Drilling and Geochemical Report

on the Ben Property

Cariboo Mining Division, British Columbia

N.T.S. 93 B / 9E

Lat: 52 degrees 40 minutes north

Long: 122 degrees 04 minutes west

Claims: Ben 1, Ben 2, Ben 3, Ben 4, Ben 5

Size: 100 units

For Operator: Circle Resources Ltd.

2800 - 666 Burrard St.

Vancouver B.C. V6C 2Z7

Prepared By: R. Fergus Graham
Consulting Mining Geologist
Project Manager

Dated: January 1991

CONTENTS

FIGURES

APPENDICES

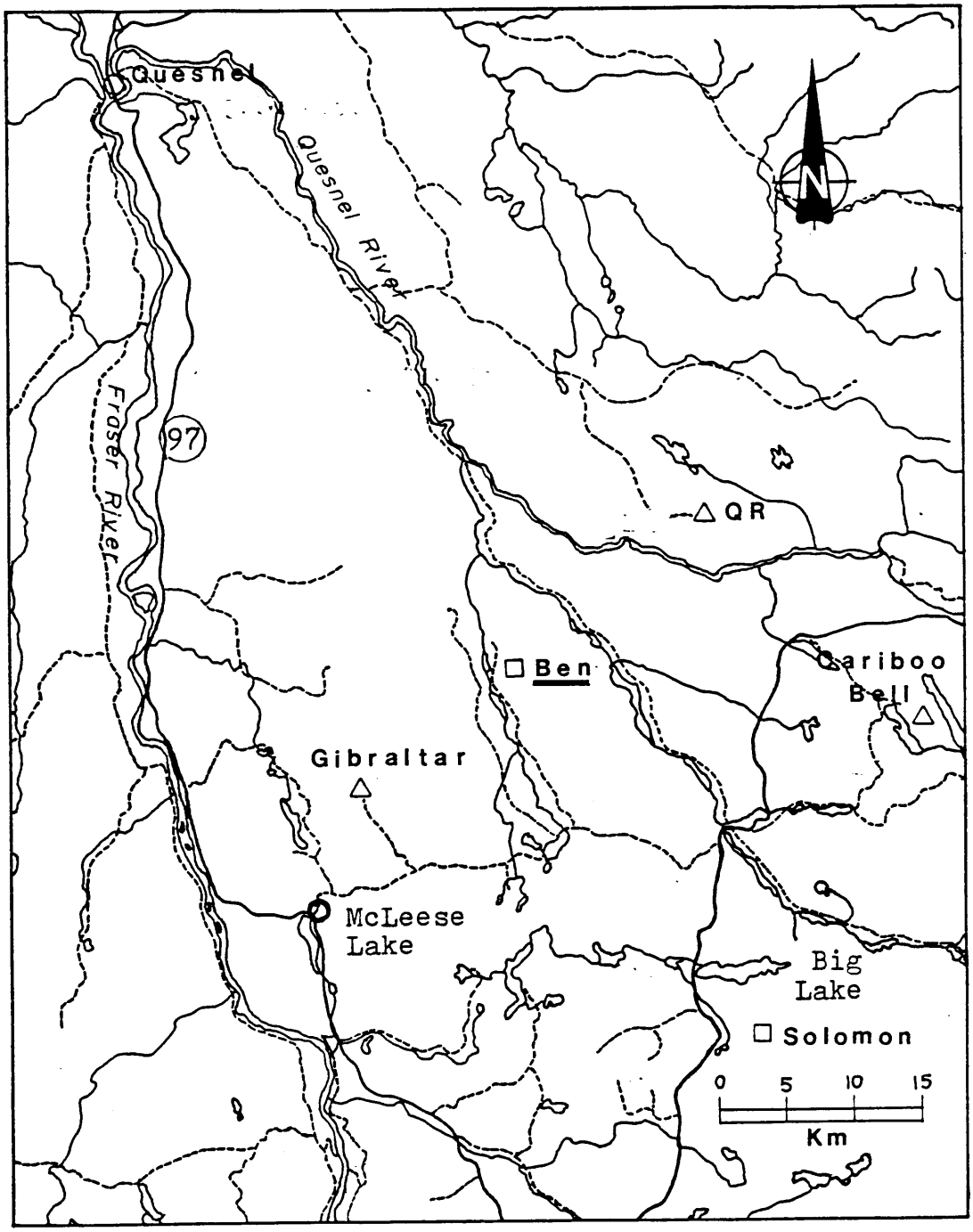


Figure 1. Location map of Ben property.
Scale: 1:500,000.

INTRODUCTION

a) Project Overview

The Ben property, situated in the relatively accessible central interior plateau of B.C., is controlled by Circle Resources Ltd. of Vancouver under agreement with Bernard H. Kahlert.

A gold exploration program was initiated on the property by Circle in 1987 after significant amounts of gold were found in heavy mineral concentrates from sediments of creeks draining the area. Soil geochemical surveys and geological mapping helped to define an area of interest and in 1990, as part of the assessment work described in this report, two core holes were drilled within this area.

b) Property Description

The Ben property consists of 5 mineral claims comprising 100 units (25 sq. km.) situated at 52° 40' north latitude, 122° 04' west longitude in the Cariboo Mining District of British Columbia (see Figure 2).

Ben Claim List (N.T.S 93B/9E)

Claim Name	Record No.	Date of Record	Units
Ben 1	8288	March 5, 1987	20
Ben 2	8289	March 5, 1987	20
Ben 3	8290	March 5, 1987	20
Ben 4	8291	March 5, 1987	20
Ben 5	8292	March 5, 1987	20
Total Units			100

c) Physiography

The Ben Property lies within the Fraser Plateau region of Central British Columbia. The property covers rounded hills east of Ben Lake in the Beedy Creek Valley. Topographic relief is moderate with most of the claims lying between 854 and 1037 meters (2800 and 3400 feet) in elevation.

d) Access

The Ben Property adjoins Ben Lake, 50 kilometers SSE of Quesnel, B.C. (see Figure 1). The nearest

settlement is the village of McLeese Lake (40 kilometers north from Williams Lake on Highway 97). The property is situated about 10 kilometers east of the Gibraltar porphyry copper mine.

Access from McLeese Lake is east towards Likely along 22 kilometers of gravel highway and then north for 13 kilometers on good gravel road following the Beedy Creek Valley. Travel time is roughly 30 minutes from McLeese Lake.

e) Previous Work

Field work in 1987 led to the discovery of a gold-bearing silica-carbonate ledge exposed in North Ben Creek. Specimens from the zone showed several stages of brecciation and silica flooding. High gold (to 210 ppb) was reported from grab samples taken from 10 meters of exposed high silica breccia and in 60 meters of exposed carbonate-mariposite altered rock. Samples also returned high values for other elements commonly associated with epithermal gold deposits: As (to 573 ppm), Hg (to 1945 ppb), Sb (to 249 ppm), and Ni (to 981 ppm). Detailed sampling in 1988 confirmed the above results.

Soil sampling, started in 1987 and completed in 1988, showed anomalies in Ni, Co, As, and Sb. These appeared to have a NNW trend within Ben 3 and parts of Ben 1 and 4. A few anomalous gold values were obtained but these were scattered and did not appear to display any trend. Details of previous work are given in assessment work reports written in 1988 and 1989 (covering the 1987 and 1988 field work respectively).

f) Current Work

In 1990 two vertical core holes were drilled on the Ben 2 claim. The depths of the holes were 102 and 252 ft. (31.1 and 76.8 m) and both were drilled entirely with NQ diamond bits. In addition to the drilling, soil geochemical survey results from all five claims were computer treated to attempt to clarify anomaly trends and element associations.

PROPERTY GEOLOGY

a) Rock Units

Regionally, Ben property lies within the Cache Creek Group of Pennsylvanian Age. Outcrop exposure

is less than 5% and mapping has relied extensively on areas of angular float.

Although exposure is very sparse, it appears that the major rock package is a sequence of interbedded black pyritic shale and chert with minor sections of chloritized basalt. In the eastern part of the property, a resistant weathering dolomite unit acts as a good marker horizon. Based on this unit the overall trend of the sequence is believed to be NNW. Reliable attitudes are rare in the sediment package but those taken indicate a gentle dip to the west.

On the west of the property, outcrops of augite porphyry flow have been included with the sequence but may very well be a section of block faulted volcanics from the base of the Takla Group of Upper Triassic age.

Intrusive rock has been observed only on South Ben Creek. At this location, epidotized medium grained diorite is found in a 40 meter exposure of outcrop and sub-outcrop.

b) Structure

Prominent NNW trending gullies are inferred to be surface expressions of major shear zones sub-parallel to the trend of the Pinchi Fault. However, no clear association has been shown between Au enrichment in soils and these major faults.

Cataclastic fabric in altered shales indicates faulting sub-parallel to bedding. This style of faulting is consistent with thrust faulting recognized regionally in the Quesnel Terrane to the east.

c) Mineralization

At the prospect on North Ben Creek, gold is associated with quartz veining and disseminated mariposite in a shale-carbonate sequence. Mapping and sampling have established that an 80 meter stretch of creek exposure contains anomalous gold with values of up to 200 ppb.

Quartz veining and mariporsite have been found in other areas to the north, northeast and east, but although they do not contain significant gold, they are enriched in antimony (up to 82 ppm) and arsenic

(up to 752 ppm), to the same extent as on North Bear Creek.

THE 1990 DRILLING

a) Logistics

Because of the paucity of outcrop on the property, the decision was taken to drill a core hole to provide some stratigraphic information. By placing the hole near the prospect on North Bear Creek, it was also hoped to obtain a relationship between mineralization and the section.

Drilling was contracted to Phil's Diamond Drilling Ltd. of 108 Mile House, B.C. and was carried out Oct. 23-30, 1990. A Longyear 38 drill was used and all coring was done with NQ size diamond bits. Access to the drill area was by old logging trails and, because drilling was done beside the trail, no timber or bush had to be cut. Only minimal leveling of the ground was required. A water supply was obtained from North Ben Creek and a water recycling system was used to minimize discharge.

Core recovery was close to 100% with the exception of two short intervals, as noted in the drill logs. After splitting and sampling, the remaining core was stored in the yard of Phil's Diamond Drilling in 108 Mile House.

Initially the plan had been to drill a single hole to a depth of 350 ft. The site selected is 350 m southwest of the prospect on North Ben Creek and at approximately 4,860 N, 1,590 E on the property grid (Fig. 3). The elevation is approximately 3,000 ft. (915 m). After drilling to a depth of 102 ft. a channelway containing sand and flowing water was encountered and the hole had to be abandoned. A second site, therefore, had to be selected and a suitable location was found about 120 m southwestward along the logging trail at grid reference 4,760 N, 1,500 E and at an elevation of about 3,080 ft (940 m). This hole was completed to a depth of 252 ft. The first hole was referred to as BN 90-1 and the second BN 90-2.

b) Lithologies

The first bedrock encountered in both holes was a fine to medium grained, strongly chloritized and fractured basalt or andesite with small amounts of

disseminated pyrite. Twelve feet of this lithology was encountered in BN 90-1 and 10 ft. in BN 90-2. It could be interpreted as a volcanic or a minor intrusion. The rest of the section in both holes consists of alternations of black shale and tuffs. The shales are soft, carbonaceous, strongly contorted and/or brecciated, and in places are ground to a fine-grained gouge. Irregularly shaped quartz veins and pods occur commonly in the shales. The tuffs are subordinate to the black shales. They are greenish to buff colored, massive to laminated, and fine-grained. They are less deformed than the shales and less commonly veined. Other rock types include a strongly altered quartz-feldspar porphyry (6 ft.) and a silty limestone (9 ft.) in the lower part of BN 90-1. Lithologies are shown in section (Fig. 4) and are described in drill logs in Appendix 1.

c) Alteration and Mineralization

Local partial silicification of shales occurs where quartz veins are strongly developed, and the secondary mica, mariposite (identified visually only), occurs in and around quartz veins. Both are probably related to formation of the veins. Chloritization and pyrite development in the andesite may represent a different phase of alteration.

All parts of the ores containing quartz veins or other alteration effects were sampled, usually in 10 ft. lengths, and assayed by Bondar Clegg in Vancouver for gold (30 gr sample, fire assay, AA finish). The samples were also analyzed for a 27 element suite by ICP. Results of the 19 sample tests are given in Appendix 2.

Slightly anomalous gold was found in three samples, all quartz veined black shales, from BN 90-2 as follows:

BN 90-2	120-130	67 ppb Au
	135-145	42 ppb Au
	200-210	104 pb Au

Three samples, the first one in the above list and two others, are strongly anomalous in antimony and arsenic, and several are enriched in nickel.

SOIL GEOCHEMISTRY DATA ANALYSIS

Soil sample surveys involving collection and analysis of 934 samples were conducted in 1987 and 1988. Analyses from this work were, at the time, plotted on 1:10,000 scale maps, hand contoured, and interpreted visually. In September 1990, as part of the current assessment work, results were computer treated in an attempt to derive more information from them and to verify previous conclusions.

Elements originally analyzed for were Au, Ag, As, Sb, Cu, Pb, Zn, Co, and Ni. Not all samples were analyzed for Co and Ni. Data were treated by the J-Map program developed for a Macintosh computer by JCR Software Ltd. of Dublin, Ireland. This is an interactive program with many statistical capabilities and can produce single or multiple element plots, variously averaged data plots or gray scale plots. All the single element and multiple element plots done are reproduced in Appendix 3.

Most notable is the arsenic-antimony anomaly in the southern part of Ben 3, 1,000 m east of the North Ben Creek showing. Also apparent are the strong and coincident anomalous NNW trends of nickel and cobalt through Ben 3. These trends extend from the position of the As-Sb anomaly towards the north-northwest. A very weak trend of gold anomalies occurs. The direction is also NNW and it passes through the location of the prospect on North Ben Creek.

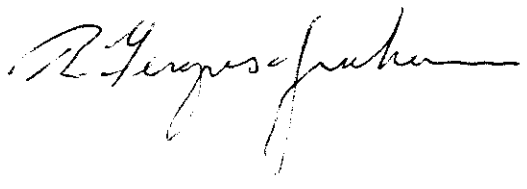
This work has clarified trends and locations of anomalies in some of the elements and has shown the importance of north-northwesterly structural control, possibly reflecting a relationship to the Pinchi fault just east of the property.

CONCLUSIONS

The stratigraphic sequence intersected in the drill holes is probably part of the Cache Creek Group.

Rock types consisting mainly of silicified, quartz-veined shale, and anomalous in gold, in North Ben Creek, are similar to those containing comparable anomalous gold in hole BN 90-2. Although exact stratigraphic equivalence of the two sequences is improbable, anomalous gold may be related to broadly stratabound quartz veining.

Computer treatment of soil geochemical data has clarified locations and trends of anomalies and shown that a north-northwest structural control, parallel to the Pinchi fault just east of the property, may be important.



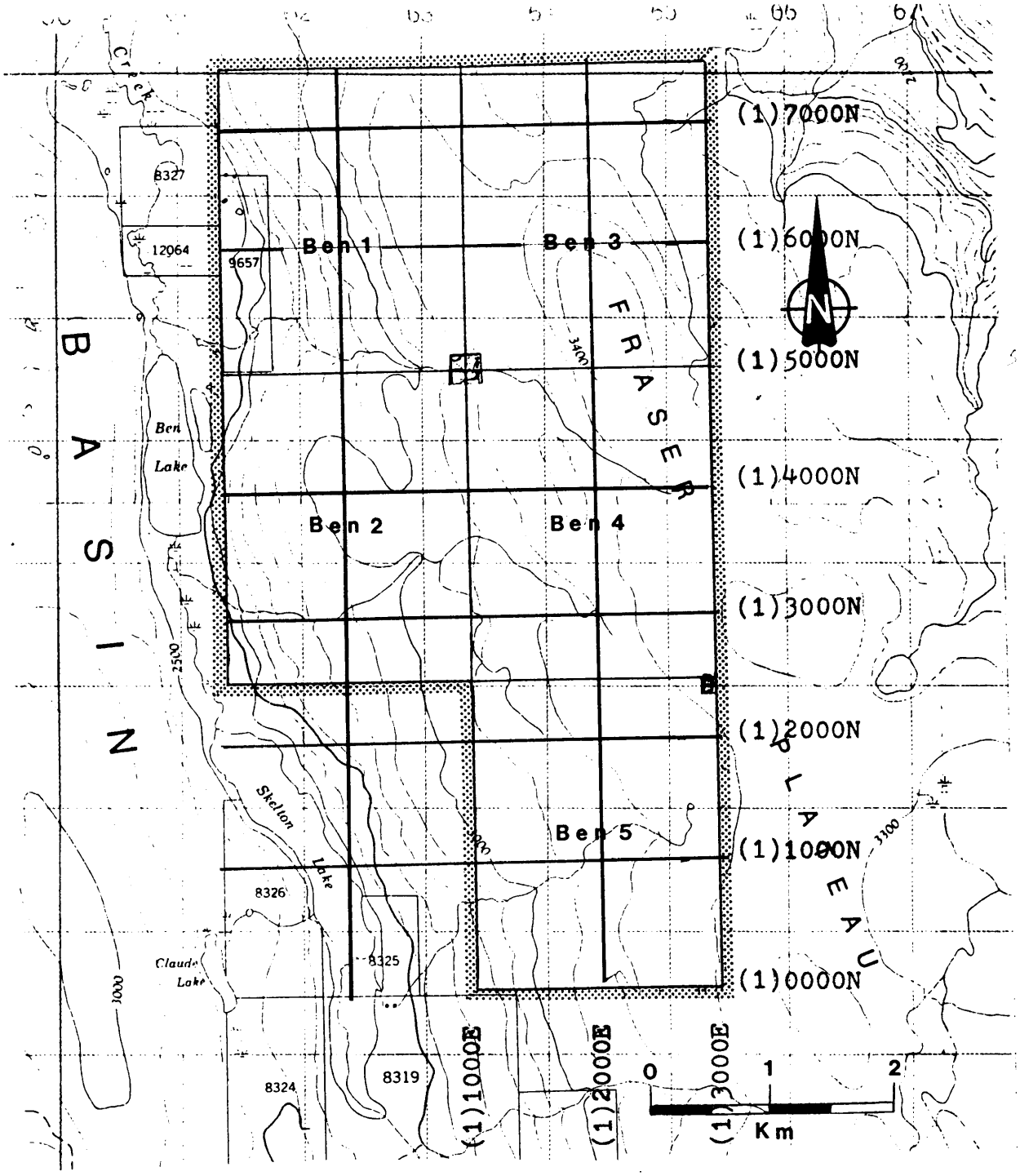


Figure 2: Ben property claim map.
Scale: 1:50,000.
Grid figures in parantheses are used on soil geochemistry maps in Appendix 3.

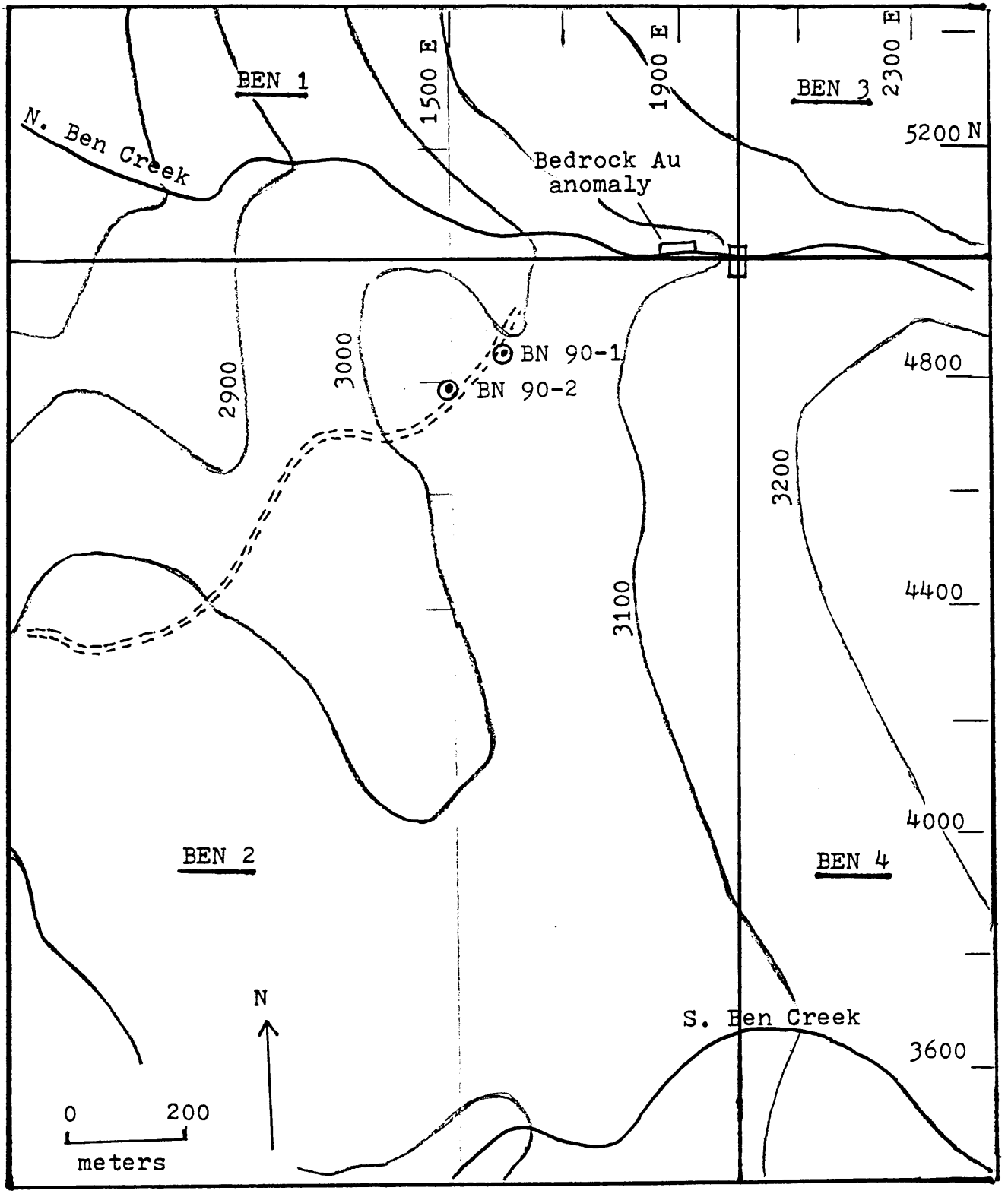


Figure 3. Locations of 1990 drill holes. Contours in feet, grid in meters.

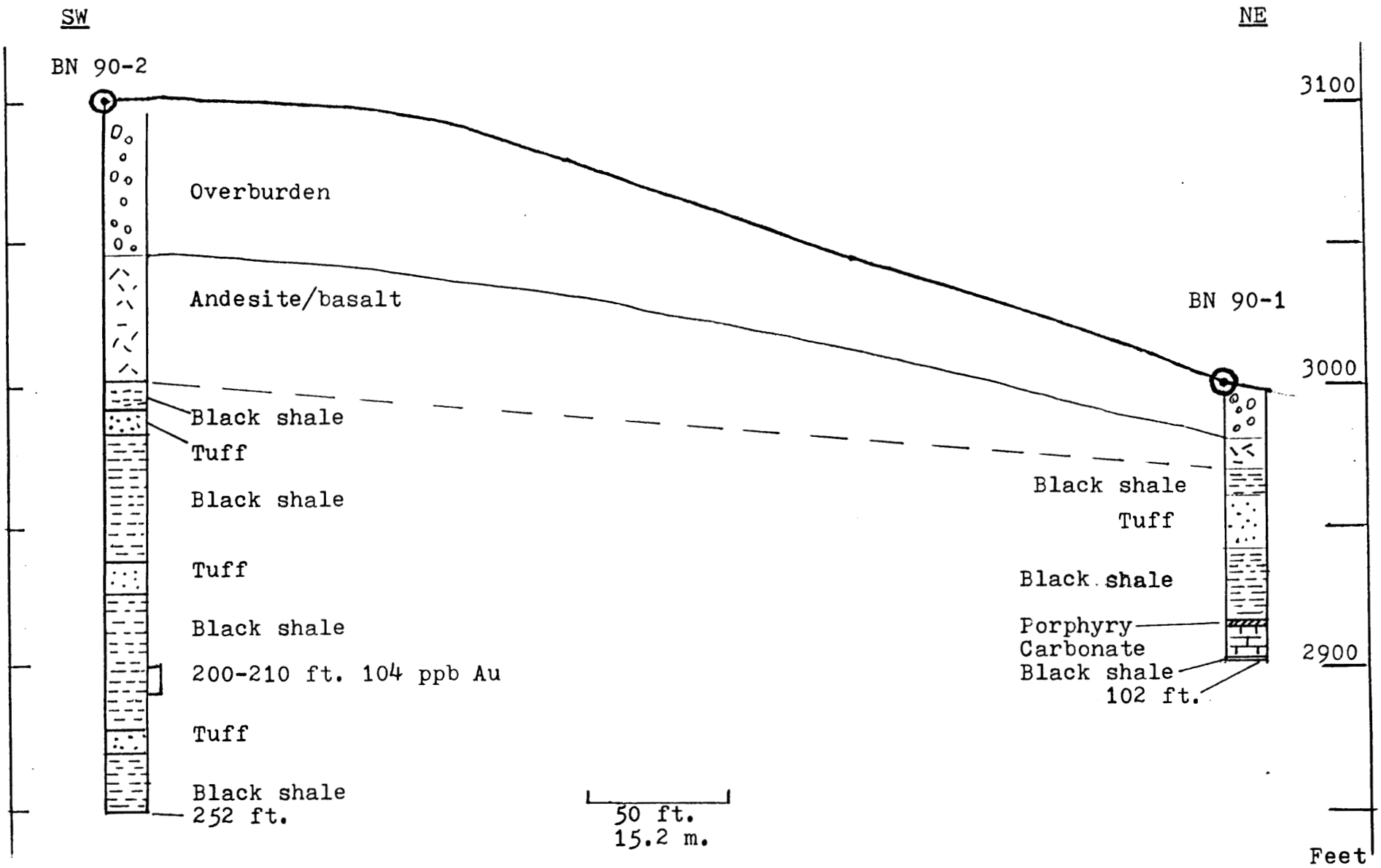


Figure 4. Drill hole section.

APPENDIX 1

DRILL LOGS

DRILL LOGS

Log of drill hole BN 90-1

Location: 450 m WSW of LCP of Ben 1-4. Elev. approx. 3,000 ft.

Property grid coords. 4,840N 1590E

Angle: Vertical Total length: 102 ft. (31.1 m)

Type: Core Core size: NQ

Drilled: Oct. 23-26, 1990

Measurements in feet. 1 ft. = 30.5 cm

0-20 Overburden. Till

20-32 Basalt or andesite. Strongly altered. Greenish, fine-medium grained. Feldspars mostly altered to clay and Fe-Mg minerals chloritized or decomposed. Diss. pyrite up to 3%. This tends to concentrate on fractures. Moderately fractured with a few thin quartz veins. Rusty weathering in top 5 ft.

32-41 Black shale. Soft, carbonaceous. Some lenticles and fragments and fine carbonate (limestone).

41-59 Tuffaceous rock. Greenish, fine grained. Few intervals of dark gray argillaceous seds. V. minor andesite. V. small amount diss. pyrite. Strongly quartz veined in top 0.5 ft.

59-61 Gouge. Composed of dark gray to black clay.

61-75 Black shale. Soft, carbonaceous. Some lenses and laminae of limestone. Numerous thin quartz veins and nodules. Veins mostly parallel to contorted bedding. Abundant mariposite. Considerable brecciation in lowest 2 ft.

75-78 Gouge.

78-85 Shale. Dark gray, Brecciated. Much irregular quartz veining. Part is silicified.

85-91 Porphyry. Strongly altered, pale green. Has quartz and feldspar phenocrysts in places. Many small crystals of epidote and small amount diss. pyrite. Silicified 81-82.

Log of drill hole BN 90-1 (cont.)

91-100 Carbonate. Finely laminated silty limestone, pale gray or creamish fractured. Much calcite and minor quartz veining.

100-102 Black shale. Soft, carbonaceous, contorted. Half consists of irregular quartz and calcite veins and pods.

Hole abandoned at 102 ft. in cavity with sand and flowing water.

Recovery near 100%.

For gold assays and 27 element ICP geochemistry, see Bondar Clegg lab. report following.

Log of drill hole BN 90-2

Location: 120 m SW of hole BN 90-1. Elev. approx. 3,100 ft.

Property grid coords. 4760 N 1500 E

Angle: Vertical Total length: 252 ft. (76.8 m)

Type: Core Core size: NQ

Drilled: Oct. 31 - Nov. 2, 1990

Measurements in feet.

0-55 Overburden. Till

55-65 Basalt or andesite. Strongly altered. Greenish, fine-medium grained. Feldspars altered to clay and Fe-Mg minerals chloritized. Minor quartz veining. Rusty weathering near top.

65-67 Gouge. Gradational contact with above.

67-100 Andesite. Contains minor shale lenses and laminated chloritic tuff. Slight schistose structure.
88-90: Laminated (tuff?) with much mariposite, and partial argillic alterations.
72-74: Green chloritic gouge.
Brecciation and fracturing of two or more phases, common. Minor quartz veining.

100-116 Black shale. Soft and carbonaceous. Contorted with irregular quartz veins.

Log of drill hole BN 90-2 (cont.)

116-122 Tuff. Greenish. Minor interbeds of black shale. V. minor quartz veining and silicifications.

122-145 Black shale. Soft, carbonaceous. Highly contorted with minor irregular quartz veins and lenses, more common 122-130 and 135-145. Silicified in part 126-130.

145-152 Gouge, sand. Almost no recovery.

152-162 Black shale: Soft, carbonaceous. Quartz veined. 50% recovery.

162-174 Tuff. Greenish and buff. Contains minor interbeds of shale. Partly brecciated in at least two phases. Minor quartz veining.

174-224 Black shale.
184-192 Mostly gouge
192-196 Soft, carbonaceous. Unveined.
196-204 Mostly gouge
204-210 Shale with moderate quartz veining. Greenish tuff at 209.
210-217 Shale
217-219 Tuff-shale, much mariposite.
219-22 Shale with moderate quartz veining. Recovery 60% 192-202.

224-238 Tuff, black shale. Two types interbedded but tuff dominant. Locally silicified. Moderate quartz veining 232-236.

238-252 Black shale. Soft, carbonaceous. Minor quartz veining. Locally silicified.

Mariposite occurs in small amounts throughout core.

Recovery near 100% except where noted.

For gold assays and 27 element ICP geochemistry, see Bondar Clegg lab. report following.

APPENDIX 2

DRILL SAMPLE ASSAYS AND GEOCHEMICAL RESULTS

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BONDAR-CLEGG

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V90-02599.0

DATE PRINTED: 16-NOV-90
PROJECT: QUESNEL PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM
D2 BN90-1 20-30		<5	0.6	30	<2	81	<1	5	26	<1	<5	6
D2 BN90-1 40-50		<5	0.3	79	<2	37	<1	292	33	<1	<5	6
D2 BN90-1 60-70		15	0.3	60	3	65	3	474	37	<1	<5	221
D2 BN90-1 80-85		6	0.4	32	4	39	<1	646	37	<1	<5	19
D2 BN90-1 85-90		<5	0.5	54	3	54	<1	171	34	<1	<5	16
D2 BN90-1 90-100		<5	0.4	39	5	73	<1	133	29	<1	<5	37
D2 BN90-1 100-102		8	0.5	63	3	94	<1	195	39	<1	<5	134
D2 BN90-2 60-70		<5	0.3	62	4	22	<1	813	50	<1	<5	10
D2 BN90-2 80-90		<5	0.6	56	<2	52	<1	42	31	<1	<5	10
D2 BN90-2 90-92		<5	0.4	13	<2	16	<1	544	50	<1	<5	<5
D2 BN90-2 100-110		<5	0.4	66	8	83	3	254	26	<1	<5	20
D2 BN90-2 120-130		67	0.4	49	2	110	9	626	40	3	<5	421
D2 BN90-2 135-145		42	0.6	50	6	80	5	34	7	<1	<5	25
D2 BN90-2 152-162		22	0.6	75	7	66	3	392	26	<1	<5	67
D2 BN90-2 162-172		<5	0.5	88	2	95	<1	161	34	<1	<5	11
D2 BN90-2 172-182		<5	0.5	68	4	92	3	163	28	<1	<5	10
D2 BN90-2 200-210		104	0.5	61	5	135	13	156	16	<1	<5	43
D2 BN90-2 220-230		<5	0.3	33	4	37	1	950	52	<1	<5	44
D2 BN90-2 230-240		<5	0.4	56	2	65	2	798	50	<1	<5	31

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SAMPLE NUMBER	ELEMENT UNITS	Sb PPM	Fe PCT	Mn PCT	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT
D2 BN90-1 20-30		<5	9.32	0.10	<10	223	10	298	<20	<10	<1	4.47
D2 BN90-1 40-50		<5	5.31	0.07	<10	244	408	97	<20	<10	<1	3.38
D2 BN90-1 60-70		84	5.75	0.08	<10	362	194	67	<20	<10	3	1.22
D2 BN90-1 80-85		7	4.54	0.06	<10	592	236	46	<20	<10	6	0.76
D2 BN90-1 85-90		13	6.56	0.11	<10	490	179	87	<20	<10	26	2.26
D2 BN90-1 90-100		23	6.44	0.10	<10	520	93	78	<20	<10	10	1.13
D2 BN90-1 100-102		59	8.52	0.10	<10	164	68	69	<20	<10	2	0.76
D2 BN90-2 60-70		7	3.14	0.04	<10	469	729	47	<20	<10	<1	2.53
D2 BN90-2 80-90		<5	8.73	0.09	<10	958	59	234	<20	<10	<1	4.58
D2 BN90-2 90-92		<5	4.86	0.09	<10	220	318	64	<20	<10	<1	1.08
D2 BN90-2 100-110		14	5.26	0.08	<10	230	187	68	<20	<10	6	1.29
D2 BN90-2 120-130		488	4.73	0.07	<10	194	216	41	<20	<10	5	0.66
D2 BN90-2 135-145		24	2.36	0.05	<10	134	127	21	<20	<10	4	0.54
D2 BN90-2 152-162		58	4.13	0.05	<10	87	308	52	<20	<10	6	1.41
D2 BN90-2 162-172		<5	8.69	0.10	<10	379	158	149	<20	<10	8	2.55
D2 BN90-2 172-182		12	6.78	0.08	<10	385	95	84	<20	<10	6	1.34
D2 BN90-2 200-210		31	3.36	0.05	<10	83	138	34	<20	<10	4	0.90
D2 BN90-2 220-230		58	5.52	0.07	<10	170	316	40	<20	<10	2	0.45
D2 BN90-2 230-240		38	6.48	0.09	<10	304	414	101	<20	<10	6	2.85
D2 BNR90-1		<5	0.64	0.14	<10	92	158	10	<20	<10	7	0.22
X2 SL90-1 0-144		<5	4.99	0.06	<10	200	78	103	<20	<10	8	2.46

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Geochemical Lab Report

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DATE PRINTED: 16-NOV-90
PROJECT: QUESNEL PAGE 1C

SAMPLE NUMBER	ELEMENT UNITS	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM
D2 BN90-1 20-30		2.43	5.87	<0.05	<0.05	57	11
D2 BN90-1 40-50		6.78	6.29	<0.05	0.06	88	7
D2 BN90-1 60-70		9.44	5.53	<0.05	0.13	244	8
D2 BN90-1 80-85		9.38	4.97	<0.05	0.07	200	5
D2 BN90-1 85-90		7.54	8.24	<0.05	0.23	251	10
D2 BN90-1 90-100		5.39	7.74	<0.05	0.14	294	10
D2 BN90-1 100-102		5.39	7.31	<0.05	0.20	238	13
D2 BN90-2 60-70		4.82	4.27	<0.05	0.06	61	3
D2 BN90-2 80-90		4.35	4.11	<0.05	<0.05	87	5
D2 BN90-2 90-92		6.30	>10.00	<0.05	<0.05	171	6
D2 BN90-2 100-110		5.00	3.08	<0.05	0.28	112	7
D2 BN90-2 120-130		>10.00	4.17	<0.05	0.23	199	7
D2 BN90-2 135-145		1.80	3.63	<0.05	0.23	126	8
D2 BN90-2 152-162		6.73	2.53	<0.05	0.19	142	7
D2 BN90-2 162-172		5.62	4.60	<0.05	0.11	133	15
D2 BN90-2 172-182		4.81	5.77	<0.05	0.22	150	13
D2 BN90-2 200-210		3.11	3.56	<0.05	0.24	117	9
D2 BN90-2 220-230		>10.00	3.32	<0.05	0.09	212	4
D2 BN90-2 230-240		>10.00	2.65	<0.05	<0.05	158	8
D2 BNR90-1		0.34	>10.00	<0.05	0.07	100	6
X2 SI 90-1 0-144		1.73	4.10	0.11	0.21	138	12

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

Geochemical Lab Report

REPORT: V90-02599.0 (COMPLETE)

REFERENCE INFO:

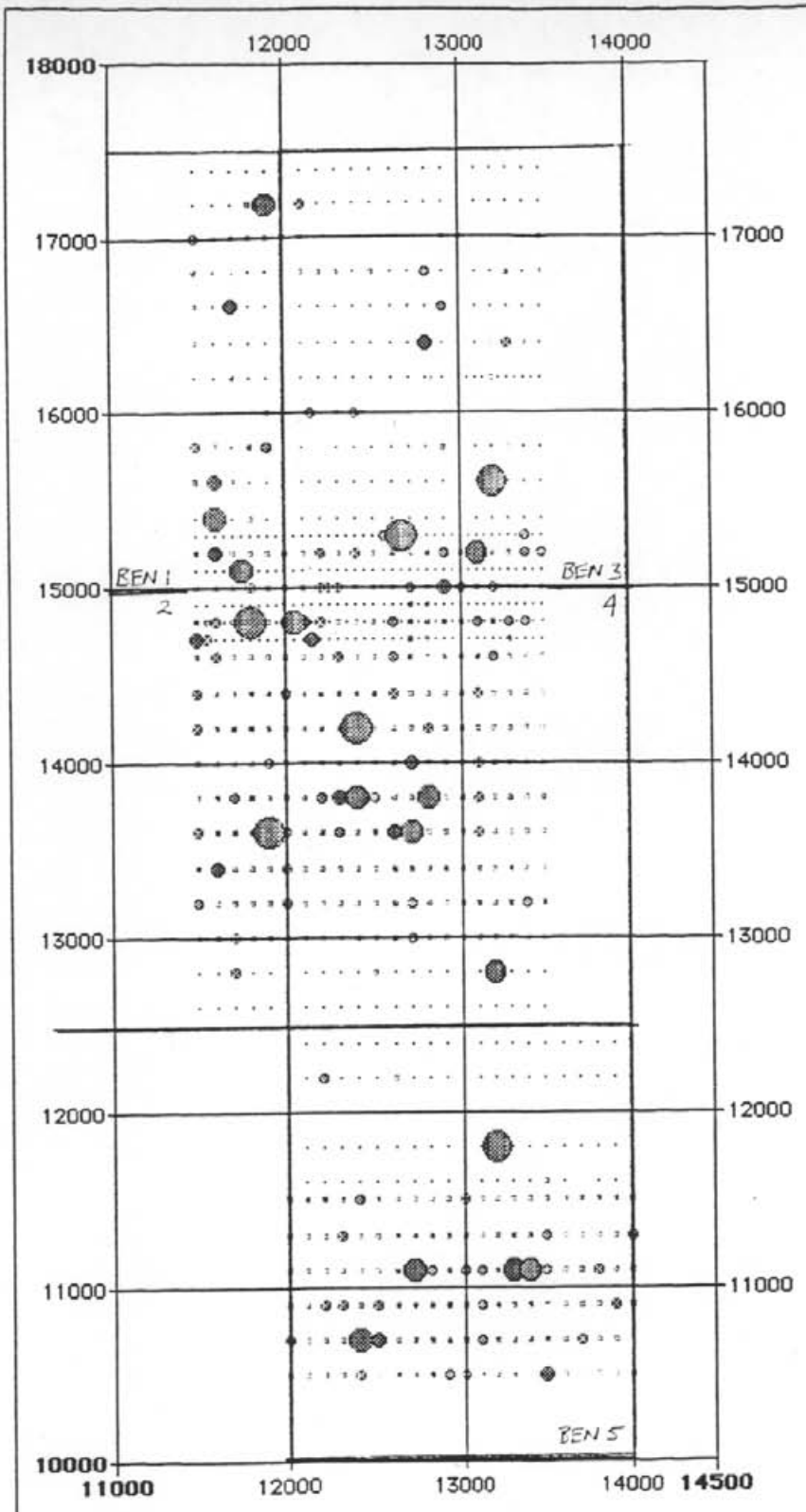
CLIENT: MS. KAY McMAHON
PROJECT: QUESNEL

SUBMITTED BY: F. GRAHAM
DATE PRINTED: 16-NOV-90

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au 30g	Gold 30 grams	21	5 PPB	Fire-Assay	Fire Assay AA
2	Ag	Silver	21	0.2 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
3	Cu	Copper	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
4	Pb	Lead	21	2 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
5	Zn	Zinc	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
6	Mo	Molybdenum	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
7	Ni	Nickel	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
8	Co	Cobalt	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
9	Cd	Cadmium	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
10	Bi	Bismuth	21	5 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
11	As	Arsenic	21	5 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
12	Sb	Antimony	21	5 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
13	Fe	Iron	21	0.01 PCT	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
14	Mn	Manganese	21	0.01 PCT	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
15	Te	Tellurium	21	10 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
16	Ba	Barium	21	5 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
17	Cr	Chromium	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
18	V	Vanadium	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
19	Sn	Tin	21	20 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
20	W	Tungsten	21	10 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
21	La	Lanthanum	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
22	Al	Aluminum	21	0.02 PCT	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
23	Mg	Magnesium	21	0.05 PCT	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
24	Ca	Calcium	21	0.05 PCT	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
25	Na	Sodium	21	0.05 PCT	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
26	K	Potassium	21	0.05 PCT	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
27	Sr	Strontium	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma
28	Y	Yttrium	21	1 PPM	HNO3-HCl Hot Extr.	Ind. Coupled Plasma

APPENDIX 3

COMPUTER PLOTS OF SOIL GEOCHEMICAL DATA



JCR Software Ltd

Ben Property : B.C.

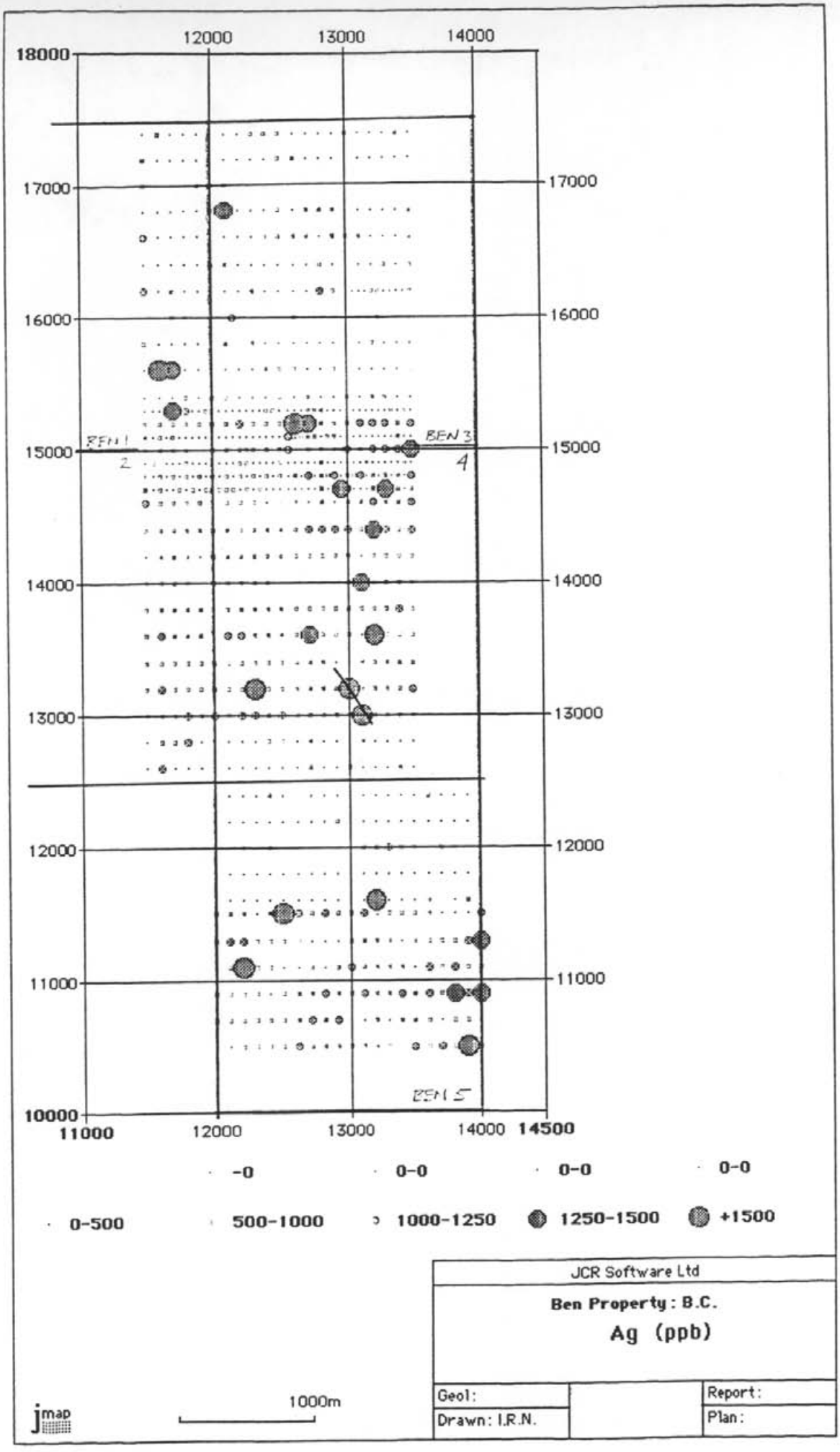
Au (ppb)

All Samples

jmap

1000m

Geol:	Report:
Drawn: I.R.N.	Plan: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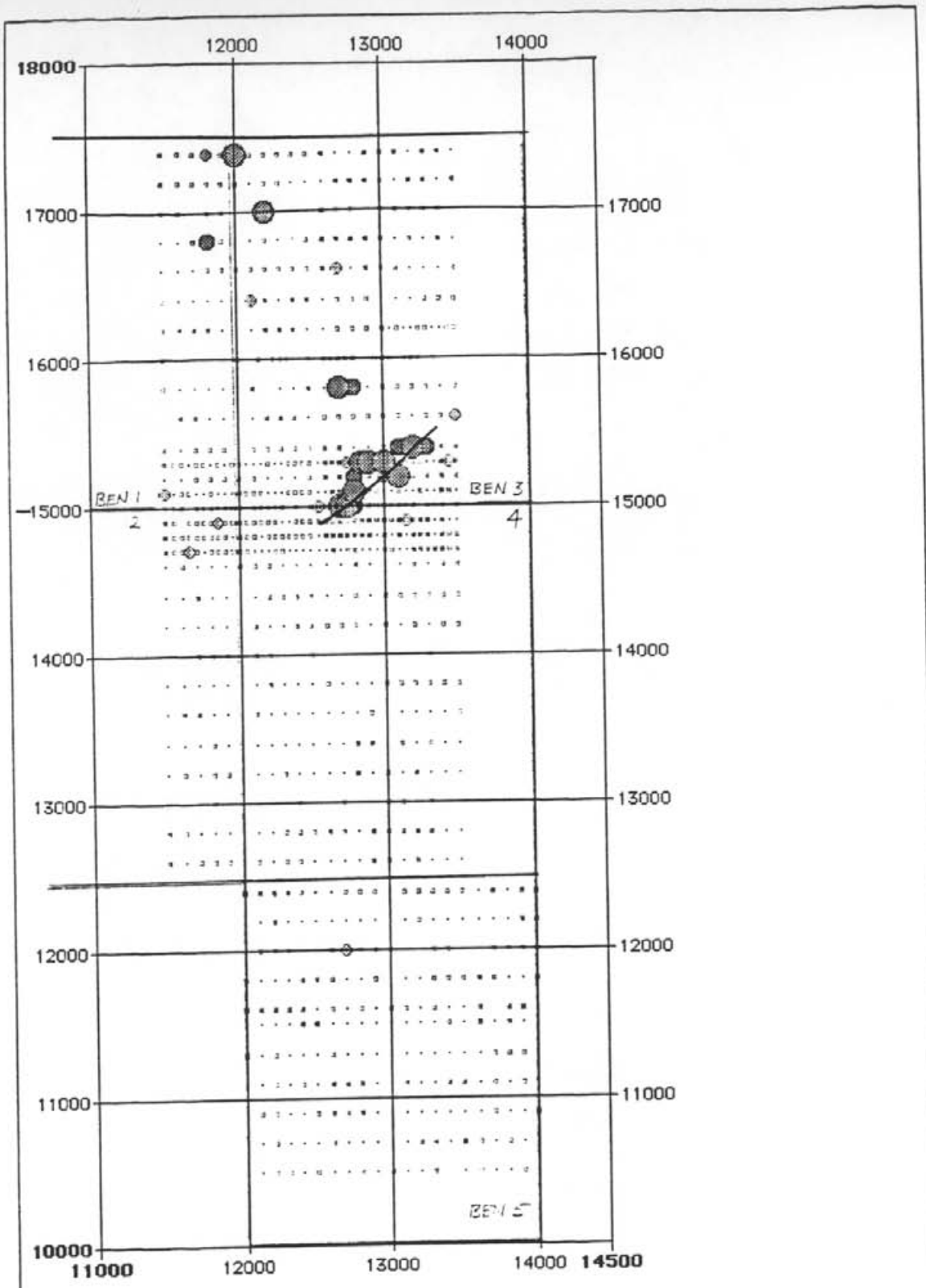
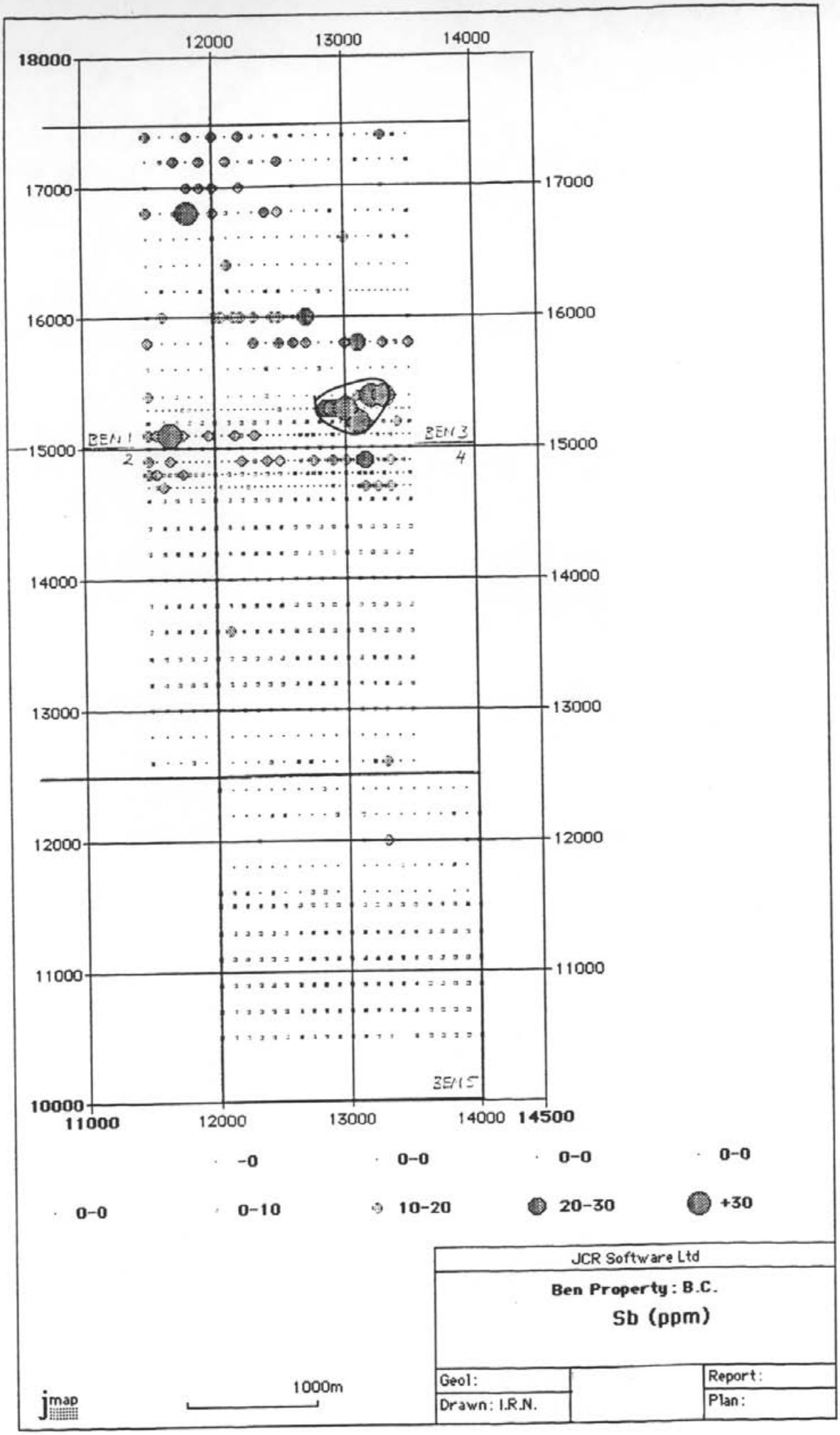
13000
14000
18000
17000
16000
15000
14000
13000
12000
11000
10000
BEN 1
2
BEN 3
4
BEN 5
11000
12000
13000
14000
14500
-0
0-0
0-0
0-0
0-500
500-1000
1000-1250
1250-1500
+1500
JCR Software Ltd
Ben Property : B.C.
Ag (ppb)
1000m
jmap
Geol:
Drawn: I.R.N.
Report:
Plan:


12000
13000
14000
18000
17000
16000
15000
14000
13000
12000
11000
10000
11000
12000
13000
14000
14500
BEN 1
BEN 3
2
4
BEN 5
-0
0-0
0-0
0-0
0-10
10-50
50-75
75-100
+100
1000m
jmap
JCR Software Ltd
Ben Property : B.C.
As (ppm)
Geol:
Drawn: I.R.N.
Report:
Plan:


12000
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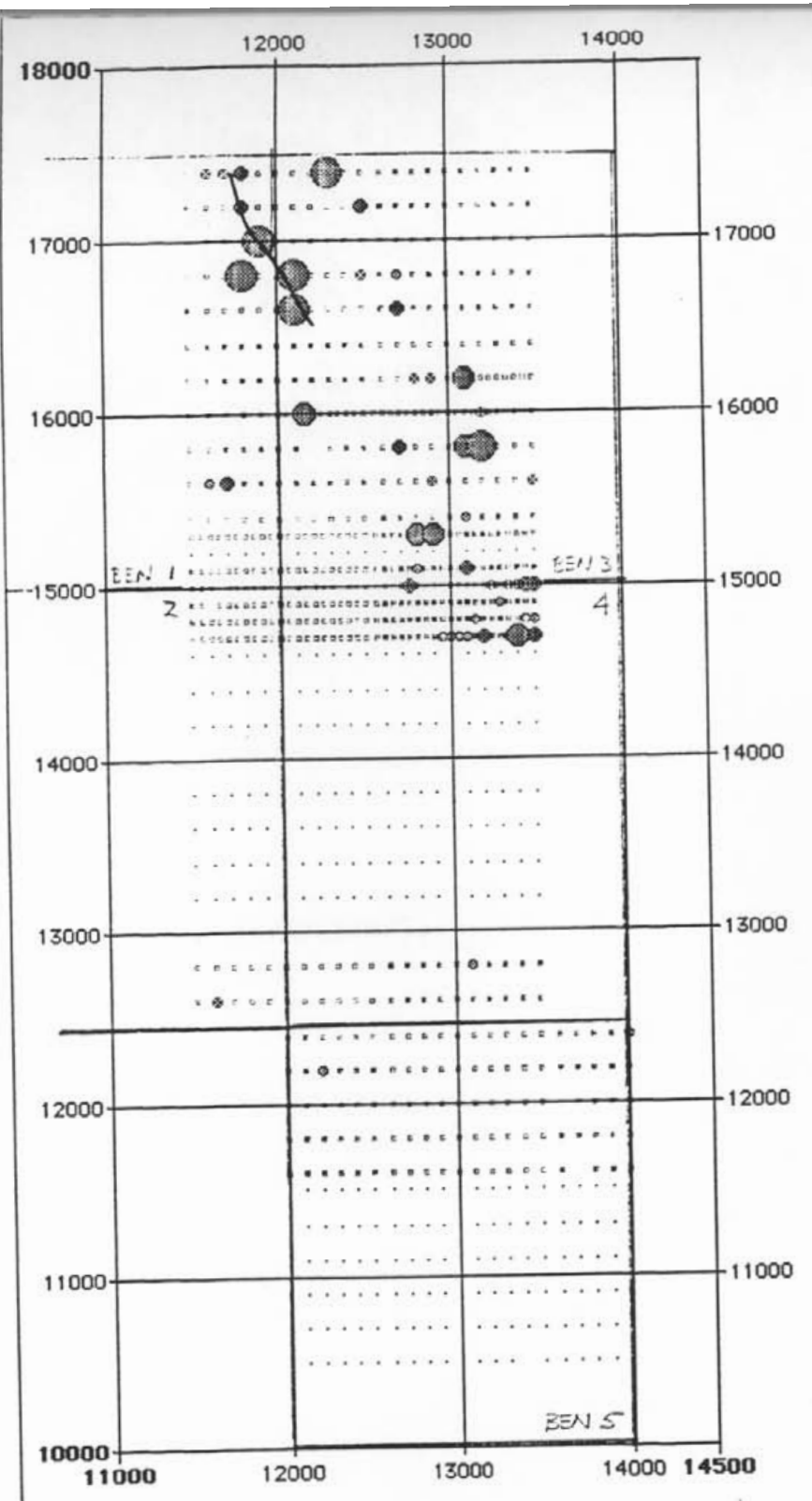
15000
14000
13000
12000
11000
10000
11000
12000
13000
14000
14500
BEN 1
2
BEN 3
4
BEN 5
-0
0-0
0-0
0-0
0-0
0-10
10-20
20-30
+30
JCR Software Ltd
Ben Property: B.C.
Sb (ppm)
Geol:
Drawn: I.R.N.
Report:
Plan:
1000m
jmap



JCR Software Ltd

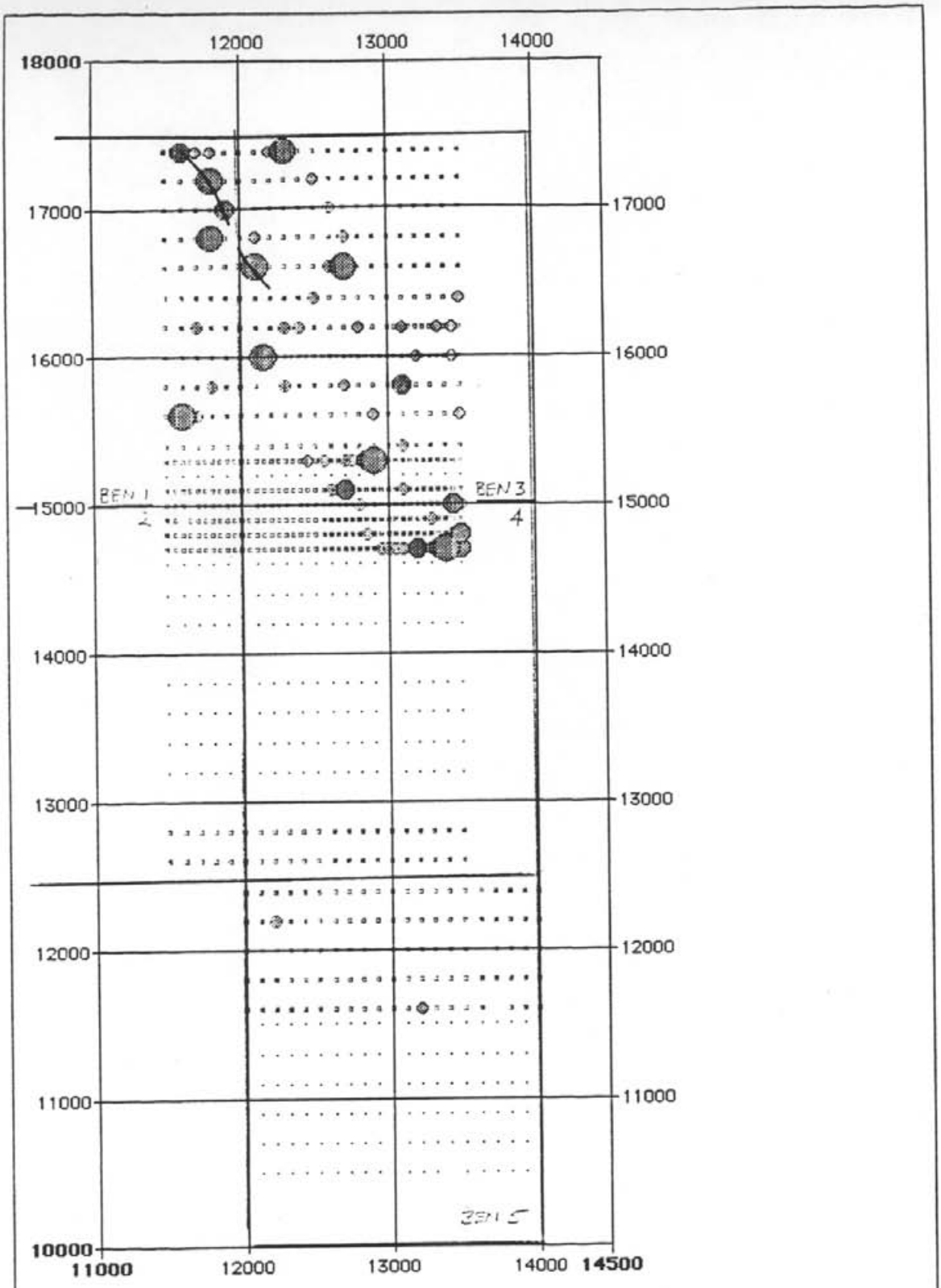
Ben Property : B.C.

Ni (ppm)

jmap

1000m

Geol:	Report:
Drawn: I.R.N.	Plan:



JCR Software Ltd

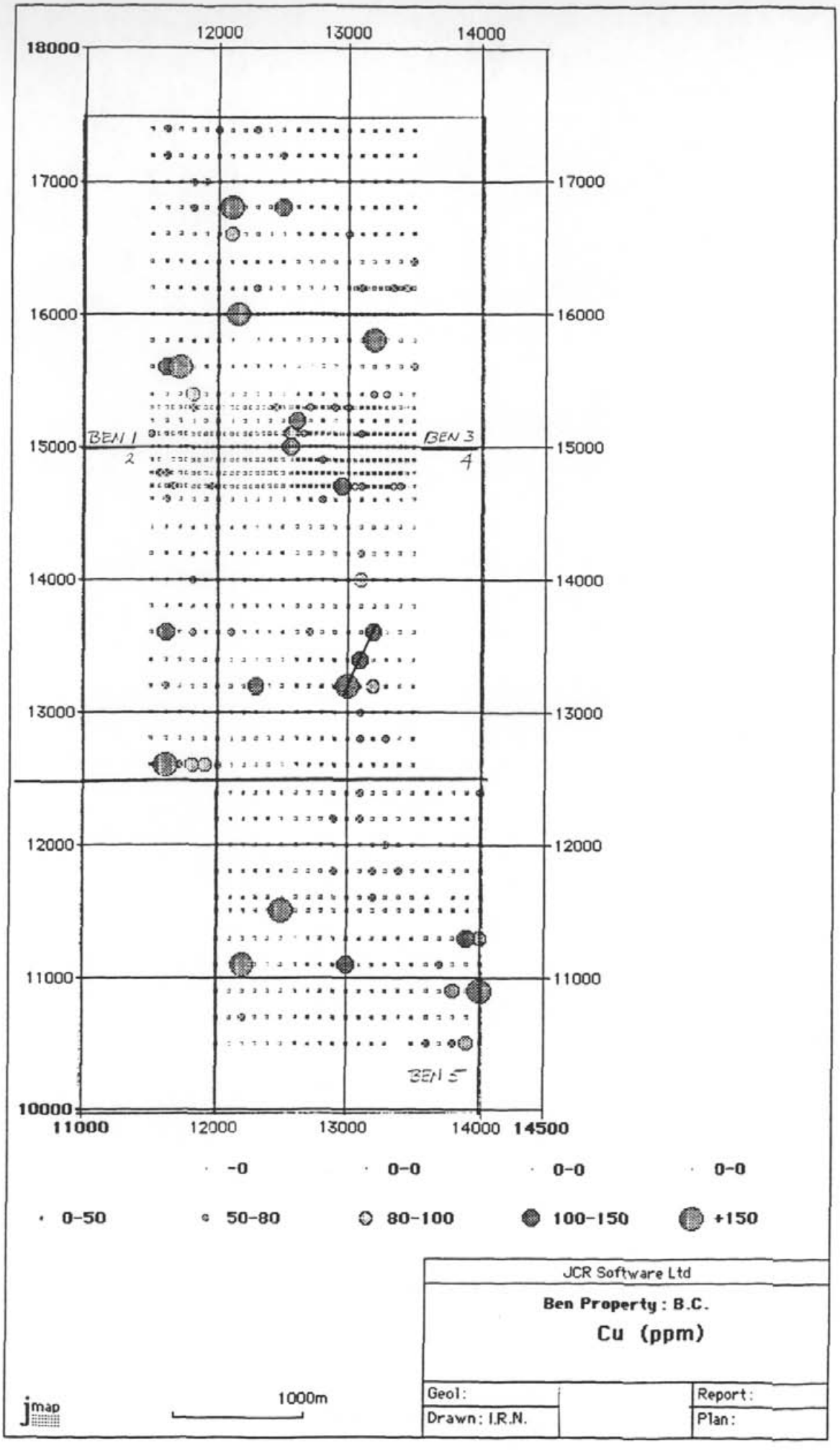
Ben Property : B.C.

Co (ppm)

jmap

1000m

Geol:		Report:
Drawn: I.R.N.		Plan:


12000
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13000
12000
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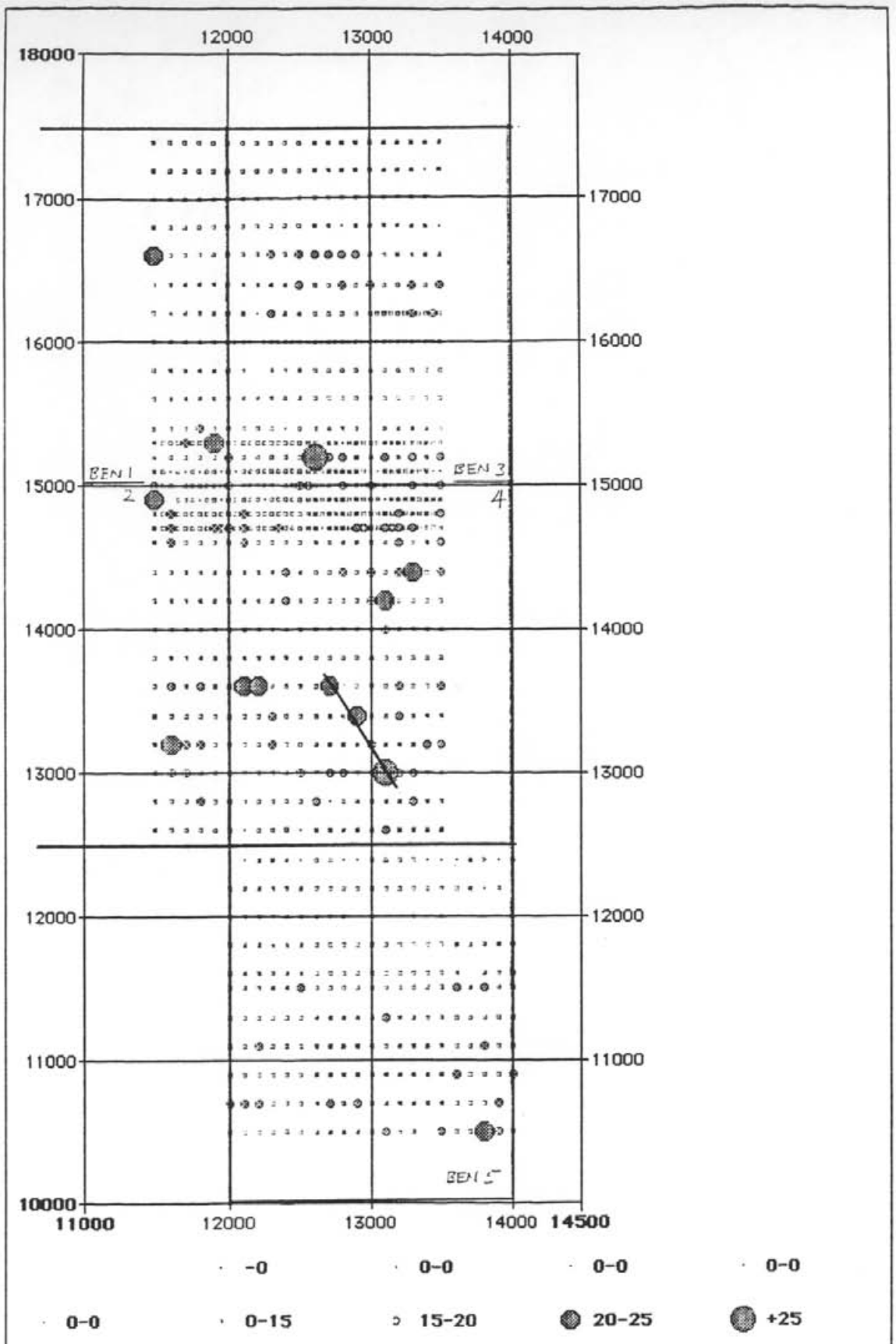
10000
BEN 1
2
BEN 3
4
BEN 5
11000
12000
13000
14000
14500
-0
0-0
0-0
0-0
0-50
50-80
80-100
100-150
+150
JCR Software Ltd
Ben Property : B.C.
Cu (ppm)
Geol:
Drawn: I.R.N.
Report:
Plan:
1000m
jmap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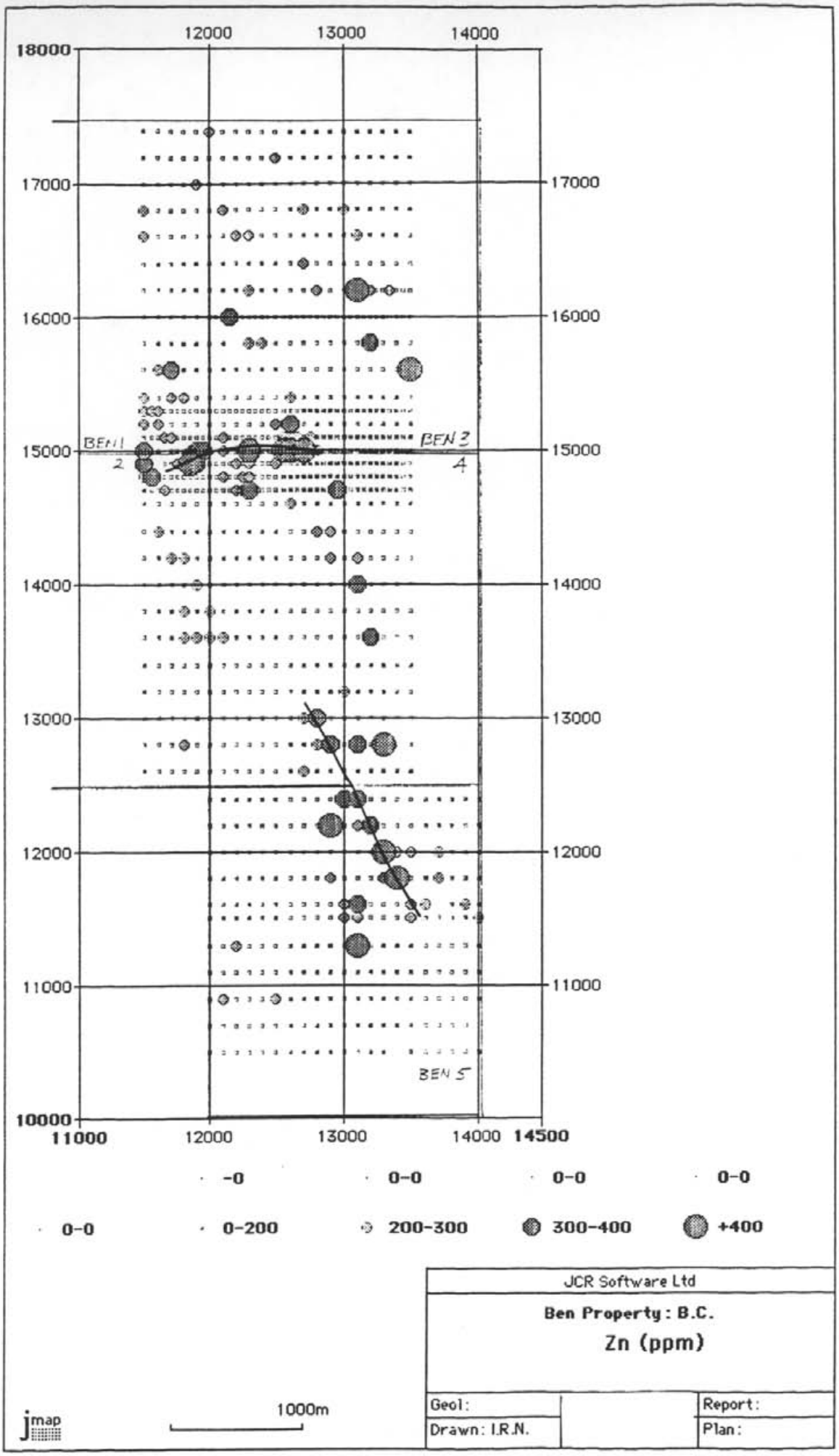
13000
12000
11000
10000
11000
12000
13000
14000
14500
BEN 1
2
BEN 3
4
BEN 5
-0
0-0
0-0
0-0
0-0
0-15
15-20
20-25
+25
JCR Software Ltd
Ben Property : B.C.
Pb (ppm)
Geol:
Drawn: I.R.N.
Report:
Plan:
1000m
jmap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13000
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15000
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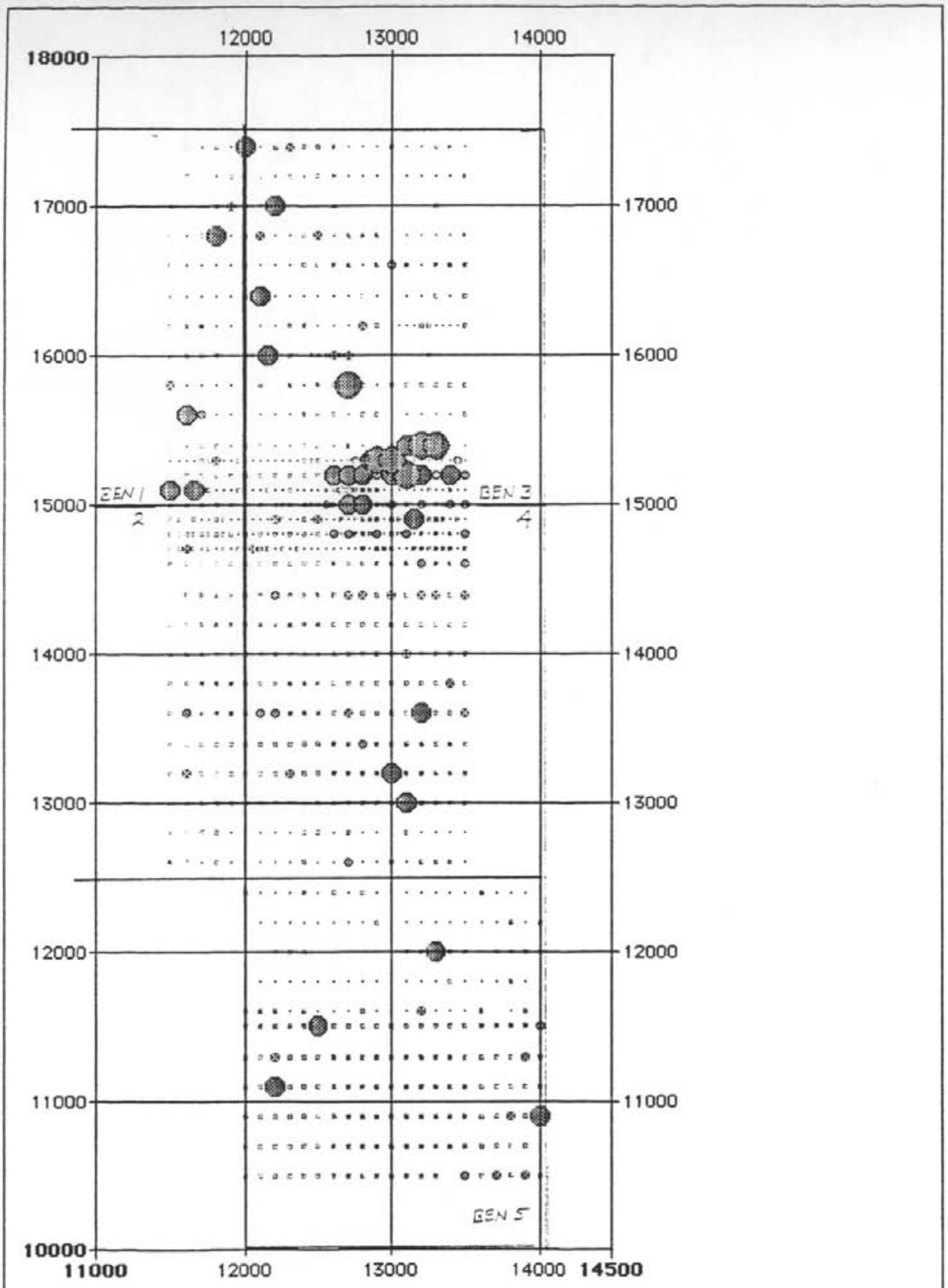
13000
12000
11000
10000
BEN 1
2
BEN 3
4
BEN 5
11000
12000
13000
14000
14500
-0
0-0
0-0
0-0
0-0
0-200
200-300
300-400
+400
JCR Software Ltd
Ben Property: B.C.
Zn (ppm)
Geol:
Drawn: I.R.N.
Report:
Plan:
1000m
jmap



JCR Software Ltd

Ben Property : B.C.

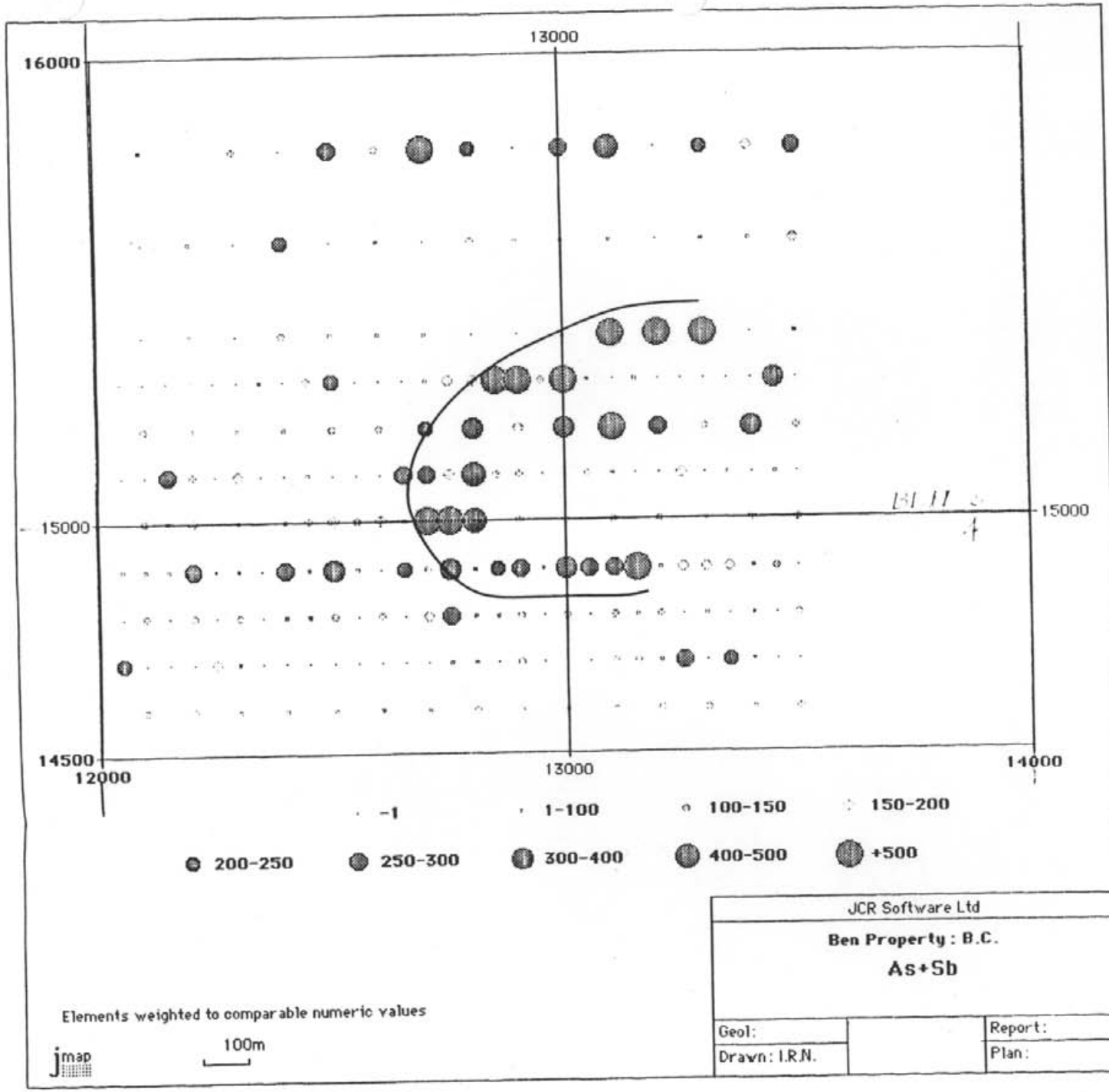
Ag+AS+Sb

Elements weighted to comparable numeric values

jmap

1000m

Geol:		Report:
Drawn: I.R.N.		Plan:


13000
16000
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15000
14500
12000
13000
14000
-1
1-100
100-150
150-200
200-250
250-300
300-400
400-500
+500
JCR Software Ltd
Ben Property : B.C.
As+Sb
Elements weighted to comparable numeric values
jmap
100m
Geol:
Drawn: I.R.N.
Report:
Plan:

APPENDIX 4

STATEMENT OF COSTS

STATEMENT OF COSTS

Costs for work performed Sept. 4 to Nov. 15, 1990 on the Ben property.

Project manager	
Project planning. Includes selection of drill contractor, drawing up contract, ground conditions and selecting and measuring drill site, discussing possible sites with driller	3 days
Drill supervision, Oct. 25-30	6 days
Report prep. and gen. admin.	3 days
Travel time	1 day
Total time: 13 days @ $350 per day =	$ 4,550
Drilling 2 holes, total 356 ft. (109 m)	8,213
Accommodation, phone, meals (project manager)	889
Vehicle: Rental, fuel	753
Field supplies	150
Assays	420
Computer treatment of geochem data	1,900
Total	$16,875

APPENDIX 5

CERTIFICATE OF AUTHOR

CERTIFICATE OF AUTHOR

I, R. Fergus Graham certify the following:

I am a consulting mining geologist with an office at:

2565 Miller Street
Lakewood,
Colorado 80215

I received a B.Sc. in Geology in 1962 from Queens University, Northern Ireland. I received an M.Sc. in 1967 and a Ph.D. in 1970, both in Geology, from the University of Western Ontario, Canada.

I have practiced as a geologist in the mining industry since 1970, mainly in Canada and the United States. I have worked as an employee of mining companies, and as an independent consultant.

I am a Canadian citizen.