22 pp
84 appx
10 figs
42 maps

ALLUVIAL PROSPECTORS - NORGOLD - PAN AUSTRALIAN MINING

BREADALBANE JOINT VENTURE

EXPLORATION LICENCE 1629 and PROSPECTING LICENCES
874-879, 890, 891, 927-929

(BREADALBANE PROJECT)

GOULBURN AREA, NSW

REPORT FOR THE SIX MONTHS ENDED 20th NOVEMBER, 1987.

D. FORTOWSKI

Senior Geologist
Mineral Resources Division
Electrolytic Zinc Company of
Australasia Ltd.
(Project operation on behalf
of Norgold)

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APPENDICIES

1. INTRODUCTION

The Breadalbane project area lies in a roughly north-south trending belt of Silurian felsic volcanics which extends northward from Captains Flat. The volcanic sequence contained economic volcanogenic massive sulphide orebodies at Captains Flat and Woodlawn, as well as numerous small historical prospects. Breadalbane area is currently covered by EL 1629 (Figure 1).

Members of the joint venture have been active in the area since the early 1970's when Minland Mining (now Alluvial Prospectors commenced operations. North Broken Hill Limited farmed-in and managed the project for a number of years before the project was again farmed-out to Marathon Petroleum in 1982. Pan Australian Mining acquired Marathon's interest in 1984 and managed the project while earning equity. The most recent program was managed by North Broken Hill Holdings subsidiary Electrolytic Zinc Company. North Broken Hill Holdings interest was acquired by its majority owned subsidiary Norgold in 1987.

Current equities in the project are:

Alluvial Prospectors Ltd.	51%
Norgold Ltd.	34%
Pan Australian Mining Ltd.	15%

Historically, exploration on EL 1629 has been targeted at Pb/Zn bearing massive sulphide orebodies. The many techniques used included stream, soil and bedrock geochemistry, airborne and ground magnetics, gravity, IP and EM. Numerous anomalies have been drilled in the lease areas, and generally indications are that the chances of finding an economic orebody of this type are low.

In 1986 a selection of core from drillholes throughout the lease were assayed for Au, resulting in the identification of an anomalous zone to the southeast of the Wet Lagoon (see Figure 2).

The report period covered the completion of one drilling program in June 1987 and commencement of a second in November 1987. Drilling was aimed at determining the orientation, size and extent of gold mineralisation at Wet Lagoon South. Other exploration done during the period included soil, rock chip and bulk leach surveys as well as the resampling of previously drilled holes.

This report includes all diamond drill hole logs and geochemical results from the early-mid 1987 drilling program, including the logs from the two holes discussed in the previous report. One log from the late 1987 drilling program is also included.

2. PREVIOUS EXPLORATION

The Silurian volcanic sequence around Breadalbane has been known to be mineralised since the late 19th century and a number of companies have explored the area extensively for base metals since 1950.

In 1986 Pan Australian carried out an extensive Au reconnaissance survey by resampling a variety of mineralisation and alteration types in drill core from prospects in the EL (Hodkinson, 1986). There had been little previous Au analysis other than at the recently drilled Greendale prospect (DDH's DB1, 2). Au mineralised intersections were found in several holes immediately SE of the Wet Lagoon (see Figure 2). The best interesections were:

DDH	INTERVAL (m)	LENGTH (m)	Au (PPM)
WL 14	222 - 223.5	1.5	3.1
WL 15	151 - 163	12	2.1
WL 16	83 - 03	10	3.6
WL 17	51 - 58.4	7.4	1.1
WL 18	46.7 - 46.5	0.8	1.1

These higher-grade Au zones correspond with intervals of intense silicification in altered acid volcanics. The result were considered very encouraging and to warrant immediate further drilling in the zone between WL 18 and WL 23 (see Figure 2) to define the extent and nature of the gold mineralisation.

Other encouraging Au anomalism identified in holes at the B1 (6.1m @ 1.3g/t Au) and Bells Flat (12m @ 0.37 Au) prospects and minor anomalism at B14, Hannans Flat and Bohara prospects during the 1986 program, has not yet been further tested.

The first 1987 diamond drill hole WL24, located a very encouraging gold intersection of 11.3m of 3.9ppm. Only narrow intersections or lower grades occurred in the other holes; WL26, 0.7m of 3.14ppm and WL27, 2.0m of 1.05ppm.

The Au geochemistry and lithologies in WL24 are consistent with that intersected in WL17, 10.0m at 3.6ppm, and WL17 is therefore thought to be located very close to WL24. WL31 was drilled to test the up dip extent of the zone in WL24 (Figure 3). Subsequent results from WL31 verified the up dip extent of the zone with 7.0m of core at 8.6ppm Au and 7.6m of sludge immediately above at 1.77ppm Au.

3. CURRENT PROGRAM - WET LAGOON PROSPECTS

3.1 WET LAGOON SOUTH PROSPECT

The early-mid 1987 drilling program was completed in June and all completed logs with geochemical results are appended (see Appendix 1 WL24 to WL31). The late 1987 drilling program is continuing and by the 20th November one hole had been completed prematurely because of drilling problems. The summary log of this hole is also appended but no assay reults are available (see Appendix 1, WL32).

Relogging and resampling of previous diamond drill holes in the area continued, concentrating on quartz and quartz/sulphide zones. In most cases the results were discouraging (see Appendix 2).

Grid soil sampling was done over an area to the north of the drilling area but in most cases the base metal and gold anomalies had been identified and drilled previously (Figs 3 and 4).

Outcrops where high gold and base metal results had been previously reported were resampled.

Five core specimens were submitted to Minpet Services for petrographic study including two with high gold grades from WL17 and WL24. (see Appendix 3). One sample from the outcrop of the Greendale Au prospect was examined.

3.1.1 DRILLING PROGRAMS

The March-June 1987 drilling program concentrated on drilling quartz-sulphide zones within fine-grained sericitised and silicified acid volcanics to the east of coarser quartz phyric tuffs comprising the 'Wet Lagoon Sequence' - see report ending 20th May 1987 for geology.

The program confirmed the existence of significant gold grades in an are of limited extent. Intersections to the north and south of the main area (WL28-WL24-WL31) did not attain enough thickness where economic gold grades occurred or the grades were too low.

To the north

WL25	140.5 - 143.5	@ 0.36ppm Au
WL26	107.0 - 107.7	@ 2.94ppm Au

The main zone - which contains an eastern and a western zone.

WL28	33.0 - 44.0m,11m	@ 3.66ppm Au - western zone
	55.0 - 62.0m, 7m	@ 2.24ppm Au -}eastern zone
	65.0 - 70.0m, 5m	@ 2.04ppm Au -}eastern zone
	89.8 - 91.8m, 2m	@ 5.21ppm Au
	139.0 - 141.0m, 2m	@ 1.88ppm Au
WL24	45.0 - 48.8m,3.8m	@ 2.55ppm Au - western
	70.5 - 81.8m,11.3m	@ 3.67ppm Au - eastern
WL31	16.2 - 23.8m,7.6m	@ 1.77ppmAu(sludge)}east.
	23.8 - 30.8m,7.6m	@ 8.64ppm Au
	82.6 - 84.6m,7m	@ 2.52ppm Au
	125.3 - 127.3m,2m	@ 9.66ppm Au

To the south

WL30	94.0 - 95.0m,1m	@ 19.0ppm Au
WL27	62.0 - 64.0m,2m	@ 0.98ppm Au
WL29	70.0 - 72.0m,2m	@ 1.90ppm Au

No results are available from WL32, the first hole drilled in the current program. The hole was drilled under the main zone (50m west of WL24) and confirmed the continuity of two subparallel zones of quartz/sulphide dipping steeply west. (refer summary log Appendix 1 and section Figure 3). The hole was abandoned at 136.3m when rods broke down the hole. A second hole was commenced from the same collar at 61.60m.

The gold-bearing sulphide zones in the main zone generally contian elevated lead and zinc grades, eg:

WL15	8m @ 1.7%Pb,	3.00%Zn	2.80ppm Au
WL17	6m @ 1.6%Pb,	3.60%Zn	0.70ppm Au
	(Ref also Figure 6)		
	7m @ 0.7%Pb,	1.60%Zn,	4.67ppm Au
WL24	3.8m @ 2.9%Pb,	0.80%Zn,	2.55ppm Au
	5.3m @ 2.4%Pb,	4.6%Zn,	5.55ppm Au
	2.0m @ 1.84%Pb,	3.75%Zn,	5.60ppm Au
WL28	1m @ 1.9%Pb,	1.16%Zn,	2.75ppm Au
	1m @ 3.6%Pb,	2.35%Zn	2.24ppm Au
WL31	3.0m @ 0.55%Pb,	1.12%Zn,	0.51ppm Au

Gold values tend to be particularly high where the sphalerite is a very pale grey/brown to fawn colour and pyrite is rare or absent.

Where very high base metal values occur, particularly associated with increased pyrite, the gold values decrease again. The association of gold with galena and sphalerite was noted in the accompanying petrographic study (Appendix 3). The distribution of Au, base metals and pyrite, contents silicification and foliation intensities in the holes are shown by a series of figures comprising Appendix 4. Correlation matrices show variable intermetal relationships in different holes (Appendix 5). Au is related to silica/quartz content and inversely related to foliation intensity.

Detailed gold analyses through the centre of the main zone (Figure 3) show that the fine-grained sericitic and siliceous volcanics generally contain greater than 0.1ppm Au, whereas the coarser quartz-phyric volcanics (Wet Lagoon Sequence) contain generally less than 0.1ppm Au. The main gold mineralisation appears to be located near the western boundary of the 'greater than 0.1ppm domain'.

3.1.2 PROPOSED DRILLING

It is proposed to complete 5 diamond drill holes in the current program including the wedge off WL32 to reach the target depth as summarised below:

DDH	Depth	Angle	Location	Target
WL32E	160m	$50^{o}/080^{o}$	50m west WL24	Down dip extsion of zones in WL17, WL24 and WL31 Test for parallel zones to the west.

WL33	200m	50°/260°	38m west WL32	Auger lead anomalies 620ppm, 1100ppm, 1450ppm -associated? Au in untested ground
WL34	160m	50°/080°	45m west WL27	Southern extension of zone in WL31
WL35	160m	50°/080°	50m west WL28	Downdip extension of zones in WL28. Test for parallel zones to the west.
WL36	200m	50°/60°	200m west WL15	Auger lead anomaly

3.1.3 RESAMPLING OF PREVIOUSLY DRILLED DIAMOND DRILL HOLES

Additional drill holes were resampled during the report period. Prospective core available at Goulburn was cut or ground over selected intervals, generally quartz-veined. Most results were low with very few samples containing greater than 0.1ppm Au. The highest result was 0.46ppm Au, 23.0 - 29.0m in WL14 (see Appendix 2 for details).

Resampling Summary

Drill Hole	Intervals sampled (m)	Best Result Int.	Au	Cu	Pb (ppm)	Zn
WL2	77.7-79.7m cut 96.3-99.4m, 123.7-139.0m ground	123.7-126.8m	0.14	30	46	179
WL7	165.9-202.0m ground	201.0-202.0m	0.05			
WL14	23.0-166.0m ground	23.0-29.0m	0.46	570	1610	1680
WL18	65.0-149.0m ground	70.0-75.0m	0.03	46	25	103
WL21	209.9-210.9,} 280.0-282.0,} 287.5-288.5,} 338.0-341.0,} 368.5-369.5 cut,} 168.6-201.6,} 494.2-513.0} ground	494.2-498.0m	0.15			
WL23	3.0-84.0m } 159.0-180.0}	74.0-77.0m	0.10	68	166	330

Resampling indicates that economic grades of gold mineralisation do not continue northwards at shallow levels (the upper part of WL14) or to the south, (the upper part of WL18). No significant parallel zones or continuations appear to exist away from the mineralised zone between WL31 and WL15 .

3.2 WET LAGOON EAST SOIL SAMPLING (Refer Figure 1, 4 and 5)

Two orientation survey lines were sampled at 20m spacings, the first heading easterly from WL22, the second approximately 180m to the north. Both lines located anomalous gold and base metal values in a zone that corresponds with anamalism encountered in DDH WL22.

A grid was established over an area of prospective ground with residual soils with lines every 200m and sampling 25m apart. These soils showed three zones of high base metals.

1. 200N-25W to 150W -max. 183ppmCu, 1600ppmPb, 422ppmZn 6ppb Au. Zone tested by DDH WL22

2. 1000N-75W to 100W -max 343ppmCu 338ppmPb, 106ppmZn, 7ppb Au. Zone tested by DDH WL2

3. 500N-550E to 700E
   To
   1200N-350E to 650E -max.72ppm Cu, 500ppm Pb, 1090ppm Zn, 13ppb Au. Forms a broad zone, the southern part of which was tested by DDH DB1

Two further soil lines will be sampled at 1100N and 1300N to further test apparent weak Au anomalism.

In summary, soil sampling generated several base metal/Au anomalies, some of which had been tested previously. The Au/Pb anomaly on 1200N, 425E-475E (max. 500 ppm Pb, 13ppb Au) may require testing.

3.3 WET LAGOON ROCK CHIP RESAMPLING

Gossary outcrops and quartz veins SE of the collar of DDH WL7 and on the small hill to the NE of the collar of DDH WL2 have been reported as containing high base metal and anomalous gold values (Noth Broken Holdings Ltd and Pan Australian Mining Ltd Reports). These areas were resampled (Refer Figure 4 for sample locations and Table 1 for assay results).

Five samples (no's 48001-48005) were collected from the south west corner of Wet Lagoon (WL7 area) with gold values up to 0.07ppm and significant copper up to 670ppm. Other base metals were low.

Seven samples (no's 48006-48012) were collected from the hill near WL2. Gold values were again low being up to 0.08ppm in a gossary sample containing 1790ppm lead.

In summary, the higher reported results of earlier exploration were not reproduced and these earlier results must therefore be treated with some scepticism.

3.4 OTHER EXPLORATION

3.4.1 Breadalbane Ironstone Quarry (B1 Anomaly) Sampling (Refer Table 2 for results and Figure 7)

High gold values were detected whilst resampling DDH B1/3, which was drilled under the Breadalbane Ironstone Quarry. (2.02ppm Au 370'-380' - see report ending 20.11.86)

During the reporting period the quarry was rock chip sampled to follow-up the gold in drill core which was associated with magnetite. Initially two rock chip traverses were done. The northern pit (sample 48992) returned a value of 0.22ppm Au, the southern face in the main quarry (sample no.48991) a value of 0.40ppm Au.

More detailed sampling of the northern and southern faces of the main quarry showed that the gold values were very low on the northern face (max. 0.06ppm) and very localised on the southern face (max.0.82ppm over 5m - composite sample). Sample 12486 from the copper ore stockpile assayed at 0.57% Cu, 7.6% Pb, 3040ppm Zn, 150ppm Ag and 1.98ppm Au.

3.4.2 Stream Sediment Survey and follow-up.

A total of 54 stream sediment samples were collected from the Breadalbane EL and PL's. They were analysed for Au by cyanide bulk leach (BLEG) and the pathfinder elements Cu, Pb, Zn, Ag, Fe, Mn, Ca, Mo, As, Bi, Mg, Sb, Se and Te by AAS. Sample weights for Au analysis is varied from 5 to 10 kg. Those elements that showed anomalies were plotted as figures 7a-j, namely Au, Cu, Pb, Zn, Fe, n, As, Bi and Sb. Results are tabled as Appendix 6.

Sample No.	Notable results	Comments
BS1	35.0ppb Au	"Merrilla" area Stream sediment follow-up (4 samples) BS1-1 to BS1-4)max. 9ppb Au
BS3	1.5ppb Au	Wet Lagoon South drilling area.
BS5	1.3ppb Au	B3 drilling area
BS9	1.15ppbAu, 40ppmCu} 65ppmPb, 135ppmZn}	Gurrundah/Lucky Hill drilling area
BS27	1.25ppb Au	Sandy Creek tributary
BS37	14.9ppm As	Western side of Dry Lagoon Stream sediment follow-up (3 samples BS37-1 to BS37-3 Max.4.0ppm As)
BS38	1.0ppbAu,1.25ppmSb} 35ppmCu,65ppmPb} 250ppmZn}	Payeys Creek, needs follow-up.
BS40	21ppm As	Sheet of Water Creek Gurrundah area.
BS42	1.3ppb Au	"Milbang" area. Tributaries of Collector Creek-needs follow-up.
BS43	22.9ppm As,} 1.55ppm Sb	"Lerida Outstation" Norfolk Creek Stream sediment follow-up (5 samples BS43-1 to BS43-5, max.3.5ppmAs, 500ppb Sb)
BS44	12.8ppm As	"Lerida Outstation" homestead area. Stream sediment follow-up (3 samples BS44-1 to BS44-3, max.1.0ppm As)
BS45	9750ppb As,} 1500ppt Au	"Springvale" Stream sediment follow-up (3 samples BS45-1 to BS45-3 max.4500ppb As, 5000ppt Au)

Sample no's BS43, S44 and BS45 all contain anomalous As, some anomalous Sb and Au. They all drain a granitic area, an arm of the Wijangla batholity, and these values may reflect background values for that granite. The only samples where some follow-up is still required are BS38 and BS42.

4. CONCLUSIONS/RECOMMENDATIONS

During the reporting period three diamond drill holes were completed at the Wet Lagoon Prospect. Results to date seem to localise economic gold mineralisation in a small area. In order to increase the reserve to a mining tonnage further intersections must be made to the north, south, down dip and in parallel zones to the west. At this stage, with the drilling incomplete, no conclusion can be made on the future of the prospect. Resampling of previous drill holes, rock chip and soil sampling all indicate that the economic gold mineralisation is probably very localised in the W128-WL24-WL31 area. Additional intersections are required along the strike to the south and as parallel zones to the west to generate an economic Au resource.

Bulk leach Au analysis of stream sediments generated several Au ± pathfinder anomalies and some of these still require follow-up work including further bulk leach sampling.

Sampling of the Breadalbane Ironstone Quarry has eliminated the potential for a small, shallow Au resource at that location.

Further exploration may be warranted in the soil survey area, line 1200N where 13ppb Au, 500ppm Pb occurs, being the possible northern extension of the DDH DB1 anomaly.

5. EXPENDITURE SUMMARY

Expenditures recorded during the accounting periods most closely corresponding to the report period total $127,172.89. The total is subdivided as follows.

Salaries + wages	$34,736.68
Diamond drilling	48,652.21
Geochemistry	10,463.20
Vehicles	4,455.58
Accommodation, meals	4,653.46
Supplies	1,388.51
Administration	4,805.95
Costeans, drill site rehabilitation	1,000.00
Geology	1,063.75
Overheads	15,953.55
	$127,172.89

TABLE 1 WET LAGOON AREA ROCK CHIP GEOCHEMISTRY

Results in ppm

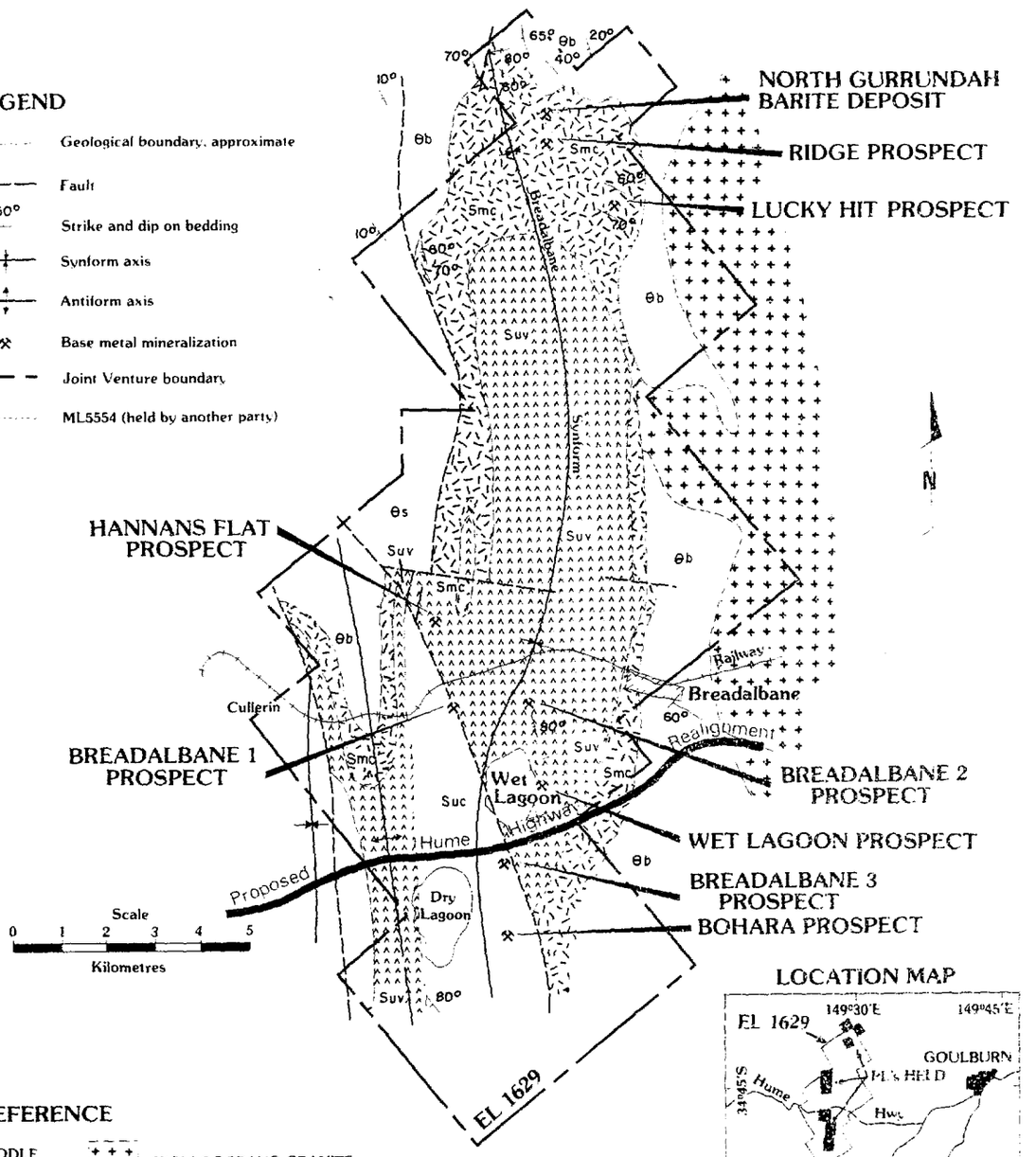
Sample No.	Au	Cu	Pb	Zn	Comments
27 48001	0.07	253	127	127	ferrug. sed
28 48002	0.04	620	120	73	ferrug.qtz-v? volc.
29 48003	0.05	340	56	61	qtz-v breccia
30 48004	0.02	670	37	137	ferrug.qtz float
31 48005	0.02	9	3	11	qtz.float
32 48006	0.02	27	15	71	} quartz
33 48007	0.02	11	5	9	} float
34 48008	0.02	14	8	14	} ferrug.
36 48009	0.02	14	12	24	} ±.
36 48010	0.04	22	25	34	} musc.
37 48011	0.04	670	330	304	} gossaneous
38 48012	0.08	920	1790	296	} tuff

TABLE 2

Abundances in ppm unless shown Ag <1, Hg <5.

S. No.	Pb	Ba	Sb	Sn	W	Bi	Au	Co	Cr
48391	36	65	<4	24	50	46	0.40	35	15
48992	54	10	6	54	<10	195	0.22	15	20
12486	7.6%						1.98		

S. No	Fe	Mn	Mo	Ni	Ca	V	Cu	Zn	As	Se
48991	59.4%	1400	10	35	520	50	500	410	65	<2
48992	58.4%	270	10	45	310	65	340	960	44	9
12486							5700	3040		



REFERENCE

MIDDLE DEVONIAN	+ + +	WOLLOGORANG GRANITE
UPPER SILURIAN	Suc	COVAN CREEK BED Shales, siltstones, sandstones
	Smc	CLARE VALE BEDS Tuffaceous and calcareous sedimentary rocks, minor volcanics and exhalites
	Suv	COOPERS CREEK DACITE Acid to intermediate volcanics, tuffaceous and calcareous sedimentary rocks
UPPER ORDOVICIAN	Θb	BREADALBANE BEDS Sandstones, siltstones, shales, black shales
	Θs	Sandstones, siltstones, shales probably equivalent to Breadalbane Beds

GEOLOGY AND PROSPECT LOCATIONS BREADALBANE PROJECT

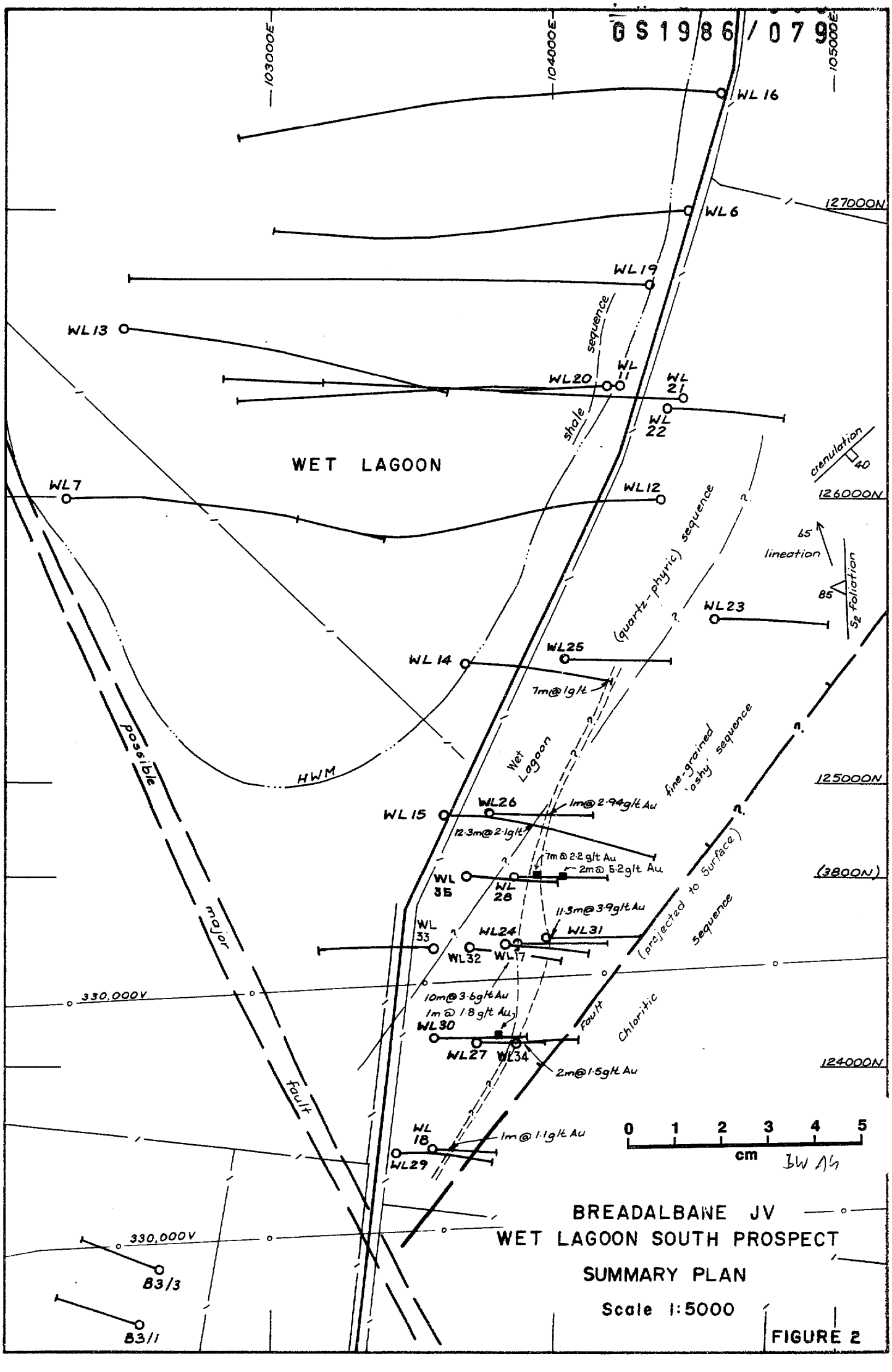
This Figure was prepared by Pan Australian Mining Ltd in October 1984 from information in its records for inclusion in this Prospectus

Figure 1

0 1 2 3 4 5
cm

BW A4

GS1986/079



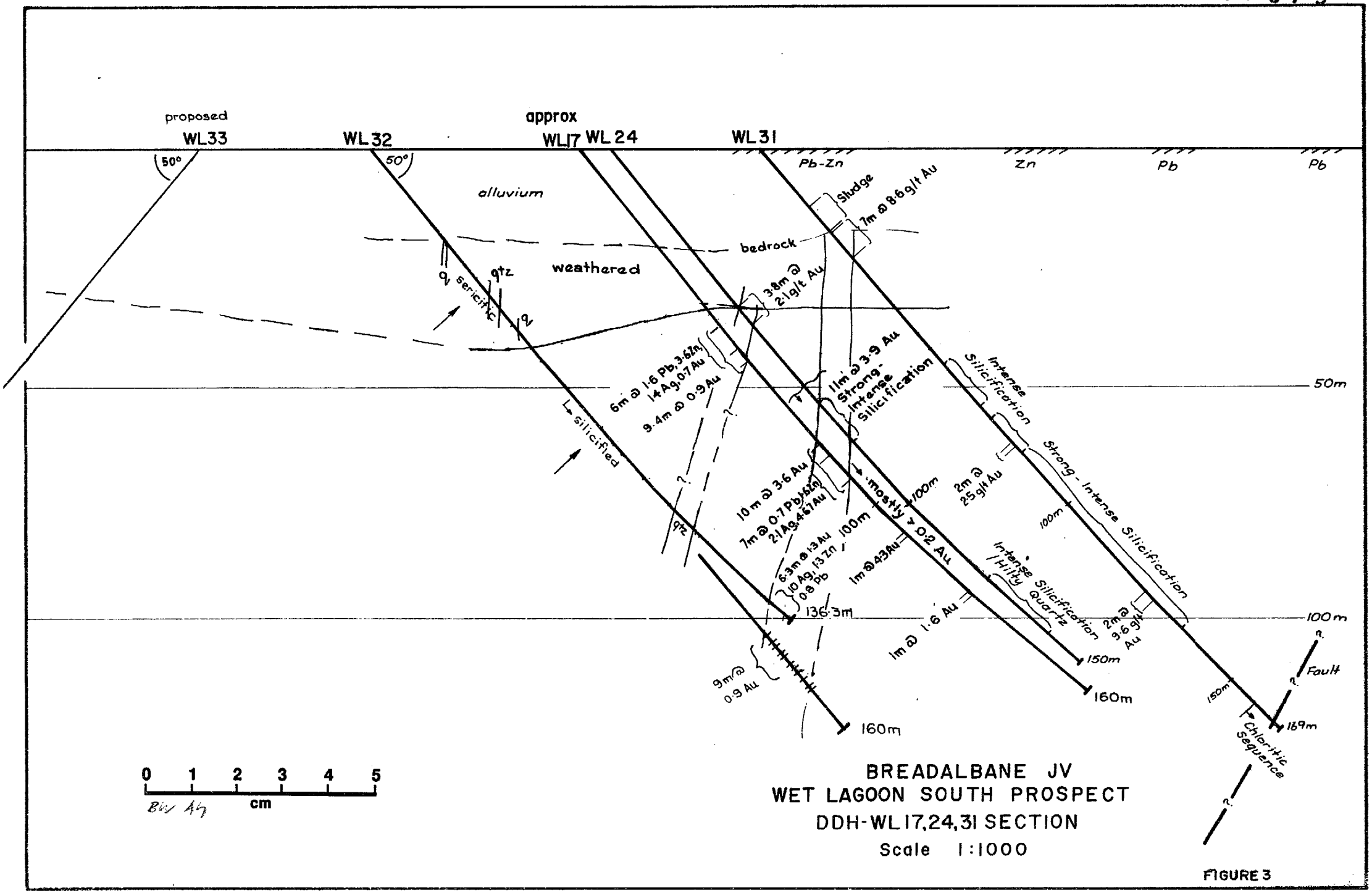
BREADALBANE JV

WET LAGOON SOUTH PROSPECT

SUMMARY PLAN

Scale 1:5000

FIGURE 2



BV 47

BREADALBANE JV
WET LAGOON SOUTH PROSPECT
DDH-WL17,24,31 SECTION
Scale 1:1000

FIGURE 3

134,000 N
132,000N
128,000N
126,000N
124,000N
108,000E
106,000E
104,000E
102,000E
100,000E

Collector Road

MN

351°30'NBHL GRID

1986 Soil Survey

700E 1200N
700E 1000N
700E 800N
600E 400N
500E 200N
200E 200N
100E 000N

DB1
DB2

150W
100W
50W

48007
48009
48006
48010
48008
48011
48012

WL1
WL2
WL3
WL4
WL5
WL6
WL7
WL8
WL9
WL10
WL11
WL12
WL13
WL14
WL15
WL16
WL17
WL18
WL20
WL21
WL22
WL23
WL24
WL25
WL26
WL27
WL28
WL29
WL30
WL31

154m - 118m

Sericite (quartz) alteration
Chlorite (carbonate) alteration
087°
<100 ppm Pb

WET LAGOON SOUTH
THE WET LAGOON

BELL'S FLAT
BF1

B2 PROSPECT
B2/1
B2/2
B2/3
B2/4
B2/5
B2/6
B2/7
B2/9

B1 PROSPECT
B1/1
B1/2
B1/3
B1/4
B1/6

B3/1
B3/2
B3/3

48001
48002
48003
48004
48005

No Access To This Property

0 1 2 3 4 cm

Pb SOIL GEOCHEMISTRY
100 ppm
200 ppm
400 ppm
AUGER SITES (═ >200 ppm Pb)
PROPOSED DRILL HOLES

Au MINERALIZATION (>1·0ppm) IN DDH
1987 SOIL GEOCHEMICAL SURVEY
10ppb Au SOIL SAMPLE ANOMALY
— ? — LITHOLOGICAL CONTACT
GRID COORDINATES IN FEET
x ROCK SAMPLE

25 SQUARE SHEET

SCALE 1:10,000
0 200 400 600 800

ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED
MINERAL RESOURCES DIVISION

PROJECT BREADALBANE JV

WET LAGOON- B1- B2 AREA

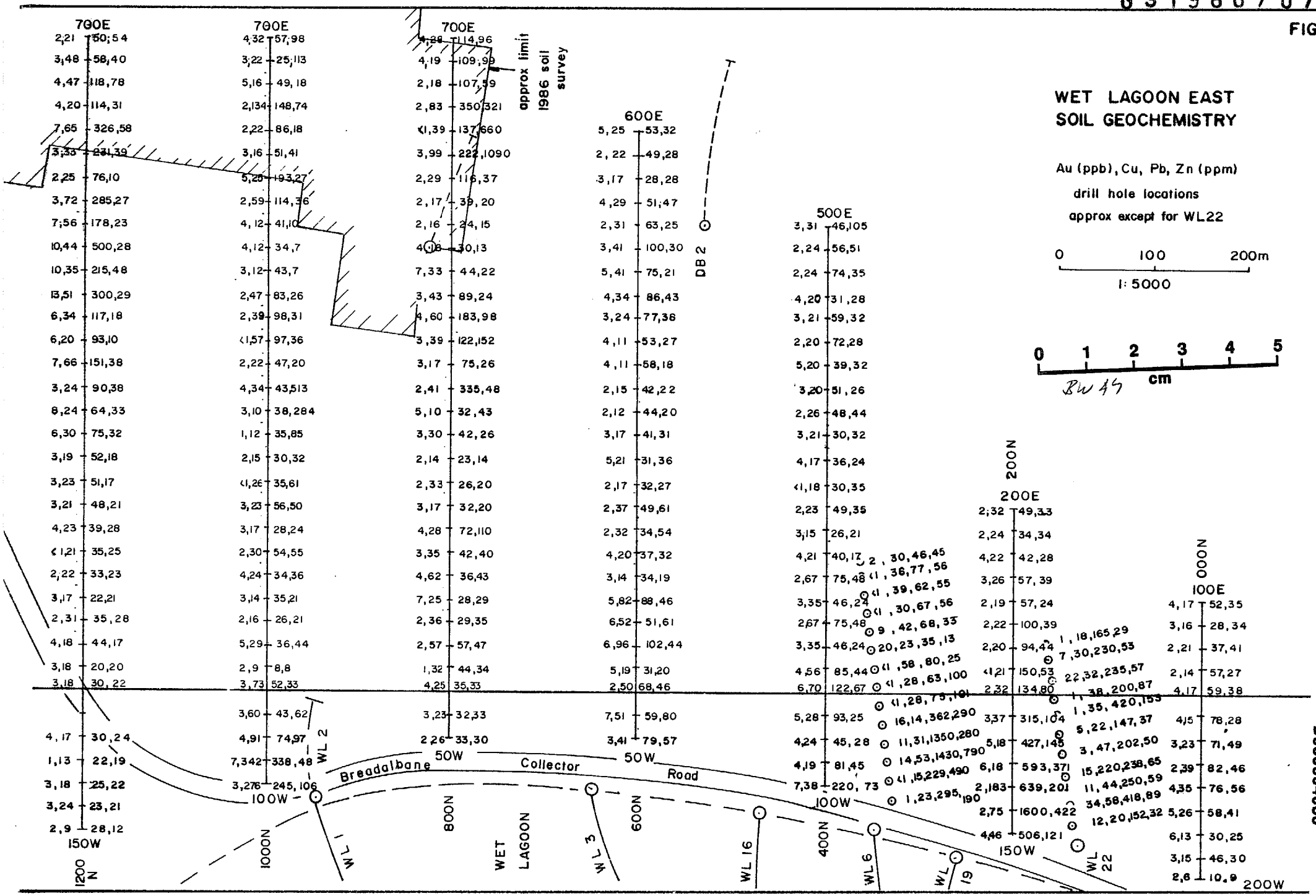
SUMMARY PLAN

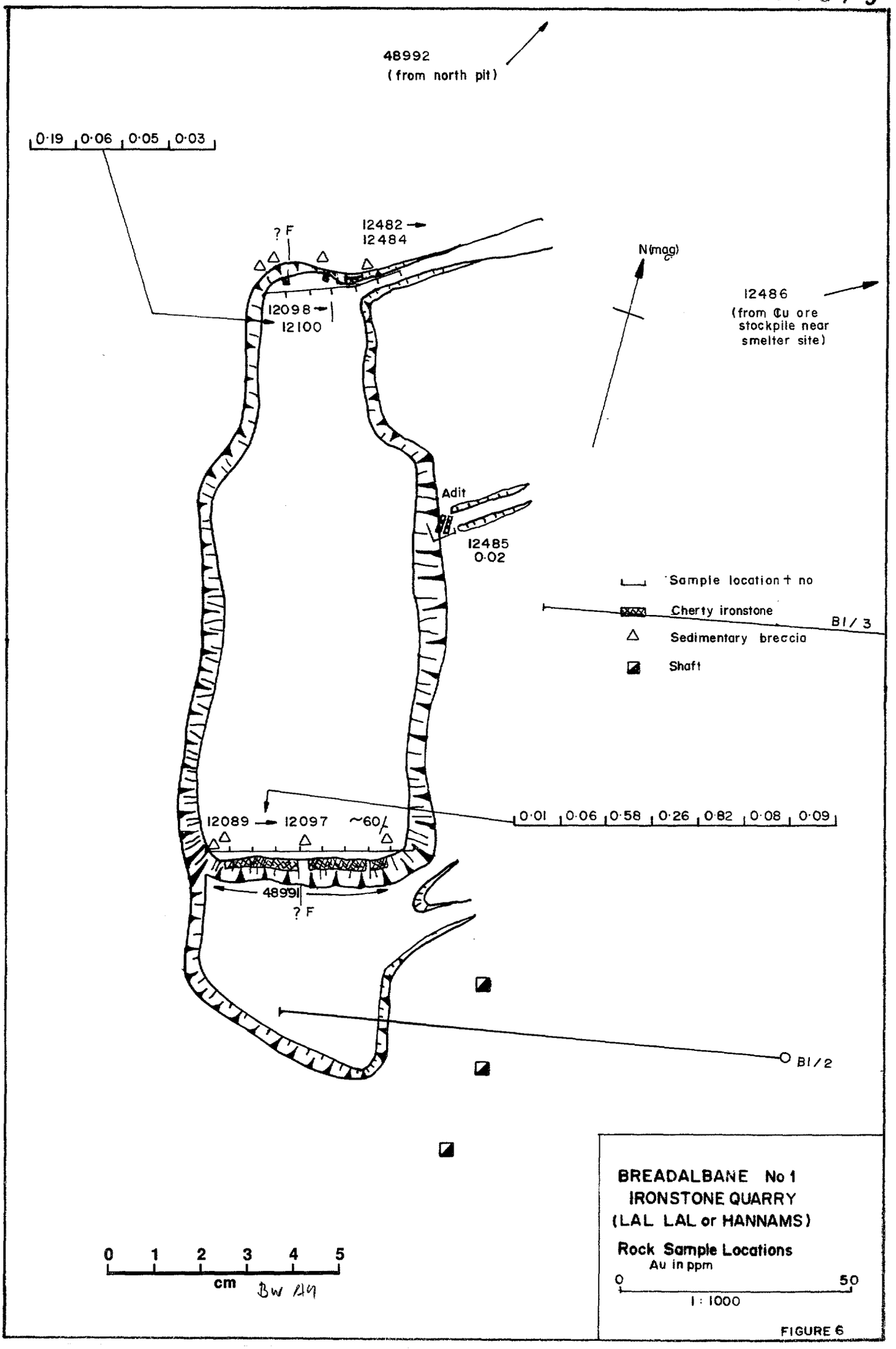
Compiled BLS | Date SEPTEMBER '87 | Scale 1:10,000
Latitude | Longitude | PLAN NO FIG. 4
Drawn C.A.S. | File No

Terminal A1 for reading within reel

Terminal A3 for report porter

FIG. 5





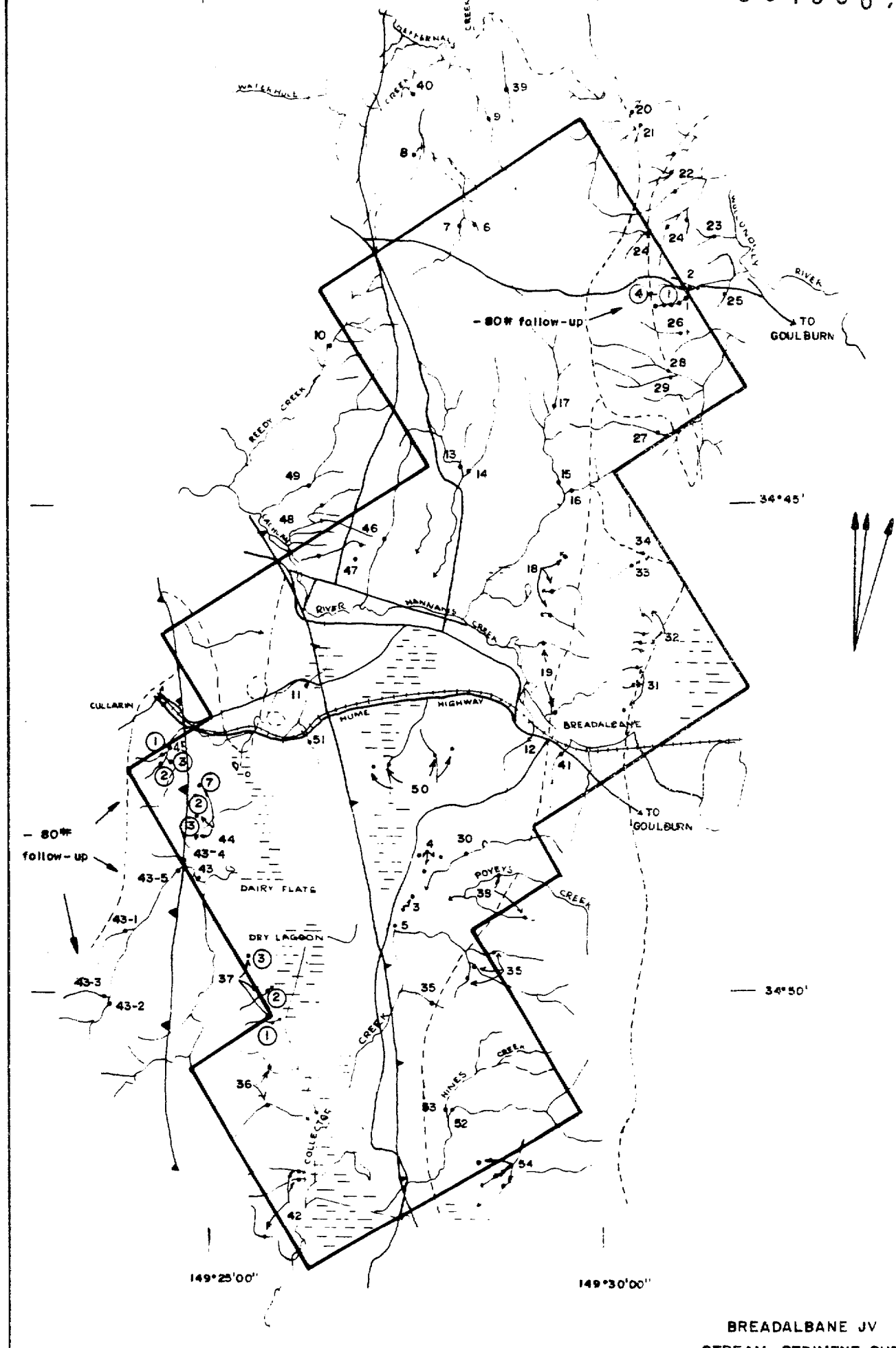
BREADALBANE No 1
IRONSTONE QUARRY
(LAL LAL or HANNAMS)

Rock Sample Locations
Au in ppm

0 50
1 : 1000

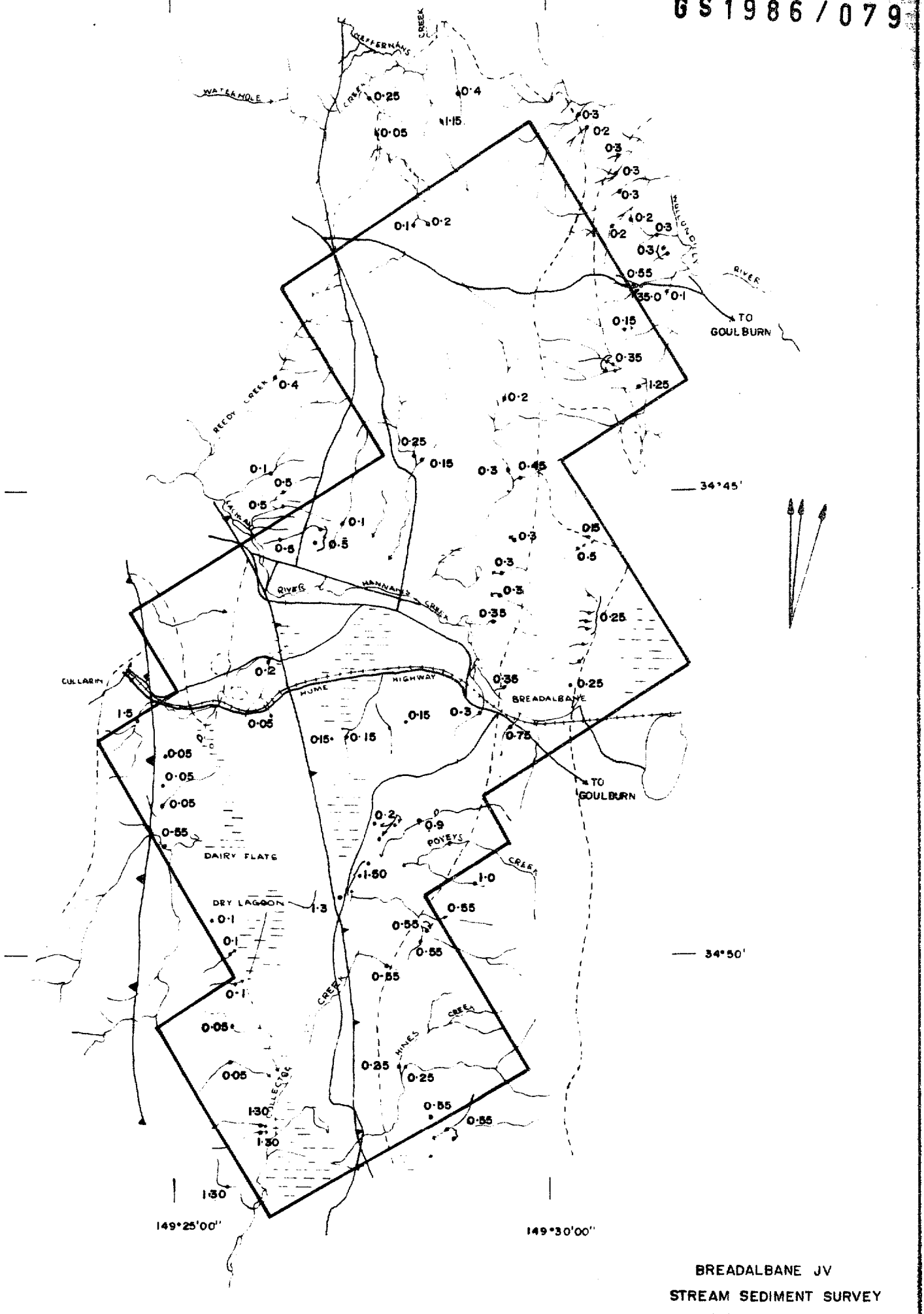
FIGURE 6

GS1986/079



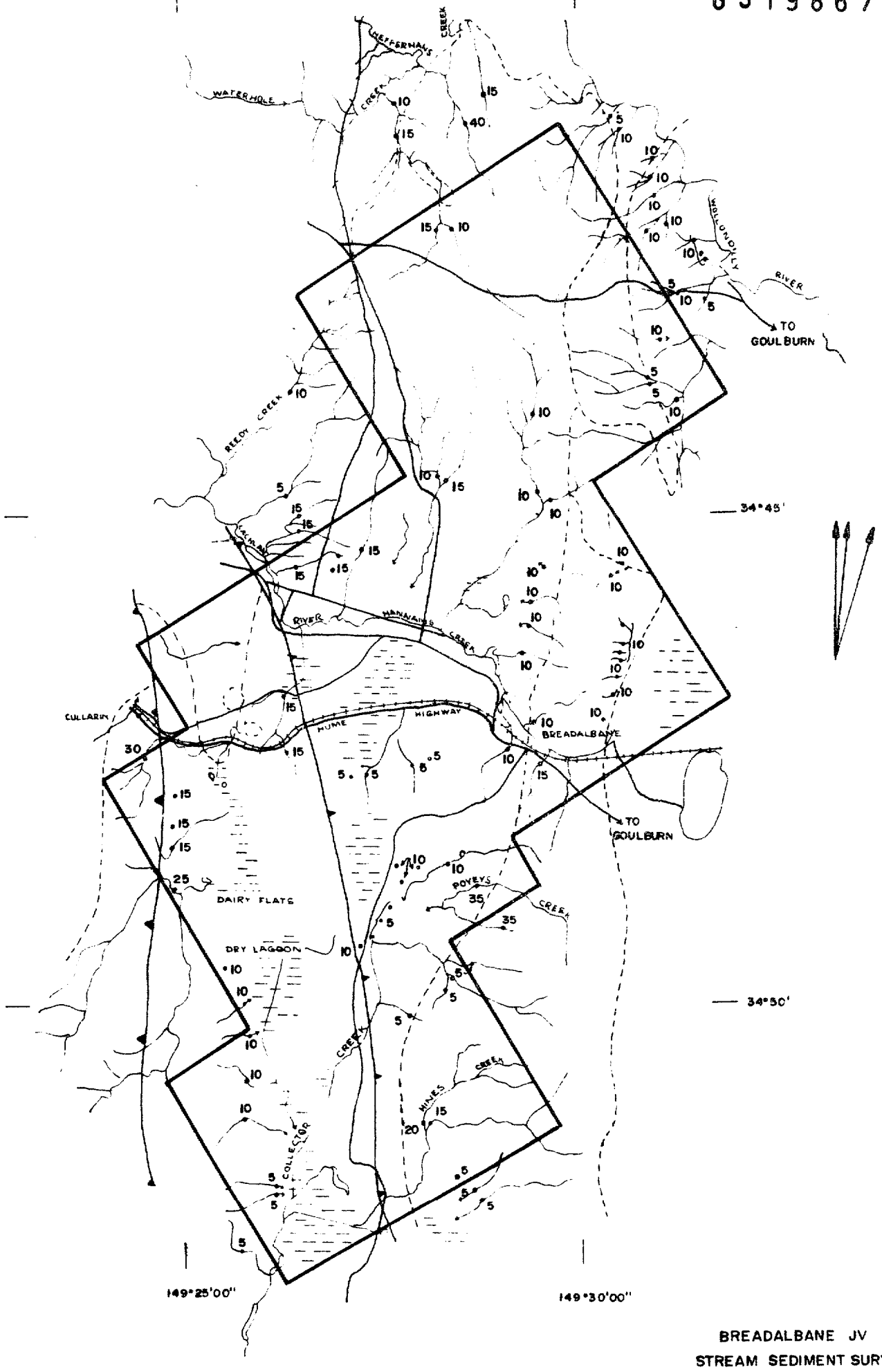
BREADALBANE JV
STREAM SEDIMENT SURVEY
SAMPLE LOCATION BSI-54

FIGURE 7a



BREADALBANE JV
STREAM SEDIMENT SURVEY
bulk leach Au (ppb)

FIG. 7b

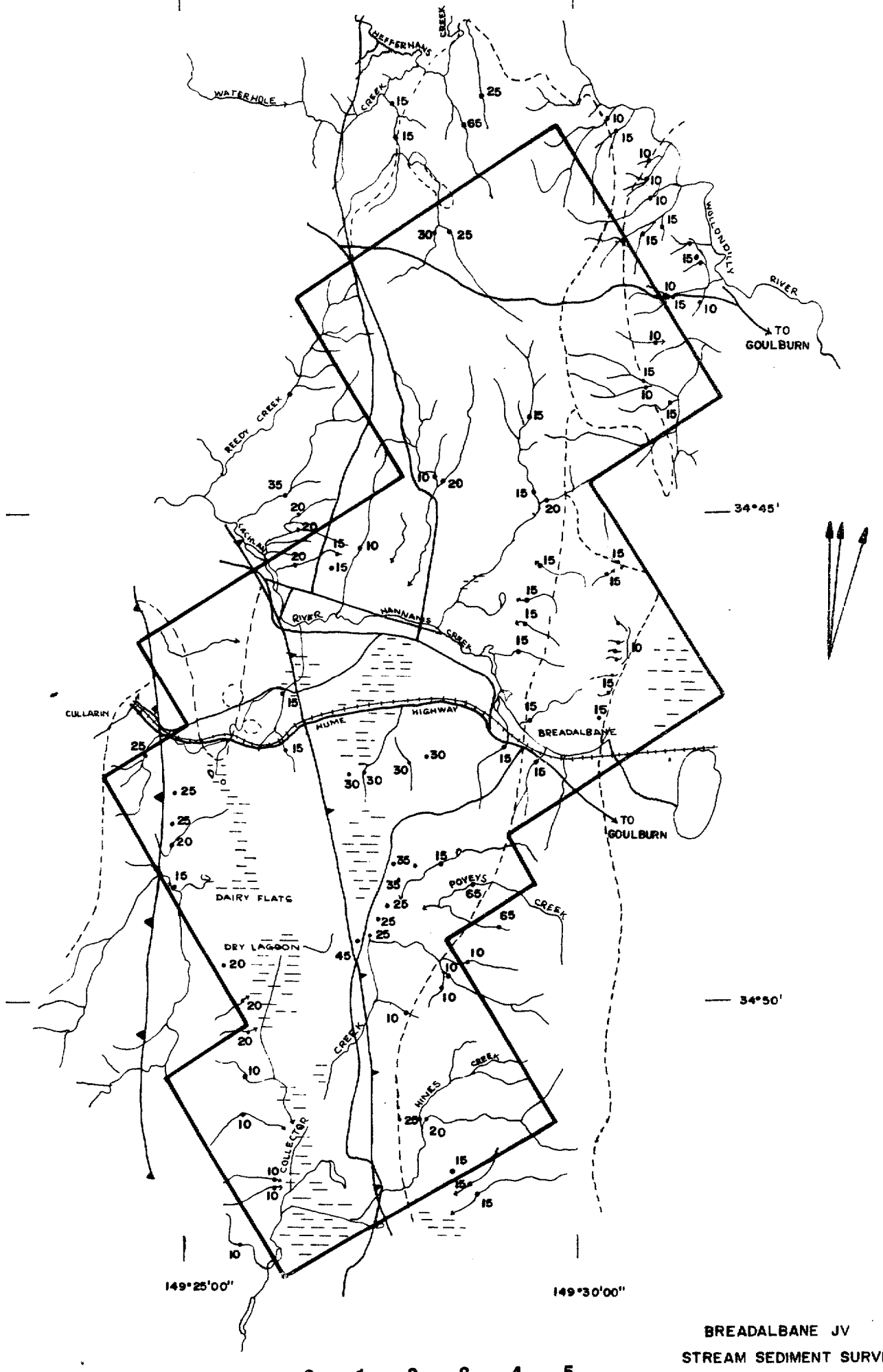


BREADALBANE JV
STREAM SEDIMENT SURVEY
Cu (ppm)

0 1 2 3 4 5
cm

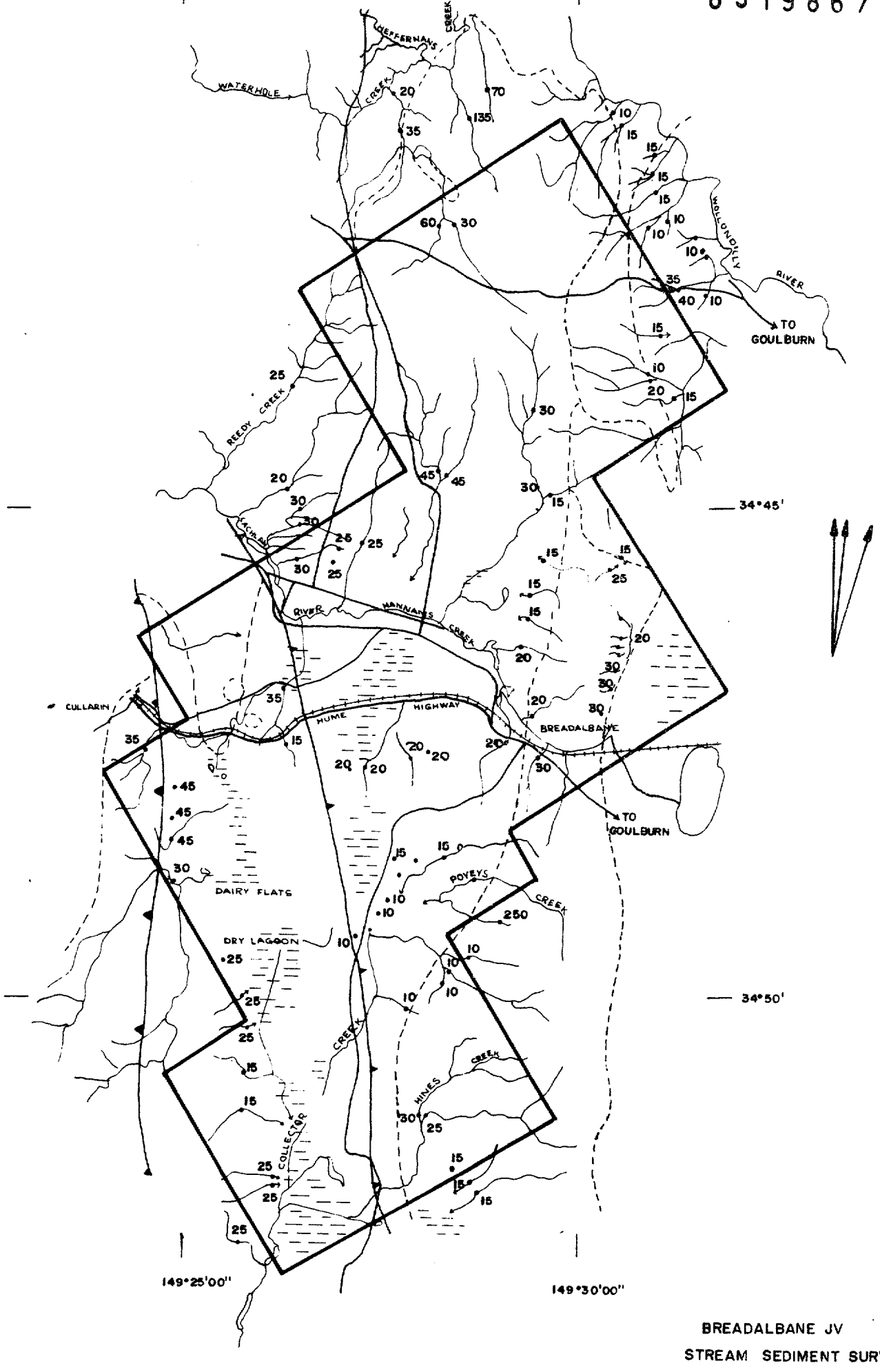
Bu Ag

FIG 7c



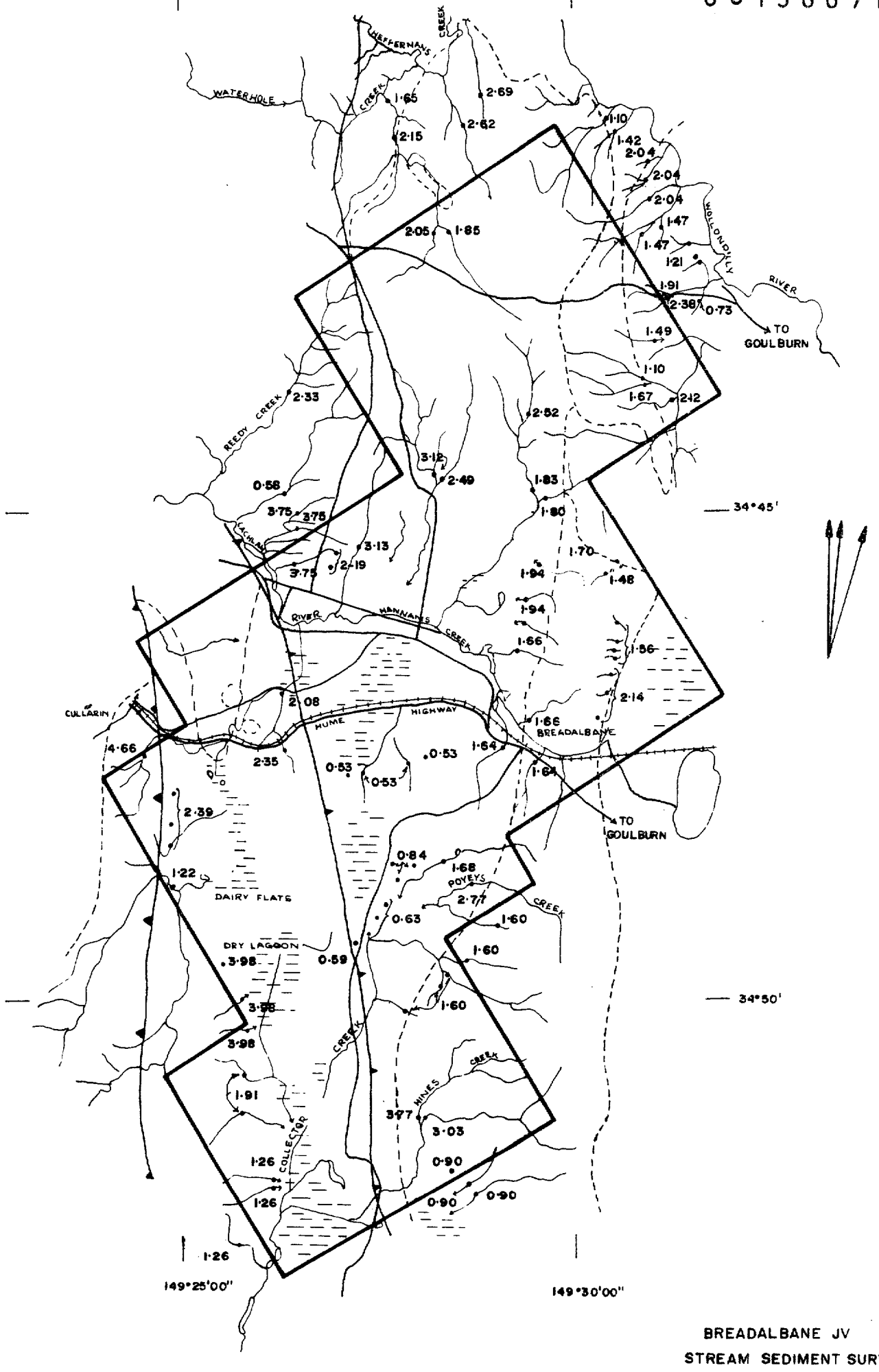
BREADALBANE JV
STREAM SEDIMENT SURVEY
Pb (ppm)

FIG. 7d



BREADALBANE JV
STREAM SEDIMENT SURVEY
Zn (ppm)

FIG. 7a

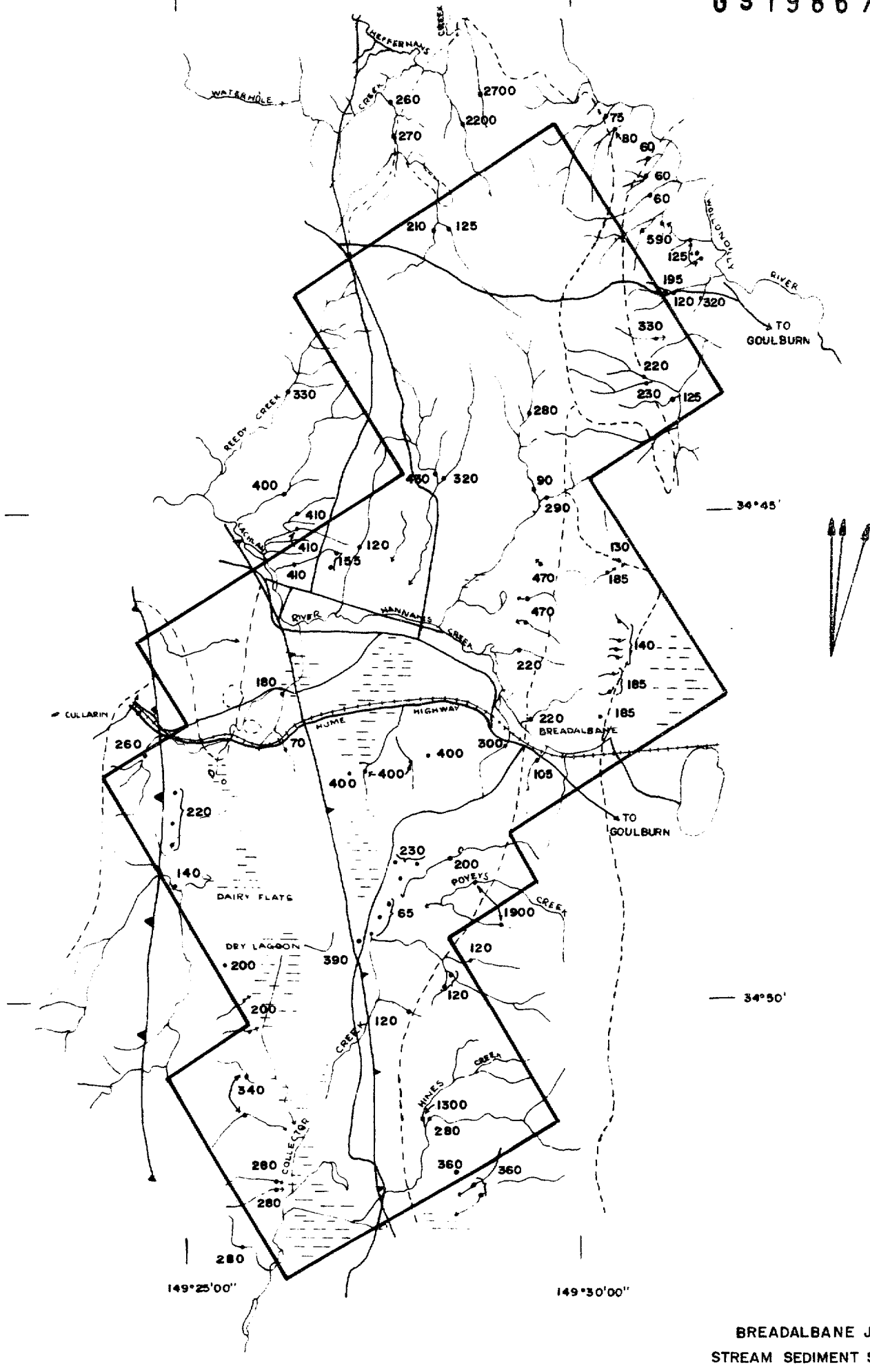


BREADALBANE JV
STREAM SEDIMENT SURVEY
Fe %

0 1 2 3 4 5
cm

BW DN

FIG. 71

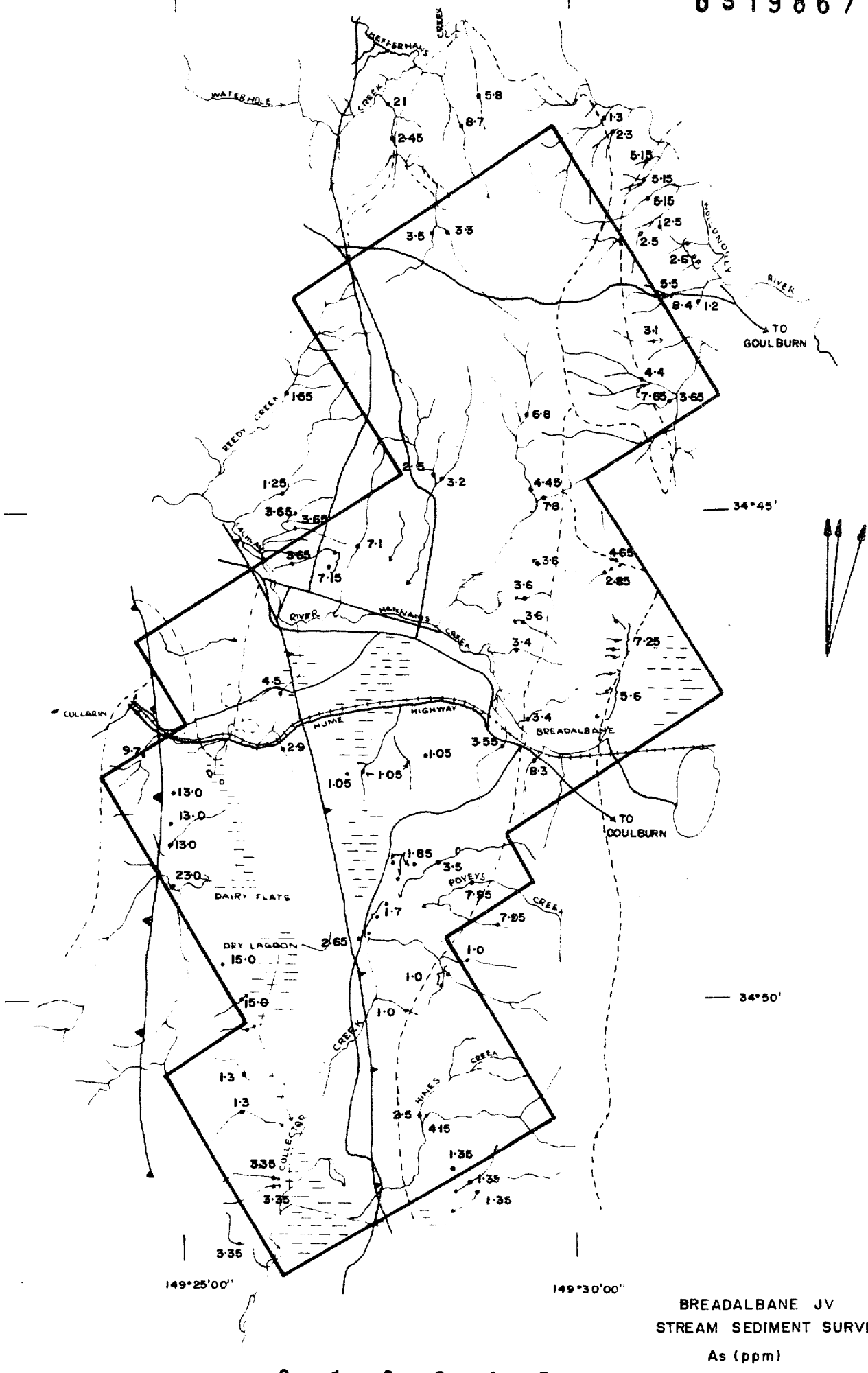


BW A4

BREADALBANE JV
STREAM SEDIMENT SURVEY
Mn (ppm)

FIG. 7q

GS1986/079

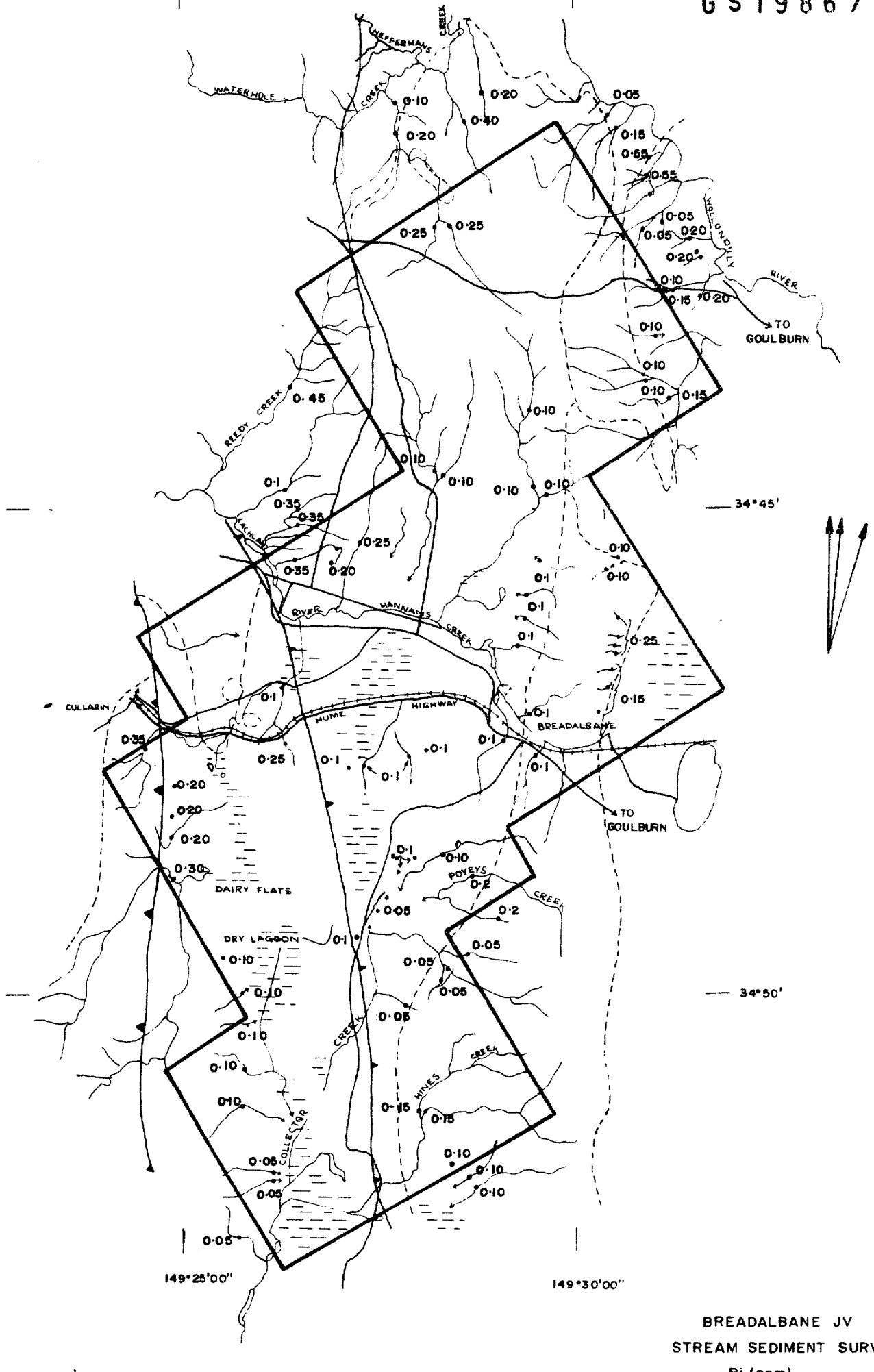


BREADALBANE JV
STREAM SEDIMENT SURVEY
As (ppm)

BW AH

FIG 7h

GS1986/079

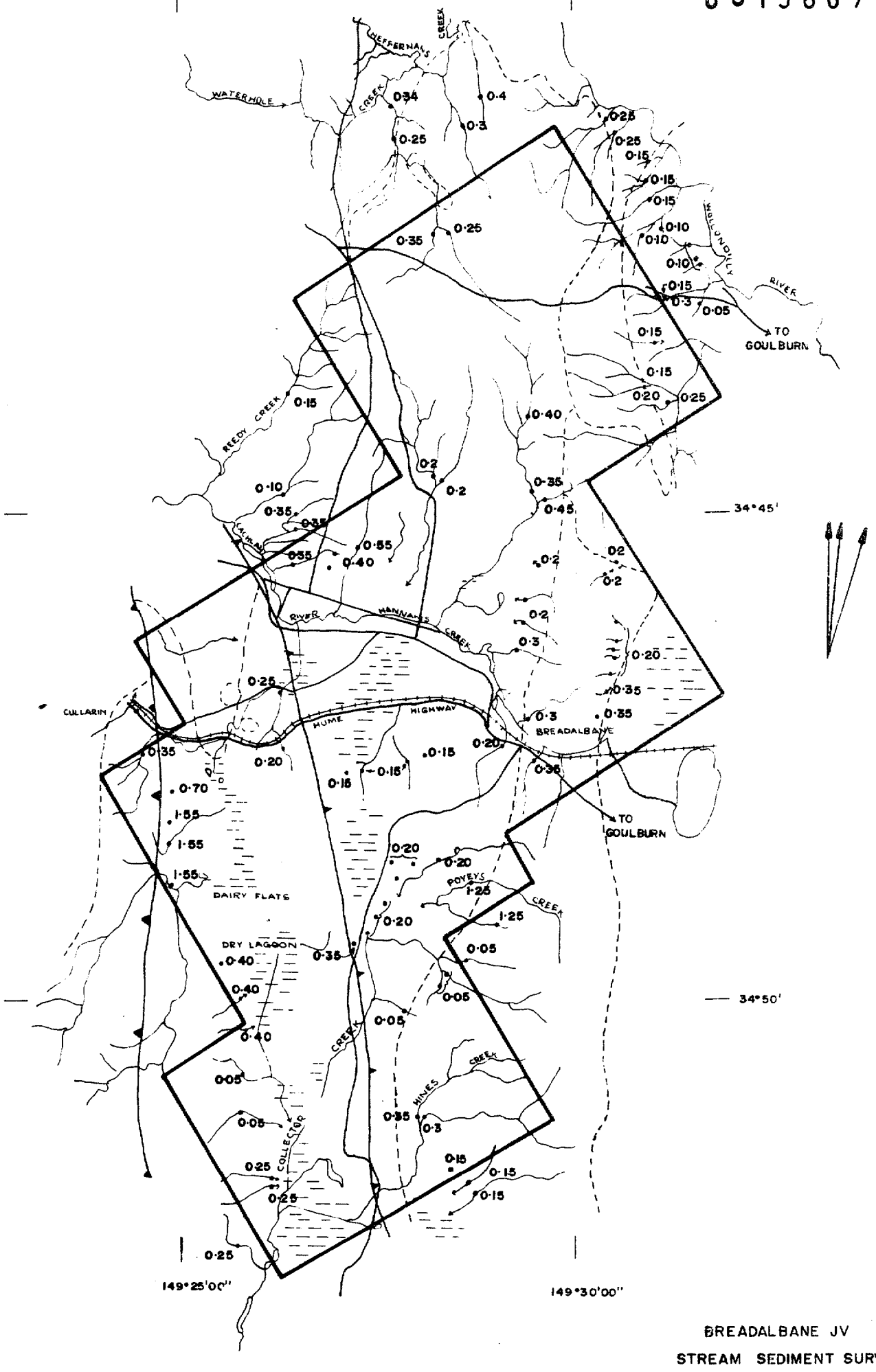


BREADALBANE JV
STREAM SEDIMENT SURVEY
Bi (ppm)

Bw 49

FIG 71

GS1986/079



BREADALBANE JV
STREAM SEDIMENT SURVEY
Sb (ppm)

FIG. 7

Bw A4

APPENDIX 1

WET LAGOON SOUTH PROSPECT

DIAMOND DRILL HOLE LOGS

WL 24 WL 25 WL 26	Logged by I. Gordon
WL 27 WL 28 WL 29 WL 30 WL 31	Logged by D. Gardner

DIAMOND DRILL HOLE SUMMARY LOG

WL 32	Logged by D. Fortowski

All assays in parts per million (ppm)

P = % pyrite content (estimated)

S = silicification intensity (0= no silicification, 6=quartz)

F = foliation intensity (0= unfoliated, 4= intensely foliated)

GS1986/079

Page 1 of 4

Latitude	Longitude	~~AMG~~ ISG 341751·7E / 1145691·0N	
Grid co-ordinates			
Collar elevation		Altitude	
Final length	155·2	Final depth	
Date commenced	16 March 1987	Date completed	11 April 1987
Contractor	Pontil Pty Ltd		
Drilling cost		Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m
NQ		155·2							

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		080	100	47·5		086		
40	51·5		089·8	130	47·25		087		
70	48·25		085	154	46·25		087·5		

Orientation Survey Instument: Eastman Singleshot

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐ electrode set in hole ☐ core susceptibility ☐ remanence ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth	Oxidation base	Water flow
few m.	42·1	—

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average Au g/t	Ag g/t	% Pb	% Zn	% Cu		
45	48·8	v. poor recov.	(6%)	2·1	19	2·9	0·8			
70·5	81·8	11·3		3·93	24	1·61	3·13	0·06		
incl. 70·5	75·8	5·3		5·8	41	2·46	4·74	0·08		
+ 79·8	81·8	2		5·6	18	1·88	3·75	0·045		
123·9	140·8	16·9		0·50	15	0·20	0·32	0·08		
134·9	135·9	1		1·08						
138·9	138·9	1		1·00						

Mineralization Recovery:

Objective of Hole:
confirmation of Au mineralisation in WL17

Summary and Conclusions:
confirmed widths and grades of Au - base metal intersection in WL17
geochemical / geological correlation suggest WL17 collar ~10m W of WL24, not the expected ~50m.

Recommendations: mineralisation requires testing along strike

Prepared by I. Gordon Date April 1987

Report Number

Section Number

Plan Number

Longitudinal Number

DRILL HOLE SUMMARY

Project BREADALBANE JV

Prospect WET LAGOON SOUTH

Full Length 155·2 Hole No. WL 24

HOLE WL24 LOGGED BY: I.GORDON

RUN	% REC	COMMENTS	TEXTURE	ALTN.	FOLN. DEGREES	MIN.	REF.NO	From	To	Au	Cu	Pb	Zn	Ag	F	S	F
		0 - 29.2						0.0	3.0								
2.9		Transported overburden, clay-rich and		Intensely we		some qtz	[illegible]	3.0	10.6	0.06	70	96	230				
3.6	35	fragments of vein quartz massive		weathered		with	[illegible]	10.6	20.0	0.01	45	103	108				
5.0	50	structureless, coarse grained towards				pyrite	[illegible]	20.0	23.0	0.01	33	94	164				
11.0	40	base, remains of lithic boulders (lag				boxworks	12041	23.0	27.0	0.12	150	3500	1110				
14.0	10	deposit)															
17.0	10																
20.0	46																
23.0	19																
24.3	35																
24.9	83																
25.2	41																
27.0	53																
28.5	29						[illegible]	27.0	26.5	0.10	124	2160	1270				
							18830	26.5	29.5	0.12	172	1890	1320	0.5	0	5	1
		29.2 - 48.8															
29.2	50	Fine grained vitric tuff (now sericitic	Fine	Silfn.	70 Weak	pyrite	12046	29.5	33.8	0.26	77	780	610				
31.6	51	schist) anastomosing chloritic fabric	grained	intense		boxworks	18831	33.8	34.5	0.09	122	1320	1660	2	1	5	1
34.1	76	represents ?flattened pumice -> ashflow?	quartz	sericite (SW		abundant	18832	34.5	35.4	0.27	34	1100	530	0.5	1	5	1
		coarse grained intervals -> 2mm several	phyrics	(Strong/		fine	45508	35.4	36.9	0.07	114	1950	930	0.5	1	5	1
		fine quartz veins + pyrite + minor dark		weak)		grained	18833	36.9	39.9	0.10	107	1280	780	0.5	1	5	1
		sphalerite, galena some quartz veins ->				dissemi-	18834	39.9	42.0	0.10	71	1870	690	0.5	1	5	1
		50cm, massive pyrite veins ->2cm.				nated	45509	42.0	43.5	0.06	32	610	390	0.5	1	3	1
						pyrite		43.5	45.0								
35.4	72	35.4 70cm intense silic+boxworks+pyrite			59		18835	45.0	48.8	2.55	870	29000	8000	19	2	5	1
36.2	90	36.2 finer grained ash + disseminated py.															
39.4	88																
41.9	89																
43.7	33	42.1 base of intense weathering															
45.5	6	45.5-48.8 fragments sulphidic quartz			66												
		fault zone															
48.8	100																
		48.8 - 50.2															
49.0	75	Puggy Fault Zone soft clay pyrite	Fine grained sparsely quartz pyrite	sericite		abundant fragment dissemi- nated pyrite	12047	48.8	50.2	0.34	40	8200	21500	0.5			
		50.2 - 70.5															
50.2		Quartz phyric crystal lithic tuff, many	quartz	Sericite	60 Weak/	Abundant	45510	50.2	51.7	0.03	26	1310	3800	0.5	5	2	2
	100	quartz phenocrystal ->3mm, flattened	phyric	Strong/	moderate	dissemi-	45511	51.7	53.2	0.03	20	425	1650	0.5	5	1	2
52.1		lithic fragments ->6mm some patches	lithic	weak-		nated	45512	53.2	54.7	0.02	22	345	1150	0.5	2	1	2
	10	intense silicif.+ sulphides pyrite, pale	frag-	moderate		pyrite	45513	54.7	56.2	0.09	390	3170	7700	0.5	2	1	2
55.2		sphalerite, galena (chalcopyrite,	ments	in places		quartz	45514	56.2	57.7	0.05	42	2060	4100	0.5	2	1	2
	97	arsenopyrite) 55.2-57.2 fragment ashy		(+chlo-		veins and	45515	57.7	59.2	0.01	24	255	730	0.5	2	1	2
58.4		tuff		rite?)		spalerite	45516	59.2	60.7	0.02	81	1870	2300	0.5	2	1	2
	100						45517	60.7	62.2	0.30	55	590	870	0.5	2	1	2

61.5		62.0 20cm intense silicif.+ pyrite, pale			45518	62.2	63.7	0.14	44	120	355	0.5	2 1 2
	100	sphalerite, grained chalcopyrite			45519	63.7	65.2	0.14	41	116	830	0.5	2 1 2
64.6					45520	65.2	66.7	0.15	26	40	480	0.5	2 1 2
	90		Silici-	Sulphitic	45521	66.7	68.2	0.16	115	430	1430	0.5	2 1 2
66.4			fication	quartz	45521	68.2	69.7	0.45	16	100	320	0.5	2 1 2
	80		increases	veins	45522	69.7	70.5	0.40	118	1135	2430	0.5	2 1 2
68.2	100			increase									
		70.5 - 75.8											
70.5		Sulphidic milky quartz + minor carbonate	Silicif.	Sulphitic	45524	70.5	71.5	1.01	1470	50000	48400	30	50 4 0
		occasional relic hostrock fragments	Intense	quartz	45525	71.5	72.5	13.05	1060	50000	12200	135	10 4 0
					45526	72.5	73.5	1.36	730	10600	28200	14	10 4 0
		70.5-71.2 55%m pyrite + arsenopyrite			45527	73.5	74.5	3.15	710	4960	20600	16	10 4 0
		sphalerite, grained + minor sphalerite			45528	74.5	75.8	9.19	480	11700	25000	19	10 4 0
		in quartz matrix contains soft green				~~75.5~~	~~75.8~~						
		mineral (?phengite muscovite)											
		74.6 1.2m broken core sulphidic quartz,											
		last 5cm is semi-massive pyrite											
		75.8 - 79.8											
		Fine-medium grained lithic tuff sericitic	Strong/	<5% py	45529	75.8	76.8	0.76	380	8900	4300	2	2 1 2
		chloritic, mainly medium grain, some	weak chlo-		45530	76.8	77.8	0.57	117	306	580	0.5	2 1 2
		finer units. Non porphyritic upper	rite		45531	77.8	78.8	0.83	580	4980	21700	18	2 1 1
		contact marked by 20cm 'spotty' silici-	serite		45532	78.8	79.8	0.36	207	535	1250	0.5	2 1 1
		fication.	some										
		76.6-77.3 coarse grained fragments	strong										
		volcaniclastic, bleached silicified	silifi-										
		lithic fragments (dacitic) to 5cm	cation										
		+ quartz fragments to 10mm, matrix	patches										
		weakly silicified pyrite + chlorite											
		78.1-78.3 55 + abundant sphalerite,											
		+ pyrite + galena											
		79.8 - 81.8											
		Massive quartz + up to 50% sulphides		50%	45533	79.8	80.8	5.73	410	32500	57000	25	25 5 0
		sphalerite galena at top more		sulphide	45534	80.8	81.8	5.45	490	4210	18100	12	25 5 0
		pyrite above base, contacts sharp,											
		grade over 5cm.											
		81.8 - 102.2											
		Medium grained crystal lithic tuff	moderate	5-10%	45535	81.8	83.3	0.64	150	3460	9600	5	7 2 1
		moderately silicified fine grained	silicif.	sulphide pyr	45536	83.3	84.8	0.33	138	260	1950	3	7 2 1
		lithic fragments + quartz in a		pyrite,	45537	84.8	86.3	0.30	256	1330	4000	8	7 2 1
		chlorite/sericite matrix silici-		some spha-	45538	86.3	87.8	0.25	340	2970	9900	14	7 2 1
		fication strongest at top.		lerite,	45539	87.8	89.3	0.42	410	2400	2700	2	7 2 1
				dissemi-	45540	89.3	90.8	0.53	130	80	220	0.5	7 2 1
				nated.	45541	90.8	92.3	0.22	174	920	1410	0.5	7 2 1
				veins,	45542	92.3	93.8	0.11	220	840	138[illegible]	0.5	7 2 1
				blebs?	45543	93.8	95.3	0.12	211	400	1000	0.5	7 2 1
					45544	95.3	96.8	0.12	224	185	25[illegible]	0.5	7 2 1
					45545	96.8	98.3	0.11	300	2240	347[illegible]	2	7 2 1
					45546	98.3	99.8	0.02	202	1540	184[illegible]	0.5	7 2 1
					45547	99.8	101.3	0.18	225	360	57[illegible]	0.5	7 2 1
					45548	101.3	102.2	0.49	360	320	138[illegible]	10	7 2 1
		102.2 - 125.9											

Medium coarse grained fragment lithic tuff, mainly poorly sorted flattened lithics up to 3cm, clasts often bleached, matrix chlorite/sericite variably silicified	Medium/ grained - strong/ intense (Chlo- rite, sericite)	moderate intense silicif.										
106.9 40cm sheared, brecciated cemented by abundant quartz and carbonate												
107.4 1.8m badly broken core												
117.5 silicification becomes more intense sulphide content increases												
123.9 - 190.8												
Massive milky quartz/strong intense, erite compared with 70.5->75.6		Intense silicif.	10-15% sulphides sphalerite pyrite galena	45570	123.9	124.9	0.23	370	520	2830	7	12 5 0
				45571	124.9	125.9	0.51	480	5200	710	13	12 5 0
				45572	125.9	126.9	0.77	1870	4820	1510	53	12 5 0
				45573	126.9	127.9	0.19	640	805	1660	9	12 5 0
				45574	127.9	128.9	0.18	1240	1630	3200	30	12 5 0
				45575	128.9	129.9	0.16	1240	2760	4200	35	12 5 0
				45576	129.9	130.9	0.16	485	1350	24200	5	12 5 0
132.2 60cm strong silicification of coarse grained lithic tuff,poorly sorted volanic fragments similar to above unit		intense silicif.	10-15% sulphides sphalerite pyrite galena	45577	130.9	131.9	0.86	1120	6240	7500	22	12 5 0
				45578	131.9	132.9	0.31	383	1330	1740	7	12 4 0
				45579	132.9	133.9	0.27	436	3330	4600	8	12 5 0
				45580	133.9	134.9	0.17	187	440	950	1	12 5 0
				45581	134.9	135.9	1.06	860	750	4100	12	12 4 0
				45582	135.9	136.9	0.35	1245	1595	2960	24	12 5 0
134.8 30cm 55 coarse grained lithic tuff poorly sorted volcanic fragments, similar to above unit				45583	136.9	137.9	0.54	399	830	1540	6	12 5 0
				45584	137.9	138.9	1.00	910	1340	5600	11	12 5 0
				45585	138.9	139.9	0.89	690	710	5900	9	12 5 0
				45586	139.9	140.8	0.20	820	1060	3100	7	12 5 0
140.8 - 156.2												
Sparsely quartz phyric chloritic tuff strongly silicifiedm contains abundant pale green sphengite (or fluorite???)		Strong silici- fication	10% dis- seminated pyrite	45587	140.8	141.8	0.22	297	221	670	0.5	10 3 1
				45588	141.8	142.8	0.15	142	466	1230	1	10 3 1
				45589	142.8	143.8	0.30	258	262	500	1	10 3 1
				45590	143.8	144.8	0.15	172	217	395	0.5	10 3 1
				45591	144.8	145.8	0.15	233	400	1170	0.5	10 3 1
				45592	145.8	146.8	0.30	298	1075	1365	0.5	10 3 1
				45593	146.8	147.8	0.29	730	2160	3400	5	10 3 1
				45594	147.8	148.8	0.71	245	1670	2600	3	10 3 1
				45595	148.8	149.8	0.34	371	2140	3600	0.5	10 3 1
				45596	149.8	150.8	0.54	140	1010	1990	0.5	10 3 1
				45597	150.8	151.8	0.24	395	670	1350	0.5	10 3 1
				45598	151.8	152.8	0.26	250	400	720	0.5	10 3 1
				45599	152.8	153.8	0.54	220	220	390	0.5	10 3 1
				45600	153.8	154.8	0.20	135	116	490	1	10 3 1
				19215	154.6	155.2	0.16	250	275	58	3	10 3 1

GS1986/307

Latitude	Longitude	~~AMG~~ ISG 341817.4E / 1145985.0N
Grid co-ordinates		
Collar elevation	Altitude	
Final length 179.4	Final depth	
Date commenced 3 April 1987	Date completed 10 April 1987	
Contractor Pontil Pty Ltd		
Drilling cost	Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m
TRICONE	0	23.6							
NQ	23.6	179.4							

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		078	178.4	48		087.5		
40	53.25		085						
101	51.5		086						

Orientation Survey Instument

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐
electrode set in hole ☐ core susceptibility ☐ remanence ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth few m | Oxidation base | Water flow —

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average Au g/t						
115.4	116.4	1		0.62						

Mineralization Recovery:

Objective of Hole:
to test above incomplete intersection of Au mineralization in WL14

Summary and Conclusions:
failed to confirm vertical continuity of WL14 intercept, minor Au only.

Recommendations:

Prepared by I. GORDON	Date APRIL 1987
Report Number	
Section Number	
Plan Number	
Longitudinal Number	

DRILL HOLE SUMMARY

EZ

Project BRENDALBANE JV
Prospect WET LAGOON SOUTH
Full Length 179.4 Hole No. WL 25

HOLE WL25 LOGGED BY: I.GORDON

INTERVALS	COMMENTS	TEXTURE	ALT.	FOLN. DEGREES	MIN.	REF.NO	From	To	Au	Cu	Pb	Zn	Ag	F	S	F
0 -29.2	No core recovered						0	29.20								
	Weakly quartz phyric tuff	Fine grained, weakly quartz phyric	Sericite	Weak	<5% disseminated pyrite	27963	29.20	32.20	0	475	7500	1760	0			
						27964	32.20	35.20	0.30	220	4800	1560	0			
35.3-90.0	Wet Lagoon type tuff, coarse-fine grained, some vitric tuffs, typical anastomosing cleavage. Numerous veins	Coarse grained-fine grained mainly medium grained weakly quartz phyric	Sericite Strong-weak	Weak-moderate	5% pyrite + sphalerite disseminated + veins	27965	35.20	38.20	0.01	164	2930	2780	0			
						27966	38.20	41.20	0.02	157	8900	4540	0			
						27967	41.20	48.80	0.02	182	3900	9800	0			
						27968	48.80	51.80	0.02	66	2290	2830	0			
						27969	51.80	54.80	0.02	85	950	2330	0			
						27970	54.80	57.80	0.01	177	4450	4430	0			
						27971	57.80	60.80	0.04	122	4720	3360	0			
						27972	60.80	63.80	0.01	109	2290	4060	0			
						19218	63.80	64.80	0.03	70	2150	5700	0	5	1	2
	64.9, 80cm and 71.5, 90cm intense silicif. honey sphalerite+chalcopyrite (pyrite coarse grained cubic) + carbonate					19218	64.80	65.80	0.02	460	12600	20800	5	5	5	0
						19219	65.80	66.80	0.01	90	1690	3800	0	5	1	2
						19220	66.80	67.80	0.01	146	9600	11500	9	5	1	2
						27973	67.80	68.80	0.01	20	100	560	0			
	vitric tuffs abundant toward base		silici-fication increases		increase in sulphides	27974	68.80	69.90	0.01	38	760	1240	0			
						27975	69.80	70.80	0	42	1880	2550	0			
						27976	70.80	71.50	0.02	78	1860	4130	0			
						19222	71.50	72.50	0.09	1820	14200	36000	9	5	5	0
90.0-93.3	Agglomerate, poorly sorted fragments, mainly quartz phyric volcanics, fragments are flattened, not reworked. (correlates to WL14 201.6-207)	Medium coarse grained fragmental	Strong-moderate silification	Weak	5-10% pyrite + sphalerite disseminated + veinlets	27977	72.50	73.50	0.02	68	880	1600	0			
						27978	73.50	76.50	0.02	56	1140	2230	0			
						27979	76.50	79.50	0.01	26	570	1050	0			
						27980	79.50	82.50	0.02	119	1360	1220	0			
						27981	82.50	83.50	0.02	25	570	510	0			
						27982	83.50	84.50	0.03	26	570	830	0			
						27983	84.50	85.50	0.02	56	3500	1130	0			
93.3-96.0	Bleached veins altered quartz phyric? tuff? Locus of fluid flow	Medium grained quartz phyric	Sericite	Weak	10-15% pyrite + sphalerite	27984	85.50	86.60	0.03	52	4570	15000	0			
						27985	86.60	87.60	0.02	22	860	1500	0			
						27986	87.60	89.00	0.02	39	3520	3940	0			
						19223	89.00	90.00	0.03	141	13200	7600	0	5	1	2
						19224	90.00	91.00	0.01	75	280	6700	0	7	3	1
	96.0m 2m 60% sulphides 20cm massive pyrite				60% sulphides	19225	91.00	92.00	0.01	149	5380	6000	0	7	3	1
						19226	92.00	93.00	0.06	195	3020	7100	0	7	3	1
						19227	93.00	94.00	0.01	118	3870	6500	0	12	2	1
96.0-99.4	Coarse grained crystal lithic tuff, abundant clasts + quartz phenocrysts (less altered version of last interval)	Coarse grained fragmental	Strong-moderate sericite	Moderate	10%pyrite + sphalerite diss. veins	19228	94.00	95.00	0.05	46	1610	2800	0	12	1	1
						19229	95.00	96.00	0.05	59	1060	1060	0	12	1	1
						19230	96.00	97.00	0.07	610	4000	5900	0	12	3	1
						19231	97.00	98.00	0.12	151	24000	3900	0	12	3	1
						19232	98.00	99.00	0.05	320	1140	3600	0	7	3	1
99.4-179.4	Lithic crystal tuff, some feldspars, probably dacitic composition, lithic clasts 1-2cm	Mainly medium grained quartz phyric	Moderate to strong silicification	Moderate to strong	<1-5% pyrite ated locally up to 15%	19233	99.00	100.00	0.15	640	3840	5100	0	5	3	1
						19234	100.00	101.00	0.17	379	9470	24500	0	2	2	2
						27987	101.00	102.00	0.25	642	16200	27200	0			
						27988	102.00	103.00	0.18	503	3670	13600	0			
						27989	103.00	104.00	0.14	287	1590	4970	0			

		fragmental feldspar			spalerite +pyrite + galena with qtz	27990	104.00	107.00	0.12	104	380	1110	0			
107.7 2.2m volcanic breccia. ?lithic tuff (coarse grained) abundant angular fragments of milky quartz	Fragments	Moderate silicification	Moderate	<2%pyrite	27991	107.00	110.00	0.12	98	360	580	0			
					27992	110.00	113.00	0.13	177	630	1000	0			
					27993	113.00	114.00	0.23	209	630	64	0			
					27994	114.00	115.40	0.01	256	650	1830	0			
					19235	115.40	116.40	0.63	294	1150	2800	1	1	2	2
116.4 1.2m quartz veins + 5% carbonate		Intense silicification		<5% pyrite, sphalerite	19236	116.40	117.40	0.25	570	1880	2900	4	1	5	0
					19237	117.40	118.40	0.31	159	1840	1710	0	1	2	2
					27995	118.40	121.40	0.09	39	330	460	0			
					27996	121.40	124.40	0.16	33	470	570	0			
					27997	124.40	126.60	0.1	45	160	600	0			
					27998	126.40	128.50	0.13	52	130	340	0			
					19238	128.50	130.00	0.16	1080	580	1760	0	1	2	2
					19239	130.00	131.50	0.12	94	270	560	0	1	2	2
					19240	131.50	133.00	0.12	68	415	640	0	1	2	2
					19241	133.00	134.50	0.07	97	340	470	0	1	2	2
					19242	134.50	136.00	0.08	84	460	830	0	1	2	2
					19243	136.00	137.50	0.13	226	440	790	0	1	2	2
					19244	137.50	139.00	0.25	33	70	253	0	1	2	2
153.3 2.5m Strongly silicified lithic tuff + quartz veins + abundant sulphides (mainly pale sphalerite) contains quartz fragments hydrothermal breccia? or silicification coeval with	Fragmental	Strong-intense silicification		10-15% sphalerite galena + pyrite	19245	139.00	140.50	0.16	60	560	1430	0	1	2	2
					19246	140.50	142.00	0.46	121	820	730	0	1	2	2
					19247	142.00	143.50	0.26	136	450	540	0	1	2	2
					19248	143.50	144.50	0.17	74	100	315	0	1	2	2
					19249	144.50	145.50	0.13	107	200	630	0	1	2	2
					19250	145.50	146.50	0.14	98	100	320	0	1	2	2
					19251	146.50	147.50	0.17	124	270	610	0	1	2	2
					19252	147.50	148.50	0.28	181	1540	2000	0	1	2	2
					19253	148.50	149.50	0.19	144	1665	2400	0	1	2	2
					19254	149.50	150.50	0.10	65	141	330	0	1	2	2
					19255	150.50	151.50	0.06	66	255	960	0	1	2	2
					19256	151.50	152.50	0.04	50	190	238	0	1	2	2
					19257	152.50	153.50	0.02	94	211	560	0	1	2	2
					19258	153.50	154.50	0.10	227	4450	9500	0	5	4	2
					19259	154.50	155.50	0.05	261	770	2250	0	5	4	2
					19260	155.50	156.50	0.09	259	2280	7900	1	1	2	2
					19261	156.50	157.50	0.10	77	226	430	0	1	2	2
					19262	157.50	158.50	0.04	56	87	245	0	1	2	2
					19263	158.50	159.50	0.09	59	160	309	0	1	2	2
					19264	159.50	160.50	0.07	57	355	570	0	1	2	2
					19265	160.50	162.00	0.07	50	93	178	0	1	2	2
					19266	162.00	163.50	0.06	114	114	326	0	1	2	2
					19267	163.50	165.00	0.08	102	305	590	0	1	2	2
					19268	165.00	166.50	0.07	128	430	1140	0	1	2	2
					19269	166.50	168.00	0.05	660	150	690	0	1	2	2
					19270	168.00	169.50	0.02	108	630	1540	0	1	2	2
					19271	169.50	171.00	0.17	121	32	355	0	1	2	2
					19272	171.00	172.50	0.09	138	244	790	0	1	2	2
					19273	172.50	174.00	0.23	94	545	760	0	1	2	2
					19274	174.00	175.50	0.15	128	90	390	0	1	2	2
					19275	175.50	177.00	0.11	114	200	500	0	1	2	2
					19276	177.00	178.50	0.05	392	410	850	0	1	2	2
179.2 EOH					19277	178.50	179.40	0.06	476	1300	3500	5	1	2	2

GS 1986/079

Latitude	Longitude	~~AMG~~ ISG 341734·4E / 1145833·9N	
Grid co-ordinates			
Collar elevation		Altitude	
Final length	173·4	Final depth	
Date commenced	12 April 1987	Date completed	20 April 1987
Contractor	Pontil Pty Ltd		
Drilling cost		Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		079	170	45		096		
50	52·75		084						
110	48·5		093						

Orientation Survey Instument

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐ electrode set in hole ☐ core susceptibility ☐ remanence ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth	Oxidation base	Water flow
few m	49	–

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average Au g/t						
52	53	1		1·4						
107·0	107·7	0·7		2·88						

Mineralization Recovery:

Objective of Hole:

to test ~~of~~ above Au intersection in WL15.

Summary and Conclusions:

failed to confirm vertical extension of WL15 Au interception

Recommendations:

Prepared by I. GORDON	Date April 87
Report Number	
Section Number	
Plan Number	
Longitudinal Number	

DRILL HOLE SUMMARY

Project	BREADALBANE
Prospect	WET LAGOON SOUTH
Full Length	173·4
Hole No.	WL 2

HOLE WL26 LOGGED BY I.GORDON

RUN	% REC	% RQD	COMMENTS	TEXTURE	ALTN.	FOLN. DEGREES	MIN.	REF.NO	From	To	Au	Cu	Pb	Zn	Ag	P	S	F
			0 - 23.6 Not cored						0	23.6								
			23.6 -25.8															
23.6			Intensely weathered transported quartz	Gravel														
	82		rich gravel, red clay,+quartz boulders:															
25.8			-> 22cm															
			25.8 - 37.8															
	87		Intensely weathered quartz crystal	fine		63 weak			23.6	25.8	0.07	132	360	580	0.5			
28.8			lithic tuff, brown clayey,not siliceous	grained-					25.8	28.8	0.12	440	1330	1320	0.5			
	100			medium					28.8	31.8	0.05	160	570	1230	0.5			
				grained					31.8	36.2	0.06	94	950	1170	0.5			
				quartz														
				phyric														
31.6	46		31.6-32.2 quartz phenocrystal 3-4mm															
34.0	64		minor quartz veining <1.5cm + boxworks															
36.2	63																	
			37.8 - 48.4															
37.8	33		pale grey intensely weathered fine	fine	sericite	62 weak	pyrite		36.2	40.8	0.04	25	200	770	0.5			
40.8	67		grained weakly quartz phyric ash, fresh	grained			3-5%		40.8	43.0	0.05	165	1040	1370	0.5			
43.5	17		euhedral pyrite	weakly			euhedral		43.0	48.0	0.26	1030	860	1440	0.5			
44.1	10			quartz			->1mm											
47.1	69			phyric														
			48.4 - 50.0															
48.4			Medium grained quartz phyric tuff,	Medium	Sericite	weak	5-10%	18844	48.0	49.0	0.20	61	1310	1990	0.5	5	0	1
49.0			?ashflow, many angular sericite frag-	grained	49.0		fragment											
	20	4	ments(?devitrified glass)anostomising	quartz	base of		diss.											
			chlorite folination equivalent to 'Wet	phyric	intense		pyrite											
			Lagoon Sequence' tuffs		weather-													
					ing													
			50.0 - 56.8															
50.0	2		Milky quartz fragments + minor sulphides		Intense		<5%	18845	49.0	52.0	0.90	511	5225	4665	3	7	4	1
51.8	100		+ (chlorite + carbonate) some weathered		silfn.		sphal.	18846	52.0	53.0	1.43	318	1910	4420	0.5	2	5	0
52.0	50		sericite quartz phyric, lithic frag-				+trace	18847	53.0	56.0	0.71	258	2030	3860	0.5	2	5	0
52.2	39		mentals weakly silicified				pyrite,											
53.1	7						galena											
55.9	55																	
			56.8 - 60.7															
56.8	57		Fine grained sericite schist, numerous	Fine	Sericite	60 Mod-	Pyrite		56.0	60.0	0.16	62	1510	1410	0.5	0	0	0
57.5	87		fine quartz veins + some siliceous	grained	weak	erate	<1%											
57.9	85		banding disrupted by micro faults,	weakly	strong	cleavage	some											
59.1	75		banding is discontinuous probable ashy	quartz		/to band-	local											
59.9	83		volcanic (flattened pumices?)	phyric		ing+veins	concen-											
60.5	50			some			trations											
				banding			trace											
							sphalerite											
							+ galena											
							with qtz											
							veins											

			60.7 - 62.0																
60.7	38	10	Quartz vein, milky quartz + chlorite + carbonate (carbonate leached out)		Intense silici-fication		Trace sphaler-ite	18848	60.0	61.0	0.18	230	1780	4090	0.5	0	5	0
			62.0 - 67.9																
62.0	58		Fine-(medium grained) sericitic schist,	Fine grained-medium grained weakly quartz phyric	Sericite (weak strong <-base of all wea-thering	62 mod-erate silfn.	Trace-minor pyrite diss. minor sphal. (+galena) with qtz ca.veins	18852	61.0	64.0	0.03	23	870	850	0.5	1	0	2
63.2	75	45	sparsely quartz phyric (->.8mm) medium																
64.4	100		grained patches have compositional																
65.1	69	35	variation (?flat pumice or lithics?)																
66.4	60	35	probably fine grained ashy tuff many quartz/carbonate veins (<2mm) +spalerite / schistosity																
			67.9 - 68.9																
67.9	50		Quartz-feldspar phyric rock. Quartz phenocrystal->2mm feldspar->1.5mm sericitised + flattened, lithics (?fiamme ?ignimbrite), pyroclastic crystal lithic tuff Fine quartz veins + pyrite + sphalerite	Sparsely quartz feldspar phyric	Sericite	61 Moderate	Trace-minor diss. pyrite	18853	64.0	67.0	0.09	30	870	1220	0.5	1	0	3
			68.9 - 77.8																
68.9	110	+1	Dark grey-black very finely banded/to	fine grained	(Weak - strong) chlorite?	64 Moderate silfn.	Trace diss. pyrite up to 5% pyrite with qtz veins	18854	67.0	70.0	0.09	46	3320	2020	2	1	0	3
69.8	70		cleavage, tuffoceous shale, epiclastic?																
70.8	95		thick consistently fine grained. Fine																
72.8	92	45	quartz/carbonate/?phengite veinlets					18855	70.0	73.0	0.09	53	470	1450	0.5	1	1	2
73.6	83		+pyrite, sphalerite, (galena), veins																
74.2	85		are crenulated by a cleavage at 14o,																
75.5	83	0	veinlets often coalesce into pods																
76.1	75	0	1-2cm truncating main cleavage																
77.3	60					55		18856	73.0	76.0	0.15	93	1930	5800	0.5	2	1	3
						59	Pyrite in qtz veins increases												
			77.8 - 80.8																
77.8	99	22	Fine grained sericitic schist some	Fine grained	Moderate -strong silfn. sericite	Moderate	Trace pyrite diss. sphalerite + galena with qtz veins	18857	76.0	80.0	0.15	41	1590	4300	0.5	1	2	2
78.7	67		siliceous zones sphalerite + galena																
79.6	83	70	up to 5%, some zones of crystal																
			cutting quartz veins ->1cm.																
			80.8 - 110.1																
81.9	100		Grey silicified strongly altered +	Medium grained	Moderate -strong silfn.	57 moderate	5% fine-medium grained diss. pyrite	18849	80.0	81.0	0.13	136	2790	5200	0.5	3	3	2
83.1	92	50	flattened, many veinlets ->patches of					18850	81.0	82.0	0.13	31	1400	3470	0.5	2	3	2
			quartz + sulphides, mainly pyrite					18851	82.0	83.0	0.03	19	1060	2560	0.5	2	3	2
			(locally ->50% pale sphalerite),					18836	83.0	84.5	0.20	63	5280	3800	0.5	10	3	2
			rare quartz eyes (Si overgrowth					18837	84.5	86.0	0.07	33	790	2860	0.5	2	3	2

			or <1mm quartz phenocrystal					mainly in	18838	86.0	87.5	0.05	89	1750	4900	0.5	2	3	2
85.5	100		84.0 5cm vein quartz, pale spalerite					cleavage	18839	87.5	89.0	0.02	30	600	2160	0.5	2	3	2
88.6	100		+galena in selvedge					upto 50%	18840	89.0	90.5	0.07	61	1150	3500	0.5	3	3	2
								pyrite+	18841	90.5	92.0	0.05	52	173	207	0.5	2	3	2
								spalerite	18842	92.0	93.5	0.47	175	420	2410	0.5	5	3	2
								quartz/	18843	93.5	95.0	0.13	63	440	1680	0.5	3	3	2
								silfn.	18858	95.0	98.0	0.08	40	270	1060	0.5	2	3	2
									18859	98.0	101.0	0.28	56	273	380	0.5	2	3	2
									18860	101.0	104.0	0.15	60	500	1050	0.5	2	3	2
									18861	104.0	107.0	0.19	106	340	730	0.5	2	3	2
							63		18862	107.0	107.7	2.94	805	2410	8300	2	5	3	2
									18863	107.7	108.7	0.27	43	920	3180	0.5	5	3	2
									18864	108.7	109.7	0.35	37	80	190	0.5	5	3	1
									18865	109.7	110.7	0.22	52	136	153	0.5	1	2	1
91.7	100	30	92.5-93.2 quartz/carbonate/feldspar+	Medium	Moderate	Si+So 62														
94.3	90		sphalerite,pyrite, galena darker	grained-	-strong	pyrite														
97.2	92		patches may represent flattened	coarse	silfn.	veins 52														
99.1	90	90	lithics (or shoots of chlorite alter-	grained																
101.1	102		ation) altered crystal lithic tuff																	
104.1	102	92																		
107.1	100		107.2-109.2 several 2-3cm veins of																	
109.2	100	85	honey sphalerite + quartz + galena																	
			(+pyrite), sulphides often marginal																	
			110.1 - 113.2																	
110.1	93		Poorly sorted volcanic fragmental	Coarse	Weak	59		Trace-	18866	110.7	111.7	0.21	91	1240	3300	0.5	1	1	1
			(?dacitic)in dark green chlorite matrix.	grained	silfn.			minor	19278	111.7	112.7	0.18	242	3290	15200	10	1	1	1
			Mainly fine grained cream fragments,	fragmen-	Sericite			fine												
			several darker(?more pyritic)fragments,	tal up				grained												
			preferentially chlorite lower 20cm	to 4cm				dissemi-												
			crusted, shear zone, fragment tuff					nated												
			?agglomerate					pyrite												
								localised												
								in clea-												
								vage												
			113.1 - 151.5																	
113.1	103	90	Strongly silicified fine grained ashy	Fine	Strong-	59		Trace	19279	112.7	113.7	0.19	520	1060	2900	4	1	4	1
			volcaniclastic? Now a siliceous	grained,	intense	Moderate		minor	19280	113.7	114.7	0.24	123	620	3540	0.5	1	4	2
			sericitic schist. Very rare quartz	weakly	silfn.			pyrite	19281	114.7	115.7	0.15	98	350	2600	0.5	1	4	2
			phenocrystal, abundant quartz, blotches,	quartz	Strong			(+sph)	19282	115.7	116.7	0.03	395	159	770	0.5	1	4	2
			pods, veins	phyric	alteration			through-	19283	116.7	117.7	0.06	96	720	4700	0.5	5	4	2
116.1	97		116.6-117.0} zone of intense silicf.		obscures			out.	19284	117.7	118.7	0.05	97	2560	6600	0.5	1	4	2
			/milky quartz with up to 50%		textures			Numerous	19285	118.7	119.7	0.05	267	1630	6000	0.5	5	4	2
			sulphides pyrite,spalerite					zones of	19286	119.7	120.7	0.11	1100	12700	3700	0.5	2	4	2
			galena (+cpy)					intense	19287	120.7	121.7	0.09	510	3580	19500	0.5	5	4	2
119.1	97	85	118.8-119.0}main zones/cleavage.					silfn.	19288	121.7	122.7	0.07	1430	1590	13500	0.5	1	4	2
			earlier crystal cutting					+ pyrite	19289	122.7	123.7	0.08	475	3360	4000	0.5	1	4	2
			quartz veins are microfolded					sph. gna.	19290	123.7	124.7	0.08	50	980	980	0.5	1	4	2
			by cleavage slip and					(cpy) sul-	19291	124.7	125.7	0.07	1430	630	30500	0.5	1	4	2
			120.3-121.5}form at 10 deg. to core axis					phides	19292	125.7	126.7	0.08	540	700	4700	0.5	1	4	2
122.1	97							often	19293	126.7	127.7	0.09	341	840	4475	0.5	1	4	2
								coarse	19294	127.7	128.7	0.12	870	37900	4700	3	1	4	2
								grained	19295	128.7	129.7	0.10	156	1690	31400	0.5	1	4	2
125.1	75							recrystal-	18867	129.7	130.7	0.10	49	3809	2170	0.5	5	4	2

							lised?	18868	130.7	131.7	0.09	39	363	969	0.5	1	4	2
								18869	131.7	132.7	0.02	176	2380	6500	0.5	1	4	2
						53		18870	132.7	133.7	0.02	88	370	1870	0.5	1	4	2
127.3	100	75	127.3-128.2 semi massive pyrite + sphalerite (+galena) in quartz/sericite matrix sheared					18871	133.7	134.7	0.09	162	2990	4900	0.5	1	4	2
								18972	134.7	135.7	0.08	130	340	2610	0.5	1	4	2
								18873	135.7	136.7	0.09	96	304	2000	0.5	1	4	2
								18874	136.7	137.7	0.08	27	146	1590	0.5	1	4	2
			129.8-130.0 Intense silification/quartz vein + pyrite, sphalerite,galena (cpy) ->50%					18875	137.7	138.7	0.06	72	1790	2080	0.5	1	4	2
								18876	138.7	139.7	0.02	164	2710	9600	0.5	1	4	2
								18877	139.7	140.7	0.03	33	990	1740	0.5	1	4	2
						55		18878	140.7	141.7	0.07	90	317	960	0.5	1	4	2
								18879	141.7	142.7	0.07	25	40	120	0.5	1	4	2
			129.9 5-10cm puggy fault					18880	142.7	143.7	0.06	34	189	320	0.5	1	4	2
130.5								18881	143.7	144.7	0.08	83	14609	4470	0.5	1	4	2
	100		131.5 Small puggy fault					18882	144.7	145.7	0.14	58	448	1260	0.5	1	4	2
								18883	145.7	146.7	0.10	32	150	830	0.5	1	4	2
			132.9 Small puggy fault					18884	146.7	147.7	0.11	23	700	650	0.5	1	4	2
133.4								18885	147.7	148.7	0.11	50	298	380	0.5	1	4	2
	97		134.6 1cm quartz vein + minor galena (or arsenopyrite?) + Au				Visible Au	18886	148.7	150.1	0.09	178	220	470	0.5	1	4	2
136.5																		
	100	85	137.4 Small puggy fault															
139.6																		
	97																	
142.7																		
	103	59	144.6 small puggy fault 144.9-145.4 puggy fault															
145.8																		
	100	88																
148.9	100		148.1 puggy fault															
150.1	100	70	150.1 puggy fault. faulted contact			64												
			151.5 - 152.0															
151.5	60	40	Fine grained massive chloritised rock, shattered, no internal banding or structures, ?infaulted chloritised vitric ash?	fine grained	chlorite	66 moderate	pyrite <1% diss. as euhedral crystals + veinlets with qtz grains-> 2mm	18887	150.1	151.5	0.06	32	5	82	0.5	0	4	2
			152.0 - 155.1															
152.0	101		FAULT ZONE sheared silicification volcanics as above	Sheared	Sil/Ser	FAULT		18888	151.5	152.5	0.06	68	184	440	0.5	0	0	3
			155.1 - 177.4															
155.1	103		Grey hard, silicified fragments, rare quartz phenocrysts + rare dark lithic fragments (to 4mm), quartz eyes common probably due to alteration. Intense silification zones approx./to cleavage appears somewhat deformed	Fine grained weakly quartz phyric	Strong-intense siln. sericite	68 moderate	5-10% pyrite + sphalerite fine grained diss.	18889	152.5	153.5	0.09	62	123	179	0.5	7	1	4
								18890	153.5	154.5	0.07	59	1460	2780	0.5	7	4	2
								18891	154.5	155.5	0.06	93	400	800	0.5	7	4	2
158.1								18992	155.5	156.5	0.05	51	209	410	0.5	7	4	2
	100	95						19893	156.5	157.5	0.10	106	350	720	0.5	7	4	2
								18894	157.5	158.5	0.09	40	130	226	0.5	7	4	2
161.1								18895	158.5	159.5	0.05	68	305	680	0.5	7	4	2

100

164.1
100

167.1
100 100

170.1 100
171.4

164.1

58

69

	18896	159.5	160.5	0.06	50	332	920	0.5	7	4	2
local	18897	160.5	161.5	0.15	84	80	360	0.5	7	4	2
concentra-	18898	161.5	162.5	0.08	30	930	460	0.5	7	4	2
tions of	18899	162.5	163.5	0.11	60	1840	2530	0.5	7	4	2
sulphides	18900	163.5	164.5	0.05	27	122	104	0.5	7	4	2
in intense	45401	164.5	165.5	0.61	55	59	300	0.5	7	4	2
siln.zones	45402	165.5	166.5	0.24	72	200	490	0.5	7	4	2
mainly	45403	166.5	167.5	0.39	46	70	152	0.5	7	4	2
white sph.	45404	167.5	168.5	0.22	142	98	65	0.5	7	4	2
+galena	45405	168.5	169.5	0.10	98	107	139	0.5	7	4	2
trace cpy.	45406	169.5	170.5	0.25	110	225	380	0.5	7	4	2
	45407	170.5	171.4	0.24	83	53	224	0.5	7	4	2

GS 1986 7075

Latitude	Longitude	~~AMG~~ ISG 341725·2E / 1145593·0N	
Grid co-ordinates			
Collar elevation		Altitude	
Final length	150·1	Final depth	
Date commenced	21 April 1987	Date completed	30 April 1987
Contractor	Pontil Pty Ltd		
Drilling cost		Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m
NONCORE									

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		082	150	42·25		099		
44	51·5		094						
96	47		095						

Orientation Survey Instument

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐ electrode set in hole ☐ core susceptibility ☐ remanence ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth	Oxidation base 32·3	Water flow

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average Au g/t						
62	64	2		1·03						

Page 1 of 6

Mineralization Recovery:

Objective of Hole:

test for strike extension of WL17-24 intersection to S.

Summary and Conclusions:

Thin, low-grade Au intersection a few metres before ? fault contact with unmineralised chloritic altered sequence.

Recommendations:

Prepared by I. GORDON Date May 1987

Report Number

Section Number

Plan Number

Longitudinal Number

DRILL HOLE SUMMARY

Project BREADALBANE

Prospect WET LAGOON SOUTH

Full Length 150·1 Hole No. WL

HOLE WL27 LOGGED BY: I.GORDON

RUN	%REC	%RQD	COMMENTS	TEXTURE	ALTN.	FOLN. DEGREES	MIN.	REF.NO	From	To	Au	Cu	Pb	Zn	Ag	P	S	F
			30.0 - 31.1															
30			Brown, compact silt-sand, + milky vein	fine	weathered	70	Pyrite		0	30								
	100		quartz fragments ->5cm, compositional	grained +	Intense		boxworks	45408	30	31	0.26	153	1530	490	0.5	0	0	0
			banding/foliation not pesistant,	larger	silfn.			45441	31	34	0.34	139	420	1270	2	0	2	1
			volcaniclastic	fragments														
31																		
			31.1 - 32.3															
	88		Brown lithified + milky quartz veins,	fragments	weathered	70												
			banding/foliation volcaniclastic		silfn.													
			(continuation of upper unit?)															
32.1																		
	90																	
			32.3 - 33.7															
			Buff-grey ashy volcanic, fine (<1cm)	fine	strong	70 +		45442	34	37	0.19	116	450	1830	0.5	0	3	2
			quartz carbonate veins sub// to foln.	grained	silfn.	kink foln.		45443	37	40	0.14	54	270	635	0.5	0	3	2
			Ash fault/flow?		(Ser)	30												
33.7																		
			33.7 - 62.3															
34.1			Buff-grey ashy volcanic quartz veins	fine	strong	70												
	90	85	very common banding at 70c core axis	grained	silfn.	moderate												
					(ser)													
37.3			kinks/micro faults common at low angle															
	90		to core															
40.5			milky quartz				trace											
			oxidation occurs along fine fractures				diss.py											
							euhedral											
							->0.5mm											
	88	75		fine	strong		41.3 2%py+	45444	40	43	0.22	41	1120	1020	0.5	0	3	2
				grained	silfn.ser		trace	45445	43	46	0.24	46	2060	1200	0.5	0	3	2
							galena,											
							cpy in											
							puggy											
							shears											
43.8	94		46.2 20cm of core and brecciated by		strong		pyrite <1%	45409	46	47	0.18	70	1960	1890	0.5	2	3	2
			fine dark veins (chalcopyrite?)		silfn. ser		in veins +	45410	47	48	0.16	67	1150	1870	0.5	2	3	2
					(+chl?)		shears	45411	48	49	0.28	54	1310	2090	0.5	2	3	2
46.9			rock becomes porous, vuggy around veins															
	94	50	and fractures				pyrite											
							locally											
							->5% +											
							rare sph.											
50			light-dark grey rock, large milky qtz	fine	strong		49.8 py.	45412	49	50	0.35	137	980	1740	0.5	4	4	1
			vein 20cm	grained	silfn.		boxworks	45413	50	51	0.29	54	700	1020	0.5	1	3	2
				(whispy			dark sph,											
				textures)			galena in											
							qtz vein											
	78		51m core becomes brown, oxidised, vuggy	fine-	strong	70 weak-	pyrite	45414	51	52	0.32	60	870	500	0.5	1	3	2
			with porous quartz, silt-sand grade	medium	silfn.	moderate	boxworks	45415	52	53	0.32	22	600	490	0.5	1	3	2
				grained		veins/to	in qtz vns	45416	53	54	0.53	45	900	690	0.5	1	3	2
52.7				numerous		foln.	local py	45417	54	55	0.28	55	2590	1880	0.5	1	2	2
	50	0		qtz veins			(cpy)+ sph											

53.5																			
	72							(dark) sul-phides<2% (locally 5-10%)											
55.1	88	grey ashy volcanic (tuff?fall?flow?)	fine grained	strong silfn. (ser) (chl?)	70 weak-moderate		45418	55	56	0.19	15	1440	1940	0.5	1	3	2
55.9	75	dark grey-chlorite? holes in quartz					45419	56	57	0.22	15	2650	2330	0.5	5	3	2
56.1		veins due to carbonate dissoluation																	
	83	many fine quartz veins//folination				57.1 qtz vein 1cm, 20% pyrite 5%sph(med) qtz vns + sph,py common	45420	57	58	0.13	11	620	1790	0.5	1	3	2
58.5							45421	58	59	0.2	19	920	2550	0.5	2	3	2
	88						45422	59	60	0.27	9	610	2030	0.5	2	3	2
60.1							45423	60	61	0.35	20	1640	3840	0.5	2	3	2
	93						45424	61	62	0.32	74	600	2060	0.5	2	3	2
61.6																			
	80																		
		62.3 - 65.5																	
62.1	75	70 Totally silicified rock/milky quartz no primary textures. Carbonate solution cavities in quartz	fine grained	Intense silfn. some patches of (ser) (chlorite)	no foln. puggy shear63.5	2-5% sulphides locally 20%, py (galena) sphalerite becomes pale ga.	45425	62	63	1.06	163	3300	9900	0.5	4	4	0
63.7																			
	80						45426	63	64	1.08	431	5860	6200	2	4	5	0
65	90	67.0 20cm milky vein quartz		strong-intense silfn.		2.5%sulph. pyrite. pale sph., (galena) locally 5-10%	45427	64	65	0.36	437	3590	7300	4	4	5	0
							45428	65	66	0.35	333	2350	4820	4	3	4	0
							45429	66	67	0.29	98	1930	4400	0.5	3	4	0
							45430	67	68	0.51	710	2220	4700	12	3	4	0
							45431	68	69	0.23	42	270	490	0.5	3	4	0
		63.5 - 74.1																	
68.1		Medium to dark grey ashy volcanic, numerous milky quartz veins->1cm wide edges disperse into strong to intense rock, slight greenish tinge, chlorite? 69.0 sulphides (clasts?) with milky quartz patches (veins? clasts?	fine grained ash (some whispy textures)	Strong to intense silfn. (min.ser. slicken-sides?)	70 defined by veins bending + sulph.	2-5% py, sphalerite (pale) locally 10-20%													
						69.0 30cm, 25% py, spalerite (pale-dark) (cpy,ga)	45432	69	70	0.34	105	5500	8400	2	10	4	0
							45433	70	71	0.17	97	3010	6500	0.5	7	4	0
71.1																			
				strong-intense silfn, strong silfn, strong silfr,ser (chlorite)		5-20%py, spalerite (pale) ga. >5%, locally 10-20% sphalerite carbona	45434	71	72	0.19	19	800	3730	0.5	5	4	1
		Strong colour banding sericite + sulphides (dark) and silicified bands (light), banding/folination	fine grained ash		foln. wraps around fragments?														
		72.5 10cm milky quartz/carbonate veins + sulphides	fragment cleared/	sericite (chlor)	70-80 intense	10-20%sulf, <1% sulf.	45435	73	73	0.41	68	1190	2910	0.5	15	1	4
							45436	73	74	0.26	34	20	56	0.5	1	1	5

	90	0	FAULT 72.9 10cm puggy sericite/chlorite fault gangue + quartz fragments FAULT	sheared (schist)	weak silfn.	cleavage/ shearing													
			FAULT 73.6 20cm puggy sericite (chlorite/) fault gangue + quartz carbonate fragments ->3cm 73.7 5cm milky quartz vein				minor py, sphalerite												
			74.1 - 82.0																
74.1	93	50	Green grey cleaved volcanic (schist) some pyrite pseudomorphs? after felospar?->5mm crystal cut folination	fragment (schist)	Sericite (chlorite) weak silfn.	70 silfn. slicken-sides	<2%sulf, pyrite, sphalerite cubes->5mm pseudomorphs <1% pyrite	45437 45438 45439 45440 45446	74 75 76 77 78	75 76 77 78 81	0.15 0.08 0.13 0.13 0.06	28 23 27 29 35	17 8 15 15 116	55 51 58 75 60	0.5 0.5 0.5 0.5 0.5	1 1 1 1 0	1 1 1 1 1	4 3 3 3 2	
			some possible pumice? lithic? fragments (sericite/->1cm volcaniclastic (pysolclastic?)	some fragments ->1cm lithics, stretched pumice															
80.1								45447	81	84	0.026	37	111	30	0.5	0	2	2	
	96	100	82-90 green grey cleared volcanic (schist)					45448	84	87	0.026	39	130	43	0.5	0	2	2	
83.1			as above fine network of serite,					45449	87	90	0.05	35	113	39	0.5	0	2	2	
	70		replacing glass? sericite replacing small																
85.1	105	90	feldspars, few pumice like textures																
86.1			86.3 large pale (sericite) lithic fragment? 2cm sericite fragments, semi round, cream against dark grey groundmass	fine grained fragments ->1cm	moderate silfn, after ser, chlorite	70-90 weak to moderate	No sulph-ides												
89.1																			
	98	60	90m sericite showing shard like textures? non silicified->originally 20-30% glass					45450	92	93	0.05	37	94	25	0.5	0	2	2	
								45451	93	96	0.06	33	85	10	0.5	0	3	1	
								45452	96	99	0.05	31	65	27	0.5	0	3	1	
92.1								45453	99	102	0.03	40	125	73	0.5	0	3	1	
	96	95	93m minor fault/shear green-grey, speckled rock, fragments (shards?)->serite + white siliceous spots. Altered pysoclastic?	fine grained matrix, many small fragments ->1cm	Sericite strong silfn, (chlor) silfn,	80-90weak defined by fragments	No sulph-ides	45454	102	105	0.02	50	79	26	0.5	0	3	1	
95.1																			
	100																		
98.1																			
	100	80	92-99 siliceous, numberous white silification spots, and dark lenticles aligned normal to core, flattened, chlorite pumices?																
101.1																			
	100																		
104.1																			
	100	90		fine grained clasts? obscured by altn.	strong silfn, sericite (chlorite)	weak defined by align-ment of fragments	pyrite (ch,/) pseudomorphs of laths? ->15mm												
107.1	96		107m several pyrite (cpy) laths/cubes					45455	105	108	0.03	35	107	53	0.5	0	3	1	

			->1.5cm (pseudomorphs?) removed by qtz, serite, carbonate, cyrstal weak fragments					45456	108	111	0.02	29	82	10	0.5	0	3	1
110.1																			
	100	100																	
112.1																			
	96	80	113.6-114.6 whispy lenticles, veins of milky quartz and quartz/carbonate	fine grained + angular round clasts	strong silfn. sericite chlorite (carbon)	70-80weak minor shears + alignment of frags.	No sulph-ides	45457	111	114	0.05	34	82	13	0.5	0	3	1
								45458	114	117	0.04	17	61	16	0.5	0	3	1
								45459	117	120	0.02	30	93	19	0.5	0	3	1
								45460	120	123	0.03	33	90	8	0.5	0	3	2
116.1			116.0 minor shear,clasts ->2cm																
	100		stretched into foln. replaced by sericite, carbonate or quartz lighter grey than groundmass																
119.1																			
	101	75	grey green volcanic groundmass very altered, fragments ->3cm	fine grained, fragments ->3cm	strong silfn. sericite (chl)(ca)	No sulph-ides													
122.1																			
	100		123m groundmass is more sericite, carbonate (+silfn) altered->lighter numerous lenticles (stretched into foln) are darker green, grey (chl), are these pumice? lithics?					45461	123	126	0.02	23	76	20	0.5	0	3	3
125.1																			
	100	100	125m return to darker grandmass, still numerous dark clasts					45462	126	129	0.02	27	79	13	0.5	0	2	2
								45463	129	132	0.04	23	79	14	0.5	0	1	2
128.1								45464	132	135	0.1	24	79	10	0.5	0	1	2
	100		Grey volcaniclastic, numerous clasts stretched into cleavage (lithics? or pumice?)	fine to medium grained + clasts	sericite chl moderate silfn. (carbon)	70-80M some minor shears	No sulph-ides	45465	135	138	0.08	26	80	13	0.5	0	1	2
131.1																			
	100	95	Carbonate alteration increases		sericite chl. Carbonate weak silfn.														
134.1																			
	96																		
137.1																			
	102	93	Cleavage wraps around large 2cm subround lithic fragments + banding disrupted by kink foliation? at 20 deg. to core			moderate-weak incon-sistent		45466	138	141	0.08	26	96	22	0.5	1	1	1
140.1																			
	100		often hard to pick alteration from fragments			moderate 70-80		45467	141	144	0.09	23	82	11	0.5	0	1	1
143.1																			
	100	95																	
146.1																			
	100		clasts usually lenticular (//to foln.) lithics? pumice? folination wraps round the larger ones	fine to medium grained +clasts	sericite chlor,(carb. weak to moderate silfn.	weak to moderate	No sulph-ides	45467	144	147	0.1	22	127	32	0.5	0	2	2
149.1																			
	105	100	147.5 10cm of puggy fault gangue		sericite chl			45467	147	150.1	0.07	21	82	17	0.5	0	1	1

carbonate
weak to
moderate
silfn.

149m stretched out wispy rock stronger
carbonate alteration than before

150.1

150.1m E.O.H.

GS1986/079

Latitude	Longitude	~~AMG~~ ISG 341749.4 E / 1145759.0 N	
Grid co-ordinates			
Collar elevation		Altitude	
Final length	170.4	Final depth	
Date commenced	1 May 1987	Date completed	16 May 1987
Contractor	Pentil Pty Ltd.		
Drilling cost		Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m
~~BQ~~ TRICONE	0	25.9							
NQ	25.9	170.4							

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		078	170	44.75	~~088~~	091		
79	53.5		090						
122	51.5		089						

Orientation Survey Instument: Eastman Single Shot.

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐ electrode set in hole ☐ core susceptibility ☐ remanence ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth	Oxidation base	Water flow
few m	94	

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average Au g/t						
33	44	11		4.64						
49	51	2		1.48						
55	57	2		3.23						
59	62	3		2.62						
67	70	3		2.65						
89.8	91.8	2		5.21						
139	140	1		1.28						

Mineralization Recovery:

Objective of Hole:
test mineralization to N of WL 17-24.

Summary and Conclusions:
confirmed WL 17-24 intersection and disclosed thinner zones to ~~the~~ E of main(?) body.

Recommendations:

Prepared by D. Gardner Date	**DRILL HOLE SUMMARY**
Report Number	Project TREADALEANE JV
Section Number	Prospect WGT LAGOON SOUTH
Plan Number	
Longitudinal Number	Full Length 170.4 Hole No. WL 28

HOLE WL 28 LOGGED BY D. GARDNER

RUN	% REC	% ROD	COMMENTS	TEXTURE	ALTN.	FOLN. DEGREES	MIN.	REF.NO	FROM	TO	Au	Cu	Pb	Zn	Ag	P	S	F
			0 - 25.9						0	7.4								
			No core recovered, sludge samples taken					18827	7.4	13.5	0.05	52	72	65	0.5			
								18828	13.5	19.5	0.05	28	80	51	0.5			
								18829	19.5	25.9	0.08	53	306	86	0.5			
25.9			25.9 - 26.2															
	70	0	Transported alluvial material, numerous quartz fragments	medium grained fragments ->3cm (qtz)	Intense weathered	None	None	12056	25.9	28	0.44	4.04	4690	504	0.5	0	0	1
								12057	28.0	29.2	0.36	329	7700	1190	0.5	0	0	1
			26.2 - 33.2															
26.2	83	0	buff-brown silty volcaniclastic?	medium grained (silt), qtz clasts? fragments? ->2cm	Intense weathered sericite patches	50 weak defined by bands, veins	possible pyrite boxworks	12058	29.2	30.0	0.28	222	2230	640	0.5	0	0	1
26.5	93	0	?fragements of milky quartz (rounded)					12059	30.0	31.0	0.47	296	2680	840	0.5	0	0	1
27.4	68	70	->1cm (some have good crystal shapes),					12060	32.0	32.0	0.69	469	3930	860	0.5	0	0	1
29.2	93	60	weak foliation wraps around some					12061	32.0	33.0	1.52	373	2140	710	0.5	0	0	1
32.2	80	20	clasts															
			32.2 - 40.8															
33.2	89	0	milky quartz and intensely silicified	fine grained silic.rock & milky quartz	Intense silfn. Fe staining due to weathering	none	minor pyrite (cpy?)	45470	33.0	34.0	14.3	258	310	840	6	1	5	0
33.9	44	30	country rock					45471	34.0	36.0	10.6	269	490	770	4	0	5	0
34.8	8	0																
36	100	0																
36.1	56	0						45472	36.0	37.0	0.4	200	540	532	1	0	5	0
36.3	60	0																
36.8	50	0					trace sulphides, py.cubes, +boxworks											
37.2	100	10						45473	37.0	38.0	1.4	281	550	1360	31	1	5	0
37.7	105	15																
38.2	57	15																
38.9	110	15	cavities contain 5-10% pyrite locally				minor py.ga?	45474	38.0	39.0	1.38	350	480	2250	12	0	5	0
39.1	100	0																
39.5	71	10	some green spots, weathered Cu minerals?		Intense silfn.		trace sulphides pyrite	45475	39.0	40.0	1.38	162	239	1410	3	1	5	0
40.2			small intervals of brown shaly (ser) cleaved material		patches of sericite	patches of silfn.foln.		45476	40.0	41.0	5.12	197	380	2550	2	0	5	0
			40.8 - 42.0															
41.2			brown shaly (ash) schlist, some	fine grained (schist)	strong sericite patches of intense silfn.	70-80 silfn.	none	45477	41.0	42.0	1.01	242	630	2610	0.5	0	4	4
	57	0	patches of serite fault pug?, minor quartz vein or intense silification rock at 41.2															
41.9																		
			42.0 - 44.1															
	50	0	milky quartz and intensely silicified rock and intervals of ashy sericite schist or ash	fine grained silicified rock, patches of schist	Intense silfn., patches of sericite (weak silfn)	70 moderate defined by banding of intense silfn.and serite rock +foln. in		45478	42.0	43.0	2.71	680	1130	4000	5	0	5	1
								45479	43.0	44.0	1.94	855	470	3500	0.5	0	5	1

							sericite rock												
44.1			44.1 - 50.0																
	22	10	brown-grey sericite schist, weakly silicified in places(44.1)small quartz veins+fragments common, ashy volcanic	fine grained (schist)	sericite (weak silfn).	60-70 moderate silfn.		45480	44.0	46.0	0.41	174	580	23260	0.5	1	1	3	
45.7			45.6 10cm fault pug			45.6 fault	fine bands diss.py/ foln.<2% in all												
	41	0	46.4-47.2 80cm intensely sheared serite pug, quartz fragments ->2cm			46.4-47.2 fault		45481	46.0	47.0	0.32	225	420	1300	0.5	1	1	4	
47.2																			
	56	0	grey sericite schist, numerous quartz veins (ashy volcanic)	fine grained (schist) (ashy)	sericite	70 strong cleaved + colour banding + veins	47.5 10%diss pyrite	45482	47.0	48.0	0.24	42	410	1220	0.5	3	0	4	
48.1	75	0	pyrite cubes as replacements?				5-10% py. cubes	45483	48.0	49.0	0.3	180	1320	1630	0.5	5	1	4	
48.9					sericite weak silfn.														
	92	78	49.1 rock much more consolidated (still sericite schist)				5-10%py. bands/foln.	45484	49.0	50.0	1.65	600	5300	6080	7	5	1	4	
			50.0 - 53.4																
50.2	88	10	intensely silicified rock/milky quartz solution cavities of carbonate	no textures	strong-intense silfn.	none	pyrite(cpy) diss. 2-5% trace ga.sph.	45485	50.0	51.0	1.31	590	2910	4120	17	3	4	2	
51.1	50	0	+ Fe staining					45486	51.0	52.0	0.17	75	310	1720	0.5	4	4	2	
51.7	100	0																	
51.9	100	0						45487	52.0	53.0	0.14	64	220	1060	0.5	3	4	2	
52.6	33	0																	
			53.4 - 55.3																
53.5			minor puggy shear at 53.5 brown-grey	fine grained ash-silt	weak - moderate silfn. serite	50 moderate silfn. cleavage & colour banding & qtz.veins	52.8 20% py. in bands//fol.	45488	53.0	54.0	0.83	250	1400	1460	0.5	4	2	3	
	95	50	fine grained cleaved rock (slightly coarser than previous units)				54.5 10% py. in bands//fol.	45489	54.0	55.0	0.53	105	400	690	0.5	5	3	3	
			55.3 - 56.3																
55.8			milky quartz + intensely silicified country rock minor carbonate solution	no textures	strong - intense silfn.	none 55.8 thin pug zone	diss.py. sph (pale-med) overall <2% sulphide	45490	55.0	56.0	2.58	820	1640	1875	15	1	4	0	
	63	20	cavities																
			56.3 - 60.4																
			56.5 10cm ashy sericitic volcanic grey-green-brown weakly silicified, aoundent quartz veins, colour banding prominent, contorted, bands <1cm	fine grained	weak - strong silfn.	50 mod. defined by bands & veins	5% sulphide pyrite, sph. in bands//to foln.	45491	56.0	57.0	3.9	550	720	990	2	5	1	2	
								45492	57.0	58.0	1.06	135	3200	2660	3	5	1	2	
58.2					strong-weak ser.		59.0 30-40% pyrite +	45493	58.0	59.0	0.23	104	1560	1260	0.5	5	1	2	
	94	10																	

						(chl?) rock becomes darker grey green		sph (med) + galena												
59.9									45494	59.0	60.0	3.86	1390	7600	5030	5	7	1	2
			60.4 – 61.0																	
	72	20	dark quartz	none	strong – intense silfn.	none	20–30% py. (ga.) sph. (med–pale)	45495	60.0	61.0	2.24	1000	36000	23500	30	25	4	0
			61.0 – 67.2																	
61	50	0	fine grained serite volcanic, some fragmental textures (some stretched into folination, others foln. wraps around)	fine – medium grained (ashy) + clasts->3cm	Sericite	60 strong cleavage + banding	2% diss. sulphides locally 10% py. + sph.	45496	61.0	62.0	1.78	590	3380	3250	0.5	2	0	3
62.2	44	30	62.3 obvious fragmental textures (volcanic brecccia?)					45497	62.0	64.0	0.46	78	560	1920	0.5	2	0	3
64.7	80	20			sericite (chl?)	strong, cleavage+ banding + stretched fragments	<5%, diss. pyrite mainly in	45498	64.0	65.0	0.77	147	1070	1850	0.5	1	0	3
65.7	83	10						45499	65.0	66.0	1.39	133	2040	1950	0.5	3	0	3
66.3								45500	66.0	67.0	0.84	227	2040	1980	0.5	2	0	3
			67.2 – 68.4																	
	100	0	milky quartz + intensely silicified rock patches of sericite volcanic	none in intense silfn.	intense silfn. (patches serite)	none in intense silfn.	10–20% py. sph. (med)	19111	67.0	68.0	1.09	460	8200	5830	0.5	15	5	0
			68.4 – 69.8																	
68.4	60	0	light grey-green ashy serite volcanic, fragmental with many quartz fragments, patches of quartz/vein/intense silification rock	fine grained ashy + fragments -> 2cm	sericite moderate silfn.(chl)	moderate bands + veins	2–5% sulphides mainly pyrite	19112	68.0	69.0	2.75	1280	19000	11600	0.5	3	2	2
69	50	0	69.4 stretched out lithic? or pumice? fragments					19113	69.0	70.0	4.11	1210	7600	4840	0.5	4	2	2
			69.8 – 70.8																	
69.8	90	25	milky quartz/intensely silicified rock, minor serite pug in places, carbonate solution cavities	none	intense silfn.	none	5–10% py. locally	19114	70.0	71.0	0.64	610	9900	4260	4	7	5	0
			70.8 – 92.1																	
70.8	75	30	light grey-green ashy volcanic fragments, chlorite streaks,	fine grained with fine streaky fragments of chlorite	sericite (minor weak silfn.) (tiny chl. spots?)	60 moderate silfn. bands of sulphides streched chlor.	<3% pyrite overall locally 30% (mainly in darker chl? bands)	19192	71.0	74.0	0.34	255	4440	3805	3	2	0	2
72.4	92	40	flattened glass? pumice? quartz caught up in folination																	

				+ qtz frags.																
78.8	100	95				sericite mod. silfn. (chl) chlorite	moderate in weak ch. +stretched chl.	2% pyrite diss.	19193	74.0	77.0	0.27	50	3770	1350	0.5	2	2	2
78.9			74.8 kinking of cleavage 77.2 pyrite in dark chlorite vein + some quartz					77.2 5cm 30% pyrite												
								77.7 3cm 30% pyrite +minor sph.	19194	77.0	80.0	0.3	296	5000	8400	0.5	3	2	2
	100	60	78.2 5cm quartz vein + sulphides					78.3 5cm 20% sph. 30% pyrite + galena, in qtz. vein												
								overall 2-5% pyrite												
79.1 80.4	84 100	40 0	80.0 10cm quartz carbonate vein 20-30% pyrite + minor galena, sphalerite					'80.0 10cm 25% pyrite + galena, sph.	19195	80.0	84.0	0.18	92	1150	2320	0.5	2	2	2
81	85	60	A lot of chlorite patches (stretched out fragments?) + sulphides, increase in number of quartz/carbonate veins and patches			Sericite moderate silfn. (Ca.)(chl)		2% diss. sulphides 5% pyrite												
83.4	90	60	84.4 streaky chlorite texture						19115	84.0	85.0	0.22	63	740	295	0.5	5	2	2
			85.1 - 85.2 85.2 milky quartz/intensely silicified rock	none		Intense silfn.	none													
86.4			85.2 - 88.2 grey-green rock, with large pale clasts (similar to above unit) in a darker chlorite matrix, also many quartz fragments volcanic breccia?	coarse grained fragmental breccia? fragments-> core size fine-med. grained matrix		sericite moderate silfn.(chl)	moderate. in veins weak cleavage, alignment of fragments	2-5% pyrite	19116	85.0	86.0	0.31	837	4100	2390	0.5	3	3	2
	92	80	86.4 silicification increases down harder to pick fragments/clasts still a volcanic breccia? quartz/carbonate increases			sericite strong silfn. (ca.carb) chl. strong in places	weak to moderate	<2% pyrite	19117	86.0	87.0	0.23	36	1400	1040	0.5	1	4	1
87.8			87.8 20cm puggy sericite fault gangue				30 silfn. fault		19118	87.0	88.0	0.23	870	9600	5910	0.5	1	4	3
			88.5 - 89.0																	
	97	80	Large areas of milky quartz with	none		intense	weak to	10% pyrite	19119	88.0	89.0	0.4	1530	19900	9400	0.5	10	5	0

			intervals of intensely serite altered rock		silfn. to strong silfn. (sericite, '(chl,ca.) in patches	none	locally 30-40% some very pale sphalerite														
89.4																					
			90.0 - 91.8																		
	73	10	Green fine grained volcanic, some quartz fragments?/veins?	fine grained + quartz fragments?	Sericite chalopyrite moderate silfn.	50 weak to none	5-10% pyrite as cubes->5%	19121	89.8	90.8	2.48	155	2120	151	0.5	8	3	1
91.3	100	20	large cubic pyrite crystals (replacements)					19122	90.8	91.8	7.94	530	1830	920	0.5	8	2	4
			91.8 - 92.4																		
91.8	33	0	puggy chl.sericite fault gangue + vein quartz fragments	pug	sericite chl.	FAULT	<2% pyrite	19123	91.8	93.0	0.79	950	12400	14600	0.5	1	0	0
			92.4 - 94.9																		
92.4			very altered intervals of intense silfn. (dark grey vein quartz) + patches of intensely sericite, chl. altered rock		Intense silfn. in places ser. (chl.) intense in others	none	overall <5% locally 30-40% py. sph.(pale) galena	19124	93.0	94.0	0.32	367	15700	23100	0.5	4	4	0
93	62	10	grey-green colour overall																		
93.2	82	0	93.2 small fault pug zone			93.2 Fault															
			94.9 - 122																		
94.9			dark-grey massive ashy volcanic, numerous quartz/carbonate veins+areas of intense silfication alteration	fine grained ashy (masive)	Strong silfn. serite (chl.?)	60-70 weak cleavage + bands + veins	2-4% pyrite diss.locally ->40% pale sphalerite	19125	94.0	95.0	0.25	610	3700	12700	0.5	4	4	0
			95.5 10cm of 40% honey sph. + quartz					19126	95.0	96.0	0.08	124	2140	8300	0.5	3	3	1
	100	57	96.8 5cm of 30% pale honey sph. in intense silific. rock, fine veinlets of pyrite					19127	96.0	97.0	0.06	39	750	4520	0.5	4	3	1
97.9			some possible fragmental textures (coarse grained)	coarse grained fragmental textures?			5-10% diss. pyrite locally 10 -20%	19128	97.0	98.0	0.08	61	210	1810	0.5	6	3	1
	100	75	99.4 10cm vein quartz + white sph. + galena 60 degrees to core axis	fine grained + coarse grained fragments?	strong silfn. ser. (chl.)	50-60 cleavage + banding		19129	98.0	99.0	0.07	28	82	210	0.5	6	3	1
								19130	99.0	100.0	0.1	140	350	1650	0.5	6	3	1
								19131	100.0	101.0	0.09	23	85	410	0.5	6	3	1
101			101.8 possible large (3cm) dark grey clast					19132	101.0	102.0	0.41	59	169	770	0.5	6	3	1
								19133	102.0	103.0	0.07	61	1140	3530	0.5	6	3	1
	100	97	102.6 20cm vein quartz + 20% honey sph + galena, 50% core					19134	103.0	104.0	0.16	60	87	277	0.5	6	3	1
								19135	104.0	105.0	0.23	77	1220	775	0.5	7	3	1
			103.0 5cm 40% pyrite in fine veins					19136	105.0	106.0	0.16	90	570	890	0.5	8	4	0
								19137	106.0	107.0	0.14	190	5830	13000	0.5	10	4	0
104.1	100	100	104.2 20cm vein quartz+10-20%.-pyrite, cpy, galena, pale sphalerite	fragmental textures?		60-70 cleavage + banding	5-10% pyrite diss. + fine veins	19138	107.0	108.0	0.14	780	1140	4510	0.5	4	3	0
								19139	108.0	109.0	1.08	147	88	232	0.5	3	3	0
105.1								19140	109.0	110.0	0.26	112	185	530	0.5	2	3	2
	100		106.6 40cm Intense silification+20-30% pyrite, pale sphalerite, galena, dar	fine grained +	strong-intense	weak to none	5% pyrite overall											

			grey ashy volcanic some possible clasts -3cm (may be alteration effects?) rock becomes lighter with chl. spots	clasts -> 3cm?	silfn.													
110.4			light grey-green ashy volcanic with fragments up to core size (just alteration?)	fine grained, fragments-> cpre size, angular-sub round	strong silfn. (ser,chl)	70-80 moderate-weak cleavage stretched fragments	diss.pyrite + veinlets	19141 19142 19143 19144 19145	110.0 111.0 112.0 113.0 114.0	111.0 112.0 113.0 114.0 115.0	0.2 0.24 0.17 0.15 0.33	146 1355 184 272 182	540 7560 435 1600 510	1650 27500 590 2670 1490	0.5 4 0.5 0.5 0.5	2 6 2 2 2	3 3 3 3 3	2 2 2 2 2
	86	10	110.9 90cm intense silfication/quartz/carbonate vein+5-10% sph.(pale) pyrite galena				sulphides often in quartz veins intense												
113.4			very altered rock, possible fragments -> 2cm (chalopyrite)	fine grained? tuff areas?	strong silfn. (ser.chl.)	70 moderate to weak stretched serite	silfn.up to 25% locally												
	90	85	115.4 5cm intense silification + 25% pyrite, pale sphalerite, galena 116.0 20cm intense silification/vein quartz + 5-10% pale sphalerite					19146 19147	115.0 116.0	116.0 117.0	0.97 0.19	950 131	6520 1240	23900 2510	0.5 0.5	3 4	3 3	1 2
116.4	88		Light-dark grey mottled rock, intensely silicified in places and numerous quartz/carbonate veins, +small networks of sericite alteration. Totally altered, many stretched out chlorites? (relicit fragments?)	no primary texture relicit fragments?	strong-intense silfn. (after ser?)	weak in bands + alignment of inclusions	pyrite ides pyrite locally 5-10% +pale sph. (ga.cpy?)	19148	117.0	118.0	0.17	375	3000	5300	0.5	3	4	1
			118.8 30cm intense silification (milky) + 10% pale sphalerite + galena					19149	118.0	119.0	0.15	1000	2250	8500	0.5	5	4	1
119.4			119.5 30cm vein quartz + sulphides (10% pale sphalerite galena)					19150	119.0	120.0	0.18	1230	6200	17600	0.5	5	4	1
			120.8 5cm Intense silification + 10% pale sphalerite + galena					19151	120.0	121.0	0.3	472	2410	5600	0.5	5	3	1
			122.0 - 160																
	96		rock becomes fine grained, regularly banded dark grey overall, numerous quartz/carbonate veins	fine grained	strong silfn.	70 weak stretched inclusions + banding	5% pyrite diss. + veins, pale sph. + galena in intense silfn.inter-vels	19152	121.0	122.0	0.1	74	124	250	0.5	5	3	1
122.4			122.3 10cm vein quartz+minor sulphides					19153	122.0	123.0	0.14	238	600	1120	0.5	5	3	1
	100		122.6 5cm vein quartz + 5% sulphides					19154	123.0	124.0	0.27	122	265	595	0.5	5	3	1
		100	(some pale sphalerite) 125.2 10cm milky vein quartz + minor sulphides (pale sphalerite + cpy)					19155	124.0	125.0	0.3	102	170	373	0.5	5	3	1
125.4			125.4 10cm vein quartz + 5-10% pale sph. and galena					19156	125.0	126.0	0.07	630	2860	5700	0.5	5	4	1
	100		126.4-126.8 small sericite (silic.) stretched pumice? glass? lithics?	fine grained	strong to intense		5% diss. pyrite	19157 19158	126.0 127.0	127.0 128.0	0.06 0.09	488 239	1280 360	12700 505	0.5 0.5	5 5	4 4	1 1

			127.0 5cm 20% pale sphalerite + pyrite		silfn. (some replacements look like sil.ser.chl)		<5% diss. pyrite	19159	128.0	129.0	0.08	267	195	450	0.5	5	4	1
128.4																			
	100	80	130.0 10cm milky vein quartz	fine to				19160	129.0	130.0	0.13	144	640	1160	0.5	3	4	1
			130.1 small buggy sericite shear/fault	medium				19161	130.0	131.0	1.51	105	495	2060	0.5	3	4	1
131.4			131.45 5cm vein qtz+ser+carbonate	grained															
			brecciating host rock?	fragments?			pyrite 2-5%	19162	131.0	132.0	0.26	238	328	780	0.5	3	4	1
	93		132.4 10cm milky quartz +10-20%, pale	sericitised				19163	132.0	133.0	0.49	1190	3650	7100	0.5	3	4	1
			sphalerite+pyrite+chalopyrite?	shards?															
			133.0 2cm intense silfn.+vein quartz				pyrite 2-5%	19164	133.0	134.0	0.16	237	300	610	0.5	3	4	1
			(+serite fragments?)+ minor pyrite																
134.4			134.8 5cm vein quartz + pyrite		strong silfn. (intense silfn, locally)		pyrite 2%	19165	134.0	135.0	0.22	109	171	344	0.5	2	4	1
	97	90																	
			135.4 5cm Intense silfn../vein quartz +					19166	135.0	136.0	0.18	61	280	425	0.5	2	4	1
			trace sulphides																
137.4			dark grey ashy volcanic massive, some	fine		60-70	1-2% pyrite	19167	136.0	137.0	0.24	61	130	306	0.5	2	4	1
			possible relict fragments replaced by	grained,		weak in		19168	137.0	138.0	0.16	31	78	153	0.5	2	4	1
			sericite, numerous quartz/carbonate veins	some		veining													
				relief															
				fragments?															
				(serite)															
	100		138.0 5cm milky vein quartz + minor	massive				19169	138.0	139.0	0.14	50	180	498	0.5	2	4	1
			sulphides																
			139.0 20cm milky quartz + pyrite(sph?)					19170	139.0	140.0	2.43	357	1170	1200	0.5	2	4	1
140.4			140.9 60cm intense silf./milky quartz +				pyrite <2%	19171	140.0	141.0	1.34	484	640	775	0.5	1	4	1
								19172	141.0	142.0	0.22	1930	7860	9900	3	1	4	1
			pyrite + 1-2% pale sphalerite				overall	19173	142.0	143.0	0.09	850	3660	8800	2	1	4	1
							local concentrations with intense silfn./qtz veins												
	97	82																	
143.4			143.0 5cm milky vein quartz + pyrite					19174	143.0	144.0	0.07	213	510	1020	0.5	1	4	1
	100		+pale sphalerite (on vein margins)					19175	144.0	145.0	0.1	189	2210	4600	0.5	1	4	1
			numerous quartz/carbonate veins																
			(phengite?) + minor sulphide																
			145.1 30cm quartz/carbonate vein					19176	145.0	146.0	0.13	610	2530	4050	0.5	1	4	1
			(phengite?) + pyrite+25%pale sphalerite					19177	146.0	147.0	0.46	103	245	478	0.5	1	4	1
146.4								19178	147.0	148.0	0.24	174	195	479	0.5	1	4	1
	83	43						19179	148.0	149.0	0.19	820	4300	2220	0.5	1	4	1
149.4			150.0 5cm quartz/carbonate vein and																
	97		minor sulphides at vein margins																
			150.8 10cm quartz/carbonate vein and					19180	149.0	150.0	0.12	223	920	1820	0.5	1	4	1
			marginal sulphides (inc. pale sph)					19181	150.0	151.0	0.11	309	545	620	4	1	4	1
								19182	151.0	152.0	0.2	232	128	100	0.5	1	4	1
152.4			152.3 1.2m milk quartz/carbonate+5-10%	fine	strong	70 weak	<2% diss.	19183	152.0	153.0	0.57	4720	2720	4400	71	7	5	0
			pyrite, pale sphalerite in bands	grained	silfn.		pyrite	19184	153.0	154.0	0.1	280	185	304	0.5	1	4	1
				massive	Intense		locally->15%												
				some relief	silfn.		sulphides												
				fragments?	intervals		pyrite, sph.												
				sericitised			usually with												
	95	95	154.8 20cm quartz/carbonate veins and				intense	19185	154.0	155.0	0.37	840	2060	4410	3	1	3	1

			marginal sulphides pyrite, sphalerite					silfn. patches or qtz/carb. veins	19186	155.0	156.0	0.05	257	200	381	0.5	1	3	1
			155.2 50cm quartz/carbonate veins and 2% pyrite rare sphalerite						19187	156.0	157.0	0.28	184	165	124	0.5	1	3	1
155.4									19188	157.0	158.0	0.27	350	535	342	0.5	1	3	1
	100		159.2 10cm Intense silification/quartz vein + 5% pale sphalerite band at margin																
158.4																			
	100	85	158.5 20cm Intense silification/quartz vein+2.5% pyrite+band pale sphalerite (cpy galena?)		decrease in silfn.			decrease in sulphides <1% pyrite	19189	158.0	159.0	0.17	1150	1630	4140	0.5	0	3	3
			161.0 - 170.4																
161.4	100		dark grey fine grained massive volcanic, laminated with dark and light grey bands decrease in sulphites	fine grained massive laminated	Moderate silfn.- strong silfn.	80	Moderate	<2% pyrite + minor local con-centrations	19196	159.0	162.0	0.13	164	520	720	0.5	2	2	2
164.4	97	100	161.4 10cm quartz vein + pyrite + pale sphalerite						19197	162.0	165.0	0.15	162	255	333	0.5	2	2	2
167.4	100		165.1 5cm quartz vein + 5% pale sphalerite (+pyrite)						19198	165.0	168.0	0.14	293	320	625	0.5	2	2	2
			167.0 20cm Intense silification/quartz carbonate vein + minor sulphides						19199	168.0	170.4	0.08	212	355	930	0.5	2	2	2
170.4			170.4 E.O.H.																

GS1986/079

Latitude	Longitude	~~AMG~~ ISC 391625.3E / 1145467.0 N	
Grid co-ordinates			
Collar elevation		Altitude	
Final length	91.7m	Final depth	
Date commenced	18 May 1987	Date completed	20 May 1987
Contractor	Pontil Pty Ltd		
Drilling cost		Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m
TRICONE	0	12.0							
NQ	12	91.7							

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		078						
45	50.25		098						
90	49.25		097						

Orientation Survey Instument: Eastman Singleshot

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐ electrode set in hole ☐ core susceptibility ☐ remanence ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth	Oxidation base	Water flow
few m.	39m	—

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average Au g/t						
70	72	2		1.90						
81	82.9	1.9		0.97						

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Mineralization Recovery:

Objective of Hole:

to test Au mineralization ~~above~~ below and ~~east~~ west of WL18.

Summary and Conclusions:

minor mineralization but hole failed to disclose substantial width of mineralization

Recommendations:

Prepared by D. Gardner Date	**DRILL HOLE SUMMARY**
Report Number	Project BREADALBANE JV
Section Number	Prospect WET LAGOON SOUTH
Plan Number	
Longitudinal Number	Full Length 91.7m Hole No. WL 2c

HOLE WL 29 LOGGED BY: D. GARDNER

RUN	% REC	% ROD	COMMENTS	TEXTURE	ALT.	FOLN. DEGREES	MIN.
			0 - 12.0 No core recovered, sludge samples taken				
			12.0 - 12.4				
12.0	250		brown clay unconsolidated	clay	none	none	none
			12.4 - 15.6				
13.8			consolidated clay, many quartz clasts, intensely weathered bedrock? some folination developed?	clay-silt fine grained + fragments (qtz.lithics) <1cm	intensively weathered?	80 weak cleavage?	none
			15.6 - 17.2				
	77		Unlithified clay, numerous quartz fragments	fine grained clay-silt +fragments	Intensevely weathered?	none	none
16.4	83		16.4 numerous quartz fragments ->core size				
17.0							
			17.2 - 18.6				
	69	10	milky vein quartz+small intervals of foliated silty rock, many cross fractures in quartz	milky qtz minor silt component	Intensively weathered	foln. in silty intervals	pyrite
18.6							
			18.6 - 42.1				
	73		buff-brown (-pink) fine grained ashy volcanic laminated (ashfall tuff? not a flow?)	fine grained ashy laminated layers <1cm	weak silfn. sericite weathered silfn.	18.6 puggy shear 60 moderate banding- weak cleavage 40-50 weak laminations colour bands	none
20.1	85		20.0 10cm of sheared sericite				
20.6			many quartz veinlets and small fragments (qtz. phyric?)				
	100	90	folination wraps around the latter				possible pyrite boxworks in more siliceous zones
			21.1 some more siliceous bands among the sericite ones				
22.6							
	96		24.3 small sericite shear (slickensided)				
			rock becomes redder, prominent laminations (colour) contorted in places by micro faults and quartz carbonate veins (ashy tuff?)	fine grained ash laminated	strong- weak ser, weathered silfn.	50-60 weak cleavage laminations	pyrite boxworks? in quartz/ carbonate

SAMPLE	FROM	TO	Au	Cu	Pb	Zn	Ag	P	S	F
	0	3.5								
	3.5	6.5	0.02	52	153	670	0.5			
	6.5	7.5								
	7.5	9.5	0.07	82	192	1120	0.5			
	9.5	12.0	0.07	105	220	1160	0.5			
45650	12.0	15.0	0.07	121	525	565	0.5	0	0	1
45651	15.0	17.4	0.06	121	1210	560	0.5	0	0	0
45614	17.4	18.6	0.06	97	1000	830	0.5	0	0	1
45653	21.6	24.6	0.11	150	1070	347	0.5	0	1	2
45654	24.6	27.6	0.08	175	1360	389	0.5	0	1	1

				layers<1cm			veins											
	100	100	rock becomes less red, generally light grey		27m weathering-decreasing		some pyrite as euhedral											
28.8																		
	100		light grey fine grained ashy tuff? sericite altered, some carbonate rich		Sericite (weak to	Moderate cleavage	crystals + boxworks in	45656	30.6	31.8	0.06	512	2190	580	0.5	1	2	2
			bands numerous quartz veins		moderate silfn. in places)	laminations	quartz veins sulphides<1%											
31.8			31.85 5cm milk quartz+carbonate solution cavities + ?pyrite boxworks			50-60 strong cleavage		45615	31.8	32.8	0.06	273	3220	635	0.5	2	1	3
	100	76	some fine wispy dark replacements, chlorite? replacing glass? pumice? stretched into cleavage			laminations -chl.py. wisps		45616	32.8	33.8	0.14	298	2430	650	2	3	1	3
34.4					still some weathering		2-5% pyrite locally with quartz veins	45617	33.8	34.8	0.1	510	2910	635	0.5	3	1	3
			34.6 20cm milky quartz, carbonate cavities, no sulphides															
			36.6 30cm numerous quartz/carbonate veins disrupt layering, 2% pyrite					45618	34.8	35.8	0.24	730	2420	370	0.5	3	1	3
	85		rock becomes darker, chlorite? replacing glass shads? many quartz/carbonate veins are lenticular, disrupting layering -> layering is not bedding?		(chl.py?)			45619	35.8	36.8	0.12	407	3180	810	3	3	1	3
37.8								45620	36.8	37.8	0.08	68	3770	1000	0.5	1	0	3
	100	15	fine grained ashy medium-dark grey laminated tuff? numerous quartz/carbon veins// to layering, often disrupt layering	fine grained ash laminated layering <1cm	sericite chl.py.	moderate-strong cleavage	<2% pyrite	45657	37.8	40.8	0.13	151	3810	1370	0.5	1	0	2
40.2																		
	20																	
40.5			rock becomes lighter grey					45658	40.8	43.8	0.07	276	3140	1000	0.5	1	0	2
	96	20	light grey green fine grained ashy? tuff? weakly laminated, numerous darker (chl.py?) lenticles,->relict stretched fragments? pumice? glass?	fine grained	sericite chl.py.													
43.2																		
	86			slight coarsening		43.2 small buggy shear												
43.9			light grey green fine grained ashy?	fine grained with numerous fragments? <1cm	sericite chl.py,	Moderate-strong cleavage + aligned chl. py. sericite	<1% pyrite	45659	43.3	46.8	0.14	1460	1700	730	0.5	1	0	2
	80	10	tuff?, numerous small fragments? <1cm replaced by chl.py. or sericite															

								replacements?													
46.4	43		48m broken core fault?	coarser		48m Fault?		45660	46.8	49.8	0.1	55	2290	1340	0.5	0	0	2	
49.2			49.5 quartz vein with dark sphalerite + galena layering determined by chal.py content	fine grained (medium grained)	sericite chl.py.	50.8 small shear		45661	49.8	52.8	0.06	39	2220	860	0.5	2	0	2	
				buff? weakly laminated + fragments (chl.py,ser)	chl.py increasing? silfn. increasing	60 - 70 Moderate cleavage + laminations 51.4 puggy shear	2% pyrite, dark sph. +trace ga. in fine qtz ca. veins												
						51.9 10cm puggy shear		45662	52.8	54.0	0.06	45	3050	3290	0.5	2	0	2	
52.3	93	80	54.9 20cm brecciation or coarse grained fragmental (1cm)	coarse grained interval (1cm) breccia?		55.1 small shear															
			55.1 50cm brown oxidised rock + small shear					45621	54.0	55.0	0.08	32	3640	4100	0.5	3	0	1	
55.9			55.8 10cm intense silfn./vein quartz + 5-10% dark spalerite+galena+pyrite	fine grained + small (1cm) lenticular chl.py/ser replacements	sericite chl.py.	70 moderate to weak	2-5% pyrite +locally dark sph.ga.	45622	55.0	56.0	0.23	334	7500	7600	3	3	0	1	
	100		grey green very altered volcanic					45623	56.0	57.0	0.17	44	3120	2200	0.5	3	0	2	
								45624	57.0	58.0	0.26	65	4530	1190	0.5	3	0	2	
58.5			58.4 40cm intense silfn./vein quartz (+chl.py/ser.patches) + 5-10% dark sphalerite 2-5% pyrite + galena																		
			56.7 small puggy shear	grained? numerous 1cm chl.py/ser lenticles	sericite	moderate to strong cleavage + banding	1% dark sph. + galena	45627	60.0	61.0	0.15	39	5185	5780	0.5	3	0	2	
	100	20	61.4-63.0 -> sheared puggy zone			61.4-63.0 FAULT		45628	61.0	63.0	0.23	264	3600	3620	0.5	3	0	4	
			64.5 10CM Quartz + 5% sph. + galena					45629	63.0	64.0	0.2	109	4180	5700	0.5	3	0	3	
64.7	60		64.7 10cm milky quartz + 5% sph.					45630	64.0	65.0	0.75	195	3200	12200	0.5	3	0	2	
65.2								45631	65.0	66.0	0.57	42	2630	11500	0.5	3	0	3	
	57	0						45632	66.0	67.0	0.18	204	3400	17800	0.5	3	0	2	

			67.0 - 68.3																
67.0	78		dark-light brown, weathered leached, fine grained sericite volcanic, number ofintense silification intervals increases	fine grained	sericite + weathered/ leached	Moderate silfn.	<1% pyrite	45633	67.0	68.0	0.28	233	3340	3600	0.5	0	0	2
67.9	85	10																	
			68.3 - 74.5																
69.9	100		Intense silicification/quartz/carbonate veins. Carbonate solution cavities+dark	quart + some fine	Intense silfn. +	none	extensive pyrite	45634	68.0	69.0	0.65	930	3170	2030	10	0	4	1
								45635	69.0	70.0	0.79	560	3170	1270	21	1	5	0
70.4	35	40	brown (oxidised) material	grained ashy	leached oxidised		boxworks? +	45636	70.0	71.0	1.14	217	1420	880	6	1	5	0
71.1	75			intervals			py. locally	45637	71.0	72.0	2.66	590	1640	735	3	1	5	0
72.1	66							45638	72.0	73.0	0.69	394	3340	2560	4	1	5	0
72.7	75	40	some cavities have a sericite fill, fractures are filled with oxidised brown material				<2%pyrite, rare sph.	45639	73.0	74.0	0.41	288	1270	560	5	1	5	0
73.9																			
			74.5 - 75.1																
	100	70	light brown	fine to medium grained + many quartz fragments <1cm	Sericite (weak silfn.)	weak to moderate	pyrite boxworks in siliceous patches	45640	74.0	75.0	0.62	374	1660	710	2	1	3	1
			75.1 - 75.5																
			milky quartz white-light brown		intense silfn.	none	<2%, some pale sph.	45641	75.0	76.0	0.33	357	1440	1460	3	1	3	1
			75.5 - 82.6																
76.9			buff-brown fine grained ashy? tuff?	fine grained	strong silfn.			45642	76.0	77.0	0.22	210	1340	515	0.5	0	3	1
	93		laminations of sericitic layers, numerous quartz/carbonate veins, minor	ashy weakly				45643	77.0	78.0	0.3	159	1540	915	0.5	0	3	2
			chalopyrite	laminated layers <1cm	moderate silfn.														
			78.4 zone of moderate silicifications					45644	78.0	79.0	0.21	218	1400	2140	0.5	0	2	1
79.9					weak silfn.			45645	79.0	80.0	0.23	195	1790	2650	0.5	0	2	1
	46	10			sericite		rare py.	45646	80.0	81.0	0.24	207	1800	2830	0.5	0	1	1
								45647	81.0	82.9	0.97	1675	3675	2110	134	0	1	2
			82.6 - 85.0																
82.9			sericite pug, brown (oxidised)->82.9			FAULT	rare py.	45648	82.9	85.0	0.23	166	940	2050	6	0	0	4
	33	40	dark green sheared chlorite ->85.0																
			85.0 - 91.7																
85.3			dark green fine grained massive	fine grained,	sericite chl.py	60 moderate -	no sul-	45649	85.0	86.0	0.07	58	55	2790	0.5	0	0	2
	100		chlorate volcanic, numerous small sericite, chalopyrite, carbonate,	possible	(minor Ca)	strong	phides												

			replacements stretched into cleavage (fragments?, snards?)	fragments? snards? <1cm now sericite		cleavage + slickensides														
35.9			fine carbonate veining common		carbonate increasing downhole		45663	86.0	89.0	0.02	46	42	508	0.5	0	0	2			
	100	70	+ carbonate spots (replaements?)																	
38.9	100		+ yellow-green (ser?) spots<1cm circular (replacements?)																	
91.7			91.7 E.O.H.				45664	89.0	91.7	0.01	50	70	209	0.5	0	0	2			

GS1986/079

Latitude	Longitude	ISG 341680.20E / 5 114595.00N
Grid co-ordinates		
Collar elevation	Altitude	
Final length 128.0	Final depth	
Date commenced 21 May 1987	Date completed 25 May 1987	
Contractor Pontil Pty Ltd		
Drilling cost	Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m
TRICONE	0	32.5							
NQ	32.5	128.0							

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		078	128	48		098		
55	51		095						
91	49		096						

Orientation Survey Instument: Eastman Singleshot

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐
electrode set in hole ☐ *core susceptibility* ☐ *remanence* ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth	Oxidation base	Water flow
few m	38.8	—

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average ~~Au g/t~~	Au g/t					
94.0	95.0	1		~~Au~~	19.0					

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Mineralization Recovery:

Objective of Hole:
to test for mineralization to E. of WL 27

Summary and Conclusions:
narrow high grade Au zone but hole did not expose broader zone of mineralization to W of WL 17-24-28 trend.

Recommendations:

Prepared by D. Gardner Date May 1987

Report Number

Section Number

Plan Number

Longitudinal Number

DRILL HOLE SUMMARY

Project BREADALBANE JV

Prospect WET LAGOON SOUTH

Full Length 128.0 Hole No. WL 36

HOLE WL 30 LOGGED BY: D. GARDNER

RUN	% REC	% RQD	COMMENTS	TEXTURE	ALT.	FOLN. DEGREES	MIN.	SAMPLE	FROM	TO	Au	Cu	Pb	Zn	Ag	P	S	F
			0 - 32.5 No core recovered sludge samples taken						0	0.9								
								45601	0.9	6.9	0.06	26	60	74	0.5			
								45602	6.9	12.9	0.05	32	75	132	0.5			
								45603	12.9	18.9	0.17	68	190	1060	0.5			
								45604	18.9	21.9	0.07	181	300	1880	0.5			
								45605	21.9	24.9	0.03	120	225	1610	0.5			
								45606	24.9	27.9	0.06	117	330	1120	0.5			
								45607	27.9	29.9	0.07	91	260	900	0.5			
			32.5 - 33.6															
32.5			buff red oxidised laminated fine to medium grained volcanic?	fine to medium grained with med.-coarse grained qtz. fragments finer	Intensively weathered, sericite	60 Moderate. Weak-moderate cleavage + colour banding	Iron oxide staining											
33.6			33.6 - 56.8	grained														
	63	35	buff red laminatee fine grained cleaved sericitic, ashy? volcanic (sericite schist)	fine grained laminated, layers<1cm	Intensively weathered, sericite	50 Moderate to strong cleavage+// laminations		45665	32.5	33.5	0.02	118	670	580	0.5	0	0	3
34.7			34.7 rock is light grey		sericite		34.7 rare pyrite											
	62	40																
35.5																		
	40	80	rock is brown, oxidised			60 moderate cleavage	pyrite boxworks + rare pyrite	45666	33.5	38.5	0.02	79	315	475	0.5	0	0	2
			38.8m end of brown oxidation light grey fine grained laminated ser. schist (anostomising chl.py scattered in cleavage) possibly a fine grained ashfall?		ser.(chl.py) chl.py increases			45667	38.5	41.5	0.02	85	298	478	0.5	0	0	2
			39.1 lenticles (boudins?) of quartz/ carbonate caught up in cleavage rock to medium-dark greengrey (chal.py)	fine grained weakly laminated	sericite (chl.py)		40.2 scattered 0.5cm pyrite cubes, crystal cleavage (replace-ments)											
40.4																		
	100	10																
41.5																		
	66	10																
42.4			green grey fine grained laminated			60 moderate cleavage	trace diss. pyrite + some cubes ->0.5cm + boxworks in vein quartz	45668	41.5	44.5	0.02	159	1120	1020	0.5	1	0	2
	100	80	sericitic schist(?) was a fine grained ashy volcanic (tuff?)															
			42.5 30cm of oxidised rock+vein qtz + py boxworks															
			42.9 minor pugoy shear			42.8 pugoy shear												
43.7					sericite		<1% pyrite	45669	44.5	47.5	0.01	55	280	514	0.5	1	0	2

						(chl.py)		(py.in chl. veinlets)											
	100	70	numerous chorite replacements stretchedinto cleavage+small chlorite veinlets (with pyrite) holes of large pyrite cubes are common)																
46.8																			
	85	10	laminations are wavy, often disrupted by quartz/carbonate veinlets/lenticles		sericite (chl.py)+ minor ca?	60 weak-moderate cleavage	<1% pyrite	45670	47.5	50.0	0.02	26	110	540	0.5	1	0	2
48.8	100	57					pyrite locally 2-5%												
50.0																			
	97	80	52.0 several large pyrite cubes <0.5cm					45671	50.0	53.5	0.03	27	106	439	0.5	1	0	1
53.0							<2% pyrite, minor ga., sph. locally												
			53.8 quartz/carbonate veins + patches of red/brown oxidised rock		sericite (chl.py) oxidation?	80-90 weak cleavage + banding		45679	53.5	54.5	0.32	43	1420	419	0.5	1	0	1
	100	85	54.4-53.3 brown oxidised rock + quartz/carbonate + pyrite boxes + minor puggy fault at 54.6			54.6 puggy fault		45680	54.5	55.5	0.06	125	1000	560	0.5	1	0	1
			light-dark grey green fine grained volcanic, intense silification,+quartz carbonate veins and carbonate spots (becoming intense)	fine grained weakly laminated	sericite intense + quartz/ca. intense	80-90 weak cleavage + banding	minor py. locally 5% + rare sph, galena	45681	55.5	56.5	0.07	216	2200	940	0.5	1	0	1
			56.8 - 68.0																
56.0	100	0	grey green ashy volcanic, laminated with dark and light layers, fine quartz/carbonate veins	fine grained, laminated layers <1cm	sericite (ca., chl.py)			45682	56.5	57.5	0.28	620	2860	3070	0.5	2	0	3
57.6																			
	86	58	58.1 10cm quartz/carbonate vein + ca. solution cavities erratic qtz/carbonate veins disrupt layering. some layering may be due to carbonate alteration	weakly laminated		Moderated cleavage		45683	57.5	58.5	0.02	133	815	1240	0.5	2	0	3
59.0			59.1 10cm quartz/carbonate vein + pyrite, galena, (sphalerite?)			weak cleavage, banding disrupted around qts. slugs	<1% pyrite overal rare galena sphalerite	45684	58.5	59.5	0.02	105	550	472	0.5	1	0	1
			59.3 10cm quartz/carbonate vein + oxidised? brown rock					45685	59.5	60.5	0.01	25	460	640	0.5	0	0	1
	63	56	Medium-dark grey green ashy volcanic abundant fine, contorted quartz carbonate veins 60.3 20cm quartz vein+some oxidised rock 60.8 vein with galena+dark sphalerite					45686	60.5	62.0	0.02	100	715	700	0.5	0	0	2
62.0																			
	83	12	light-medium grey ashy volcanic, layering contorted + plated by fine carbonate and quartz veins	fine grained laminated scm	sericite (carbonate?	60 medium cleavage + laminations	<1% pyrite overall locally to 5%	45687	62.0	63.0	0.14	165	625	335	0.5	1	0	2
								45688	63.0	63.7	0.11	133	450	489	0.5	0	0	2

64.4			64.0-64.5 milky quartz vein+carbonate solution cavities and ?py. boxworks	stretched relick fragments? to 3cm				45689	63.7	64.6	0.05	105	220	335	0.5	1	0	2
	64	0	65.0 small puggy fault 66.0 small quartz veing	fine grained?	sericite (carbonate?)	medium - strong cleavage, variable orientation	1-2% pyrite	45690	64.6	65.6	0.03	174	665	1740	0.5	1	0	3
66.9			66.0-66.9 fault zone, broken, puggy rock					45691	65.6	67.0	0.07	68	180	755	0.5	1	0	3
	100	18	discontinuous banding quartz/carbonate spots? boudins? + some chlorite? lenticles stretched fragments? pumice?		sericite(ca) (chl.py?)	many micro faults, shears		45692	67.0	68.0	0.05	151	330	1230	0.5	1	0	3
68.0			_ _ _ _ _ _ _ ? _ ?															
			68.0 - 91.0															
			dark grey green fragment massive volcanic	fine grained, possible chl.py. fragments? <2 cm	sericite strong-weak (chl.py?) intense alteration becoming more siliceous		sphalerite 1-2% in bands <1c, (sph. is dark)	45693	68.0	69.0	0.06	50	625	5300	0.5	1	1	2
	85	10	some fine carbonate, quartz/carbonate veins carbonate altering to strong at 69.0m					45694	69.0	70.0	0.05	53	985	3000	0.5	0	1	1
			fine carbonate and quartz veins common		sericite strong-weak	40 weak cleavage + banding		45695	70.0	71.0	0.03	179	3530	3000	0.5	0	1	1
70.6																		
	75	49	light-medium grey ashy volcanic, some stretched and chlorite? (dark) fragments? pumice?	fine grained laminated in places		50-60 weak cleavage + bands+veins	<1% pyrite + rare sph. in veins	45696	71.0	72.0	0.03	82	480	550	0.5	0	1	1
72.2								45697	72.0	73.0	0.03	65	470	2200	0.5	0	1	1
	94	58																
74.0			74.6 5cm of 30% brown sphalerite				sphalerite in some veins	45698	73.0	74.0	0.02	40	560	2480	0.5	0	1	1
								45699	74.0	75.0	0.02	82	1740	7100	0.5	0	1	1
			75.9 band of brown sphalerite					45700	75.0	76.0	0.03	29	2780	1860	0.5	0	1	1
	97	94	76.1 40cm white vein quartz/intense silfn. + pyrite + pale sphalerite				minor py. + rare brown sph. overall 2% sulf.	12505	76.0	77.0	0.07	690	2100	9800	3	1	1	1
			76.6 5cm vein quartz + 5-10% pale sph.															
77.0																		
			77.6 small puggy fault					12506	77.0	78.0	0.08	60	470	1130	1	1	1	1
			light-medium grey ashy volcanic, some chlorite replacements (shards? pumice? lithics?) stretched // to cleavage	fine grained + some chl. fragments	sericite strong-weak (ca,chl,py) very altered	weak to moderate cleavage banding + stretched chl.py	1-2% pyrite +occassional sphalerite	12507	78.0	79.0	0.09	66	1070	2100	0.5	1	1	1
	97	80																
			79.1 10cm vein quartz, + carbonate cavities + minor pale sphalerite 79.6 band of brown sphalerite 79.8 2cm quartz vein + large white sphalerite grain 1cm				2-4% pyrite sph.<1% overall locally 10-15%	12508	79.0	80.0	0.04	105	885	4950	1	3	1	2
80.0																		
			80.1 thin vein of dark brown sphalerite	fine	sericite	60-70 weak	dark sph.	12509	80.0	81.0	0.05	90	3540	7100	2	1	2	1

			+ galena 81.0 quartz carbonate vein + dark sph. 81.2 20cm quartz/intense silification + 15-20% dark sphalerite, marginal	grained? some stretched chl.py replacements	strong to moderate (carb.chlor.) intensively altered	mainly veins	1-2% over-all	12510	81.0	82.0	0.05	44	2320	5000	1	1	2	1
	97	95	! rock becomes darker grey, more ! siliceous quartz vein dissem? into ! country rock, quartz/carbonate ! veins intense often with sphalerite ! galena)				sphalerite <1%	12511	82.0	83.0	0.01	71	545	1140	2	1	2	1
83.0							pyrite 1-2% overall											
	87	55	pyrite sometimes as cubes <5mm			Faults 83.7m and 84.4m		12512	83.0	84.0	0.08	144	2150	7300	2	2	2	1
								12513	84.0	85.0	0.08	40	172	325	1	1	2	1
86.0								12514	85.0	86.0	0.07	47	2050	4370	2	2	2	1
	80	10	dark grey-black massive ashy volcanic some ch.py? replacements are stretched //to cleavage	fine grained massive	sericite strong to moderate chlorite?	80-90 weak cleavage + veins	pyrite 1-2% diss.and in fine bands	45672	86.0	89.0	0.07	55	1240	417	0.5	2	2	1
89.0	100	0	Intense quartz/carbonate veins <1cm + lenticles (boudins?) of quartz/carbonate (cleavage wraps around these)			broken rock in places												
89.6	66	0	_ _ _ _ _ ? _ _ _ ? _ _ _ _					45673	89.0	92.0	0.19	79	235	1220	0.5	2	2	1
			91.0 - 103.0 rock becomes medium dark grey intense fine quartz/carbonate veining	fine grained (massive?)	sericite weak to moderate silfn. (minor chlorite)	70-80 weak cleavage + veins												
92.0	76	79	91.9 small quartz/carbonate vein + dark sphalerite				minor red/brown sph. in qtz. veins	12069	92.0	93.0	0.11	136	800	1030	0.5	2	2	1
			92.4 10cm milky vein quartz															
			93.5 10cm with fine quartz/carbonate veins+15-20% dark sphalerite (red/brown) +galena + pyrite (cpy?)				pyrite 2-5% (sph.5-10% locally)	10270	93.0	94.0	0.18	145	2770	5190	3	2	2	1
94.1	89	15	94.1 broken rock					10271	94.0	95.0	20.7	145	1440	5080	4	2	2	1
95.0			95.2 2cm + 50% sulphides sphalerite, galena, pyrite, (cpy?)					10272	95.0	96.0	0.69	81	1700	1410	2	3	1	1
	83	49	96.7 quartz vein+dark sphalerite+galena					10273	96.0	97.0	0.41	78	1330	3720	2	3	1	1
97.3			97.0 10cm quartz veins/intense silfn. + pyrite + dark sphalerite					10279	97.0	98.0	0.47	66	1290	2440	2	3	1	1
	90	86	medium grey ashy volcanic, some discontinuous wispy layering, intense fine quartz/carbonate veins + sulphides	fine grained (massive?)	sericite strong-weak ?chlorite	70 weak cleavage + veins	pyrite 1-2% minor dark sph. with qtz/ca.veins	45676	98.0	101.0	0.24	47	670	1940	0.5	2	1	1
100.4			101.1 rounded inclusion of carbonate chlorite? altered rock with sericite halo, clast? 2cm diameter					12515	101.0	102.0	0.08	20	915	1870	0.5	2	1	1
	100	98	102.5 band of dark red/brown sphalerite					12516	102.0	103.0	0.16	87	2970	4010	0.5	2	1	1
			_ _ _ _ _ _ _ ? _ _ _ _ _ _ _															
			103.0 - 120.6 rock becomes green-grey	fragmental	sericite	60-70 weak	pyrite 2-5%	12517	103.0	104.0	0.19	236	3420	4540	0.5	3	2	1

103.5			103.0 30cm quartz carbonate veins + 5-10% dark sphalerite+15-20% pyrite + galena	texture? many lenticular fragments?	strong - moderate chlorite?	cleavage + alignment of lenticles	+ local sph. galena												
	97	78	104.6 20cm quartz/carbonate veins + 10-15% pyrite+5-10% medium-dark sphalerite ! darker green-grey				pyrite 5% overall diss.+cubes	12518	104.0	105.0	0.11	95	1100	3660	0.5	5	2	1
							sph.1-2% bands minor galena	12519	105.0	106.0	0.08	30	1990	3550	0.5	5	2	1
			106.2 small puggy shear																
106.6			dark green grey fragment? volcanic, mottled alteration	fine grained? massive? fragments -> 2cm?	sericite weak to moderate chlorite? replacing fragments?	60-70 weak	5-10%pyrite overall diss. + cubes	12520	106.0	107.0	0.2	31	7000	2870	1	8	2	1
	86	40	107.5 quartz vein, carbonate cavities, 10-15% pyrite 107.9 small band 40% pyrite					12521	107.0	108.0	0.09	420	3840	6300	0.5	8	1	1
108.0			108.0 small shear																
	95	60						12522	108.0	109.0	0.07	28	960	810	0.5	8	1	1
110.0								12523	109.0	110.0	0.05	28	320	430	0.5	8	1	1
								12524	110.0	111.0	0.06	28	390	590	1	8	1	1
	97	100						12525	111.0	112.0	0.03	27	270	470	0.5	8	1	1
			112.2 30cm intense silification/quartz vein 20-30% pyrite orange sphalerite + galena					12526	112.0	113.0	0.07	95	5900	8900	4	8	1	1
113.0					sericite moderate silfn.		sphalerite becomes pale 2-3% over-all	12527	113.0	114.0	0.03	37	550	655	2	8	2	1
	100	100	114.5 10cm strong silification/quartz vein 15% pale yellow sphalerite + pyrite + galena					12528	114.0	115.0	0.01	70	2080	4260	2	8	2	1
							5-10%pyrite overall	12529	115.0	116.0	0.01	30	260	520	1	8	2	1
116.0			dark green grey fine grained?volcanic quartz veins/intense silification alteration common inpatches	fine grained? masive	sericite moderate-strong chlorite	60-70 weak cleavage some colour banding	5-10%pyrite overall pale sph.2-3% overall	12530	116.0	117.0	0.05	36	685	1160	2	6	2	1
								12531	117.0	118.0	0.6	59	550	1810	3	8	2	1
								12532	118.0	119.0	0.15	113	2210	6300	3	9	2	1
	97	80	119.6 10cm intense silification + 10-15% yellow sphalerite	fragmental?	intensely altered mottled														
119.0							2-5%pyrite some cubes -> 8mm	12533	119.0	120.0	0.33	118	1360	2310	6	4	2	1
	88	60	120.0 5cm intense silificiation 120.6 20 cm pyggy sericite/cghlorite + quartz fragments FAULT			120.6 FAULT	minor sph.	12534	120.0	121.0	0.27	90	98	219	0.5	3	2	1
			120.6 - 128.0																
120.8			dark green grey fine grained massive volcanic	fine grained? massive	strong-moderate chlorite sericite, minor cart. Carbonate spotting increases	70-80 weak cleavage	No sul-phides	12535	121.0	122.0	0.01	23	10	84	0.5	6	2	1
	83	31	121.7 grey subround clast 1cm cross cuts cleavage																
122.0								45477	122.0	123.0	0.02	32	18	133	0.5	0	1	2
	84	10	122.4 minor shear																

123.9				chl./carbonate alteration becomes dominant as stretched out replacements + spots				chlorite, carbonate +sericite	50-60 moderate cleavage	No sulphides														
	82	31	124.8	small shear																				
125.0			125.0	intense carbonate spotting + veins 30cm							45678	125.0	128.0	0.01	37	16	153	0.5	0	1	2			
	100	95																						
128.0																								

GS 1986 / 079

Latitude	Longitude	AMG ISG 341783·7E / 1195692·0N
Grid co-ordinates		
Collar elevation	Altitude	
Final length 169·6	Final depth	
Date commenced 26 May 1987	Date completed 5 June 1987	
Contractor Pontil Pty Ltd		
Drilling cost	Rig type	

Hole/core size	from m	to m	Hole/core size	from m	to m	casing set from m	casing set to m	casing left from m	casing left to m
tricone	0	23·8							
NQ	23·8	169·6							

Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	HOLE ORIENTATION dip	direction true N	direction mag N	Hole length m	Wedges used
0	50		078	163	43		096		
45	50·75		091						
103	48		093						

Orientation Survey Instument: Eastman Singleshot

GEOPHYSICAL TECHNIQUES USED: down hole I.P. ☐ EM ☐ Magnetic ☐ Mise a la masse ☐ electrode set in hole ☐ core susceptibility ☐ remanence ☐

Intersection (m) From	to	actual length	estimated true width (m)	SUMMARY GEOLOGY Rock units, mineralisation and structure	rock density g/cm³

Water table depth	Oxidation base	Water flow
few m.	45·3	—

Intersections (m) From	to	actual length	estimated true width m	SUMMARY ASSAYS weighted average Au g/t	Ag g/t					
23·8	30·8	7		8·64						
82·										
82·6	84·6	2		2·21	14					
125·3	127·3	2		9·65	20					
157·6	158·6	1		1·09	[illegible]					
159·6	160·6	1		1·17						

Page 1 of 10

Mineralization Recovery:

Objective of Hole:
test grade and width of Au mineralization above WL 24

Summary and Conclusions:
confirmed intersections in WL 29, base metals low due to weathering/leaching
main zone partially lost as intersected at top of bedrock.

Recommendations:

Prepared by D. Gardner	Date June 1987
Report Number	
Section Number	
Plan Number	
Longitudinal Number	

DRILL HOLE SUMMARY

Project: BREADALBANE JV
Prospect: WET LAGOON SOUTH
Full Length
Hole No. WL 31

HOLE WL 31 LOGGED BY: D. GARDNER

RUN	% REC	% RQD	COMMENTS	TEXTURE	ALT.	FOLN. DEGREES	MIN.	SAMPLE	FROM	TO	Au	Cu	Pb	Zn	Ag	P	S	F
			0 - 23.8						0.0	1.2								
			No core recovered sludge samples taken					45608	1.2	4.2	0.09	50	30	136	0			
								45609	4.2	7.2	0.06	58	33	120	0			
								45610	7.2	10.2	0.03	62	34	121	0			
								45611	10.2	16.2	0.02	68	33	114	0			
								45612	16.2	23.2	1.77	113	48	265	0			
23.8									23.2	23.8								
			23.8 - 24.3															
			weathered (leached?) milky vein quartz/ intense silification Fe stained in places. some clay/sericite material in joints?, + carbonate solution cavities	quartz	Intense silfn./ vein qtz. weathered		possible pyrite boxworks											
								12536	23.8	24.8	42.8	148	93	570	2	0	4	2
			24.3 - 24.8															
	100	36	brown-buff intensely weathered oxidised rock	medium-coarse grained	sericite intensely weathered	moderate silfn. in banding												
			24.4 fault? clay/sericite many siliceous bands, veins															
			24.8 - 28.1															
			weathered milky quartz, Fe stained in places carbonate solution cavities	quartz	Intense silfn. weathered		possible pyrite boxworks											
24.9	75	30	24.9 10cm clay + quartz fragments, fault?					12537	24.8	25.8	1.44	159	64	385	0	0	5	0
25.7	75	21																
27.3	60	18	milky quartz + medium grained sericitic material in bands 2-3cm wide	medium grained sericite bands	Intense silfn. + bands of sericite	50 strong cleavage in sericitic bands		12538	25.8	27.8	2.38	127	98	475	0	0	4	3
			28.1 - 28.7															
28.2			buff-brown laminated fine to medium grained volcanic very weathered	fine to medium grained, weakly laminated (<1cm)	weak to moderate silfn. intensely weathered	80 moderate cleavage	Pyrite boxworks	12539	27.8	28.8	1.05	176	171	600	2	0	2	3
	66	12																
			28.7 - 30.5															
29.4	33	0	milky white-grey. Fe stained, quartz/ intense silification, small bands	quartz + medium grained sericite bands	Intense silfn., + sericitic bands intensely weathered	60-70 moderate cleavage in sericitic bands	pyrite boxworks	12540	28.8	29.8	7.07	214	380	1080	5	0	4	2
29.7	110	0	of more sericitic rock															
29.9	80	39																
								12541	29.8	30.8	3.35	231	370	825	6	0	3	2
			30.5 - 36.0															
31.4	42	14	buff-brown volcanic, fragments quartz + lithics?	fine-medium grained wea	sericite	60-70 moderate cleavage	pyrite boxworks + minor											
32.6	29	0	cleavage wraps around fragments, weak	dispersed	weak to													

			colour banding			moderate silfn. patches	wraps around	pyrite													
34.7	27	0	some patches of broken vein quartz		laminations	strongly weathered	some qtz slugs (boudins?)														
35.8																					
			36.0 - 40.6							35.8	36.0										
36.0	0	0	FAULT ZONE only quartz fragments recovered, sludge sample				FAULT		45613	36.0	40.6	0.6	960	570	6700	0					
			40.6 - 45.3																		
40.6	100	0	buff-brown cleaved volcanic, sericite and quartz small bands (veins?)+clasts (boudins?) of quartz	fine grained some clasts to 1cm?	sericite (weak to moderate silficiation patches) weathered		40-50 weak cleavage	possible pyrite boxworks	12543	40.6	44.0	0.43	700	155	1430	4	0	1	1		
41.2			41.6 pyrite in 2cm lenticle of unweathered? rock					+ rare pyrite in grey patches													
	73	49	43.3 small grey patch and pyrite		weathering lessens																
			44.0 small puyg zone/fault																		
44.2			44.8 some quartz 'eyes' up to 1cm																		
	79	27	45.1 vein quartz 5cm					minor py.													
45.1			base of weathering at 45.3						12544	44.0	47.0	0.22	600	185	970	7	1	1	1		
			45.3 - 46.0																		
			light-medium grey ashy volcanic	fine grained weakly laminated	sericite weak silfn.		50 weak-moderate cleavage	1-2% pyrite													
	88	0	45.5 20cm vein quartz/intense silfn.+ 2-5% pyrite					diss. + small bands													
			45.6 20cm dark grey sericitic rock + 10-20% pyrite																		
			45.9 30cm crushed puggy sericite + 5% sericite				small fault	2-5% pyrite													
46.7			numerous small quartz/carbonate veins// cleavage, + pyrite bands				60-70 strong cleavage	diss. + veins													
	92	0	streaked into cleavage + small quartz clasts? (some pyrite bands crystal cut cleavage)																		
			46.0 - 52.4																		
47.9	22	0	broken rock, slickensided, numerous qtz.	fine grained	sericite		moderate-strong	py.<2% diss.	12545	47.0	52.4	0.46	1000	89	550	2	1	2	3		
50.2	5c	0																			
51.1	3c	0	fragments to 3cm subangular, minor puggy areas, FAULT		weak to moderate silfn.		FAULT														
52.8																					
			52.4 - 59.2																		
	100	65	Medium grey ash volcanic, numerous qtz inclusions, clasts-3cm subangular-subround	fine grained coarse grained clasts of	sericite		weak	py.1-2%diss.	12546	52.4	53.4	0.4	3160	172	740	2	2	0	2		

53.2				+quartz/carbonate veins	quartz + quartz/ carbonate		50-60 mod-strong cleavage	minor pyrite														
				medium grey sericitic volcanic, many quartz/carbonate spots (clasts?) and veins, some sericite spotting	fine grained, + coarse inclusions of qtz/carb.	sericite	50-60 mod-strong cleavage	minor pyrite														
	93	53	53.5	30cm 10-15% pale sphalerite(?) + pyrite + quartz veins					12547	53.4	54.4	0.59	17800	770	3100	9	1	0	2
			53.8	40cm shear, sericitic 20% pyrite in places	fine grained mottled	sericite weak silfn.		py. 2-5%	12548	54.4	55.4	0.39	3560	325	1090	5	3	1	2
			55.6	5cm, 10% pale spalerite		(carbonate) very altered (chlorite?)			12549	55.4	56.4	0.56	12000	1200	7200	13	3	1	2
56.2				some dark (chloritic?) streaks					12550	56.4	57.4	0.41	405	87	240	0	3	1	2
	94	54	57.4	30cm intense silification + minor pale sphalerite	fine grained mottled	patches of intense silfn.	weak to moderate cleavage	py. 2-5%	12551	57.4	58.4	0.33	485	137	135	0	4	1	1
				numerous quartz/carbonate veins+patches of intense silification alteration	weakly laminated			locally 10-20%	12552	58.4	59.4	0.37	990	225	147	3	4	1	1
59.2				59.4 - 62.5																		
	75	12		mottled milky quartz intense silfn., quartz veins in places	quartz	intense silfn. patches of strong silfn. (+ser.)	no cleavage	py. < 2%	12553	59.4	60.4	0.18	2660	430	1100	6	1	5	0
60.3	100	36		carbonate solution cavities, some minor pale sphalerite					12554	60.4	61.4	0.11	6000	940	2110	12	1	5	0
61.2	100	56	61.5	sand intervals, fault?			very weak cleavage		12555	61.4	62.4	0.28	4500	840	1300	7	1	5	0
62.2				62.5 - 68.1																		
	93	48		light-medium grey fine grained volcanic, laminated	fine to medium grained	Moderate to strong silfn.	80 v. weak cleavage	trace py.	12556	62.4	63.5	0.25	810	185	430	2	0	4	0
				silicified, numerous quartz/carbonate veins and patches	weak lamin-ations(<1cm)	sericite, minor ca.		minor pale sphalerite	12557	63.5	64.5	0.3	300	197	144	0	0	3	0
65.2				64.6 possible coarse breccia? textures	mottled rare possible fragments? clasts?				12558	64.5	65.5	0.24	89	108	86	0	0	2	0
									12559	65.5	66.5	0.23	120	75	82	0	0	2	0
	100	60	67.2	tiny shear 60o to core					12560	66.5	67.5	0.22	124	79	80	0	0	2	0
			67.7	shear 60o to core, sericite fill					12561	67.5	68.4	0.44	690	410	390	6	0	4	0
68.2				68.1 - 68.6 mottled milk intense silification/vein quartz	quartz	strong to intense silfn.	no cleavage	minor py. pale sph. <1% sul-phides														
				68.6 - 71.1 mottled grey volcanic, numerous intense silification patches	fine to medium grained	moderate-strong silfn.	very weak cleavage	2-3% pyrite coarse grained	12562	68.4	69.4	0.61	1310	290	875	4	2	4	0

					possible coarse	patches intense silfn.		minor pale sphalerite													
	93	60	68.9	20cm intense silification/quartz	siliceous clasts?	patches sericite		with intense silfn. patches													
			69.5	20cm sericite/chlorite sheared slickensided		sericite alteration increases downhole			12563	69.4	70.4	0.94	486	250	1430	6	3	2	1
			69.7	10cm quartz/carbonate + pyrite + pale sphalerite																	
71.2									12564	70.4	71.4	0.36	210	315	670	5	3	4	1
			71.1 - 71.9																		
			Intense silification + vein quartz/ carbonate, sulphides marginal and veinlets		quartz	intense silfn.	no cleavage	pyrite + pale sph. 2-5% sulphides													
									12565	71.4	72.1	0.43	5500	710	1470	14	3	4	3
			71.9 - 74.5																		
			Dark green-grey fine to medium grained cleaved volcanic, chloritised and sericitised, large quartz/carbonate veins + patches		fine to medium grained	sericite chlorite (sw)(ca.)	80 strong cleavage slickensided	trace pyrite												
			72.2	10cm carbonate/quartz		very altered															
			72.4	20cm carbonate/quartz					12566	72.1	73.1	0.43	405	5[illegible]	158[illegible]	7	[illegible]	[illegible]	3
			72.7	20cm carbonate/quartz																	
	10[illegible]	85	73.1	50cm carbonate/quartz veins																	
			73.15	sericite shear																	
			73.2	30cm carbonate/quartz+pale sphl.?				5% pale sph. (+py)	12567	73.1	74.6	0.75	47[illegible]	162[illegible]	18800	65	1	1	[illegible]
			73.6	20cm 10% pale sphl.+py.																	
			73.8	10cm carbonate/quartz																	
			74.0	20cm 5-10% pale sphl.		silfn. increasing downhole															
74.2			74.2	30cm intense carbonate/quartz veins +pyrite (+pale sphalerite)				pyrite/ pale sphl.													
			74.5 - 78.5																		
	93	89	dark grey-green silicified volcanic, mottled		quartz mottled	strong to intense silfn.	no cleavage	minor py.	12568	74.6	75.6	0.2	102[illegible]	153	3[illegible]	2	0	4	1
			(possible clasts?) intense silfn.+quartz vein common						12569	75.6	76.6	0.0[illegible]	795	166	735	5	[illegible]	[illegible]	[illegible]
77.2			some medium-coarse grained fragments???		fine grained? massive	silfn. decreasing moderate-strong silfn.(ser)	80-90 very weak cleavage	pyrite 12% diss. and in veinlets	12570	76.6	77.6	0.32	345	183	150	4	1	3	1
									12571	77.6	78.6	0.23	256	142	72	2	1	2	[illegible]
			78.5 - 79.4																		
	1[illegible]	[illegible]	78.5 90cm strong to intense silfication and trace pale sphalerite		quartz mottled	strong to intense silfn.	no cleavage	pyrite diss. trace pale sphalerite	12572	78.6	79.6	0.25	1[illegible]	[illegible]	72[illegible]	5	[illegible]	[illegible]	[illegible]

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			79.4 - 82.6																	
			medium-dark grey fine grained speckled silicified volcanic	fine to medium grained	moderate-strong silfn.	70-80 very weak cleavage	minor pyrite	12573	79.6	80.6	0.37	156	147	116	2	0	3	0
80.3	80	31	80.90 10cm puggy fault and quartz fragments			FAULT		12574	80.6	81.6	0.41	2030	565	1000	9	0	2	0
81.2			medium grey fine to medium grained speckled volcanic, possible clasts to 3cm (brecciated? autobrecciated?)	fine to medium grained siliceous clasts?	strong-moderate silfn. (sericite)	very weak	minor pyr.													
	73	27	81.4 small puggy fault 3cm	-> 3cm	intense silfn. patches increase	FAULT														
			81.8 small puggy fault 1cm	breccia?				12575	81.6	82.6	0.27	1670	380	360	5	0	3	0
			82.6 - 84.2																	
82.7	56	22	mottled white-grey milky quartz	quartz	intense silfn.		pyrite, pale sphl. in fine veinlets 2-5% pale sphalerite	12576	82.6	83.6	3.9	11000	900	2870	22	1	5	0
83.6	100	28	83.7 10cm speckled strong silfn. rock																	
			84.2 - 99.8																	
83.9	85	29	grey speckled fine to medium grained silicified volcanic intense silification patches with associated sulphides	fine to medium grained speckled	strong silfn. intense silfn. patches	70-80 very weak cleavage	minor py. pale sphl. with intense silfn. bands and veins	12577	83.6	84.6	1.12	5500	510	2165	7	0	4	0
84.5	100	18	84.50 10cm intense silification + minor pyrite, sphalerite																	
84.9	80	24	85.05 10cm intense silification/quartz vein + 2% pyrite->pale sphalerite					12578	84.6	85.6	0.5	2210	315	400	2	0	3	0
85.4			85.30 10cm intense silification/quartz vein + pyrite + pale sphalerite					12579	85.6	86.6	0.56	420	165	180	2	0	3	0
	100	100	numerous intense silification/quartz veins ->8cm wide + pyrite sphalerite					12580	86.6	87.6	0.24	410	630	145	4	0	3	0
88.4			88.20 40cm intense silification + 2-5% pyrite + pale sphalerite					12581	87.6	88.6	0.15	780	210	440	2	0	3	0
			89.00 30cm intense silification + minor pyrite, sphalerite					12582	88.6	89.6	0.18	725	425	320	3	0	3	0
	97	100						12583	89.6	90.6	0.21	355	110	195	1	0	3	0
91.5			90.70 5cm intense silification + minor pyrite, sphalerite	fine to medium grained, speckled	strong - moderate silfn.	80 very weak	minor sulphides	12584	90.6	91.6	0.11	215	240	135	1	1	2	0
			medium-dark grey-green speckled volcanic fine-medium grained	massive?	(ser,chl?)	(stretched due to)	with intense silfn. patches	12585	91.6	92.6	0.15	1370	275	55	3	0	3	0
	94	60	silicified, traces of pyrite + quartz carbonate veins					12586	92.6	93.6	0.18	371	243	240	1	0	2	0

94.6																						
	100	53	97.00 intense silification patches increase ↑		strong to intense silfn.		pyrite + sphal. 2%	12587	93.6	94.6	0.31	103	166	125	1	0	2	0
								12588	94.6	95.6	0.23	370	154	280	2	0	3	0
97.6								12589	95.6	96.6	0.2	400	285	300	2	1	4	0
			98.40 50cm intense silification/quartz vein + 2-5% pyrite + pale sphalerite					12590	96.6	97.6	0.2	6300	950	3640	6	1	4	0
	100	85						12591	97.6	98.4	0.12	1260	385	720	5	1	4	0
								12592	98.4	99.4	0.18	4250	420	2160	5	1	4	0
			99.8 - 105.7															
100.7	100	85	milky quartz + intense silification alteration, small patches strong silfn.	quartz	intense silfn.	no cleavage	pyrite <2%	12593	99.4	100.4	0.21	238	63	105	0	1	4	0
101.2	94	90	100.70 30cm strong silification rock + 5% pyrite				minor pale sphalerite in veinlets	12594	100.4	101.4	0.14	196	78	120	1	1	5	0
102.1								12595	101.4	102.4	0.2	2750	610	1850	13	1	5	0
	100	98						12596	102.4	103.4	0.29	242	430	1350	10	1	5	0
102.6					decrease in silfn. downhole		pyrite 2-5% + minor pale sphal.	12597	103.4	104.6	0.06	545	77	445	2	2	5	0
			104.6 increase in strong silification proportion					12598	104.6	105.6	0.17	680	231	590	4	3	5	0
			105.7 - 116.0															
	100	100	dark grey rock, many lenticular quartz inclusions (clasts?)	fine grained	strong silfn.	60 very weak aligned quartz inclusions	2-5% pyrite	12599	105.6	106.6	0.07	1200	89	500	2	3	4	0
			106.00 definite fragmental texture, volcanic conglomerate/breccia? matrix supported	possible coarse grained clasts			locally pale sphalerite											
106.7			106.70 10cm of intense silification/ milky quartz	fine grained + fragments up to 2cm (stretched)	strong silfn.(ser) (chl?)	clasts aligned 70-90	minor pyrite	12600	106.6	107.6	0.19	225	41	105	0	2	3	0
			107.90 5cm of intense silification, autobrecciated? vein		strong - intense silfn.			12401	107.6	108.6	0.17	236	65	130	0	0	4	0
	100	95	? ? ? ?															
			108.60 40cm intense silification with strong silification sections	textures obscured	strong - intense silfn.		minor pyrite	12402	108.6	109.7	0.16	940	142	460	2	0	4	0
			109.40 30cm milky quartz		silfn. increasing downhole													
109.8			dark grey fine grained volcanic, numerous intense silification patches			very weak	rare pyrite diss. + fine veinlets	12403	109.7	110.7	0.12	775	126	315	2	0	4	0
	100	78						12404	110.7	111.7	0.15	1600	140	305	1	0	4	0
				fine grained? mottled				12405	111.7	112.7	0.12	960	245	370	2	0	4	0
112.?					strong silfn.		pyrite 1-2%	12406	112.7	113.7	0.23	208	77	56	0	1	3	
	100	90						12407	113.7	114.7	0.21	340	131	112	0	1	3	0

			115.10 20cm of milky quartz + minor pale sphalerite								12408	114.7	115.7	0.39	1220	95	190	0	1	3	0
116.0											12409	115.7	116.7	0.49	480	310	260	2	2	4	0
			116.0 - 118.5																		
	85	83	milky quartz/intense silification minor strong silification sections	quartz	intense silfn.		2-5% py. + pale sph. in veinlets				12410	116.7	118.0	0.77	3050	810	1460	2	2	5	0
			117.20 autobrecciation?																		
118.0											12411	118.0	119.0	0.29	3480	545	930	3	2	4	0
			118.5 - 119.3																		
	100	64	dark grey fine grained silicified volcanic	fine grained mottled in places	strong silfn. (ser?)very altered	very weak	2% pyrite														
119.2											12412	119.0	120.0	0.32	700	260	600	2	0	5	0
			119.3 - 122.3																		
	97	100	grey white intense silification/milky quartz (intervals of strong silfn)	quartz	intense silfn.	very weak (in strong silfn. patches)	<2% pale spalerite				12413	120.0	121.0	0.3	670	153	630	1	0	5	0
122.2			+ quartz/carbonate veins				1-2% pale sphalerite				12414	121.0	122.3	0.23	610	168	315	1	0	5	0
			122.3 - 129.3																		
	97	100	dark green grey fine grained volcanic numerous quartz veins/intense silfn. patches	fine grained	strong silfn. (chl.ser?)	80-90 weak banding	2-5% pyrite diss. and bands				12415	122.3	123.3	0.36	260	99	232	1	3	3	1
			123.2 10cm intense silification+ minor pale sphalerite								12416	123.3	124.1	0.08	295	111	206	0	3	3	1
125.2											12417	124.1	125.3	0.32	3410	770	1260	8	4	4	0
			124.3 - 127.2																		
			grey white intense silification/milky quartz + quarts/carbonate veins	quartz	intense silfn.		2-5% pale sph. in qtz veins				12418	125.3	126.3	17.1	903	1160	365	25	4	5	0
			intervals of darker strong silification volcanic to 20cm		+ strong silfn. (chl.ser) patches		+ pyrite 2-5%				12419	126.3	127.3	2.23	2720	860	8900	16	3	4	0
			127.2 - 131.3																		
	100	80	grey-green fine grained silicified volcanic	fine grained	strong silfn. (chl.ser)	80-90 weak colour banding	pyrite 2-3%														
			127.3 10cm milky quartz + pyrite								12420	127.3	128.3	0.29	730	300	310	3	3	3	1
			127.5 20cm milky quartz + pyrite																		
128.2			128.3 10cm milky quartz + minor pale sphalerite + pyrite								12421	128.3	129.3	0.49	1090	285	485	3	2	3	1
			128.8 30cm milky quartz + minor pale sphalerite	fine to medium grained	strong silfn. ser.chl.																
	100	80					2-5% py. + minor pale sph.				12422	129.3	130.3	0.35	365	165	210	6	3	5	1
131.2				mottled	strong-intense silfn.						12423	130.3	131.3	0.26	192	164	76	1	3	4	0

			131.8 - 132.0																	
131.2			white grey quartz	quartz	Intense silfn.		1-2% pyrite trace pale sph.	12424	131.8	132.8	0.14	260	131	120	1	2	5	0
			132.0 - 134.9																	
	100	66	green-grey fine to medium grained silicified volcanic intense quartz/ carbonate veins + intense silfn. patches	fine to medium grained	strong silfn. (ser,chl?)	70 very weak banding	pyrite 2-5% some coarse	12425	132.8	133.1	0.17	238	135	164	2	3	3	0
			133.2 40cm intense silfn/qtz brecciated?																	
134.0			133/7 20cm intense silf/qtz + pyrite + trace pale sphalerite					12426	133.1	134.1	0.13	1250	236	445	4	5	3	0
134.2	100	89	dark grey volcanic				pyrite 2-8%													
			134.9 - 137.6																	
	88	71	milky white quartz (patches of dark	quartz	intense silfn.		fine vein-lets of pale sph. minor pyrite	12427	134.1	135.1	0.19	360	330	180	3	3	4	0
	100	100	grey volcanic up to 10cm ->2-5%py) carbonate veining					12428	135.1	136.1	0.1	1150	261	182	7	0.5	5	0
								12429	136.1	137.1	0.52	1840	690	750	17	0	5	0
								12430	137.1	138.1	0.22	1020	418	440	8	2	5	0
136.8																				
			137.6 - 147.8																	
	94	100	dark grey green fragment? silicified volcanic	fine grained?	strong - intense silfn. (chl?ser?) very altered	70-80 very weak bending + veins	pyrite 2-5% sp.e coarse	12431	138.1	139.1	0.28	260	199	193	3	3	4	0
140.0								12432	139.1	140.3	0.37	815	319	275	3	3	4	0
	97	95						12433	140.3	141.3	0.34	203	181	116	2	3	4	0
								12434	141.3	142.3	0.29	199	207	134	2	3	4	0
			142.9 small pug fault					12435	142.3	143.3	0.68	680	232	172	4	3	4	0
143.1								12436	143.3	144.3	0.21	252	147	64	1	3	4	0
	100	85	trace pale sphalerite? in intense silfn.					12437	144.3	145.3	0.3	290	214	126	8	3	4	0
146.2			patches					12438	145.3	146.4	0.39	340	147	130	4	3	4	0
								12439	146.4	147.6	0.4	230	310	157	9	3	4	0
			147.8 - 148.5																	
	100	95	intense silification/milky quartz	quartz	intense silfn.		pyrite 2-5% pale sph. 2-5%	12440	147.6	148.6	0.97	2490	246	525	11	3	5	0
			148.5 - 164.4																	
149.2			dark grey green fine grained silicified volcanic with numerous dark green (chl) lenticles (flattened fragments?) up to 2cm. many quartz/carbonate veins	fine grained + coarse grained lenticles	strong silfn. (chl,ser)	80-90 weak alignment of lenticles	2-5% pyrite	12441	148.6	149.6	0.19	500	136	150	3	3	3	1
	100	95	149.6 70cm intense silfn/milky quartz + 2-3% pale sphalerite			+ banding		12442	149.6	150.6	0.18	3560	285	940	8	3	4	1
			minor pale sphalerite in intense silification patches		strong - intense silfn. (chl)(ser?)			12443	150.6	151.6	0.15	840	218	440	4	3	4	1
152.2								12444	151.6	152.6	0.17	1010	145	220	4	3	4	1
	100	85						12445	152.6	153.6	0.19	910	187	315	4	3	4	1
								12446	153.6	154.6	0.16	1000	162	755	5	3	4	1
155.2	100	20	155.0 20cm intense silfn/milky qtz					12447	154.6	155.6	0.17	850	155	350	4	3	3	1

			+ minor pale sphalerite																	
155.8			some very chloritic patches, now silicified	fine grained						12448	155.6	156.6	0.19	510	167	270	7	3	3	1
	100	95	+ many subround slugs of milky quartz (brecciated?)	+milky qtz clasts?						12449	156.6	157.6	0.79	990	360	555	39	3	3	1
158.2										12450	157.6	158.6	1.09	2660	710	1520	44	3	3	1
	100	79	158.9 small chloritic non silicified band		strong silfn.	70-80 strong banding	rare pale sphalerite			12451	158.6	159.6	0.08	10800	2230	1400	370	2	3	3
			dark green fine grained silicified volcanic, + milky quartz pathces				pyrite 1-2%			12452	159.6	160.6	1.17	5900	1290	1810	99	1	3	3
			161.1 several sericitised bands		strong silfn/chl					12453	160.6	161.6	0.31	890	330	330	14	1	3	3
161.2			dark green fine grained silicified volcanic + milky quartz intervals and fragments? quartz/carbonate vein/bands	fine grained	strong silfn./chl	70 weak cleavage + banding	pyrite 1-2%													
	32	38	161.8 40cm intense silification+pyrite +pale sphalerite?		↓ silfn.					12454	161.6	162.6	0.29	1690	310	730	27	0	3	1
					↓ decreasing					12455	162.6	163.6	0.55	568	142	165	30	0	3	1
162.4			intense quartz/carbonate veins/bands, some wavy.		Moderate - weak silfn chl. ser.	moderate	pyrite <<1%			12456	163.6	164.6	0.15	233	63	135	<3	<0	2	2
164.2			164.4 small puggy fault	fine grained	chlorite sericite	FAULT	trace py. some large													
			164.4 - 169.6 dark green fine grained chlorite volcanic, intense fine carbonate veining		(weak silfn)	70 strong cleavage slickensided	cubes			12457	164.6	165.6	0.01	149	51	76	2	0	1	3
166.4			166.3 10cm quartz/carbonate, milky, strong carbonate/quartz veins							12458	165.6	166.6	0.01	89	37	15	0	0	1	3
			large patches quartz carbonate							12459	166.6	167.6	0.01	100	36	23	0	0	1	3
										12460	167.6	168.6	0.01	62	42	12	0	0	1	3
169.6			E.O.H.							12461	168.6	169.6	0.01	102	39	15	1	0	1	3

DIAMOND DRILL HOLE WL 32 SUMMARY LOG

0 -	17.0m	Open hole - no core
17.0 -	24.8m	Sandy, gritty clay - yellow brown, red brown, pale grey with rock fragments.
24.8 -	25.0m	Quartz vein with ferruginous voids after pyrite.
25.0 -	70.5m	Yellow-red brown to grey, fine grained, banded sericitic shaley to fine sandy tuff. Occassional dark grey chloritic zones and quartz veins. Weakly pyritic - up to 2%. 55.3m - base of weathering.
70.5 -	136.3m	Dark to light grey, silicified, fine to medium grained chloritic banded tuff. Chlorite is common as oriented schlienen and bands. Possible flattended siliceous lapilli fragments occur in zones throughout. Less chloritic and more siliceous (cherty) with depth. Pyrite content initially occurs in trace amount (up to 1%) but rapidly increases from 78.4m to about 5% and is generally enriched in more chloritic zones. Also at this depth other sulphides, notably sphalerite and galena, befin to occur in quartz veins and siliceous zones. From 83.6m the pyrite content increases again but is of ten localised in bands. 101.50-106.35m Quartz/pyrite zone, trace sphalerite 129.8-136.3m Main quartz/pyrite zone with minor pale brown sphalerite, trace galena and abundant irregular masses of fine to coarse pyrite reaching semi-massive grades (40%) over zones up to 10cm wide. From 133.7m essentially pine white to grey quartz. 136.3m-E.O.H.

APPENDIX 2

DIAMOND DRILL HOLES ASSAY RESULTS

WL 2
WL 7
WL 14
WL 15
WL 17
WL 18
WL 21
WL 22
WL 23

APPENDIX 2 BREADALBANE WL 2, 7, 14, 21, 23

Sample No.	Interval		Au ppm	Cu ppm	Pb ppm	Zn ppm	Pb %
WL 2							
12487	255	258.2	0.11	219	1300	4700	
12488	258.2	261.5	0.10	1760	1340	17600	
12489	316	326	0.10	550	81	310	
12490	406	416	0.14	30	46	179	
12491	416	426	0.10	96	350	880	
12492	426	436	0.03	40	108	212	
12493		446	0.03	120	70	157	
12494		456	0.09	269	92	192	
WL7							
16586	544.2	547.5	0.02	9	70	83	
16587	574.5	578	0.03	10	47	69	
16588	583.5	586.8	-0	16	26	113	
16589	594.8	598	-0	10	50	83	
16590	631.2	634.5	-0	36	50	93	
16591	646.2	649.5	-0	9	21	67	
16592	649.5	652.8	-0	66	900	218	
165593		656	0.03	40	58	43	
16594		659.1	-0	16	37	55	
16595		662.5	0.05	11	21	39	
WL21	Split core						
16596	209.8	210.8	0.06	1100	9700	4300	
16597	280	281	0.06	76	1000	12600	
16598		282	0.05	26	700	8000	
16599	287.5	288.5	0.06	94	820	15800	
16600	368.5	369.5	0.07	3400	8600	8900	
12495	338	339	0.06	149	7500	5100	
12496		340	0.04	24	2320	8200	
12497		341	-0	21	10300	400	1.03
Ground Core							
48013	168.5	171.6	0.03	56	770	1760	
48014	171.6	174.6	0.06	36	277	1850	
48015		177.6	0.07	29	176	1030	
48016		180.6	0.05	26	1150	1480	
48017		183.6	0.04	25	390	1870	
48018		186.6	0.05	28	600	1580	
48019		189.6	0.05	90	840	630	
48020	189.6	192.6	0.04	47	1250	1930	
48021		195.6	0.03	61	600	1360	
48022		198.6	0.02	163	190	1730	
48023		201.6	0.02	53	157	480	
48024	494.2	498	0.15				
48025	498	501	0.04				
48026		504	0.05				
48027		507	0.03				
48028		510	0.04				
48029		513	0.08				

BREADALBANE WL 14

1981
14 341711.5 0

Depth	Azimuth	Dip
0	81.5	-50
33	83	-52
63	82	-50
93	91	-45
123	90.5	-44
181	90	-38
223	91.5	-30
-999	0	0

From	To	Au	Cu	Pb	Zn	Ag
0.00	23.00	-0.90	-0.90	-0.90	-0.90	-0.90
23.00	29.00	0.46	570.00	1610.00	1680.00	-0.90
29.00	34.60	0.06	700.00	1650.00	2630.00	-0.90
34.60	38.00	0.04	1790.00	4800.00	2250.00	-0.90
38.00	41.00	0.03	330.00	440.00	610.00	-0.90
41.00	44.00	0.02	207.00	370.00	870.00	-0.90
44.00	47.00	0.01	146.00	390.00	2590.00	-0.90
47.00	50.00	0.06	53.00	480.00	1430.00	-0.90
50.00	53.00	0.02	60.00	340.00	1010.00	-0.90
53.00	56.00	0.03	61.00	235.00	4000.00	-0.90
56.00	59.00	0.05	111.00	360.00	1700.00	-0.90
59.00	62.00	0.05	96.00	300.00	2270.00	-0.90
62.00	65.00	0.03	92.00	540.00	3010.00	-0.90
65.00	68.00	0.04	1200.00	4610.00	1520.00	-0.90
68.00	71.00	0.05	64.00	350.00	1120.00	-0.90
71.00	74.00	0.01	44.00	275.00	510.00	-0.90
74.00	77.00	0.04	82.00	660.00	1410.00	-0.90
77.00	79.90	0.03	91.00	410.00	820.00	-0.90
79.90	80.80	0.03	18.00	142.00	240.00	-0.90
80.80	83.00	-0.90	-0.90	-0.90	-0.90	-0.90
83.00	86.00	0.01	69.00	260.00	400.00	-0.90
86.00	89.00	0.01	60.00	285.00	400.00	-0.90
89.00	92.00	0.01	300.00	670.00	1630.00	-0.90
92.00	95.00	0.01	181.00	682.00	1072.00	-0.90
95.00	98.00	0.01	294.00	1270.00	1980.00	-0.90
98.00	101.00	0.01	139.00	750.00	770.00	-0.90
101.00	104.00	0.01	46.00	119.00	236.00	-0.90
104.00	107.00	0.01	150.00	246.00	1220.00	-0.90
107.00	110.00	0.01	201.00	250.00	1040.00	-0.90
110.00	113.00	0.05	48.00	880.00	2490.00	-0.90
113.00	116.00	0.05	80.00	370.00	460.00	-0.90
116.00	119.00	0.01	860.00	2350.00	2120.00	-0.90
119.00	122.00	0.01	66.00	287.00	450.00	-0.90
122.00	125.00	0.01	1120.00	2420.00	1760.00	-0.90
125.00	128.00	0.01	101.00	257.00	450.00	-0.90
128.00	131.00	0.04	93.00	244.00	610.00	-0.90
131.00	134.00	0.05	59.00	150.00	430.00	-0.90
134.00	137.00	0.05	59.00	184.00	510.00	-0.90
137.00	140.00	0.04	45.00	200.00	410.00	-0.90
140.00	143.00	0.01	68.00	740.00	560.00	-0.90
143.00	146.00	0.01	165.00	1080.00	3600.00	-0.90
146.00	149.00	0.06	71.00	166.00	590.00	-0.90

149.00	152.00	0.05	143.00	2560.00	2600.00	-0.90
152.00	155.00	0.01	107.00	216.00	960.00	-0.90
155.00	158.00	0.04	63.00	200.00	245.00	-0.90
158.00	161.00	0.01	87.00	520.00	263.00	-0.90
161.00	164.00	0.01	70.00	810.00	550.00	-0.90
164.00	166.00	0.01	70.00	276.00	820.00	-0.90
166.00	168.00	0.20	-0.90	-0.90	-0.90	-0.90
168.00	170.00	0.08	-0.90	-0.90	-0.90	-0.90
170.00	172.00	0.06	-0.90	-0.90	-0.90	-0.90
172.00	173.60	0.07	-0.90	-0.90	-0.90	-0.90
173.60	175.00	0.06	-0.90	-0.90	-0.90	-0.90
175.00	176.00	0.03	-0.90	-0.90	-0.90	-0.90
176.00	177.50	0.04	-0.90	-0.90	-0.90	-0.90
177.50	179.00	0.01	-0.90	-0.90	-0.90	-0.90
179.00	180.00	0.05	-0.90	-0.90	-0.90	-0.90
180.00	186.80	-0.90	-0.90	-0.90	-0.90	-0.90
186.80	187.80	0.06	-0.90	-0.90	-0.90	-0.90
187.80	190.00	-0.90	-0.90	-0.90	-0.90	-0.90
190.00	191.00	0.03	-0.90	-0.90	-0.90	-0.90
191.00	191.50	0.03	-0.90	-0.90	-0.90	-0.90
191.50	200.00	-0.90	-0.90	-0.90	-0.90	-0.90
200.00	201.50	0.03	-0.90	-0.90	-0.90	-0.90
201.50	207.00	-0.90	-0.90	-0.90	-0.90	-0.90
207.00	208.50	0.05	-0.90	-0.90	-0.90	-0.90
208.50	210.00	0.14	-0.90	-0.90	-0.90	-0.90
210.00	211.50	0.10	-0.90	-0.90	-0.90	-0.90
211.50	213.00	0.16	-0.90	-0.90	-0.90	-0.90
213.00	214.50	0.14	-0.90	-0.90	-0.90	-0.90
214.50	216.00	0.15	-0.90	-0.90	-0.90	-0.90
216.00	217.50	0.48	-0.90	-0.90	-0.90	-0.90
217.50	219.00	0.88	-0.90	-0.90	-0.90	-0.90
219.00	220.50	0.25	-0.90	-0.90	-0.90	-0.90
220.50	222.00	0.15	-0.90	-0.90	-0.90	-0.90
222.00	223.50	3.14	-0.90	-0.90	-0.90	-0.90
223.50	225.00	0.21	-0.90	-0.90	-0.90	-0.90

BREADALBANE WL 15

1981		
15	341678.9	0

Depth	Azimuth	Dip
0	81.5	-50
33	83	-50
73	84	-51
130	93	-44
190	96.5	-40
250	96.5	-32
298	97	-28
-999	0	0

FROM	TO	Au	Cu	Pb	Zn	Ag
0.00	139.50	-0.90	-0.90	-0.90	-0.90	-0.90
139.50	141.50	0.63	-0.90	-0.90	-0.90	-0.90
141.50	142.70	0.59	-0.90	-0.90	-0.90	-0.90
142.70	151.00	-0.90	-0.90	-0.90	-0.90	-0.90
151.00	153.00	1.76	-0.90	-0.90	-0.90	-0.90
153.00	155.00	-0.90	-0.90	-0.90	-0.90	-0.90
155.00	157.00	0.98	-0.90	-0.90	-0.90	-0.90
157.00	159.00	8.70	-0.90	-0.90	-0.90	-0.90
159.00	161.00	0.34	-0.90	-0.90	-0.90	-0.90
161.00	163.00	0.93	-0.90	-0.90	-0.90	-0.90
163.00	164.00	1.01	306.00	400.00	790.00	-0.90
164.00	165.00	0.43	1230.00	1020.00	1450.00	-0.90
165.00	166.00	0.77	930.00	2110.00	6700.00	3.00
166.00	169.00	-0.90	-0.90	-0.90	-0.90	-0.90
169.00	171.00	0.19	-0.90	-0.90	-0.90	-0.90
171.00	174.00	-0.90	-0.90	-0.90	-0.90	-0.90
174.00	175.00	0.15	127.00	1100.00	3500.00	-0.90
175.00	176.00	2.30	378.00	1300.00	6050.00	-0.90
176.00	177.00	0.51	188.00	1460.00	7300.00	-0.90
177.00	178.00	0.36	121.00	310.00	860.00	-0.90
178.00	179.00	0.83	321.00	1360.00	4800.00	-0.90
179.00	180.00	0.14	63.00	321.00	700.00	-0.90
180.00	183.00	-0.90	-0.90	-0.90	-0.90	-0.90
183.00	184.00	0.14	118.00	1475.00	3500.00	-0.90
184.00	185.00	0.25	225.00	3500.00	5400.00	-0.90
185.00	187.00	-0.90	-0.90	-0.90	-0.90	-0.90
187.00	189.00	0.91	-0.90	-0.90	-0.90	-0.90
188.00	189.00	0.10	60.00	13500.00	9100.00	-0.90
189.00	190.00	0.08	102.00	12000.00	22800.00	-0.90
189.00	191.00	0.09	-0.90	-0.90	-0.90	-0.90
191.00	193.00	0.07	-0.90	-0.90	-0.90	-0.90
193.00	195.00	0.11	-0.90	-0.90	-0.90	-0.90
195.00	196.00	0.07	285.00	3980.00	8100.00	-0.90
195.00	197.00	0.08	-0.90	-0.90	-0.90	-0.90
196.00	197.00	0.06	139.00	1560.00	5300.00	-0.90
197.00	198.00	0.08	69.00	200.00	950.00	-0.90
197.00	199.00	0.10	-0.90	-0.90	-0.90	-0.90
199.00	201.00	0.08	-0.90	-0.90	-0.90	-0.90
200.50	201.50	0.01	168.00	3150.00	17700.00	-0.90
201.50	202.50	0.09	128.00	380.00	2600.00	-0.90
201.00	203.00	0.11	-0.90	-0.90	-0.90	-0.90

203.00	205.00	0.12	-0.90	-0.90	-0.90	-0.90
205.00	207.00	0.12	-0.90	-0.90	-0.90	-0.90
207.00	214.00	-0.90	-0.90	-0.90	-0.90	-0.90
214.00	215.00	0.07	254.00	4000.00	8500.00	-0.90
215.00	216.00	0.11	350.00	1000.00	870.00	-0.90
216.00	274.00	-0.90	-0.90	-0.90	-0.90	-0.90
274.00	275.00	0.01	215.00	400.00	850.00	-0.90
275.00	276.00	0.07	332.00	550.00	1130.00	-0.90
276.00	277.00	0.01	530.00	2100.00	3300.00	1.00
277.00	278.00	0.03	174.00	270.00	560.00	-0.90
278.00	301.50	-0.90	-0.90	-0.90	-0.90	-0.90

BREADALBANE WL 17

1981
17 341700.9 0

DEPTH	AZIMUTH	DIP
0	81.5	-50
30	82	-51
62	82	-51
122	92	-42
160	94	-36

FROM	TO	Au	Cu	Pb	Zn	Ag
0.00	49.00	-0.90	-0.90	-0.90	-0.90	-0.90
49.00	51.00	0.15	-0.90	-0.90	-0.90	-0.90
51.00	53.00	1.55	-0.90	-0.90	-0.90	-0.90
53.00	55.00	0.38	-0.90	-0.90	-0.90	-0.90
55.00	57.00	0.73	-0.90	-0.90	-0.90	-0.90
57.00	58.40	1.90	-0.90	-0.90	-0.90	-0.90
58.40	66.00	-0.90	-0.90	-0.90	-0.90	-0.90
66.00	67.00	0.12	-0.90	-0.90	-0.90	-0.90
67.00	68.00	0.04	-0.90	-0.90	-0.90	-0.90
68.00	69.00	0.03	-0.90	-0.90	-0.90	-0.90
69.00	70.00	0.07	-0.90	-0.90	-0.90	-0.90
70.00	71.00	0.07	-0.90	-0.90	-0.90	-0.90
71.00	72.00	0.06	-0.90	-0.90	-0.90	-0.90
72.00	73.00	0.04	-0.90	-0.90	-0.90	-0.90
73.00	74.00	0.16	-0.90	-0.90	-0.90	-0.90
74.00	75.00	0.09	-0.90	-0.90	-0.90	-0.90
75.00	76.00	0.08	-0.90	-0.90	-0.90	-0.90
76.00	77.00	0.06	-0.90	-0.90	-0.90	-0.90
77.00	78.00	0.07	-0.90	-0.90	-0.90	-0.90
78.00	79.00	0.09	-0.90	-0.90	-0.90	-0.90
79.00	80.00	0.26	-0.90	-0.90	-0.90	-0.90
80.00	81.00	0.15	-0.90	-0.90	-0.90	-0.90
81.00	82.00	0.16	-0.90	-0.90	-0.90	-0.90
82.00	83.00	0.28	-0.90	-0.90	-0.90	-0.90
83.00	84.00	2.19	-0.90	-0.90	-0.90	-0.90
84.00	85.00	0.30	-0.90	-0.90	-0.90	-0.90
85.00	86.00	0.97	-0.90	-0.90	-0.90	-0.90
86.00	87.00	2.54	3400.00	6800.00	19600.00	48.00
87.00	88.00	0.68	35.00	125.00	640.00	3.00
88.00	89.00	21.50	1400.00	17800.00	31200.00	35.00
89.00	90.00	1.87	310.00	4400.00	4800.00	8.00
90.00	91.00	3.12	540.00	2800.00	15200.00	9.00
91.00	92.00	2.00	720.00	3600.00	23100.00	30.00
92.00	93.00	1.06	660.00	18500.00	17500.00	12.00
93.00	94.00	0.14	25.00	270.00	700.00	3.00
94.00	95.00	0.07	30.00	440.00	620.00	4.00
95.00	96.00	0.13	70.00	130.00	1800.00	5.00
96.00	97.00	0.25	155.00	840.00	9600.00	9.00
97.00	98.00	0.46	55.00	105.00	360.00	4.00
98.00	99.00	0.75	90.00	40.00	1050.00	6.00
99.00	100.00	0.35	95.00	140.00	1800.00	4.00
100.00	101.00	0.30	120.00	95.00	3000.00	5.00
101.00	102.00	0.44	280.00	340.00	5200.00	7.00
102.00	103.00	0.79	720.00	155.00	4000.00	4.00
103.00	104.00	0.26	260.00	210.00	2400.00	3.00

104.00	105.00	0.25	350.00	380.00	3000.00	3.00
105.00	106.00	0.48	100.00	80.00	400.00	2.00
106.00	107.00	0.59	125.00	35.00	420.00	1.00
107.00	108.00	0.52	120.00	520.00	2000.00	2.00
108.00	109.00	0.46	350.00	1200.00	1800.00	5.00
109.00	110.00	4.36	620.00	5600.00	10700.00	13.00
110.00	111.00	0.57	-0.90	-0.90	-0.90	-0.90
111.00	112.00	0.41	-0.90	-0.90	-0.90	-0.90
112.00	113.00	0.22	-0.90	-0.90	-0.90	-0.90
113.00	114.00	0.33	-0.90	-0.90	-0.90	-0.90
114.00	115.00	0.96	-0.90	-0.90	-0.90	-0.90
115.00	116.00	0.21	-0.90	-0.90	-0.90	-0.90
116.00	117.00	0.44	-0.90	-0.90	-0.90	-0.90
117.00	118.00	0.21	-0.90	-0.90	-0.90	-0.90
118.00	119.00	0.24	-0.90	-0.90	-0.90	-0.90
119.00	120.00	0.21	-0.90	-0.90	-0.90	-0.90
120.00	121.00	0.17	-0.90	-0.90	-0.90	-0.90
121.00	122.00	0.18	-0.90	-0.90	-0.90	-0.90
122.00	123.00	0.16	-0.90	-0.90	-0.90	-0.90
123.00	124.00	0.20	-0.90	-0.90	-0.90	-0.90
124.00	125.00	0.22	-0.90	-0.90	-0.90	-0.90
125.00	126.00	0.18	-0.90	-0.90	-0.90	-0.90
126.00	127.00	0.18	-0.90	-0.90	-0.90	-0.90
127.00	128.00	0.31	-0.90	-0.90	-0.90	-0.90
128.00	129.00	1.63	-0.90	-0.90	-0.90	-0.90
129.00	130.00	0.52	-0.90	-0.90	-0.90	-0.90
130.00	131.00	0.36	-0.90	-0.90	-0.90	-0.90
131.00	132.00	0.22	-0.90	-0.90	-0.90	-0.90
132.00	133.00	0.18	-0.90	-0.90	-0.90	-0.90
133.00	134.00	0.43	-0.90	-0.90	-0.90	-0.90
134.00	135.00	0.62	-0.90	-0.90	-0.90	-0.90
135.00	136.00	0.26	-0.90	-0.90	-0.90	-0.90
136.00	137.00	0.29	-0.90	-0.90	-0.90	-0.90
137.00	138.00	0.14	-0.90	-0.90	-0.90	-0.90
138.00	139.00	0.15	-0.90	-0.90	-0.90	-0.90
139.00	140.00	0.22	-0.90	-0.90	-0.90	-0.90
140.00	141.00	0.36	-0.90	-0.90	-0.90	-0.90
141.00	142.00	0.31	-0.90	-0.90	-0.90	-0.90
142.00	143.00	0.60	-0.90	-0.90	-0.90	-0.90
143.00	144.00	0.30	-0.90	-0.90	-0.90	-0.90
144.00	145.00	0.18	-0.90	-0.90	-0.90	-0.90
145.00	146.00	0.15	-0.90	-0.90	-0.90	-0.90
146.00	147.00	0.21	-0.90	-0.90	-0.90	-0.90
147.00	148.00	0.39	-0.90	-0.90	-0.90	-0.90
148.00	149.00	0.39	-0.90	-0.90	-0.90	-0.90
149.00	150.00	0.40	-0.90	-0.90	-0.90	-0.90
150.00	151.00	0.23	-0.90	-0.90	-0.90	-0.90
151.00	152.00	0.10	-0.90	-0.90	-0.90	-0.90
152.00	153.00	0.10	-0.90	-0.90	-0.90	-0.90
153.00	154.00	0.32	-0.90	-0.90	-0.90	-0.90
154.00	155.00	0.23	-0.90	-0.90	-0.90	-0.90
155.00	156.00	0.12	-0.90	-0.90	-0.90	-0.90
156.00	157.00	0.10	-0.90	-0.90	-0.90	-0.90

BREADALBANE WL 18

18	341641.4	0
DEPTH	AZIMUTH	DIP
0	81.5	-50

FROM	TO	Au	Cu	Pb	Zn	Ag
0.00	10.10	-0.90	-0.90	-0.90	-0.90	-0.90
10.10	12.10	0.04	-0.90	-0.90	-0.90	-0.90
12.10	14.10	0.04	-0.90	-0.90	-0.90	-0.90
14.10	16.10	0.12	-0.90	-0.90	-0.90	-0.90
16.10	17.10	0.08	-0.90	-0.90	-0.90	-0.90
17.10	18.10	0.08	-0.90	-0.90	-0.90	-0.90
18.10	20.10	0.54	-0.90	-0.90	-0.90	-0.90
20.10	22.10	0.13	-0.90	-0.90	-0.90	-0.90
22.10	24.10	0.26	-0.90	-0.90	-0.90	-0.90
24.10	26.10	0.19	-0.90	-0.90	-0.90	-0.90
26.10	28.10	0.31	-0.90	-0.90	-0.90	-0.90
28.10	30.10	0.16	-0.90	-0.90	-0.90	-0.90
30.10	32.10	0.34	-0.90	-0.90	-0.90	-0.90
32.10	34.10	0.22	-0.90	-0.90	-0.90	-0.90
34.10	36.10	0.40	-0.90	-0.90	-0.90	-0.90
36.10	38.10	0.20	-0.90	-0.90	-0.90	-0.90
38.10	40.10	0.24	-0.90	-0.90	-0.90	-0.90
40.10	42.10	0.32	-0.90	-0.90	-0.90	-0.90
42.10	44.10	0.62	-0.90	-0.90	-0.90	-0.90
44.10	44.90	0.50	-0.90	-0.90	-0.90	-0.90
44.90	45.70	0.50	-0.90	-0.90	-0.90	-0.90
45.70	46.50	1.10	-0.90	-0.90	-0.90	-0.90
46.50	48.50	0.43	-0.90	-0.90	-0.90	-0.90
48.50	50.50	0.19	-0.90	-0.90	-0.90	-0.90
50.50	51.50	0.43	-0.90	-0.90	-0.90	-0.90
51.50	52.50	0.43	-0.90	-0.90	-0.90	-0.90
52.50	54.50	0.19	-0.90	-0.90	-0.90	-0.90
54.50	56.25	0.35	-0.90	-0.90	-0.90	-0.90
56.25	57.30	0.32	-0.90	-0.90	-0.90	-0.90
57.30	59.00	0.33	-0.90	-0.90	-0.90	-0.90
59.00	61.00	0.02	-0.90	-0.90	-0.90	-0.90
61.00	63.00	0.01	-0.90	-0.90	-0.90	-0.90
63.00	65.00	0.01	-0.90	-0.90	-0.90	-0.90
65.00	70.00	0.01	58.00	30.00	121.00	-0.90
70.00	75.00	0.03	46.00	25.00	103.00	-0.90
75.00	80.00	0.01	48.00	23.00	88.00	-0.90
80.00	85.00	0.01	43.00	21.00	78.00	-0.90
85.00	90.00	0.01	51.00	15.00	95.00	-0.90
90.00	95.00	0.01	52.00	11.00	222.00	-0.90
95.00	100.00	0.01	45.00	23.00	75.00	-0.90
100.00	105.00	0.01	49.00	23.00	98.00	-0.90
105.00	110.00	0.01	57.00	17.00	102.00	-0.90
110.00	115.00	0.01	51.00	20.00	88.00	-0.90
115.00	120.00	0.01	49.00	18.00	79.00	-0.90
120.00	125.00	0.01	52.00	13.00	91.00	-0.90
125.00	130.00	0.01	46.00	14.00	95.00	-0.90
130.00	135.00	0.01	51.00	30.00	97.00	-0.90
135.00	140.00	0.01	46.00	23.00	93.00	-0.90
140.00	145.00	0.01	42.00	25.00	94.00	-0.90
145.00	149.00	0.02	37.00	27.00	93.00	-0.90

WL 22

Sample No.	Interval		Au ppm	Cu ppm	Pb ppm	Zn ppm	Au ppm
12062	7	9	0.8	60	530	127	
12063	9	11	0.01	102	580	176	
12064	11	13	0.01	123	710	169	
12065	13	16	0.02	102	840	249	
12066	16	18	0.02	153	1880	570	
12067	18	230	0.01	40	400	200	
12068	20	21	<0.01	52	740	383	

BREADALBANE WL 23

1985

23 341978.7 0

Depth	Azimuth	Dip
0	80.5	-50
30	82	-51
60	85	-49.5
90	84	-49
120	84	-46.9
151	86	-38
180	89	-32.9

FROM	TO	Au	Cu	Pb	Zn	Ag
0	3	-0.9	-0.9	-0.9	-0.9	-0.9
3	7	0.005	37	70	104	-0.9
7	12	0.005	51	82	85	-0.9
12	16	0.005	26	64	27	-0.9
16	19.5	0.005	49	290	49	-0.9
19.5	22.9	0.005	34	620	37	-0.9
22.9	26	0.005	74	169	75	-0.9
26	29	0.005	29	60	94	-0.9
29	32	0.005	62	32	57	-0.9
32	35	0.005	43	26	67	-0.9
35	38	0.005	114	142	262	-0.9
38	41	0.005	93	219	490	-0.9
41	44	0.005	85	133	330	-0.9
44	47	0.005	47	57	155	-0.9
47	50	0.005	50	36	124	-0.9
50	53	0.005	42	35	153	-0.9
53	56	0.005	49	38	247	-0.9
56	59	0.005	49	39	126	-0.9
59	62	0.005	64	44	330	-0.9
62	65	0.005	39	18	180	-0.9
65	68	0.005	37	44	530	-0.9
68	71	0.005	52	30	191	-0.9
71	74	0.005	37	43	235	-0.9
74	77	0.1	68	166	330	-0.9
77	80	0.05	104	318	1760	-0.9
80	84	0.07	87	314	1000	-0.9
84	85	0.04	860	3200	10100	5
85	86	0.04	175	560	1600	2
86	87	0.03	20	5	65	1
87	88	0.05	940	2400	9400	3
88	89	0.06	9600	6000	37500	52
89	90	0.05	980	1150	20900	8
90	91	0.01	50	210	580	1
91	92	0.02	175	3600	3000	3
92	93	0.04	260	1500	2300	5
93	94	0.03	110	440	4400	2
94	95	0.03	75	35	860	1
95	96	0.07	250	65	1400	2
96	119	-0.9	-0.9	-0.9	-0.9	-0.9
119	120	0.05	115	35	3400	2
120	121	0.03	190	3600	10500	5
121	122	0.02	65	185	4000	1
122	123	0.05	75	800	280	1

123	124	0.03	75	480	640	1
124	125	0.03	230	370	3800	1
125	126	0.02	150	840	5000	2
126	127	0.03	1250	3600	10800	4
127	128	0.02	680	600	9200	3
128	129	0.03	700	2000	10100	5
129	130	0.03	50	65	570	1
130	131	0.08	230	2000	6000	3
131	131.85	0.07	40	120	250	1
131.85	132.25	0.08	1400	8000	16300	9
132.25	133.25	0.06	2400	27600	66300	22
133.25	134.25	0.08	2800	35500	79500	25
134.25	135	0.07	120	2400	3400	2
135.25	136	0.07	40	560	1800	1
136	137	0.04	40	1000	1600	2
137	138	0.04	30	250	560	1
138	139	0.04	40	760	1200	1
139	140	0.05	50	4000	7000	3
140	141	0.05	30	600	1600	1
141	142	0.04	45	960	680	1
142	144	-0.9	-0.9	-0.9	-0.9	-0.9
144	145	0.03	20	480	1600	1
145	146	0.04	20	1450	4000	2
146	147	0.04	10	1100	2000	2
147	148	0.04	20	55	220	1
148	149	0.03	10	220	380	1
149	150	0.02	10	640	360	2
150	151	0.04	25	420	2800	1
151	152	0.05	20	600	740	1
152	153	0.04	15	1350	2200	1
153	154	0.04	25	5200	4200	3
154	155	0.04	10	800	720	2
155	156	0.04	30	800	1600	2
156	157	0.03	30	1500	4800	2
157	158	0.05	10	310	980	1
158	159	0.04	15	1000	4000	2
159	162	0.06	45	800	2280	-0.9
162	165	0.02	177	840	4600	-0.9
165	168	0.005	101	66	410	-0.9
168	171	0.04	149	620	920	-0.9
171	174	0.005	111	184	400	-0.9
174	177	0.07	135	310	550	-0.9
177	180	0.02	168	372	530	-0.9

APPENDIX 3

Wet Lagoon South and Greendale Prospects - petrology

2. SUMMARY

2.1 Wet Lagoon Area

WL 31 107.5m
13385 Rhyolite tuff, flow banded and shows vitric and crystal bands as alternate layers. Latterly sheared. Weakly sericitised, quartz veined and contains dispersed pyrite.

WL 17 86.6m
13386 Silicified rhyolite, mineralised and strongly deformed.

Mainly sphalerite with less galena, pyrite, chalcopyrite and gold, are emplaced in broad fractures.

WL 24 72.2m
13387 Sulphides present are mostly sphalerite with less tetrahedrite and galena, minor chalcopyrite and pyrite, and traces of gold and native silver. Gold is found associated with most sulphides and a little is dispersed via quartz vein into the silicified rock groundmass. Gold shows mostly an association with galena. Silver marginally tarnished, is present as one small grain.

WL 29 89.0m
13338 Porphyritic andesite, propylitised (includes albitisation) and then strongly carbonatised (to calcite). Strongly sheared.

WL 29 90.0m
13389 Porphyritic andesite, propylitised and silicified strongly and shows less carbonate alteration. Plagioclase present was albitised.

3. PETROGRAPHIC DESCRIPTIONS

WEST LAGOON AREA

Specimen No. 13385/MPS 4650

Field Description: Altered volcanic.

Petrographic Summary: A rhyolitic vitric and crystal tuff where glassy and crystal layers form alternate lenticles. The specimen contains brecciated quartz veins with pyrite that cut sericite layers. Pyrite dispersed as fine euhedral or subhedral grains is noted. The rhyolite tuff has itself been sheared, and contains healed breccia fragments. Some silicified structures embedded in potassic 'glass' show shard forms and a possible glassy welded fabric is noted.

Mineralogy:	Vol.%
Quartz	64
K feldspar	25
Sericite	4
Pyrite	7
Observed Phenocryst Fragments	
Quartz	3
K feldspar	7

Vein: Quartz:pyrite.

Texture: A flow banded, rhyolite volcanic that contains lenticles of rhyolite tuff. Shows many more crystal fragments than the sections of WL 20, 64.4 m, 152.20 and 195.10 m, and also an abundance of K feldspar as devitrified glass and phenocryst fragments not present in the WL 20 series.

A lenticle by lenticle description:-
Bottom end of the section (9 mm depth) consists of packed K feldspar and quartz fragments and is a crystal tuff. Fine

sericitised vitric matrix as flow bands consists of a reticulate network of clear sericite flakes. Following and within the sericite lenticles are other lenticles of fine pyrite grains. Pyrite is also dispersed through the sericite as fine size (0.01-0.02 mm, but rarely to 0.24 mm) euhedral and subhedral grains. Quartz phenocryst fragments (to maximum 1.2 x 0.6 mm) and brecciated and healed mosaics of quartz phenocrysts occur but are fairly uncommon. The K feldspar phenocryst fragments are subrounded and show strong attrition or corrosion. Most likely the latter.

A sharp contact with more vitric tuff above the crystal tuff layer shows a brecciated, then healed cross-cutting quartz vein (0.3 mm wide) indicating that the tuff was subsequently brecciated. Otherwise what might be in-situ fragmentation is not so obvious.

Thin, lenticles of phenocryst aggregates in essentially devitrified potassic glass alternate with strongly chertified layers. Phenocrysts are not fractured in-situ. Fine pyrite as thin lenticles are often situated within strongly sericitised channels but the sulphide is mainly associated with quartz veins and was also dispersed finely through the altered volcanic matrix. Broad (4 x 1.5 mm) lenticles of quartz breccia containing a coarser pyrite are assumed to be fractured veins traversing altered rhyolite, since they contain unbrecciated K feldspar phenocrysts.

The alternating potassic and cherty layers continue up through the section and one potassic lenticle (4 mm wide) contains an abundance of K feldspar fragments of phenocryst type. Several show shear deformation and fracture. Above the latter broad potassic lenticle occur coarse (to 1.6 x 1.2 mm) brecciated quartz and K feldspar phenocrysts in a mixed cherty quartz and devitrified potassic glass matrix. Some weakly brecciated and healed K feldspar laths that reach 2 x 1.8 mm show some rounding of shapes.

Alteration: Sericitisation was followed by pyrite + quartz veins.

Metamorphism: The rock has been subjected to only moderate shear since many phenocrysts in the vitric layers remain unbrecciated.

Specimen No. 13386/MPS 4651

Field Description: Lode gold.

Petrographic Summary: A silicified rhyolite. Fractures contain abundant sphalerite, less galena and minor pyrite and chalcopyrite, also a trace of gold.

Mineralogy:	Vol.%
Quartz	60
K feldspar	4
Albite*	8
muscovite	<1
Carbonate	1
Sphalerite	20
Galena	3
Gold	<1
Chalcopyrite	1
Pyrite	2

* Confirmed.

Veins: (1) Quartz:albite:sulphides. (2) Quartz:K feldspar.

Texture: A strongly silicified rhyolite of fine quartz in mosaics, contains sulphides in broad fractures parallel to the rhyolite flow trend. Part of the thin section clear of sulphides shows variable fine (0.015 to 0.2 mm) quartz in mosaics of grains of irregular size cemented at strongly sutured grain boundaries. Scattered throughout are grains (up to 0.5 x 0.5 mm) of poikiloblastic and subhedral albite. Cutting across the silicified rock groundmass are quartz:albite veins, 1.5 mm wide of polyhedral quartz ($\sim$0.3 mm) and larger transverse prismatic albite grains (1.5 mm). Later cross-cutting veins of K feldspar and quartz are strongly sheared, transverse to the rhyolite flow. K feldspar also occurs, $\sim$0.2 to 1.5 mm in size as anhedral grains filling fractures associated with quartz and sulphides. Flakes of muscovite present (maximum 0.05 x 0.01 mm) occupy interstices

between quartz. Also carbonate (0.08 mm wide) occur as short lenticles between quartz.

In subdued plain polarised light a previous texture of replaced crystal fragments traced by fine opaque particles is not related to the present silicification structure of quartz in mosaics. 'Ghost' crystals are mostly around 0.1 mm in size.

Viewed by incident light, the area of mostly cherty quartz is seen to be specked by pyrite ($\sim$ 0.03 mm) in addition to fine sphalerite. Pyrite is present as cubic forms following earlier fractures and the sulphide forms short veinlets, 0.03-0.05 mm wide.

In the wide (several mms) sulphide filled fracture, sphalerite fills broad interconnecting spaces between quartz, varies 0.4 to 6 mm in width and shows galena varying 0.005 to 0.3 mm as scattered inclusions or as veinlets 0.1 mm wide in the sphalerite mass, commonly adjoining quartz ($\sim$ 0.5 mm) also included in the sphalerite.

Chalcopyrite (0.001 to 0.4 x 0.25 mm) within the sphalerite mass is in mutual contact with the included galena, as also is rare gold (0.05 x 0.03 mm).

Chalcopyrite with galena, forms discontinuous traces of grains across the sphalerite mass. Rare pyritohedral forms of pyrite ($\sim$ 0.04 mm) are embedded in the sphalerite. Other gold present as fine veinlets (0.08 x 0.04 mm) are part of a quartz:sphalerite vein.

Paragenesis: Pyrite $\longrightarrow$ sphalerite
galena
chalcopyrite
gold

Alteration: Silicification was followed by sulphides + gold emplacement.

Metamorphism: Shear moderate, affects cross-cutting veins. Two brecciation phases are present.

Specimen No. 13387/MPS 4652

Field Description: Gold lode.

Petrographic Summary: Brecciated, flow banded rhyolite acid volcanic shows two brecciation phases at least. Specimen is strongly silicified and contains quartz:sphalerite:galena: tetrahedrite:pyrite:gold composites in broad fractures. Traces only of euhedral pyrite are embedded in sulphides and healed quartz breccia. Gold (to 2.4 mm) as subveinlets occur associated with galena.

Mineralogy:	Vol.%
Quartz	44
K feldspar	12
Albite*	5
Carbonate	1
Tetrahedrite	5
Galena	5
Sphalerite	25
Chalcopyrite	2
Pyrite	1
Gold	<1
Silver	<<1

Veins: (1) Quartz:albite:(?) sulphides; (2) Quartz, K feldspar.

* Confirmed by mineral staining technique.

Texture: Similar to specimen 13386 section, as a groundmass of fine cherty quartz and fracture fill by quartz vein including sutured quartz plates 4 x 1.5, 3 x 1.5, 1 x 1 mm in size and clear K feldspar and quartz embedded in massive sulphide, mainly sphalerite that is several millimetres in width. Feldspar shows replacement by veinlets of carbonate ($\sim$ 0.1 mm wide) that also cut across sulphides, or feldspar is replaced by abundant blebs of carbonate.

Examining section by subdued polarised light indicates a primary texture of fine quartz breccia fragments (~ 0.3 x 0.115 x 0.08 x 0.08 mm, etc) where shapes are indicated by trails of interstitial iron oxides dust.

Some healed fractures of earlier brecciation appear to be perlitic and the rock may therefore be an in situ brecciated acid volcanic. Flow bands are identifiable.

Opaque oxide trails, transect quartz grains of silicification alteration, thus indicating a second cycle brecciation.

Observation by incident light shows as in specimen 13386, broad fracture-fill by sphalerite containing scattered dilated vein forms of galena (0.02 to 0.20 mm) of rounded and embayed forms. Galena joins with cross veinlets (0.02 mm wide) of chalcopyrite in sphalerite. Quartz joins with galena in narrow veins. A similar width of chalcopyrite joins with galena in some cross veinlets. A pale native silver bleb (0.22 mm) is contained by a halo of orange mineral, but is joined to galena veins.

An olive-grey reflecting tetrahedrite which appears to be of similar hardness to sphalerite but is brighter in reflected light, broad (0.3 mm though variable) masses in mutual composites peripheral to sphalerite and contains bleb-shaped inclusions of chalcopyrite and sphalerite, particles of gold (0.15 mm) which fill fine fractures in the host mineral. Gold (0.02 mm) is composited with chalcopyrite veinlets in the tetrahedrite mass.

In one section abundant cubes and octahedra of pyrite (0.1 mm) are scattered through the sphalerite mass.

Gold grains (0.04 to 0.24 mm) not embedded in sulphides form a group in quartz. One gold grain is composited with a small galena grain.

Alteration: Strong silicification to almost total replacement of

rhyolite host. Quartz veins include K feldspar as fill after the later brecciation.

Metamorphism: Two brecciation phases (the first phase is apparent only by viewing the section using subdued polarised light).

Paragenesis: Pyrite → sphalerite → chalcopyrite → gold
tetrahedrite galena

Specimen No. 13388/MPS 4653

Field Description: Chloritic rock.

Petrographic Summary: A sheared porphyritic andesite that is now altered to secondary carbonate, chlorite, albite, clinozoisite and sericite. Rock was altered last by carbonate. Shows green schist metamorphism.

Mineralogy:	Vol.%
Albite	15
Carbonate (stained - calcite)	47
Chlorite	17
Clinozoisite	8
Sericite	6
Quartz	4
Iron oxides and leucoxene	3

Texture: The section indicates this to be a strongly sheared metamorphic rock, mainly as lenticles of carbonate that vary 1 to 3 mm in width which alternate with lenticles of albite:chlorite, clinozoisite and sericite, specked with abundant fine (0.01 to 0.02 mm) iron oxides. The latter are maximum 2.4 x several millimetres long, mainly surrounded by the carbonate. Albite (0.015-0.02 mm) alternates with chlorite platelets. Also scattered through the section and often oriented nearly perpendicular to shear are chlorite:iron oxides:sericite bodies (though these are often mainly of chlorite and iron oxides). The bodies vary in shape but are usually squat prisms, and occasionally display the shapes of hornblende cross sections 0.8, 0.5 mm, etc. One rectangular section (0.6 x 0.6 mm) is identifiable as an albitised plagiolase phenocryst. Several other feldspar shapes (0.6 x 0.4 mm) are completely sericitised. Other phenocryst shapes are broken down as blebs of iron oxides, chlorite, etc. The separate carbonate lenticles are of granular carbonate ($\sim$ 0.15 mm) and are commonly present as rhomb shapes. Where carbonate lenticles are thin, then carbonate grains are sheared. Carbonate

is clear except for relicts of alternate part-replaced chlorite: clinozoisite:sericite lenticles.

The chlorite, etc., lenticles (0.5 x 0.2 to 20 x 3 mm) also include fine aggregates of clinozoisite granules or short prisms, often as lenticular forms (0.3 x 0.12 mm) with an abundance of included reticulate sericite laths (0.05 x 0.008 mm) and specks of iron oxides. Scattered quartz as sheared, short fragments are present but these do not occur associated with the chlorite laminae. When viewed by subdued plain polarised light there are no pre shear textures apart from those that affect altered phenocrysts.

Carbonate replacement of chlorite is noted.

Alteration:

i) Chlorite, clinozoisite and sericite.

ii) Carbonate replacement.

Metamorphism: Dynamic - stress - Green Schist.

Specimen No. 13389/MPS 4654

Field Description: Chloritic rock.

Petrographic Summary: Porphyritic andesite, metamorphosed to chlorite:quartz:clinozoisite schist with minor carbonate, which left residual albite and leucoxene. Rock was then silicified, then weakly carbonatised and metamorphosed with metamorphic grade - Green Schist - shows stress.

Mineralogy:	Vol.%
Albite	5
Chlorite	45
Carbonate	4
Clinozoisite	15
Sericite	2
Quartz	25
Iron oxides and leucoxene	4

Texture: There is no regular differentiation into carbonate and chlorite rich lenticles in this section. Less albite, and more quartz as silicification are observed, with only moderate carbonate alteration.

The rock is strongly sheared and laminated. The laminae (0.015 to 0.12 mm) are of clear pale green chlorite, and are parallel in a schistose fashion but alternate with thin lenticles of rubbly leucoxene, sheared quartz in mosaics ($\sim$ 0.04 mm wide) and show dispersal of fine grains of leucoxene between chlorite flakes. Rubbly clinozoisite as groups to 0.08 mm, and squat prisms ($\sim$ 0.03 mm) are associated with leucoxene or otherwise are embedded between chlorite laminae. Thin sericite flakes (0.005 mm wide) are distributed en-echelon in the schist and are mainly parallel to chlorite flakes, though several sericite flakes are oriented almost perpendicular to shear direction.

Clear carbonate as ruptured 'vein' systems or lenticles varies from short lenticles (0.015 mm wide) to coarse lenticles (0.3 x 1

mm) and carbonate is seen to have part replaced altered phenocrysts. Other phenocryst replacement is by clinozoisite and chlorite (0.3 x 0.2 mm); also a phenocryst showing prism and dome forms (0.8 x 0.5 mm) of hornblende is replaced by chlorite and clinozoisite and veined by carbonate. Other phenocrysts are replaced by tufts of chlorite with leucoxene.

Alteration:

i) Chlorite, clinozoisite and leucoxene - strong.

ii) Silicification - strong.

iii) Carbonatisation - weak.

Metamorphism: Brecciation and strong shear.

APPENDIX 4

WET LAGOON SOUTH PROSPECT

Au, Ag, Cu, Pb, Zn, pyrite, silicification, foliation distributions in DDH's - WL 14,15,17,18,23-31

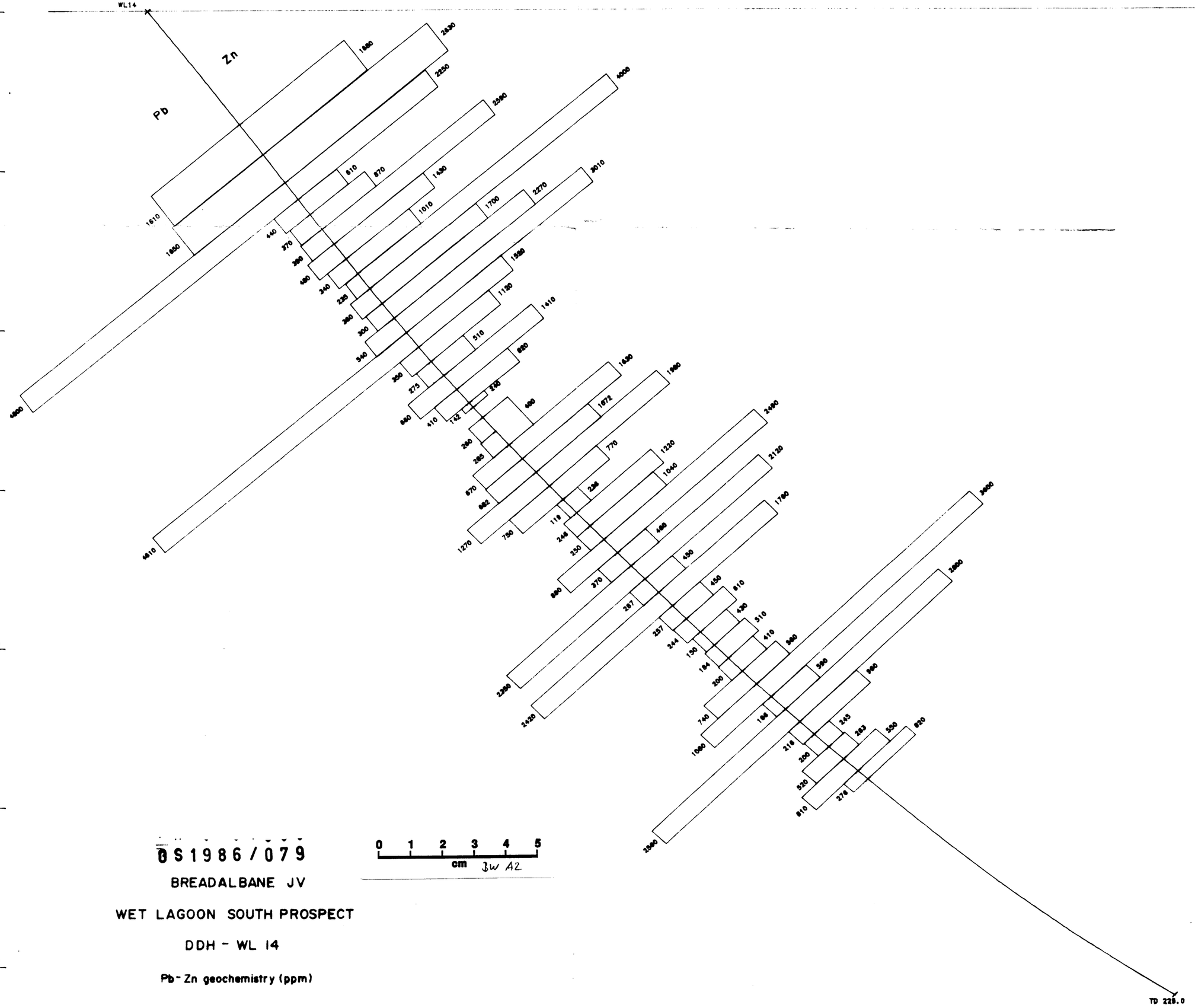
341700E 1145986N | 341725E 1145986N | 341750E 1145986N | 341775E 1145986N | 341800E 1145986N | 341825E 1145986N | 341850E 1145986N | 341875E 1145986N

WL14

Zn

Pb

-25 -50 -75 -100 -125 -150



0 1 2 3 4 5 cm

3w A2

BS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 14

Pb - Zn geochemistry (ppm)

Pb (left) Zn (right) in ppm

SCALE=1:500

EZ EXPLORATION 1287

1:500

FIGURE

341700E 1145986N | 341725E 1145986N | 341750E 1145986N | 341775E 1145986N | 341800E 1145986N | 341825E 1145986N | 341850E 1145986N | 341875E 1145986N

WL14

Au

Cu

-25 -50 -75 -100 -125 -150

0.46 0.06 0.04 0.03 0.02 0.005 0.06 0.02 0.03 0.05 0.03 0.04 0.05 0.005 0.04 0.03 0.030 0.005 0.01 0.005 0.05 0.005 0.04 0.05 0.04 0.01 0.06 0.05 0.005 0.04 0.005 .200 .080 .060 .070 .020 .020 .040 .010 .050 .040 .030 .090 .050 .140 .100 .160 .140 .150 .490 .250 .150 .990 .210 3.140

570 700 330 207 146 53 60 61 111 96 82 84 44 82 91 75 69 60 300 181 294 139 46 150 201 48 80 66 660 1120 101 93 59 45 68 165 71 143 107 63 87 70

1780 1200

TD 225.0

0 1 2 3 4 5 cm BW A2

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 14

Au - Cu geochemistry (ppm)

WL14 Cu (left) Au (right) in ppm

SCALE=1:500 EZ EXPLORATION 1287

D000864710

1:500 FIGURE

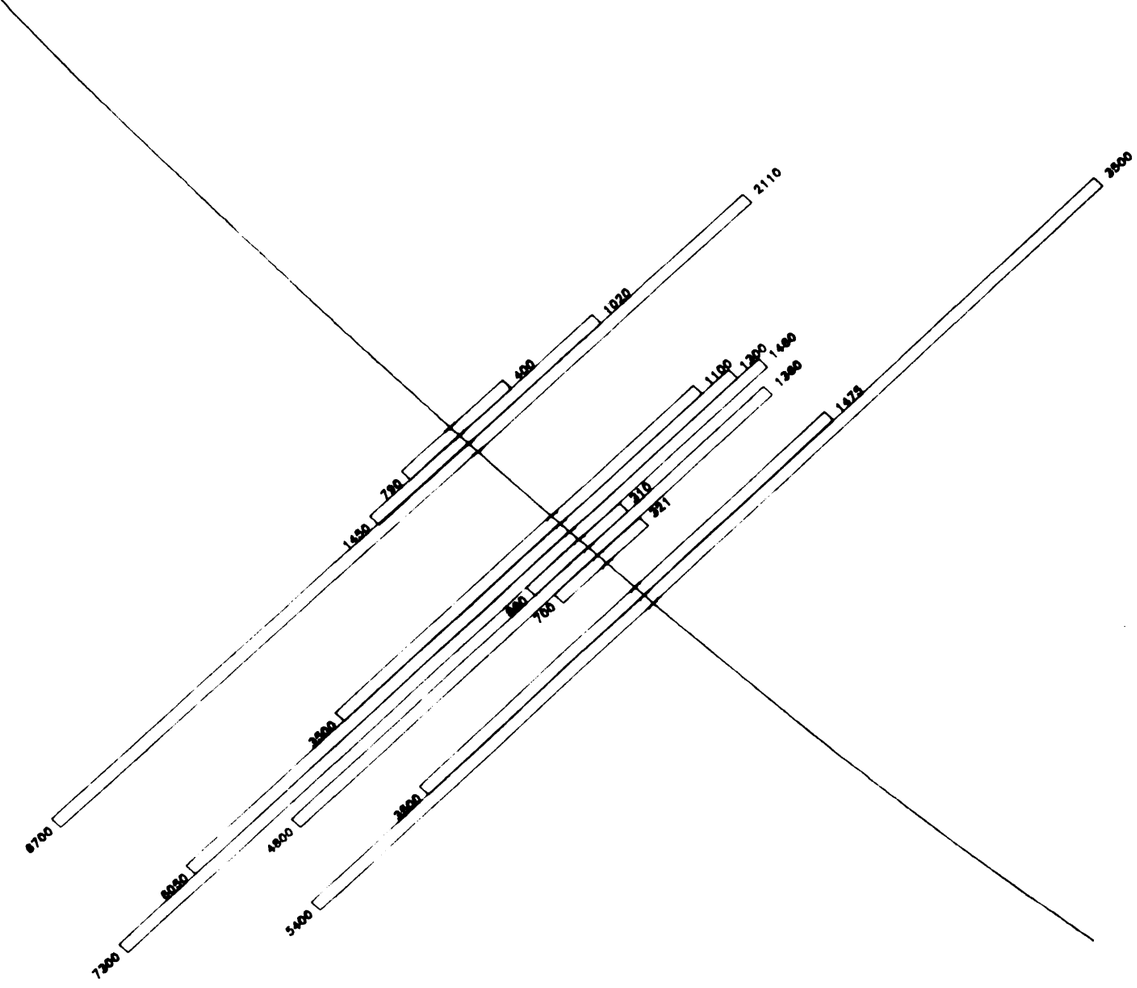
341675E 1145834N | 341700E 1145834N | 341725E 1145834N | 341750E 1145834N | 341775E 1145834N | 341800E 1145834N | 341825E 1145834N

WL15

Pb

Zn

-25 -50 -75 -100 -125 -150



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 15

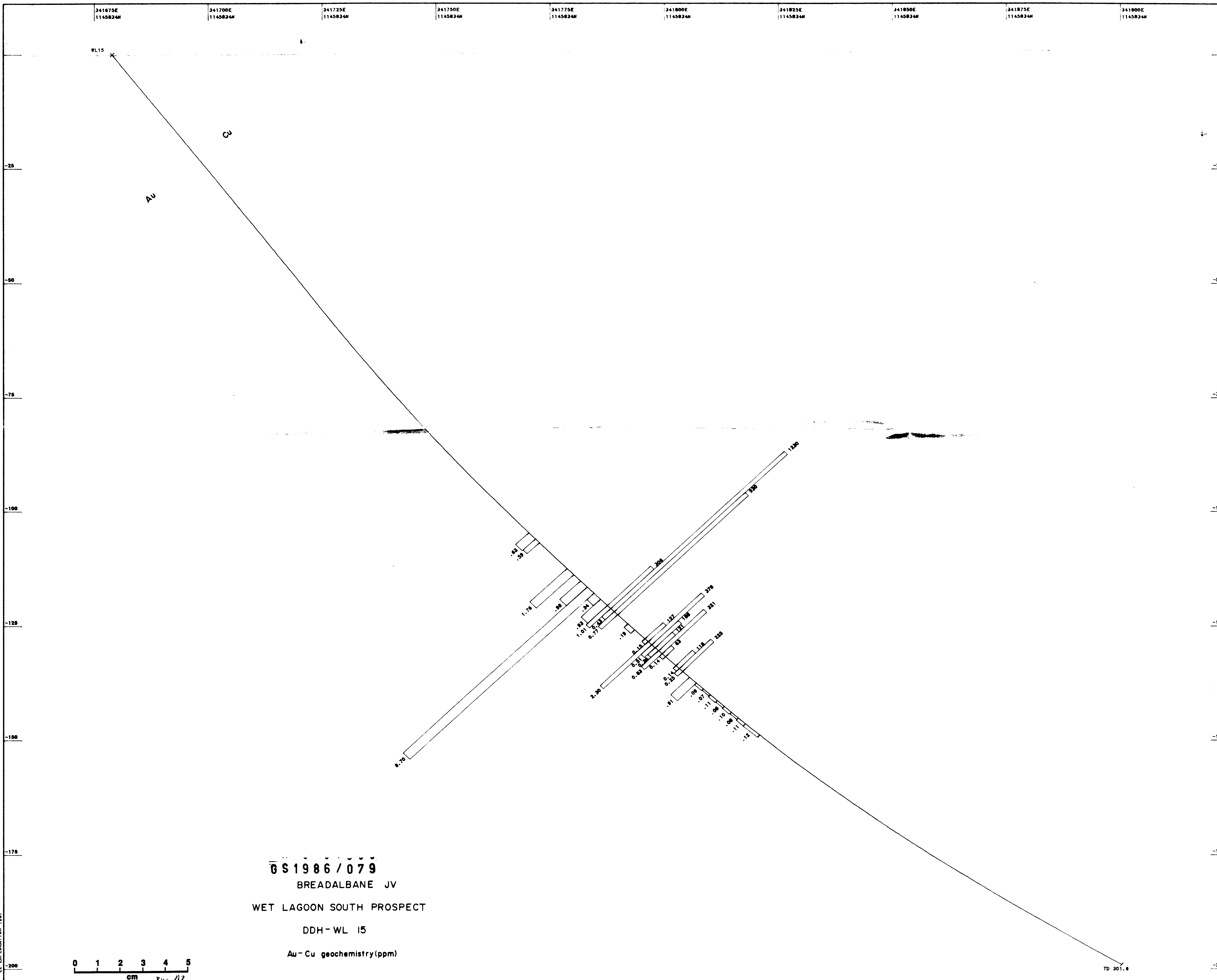
Pb - Zn geochemistry (ppm)

0 1 2 3 4 5 cm Bw A2

WL15 Zn (left) Pb (right) in ppm
SCALE=1:500 EZ EXPLORATION 1287

D000864720

1:500 FIGURE



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 15

Au-Cu geochemistry (ppm)

WL15 Au (left) Cu (right) in ppm
SCALE=1:500

1:500 FIGURE

D000864730

341700E
1145892N

341725E
1145892N

341750E
1145892N

341775E
1145892N

341800E
1145892N

341825E
1145892N

WL17

Cu

Au

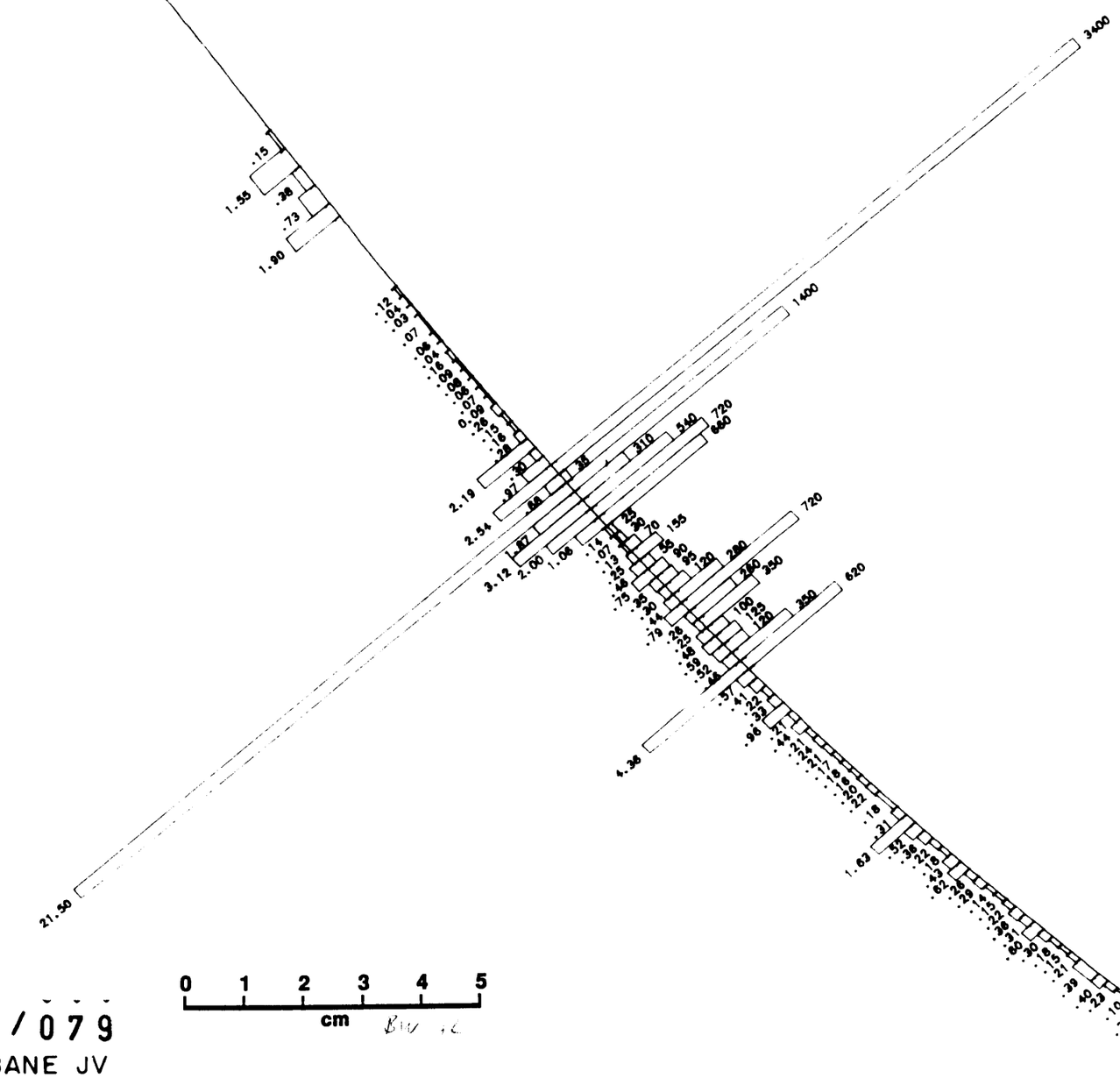
-25

-50

-75

-100

-125



0 1 2 3 4 5
cm

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 17

Au - Cu geochemistry (ppm)

D000864740

WL17 Au (left) Cu (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1 : 500

FIGURE

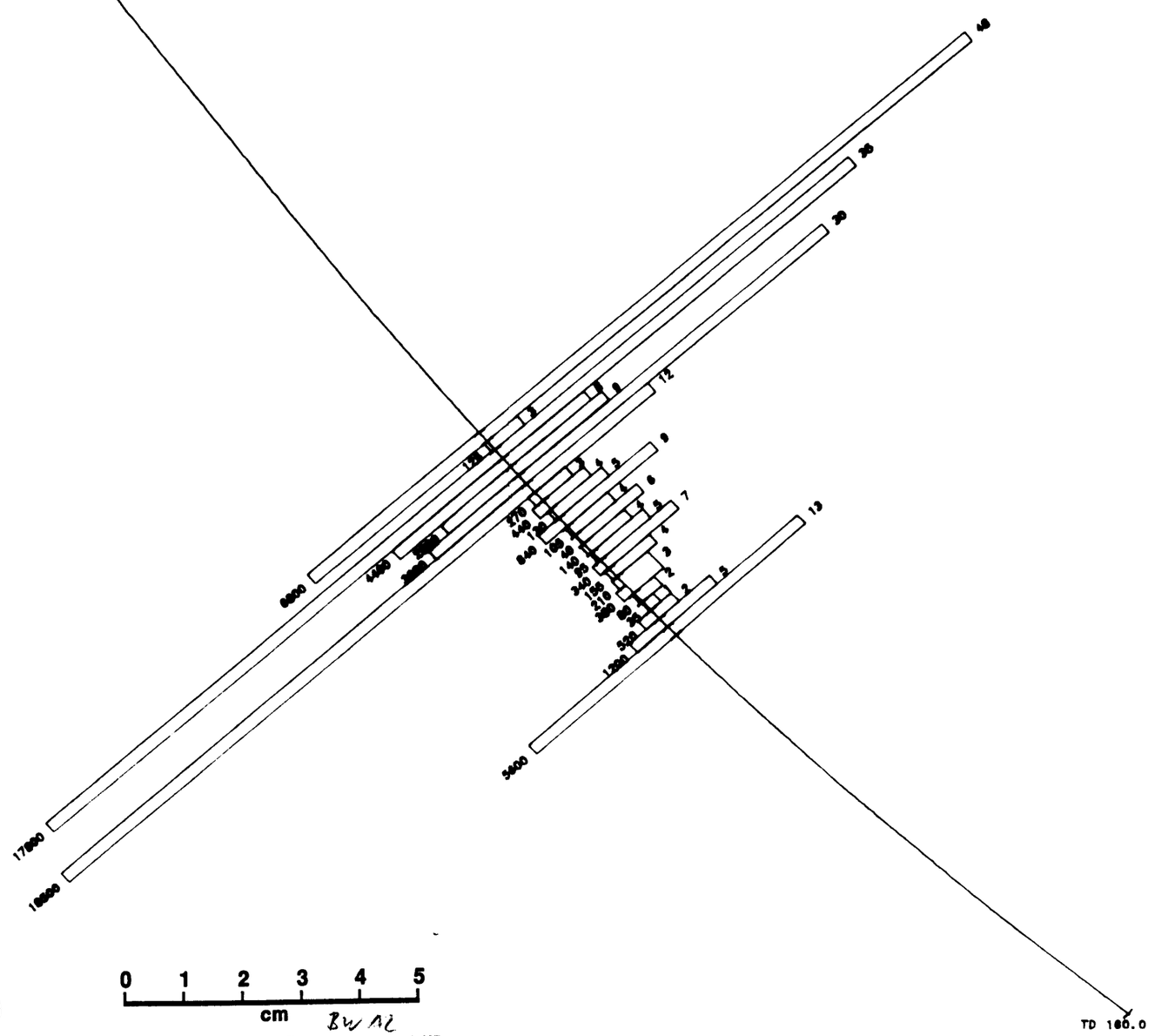
341700E 1148692N | 341725E 1148692N | 341750E 1148692N | 341775E 1148692N | 341800E 1148692N | 341825E 1148692N

WL17

Ag

Pb

-25 -50 -75 -100 -125



0 1 2 3 4 5
cm

BW AL

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 17

Pb-Ag geochemistry (ppm)

WL17 Pb (left) Ag (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1:500

FIGURE

341700E
1145892N

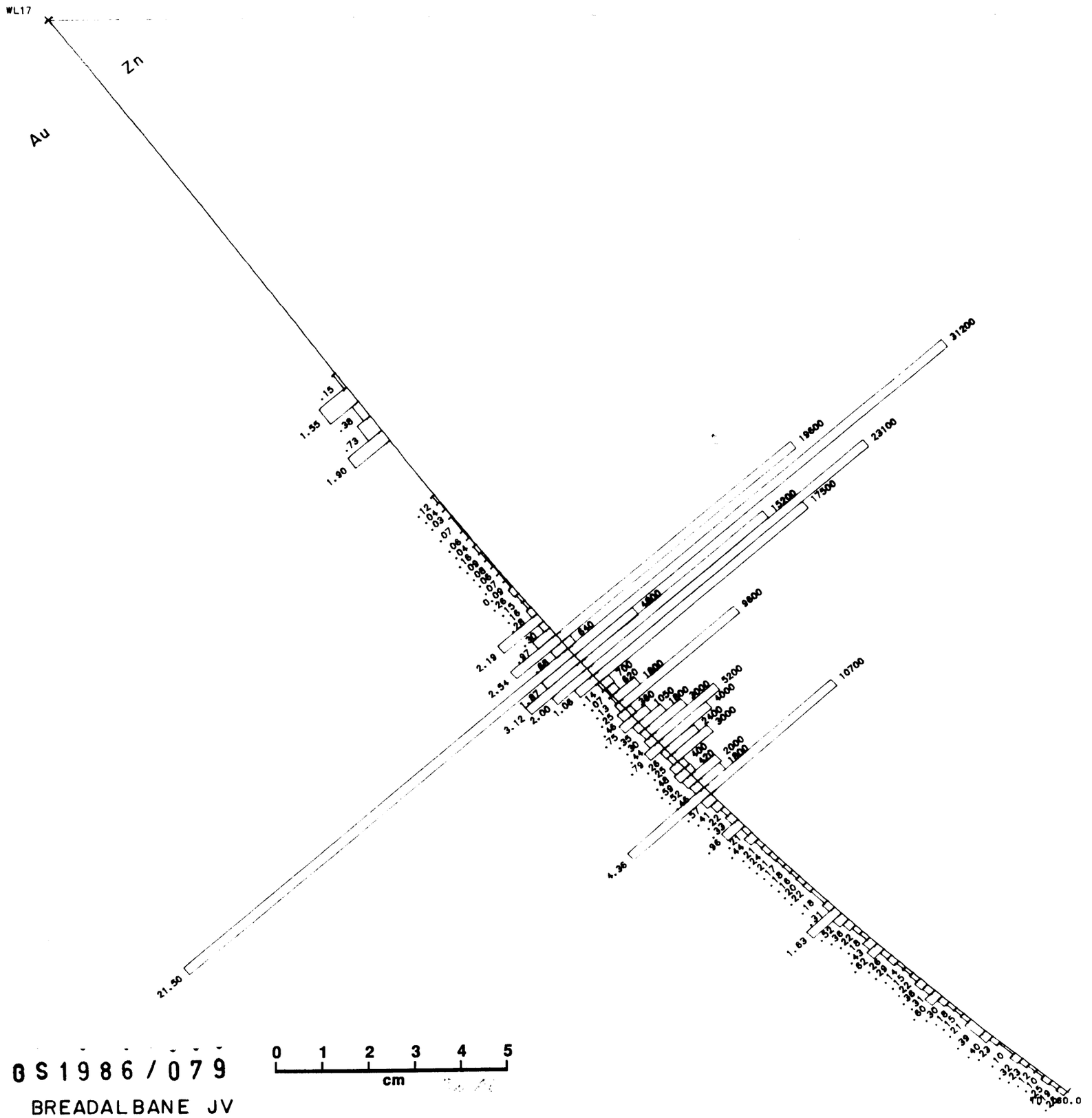
341725E
1145892N

341750E
1145892N

341775E
1145892N

341800E
1145892N

341825E
1145892N



0 1 2 3 4 5
cm

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL17

Au-Zn geochemistry(ppm)

WL17 Au (left) Zn (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1:500

FIGURE

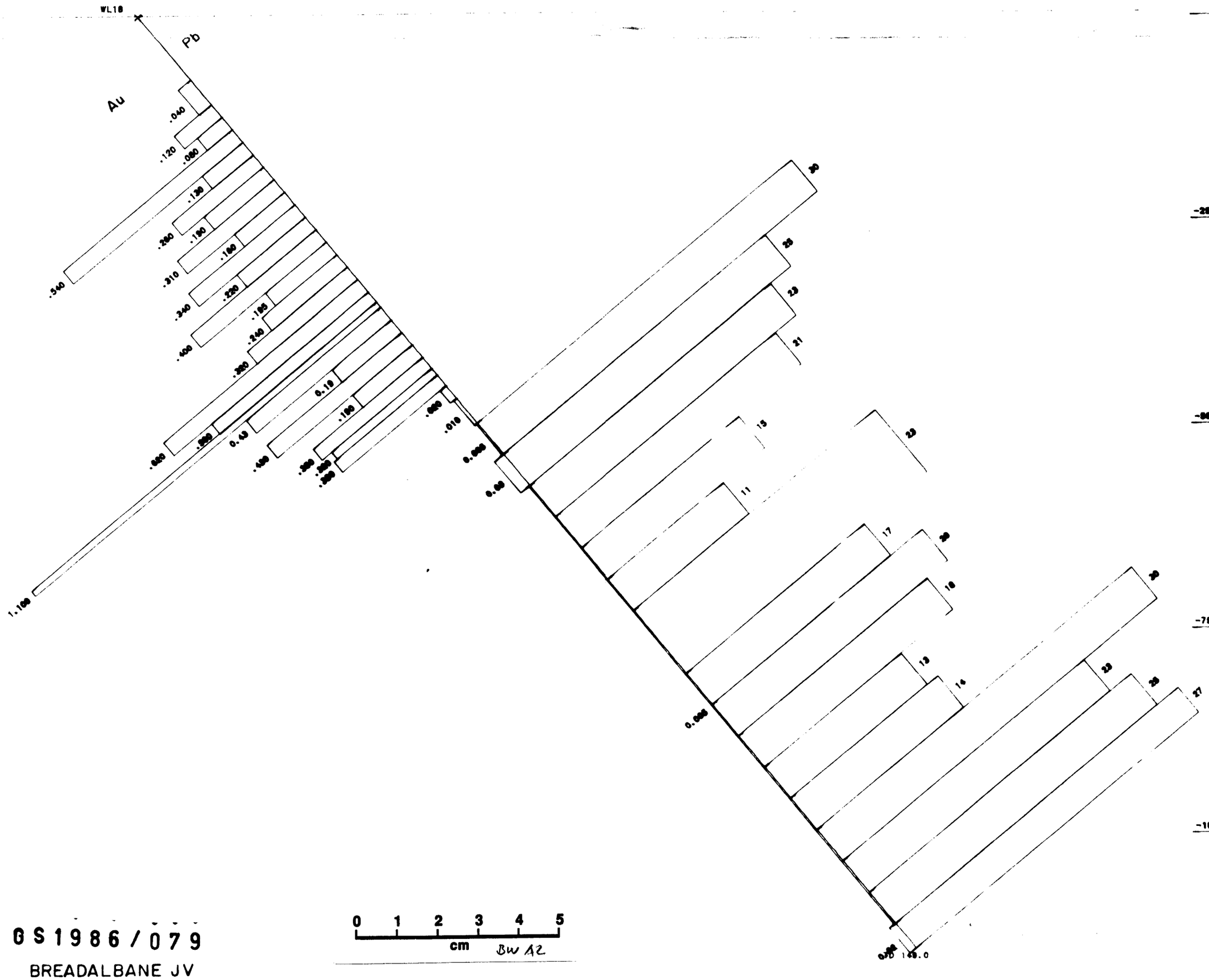
3416250E 1148475N | 3416500E 1148475N | 3416750E 1148475N | 3417000E 1148475N | 3417250E 1148475N | 3417500E 1148475N

WL18

Pb

Au

-25 -50 -75 -100 -125



0 1 2 3 4 5 cm

BW A2

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 18

Au - Pb geochemistry (ppm)

D000864770

WL18 Au (left) Pb (right) in ppm

SCALE=1:500

EZ EXPLORATION 1287

1 500

FIGURE

341625E
1148475N

341650E
1148475N

341675E
1148475N

341700E
1148475N

341725E
1148475N

341750E
1148475N

WL18

Cu

Zn

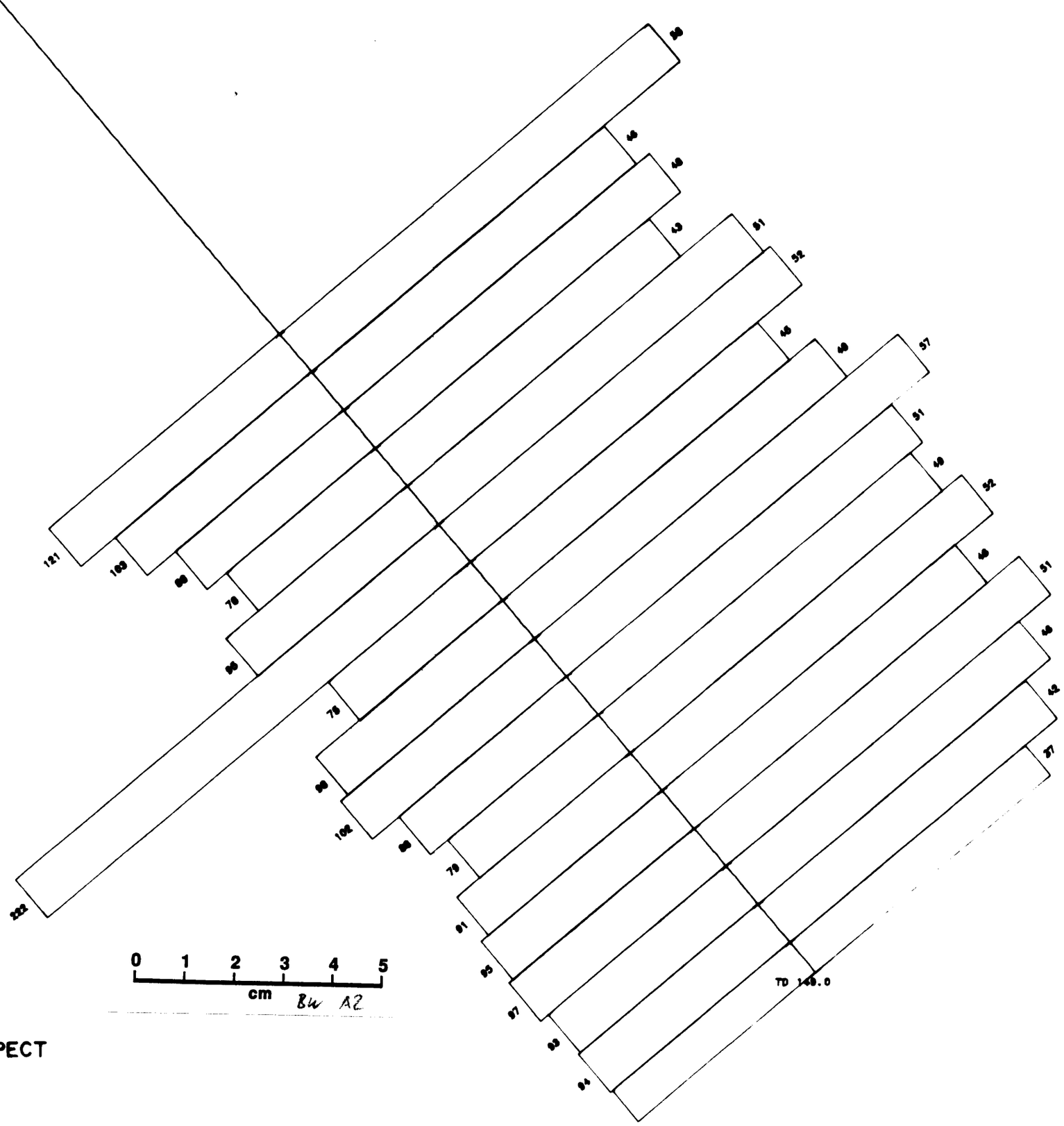
-25

-50

-75

-100

-125



WL18 Zn (left) Cu (right) in ppm
SCALE=1:500

EZ EXPLORATION 1297

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 18

Zn - Cu geochemistry (ppm)

0 1 2 3 4 5
cm Bw A2

D000864780

1:500

FIGURE

341975E
1148023N

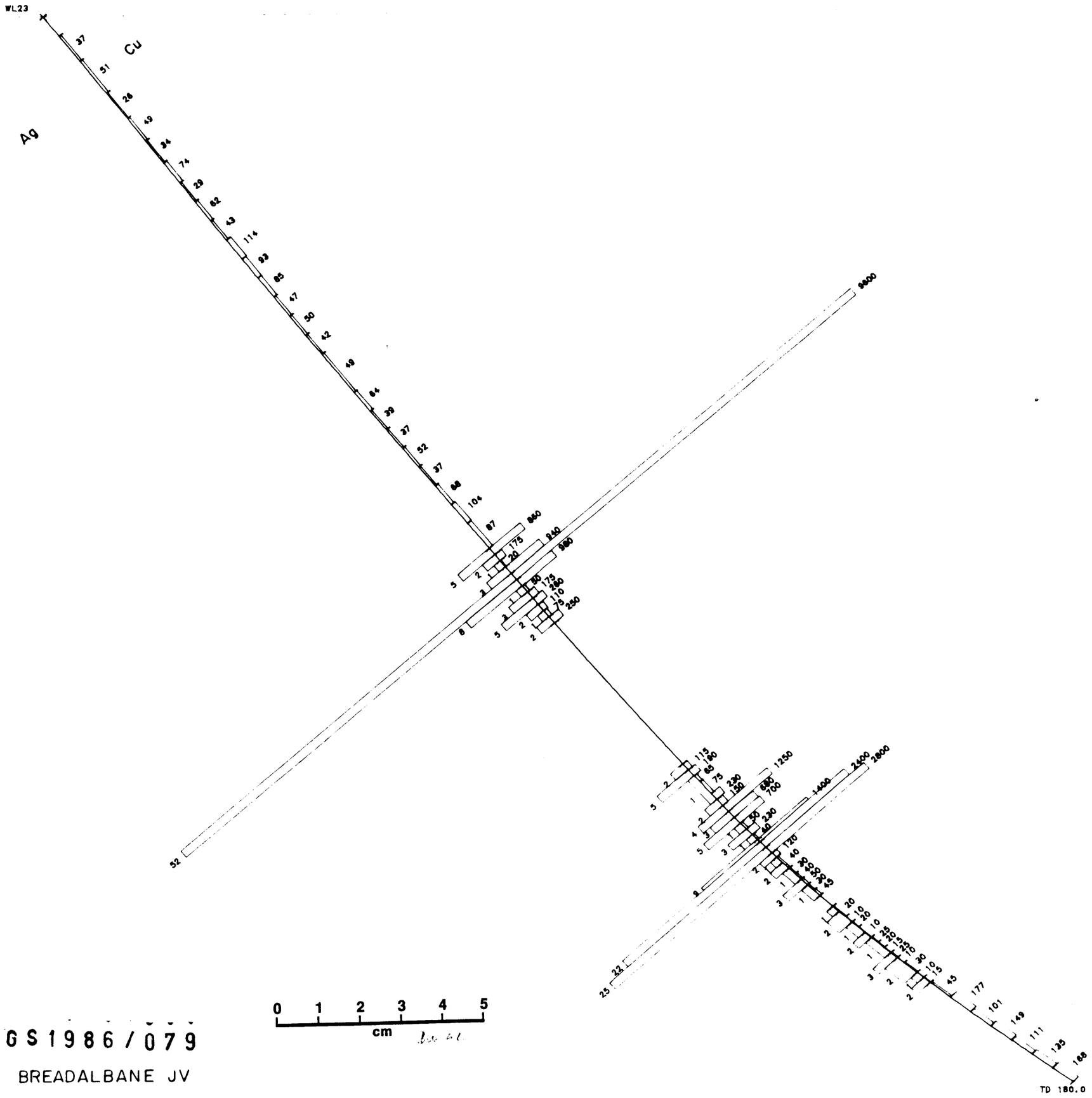
342000E
1148023N

342025E
1148023N

342050E
1148023N

342075E
1148023N

342100E
1148023N



-25
-50
-75
-100
-125

0 1 2 3 4 5
cm

GS 1986 / 079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 23

Ag - Cu geochemistry (ppm)

WL23 Ag (left) Cu (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1:500

FIGURE

341975E 1146023N | 342000E 1146023N | 342025E 1146023N | 342050E 1146023N | 342075E 1146023N | 342100E 1146023N

WL23

Zn

Pb

-25 -50 -75 -100 -125

0 1 2 3 4 5
cm

GS 1985/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 23

Pb- Zn geochemistry (ppm)

D000864800

WL23 Pb (left) Zn (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1:500

FIGURE

341975E
1146023N

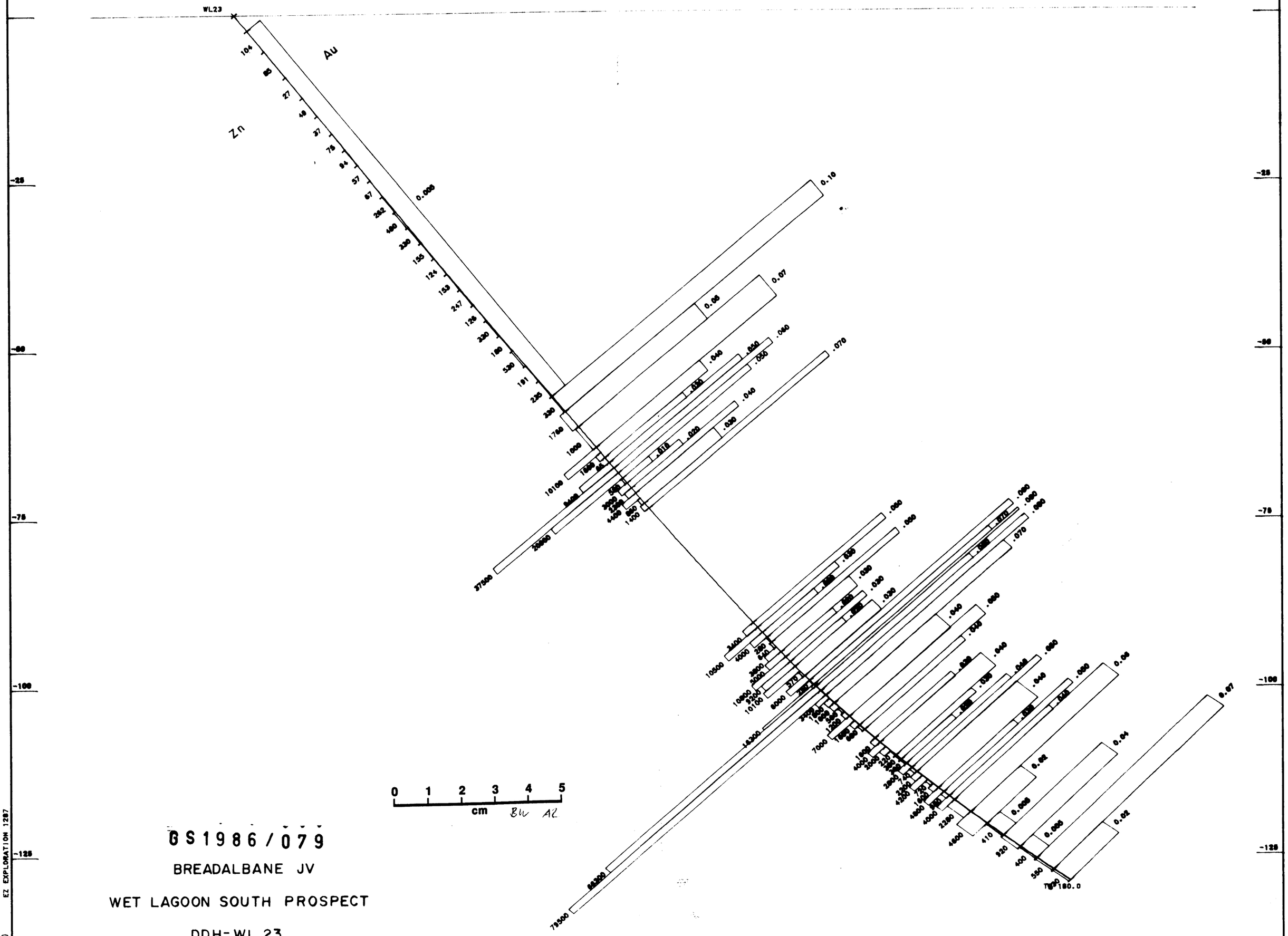
342000E
1146023N

342025E
1146023N

342050E
1146023N

342075E
1146023N

342100E
1146023N



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 23

Zn - Au geochemistry (ppm)

WL23 Zn (left) Au (right) in ppm

SCALE=1:500

EZ EXPLORATION 1287

1:500

FIGURE

3417258
11459025

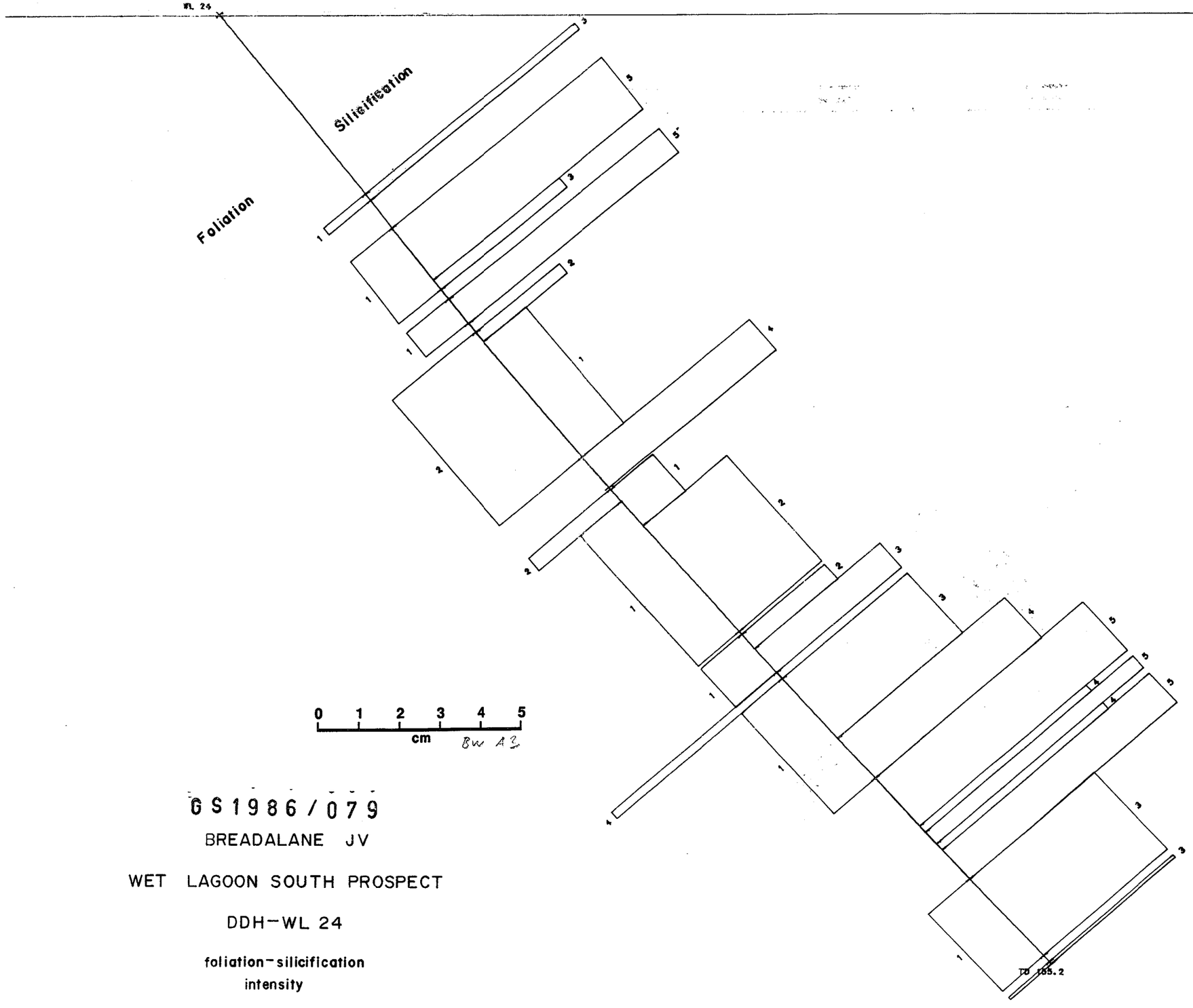
3417508
11458925

3417758
11458925

3418008
11458925

3418258
11458925

3418508
11458925



0 1 2 3 4 5
cm

GS1986/079

BREADALANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 24

foliation-silicification
intensity

WL24 foliation (left) silicification (right)
SCALE=1:500

EZ EXPLORATION 1267

1:500

FIGURE

341725E
1145692N

341750E
1145692N

341775E
1145692N

341800E
1145692N

341825E
1145892N

341850E
1145692N

-25

-50

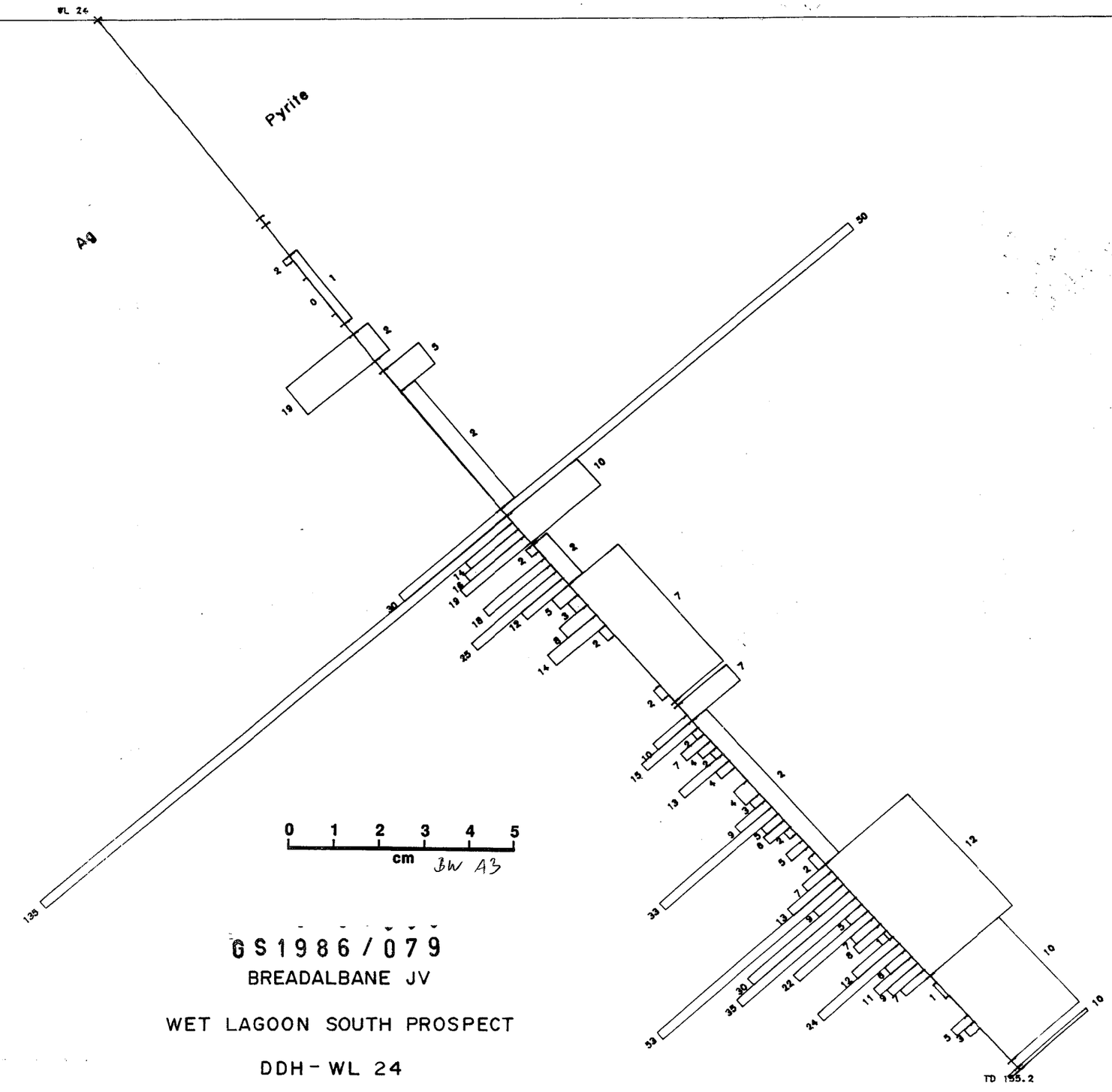
-75

-100

WL 24

Pyrite

Ag



0 1 2 3 4 5
cm

Bw A3

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 24

Ag - Pyrite (%) intensity

WL24 Ag (left) pyrite (right) in ppm/-

SCALE=1:500

EZ EXPLORATION 1287

1:500

FIGURE

341725E
1145692N

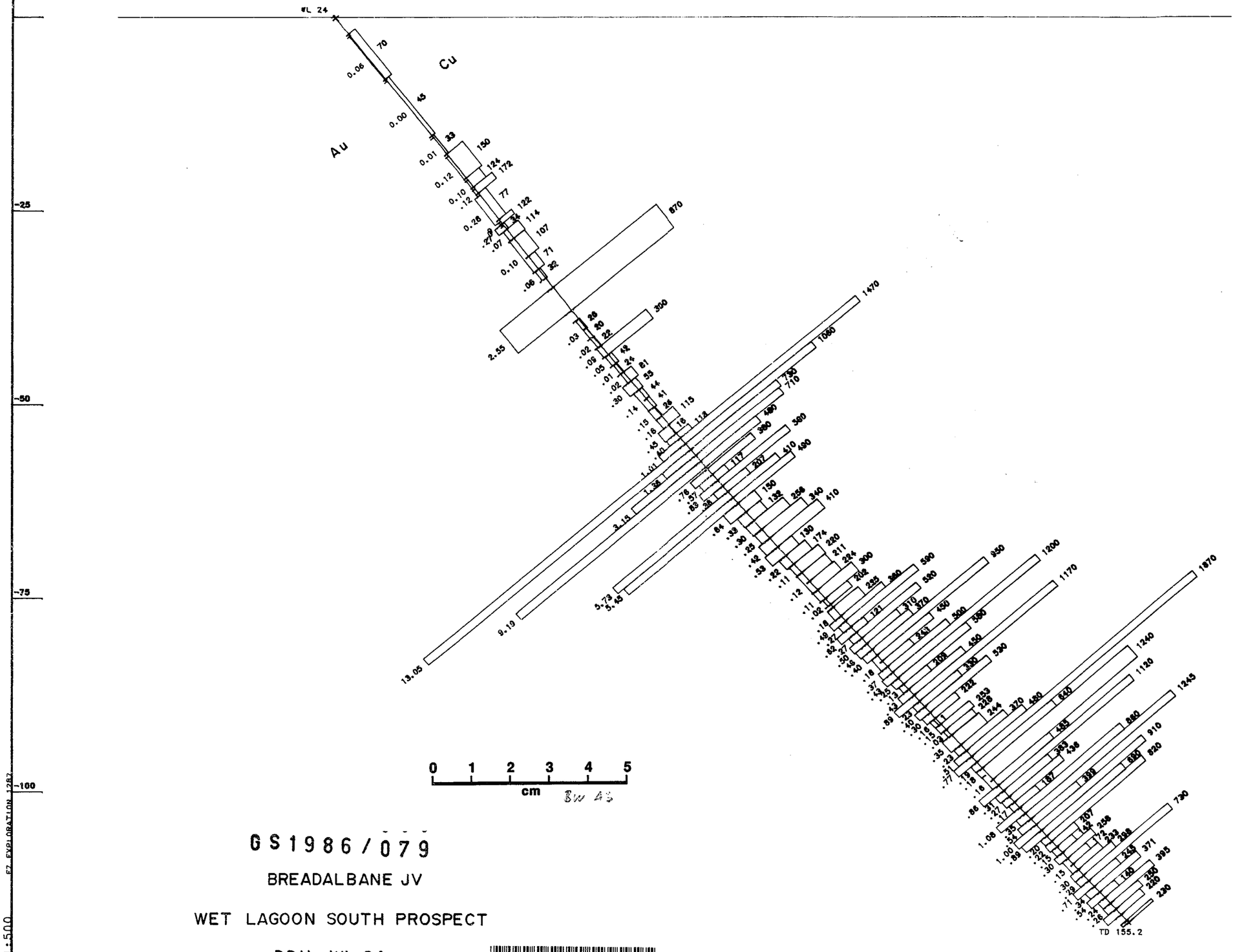
341750E
1145692N

341775E
1145692N

341800E
1145692N

341825E
1145692N

341850E
1145692N



0 1 2 3 4 5
cm

Sw A5

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 24

D000864840

Au-Cu geochemistry (ppm)

WL24 Au (left) Cu (right) in ppm
SCALE=1:500 EZ EXPLORATION 1287

1:500

FIGURE

341725E
1145692N

341750E
1145692N

341775E
1145692N

341800E
1145692N

341825E
1145692N

341850E
1145692N

-25

-50

-75

-100

WL 24

Pb

Zn

0 1 2 3 4 5
cm

Bw A3

EZ EXPLORATION 1287

WL24 Pb (left) Zn (right) in ppm

SCALE=1:500

OS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 24

Pb-Zn geochemistry
(ppm)

D000864850

1:500

FIGURE

341800E
1145987N

341825E
1145987N

341850E
1145987N

341875E
1145987N

341900E
1145987N

341925E
1145987N

341950E
1145987N

WL25

silicification

Cu

-25

-50

-75

-100

-125

-150

1920

1510

1080

640

570

440

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 25

Cu (ppm) – Silicification intensity

0 1 2 3 4 5
cm

Bw 12

WL25 Cu (left) silicification (right) in ppm/-
SCALE=1:500 EZ EXPLORATION 1287

D000864860

1:500

FIGURE

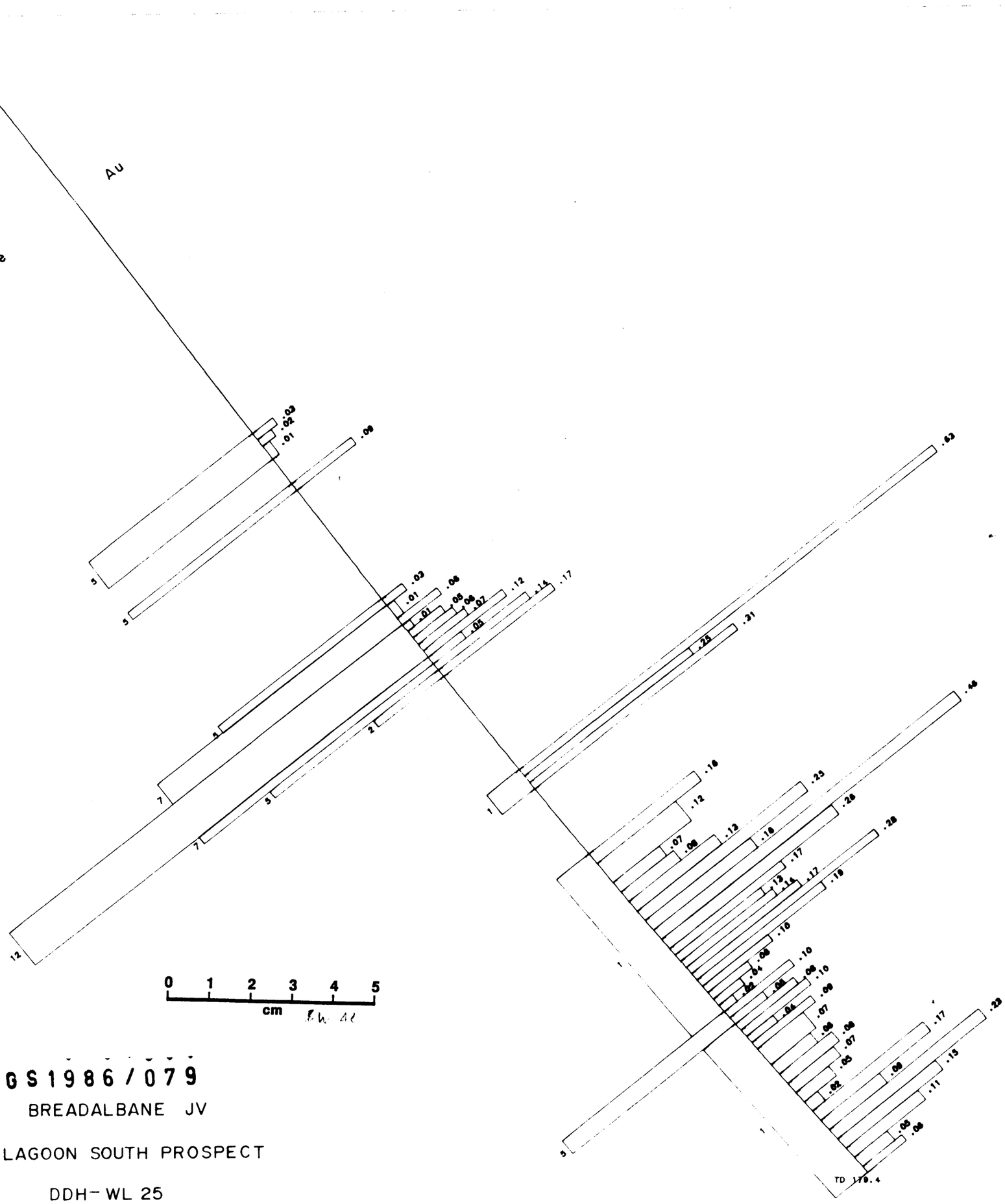
341800E 1145987N | 341825E 1145987N | 341850E 1145987N | 341875E 1145987N | 341900E 1145987N | 341925E 1145987N | 341950E 1145987N

WL25

Au

Pyrite

-25 -50 -75 -100 -125 -150



0 1 2 3 4 5
cm

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BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 25

Pyrite — Au intensity

WL25 pyrite (left) Au (right) in -/ppm
SCALE=1:500 EZ EXPLORATION 1287

1:500 FIGURE

341800E
11458987N

341825E
11458987N

341850E
11458987N

341875E
11458987N

341900E
11458987N

341925E
11458987N

341950E
11458987N

WL25

Pb

Zn

-25

-50

-75

-100

-125

-150

20000

24000

24000

11500

5700

2150

1850

9600

12000

14500

7000

6700

6000

7100

5600

5000

5800

5800

5350

5050

5970

1810

1000

4000

2840

1140

9470

12500

24000

1150

1900

1840

2000

2900

1710

1750

580

640

470

830

790

252

1430

730

540

312

630

320

410

70

880

850

480

100

350

155

270

1540

1660

2000

2400

360

360

360

141

255

135

231

770

2250

2250

4480

9500

7900

430

240

350

570

178

358

500

1140

860

1540

255

750

760

350

500

880

3000

67

150

358

83

114

305

430

150

630

32

244

345

90

200

410

1300

179.4

0 S 1986 / 079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 25

Pb-Zn geochemistry

(ppm)

0 1 2 3 4 5

cm

Bw AZ

WL25 Zn (left) Pb (right) in ppm

SCALE=1:500 EZ EXPLORATION 1287

D000864880

1:500

FIGURE

341800E
1145987N

341825E
1145987N

341850E
1145987N

341875E
1145987N

341900E
1145987N

341925E
1145987N

341950E
1145987N

WL25

Ag

foliation

-25

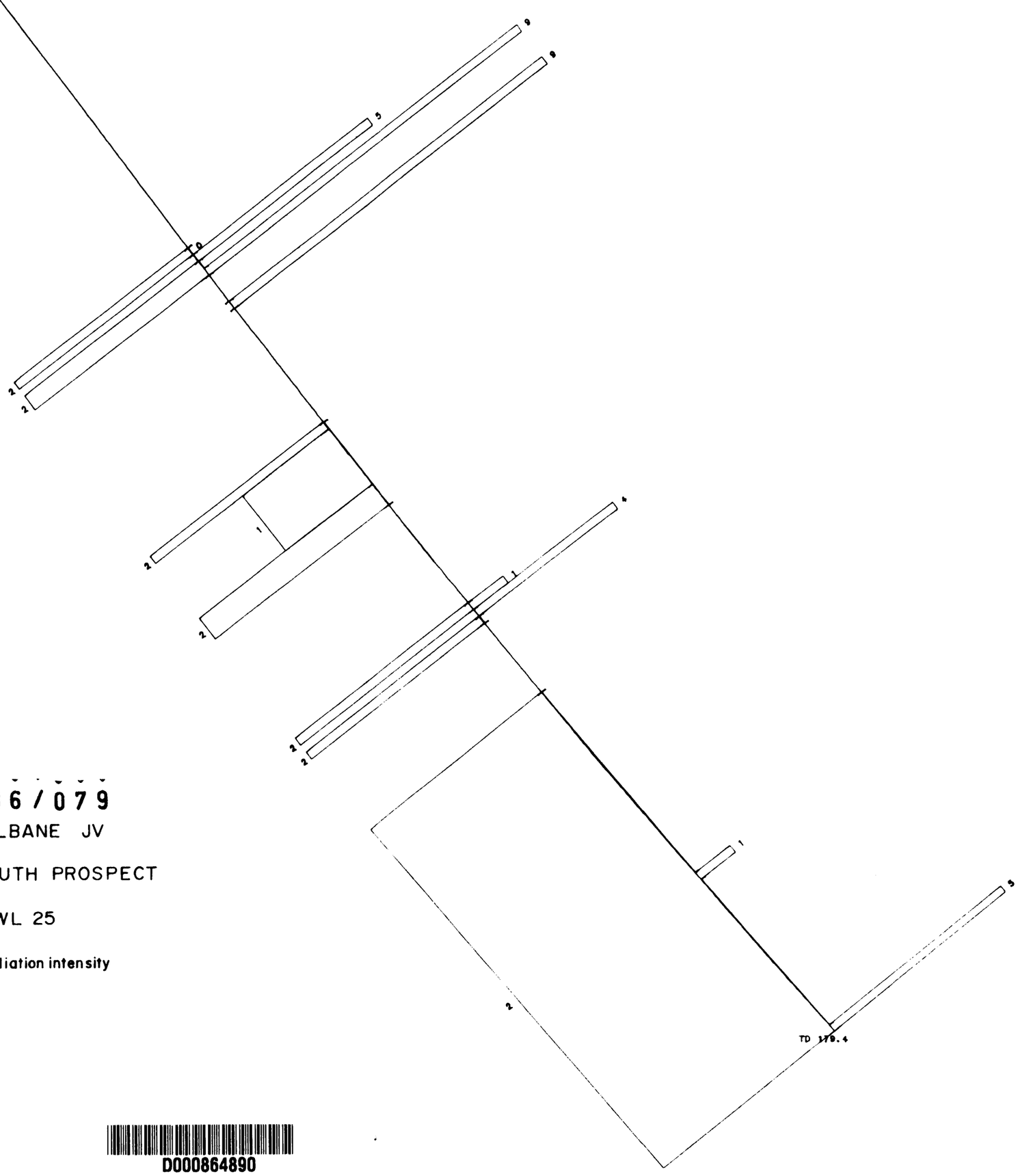
-50

-75

-100

-125

-150



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 25

Ag (ppm) — foliation intensity

0 1 2 3 4 5
cm

Bw AZ

D000864890

WL25 foliation (left) Ag (right) in -/ppm
SCALE=1:500
EZ EXPLORATION 1287

1:500

FIGURE

341725E
1146835N

341750E
1146835N

341775E
1146835N

341800E
1146835N

341825E
1146835N

341850E
1146835N

WL26

foliation

Ag

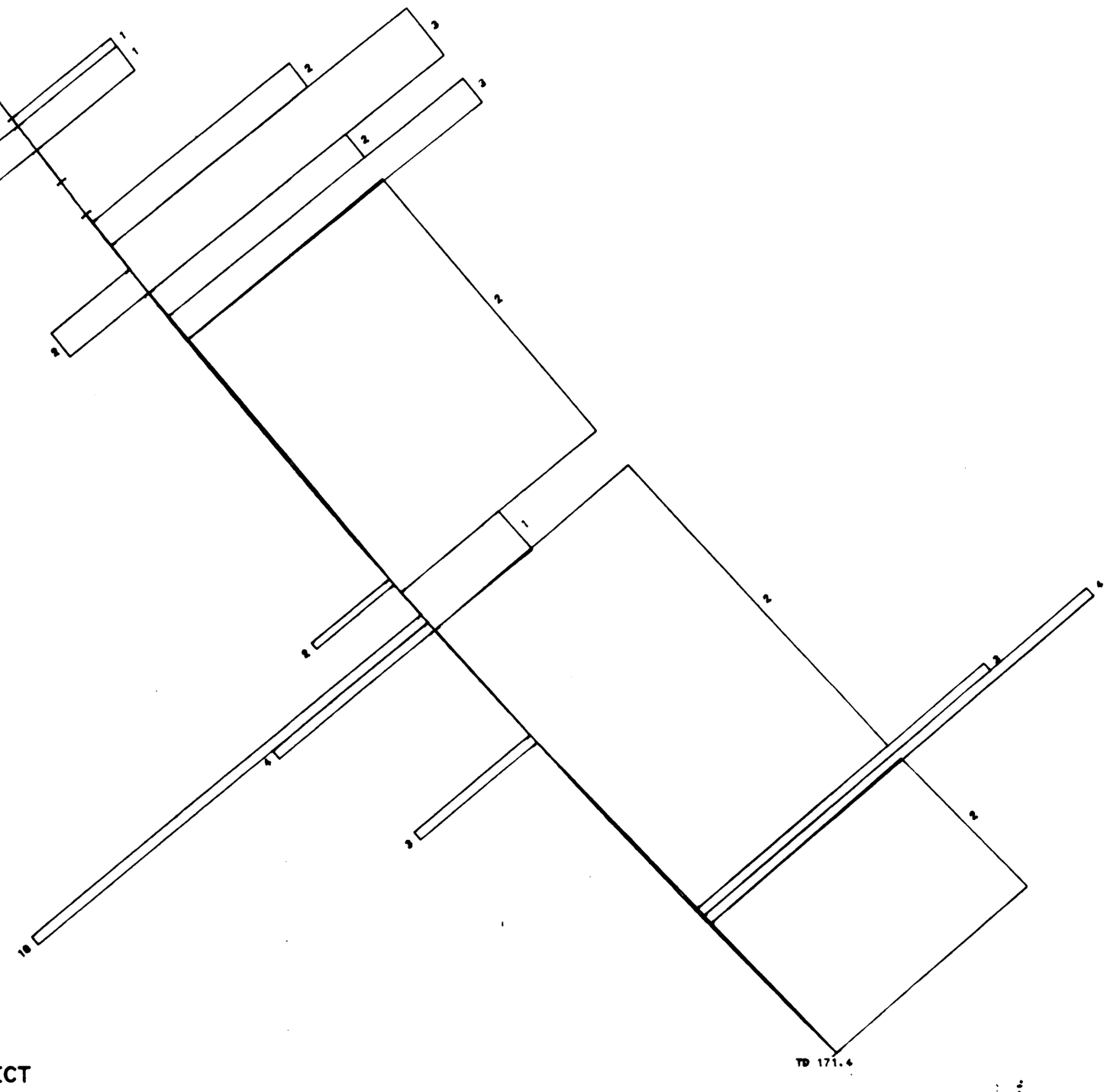
-25

-50

-75

-100

-125



0 1 2 3 4 5
cm

BW A2

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BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 26

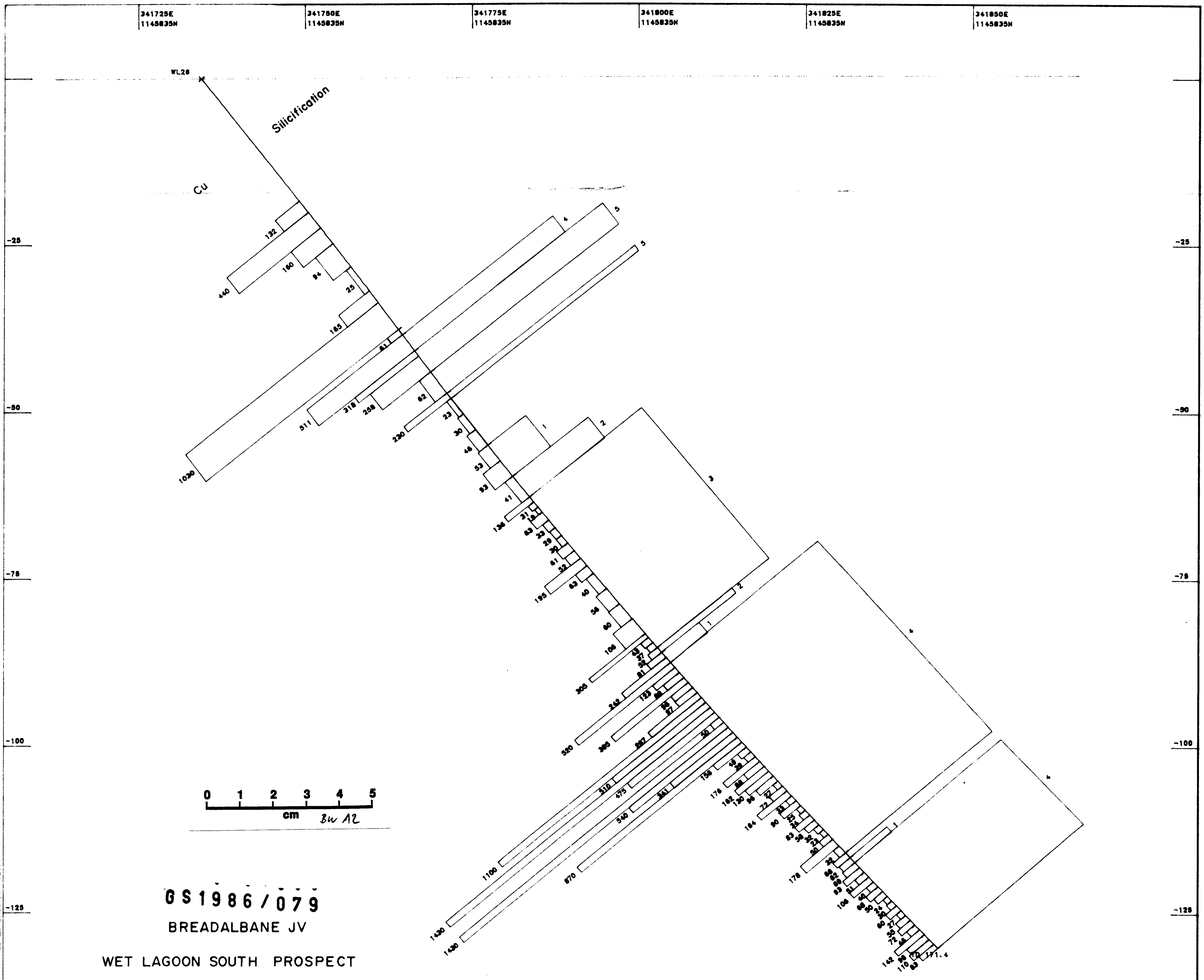
Ag- foliation intensity (ppm)

WL26 Ag (left) foliation (right) in ppm/-
SCALE=1:500

EX EXPLORATION 1297

1:500

FIGURE



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 26

Cu (ppm)-silicification intensity

D000864910

1:500

FIGURE

SCALE=1:500

3417250E
11466300N

3417500E
11466300N

3417750E
11466300N

3418000E
11466300N

3418250E
11466300N

3418500E
11466300N

WL26

pyrite

Au

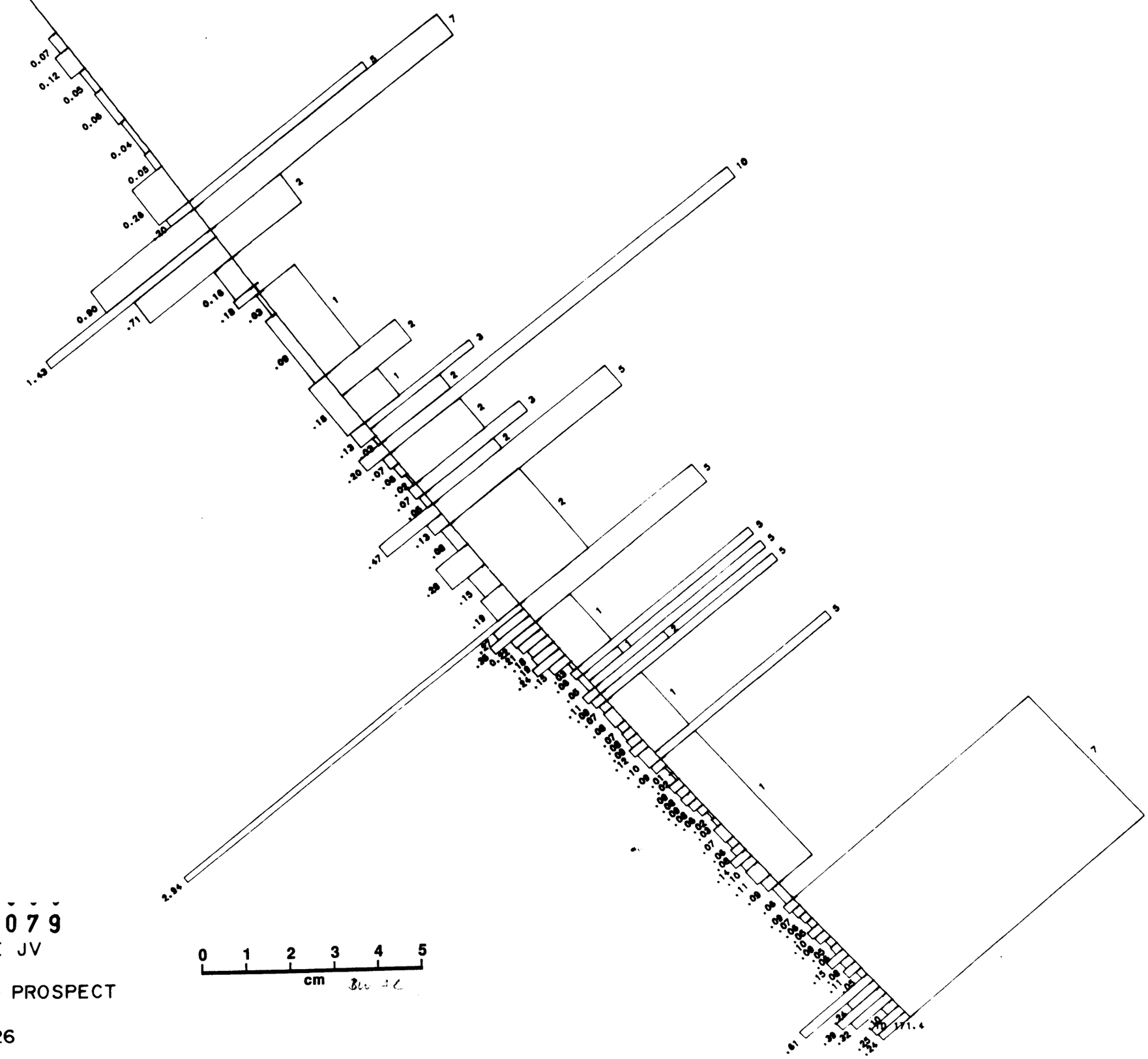
-25

-50

-75

-100

-125



0 1 2 3 4 5
cm

GS1986/079

BREADALANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 26

Au- pyrite (%) - geochemistry

EZ EXPLORATION 1287

WL26 Au (left) pyrite (right) in ppm/-

SCALE=1:500

1:500

FIGURE

341725E
1145835N

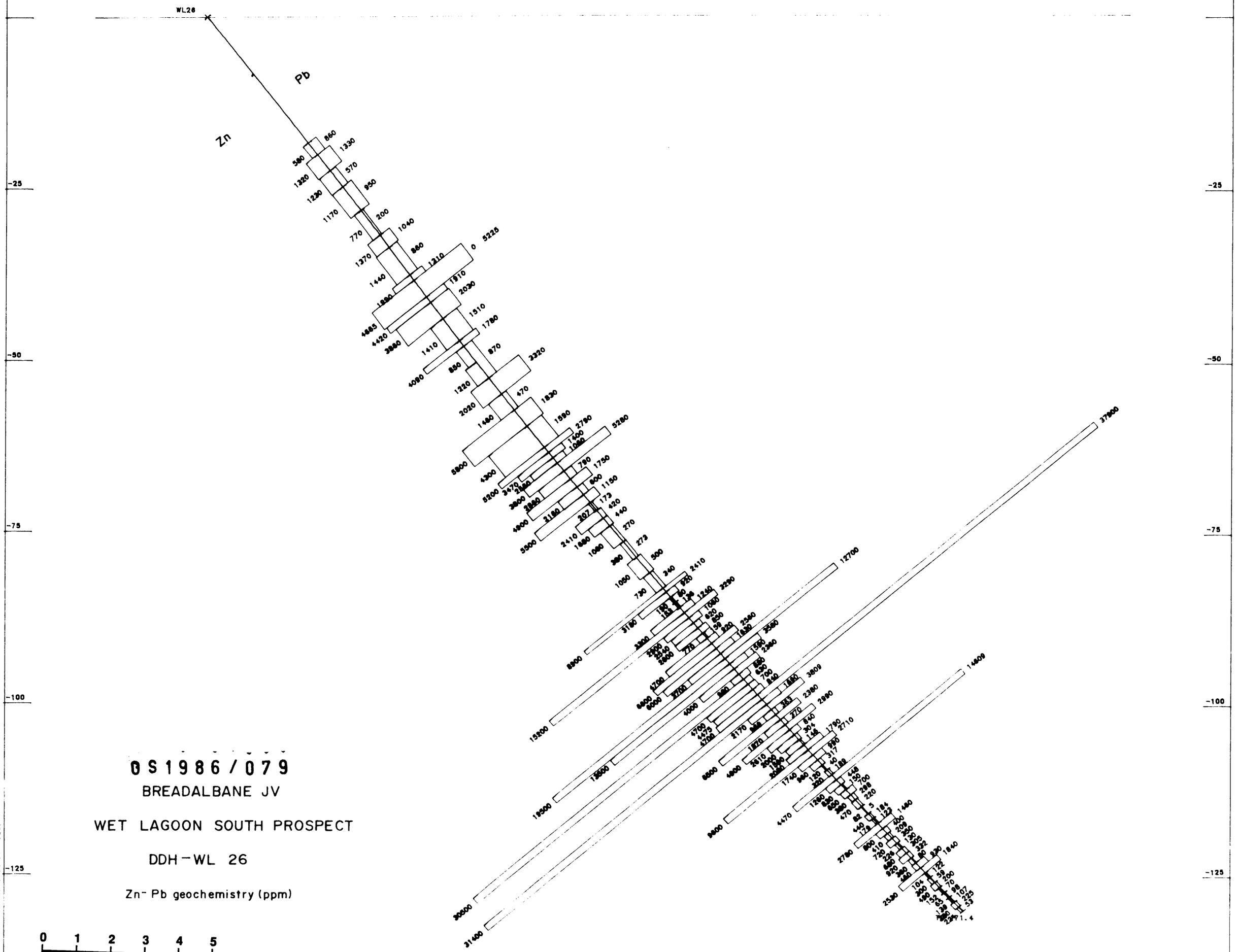
341750E
1145835N

341775E
1145835N

341800E
1145835N

341825E
1145835N

341850E
1145835N



OS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 26

Zn - Pb geochemistry (ppm)

0 1 2 3 4 5
cm

NL26 Zn (left) Pb (right) in ppm
SCALE=1:500 EZ EXPLORATION 1287

1:500

FIGURE

341700E
1145600N

341725E
1145600N

341750E
1145600N

341775E
1145600N

341800E
1145600N

341825E
1145600N

WL27

-25

-50

-75

-100

silicification

pyrite

0 1 2 3 4 5
cm

Iw 13

TD 150.1

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 27

pyrite (%) – silicification intensity

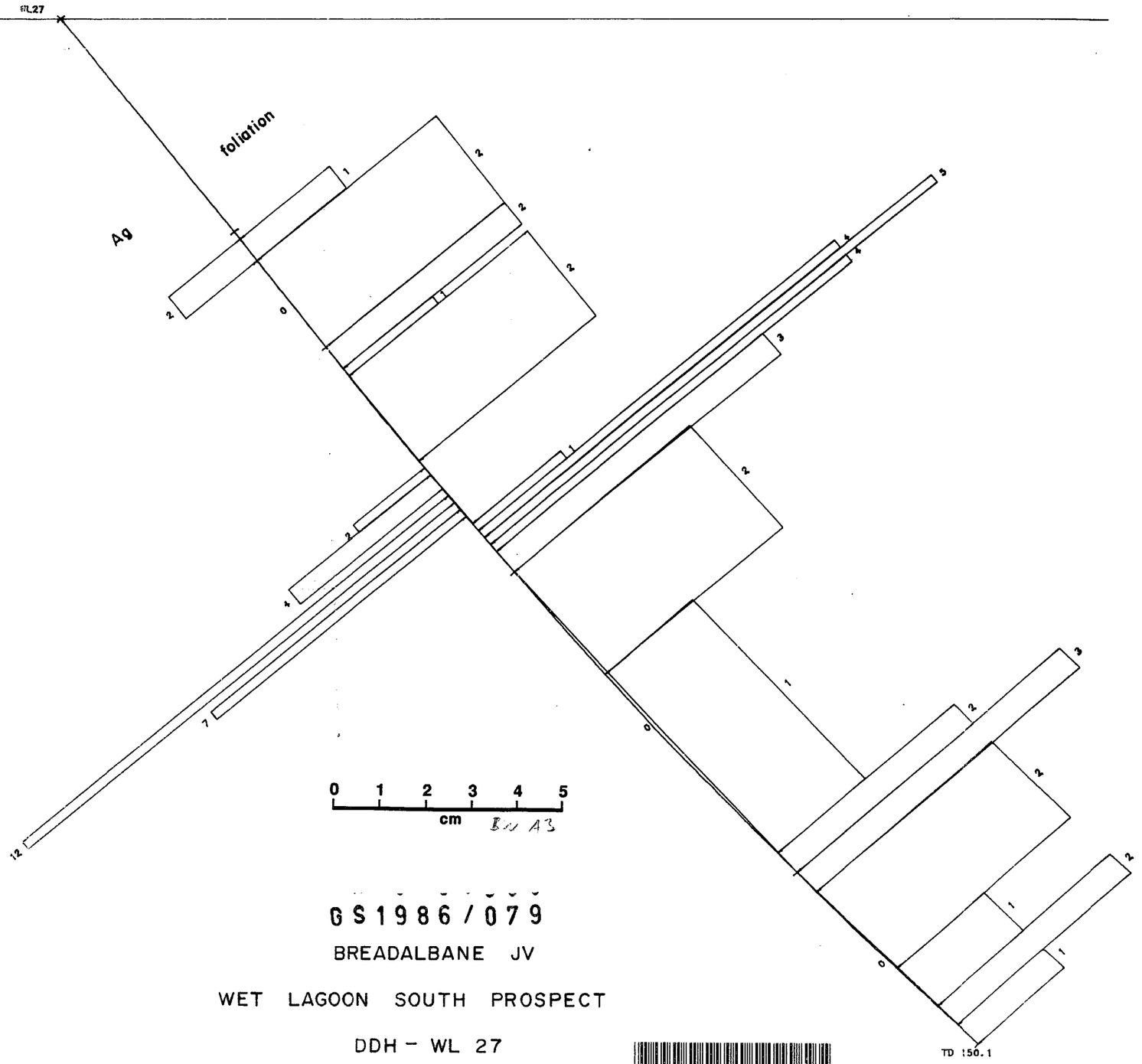
D000864940

WL27 pyrite (left) silicification (right)
SCALE=1:500 EZ EXPLORATION 1287

1:500

FIGURE

341700E 1145550N	341725E 1145532N	341750E 1145580N	341775E 1145580N	341800E 1145580N	341825E 1145630N



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BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 27

Ag (ppm) — foliation intensity

D000864950

WL27 Ag (left) foliation (right) in ppm/-
SCALE=1:500 EZ EXPLORATION 1287

1:500 FIGURE

341700E
1145568N

341725E
1145588N

341750E
1145588N

341775E
1145588N

341800E
1145588N

341825E
1145588N

WL27

Zn

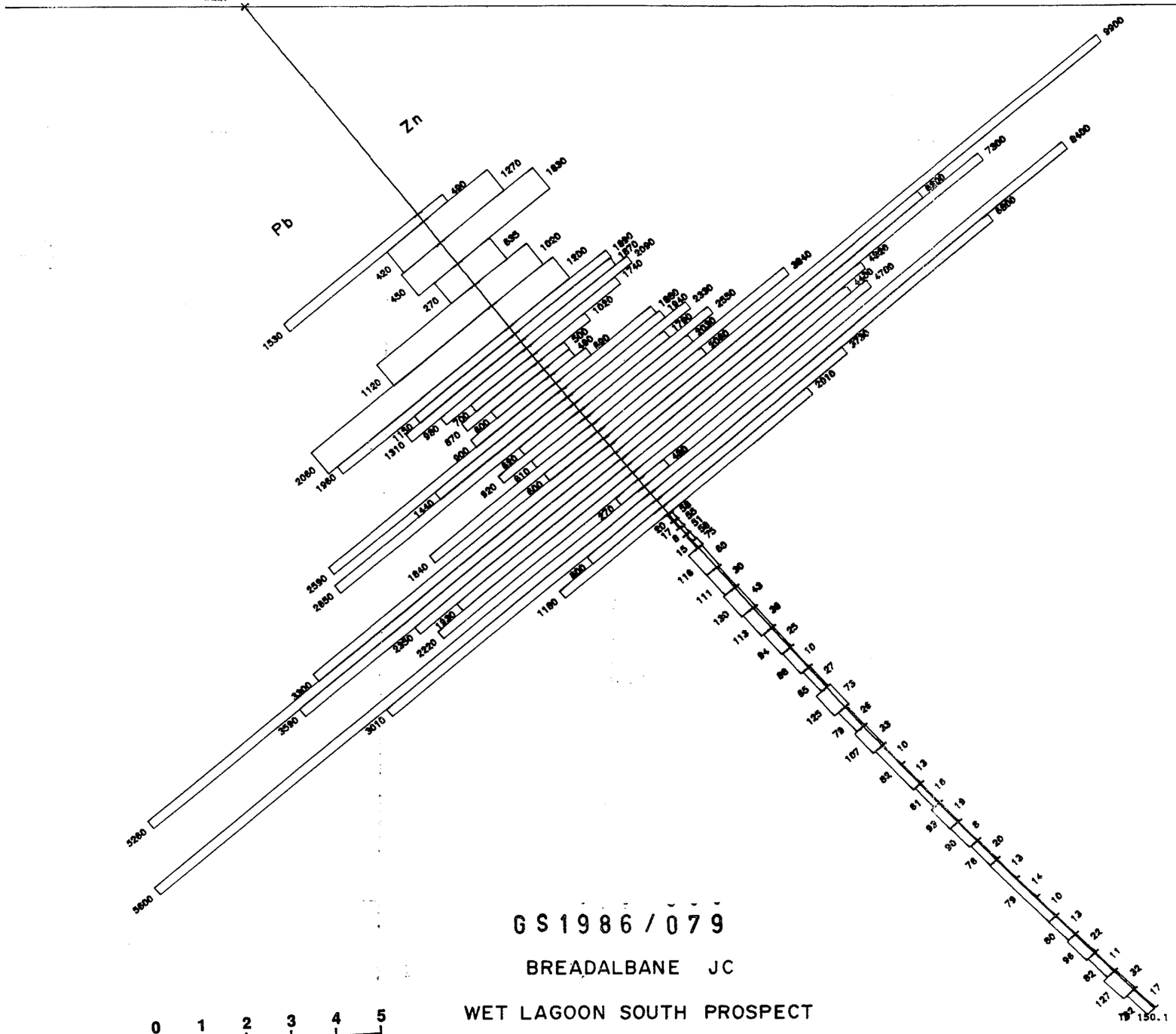
Pb

-25

-50

-75

-100



0 1 2 3 4 5
cm

Bw 43

GS1986/079

BREADALBANE JC

WET LAGOON SOUTH PROSPECT

DDH- WL 27

Pb- Zn geochemistry (ppm)

WL27 Pb (left) Zn (right) in ppm
SCALE=1:500

EZ EXPLORATION 1287

D000864960

1:500

FIGURE

341700E
1145588N

341725E
1145588N

341750E
1145588N

341775E
1145588N

341800E
1145588N

341825E
1145588N

WL27

-25

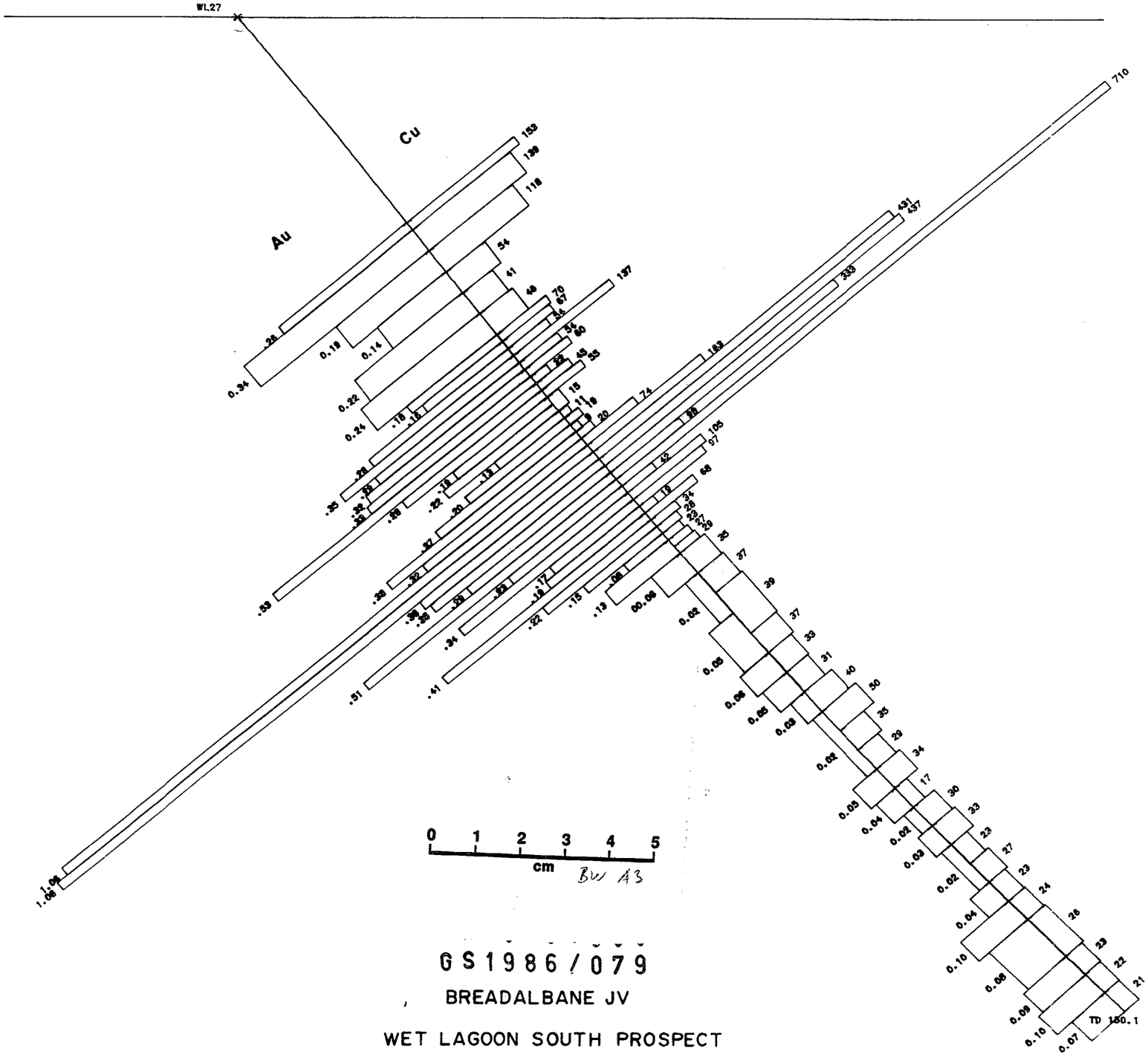
-50

-75

-100

Cu

Au



0 1 2 3 4 5
cm

Bw A3

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH — WL 27

Au - Cu geochemistry
(ppm)

D000864970

WL27 Au (left) Cu (right) in ppm
SCALE=1:500

EZ EXPLORATION 1287

1:500

FIGURE

341750E
1145760N

341775E
1145760N

341800E
1145760N

341825E
1145760N

341850E
1145760N

341875E
1145760N

WL28

Ag

silicification

-25

-50

-75

-100

-125

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 28

silicification intensity - Ag (ppm)

TD 170.4

0 1 2 3 4 5
cm

Rev A2

D000864980

WL28 silicification (left) Ag (right) in -/ppm

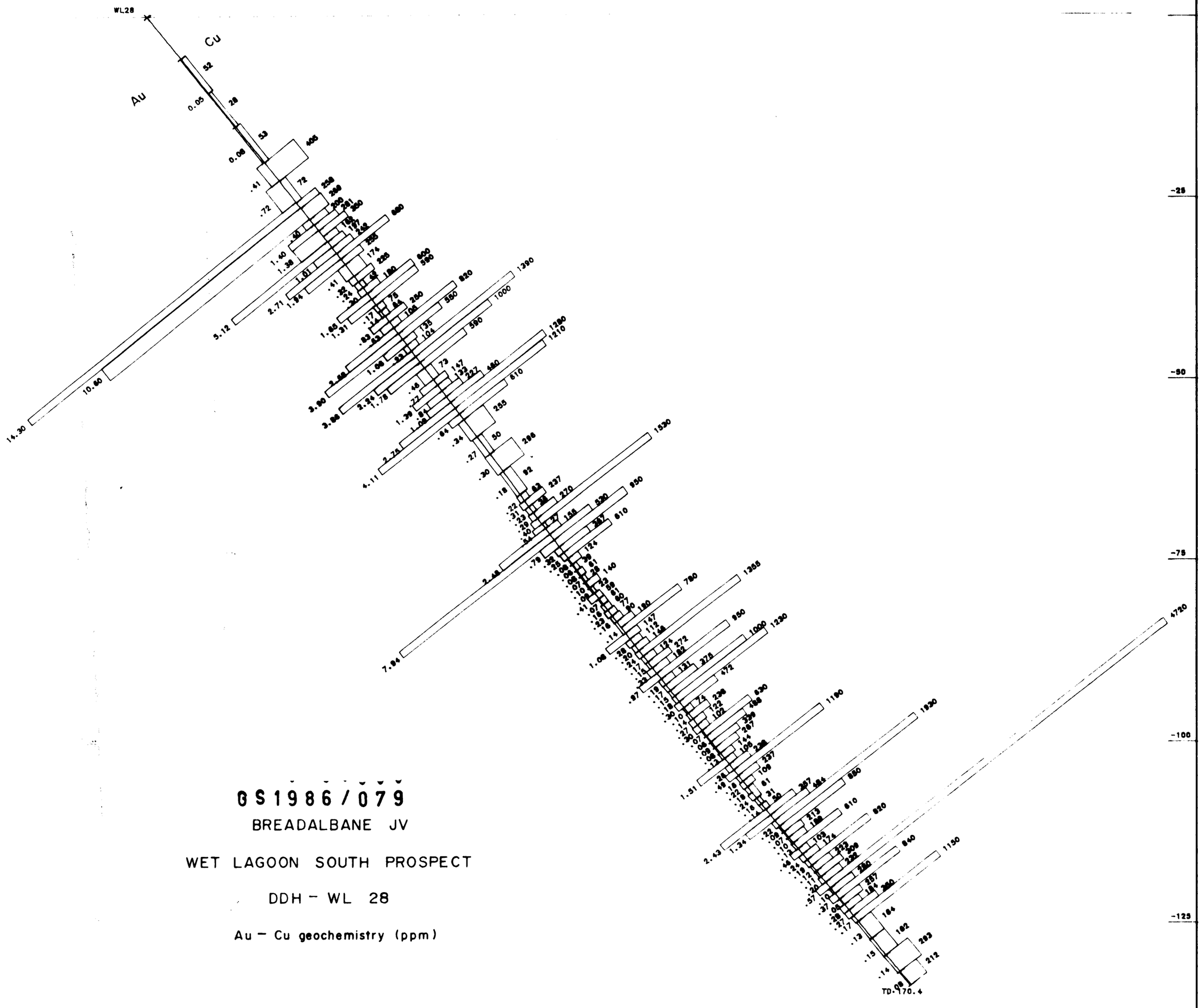
SCALE=1:500 EZ EXPLORATION 1287

1:500

FIGURE

341750E 1145760N | 341775E 1145760N | 341800E 1145760N | 341825E 1145760N | 341850E 1145760N | 341875E 1145760N

-25 | -50 | -75 | -100 | -125



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 28

Au - Cu geochemistry (ppm)

0 1 2 3 4 5 cm

Bw AZ

D000864990

WL28 Au (left) Cu (right) in ppm
SCALE=1:500 EZ EXPLORATION 1287

1:500 | FIGURE

341750E
1145760N

341775E
1145760N

341800E
1145760N

341825E
1145760N

341850E
1145760N

341875E
1145760N

WL28

Pb

Zn

-25

-50

-75

-100

-125

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 28

Pb- Zn geochemistry (ppm)

0 1 2 3 4 5
cm

B/W A2

D000865000

WL28 Pb (left) Zn (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1:500

FIGURE

341750E 1145760N | 341775E 1145760N | 341800E 1145760N | 341825E 1145760N | 341850E 1145760N | 341875E 1145760N

WL28

foliation

pyrite

-25 -50 -75 -100 -125

TD 170.4

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 28

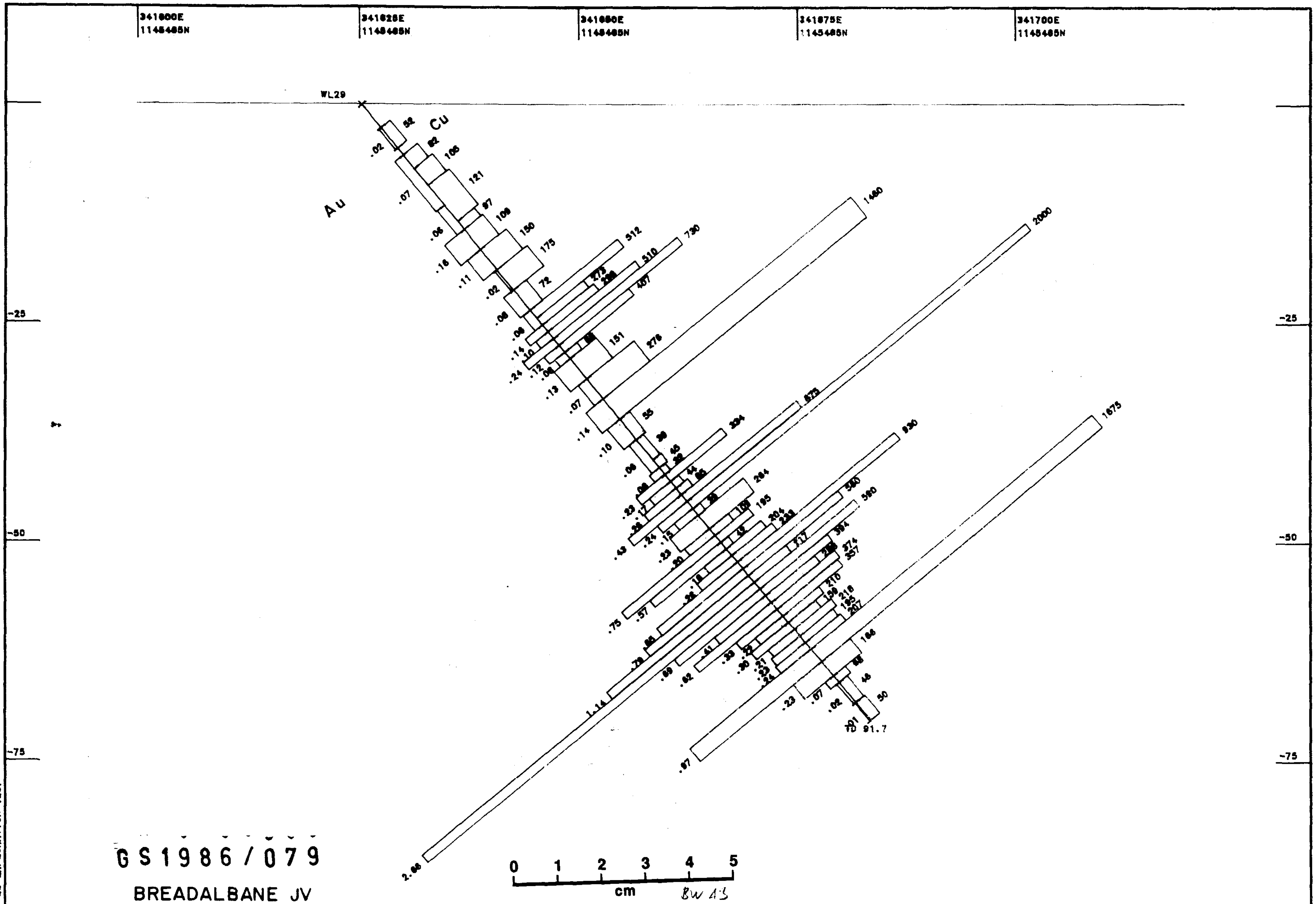
pyrite (%) — foliation intensity

0 1 2 3 4 5 cm

D000865010

WL28 pyrite (left) foliation (right)
SCALE=1:500 EZ EXPLORATION 1287

1:500 FIGURE



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 29

Au - Cu geochemistry (ppm)

WL29 Au (left) Cu (right) in ppm

SCALE=1:500 EZ EXPLORATION 1287

D000865020

1:500

FIGURE

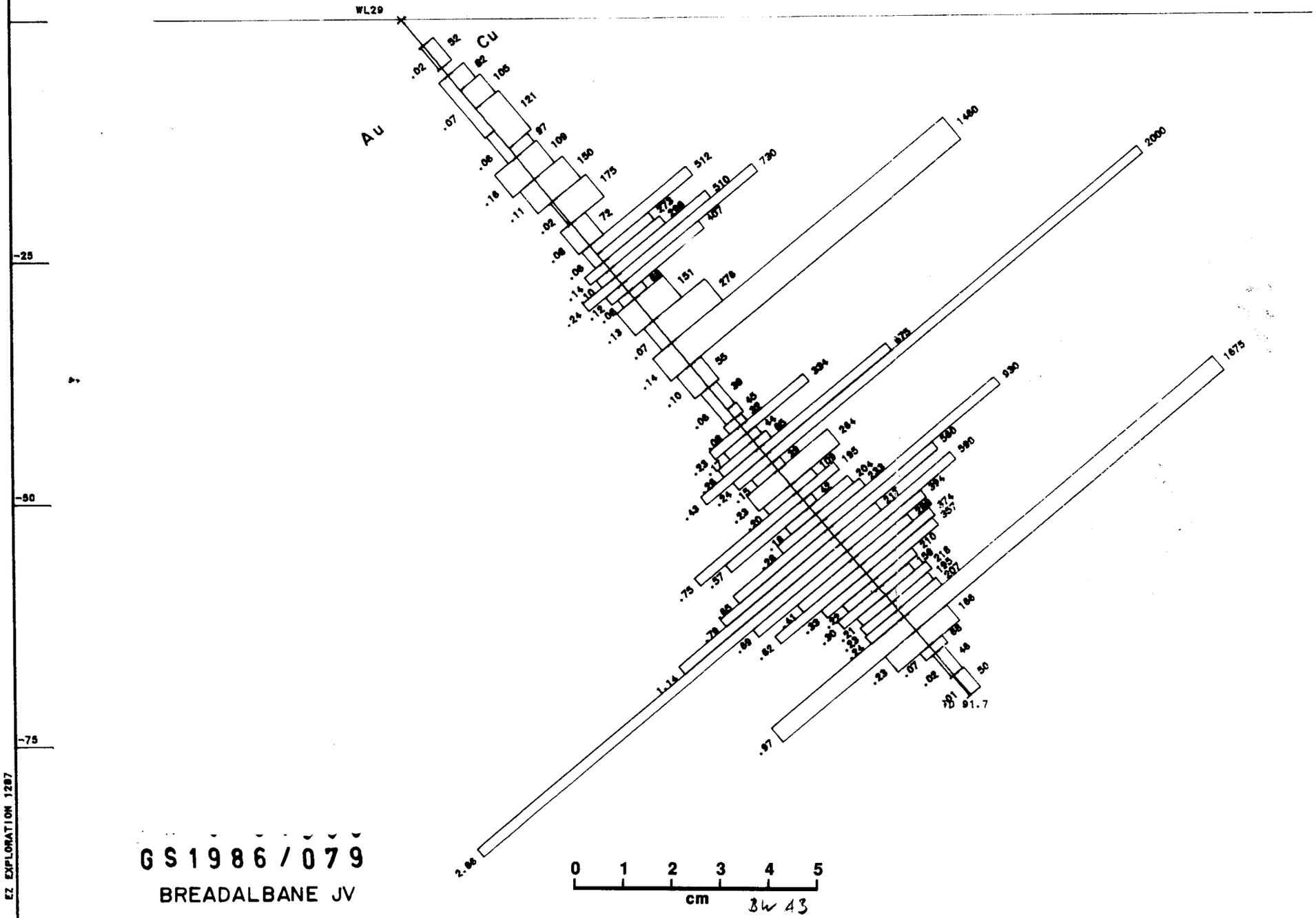
341600E
1145485N

341625E
1145485N

341650E
1145485N

341675E
1145485N

341700E
1145485N



GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 29

Au - Cu geochemistry (ppm)

WL29 Au (left) Cu (right) in ppm

SCALE=1:500

EZ EXPLORATION 1287

1:500

FIGURE

341650E
1145485N

341625E
1145485N

341650E
1145485N

341675E
1145485N

341700E
1145485N

WL29

Pb

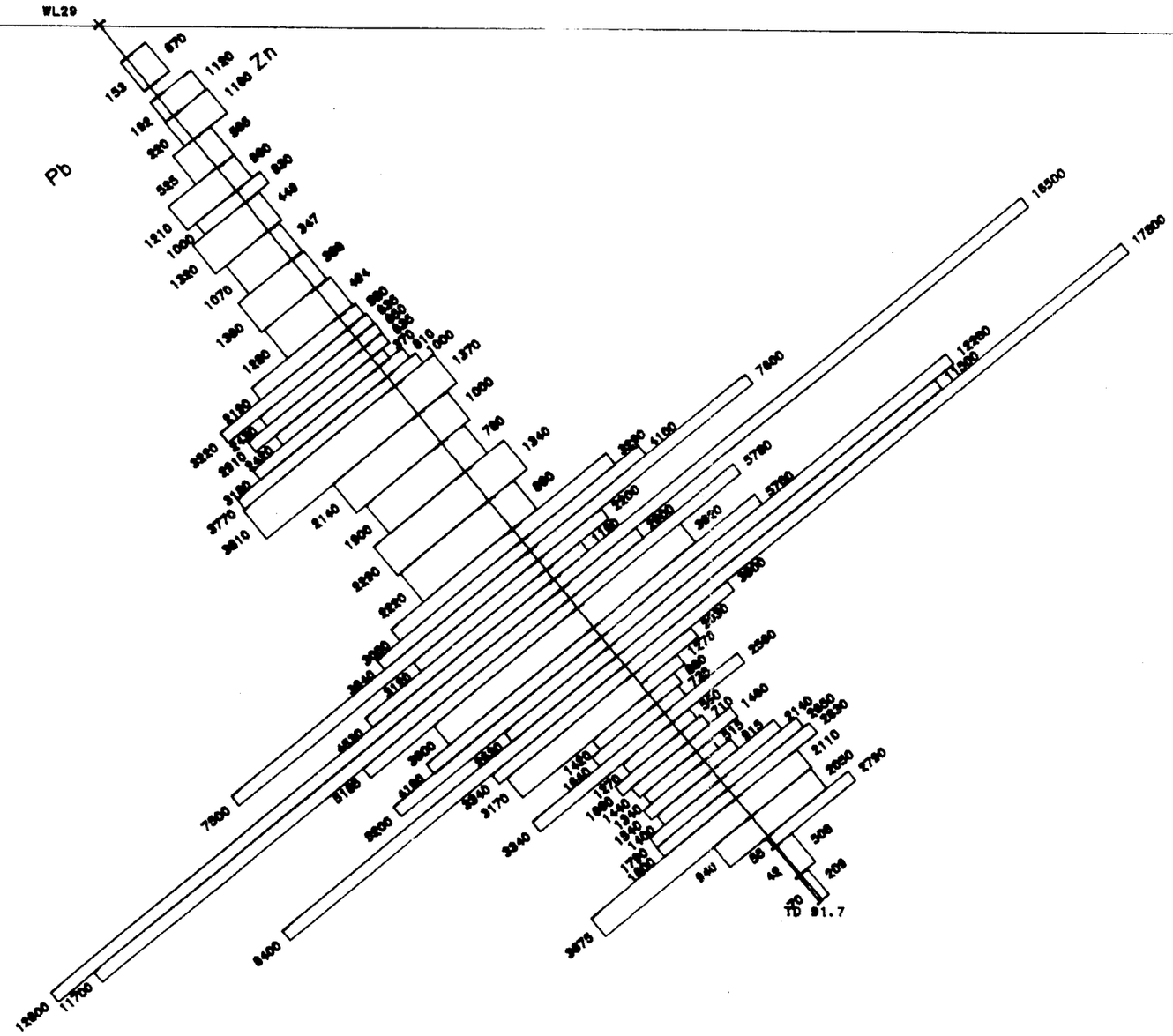
Zn

-25

-50

-75

-100



0 1 2 3 4 5
cm

Bw A3

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 29

Au - Cu geochemistry (ppm)

WL29 Pb (left) Zn (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1 : 500

FIGURE

341675E
1145583N

341700E
1145593N

341725E
1145593N

341750E
1145593N

341775E
1145603N

WL30

Ag

Au

-25

-50

-75

-100

TD 128.0

6.30

GS1986/079

0 1 2 3 4 5
cm

BREADALANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 30

Au - Ag geochemistry (ppm)

D000865050

WL30 Au(left) Cu (right) in ppm
SCALE=1:500 EZ EXPLORATION 1287

1:500

FIGURE

341675E
1145593N

341700E
1145593N

341725E
1145593N

341750E
1145593N

341775E
1145593N

WL30

-25

-50

-75

-100

Cu

Pb

0 1 2 3 4 5
cm

BW 43

EZ EXPLORATION 1287

WL30 Pb (left) Zn (right) in ppm

SCALE=1:500

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BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 30

Cu — Pb geochemistry (ppm)

1:500

FIGURE

341675E
1145583N

341700E
1145583N

341725E
1145583N

341750E
1145583N

341775E
1145583N

WL30

-25

-50

-75

-100

Zn

Pb

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 30

Zn - Pb geochemistry (ppm)

WL30 Zn (left) Ag (right) in ppm

SCALE=1:500

EZ EXPLORATION 1287

0 1 2 3 4 5

cm

3w A3

D000865070

1:500

FIGURE

341775E
1145691N

341800E
1145691N

341825E
1145691N

341850E
1145691N

341875E
1145691N

341900E
1145691N

WL31

Ag

Au

-25

-50

-75

-100

-125

42.60

7.07

3.90

17.10

TD 189.6

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH-WL 31

Au - Ag geochemistry (ppm)

0 1 2 3 4 5
cm

1:500

FIGURE

341775E
1145691N

341800E
1145691N

341825E
1145691N

341850E
1145691N

341875E
1145691N

341900E
1145691N

-25

-50

-75

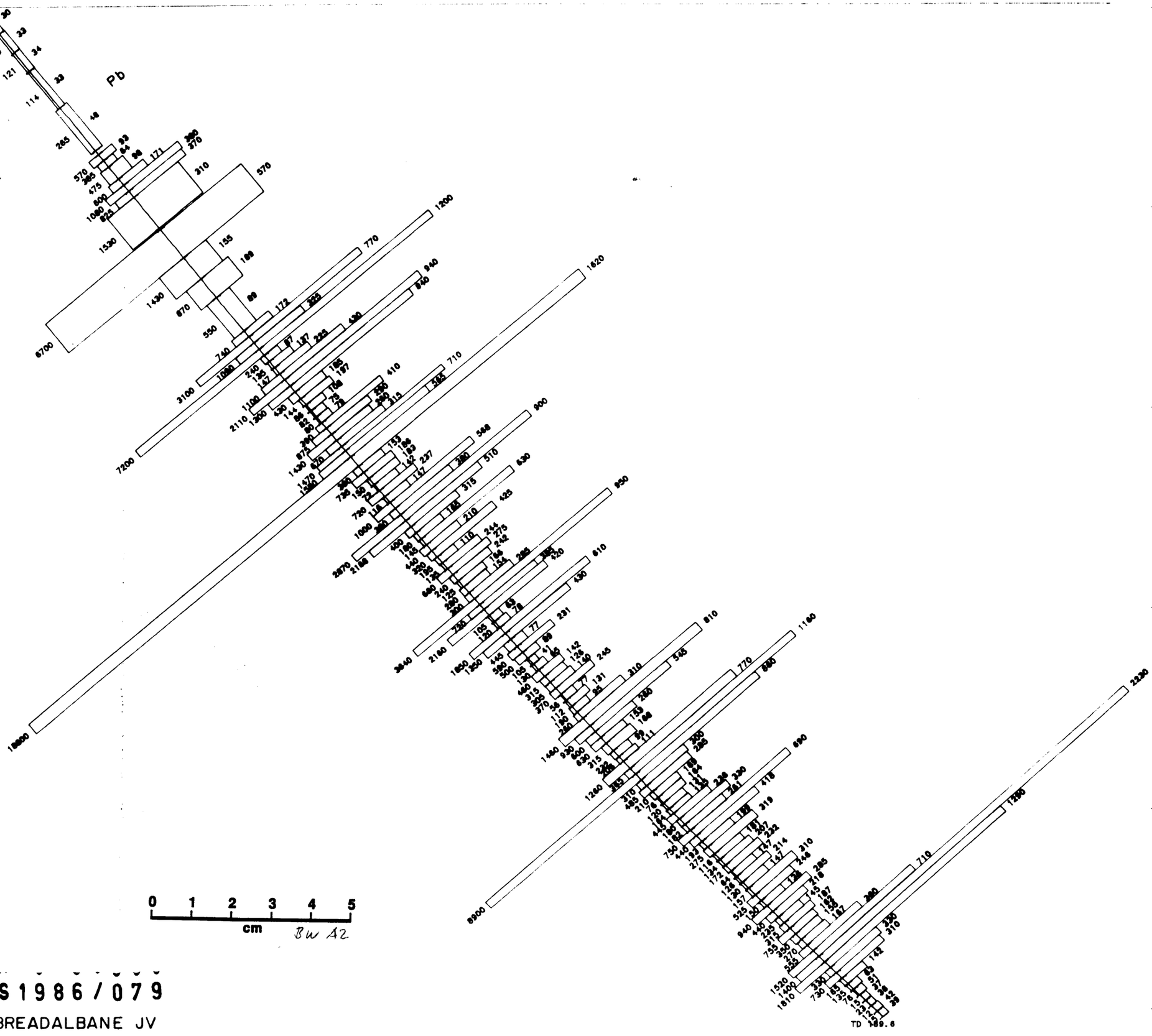
-100

-125

WL31

Pb

Zn



0 1 2 3 4 5
cm

Bw A2

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH- WL 31

Zn - Pb geochemistry(ppm)

WL31 Zn (left) Pb (right) in ppm
SCALE=1:500
EZ EXPLORATION 1287

1 : 500

FIGURE

341775E
1145691N

341800E
1145691N

341825E
1145691N

341850E
1145691N

341875E
1145691N

341900E
1145691N

WL31

Au

Cu

-25

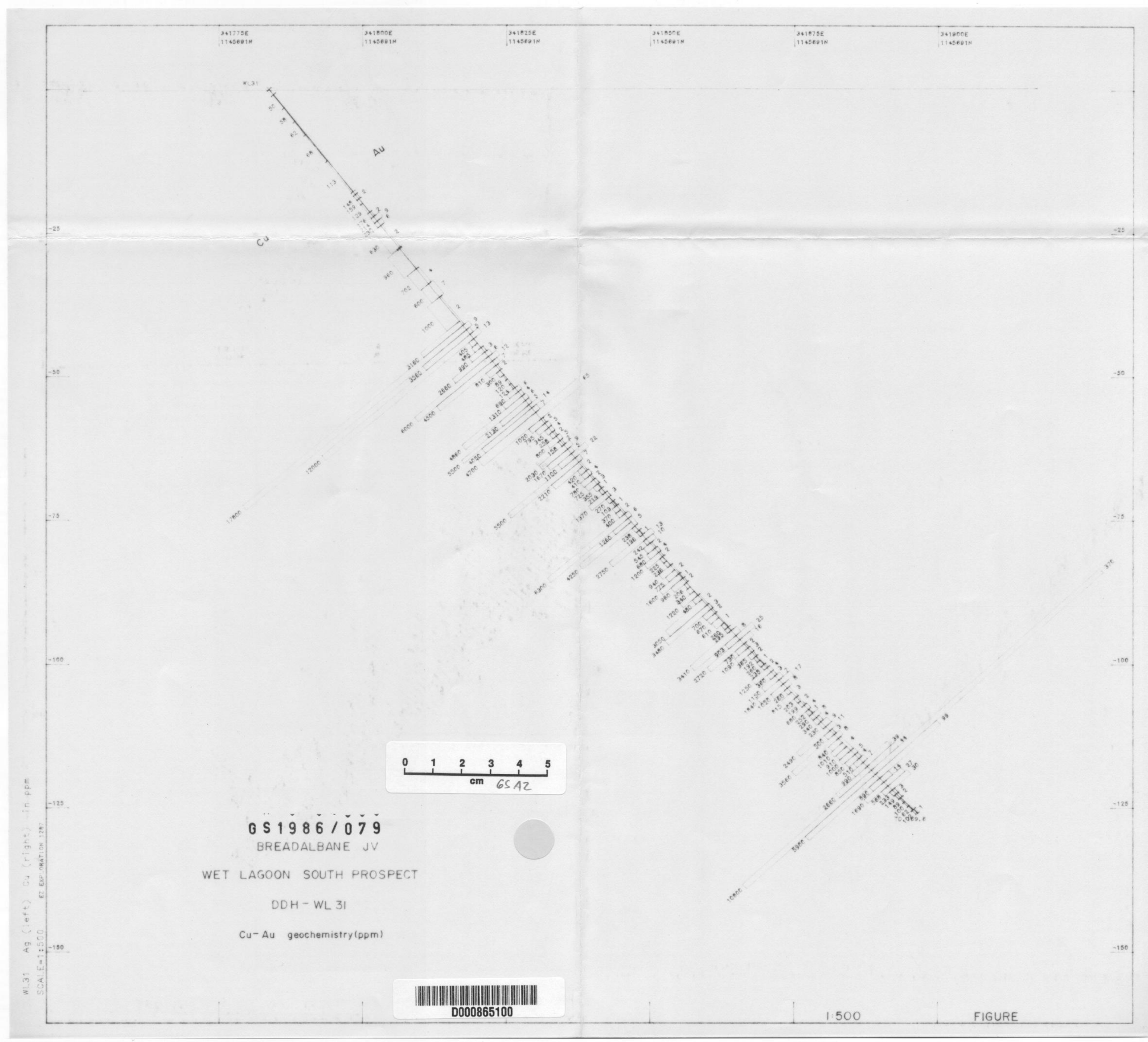
-50

-75

-100

-125

-150



0 1 2 3 4 5
cm GSAZ

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DDH - WL 31

Cu - Au geochemistry(ppm)

WL31 Ag (left) Cu (right) in ppm

SCALE=1:500 EZ EXPLORATION 1287

1:500

FIGURE

341700E

341800E

341900E

342000E

342100E

WL-28

WL-18

WL-30

WL-27

WL-17

WL-24

WL-31

WL-29

WL-19

WL-26

WL-14

WL-25

WL-33

GS1986/079

BREADALBANE JV

WET LAGOON SOUTH PROSPECT

DRILL HOLE PLAN

0 1 2 3 4 5
cm BW A1

D000865110

1:1000

FIGURE

1145501N

1145601N

1145701N

1145801N

1145901N

1146001N

APPENDIX 5

WET LAGOON SOUTH PROSPECT

Spearman Rank Correlations for Au, Ag, Cu, Pb, Zn, pyrite, silicification, foliation distributions in DDH's - WL 14,15,17,18,23-31

WL 14

	Au	Cu	Pb	Zn	Ag
Au	1.0000	-.1062	.0401	.2224	1.0000
	(71)	(71)	(71)	(71)	(71)
	1.0000	.4761	.7877	.1358	.0000
Cu	-.1062	1.0000	.6426	.5555	1.0000
	(71)	(46)	(46)	(46)	(46)
	.4761	1.0000	.0000	.0002	.0000
Pb	.0401	.6426	1.0000	.6148	1.0000
	(71)	(46)	(46)	(46)	(46)
	.7877	.0000	1.0000	.0000	.0000
Zn	.2224	.5555	.6148	1.0000	1.0000
	(71)	(46)	(46)	(46)	(46)
	.1358	.0002	.0000	1.0000	.0000
Ag	1.0000	1.0000	1.0000	1.0000	1.0000
	(71)	(46)	(46)	(46)	(0)
	.0000	.0000	.0000	.0000	1.0000

WL 16

	Au	Cu	Pb	Zn	Ag
Au	1.0000	.7426	.0319	.3676	1.0000
	(29)	(29)	(29)	(29)	(29)
	1.0000	.0189	.9197	.2451	.0000
Cu	.7426	1.0000	.2545	.4100	1.0000
	(29)	(11)	(11)	(11)	(11)
	.0189	1.0000	.4209	.1948	.0000
Pb	.0319	.2545	1.0000	.7927	1.0000
	(29)	(11)	(11)	(11)	(11)
	.9197	.4209	1.0000	.0122	.0000
Zn	.3676	.4100	.7927	1.0000	1.0000
	(29)	(11)	(11)	(11)	(11)
	.2451	.1948	.0122	1.0000	.0000
Ag	1.0000	1.0000	1.0000	1.0000	1.0000
	(29)	(11)	(11)	(11)	(1)
	.0000	.0000	.0000	.0000	1.0000

WL 17

	Au	Cu	Pb	Zn	Ag
Au	1.0000	.6781	.4676	.5541	.5422
	(99)	(99)	(99)	(99)	(99)
	1.0000	.0011	.0249	.0079	.0093
Cu	.6781	1.0000	.6896	.8484	.6307
	(99)	(24)	(24)	(24)	(24)
	.0011	1.0000	.0009	.0000	.0025
Pb	.4676	.6896	1.0000	.7970	.7075
	(99)	(24)	(24)	(24)	(24)
	.0249	.0009	1.0000	.0001	.0007
Zn	.5541	.8484	.7970	1.0000	.8127
	(99)	(24)	(24)	(24)	(24)
	.0079	.0000	.0001	1.0000	.0001
Ag	.5422	.6307	.7075	.8127	1.0000
	(99)	(24)	(24)	(24)	(24)
	.0093	.0025	.0007	.0001	1.0000

WL 18

	Au	Cu	Pb	Zn	Ag
Au	1.0000	-.4007	.3901	.1841	1.0000
	(49)	(49)	(49)	(49)	(49)
	1.0000	.1090	.1186	.4614	.0000
Cu	-.4007	1.0000	-.3286	.4892	1.0000
	(49)	(17)	(17)	(17)	(17)
	.1090	1.0000	.1887	.0504	.0000
Pb	.3901	-.3286	1.0000	.0804	1.0000
	(49)	(17)	(17)	(17)	(17)
	.1186	.1887	1.0000	.7478	.0000
Zn	.1841	.4892	.0804	1.0000	1.0000
	(49)	(17)	(17)	(17)	(17)
	.4614	.0504	.7478	1.0000	.0000
Ag	1.0000	1.0000	1.0000	1.0000	1.0000
	(49)	(17)	(17)	(17)	(0)
	.0000	.0000	.0000	.0000	1.0000

Coefficient (sample size) significance level

WL 23

	Au	Cu	Pb	Zn	Ag
Au	1.0000	.1743	.5667	.6069	.2197
	(83)	(83)	(83)	(83)	(83)
	1.0000	.1144	.0000	.0000	.1202
Cu	.1743	1.0000	.2949	.4621	.6511
	(83)	(83)	(83)	(83)	(83)
	.1144	1.0000	.0076	.0000	.0000
Pb	.5667	.2949	1.0000	.8012	.7898
	(83)	(83)	(83)	(83)	(83)
	.0000	.0076	1.0000	.0000	.0000
Zn	.6069	.4621	.8012	1.0000	.8105
	(83)	(83)	(83)	(83)	(83)
	.0000	.0000	.0000	1.0000	.0000
Ag	.2197	.6511	.7898	.8105	1.0000
	(83)	(83)	(83)	(83)	(51)
	.1202	.0000	.0000	.0000	1.0000

WL 24

	Au	Cu	Pb	Zn	Ag	py	sil	fol
Au	1.0000	.5964	.3656	.4207	.5983	.2460	.1585	-.3758
	(105)	(105)	(105)	(105)	(105)	(105)	(105)	(105)
	1.0000	.0000	.0002	.0000	.0000	.0159	.1224	.0002
Cu	.5964	1.0000	.5782	.6242	.8172	.4506	.4818	-.6695
	(105)	(105)	(105)	(105)	(105)	(105)	(105)	(105)
	.0000	1.0000	.0000	.0000	.0000	.0000	.0000	.0000
Pb	.3656	.5782	1.0000	.7527	.5465	.1743	.2044	-.3528
	(105)	(105)	(105)	(105)	(105)	(105)	(105)	(105)
	.0002	.0000	1.0000	.0000	.0000	.0877	.0463	.0005
Zn	.4207	.6242	.7527	1.0000	.6125	.2079	.1079	-.3179
	(105)	(105)	(105)	(105)	(105)	(105)	(105)	(105)
	.0000	.0000	.0000	1.0000	.0000	.0416	.2928	.0018
Ag	.5983	.8172	.5465	.6125	1.0000	.3730	.4626	-.6579
	(105)	(105)	(105)	(105)	(99)	(99)	(99)	(99)
	.0000	.0000	.0000	.0000	1.0000	.0003	.0000	.0000
py	.2460	.4506	.1743	.2079	.3730	1.0000	.4429	-.7097
	(105)	(105)	(105)	(105)	(99)	(97)	(97)	(97)
	.0159	.0000	.0877	.0416	.0003	1.0000	.0000	.0000
sil	.1585	.4818	.2044	.1079	.4626	.4429	1.0000	-.8141
	(105)	(105)	(105)	(105)	(99)	(97)	(96)	(96)
	.1224	.0000	.0463	.2928	.0000	.0000	1.0000	.0000
fol	-.3758	-.6695	-.3528	-.3179	-.6579	-.7097	-.8141	1.0000
	(105)	(105)	(105)	(105)	(99)	(97)	(96)	(97)
	.0002	.0000	.0005	.0018	.0000	.0000	.0000	1.0000

WL 25

	Au	Cu	Pb	Zn	Ag	py	sil	fol
Au	1.0000	.1302	-.1482	-.2588	-.0444	-.4833	.1075	.2678
	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)
	1.0000	.3174	.2551	.0468	.7350	.0002	.4089	.0397
Cu	.1302	1.0000	.5723	.6070	.4157	.2450	.4152	-.2245
	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)
	.3174	1.0000	.0000	.0000	.0015	.0598	.0014	.0847
Pb	-.1482	.5723	1.0000	.9194	.4095	.6707	.1358	-.4874
	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)
	.2551	.0000	1.0000	.0000	.0018	.0000	.2969	.0002
Zn	-.2588	.6070	.9194	1.0000	.4406	.7030	.1908	-.4947
	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)
	.0468	.0000	.0000	1.0000	.0008	.0000	.1427	.0001
Ag	-.0444	.4157	.4095	.4406	1.0000	.0689	.2119	-.2913
	(60)	(60)	(60)	(60)	(59)	(59)	(59)	(59)
	.7350	.0015	.0018	.0008	1.0000	.5996	.1065	.0265
py	-.4833	.2450	.6707	.7030	.0689	1.0000	.0773	-.6708
	(60)	(60)	(60)	(60)	(59)	(60)	(60)	(60)
	.0002	.0598	.0000	.0000	.5996	1.0000	.5528	.0000
sil	.1075	.4152	.1358	.1908	.2119	.0773	1.0000	-.4181
	(60)	(60)	(60)	(60)	(59)	(60)	(60)	(60)
	.4089	.0014	.2969	.1427	.1065	.5528	1.0000	.0013
fol	.2678	-.2245	-.4874	-.4947	-.2913	-.6708	-.4181	1.0000
	(60)	(60)	(60)	(60)	(59)	(60)	(60)	(60)
	.0397	.0847	.0002	.0001	.0265	.0000	.0013	1.0000

WL 26

	Au	Cu	Pb	Zn	Ag	py	sil	fol
Au	1.0000	.1610	-.0271	-.0167	.2514	.2436	-.0506	-.2680
	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)
	1.0000	.1127	.7898	.8694	.0177	.0216	.6333	.0114
Cu	.1610	1.0000	.3945	.4660	.1861	-.1145	.2940	-.2044
	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)
	.1127	1.0000	.0001	.0000	.0792	.2801	.0055	.0538
Pb	-.0271	.3945	1.0000	.7981	.2001	-.1950	-.0837	-.1471
	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)
	.7898	.0001	1.0000	.0000	.0591	.0659	.4299	.1653
Zn	-.0167	.4660	.7981	1.0000	.2677	-.2572	.0214	-.0709
	(98)	(98)	(98)	(98)	(98)	(98)	(98)	(98)
	.8694	.0000	.0000	1.0000	.0115	.0153	.8398	.5036
Ag	.2514	.1861	.2001	.2677	1.0000	-.0984	-.0580	.0233
	(98)	(98)	(98)	(98)	(90)	(90)	(90)	(90)
	.0177	.0792	.0591	.0115	1.0000	.3534	.5844	.8264
py	.2436	-.1145	-.1950	-.2572	-.0984	1.0000	-.0077	.0598
	(98)	(98)	(98)	(98)	(90)	(90)	(90)	(90)
	.0216	.2801	.0659	.0153	.3534	1.0000	.9419	.5727
sil	-.0506	.2940	-.0837	.0214	-.0580	-.0077	1.0000	-.1574
	(98)	(98)	(98)	(98)	(90)	(90)	(90)	(90)
	.6333	.0055	.4299	.8398	.5844	.9419	1.0000	.1375
fol	-.2680	-.2044	-.1471	-.0709	.0233	.0598	-.1574	1.0000
	(98)	(98)	(98)	(98)	(90)	(90)	(90)	(90)
	.0114	.0538	.1653	.5036	.8264	.5727	.1375	1.0000

WL 27

	Au	Cu	Pb	Zn	Ag	py	sil	fol
Au	1.0000	.4810	.7376	.8114	.4491	.7195	.4171	-.1479
	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)
	1.0000	.0002	.0000	.0000	.0005	.0000	.0011	.2481
Cu	.4810	1.0000	.5311	.4706	.4935	.3154	.4022	-.4035
	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)
	.0002	1.0000	.0000	.0002	.0001	.0146	.0017	.0016
Pb	.7376	.5311	1.0000	.8518	.4151	.6391	.6340	-.3743
	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)
	.0000	.0000	1.0000	.0000	.0012	.0000	.0000	.0035
Zn	.8114	.4706	.8518	1.0000	.4360	.8180	.5920	-.1958
	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)
	.0000	.0002	.0000	1.0000	.0007	.0000	.0000	.1263
Ag	.4491	.4935	.4151	.4360	1.0000	.4107	.3977	-.4714
	(62)	(62)	(62)	(62)	(62)	(62)	(62)	(62)
	.0005	.0001	.0012	.0007	1.0000	.0015	.0019	.0002
py	.7195	.3154	.6391	.8180	.4107	1.0000	.5472	-.2123
	(62)	(62)	(62)	(62)	(62)	(61)	(61)	(61)
	.0000	.0146	.0000	.0000	.0015	1.0000	.0000	.1000
sil	.4171	.4022	.6340	.5920	.3977	.5472	1.0000	-.5679
	(62)	(62)	(62)	(62)	(62)	(61)	(62)	(62)
	.0011	.0017	.0000	.0000	.0019	.0000	1.0000	.0000
fol	-.1479	-.4035	-.3743	-.1958	-.4714	-.2123	-.5679	1.0000
	(62)	(62)	(62)	(62)	(62)	(61)	(62)	(62)
	.2481	.0016	.0035	.1263	.0002	.1000	.0000	1.0000

WL 28

	Au	Cu	Pb	Zn	Ag	py	sil	fol
Au	1.0000	.3385	.3292	.2056	.4196	-.1261	-.0308	.0230
	(122)	(122)	(122)	(122)	(122)	(122)	(122)	(122)
	1.0000	.0002	.0003	.0243	.0000	.1708	.7375	.8027
Cu	.3385	1.0000	.6434	.6331	.3542	-.0606	.2005	-.1448
	(122)	(123)	(123)	(123)	(123)	(123)	(123)	(123)
	.0002	1.0000	.0000	.0000	.0001	.5089	.0287	.1142
Pb	.3292	.6434	1.0000	.8098	.1962	.1791	-.0713	.0680
	(122)	(123)	(123)	(123)	(123)	(123)	(123)	(123)
	.0003	.0000	1.0000	.0000	.0302	.0507	.4368	.4583
Zn	.2056	.6331	.8098	1.0000	.2039	.1483	.0774	.0259
	(122)	(123)	(123)	(122)	(122)	(122)	(122)	(122)
	.0243	.0000	.0000	1.0000	.0249	.1071	.4003	.7787
Ag	.4196	.3542	.1962	.2039	1.0000	-.1556	.2394	-.2061
	(122)	(123)	(123)	(122)	(123)	(123)	(123)	(123)
	.0000	.0001	.0302	.0249	1.0000	.0897	.0090	.0245
py	-.1261	-.0606	.1791	.1483	-.1556	1.0000	-.1124	-.0995
	(122)	(123)	(123)	(122)	(123)	(120)	(120)	(120)
	.1708	.5089	.0507	.1071	.0897	1.0000	.2201	.2776
sil	-.0308	.2005	-.0713	.0774	.2394	-.1124	1.0000	-.7219
	(122)	(123)	(123)	(122)	(123)	(120)	(120)	(120)
	.7375	.0287	.4368	.4003	.0090	.2201	1.0000	.0000
fol	.0230	-.1448	.0680	.0259	-.2061	-.0995	-.7219	1.0000
	(122)	(123)	(123)	(122)	(123)	(120)	(120)	(120)
	.8027	.1142	.4583	.7787	.0245	.2776	.0000	1.0000

WL 29

	Au	Cu	Pb	Zn	Ag
Au	1.0000	.5284	.4134	.4084	.6138
	(54)	(54)	(54)	(54)	(54)
	1.0000	.0001	.0026	.0030	.0000
Cu	.5284	1.0000	.2726	-.0393	.6568
	(54)	(54)	(54)	(54)	(54)
	.0001	1.0000	.0472	.7746	.0000
Pb	.4134	.2726	1.0000	.6269	.1852
	(54)	(54)	(54)	(54)	(54)
	.0026	.0472	1.0000	.0000	.1776
Zn	.4084	-.0393	.6269	1.0000	.1065
	(54)	(54)	(54)	(54)	(54)
	.0030	.7746	.0000	1.0000	.4383
Ag	.6138	.6568	.1852	.1065	1.0000
	(54)	(54)	(54)	(54)	(54)
	.0000	.0000	.1776	.4383	1.0000

WL 30

	Au	Ag	Cu	Pb	Zn
Au	1.0000	.1526	.2173	.3398	.2988
	(74)	(74)	(74)	(74)	(74)
	1.0000	.1922	.0634	.0037	.0107
Cu	.1526	1.0000	.0035	.2459	.3176
	(74)	(74)	(74)	(74)	(74)
	.1922	1.0000	.9759	.0356	.0067
Pb	.2173	.0035	1.0000	.3654	.3582
	(74)	(74)	(74)	(74)	(74)
	.0634	.9759	1.0000	.0018	.0022
Zn	.3398	.2459	.3654	1.0000	.7613
	(74)	(74)	(74)	(74)	(74)
	.0037	.0356	.0018	1.0000	.0000
Ag	.2988	.3176	.3582	.7613	1.0000
	(74)	(74)	(74)	(74)	(74)
	.0107	.0067	.0022	.0000	1.0000

WL 31

	Au	Ag	Pb	Zn	Cu
Au	1.0000	.3166	.4136	.4035	.2226
	(132)	(132)	(132)	(132)	(132)
	1.0000	.0003	.0000	.0000	.0108
Cu	.3166	1.0000	.7676	.6570	.6719
	(132)	(132)	(132)	(132)	(132)
	.0003	1.0000	.0000	.0000	.0000
Pb	.4136	.7676	1.0000	.7348	.7279
	(132)	(132)	(132)	(132)	(132)
	.0000	.0000	1.0000	.0000	.0000
Zn	.4035	.6570	.7348	1.0000	.7832
	(132)	(132)	(132)	(132)	(132)
	.0000	.0000	.0000	1.0000	.0000
Ag	.2226	.6719	.7279	.7832	1.0000
	(132)	(132)	(132)	(132)	(132)
	.0108	.0000	.0000	.0000	1.0000

Coefficient (sample size) significance level

APPENDIX 6

BREADALBANE STREAM SEDIMENT SURVEY RESULTS

Au by cyanide bulk leach

Ag, Cu, Pb, Zn, Fe, Mn, Mo, Ca, As, Bi, Sb, Hg, Se, Te by ICP

Analysed by Australian Laboratory Services Pty Ltd., Brisbane.

[redacted]

Client: ELECTR. OF RUST. LTD.,
Address: P.O
BENCH. 2014

Batch Number: E...

Contact: Mr. L

Order No: HLS ...

Sample Type: STREAM SEDIMENT

No of Samples: 54
Date Received: 28/05/67
Date Completed: 17/06/67

GS 1986/079

SAMPLE NU	Cu ppm IC591	Pb ppm IC591	Zn ppm IC591	Ag ppm IC591	Fe % IC591	Mn ppm IC591	Ca ppm IC591	Mo ppm IC591	As ppb IC591	Bi ppb IC591	Hg ppb IC591	Sb ppb IC591	Se ppb IC591	Te ppb IC591	W ppt PM216	S wt kg
BS1	10	15	40	<1	2.38	120	1250	<2	6400	150	<50	300	<50	50	35.0ppb	8.24
BS2	5	10	25	<1	1.91	195	1200	<2	5500	100	<50	150	<50	<50	550	8.36
BS3	5	25	10	<1	0.63	65	170	<2	1700	50	<50	200	<50	100	1500	5.72
BS4	10	35	15	<1	0.84	230	290	<2	1850	100	<50	200	<50	100	200	5.84
BS5	10	45	10	<1	0.59	390	150	<2	2650	100	<50	350	<50	<50	1300	6.18
BS6	10	25	30	<1	1.85	125	860	<2	3300	150	<50	250	<50	<50	150	7.84
BS7	15	30	60	<1	2.05	210	1550	<2	3500	250	<50	350	<50	<50	100	6.65
BS8	15	15	35	<1	2.15	270	650	<2	2400	200	<50	250	<50	<50	50	7.49
BS9	40	65	135	<1	2.62	2200	3200	<2	6100	400	<50	300	<50	<50	1150	7.62
BS10	10	10	25	<1	2.33	330	190	<2	1950	450	<50	150	<50	100	400	8.17
BS11	15	15	30	<1	2.68	180	810	<2	4500	100	<50	250	<50	<50	200	6.44
BS12	10	15	20	<1	1.61	300	1250	<2	3550	100	<50	300	<50	100	300	6.21
BS13	10	10	45	<1	3.12	430	500	<2	2500	100	<50	200	<50	<50	250	7.65
BS14	15	20	45	<1	2.49	320	1700	<2	3200	100	<50	200	<50	<50	150	7.06
BS15	10	15	30	<1	1.83	90	1950	<2	4450	100	<50	350	<50	<50	300	6.24
BS16	10	20	15	<1	1.89	290	520	<2	7600	100	<50	450	<50	100	450	6.88
BS17	10	15	30	<1	2.52	280	5100	<2	6800	100	<50	400	<50	50	200	7.06
BS18	10	15	15	<1	1.94	470	540	<2	3600	100	<50	200	<50	<50	300	7.37
BS19	10	15	20	<1	1.66	220	530	<2	3400	100	<50	300	<50	<50	350	6.86
BS20	5	10	10	<1	1.10	75	370	<2	1300	50	<50	250	<50	<50	300	6.06
BS21	10	15	15	<1	1.42	80	330	<2	2300	150	<50	250	<50	<50	200	8.87
BS22	10	10	15	<1	2.04	60	300	<2	5150	550	<50	150	<50	100	300	8.45
BS23	10	15	10	<1	1.21	125	520	<2	2600	100	<50	100	<50	<50	300	8.22
BS24	10	15	10	<1	1.47	590	850	<2	2500	50	<50	100	<50	<50	200	6.85
BS25	5	10	10	<1	0.73	320	740	<2	1200	200	<50	50	<50	<50	100	7.78
BS26	10	10	15	<1	1.49	330	400	<2	3100	100	<50	150	<50	<50	150	7.23
BS27	10	15	15	<1	2.12	125	950	<2	3550	150	<50	150	<50	<50	1250	6.33
BS28	5	15	10	<1	1.10	220	390	<2	4400	100	<50	150	<50	50	350	7.01
BS29	5	10	20	<1	1.57	230	460	<2	7650	100	<50	200	<50	<50	150	8.64
BS30	10	15	15	<1	1.68	200	290	<2	3500	100	<50	200	<50	<50	900	7.68
BS31	10	15	30	<1	2.14	185	650	<2	5600	150	<50	350	<50	<50	250	7.62
BS32	10	10	20	<1	1.56	140	350	<2	7150	150	<50	200	<50	<50	250	7.75
BS33	10	15	25	<1	1.48	185	290	<2	2850	100	<50	200	<50	<50	500	5.90
BS34	10	15	15	<1	1.70	130	420	<2	4650	100	<50	200	<50	<50	150	6.62
BS35	5	10	10	<1	1.60	120	1000	<2	1000	<50	<50	50	<50	<50	550	7.66
BS36	10	10	15	<1	1.91	340	1500	<2	1300	100	<50	50	<50	<50	50	10.3
BS37	10	20	25	<1	2.98	200	280	<2	14.9ppm	100	<50	400	<50	100	100	8.12
BS38	35	65	250	<1	3.77	1900	860	<2	7450	300	<50	1250	<50	<50	1000	7.41
BS39	15	25	70	<1	2.69	2700	2300	<2	5800	200	<50	400	<50	50	400	6.15
BS40	10	15	20	<1	1.65	260	320	<2	21.0ppm	100	<50	340	<50	<50	250	6.10
BS41	15	15	30	<1	1.64	105	310	<2	8300	100	<50	350	<50	<50	750	6.78
BS42	5	10	25	<1	1.20	280	590	<2	3350	50	<50	850	<50	<50	1300	7.42
BS43	25	15	30	<1	1.22	140	830	<2	22.9ppm	300	<50	1550	<50	150	550	7.51
BS44	15	20	45	<1	2.39	220	650	<2	12.8ppm	200	<50	700	<50	<50	50	8.26
BS45	30	25	35	<1	4.66	260	470	<2	9750	350	<50	750	<50	200	1500	8.14
BS46	15	10	25	<1	3.13	120	250	<2	7100	250	<50	550	<50	<50	100	9.88
BS47	15	15	25	<1	2.19	155	190	<2	7150	200	<50	400	<50	150	<50	9.40
BS48	15	20	30	<1	3.75	410	280	<2	3650	350	<50	350	<50	150	50	10.1
BS49	5	35	20	<1	0.58	400	250	<2	1250	100	<50	100	<50	<50	100	9.63
BS50	5	30	20	<1	0.53	400	230	<2	1050	100	<50	150	<50	<50	150	9.34
BS51	15	15	15	<1	2.35	70	360	<2	2900	250	<50	200	<50	<50	50	7.69
BS52	15	20	25	<1	3.03	280	340	<2	4150	150	<50	300	<50	<50	250	10.7
BS53	20	25	30	<1	3.77	1300	430	<2	8500	150	<50	350	<50	50	250	7.09
BS54	5	15	15	<1	0.90	360	180	<2	1350	100	<50	150	<50	<50	550	8.20
Detection Limit	2	5	2	1	0.01	5	10	2	50	50	50	50	50	50	50	

Comments

APPENDIX

Reference ES621

Sample No.	Au ppb	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm
1 -80# BS 1-1	4	10	12	25	5.5	<0.5
2 -80# BS 1-2	9	13	13	24	5.0	<0.5
3 -80# BS 1-3	6	17	20	62	6.5	<0.5
4 -80# BS 1-4	4	22	20	85	9.0	<0.5
5 -80# BS37-1	3	14	19	42	2.5	<0.5
6 -80# BS37-2	<1	20	13	27	3.0	1.0
7 -80# BS37-3	8	19	19	64	4.0	3.0
8 -80# BS43-1	<1	10	19	22	3.5	<0.5
9 -80# BS43-2	4	10	25	47	1.5	<0.5
10-80# BS43-3	6	11	12	24	2.5	0.5
11-80# BS43-4	7	12	17	25	1.0	<0.5
12-80# BS43-5	3	10	15	24	2.0	<0.5
13-80# BS44-1	1	11	11	45	<0.5	3.0
14-80# BS44-2	3	11	17	33	1.0	3.0
15-80# BS44-3	3	10	20	31	<0.5	<0.5
16-80# BS45-1	2	14	20	37	3.5	<0.5
17-80# BS45-2	5	13	24	74	2.0	<0.5
18-80# BS45-3	5	16	29	42	4.5	<0.5