FINANCIAL ASSISTANCE FOR MINERAL EXPLORATION (M.E.I.G.A.)

COMPANY: EXPLORATION VENTURES LTD REF: AE 36
MRD 84/5/27
PROJECT: BALQUHINDACHY MRD 144/5/27

The following Open File material is held by B.G.S. in London, Keyworth and Edinburgh. Available for public inspection from 16.10.80.

- * Extracts from draft application 6.8.71 with accompanying plan, 1" : 4 miles, 2 copies

- 1973 Activity Report, with 2 enclosures

  Enclosure 1: Report on Molybdenum in E. Aberdeenshire. March 1973 including 10 figures

  Fig 1 Location plan of known Mo anomalous areas. 1 : 250,000. 21.3.73

  Fig 3 Aeromagnetic contour map - total field around Balquhindachy. 2½" : 1 mile

  Fig 4 (This is virtually illegible) Mo soil anomalies at Balquhindachy and Quilquox

  Fig 5 Extent of vein quartz float and Mo stream anomalies. March '73, 2½" : 1 mile

  Fig 6 Mo, As and Au values in follow up geochemical soil traverses 26.3.73. 6" : 1 mile. Balquhindachy

  Fig 7 Mo, As and Au values in follow up geochemical soil traverses 6" : 1 mile. Quilquox

  § Fig 8 Soil Mo results, Rathven. Feb '82. 6" : 1 mile

  § Fig 9 Detailed soil Mo results. Kinmundy 6" : 1 mile. March '71

  § Fig 10 Detailed soil Cu results, Kinmundy 6" : 1 mile. March '71

  § Fig 11 Molybdenum in soils at Inverurie 10.6.70. 6" : 1 mile

  Enclosure 2: Balquhindachy District: Belnagoak Pitting May '73 including

  (i) Map of pit locations

  (ii) Pitting profiles

  (iii) Assay results

  (iv) Pit descriptions

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* Not in Keyworth § Not in Edinburgh

EXPLORATION VENTURES LTD.

(RIOFINEX)

1973 ACTIVITY REPORT

BALQUHINDACHY DISTRICT (DTI Code AE 36)

A pitting programme was undertaken at Belnagoak in order to assess further the geochemical anomaly of molybdenum in soil.

Details of this work and a general account of molybdenum occurrences in the east part of Aberdeenshire are appended.

Enclosures

1. Report on molybdenum in east Aberdeenshire.

2. Account of pitting programme at Balquhindachy.

EXPLORATION VENTURES LIMITED

BALQUHINDACHY DISTRICT : BELNAGOA

PITTING : ABERDEENSHIRE

MAY 1973

Abstract

On 11th May, 13 pits were dug along a traverse on the farmland of Belnagoak where anomalous amounts of molybdenum had been recorded in the soils. The bedrock was not exposed in the area but abundant blocks of quartz float with minor amounts of pyrite and traces of molybdenite could be seen in the walls of the fields. Low gold values had been detected in some of the samples.

Eleven of the 13 pits dug reached bedrock between 2 ft. and 8 ft. This consisted of either andalusite schist or siliceous, and felspartic quartzites and grits. No mineralisation or quartz veins were intersected though it was probable that a thick quartz vein existed along a faulted contact between the two rock types.

It is concluded that the soil anomaly relates to a narrow quartz vein in the Dalradian schists. Although no in-situ vein material was encountered, it is clear from float samples that molybdenum (and gold) mineralisation is only rarely present - and even then in very low amounts.

No further work is recommended.

Previous Surveys

Geochemical soil sampling defined weak, patchy molybdenum anomalies in the Quilquox and Balquhindachy areas of eastern Aberdeenshire. Values ranged from 1.6 ppm up to a peak of 62 ppm. The area is underlain by a series of andalusite schists and siliceous metamorphics. Outcrops are scarce due to extensive drift cover. Float mapping near the molybdenum anomalies indicated large amounts of white vuggy vein quartz. A few of these blocks contained some disseminated pyrite and the occasional trace of molybdenite. Several samples of this mineralised float showed values of 200 to 1500 ppm Mo and 0.4 - 1 dwt gold.

As the extent of the mineralized vein quartz could not be determined, it was recommended that pitting should be carried out across one of the anomalies where bedrock was thought to be close to the surface. This was on the farmland of Belnagoak, situated 1½ miles due east of Balquhindachy. Here three samples taken on three separate, 1000 ft. apart soil lines, contained 54, 62 and 26 ppm Mo aligned on a NE/SW strike.

Pitting

A total of 13 pits were dug using a JCB 3C digger. Eleven of these were located on a N/S traverse across the strike of the soil anomaly.

Pits A to H were dug at 100 ft. intervals and then Pits J, I and K were dug between Pits C and E. Pits L and M were dug to the west of the traverse over the position where the highest molybdenum value in the soil was recorded (see location map).

Results

Only two pits - A and B - failed to reach bedrock. In these two a bed of yellow brown sand occurred down to a depth of 10 ft. - the base of the pits.

In the remaining pits the general profile was soil overlying the bed of sand overlying bedrock.

In pits C, J and M bedrock was found to be andalusite schists. In the remaining pits the bedrock consisted of siliceous and felspartic grits and quartzites with only slight metamorphic texture. This rock was soft and friable, breaking down to a greenish-brown sand.

No mineralization was noted in the bedrock and only a thin 3" quartz vein was seen in Pit H.

Bedrock was closest to the surface at Pit J - 2 ft. and it is thought that the vein quartz float in the walls of the fields came from a quartz vein just south of Pit J. Pitting on this site could not be carried out due to water pipes lying close below the surface.

The change in rock type between Pits J and K is thought to be due to a fault along which the quartz vein containing trace amounts of molybdenite occurred.

Pits L and M dug along strike of the anomaly again failed to locate the quartz vein though it is probable that it runs between these two pits.

Conclusions

The pitting failed to locate any mineralised or unmineralised quartz-veins. It is likely that a vein of the order of 5 ft. thickness exists between Pits J and K along a fault line. Unless the underground water pipes are first removed and a trench dug across this zone, the exact position of this quartz vein will remain unknown.

The abundance of large blocks of vein quartz in the walls is thought to be truly representative of the vein and therefore is of no economic interest. Only two boulders contained traces of molybdenite but the content would be sufficient to cause a soil anomaly. No visible gold was seen and the potential for this element is negligible.

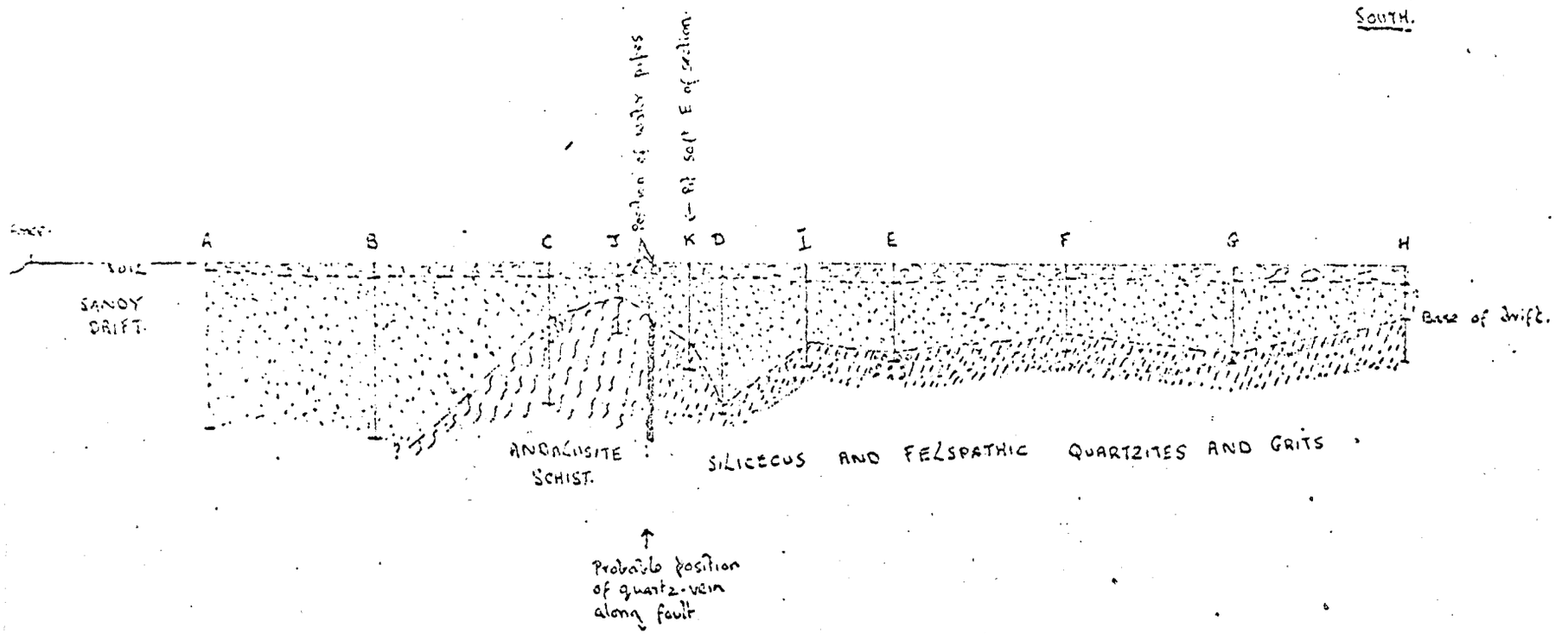
It is therefore recommended that no further work be carried out over the anomalies in this area.

RIO TINTO FINANCE AND EXPLORATION LTD

TITLE BELNAGOAK AREA BALQUHINDACHY DIST. ABERDEENSHIRE – LOCATION OF PITS

Scale 6 ins. = 1 Mile	Prepared C.A.F.E.	Drawn	FIG No.
O.S Sheet No. NJ 6 & 6 E	Revised	Date Mar. 1975	

SOUTH.



Horizontal Scale

0 100 200

1" = 100 ft.

Vertical Scale

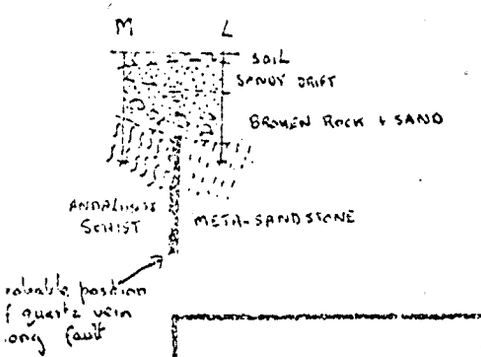
0

5

10

1" = 10 ft.

280 ft West of Section



EXPLORATION VENTURES LTD

TITLE BELNAGOAK AREA - BALQUHINDACHY DISTRICT ABERDEENSHIRE.

PITTING PROFILES

Scale	Prepared C.A.F.B	Drawn C.A.F.B	FIG No
O.S. Sheet No. 84 SE	Revised	Date MAY 1973	

BALQUHINDACHY DISTRICT

BELNAGOAK PITTING

ASSAY RESULTS

SAMPLE NUMBER	PPM GOLD	PPM MOLYBDENUM
1	0.10	2
2	0.03	4
3	<0.03	9
4	<0.03	10
5	<0.03	< 2
6	<0.03	<10
7	0.04	60
8	<0.03	<10
9	<0.03	<2
10	<0.03	<10
11	0.06	<2
12	<0.03	<10
13	<0.03	< 2
14	<0.03	<10
15	<0.03	2
16	<0.03	<10
17	0.05	50
18	0.13	10
19	<0.03	2
20	<0.03	<10
21	0.04	2
22	<0.03	<10
23	<0.03	15
24	0.08	<10

BALQUHINDACHY DISTRICT

BELNAGOAK PITTING

PIT A	100' up from road fence	
	0-6"	Soil
	6"-9'.6"	Yellow/brown sand
	SAMPLE (1)	Sand @ 9'.6".
PIT B	200' up from road fence.	
	0'-9"	Soil
	9"-10'.0"	Yellow/brown and grey green sand
	SAMPLE (2)	Sand @ 10'.0".
PIT C	300' up	
	0-8"	Soil
	8"-3'.0"	Yellow/brown sand
	3'.0"-4'.6"	broken oxidised rock and sand.
	4'.6"-8'.0"	broken oxidised Andalusite schist
	SAMPLE (3)	rock and sand @ 4'.0"
	SAMPLE (4)	rock from 8' - andalusite schist.
PIT D	400' up	
	0-8"	Soil
	8"-8'.0"	Brown/yellow sand
	8'.0"-8'.6"	sand & broken rock.
	SAMPLE (5)	sand from 8' felspathic sandstone
	SAMPLE (6)	rock from 8'.6"
PIT E	500' up	
	0-12"	Soil
	12"-5'.0"	Yellow/brown sand
	5'.0"-5'.6"	broken rock
	SAMPLE (7)	sand & rock from 5'
	SAMPLE (8)	rock from 5'-6" - coarse conglomeratic arkosic grit.

PIT F — 600' up

0-10"	Soil
10"-4'.0"	Yellow/brown sand
4'.0"-5'.0"	Sandy broken rock

SAMPLE (9) — sand from 4'.0" medium grained

SAMPLE (10) — rock from 5' .0" brown-meta-sandstone

PIT G — 700' up

0-12"	Soil
12"-5'0"	Yellow/brown sand
5'0"-5'.6"	weathered rock and sand

SAMPLE (11) — sand from 5'

SAMPLE (12) — rock from 5'.6" medium course siliceous meta-sandstone.

PIT H — 800' up

0-12"	Soil and iron from horizon
12"-2'.0"	Yellow sand
2'.0"-5'.6"	Grey/green sand from weathered sandy rock + broken rock thin broken 8"qtz. vein-turning ⏜ NE/SW dip ⏜ 30°.

SAMPLE (13) — weathered qtz vein @ 2'.6"

SAMPLE (14) — rock @ 5'.6" medium course siliceous meta-sandstone.

PIT I — 450' up

0-12"	Soil
12"-4'.6"	Yellow/brown sand
4'.6"-5'9"	weathered sandy bedrock

SAMPLE (15) — sand @ 4'.6"

SAMPLE (16) — rock from 5'.9" medium/coarse siliceous micaceous meta-sandstone.

PIT J — 340' up

0-8"	Soil
8"-2'.0"	Sand - Yellow/brown
2'.0"-4'.0"	Broken andalusite schist.

SAMPLE (17) — Sand from 2'

SAMPLE (18) — Rock from 4'. andalusite schist.

PIT K — 383' up and 50' east of wall.

0-9"	Soil
9"-4'.6"	Yellow/brown sand
4'.6"-6'.0"	broken sandy rock.

SAMPLE (19) — sand from 4'.6"

SAMPLE (20) — rock from 6' medium/coarse green sandstone.

PIT L — on peak Mo value (62 ppm)
160' up fence from corner
200' east.

0-6"	Soil
6"-2'.0"	Yellow/orange sand
2'.0"-4'.6"	broken rock and sand
4'.6"-5'.6"	broken sandy rock

SAMPLE (21) — Sand from 2'

SAMPLE (22) — rock from 5'.6" medium grained arko: mica rich quartz

PIT M

0-9"	Soil
9"-1'.6"	Yellow/orange sand
1'.6"-3'.6"	Yellow sand and broken rock
3'.6"-5'.6"	broken andalusite schist

SAMPLE (23) — Sand from 1'.6"

SAMPLE (24) — rock from 5'.6" andelusite schist.

FINANCIAL ASSISTANCE FOR MINERAL EXPLORATION (M.E.I.G.A.)

COMPANY: EXPLORATION VENTURES LTD

REF: AE 37
MRD 84/5/1
MRD 144/5/1

PROJECT: QUILQUOX

The following Open File material is held by B.G.S. in London, Keyworth and Edinburgh. Available for public inspection from 16.10.80.

- EVL soils research project

- EVL summary of metallurgical testworks

- * Extract from application 6.8.71, ".... outline of proposed project .... geological considerations ...." with plan 1" : 4 miles

- §‡ DDH Logs HQ1, ND1

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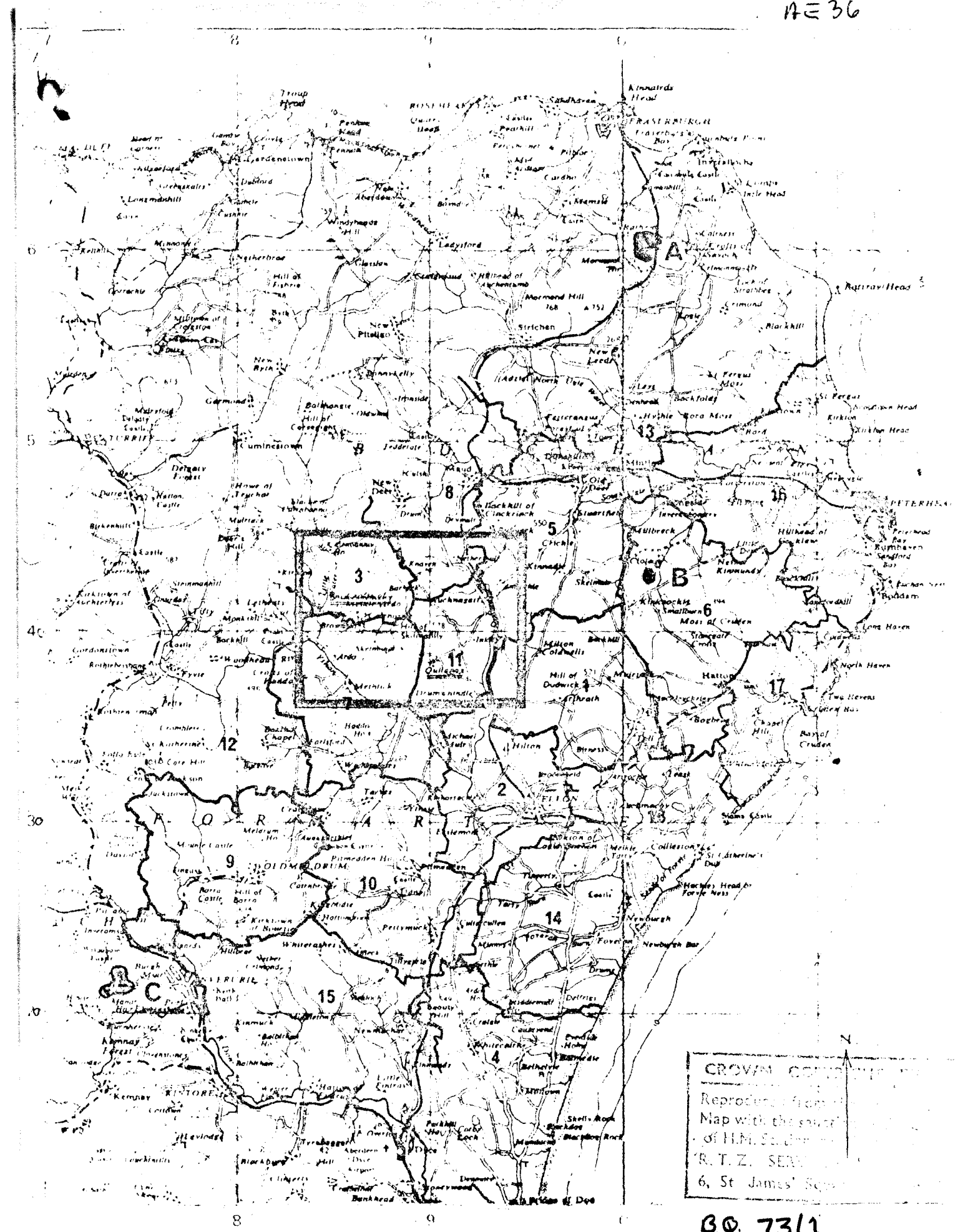
* Not in Keyworth § Not in Edinburgh ‡ Not in London

AE 37 is related to AE 22

AE36



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B.Q. 73/1

COVERAGE OF APPENDED MAP AND OVERLAYS AROUND THE BALQUHINDACHY - QUILQUOX AREA

OTHER AREAS WITH MOLYBDENUM IN SOILS
A. RATNEN B. KINMUNDY C. INVERUGIE

ADMINISTRATIVE AREAS

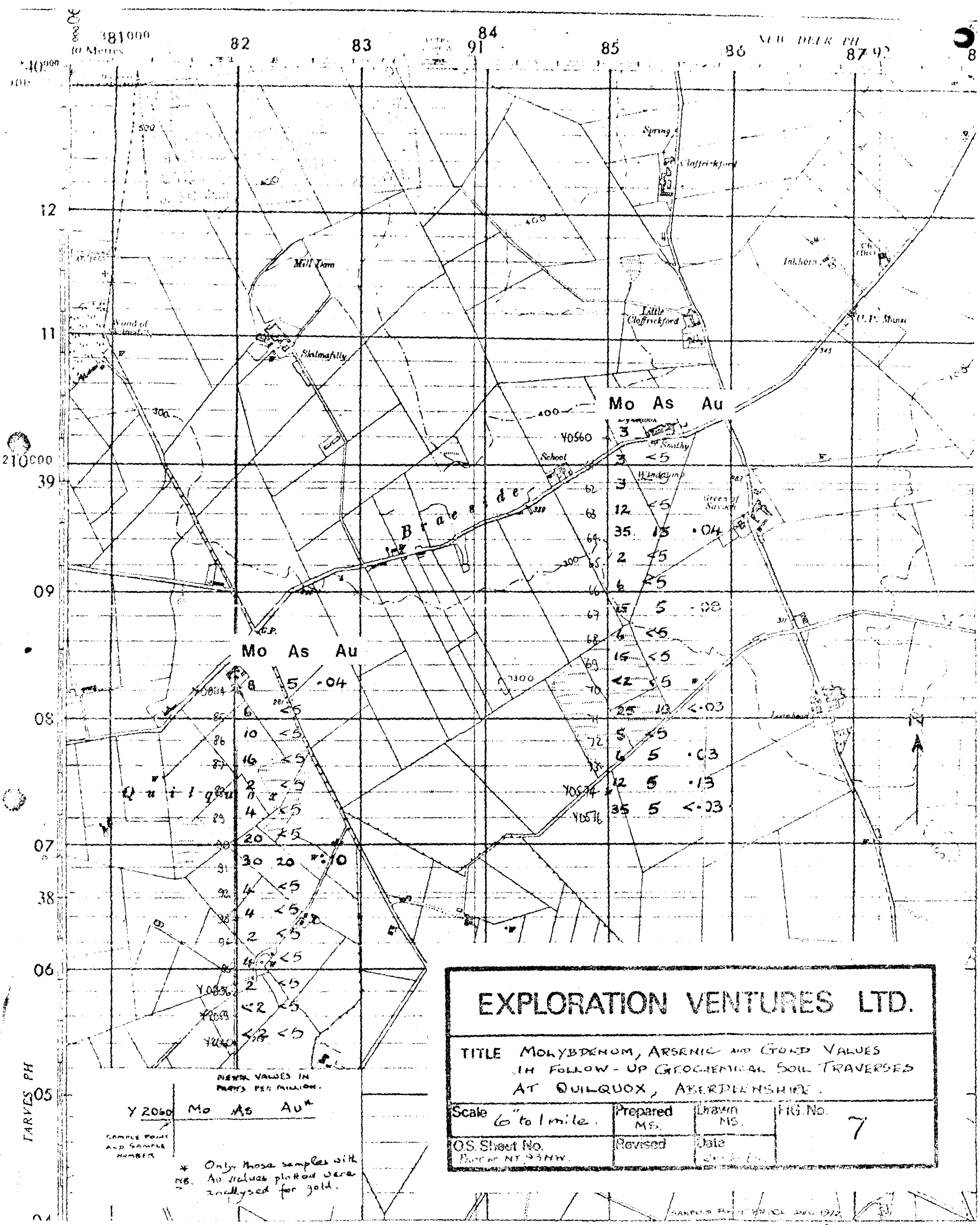
1 Aikath Duchwick
2 Kinharrachie
3 Balquhindachy
4 Bethelvie
5 Crichie
6 Forest of Deer
7 Haddo
8 Udny
9 Dunquox
10 West Haddo
11 Strichen Compound
12 Newburgh
13 Inverugie - Stratton
14 Longside - Peterhead
15 Kinmuck
16 Kinmundy
17 Ratnen

EXPLORATION VENTURES LTD

BALQUINDACHY.

TITLE LOCATION PLAN OF KNOWN MO-ANOMALOUS AREAS IN EAST ABERDEENSHIRE

Scale 1:250,000 Prepared Drawn MS EG No. 1


EXPLORATION VENTURES LTD.
TITLE Molybdenum, Arsenic and Gold Values in Follow-Up Geochemical Soil Traverses at Quilquox, Aberdeenshire.
Scale 6" to 1 mile.
Prepared MS.
Drawn MS.
FIG. No. 7
O.S. Sheet No. Part of NT 93 NW.
Revised
Date
Metal values in parts per million.
Y 2060 Mo As Au*
Sample point and sample number
* NB. Only those samples with Au values plotted were analysed for gold.
Mo As Au
Mo As Au
Mill Dam
Skelmafilly
Braeside
School
Little Cloffrickford
Cloffrickford
Spring
Inkhorn
Quilquox
NEW DEER PH
TARVES PH

RO 73/7

	Mo	As	Au
E 3707	<2	<5	
96	<2	<5	
94	<2	<5	
D 93	2	<5	
E 3384	8	<5	
83	6	<5	
82	8	<5	
81	30	40	·04
80	4	15	<·03
79	12	10	<·03
78	2	5	<·03
77	8	<5	
76	3	5	·03
75	15	5	·04
74	4	<5	
73	2	<5	
72	2	<5	
E 3671	2	<5	
E 3720	2	<5	
19	4	<5	
18	4	<5	
17	8	5	<·05
16	8	8	<·05
15	8	5	·15
14	<2	<5	
E 3713	<2	<5	

	Mo	As	Au
1077	4	<5	
78	4	<5	
79	15	5	·20
80	8	<5	
81	4	<5	
82	5	5	·05
83	12	30	·05
1084	12	5	·10
1086	20	10	·30

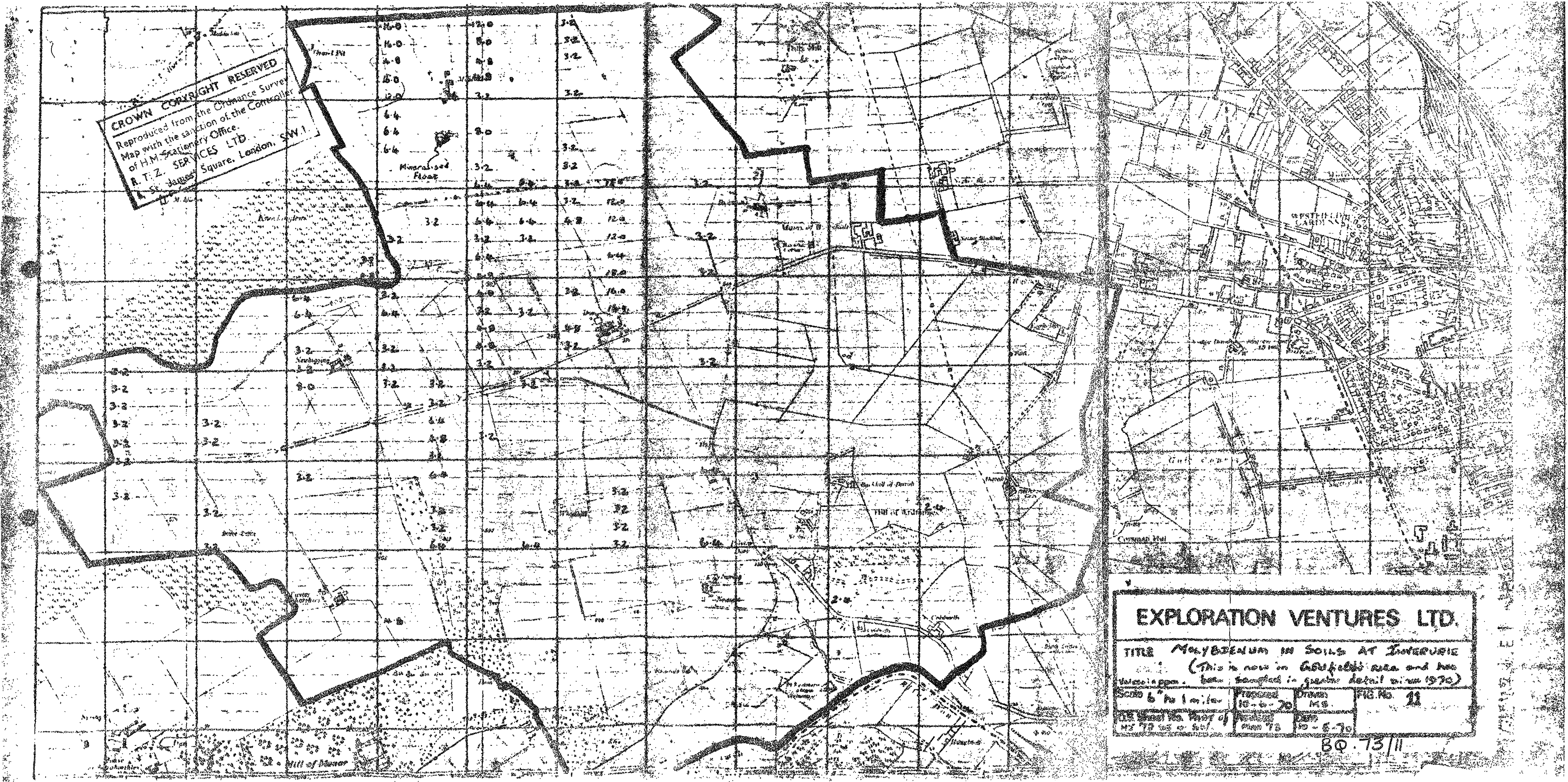
METAL VALUES IN PARTS PER MILLION

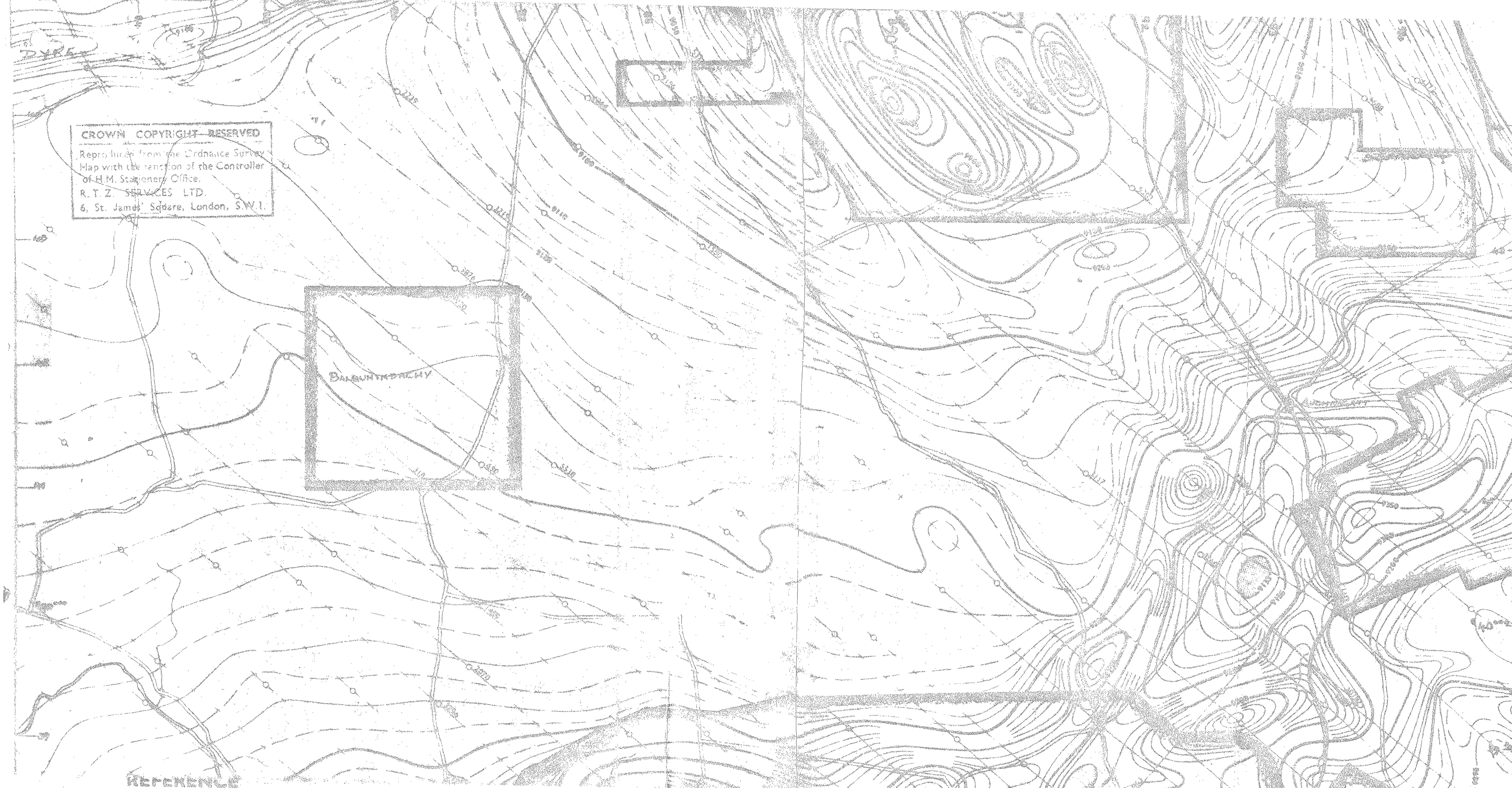
BD 73/6.

EXPLORATION VENTURES LTD.

TITLE MOLYBDENUM, ARSENIC AND GOLD VALUES IN FOLLOW-UP GEOCHEMICAL SOIL TRAVERSES AT BALQUHINDACHY, ABERDEENSHIRE.

Scale 6" to 1 mile	Prepared MS	Drawn MS	FIG No. 6
OS Sheet No PART OF NJ 84 SE	Revised	Date 26-3-75	


CROWN COPYRIGHT RESERVED
Reproduced from the Ordnance Survey
Map with the sanction of the Controller
of H.M. Stationery Office.
R.T.Z. SERVICES LTD
St. James's Square, London, SW.1
Mineralised Float
Hill of Manar
Coldwells
Common Hill
EXPLORATION VENTURES LTD.
TITLE MOLYBDENUM IN SOILS AT INVERURIE
(This is now in Goldfields area and has been sampled in greater detail since 1970)
Scale 6" to 1 mile
Prepared 10-6-70
Drawn M.S.
FIG. No. 11
Date 10-6-70
BQ.73/11



REFERENCE

Mean terrain clearance	500 feet above ground level
Mean flight line spacing	¼ statute mile
Flight lines numbered	1 to 159
Tie lines lettered	A.B.C. etc.
Plotted 35mm from numbers	4011
Minimum Contour interval	5 gammas

Furlongs 4 3 2 1 0

N

AREA COVERED BY I.P. SURVEYS.

Bq 73/3

SCALE 1:25,000 OR APPROX 2½ INCHES TO THE MILE

EXPLORATION VENTURES LTD.

TITLE AEROMAGNETIC CONTOUR MAP SHOWING TOTAL FIELD AROUND THE BALQUHINDACHY & QUILQUOX AREAS IN ABERDEENSHIRE.

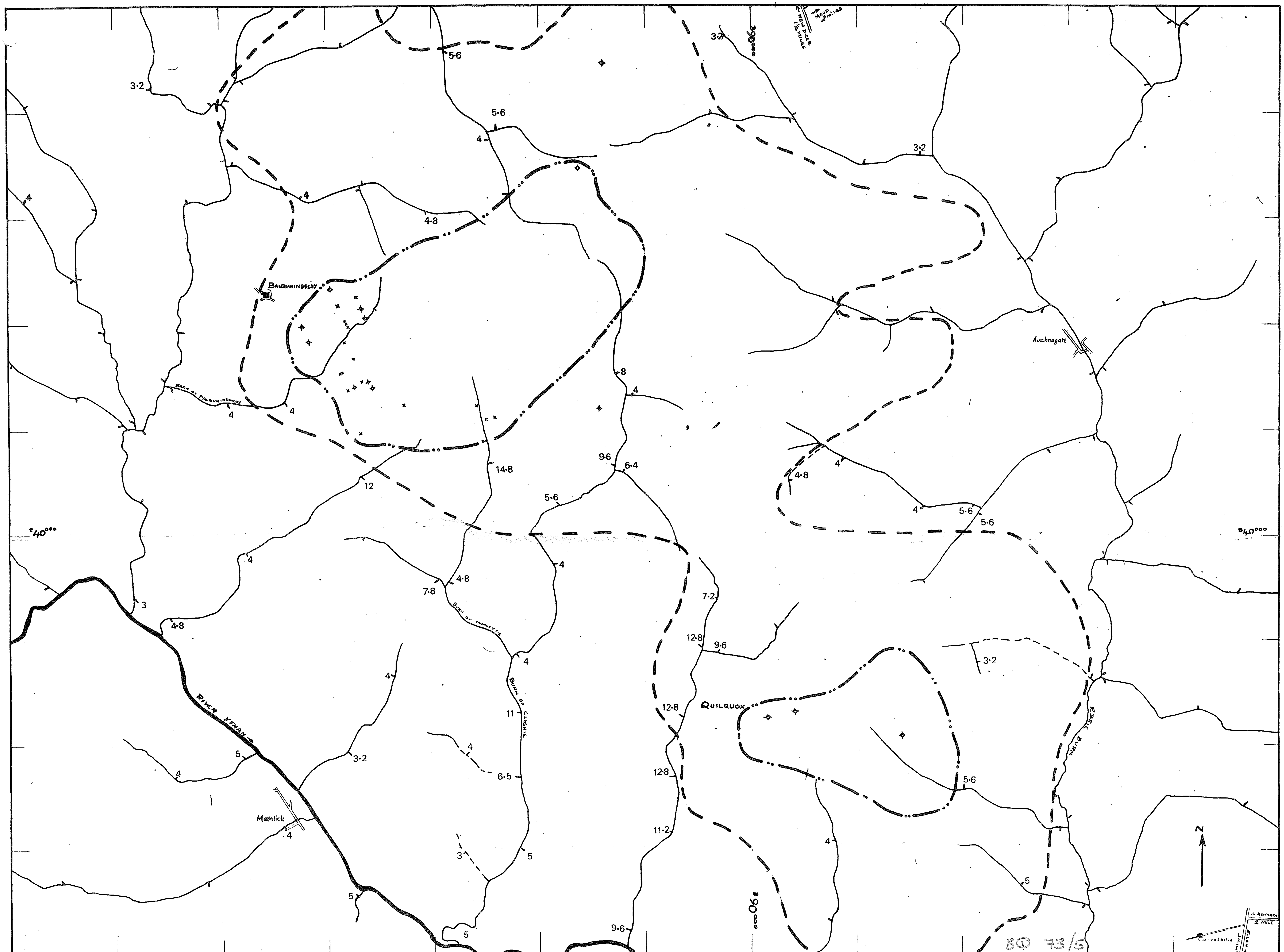
Scale 2½" to 1 mile	Prepared and Drawn FAIREY SURVEYS LTD	FIG No. 3
OS Sheet No [illegible]	Revised	Date May 1973

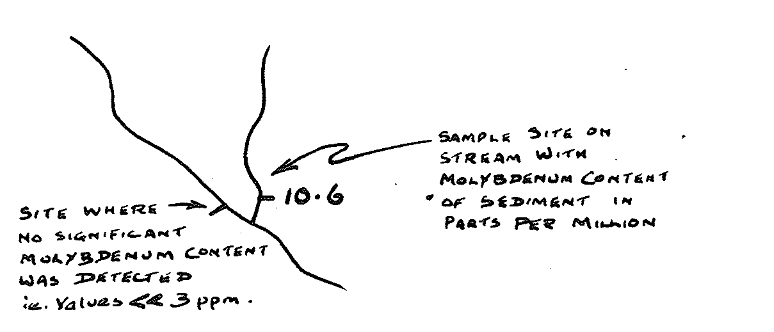
Magnetic contours (values in Gammas) —

Enclosed areas of low magnetic intensity :—

COMPILATION NOTE

Flown and compiled October 1969 - February 1970 Major topographical detail taken from 1:25,000 series Ordnance Survey of Great Britain





ARBITRARY BOUNDARY BASED ON RIOFINEX FLOAT MAPPING DATA SHOWING MAIN LIMITS OF WHITE, VHUGGY VEIN QUARTZ BLOCKS WHICH ARE MOSTLY PRESENT IN WALLS AROUND FIELDS.

ARBITRARY BOUNDARY SURROUNDING AREAS WHERE VHUGGY VEIN QUARTZ APPEARS TO BE MOST ABUNDANT IN WALLS.

SYMBOLS SHOWING THE LOCATION OF A VEIN QUARTZ FLOAT BLOCK CONTAINING:—

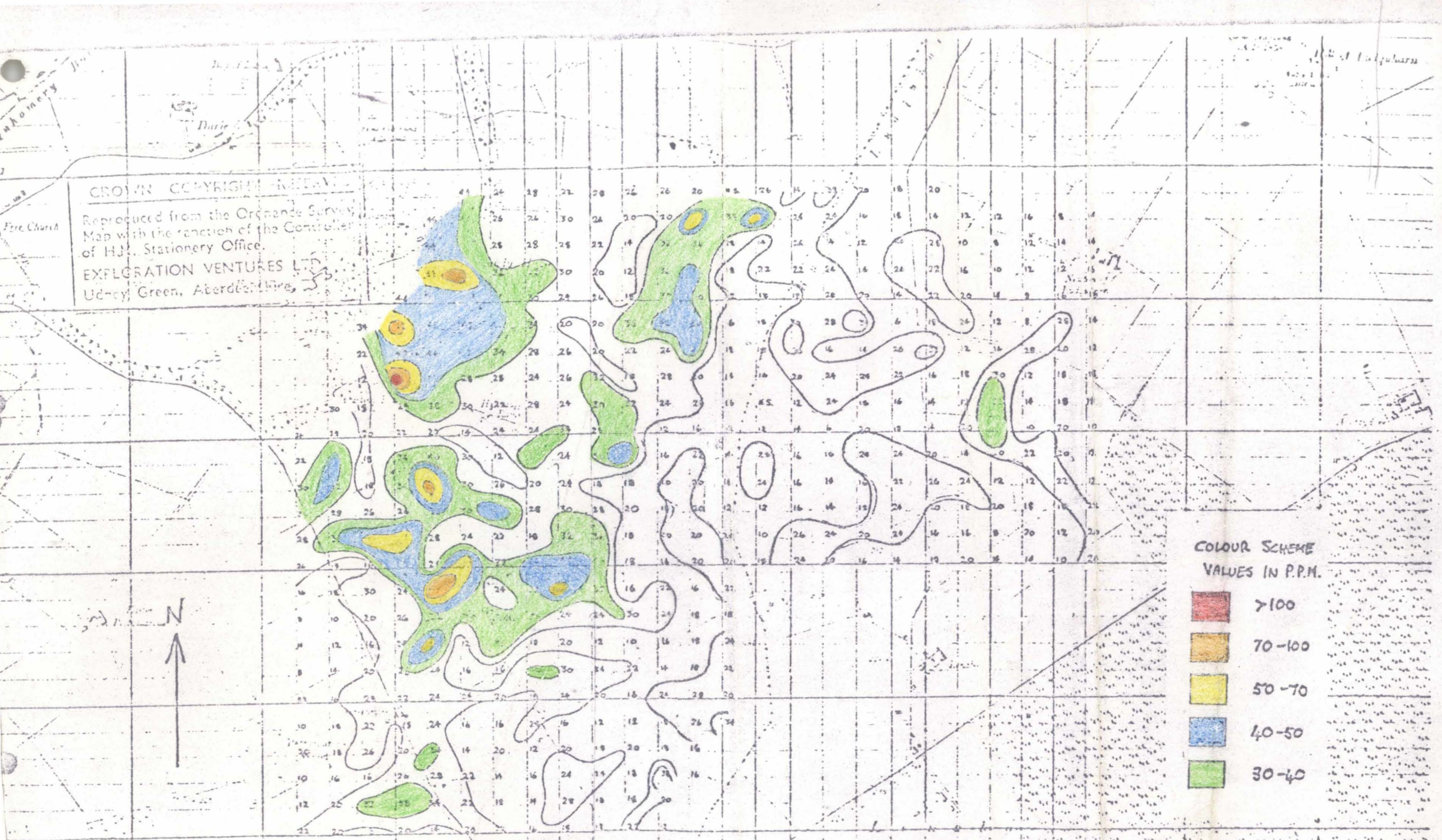
- Molybdenite
- x Pyrite
- Galena ± Sphalerite ± Pyrite

EXPLORATION VENTURES LTD.

TITLE: EXTENT OF VEIN QUARTZ FLOAT AND MOLYBDENUM STREAM ANOMALIES IN THE BALQUHINDACHY - QUILQUOX AREA, ABERDEENSHIRE.

Scale: 2½" to 1 mile	Prepared: MS.	Drawn: MS.	FIG No. 5
O.S. Sheet No. Covers parts of NJ 83, 84, 93 + 94	Revised	Date: MARCH 1973	

EXPLORATION VENTURES LTD
Udney Green, Aberdeenshire

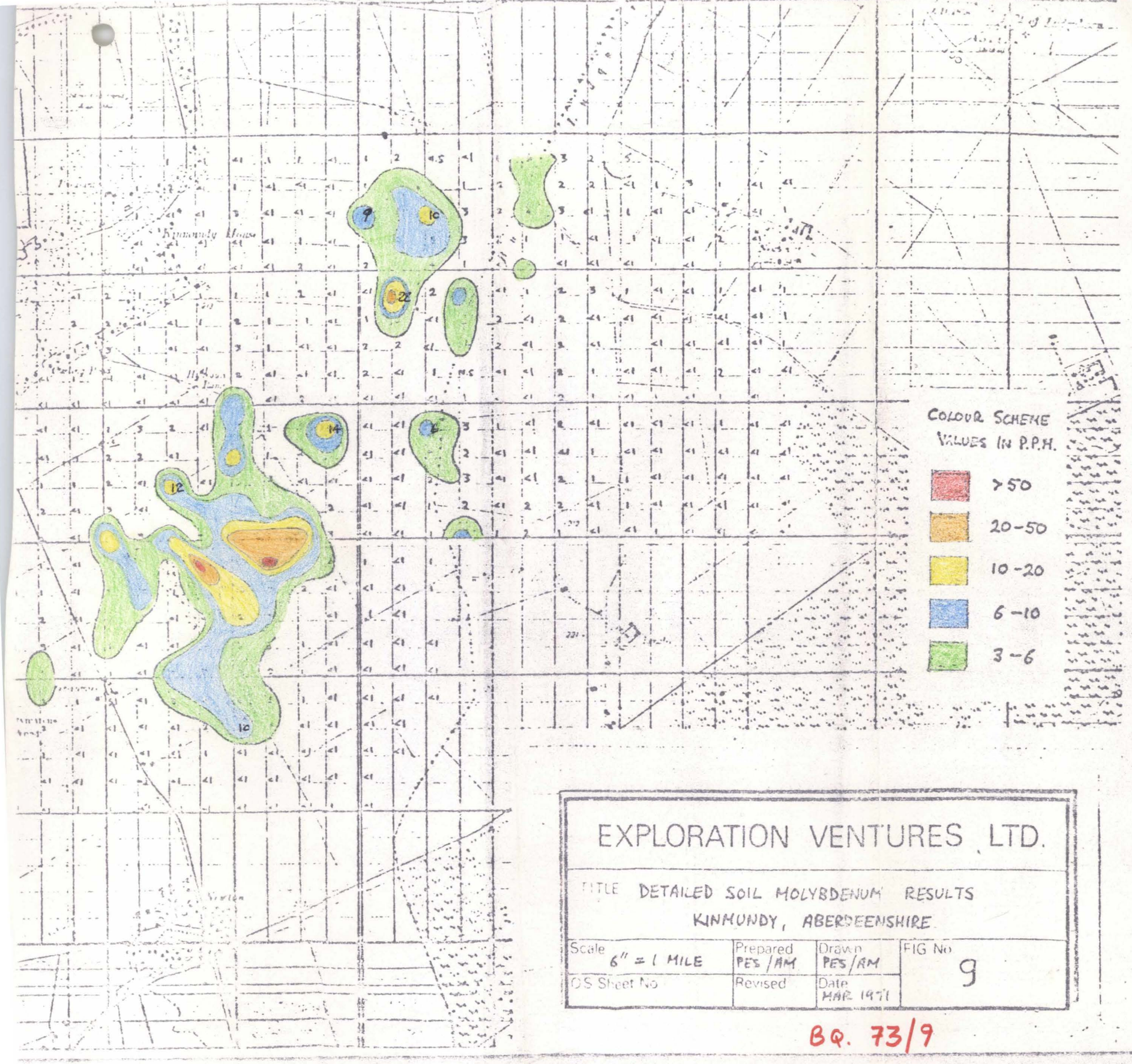


EXPLORATION VENTURES LTD.

TITLE DETAILED SOIL COPPER RESULTS
KINMUNDY, ABERDEENSHIRE

Scale	Prepared	Drawn	FIG No.
6" = 1 MILE	PES, AM	PES / AM	10
Survey No.	Revised	Date MAR 1971	

BO 73/10

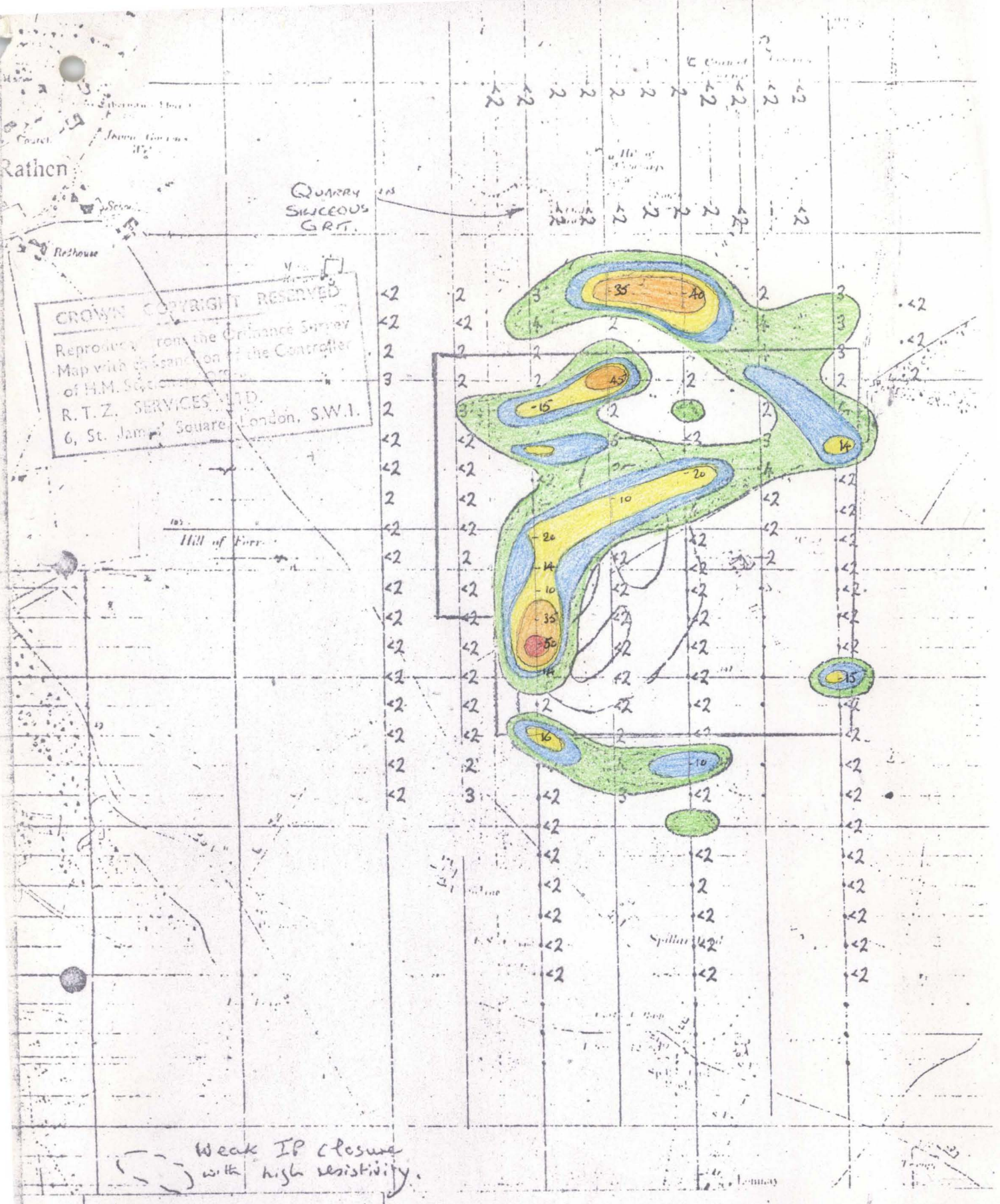


EXPLORATION VENTURES LTD.

TITLE DETAILED SOIL MOLYBDENUM RESULTS
KINMUNDY, ABERDEENSHIRE

Scale	Prepared	Drawn	FIG No
6" = 1 MILE	PES/AM	PES/AM	9
OS Sheet No	Revised	Date MAR 1971	

BQ. 73/9



EXPLORATION VENTURES LTD

TITLE: SOIL MOLYBDENUM RESULTS
RATHEN, ABERDEENSHIRE

Scale	Prepared	Drawn	FIG. No
6" = 1 MILE	A.M.	A.M.	8
OS Sheet No NK 05 NW & 06 SW	Revised	Date FEB 1972	

BD 73/8

Balquhindachy

Suggested target

Auchnagatt

Quilquox

Methlick

N

BΦ.73/4.

FLAT

POORLY DRAINED SOIL

X LOCATION OF SOILS FROM WHICH SOIL SAMPLE PROFILES WERE COLLECTED IN NOVEMBER 1947

CONJECTURE PLOTTING EXTENT OF ANOMALOUS MOLYBDENUM IN SOIL

AREAS WHERE SOIL SAMPLES HAVE BEEN TESTED FOR MOLYBDENUM

EXPLORATION VENTURES LTD

TITLE MOLYBDENUM ANOMALIES AT BALQUHINDACHY & QUILQUOX

FIG. No. 4