Th
126/31.9	OFFSCALE/10 (100)	Very high sharp U, low K & Th
127/9.9	64/12	high, sharp U, low K & Th
127/15.0	34/12	distinct U, low K & Th
127/16.0	34/12	distinct U, gradual decrease, weak K, medium Th
127/29.0	30/12	broad, weak U, medium K & Th
127/29.9	27/10	sharp U, low K & Th
127/30.1	32/12	weak U peak, medium K & Th
127/32.3	30/14	weak U peak, medium K & Th
127/49.4	39/9	sharp, high U, low K & Th
127/64.5	34/20	weak broad peak in area of high background, high Th, weak K

Table 2

SCINTILLOMETER SURVEYS OF ANOMALIES
ON THE BON CLAIMS
1977

ANOMALY NUMBER	TRAVERSE NUMBER	DATE OF TRAVERSE	SCINTILLOMETER RESPONSE IN COUNTS PER SECOND OVER ANOMALY (BACKGROUND/HIGH)	LITHOLOGY
125/1.0	50D	Aug. 9	110/200	chert & siltstone rubble
125/6.0	42N	June 19	100/120	grey siltstone & shale
125/14.8-13.9	118-119D, 146,N	Aug. 5, Aug. 11	75/100	red & tan shales
125/18.9-19.5	112D, 147N	Aug. 3, Aug. 11	75/100	brown shales
125/21.5-20.5	122D, 137N	Aug. 5, Aug. 7	75/100	brown & red shales
125/29.1-28.5	137N, 122D	Aug. 7, Aug. 5	75/100	rubbly shale & sandstone
125/39.4	121D, 136N	Aug. 5, Aug. 7	70/90	interbedded black shales
125/39.2	121D, 136N	Aug. 5, Aug. 7	70/90	interbedded black shales
125/45.8	123D, 136N	Aug. 5, Aug. 7	75/90	brown shales & grey siltstones
125/47.0	141D	Aug. 14	80/100	black shales
125/50.9	111D	Aug. 2, Aug. 16	75/100	black shales
125/52.9-53.5	115D, 152N	Aug. 3	80/120	interbedded sandstone and tan to red shale
125/58.3-58.7	136N	Aug. 7	80/90	black & brown shale & shaley soil
125/64.3-65.1	109D	Aug. 2	75	shaley soils
125/67.1-66.1	108D, 138N, 153N 68D	Aug. 2, Aug. 7, Aug. 11, July 20	80/90	shaley rubble and soil

ANOMALY NUMBER	TRAVERSE NUMBER	DATE OF TRAVERSE	SCINTILLOMETER RESPONSE IN COUNTS PER SECOND OVER ANOMALY (BACKGROUND/HIGH)	LITHOLOGY
125/73.0	136N	Aug. 7	80/90	black shales, recessive
125/77.6-77.2	60N,109D, 110D	July 3, Aug 9 Aug. 16, Aug 2	125/200	chert pebble conglomerate & interbedded shales
126/9.0	136N, 150N	Aug. 6, Aug. 11	150/700	fringe of BON claims showing chert conglomerate & breccia
126/17.25	BON claims showing			chert conglomerate & breccia
126/17.7	BON claims showing			chert conglomerate & breccia
126/21.25	139N, 140N, 161N	Aug. 7, 13	80/100	interbedded sandstone & shale, occasional coal
126/31.9	124D	Aug. 6, 8	200/750	chert conglomerate & breccia of BON showing
127/9.9	124D, 141N	Aug. 6, 8, Aug. 8	300/800	chert conglomerate & breccia of BON showing
127/15.0	124D	Aug. 6, 8	200/750	chert conglomerate & breccia of BON showing
127/16.0	136N, 185N	Aug. 6, Aug. 18	90/120	sandstone & interbedded black shales
127/29.0	136N, 185N	Aug. 7, Aug. 18	100/110	black shales
127/29.9	164N	Aug. 14	70/90	interbeds of black shale
127/30.1	164N	Aug. 14	75/100	chert conglomerate & breccia
127/32.3	184N	Aug. 18	65	black & grey shale
127/49.4	164N	Aug. 14	75/100	white, brecciated chert (rubble only)
127/64.5	141D	Aug. 14	75/100, 75/100	black shale, chert breccia (rubble only)
126/5.4-6.0	68D	July 20	90/110	black shale and siltstone

Table 3

Table of Formations
Mapped on a Showing on the
BON Claims, 1977

Formation		Unit		Period
Kingak	relationship unknown	white sandstone grey sandstone quartzite	relationship unknown	Lower Cretaceous and Jurassic
Kayak		iron-rich sandstone shale white siltstone white chert		Mississippian

138°00'

68° 24'

68°20'

138°00'

BON 1 - 270 incl.

0 3000 6000

FEET

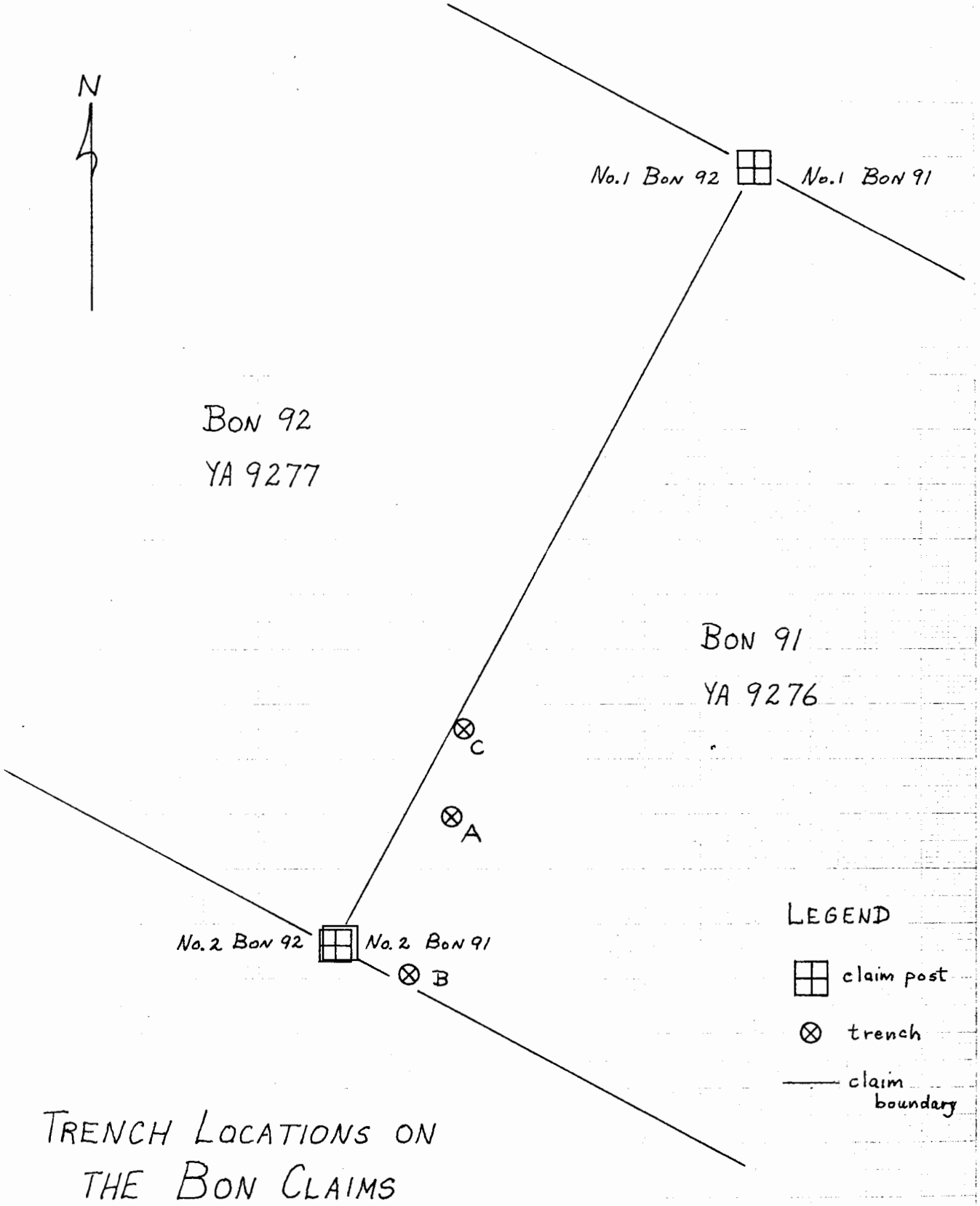
AQUITAINE COMPANY OF CANADA LTD.

BONNET LAKE AREA
YUKON TERRITORY
BON CLAIMS 1 - 270 incl.

117A7

INTERPRETED BY :	CONTOUR INTERVAL :
DATE : August 1976	SCALE :
REVISED :	FILE NO. :

FIGURE 1



TRENCH LOCATIONS ON THE BON CLAIMS

scale 1 : 2,500
1 cm = 25 meters

FIGURE 2

68°40'

138°00'

68°40'

68°35'

68°35'

138°15

68°30'

137°45'

68°30'

68°25'

68°25'

68°20'

68°20'

L.125

L.126

L.127

OUTLINE OF BON CLAIMS

68°15'

68°15'

138°15°

138°00'

137°45'

INDEX MAP

LEGEND

FLIGHT LINE WITH FIDUCIAL POINTS

ANOMALY : BETWEEN FIDUCIAL POINTS AT FIDUCIAL POINT

GROUND INVESTIGATION : OFF FLIGHTLINE, ON FLIGHTLINE, AT ANOMALY

GROUND TRAVERSE

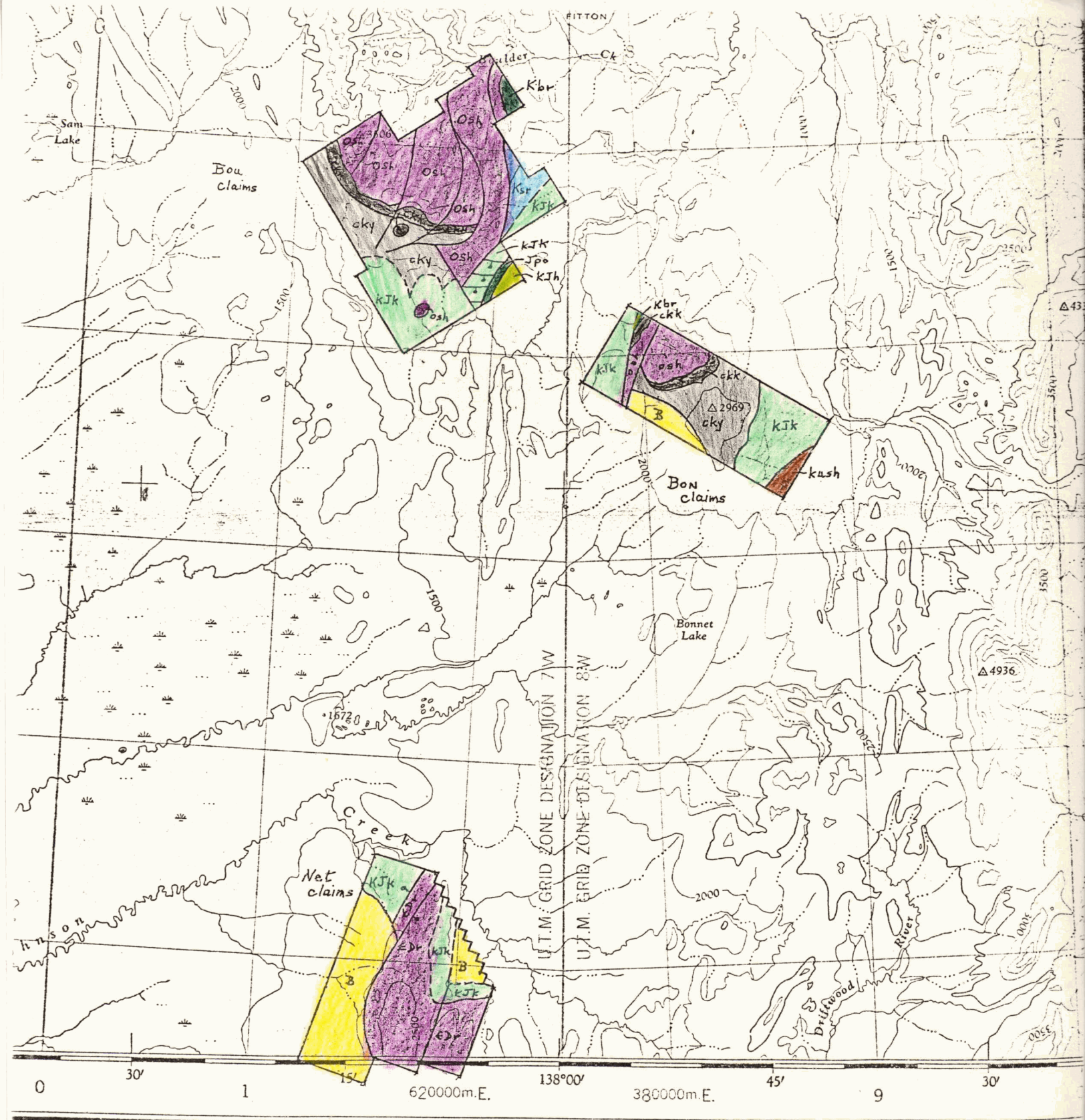
MILES 1 0 1 2 3 MILES

METRES 1000 500 0 1000 2000 3000 4000 METRES

AQUITAINE COMPANY OF CANADA LTD.

PHOTOMOSAIC OF 117 A CENTRE SOUTH
AIRBORNE SPECTROMETER SURVEY
SCINTILLOMETER SURVEYS OF ANOMALIES
OF THE BON CLAIMS

DATE:	NTS:	FIGURE No.:
SEPT. 1977	PARTS OF : 117A/6,7,10,11	3



RANCH,
YS, 1962

Établie et impr
MINISTÈRE
photographies

GEOLOGY of the Bou, Bon and Net CLAIMS

BLOW RIVER

YUKON TERRITORY – NORTHWEST TERRITORIES

117 A

Scale 1:250,000 Échelle

(after D.K. Norris, unpublished data, now available as G.S.C. O.F. 499)

Miles 5 0 5 10 15 20 Milles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres

FIGURE 4

Legend

Aquitaine Company of Canada Ltd. - Claim Blocks, Blow River Area, Y.T.

B	(755)	Pediment surfaces, mostly with thin cover of colluvium and/or organic deposits

Lower Cretaceous and Jurassic

Ksr	(737½)	unnamed chert, quartzite, lithic pebble conglomerates of Albian age.
Kbr	(739)	unnamed flyschoid shales and siltstones of Aptian or Albian age.
Kush	(745½)	"upper shale-siltstone division" (see Jeletzky, G.S.C. Paper 61-9)
Kbs	(736½)	"bluish grey shale division" (see Jeletzky, G.S.C. Paper 61-9)
Klss	(746)	"lower sandstone division" (see Jeletzky, G.S.C. Paper 61-9)
KJh	(738½)	Husky Formation, shale and siltstone
Jpo	(375)	Porcupine Formation, buff sandstone of Late Jurassic age.
KJk	(751)	Kingak Formation, shale and siltstone, regionally of Jurassic and Early Cretaceous age.

Mississippian

Cky	(734½)	Kayak Formation, shale, siltstone, coal
Ckk	(747½)	Kekiktuk Formation, chert and quartzite pebble and cobble conglomerate

Lower Devonian, Silurian, Ordovician

OSh=€Dr	(742)	Road River Formation in Driftwood Hills and unnamed shale, siltstone and chert in Barn Mountains.

Fault, solid circle on downthrown wall

Anticline

Syncline

x 60y Outcrop examined on the ground; with attitude

xCV Fossil Locality with paleontological age (see Norris, D.K., G.S.C. Paper 76-1B, p. 264-265).

D. K. Norris

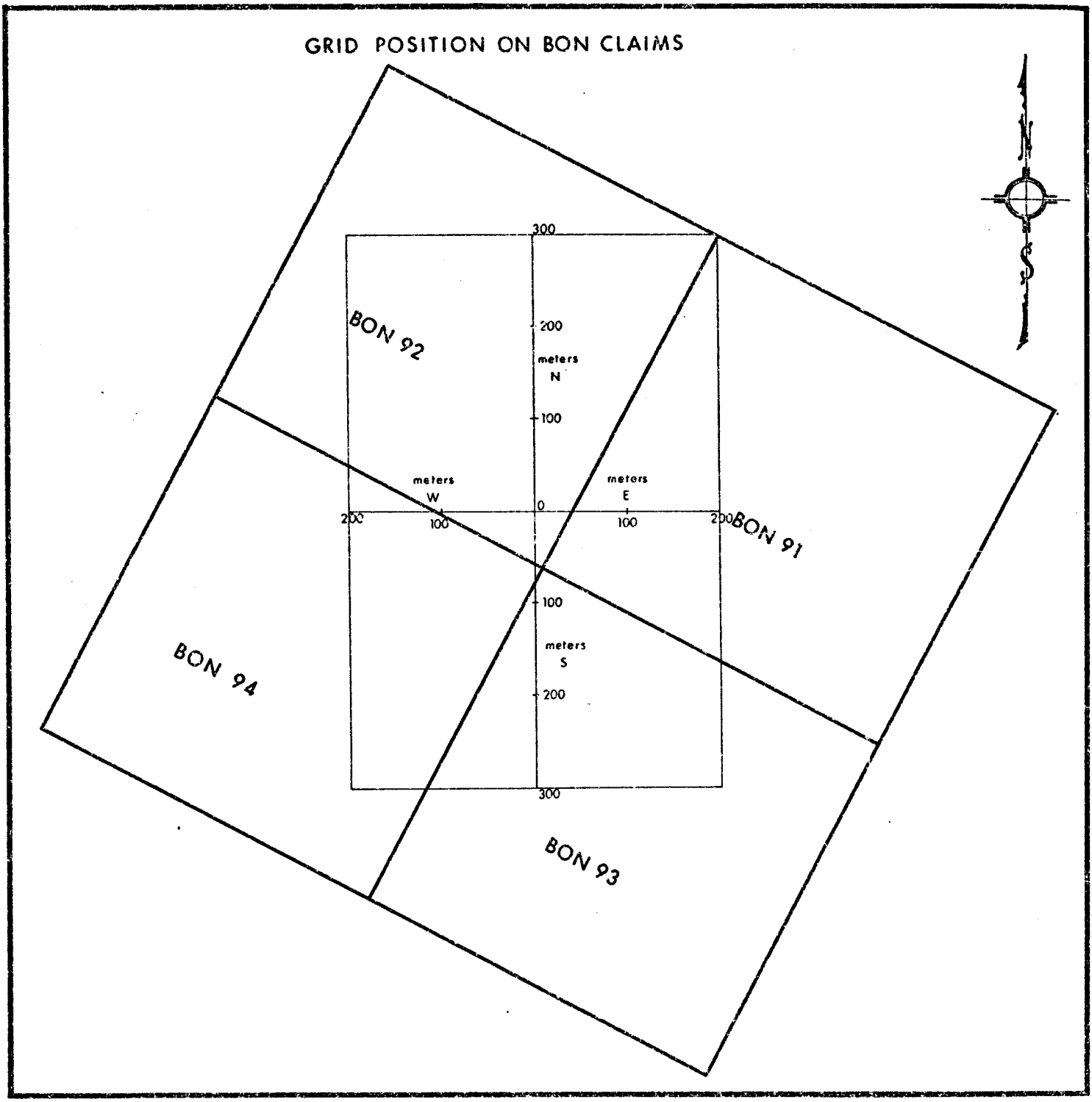
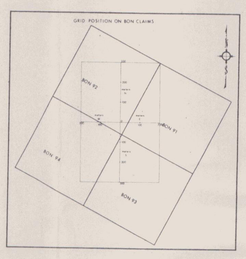

GRID POSITION ON BON CLAIMS
BON 92
BON 91
BON 94
BON 93
300
200
meters
N
100
meters
W
meters
E
0
200
100
100
200
100
meters
S
200
300

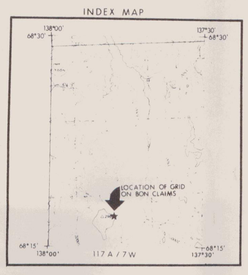
Figure 5

- 200W | -150W | - 100W | -50W | 0 | +50E | +100E | +150E | +200E

+300N | +250N | +200N | +150N | +100N | +50N | 0- | - 50S | - 100S | - 150S | - 200S | - 250S | - 300S

INDEX MAP





SCALE

0 10 20 30 40 50 Metres

1:500

AQUITAINE COMPANY OF CANADA LTD.

A SCINTILLOMETER SURVEY OVER A SHOWING ON THE BON CLAIMS

DATE:	NTS:	FIGURE NO :
AUG. 1977	117 A / 7W	6

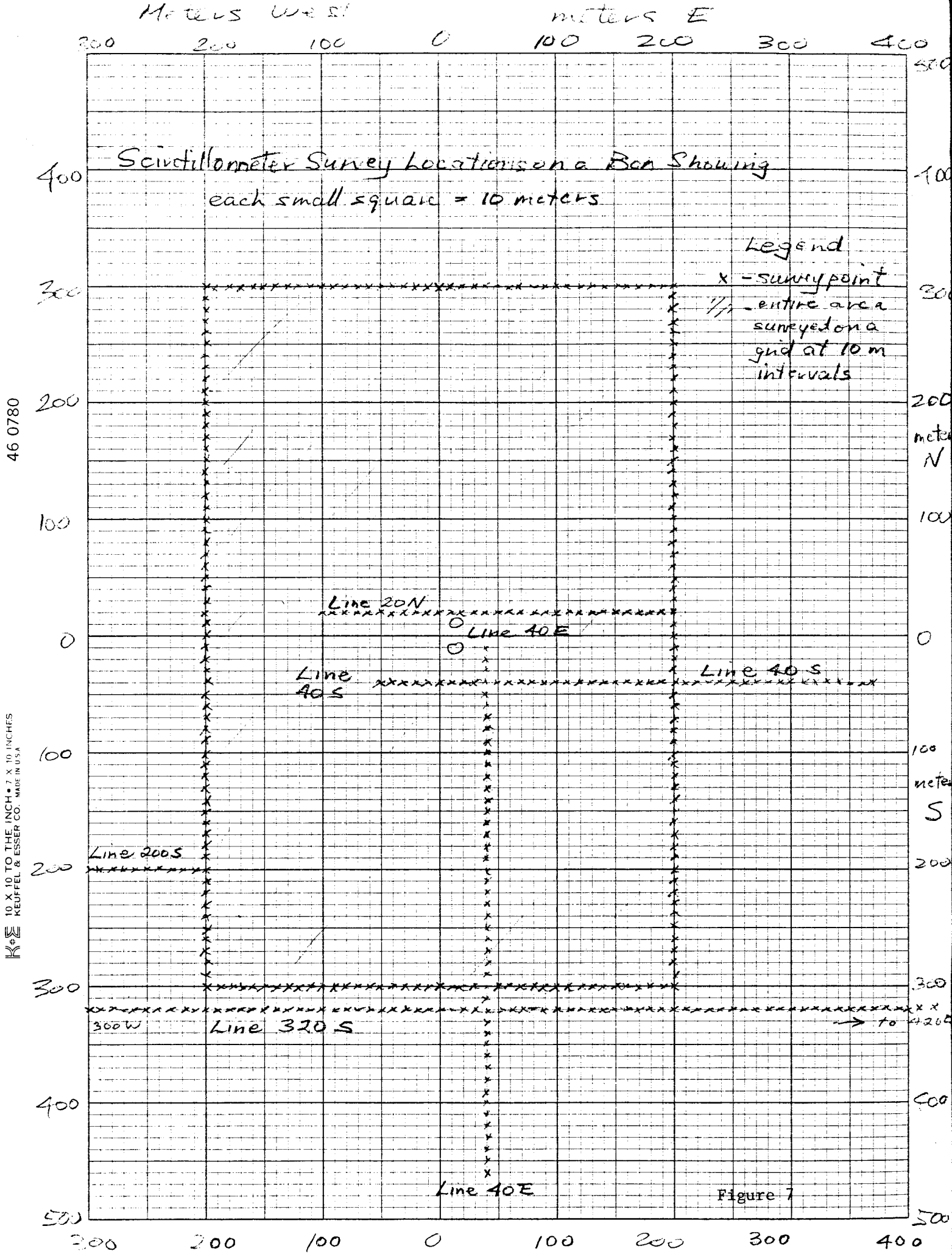

meters W
meters E
300
200
100
0
100
200
300
400
Scintillometer Survey Locations on a Box Showing
each small square = 10 meters
Legend
x - survey point
// - entire area surveyed on a grid at 10 m intervals
meters N
meters S
Line 20N
Line 40E
Line 40S
Line 40S
Line 200S
300W
Line 320S
to +200
Line 40E
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

Figure 7

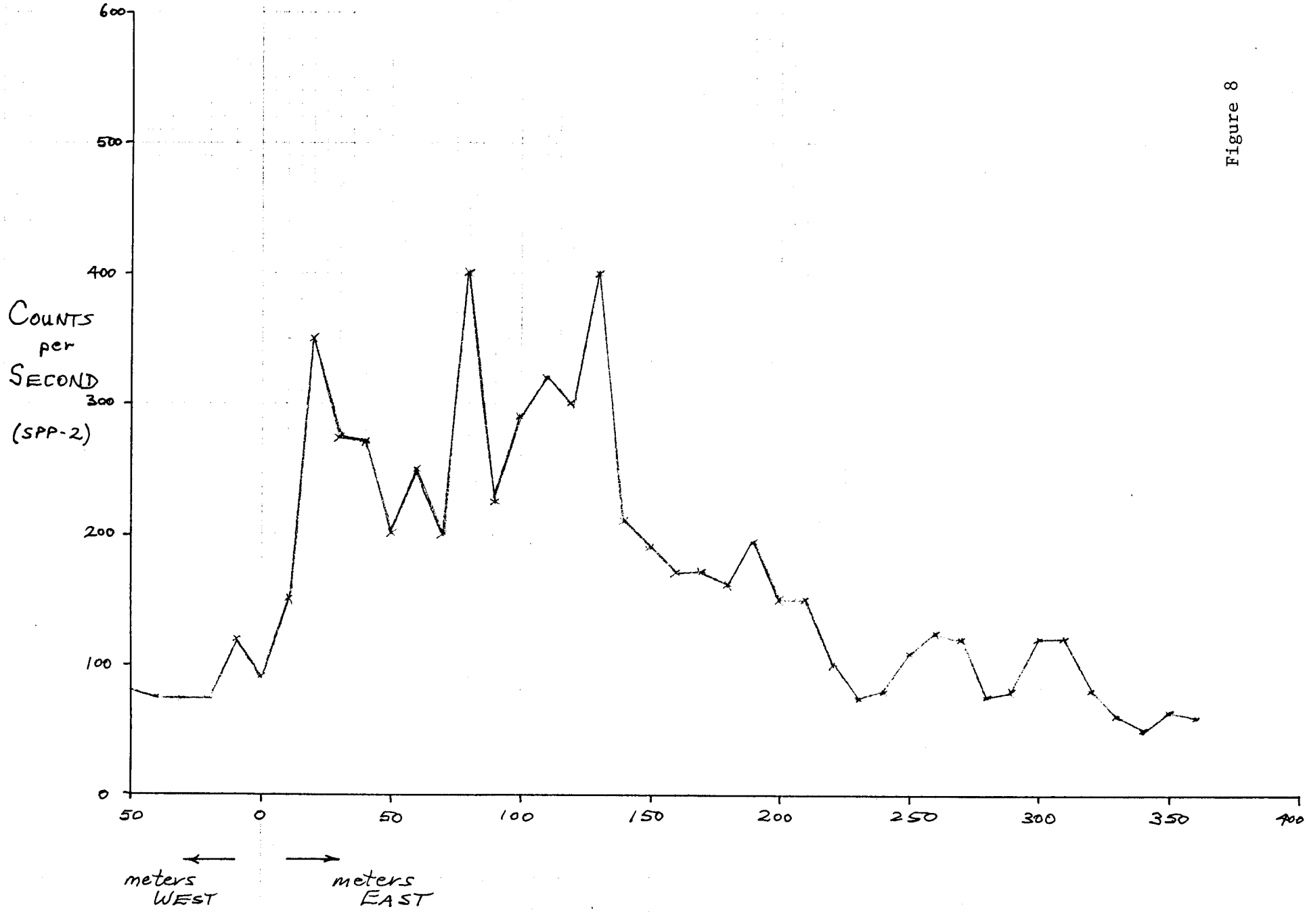

SCINTILLOMETER SURVEY, BON CLAIMS, AUGUST 1977
LINE 40 SOUTH, 50 WEST to 360 EAST
COUNTS per SECOND (SPP-2)
600
500
400
300
200
100
0
50
0
50
100
150
200
250
300
350
400
meters WEST
meters EAST

Figure 8

Scintillometer Survey, Bon Claims, August 1977

Line 200 South, 300 West to 80 East

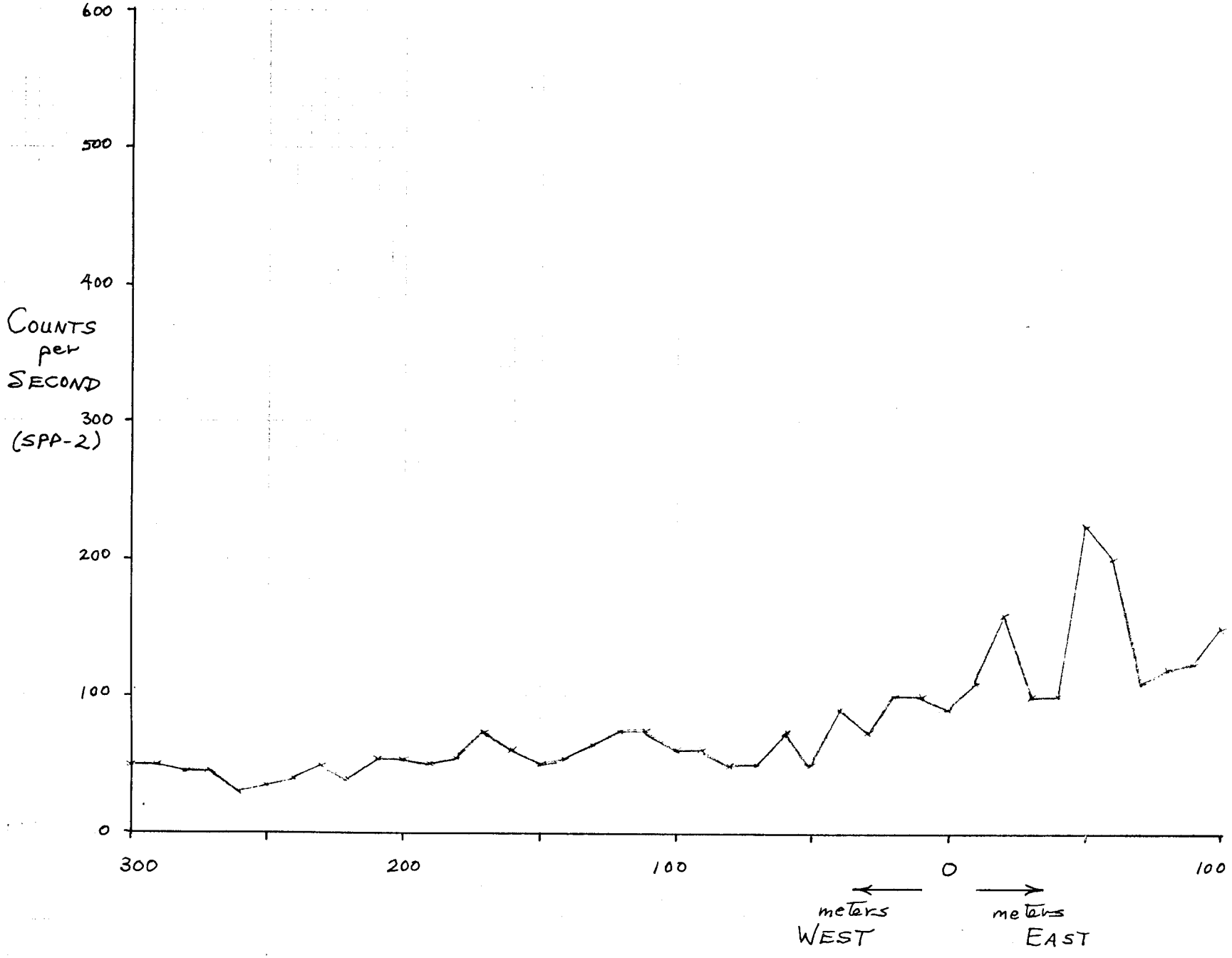


Figure 9

SCINTILLOMETER SURVEY, BON CLAIMS, AUGUST 1977
LINE 320 SOUTH, 70 EAST to 420 EAST

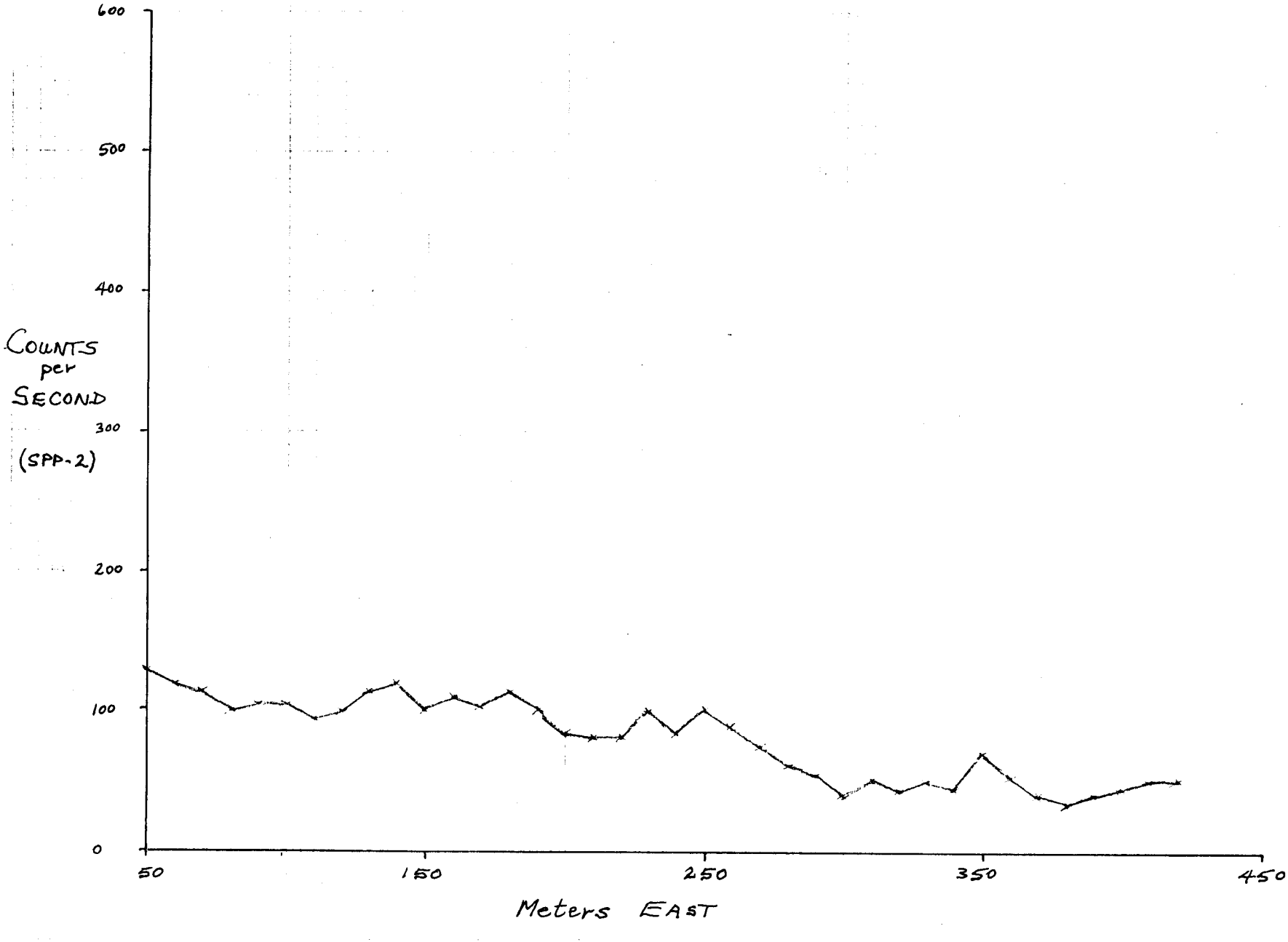


Figure 10

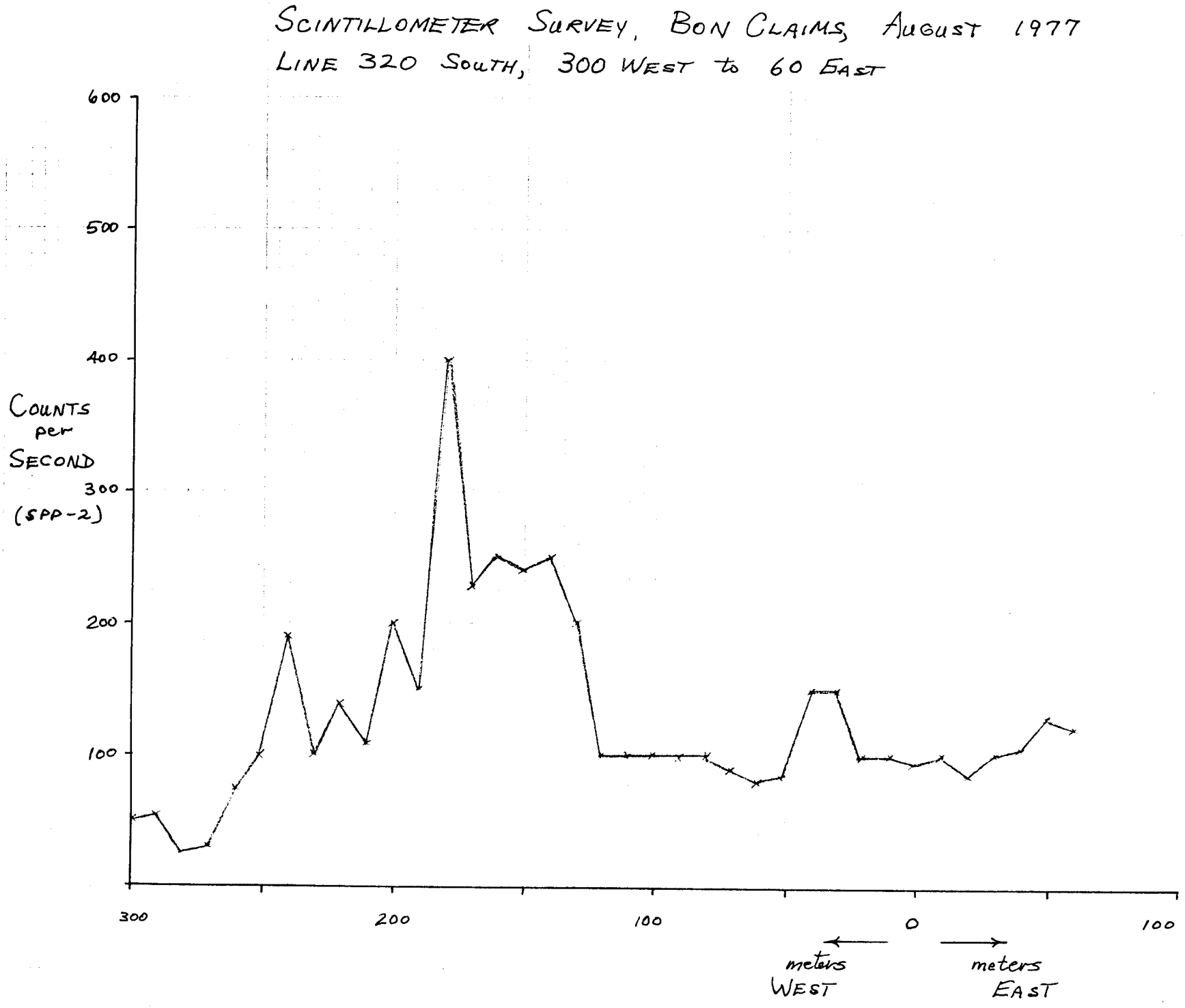

SCINTILLOMETER SURVEY, BON CLAIMS, AUGUST 1977
LINE 320 SOUTH, 300 WEST to 60 EAST
600
500
400
300
200
100
COUNTS per SECOND (SPP-2)
300
200
100
0
100
meters WEST
meters EAST

Figure 11

SCINTILLOMETER SURVEY, BON CLAIMS, AUGUST 1977
LINE 40 EAST, 0 to 460 SOUTH

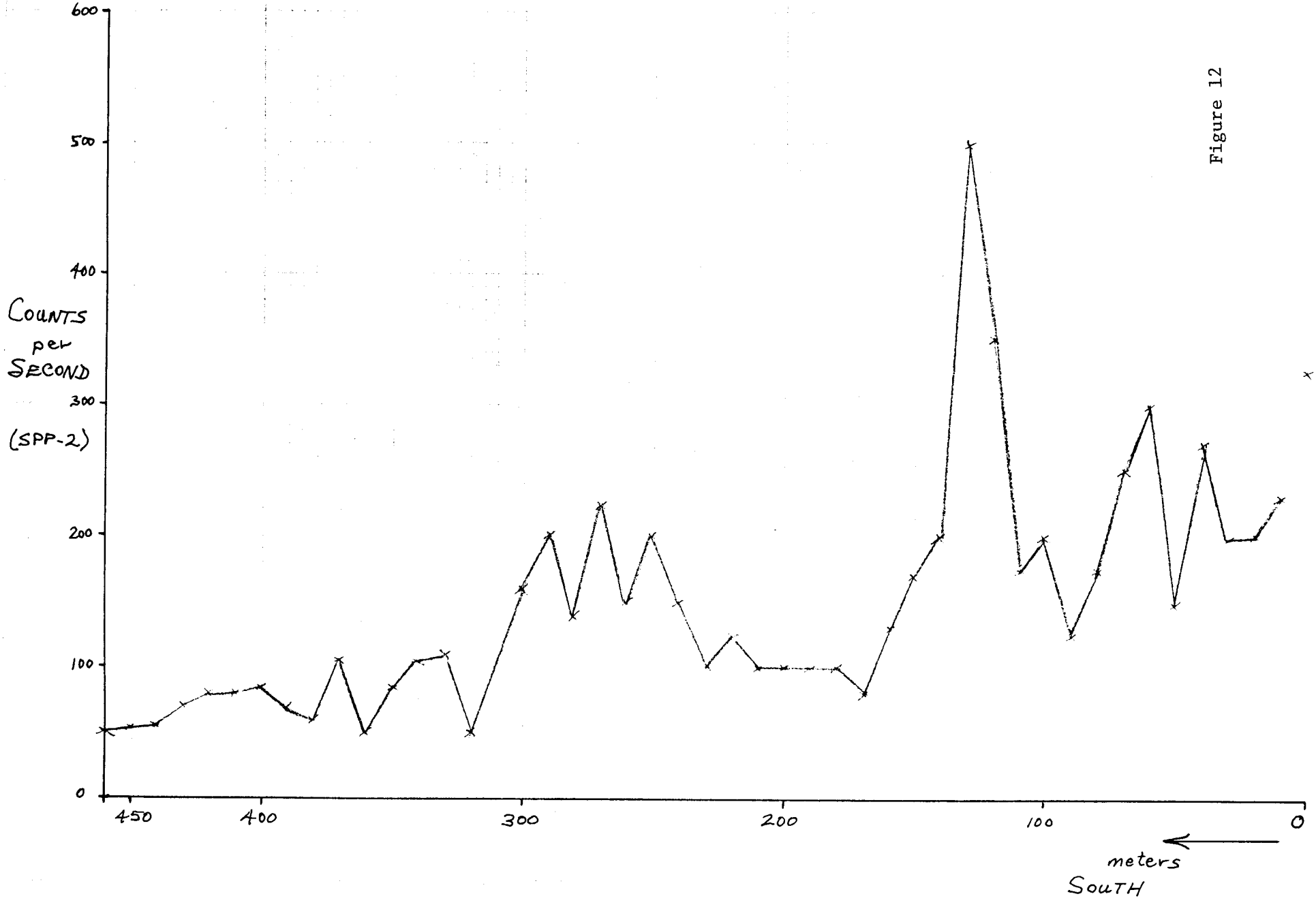


Figure 12

BON CLAIMS, AUGUST 1977
SCINTILLOMETER SURVEY

LINE 20 NORTH, 100 WEST
to 300 EAST

stations at 10 meter intervals

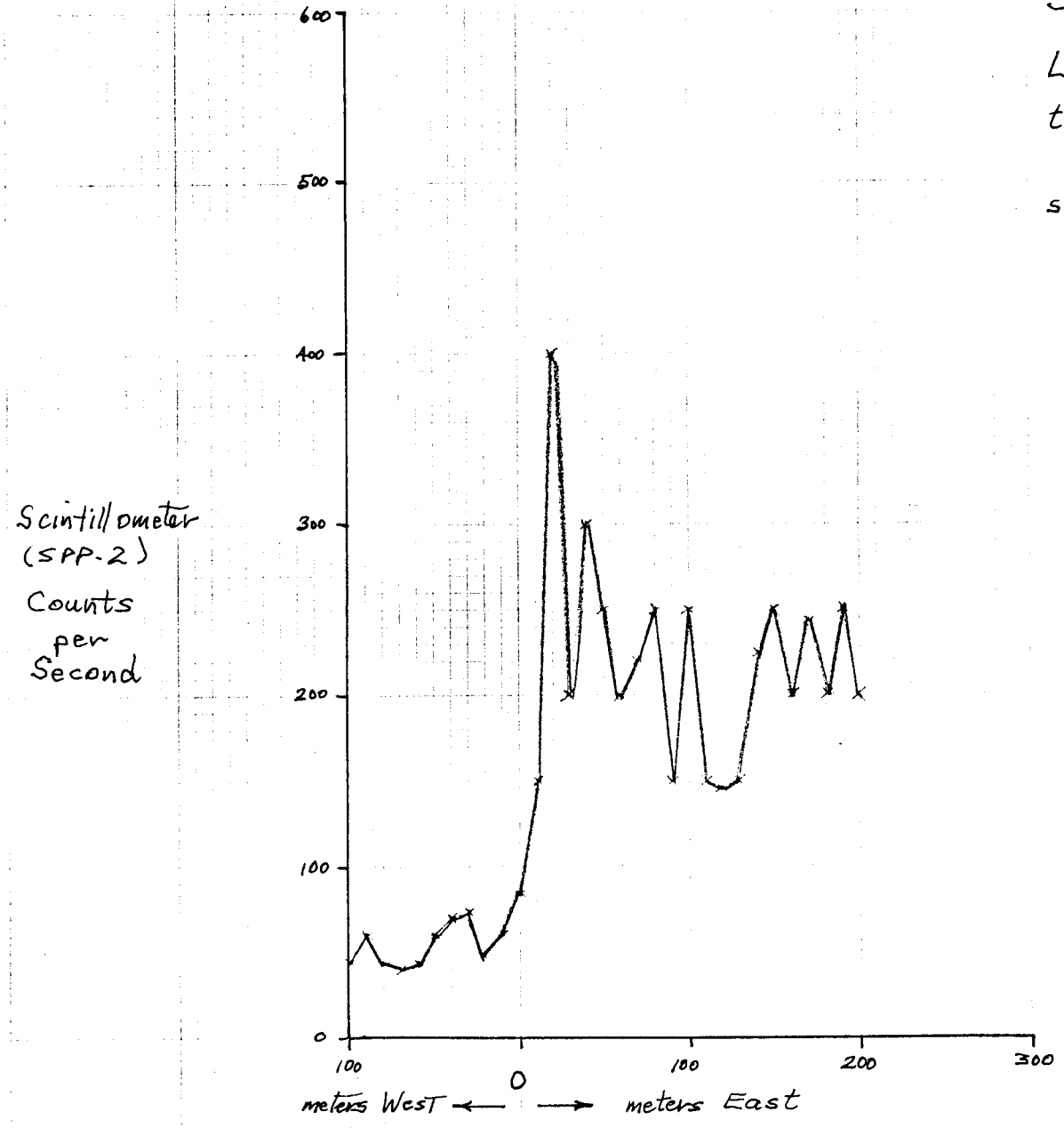


Figure 13

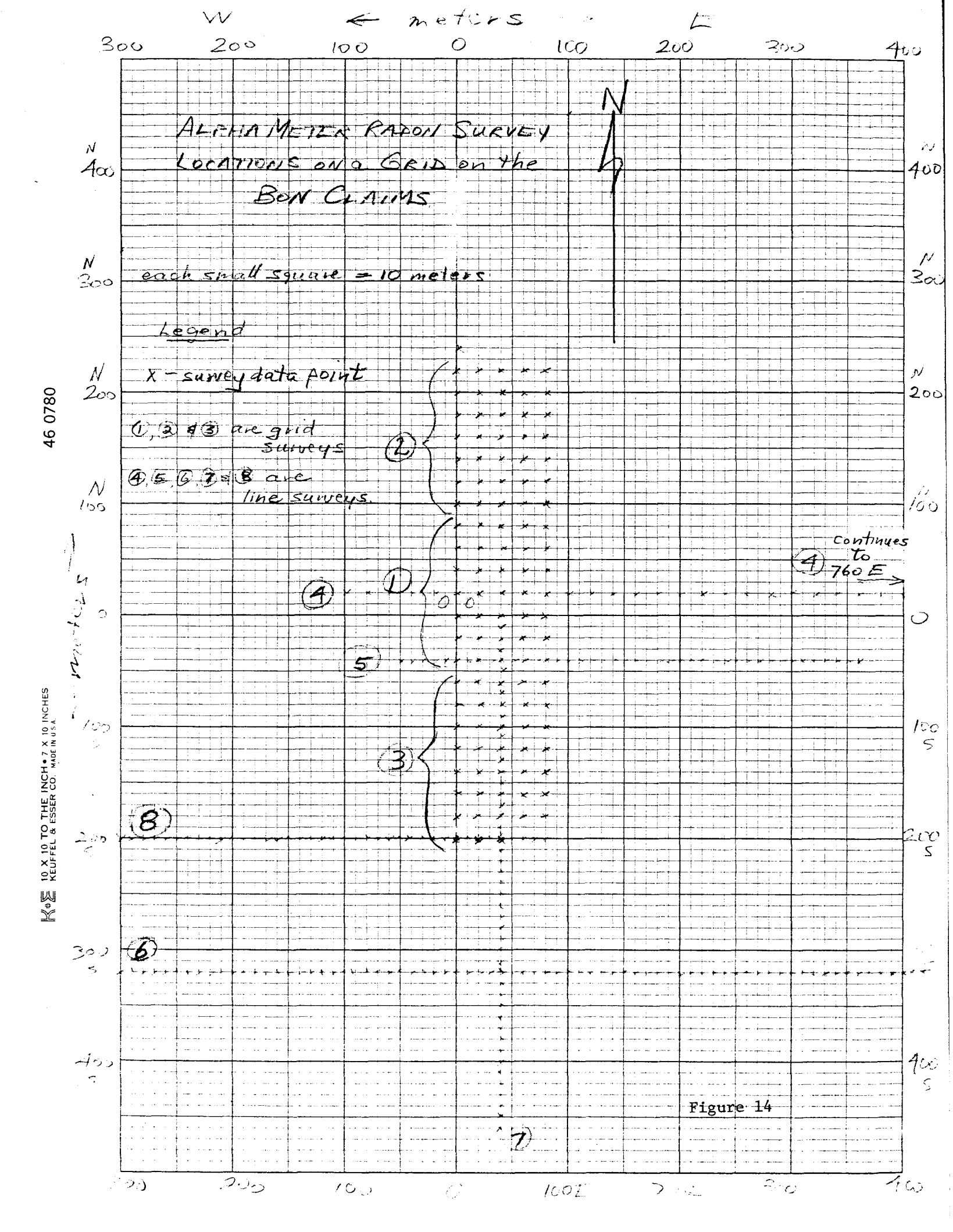
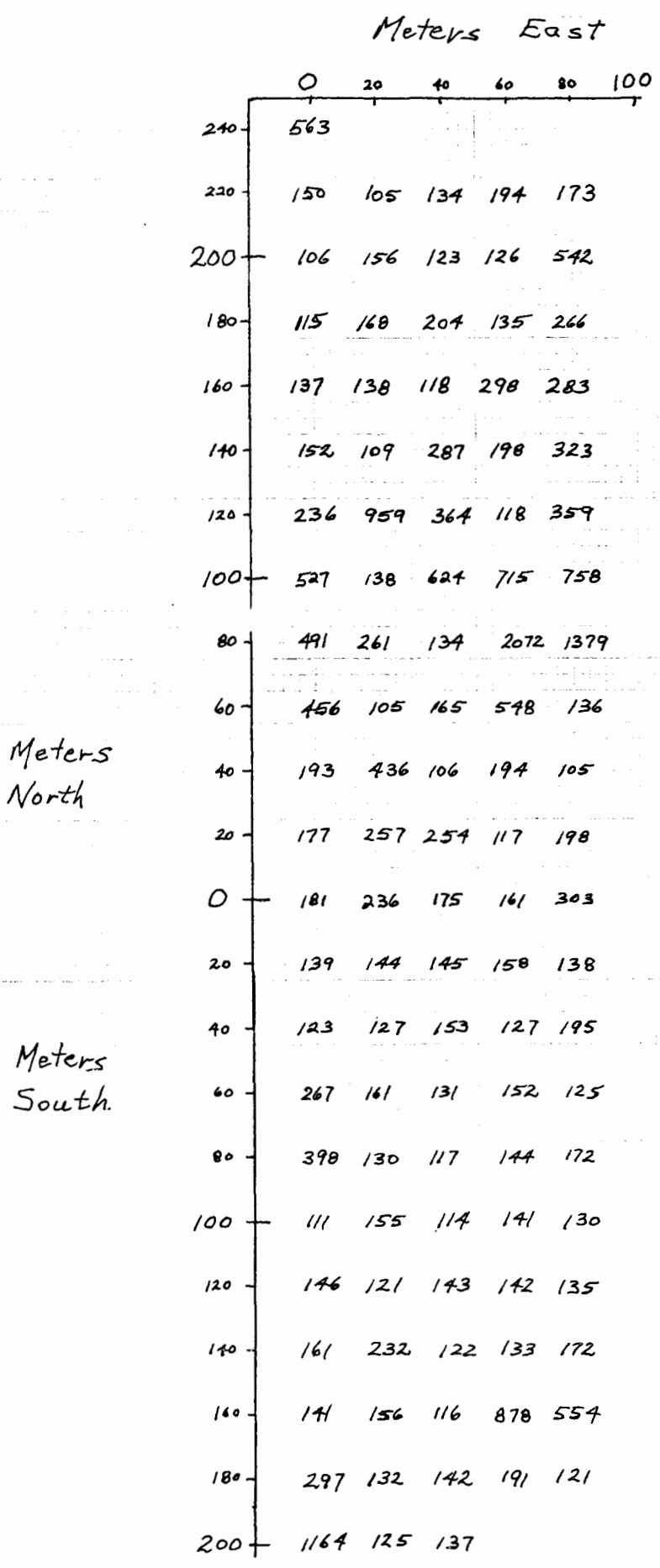

W ← meters → E
300 200 100 0 100 200 300 400
N
ALPHA METER RADON SURVEY
LOCATIONS ON A GRID on the
BON CLAIMS
each small square = 10 meters
Legend
X - survey data point
①, ②, ③ are grid surveys
④, ⑤, ⑥, ⑦ & ⑧ are line surveys.
N 400
N 300
N 200
N 100
0
100 S
200 S
300 S
400 S
continues to 760 E
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

Figure 14



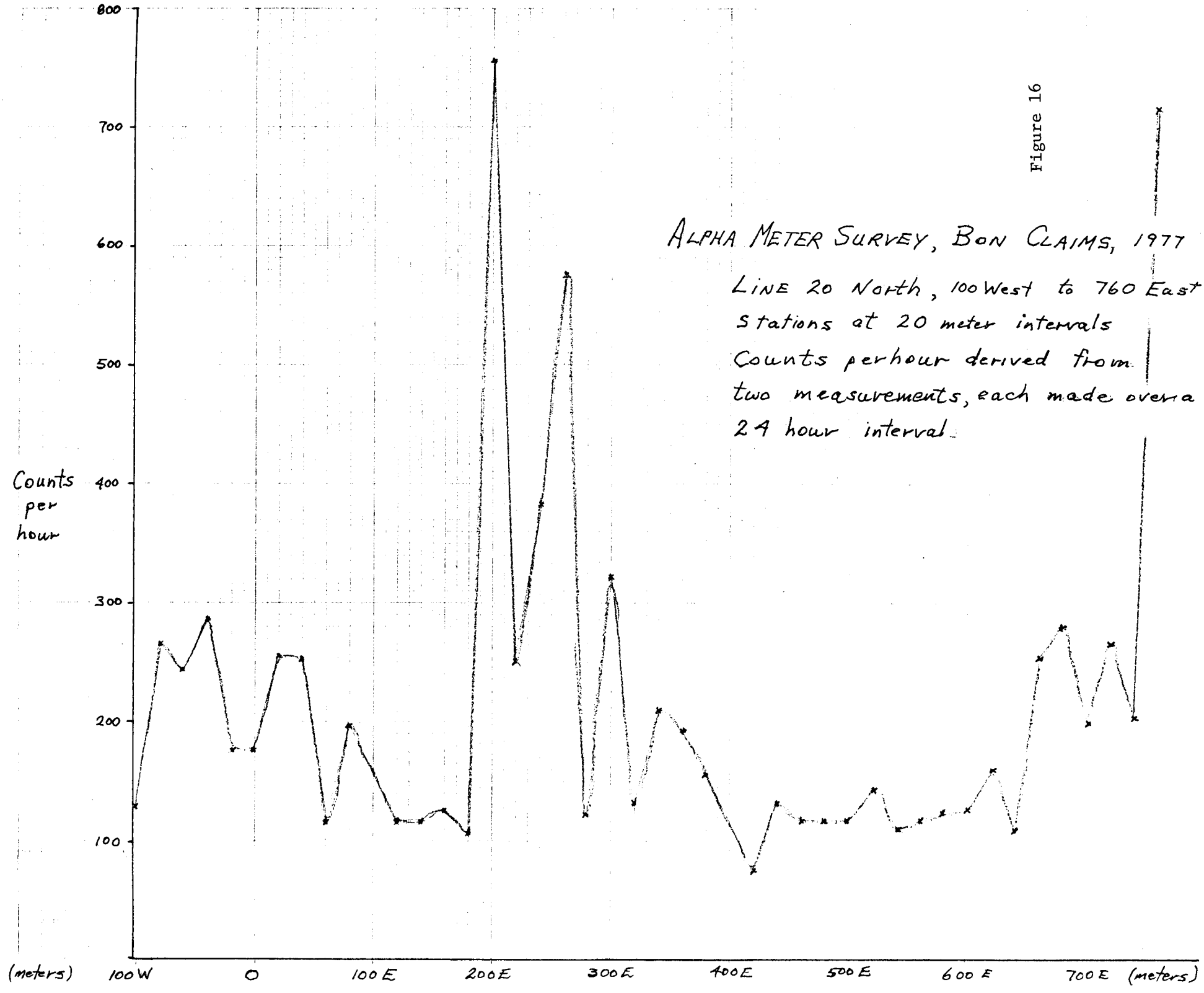
Alpha meter Survey

BON CLAIMS

values plotted are counts per hour, calculated from two readings taken over intervals of approx. 24 hours each.

Figure 15

Figure 16


ALPHA METER SURVEY, BON CLAIMS, 1977
LINE 20 North, 100 West to 760 East
Stations at 20 meter intervals
Counts per hour derived from two measurements, each made over a 24 hour interval.
Counts per hour
800
700
600
500
400
300
200
100
(meters)
100W
0
100E
200E
300E
400E
500E
600E
700E
(meters)

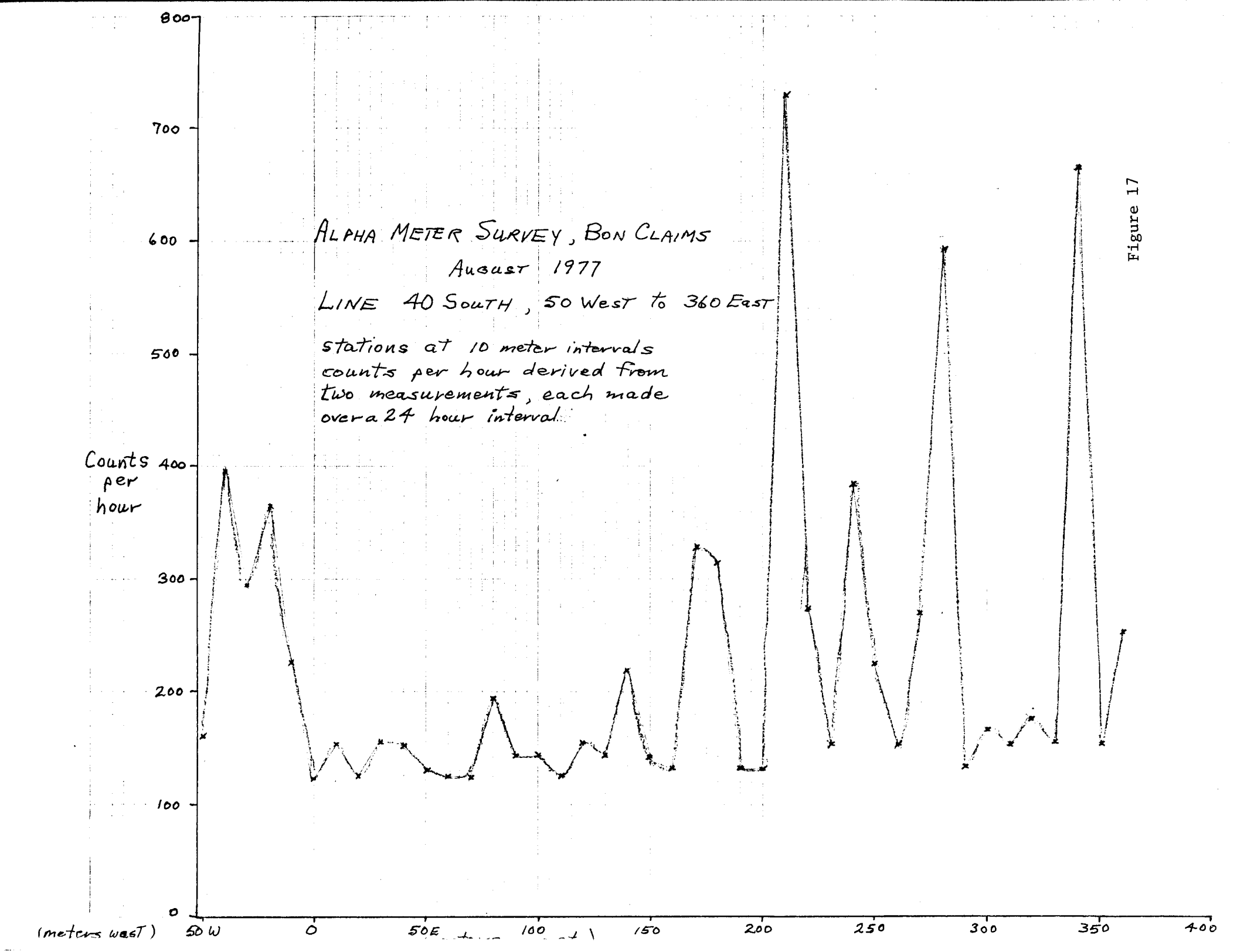

ALPHA METER SURVEY, BON CLAIMS
AUGUST 1977
LINE 40 SOUTH, 50 WEST to 360 EAST
stations at 10 meter intervals
counts per hour derived from
two measurements, each made
over a 24 hour interval
Counts per hour
800
700
600
500
400
300
200
100
0
(meters west)
50 W
0
50E
100
150
200
250
300
350
400

Figure 17

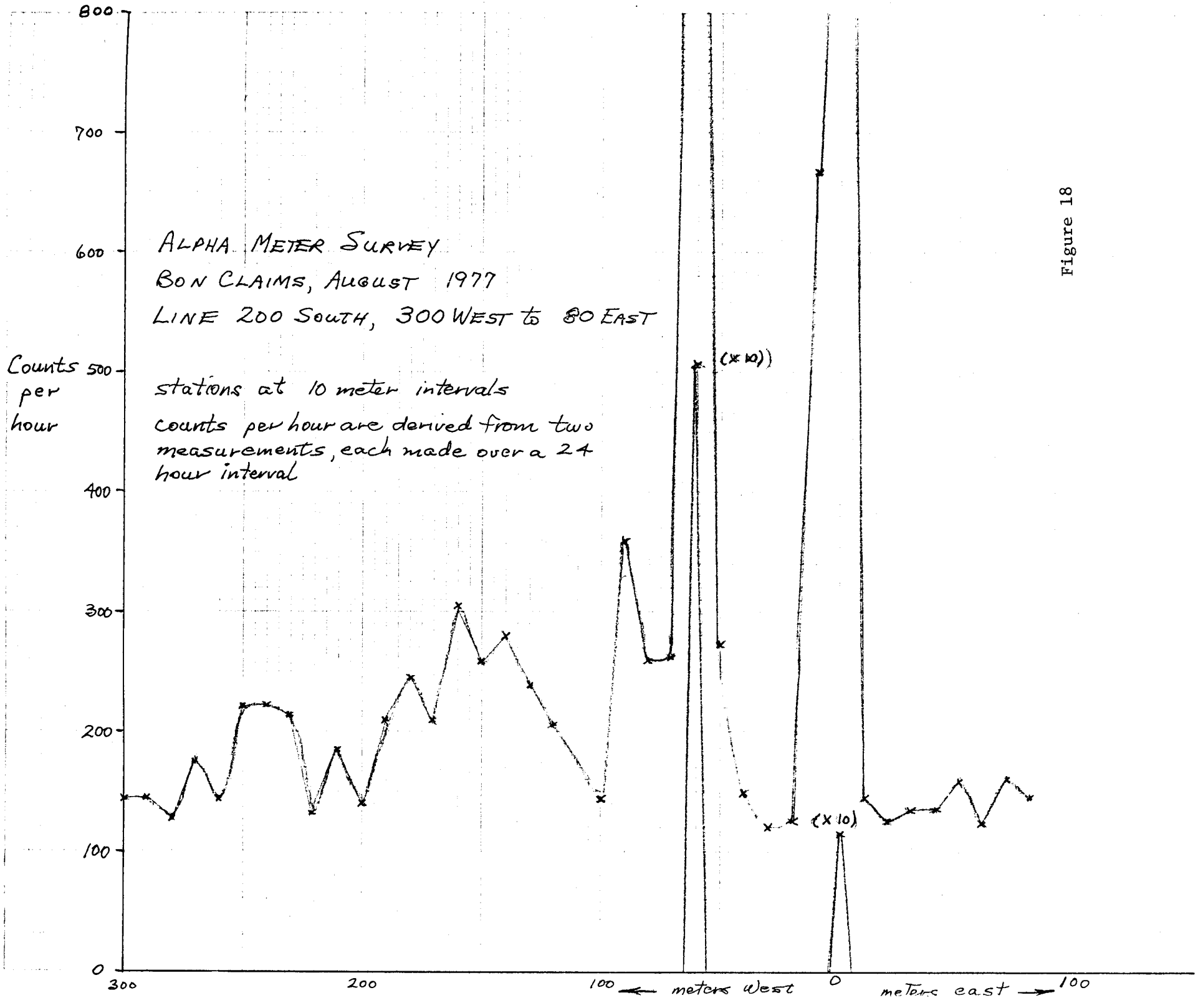

ALPHA METER SURVEY
BON CLAIMS, AUGUST 1977
LINE 200 SOUTH, 300 WEST to 80 EAST
stations at 10 meter intervals
counts per hour are derived from two measurements, each made over a 24 hour interval
Counts per hour
800
700
600
500
400
300
200
100
0
(X 10)
(X 10)
300
200
100
meters West
0
meters east
100

Figure 18

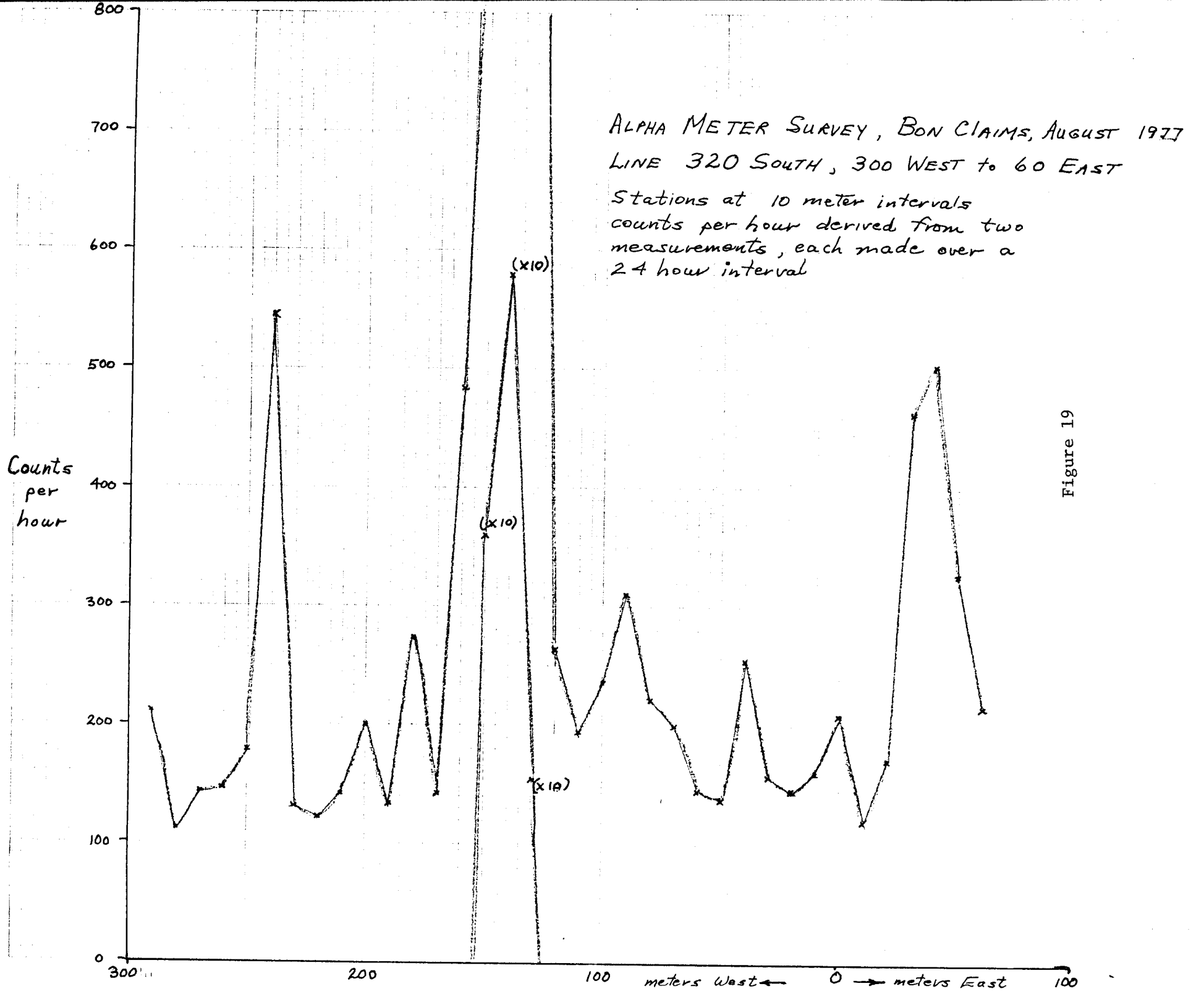

ALPHA METER SURVEY, BON CLAIMS, AUGUST 1977
LINE 320 SOUTH, 300 WEST to 60 EAST
Stations at 10 meter intervals
counts per hour derived from two measurements, each made over a 24 hour interval
Counts per hour
800
700
600
500
400
300
200
100
0
(x10)
(x10)
(x10)
300
200
100
meters West
0
meters East
100

Figure 19

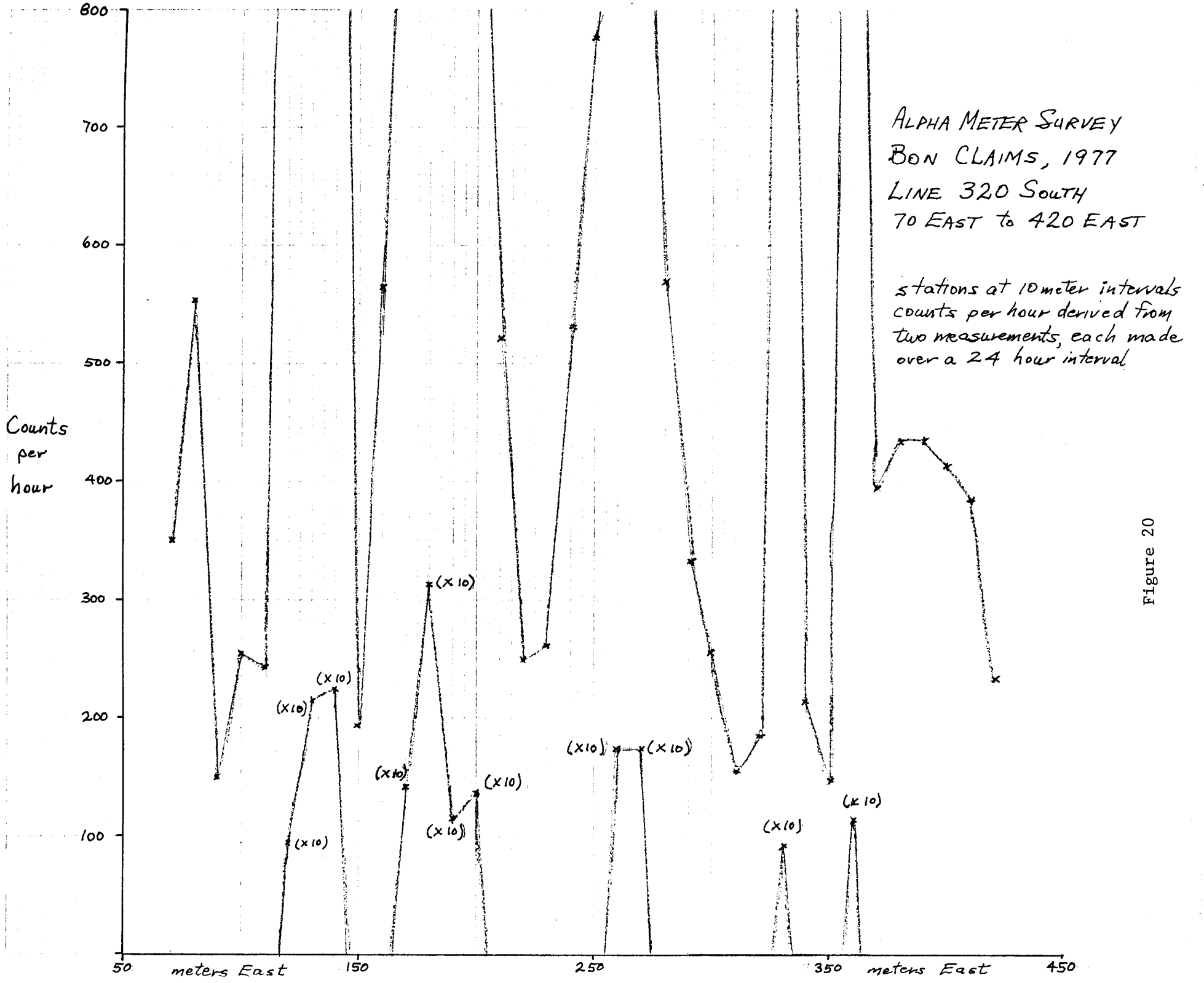

ALPHA METER SURVEY
BON CLAIMS, 1977
LINE 320 SOUTH
70 EAST to 420 EAST
stations at 10 meter intervals
counts per hour derived from
two measurements, each made
over a 24 hour interval
Counts per hour
800
700
600
500
400
300
200
100
(X10)
50
meters East
150
250
350
meters East
450

Figure 20

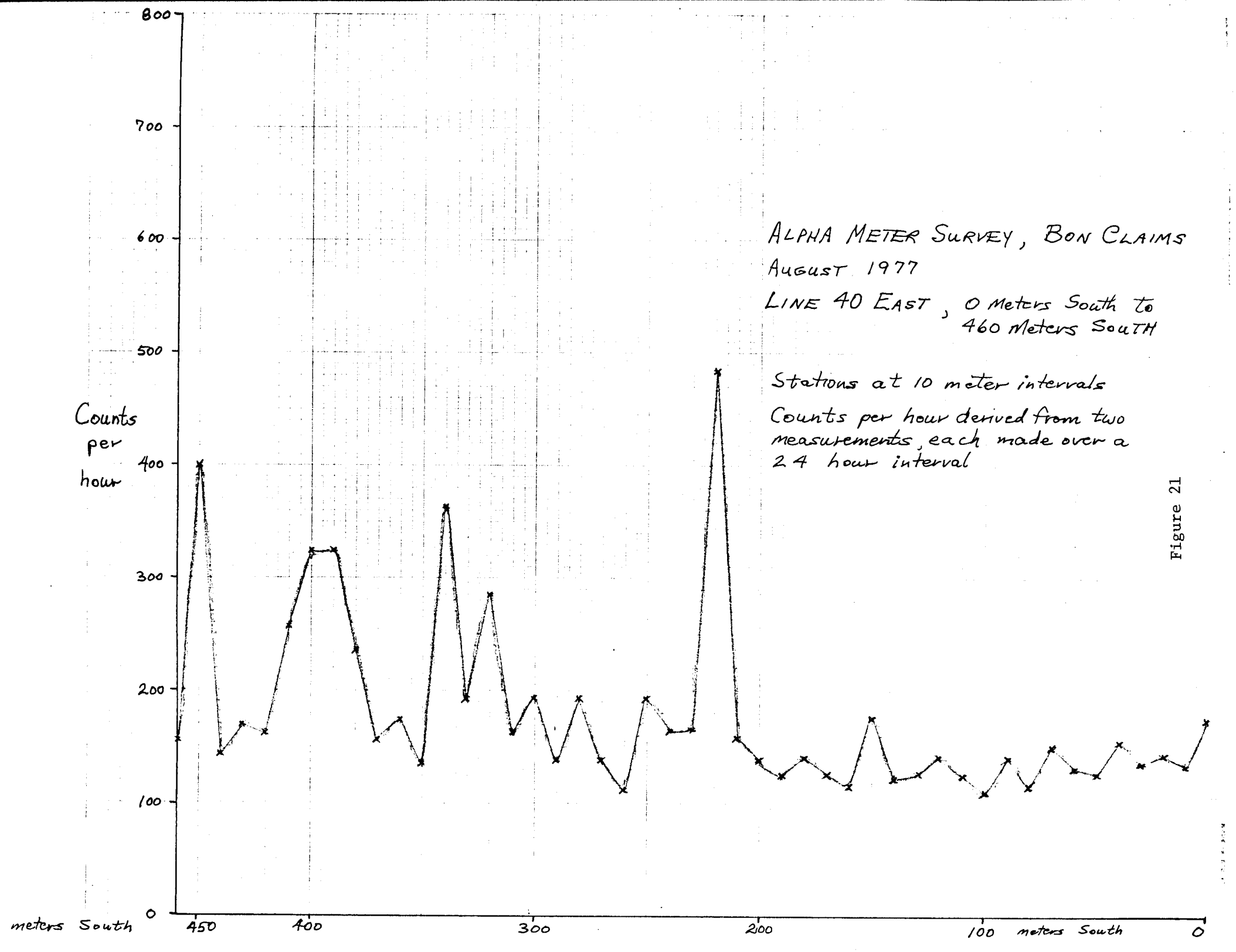

ALPHA METER SURVEY, BON CLAIMS
AUGUST 1977
LINE 40 EAST, 0 Meters South to 460 Meters South
Stations at 10 meter intervals
Counts per hour derived from two measurements, each made over a 24 hour interval
Counts per hour
800
700
600
500
400
300
200
100
0
meters South
450
400
300
200
100
meters South
0

Figure 21

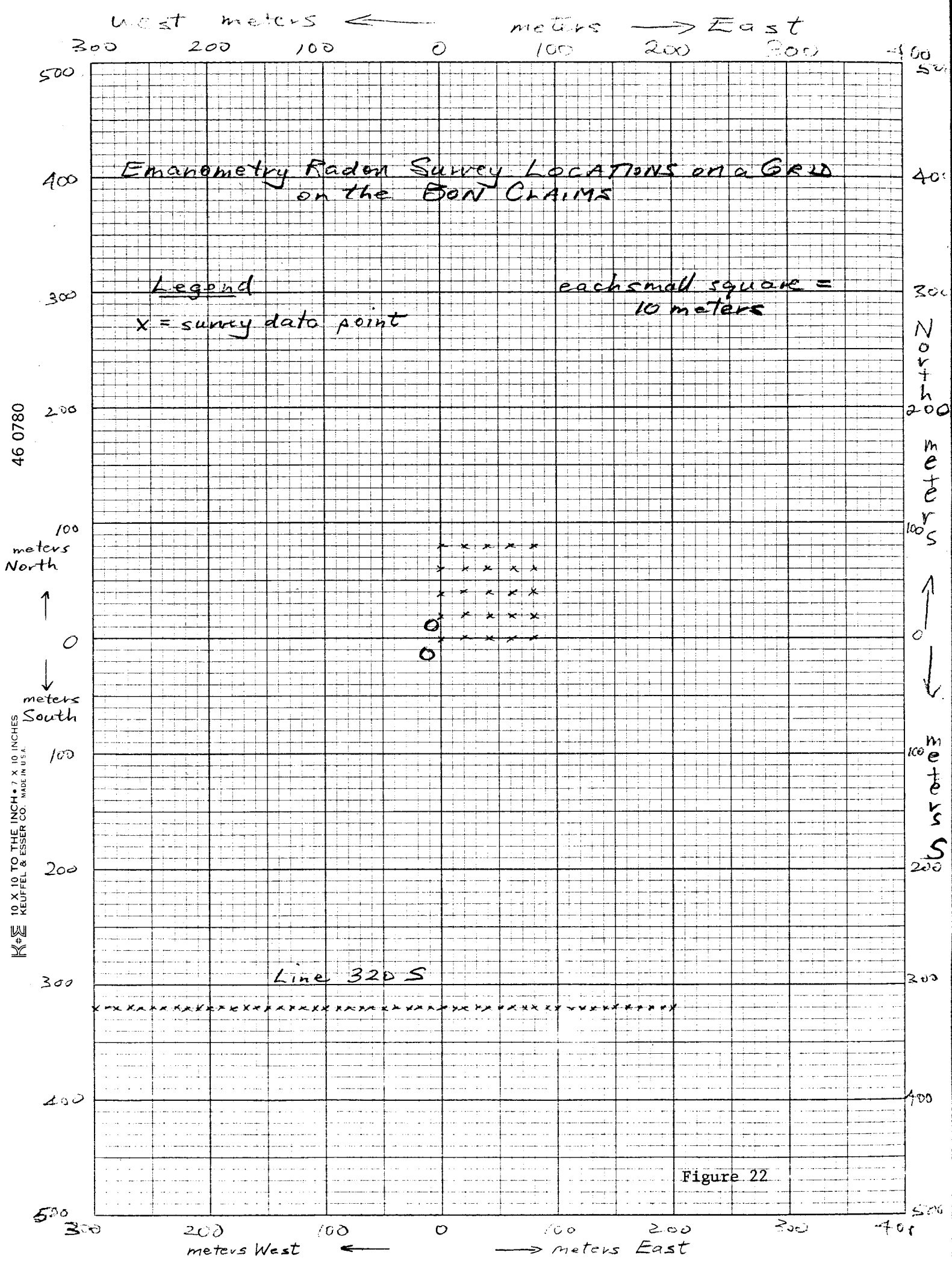

West meters
meters East
300 200 100 0 100 200 300
500
400
300
200
100
0
Emanometry Radon Survey LOCATIONS on a GRID
on the BON CLAIMS
Legend
x = survey data point
each small square = 10 meters
46 0780
meters North
meters South
North meters
South meters
Line 320 S
meters West
meters East

Figure 22

EDA Emanometer (Radon) Survey

Bon Claims, August 1977

stations at 20 meter intervals
counts per minute values derived by averaging 3 measurements taken at consecutive one-minute intervals

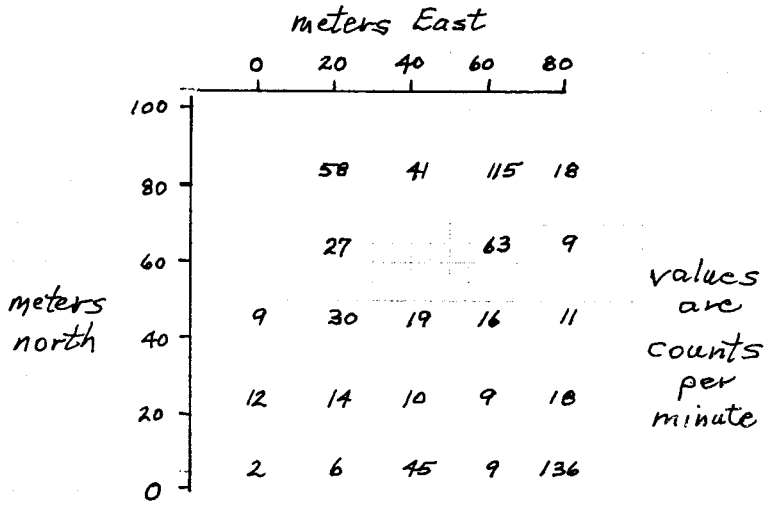
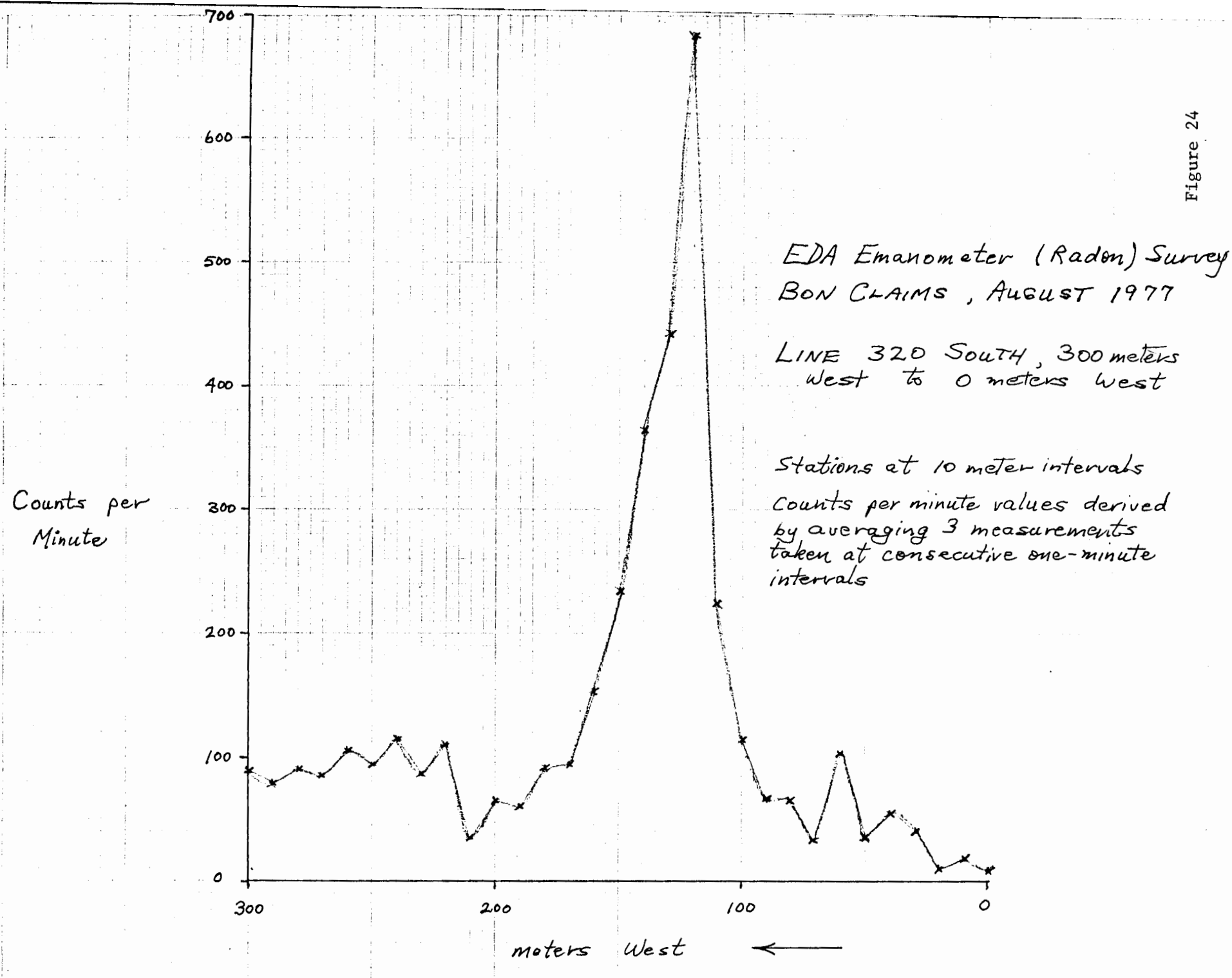


Figure 23

Figure 24


EDA Emanometer (Radon) Survey
BON CLAIMS, AUGUST 1977
LINE 320 SOUTH, 300 meters West to 0 meters West
Stations at 10 meter intervals
Counts per minute values derived by averaging 3 measurements taken at consecutive one-minute intervals
Counts per Minute
700
600
500
400
300
200
100
0
300
200
100
0
meters West

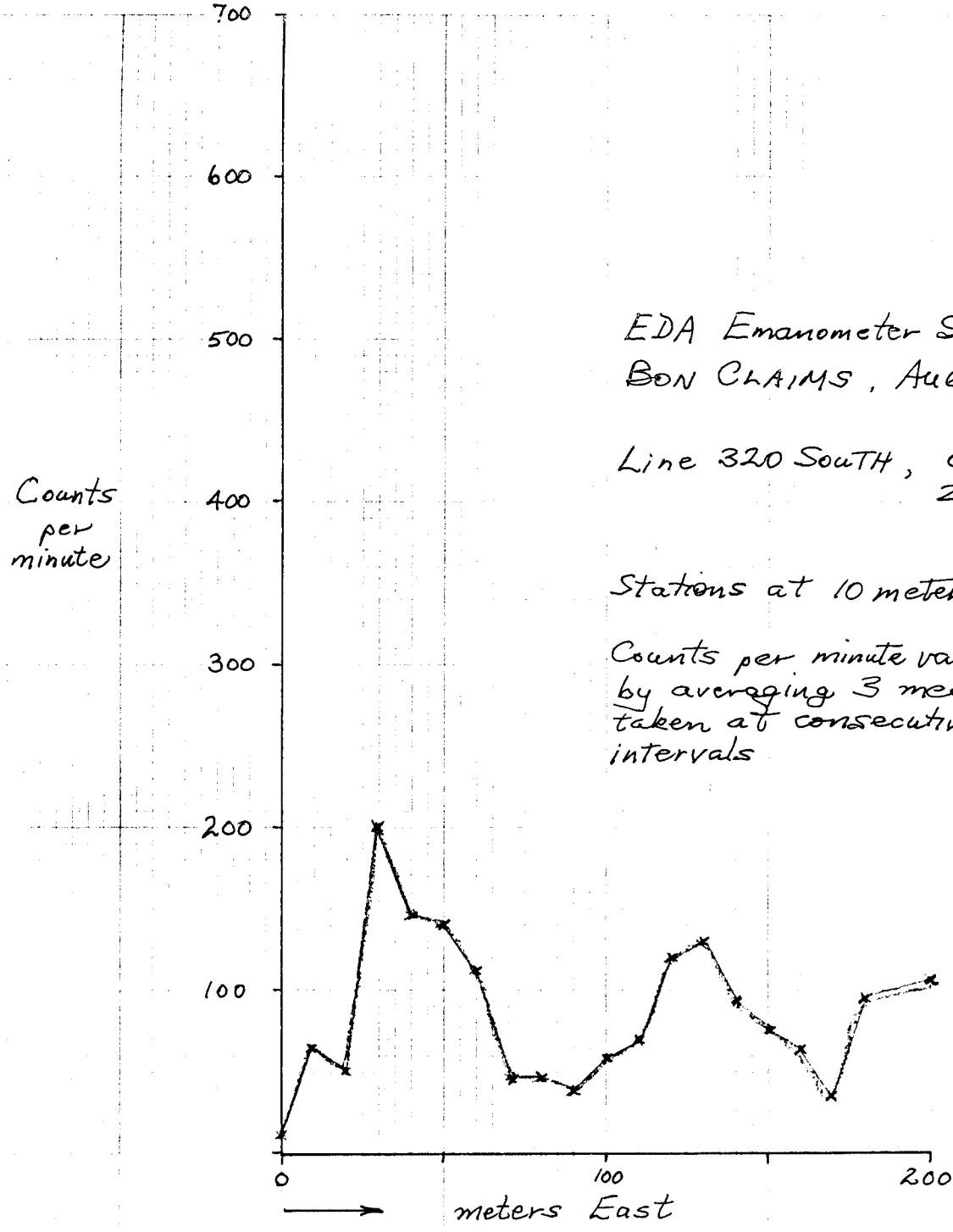

EDA Emanometer Survey (Radon)
BON CLAIMS, AUGUST 1977
Line 320 SOUTH, 0 meters East to 200 meters East
Stations at 10 meter intervals
Counts per minute values derived by averaging 3 measurements taken at consecutive one-minute intervals
Counts per minute
700
600
500
400
300
200
100
0
100
200
meters East

Figure 25

138°00'
68°30'

137°30'
68°30'

MT
TITTON

Ck

1500

1000

1500

2000

△ 2969

APPROXIMATE OUTLINE OF THE BON CLAIMS

2000

68°15'
138°00'

68°15'
137°30'

LEGEND

CENOZOIC

QUATERNARY
15 Modern Mackenzie delta

TERTIARY AND QUATERNARY
14 Mud, silt, sand, coal

MESOZOIC

CRETACEOUS
UPPER CRETACEOUS
13 Shale, sandstone

LOWER CRETACEOUS
12 Shale, sandstone

JURASSIC
11 Shale, sandstone; may include Triassic in Arctic coastal plain

TRIASSIC
UPPER TRIASSIC
10 Shale, limestone

PALAEOZOIC

CARBONIFEROUS AND PERMIAN
9 Limestone, shale, sandstone, conglomerate, chert

DEVONIAN
UPPER DEVONIAN
8 Shale, sandstone, conglomerate; may include Middle Devonian in Peel Plateau

MIDDLE DEVONIAN
7 Limestone, shale

CAMBRIAN, ORDOVICIAN AND SILURIAN
6 Graptolite facies - Road River Formation; includes Lower Devonian in Ogilvie Mountains and Keele Range

5 Limestone, dolomite

CAMBRIAN
UPPER CAMBRIAN
4 Conglomeratic mudstone, wackestone formation

CAMBRIAN
3 Limestone, shale, siltstone, conglomerates, includes Macdougal Group

PRECAMBRIAN AND CAMBRIAN (?)
2 Clastic rocks, includes 2a, Katherine Group; 2b, Tindir Group, and 2c, Neruokpuk Formation

PRECAMBRIAN
1 Pitted quartzite

A Granitic intrusions

B Altered rocks (area of alteration)

Geological contact (assumed)

Mineral occurrence

SCALE 1 : 50,000
1 1/4 inch to 1 mile approximately

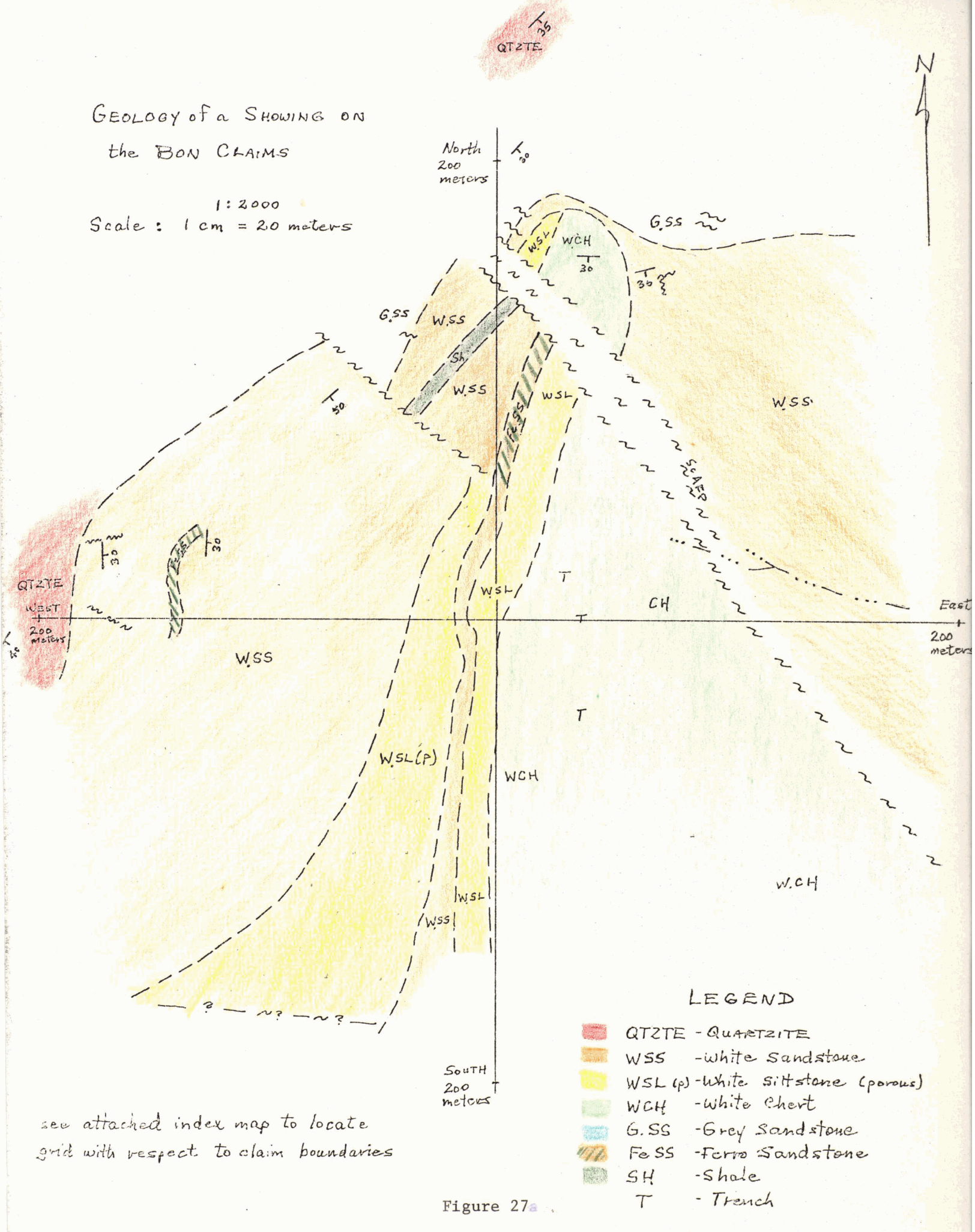
MILES 1 0 1 2 3 MILES
METRES 1000 500 0 1000 2000 3000 4000 METRES
Universal Transverse Mercator Projection

140° 136°
69° 69°
68° 68°
67° 67°
140° 136°
117A
1160
116P

AQUITAINE COMPANY OF CANADA LTD.

GEOCHEMICAL SURVEY
PPM U_3O_8 AT SAMPLE LOCATION

DATE	NTS	FIGURE No
1977	117A/7W	26



see attached index map to locate grid with respect to claim boundaries

Figure 27a

A Detailed Description of Lithologies to Accompany
a Geology Map of a Showing on the BON Claims

W.SS white sandstone, the most common in the mapped area. It is composed predominantly of white to clear quartz grains and a milky white cement which is often rusty, giving the rock a buff colour on weathered surfaces. Contains up to 1% rusty grains.

G.SS grey sandstone, underlies and is similar to W.SS. Composed of clear quartz grains and a small percentage of dark grains. Well cemented and a weathered surface is a homogeneous grey.

QTZTE quartzite, underlies G.SS. Very fine grained to microcrystalline quartz grains and a small percentage of mafic grains. Light to dark grey.

FeSS iron rich sandstone, similar to G.SS. Contains a small percentage of grains, possible magnetite, that cause a weathered surface to appear rusty.

SHALE shale, minor occurrency, hard, black, slatey and fossilferous, resembling coal and grades to a grey aphanitic, siliceous, bedded lithology.

W.SL White siltstone, amorphous, white, resinous mass resembling kaolin. Occasionally rusty weathering. Microcrystalline.

W.CH white chert, grades upward from W.SL to contain an increasing proportion of chert and quartz grains. The uppermost horizons are composed of angular chert fragments of variable size and chert pebble conglomerate in a siliceous, kaolin-like matrix. Notable radioactivity is associated with these highest horizons and more specifically, with rusty weathering zones in these horizons.

Figure 28

Airborne Gamma-Ray Spectrometer Profiles of the BON Claims

Part 1 of 2 parts

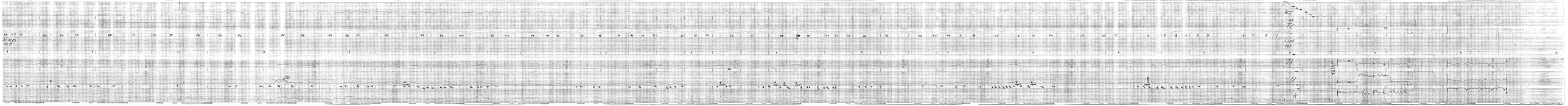
Lines 125
126

Figure 28

Airborne Gamma-Ray Spectrometer Profiles of the BON Claims

Part 2 of 2 parts

Line 127


II
V5
EKG
123

GRID POSITION ON BON CLAIMS