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Allstate Explorations N. L.

79-1346.

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174001

MEMO

MICROFILMED

TO : H.D. Kennedy

FROM : T.E. Bates

SUBJECT : EL 17/73 Beaconsfield

Potential for locating Reefs near to and Approximately Parallel to the Tasmania Reef.

Various old plans held by the Tasmania Mines Department, and reports by old workers in the area mention the location of some gold bearing structures that may be nearly parallel to the Tasmania Reef.

In all cases these reports are unsubstantiated by firm documentary evidence. They are mostly mentioned as situations that the writers of the various articles were informed about by former mine workers. No development was carried out on these structures for the following reasons.

- i) Two small and too low grade.
- ii) Pyritic nature of ore.
- iii) Making too much gas to be worked, so sealed off.
- iv) Only cut through corner of lease.

To try to get some idea of the likely position of these rumoured structures a series of cross sections have been constructed.

The point of origin for these cross sections is the Bonanza Shaft. The sections are all constructed at right angles to a base line with a bearing of $055\frac{1}{2}^{\circ}$, (True), that commences at a point 160 metres at $325\frac{1}{2}^{\circ}$ from the Bonanza Shaft. The first section, A A', runs through the Bonanza Shaft, and the others are situated at 90, 180, 270, 340, 400, 480 and 590metres north easterly along the base line which is approximately parallel to the strike of the Tasmania Reef.

Information to construct the cross sections was largely obtained from Tasmania Mines Department Plans 2418-30, 3206, 3038, a longitudinal section of the reef (in Watts Griffis & McQuat's report), Geological Plan of the Tasmania Mine Plan No. 2, and various drill sections. Some discrepancies arise as to the position of various shafts and levels on these plans. In particular No. 5 level (715') diverges in position to the North east on plans 2418-30 and 3206 so that at section GG' the position as plotted from each plan differs by some 15m. As Level 5 is the key level in linking the information on the two plans the average position has been adopted.

From the various sections the average dips of the reef for the zones above and below 5 level are listed below.

<u>Section</u>	<u>Above 5 level</u>	<u>Below 5 level</u>
AA'	63°	
BB'	62°	56°
CC'	67°	61°
DD'	72°	62°
EE'	74°	57°
FF'	62°	64°
GG'	67°	68°
HH'		60°

These dips indicate some flexuring of the reef along strike and down dip. They are also at variance with the generally accepted dip of the reef, 50° by Cundy and Fawcett, and 50° - 60° by Willstead.

Stacked sections show that in the upper levels the reef is approximately parallel to the base line but that, at levels below 900', the lower part of the reef swings towards the base line.

Various plans and reports indicate that gold bearing structures approximately parallel to the main reef were cut in four places by early miners.

- i) Hudson (1923) reports that a pyritic gold bearing reef was cut in the Bonanza Shaft at a level of 1000'. Pencil notes on plans show this reef at 1056' depth. Assay values are variously given as 11.0 to 14.0 dwts Au/ton. The reef is by inference about 2 metres thick. No development took place on this reef as it was in a corner of the Bonanza Property.
- ii) Hudson (1923) reports that in 1887 a crosscut was driven south at the 500' level. A branch lode was struck and yielded 10,000 oz Au and the crosscut was extended a total distance of 400' where a 2m pyritic lode parallel to the main reef was cut. This reef was not driven on due to the high levels of gas emanating from it. Assays from this reef are variously reported as being from 10 to 15 dwts Au/ton.
- iii) Cundy & Fawcett (1914) record that at 1250 feet from Harts Shaft (this presumably means 1250 level as a crosscut of required length occurs on plans), a crosscut was driven northwards for 655 feet. At 370 feet from the main reef a small irregular reef was cut and followed east for 210 feet but, although carrying gold, was too low grade to pay.

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- iv) Hudson (1923) reports that in 1914 tributers constructed a small hanging wall crosscut on the 1500 level about 500' east of Grubb's shaft. The crosscut intersected a 6 foot reef some 9 feet out from the main reef. No assay was taken as the tributers were abandoning the mine. Hudson suggests a correlation between this and a branch lode reported by Heathcote (1914) that assayed 4.0 dwt Au/ton over 4.5 feet.

The position of the first three reported reefs can be established with a reasonable degree of certainty, although as far as the second is concerned there is some doubt as to whether the reef is 400 feet from the main lode or from the branch lode.

After consideration of the geological features and the location of the reported reefs, only the first two are thought worth pursuing as drill targets from surface.

The fourth reef is too deep, and is most likely a branch of the main reef as it is not recorded in either of the drill holes to the west (ie A6 or B4) of its supposed position. However, it is worth noting that in the area of drill intersection significant splits in the reef are indicated by level plans on the 1250, 1370, and 1500 levels and that, in places, the splits are 10 to 20 metres apart. None of the drill holes has been drilled deep enough to be certain that only one reef is present in the zone of intersection.

The third reef is apparently small and low grade and also situated at depth (1250'). Higher crosscuts to the west have not indicated evidence of a reef in similar position, although only a slight divergence in dip and/or strike of this reef from an orientation parallel with the Tasmania Reef would cause the reef to pass to the north of cross cuts shown on sections D - D' and C - C'. As there is no way of predicting in which direction width and grade of this reef might improve, and because any drilling from surface would necessarily pass through old workings, it does not constitute a worthwhile target at this stage of exploration.

Reefs i and ii are considered to present the best, most readily accessible, and least costly targets for surface diamond drilling. Since the mine closed these two reported intersections are apparently the basis for proposing the presence of a South lode. In an attempt to locate this south lode the Tasmanian Mines Department drilled DDH B5 in 1969 to a depth of 663 feet. No lode material was intersected, but between 370 and 440 feet no core was recovered and no sampling of sludge or chips carried out.

The Southern Lode hypothesis is premised upon correlating the pyritic lodes intersected in the Bonanza Shaft and the 500 level south crosscut. This correlation would be based on:

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- i) Apparently similar size and grade of each reef.
 - ii) Apparently similar pyritic nature.
 - iii) Supposed parallelism of both reefs to the Tasmania Reef.

At this stage it should be noted that no reef material that could correlate with either reef has been recorded in the number 2 Adit Level, the main shaft, or the Phoenix Shaft. In view of this it must be considered that, if present, the reef or reefs do not extend to surface.

Examination of the various cross sections show that, if the two reefs are one and the same, they are either:

- a) Not parallel to the Tasmania Reef, and strike more nearly east west than the section line, or
- b) they have been disrupted by faulting, or

alternatively the reef in the Bonanza Shaft is really the western most end of the Tasmania Reef.

Examination of the various sections also shows that the Mines Department Drill Hole DDH B5 was not deep enough to intersect the extension of the reef found in the 500 foot crosscut if this reef is in fact nearly parallel to the Tasmania Reef.

Conclusions

1. Whether the pyritic reefs represent one or two reefs, they remain the only significant targets presently known which can be tested by relatively shallow diamond drilling.
2. There is no reason to assume that all fissures parallel or near parallel to the Tasmania Reef will reach the surface.
3. Ore controls on fissures near and approximately parallel to the Tasmania Reef are likely to be the same as for the Tasmania Reef. Hence exploration potential west of the Bonanza Shaft is severely limited by the presence of an "upper" horizon formed by the steeply west dipping main cross course fault, and a "lower" horizon formed by the east? dipping limestone recorded in the bottom of the Bonanza Shaft.

Recommendations

1. One diamond drill hole of approximately 200 metres, angled at -55° should be drilled in section CC' to intersect the supposed pyritic lode on the 500 level cross cut.
2. A second diamond drill hole angled at -60° and approximately 350 metres in length should be drilled on a section parallel to sections AA' and B'B' and about half way between them to intersect the possible eastern extension of the pyritic lode in the Bonanza Shaft.

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N.B. The existence, position, nature and grades of the two pyritic lodes is not firmly established, being largely based on verbal reports of mine workers to various investigators. Further detailed searching of old records and reports is required to attempt to verify the existence of these lodes before drilling is undertaken.



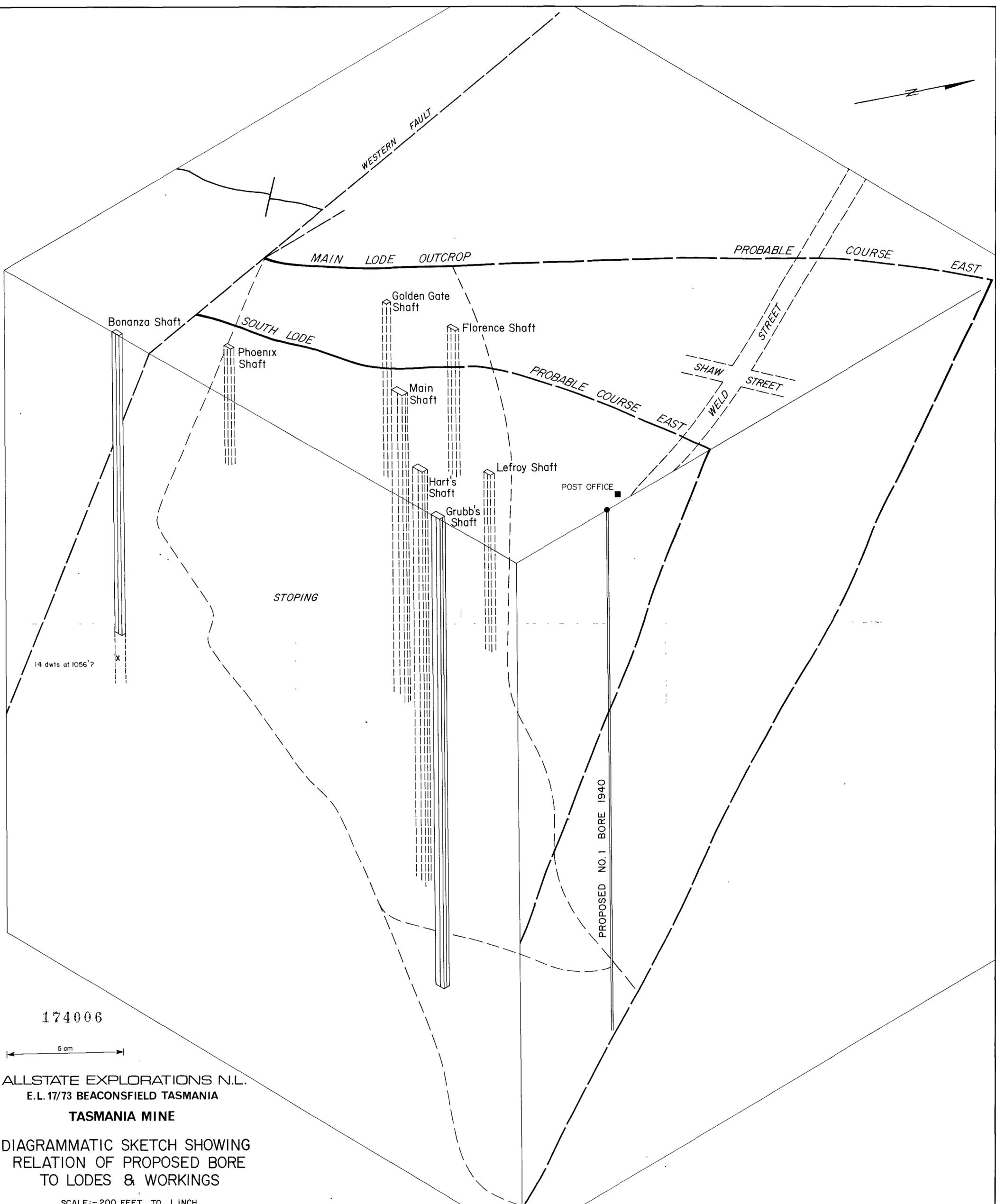
for.

T.E. Bates

29.4.1979

MAPS

1. EL 17/73 Beaconsfield. Diagrammatic sketch
2. Underground mine.
3. Beaconsfield Section A A
4. - Section B B
5. - - C C
6. ✓ - D D
7. - - E E
8. - - F F
9. - - G G
10. - - H H



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5 cm

ALLSTATE EXPLORATIONS N.L.
E.L. 17/73 BEACONSFIELD TASMANIA
TASMANIA MINE

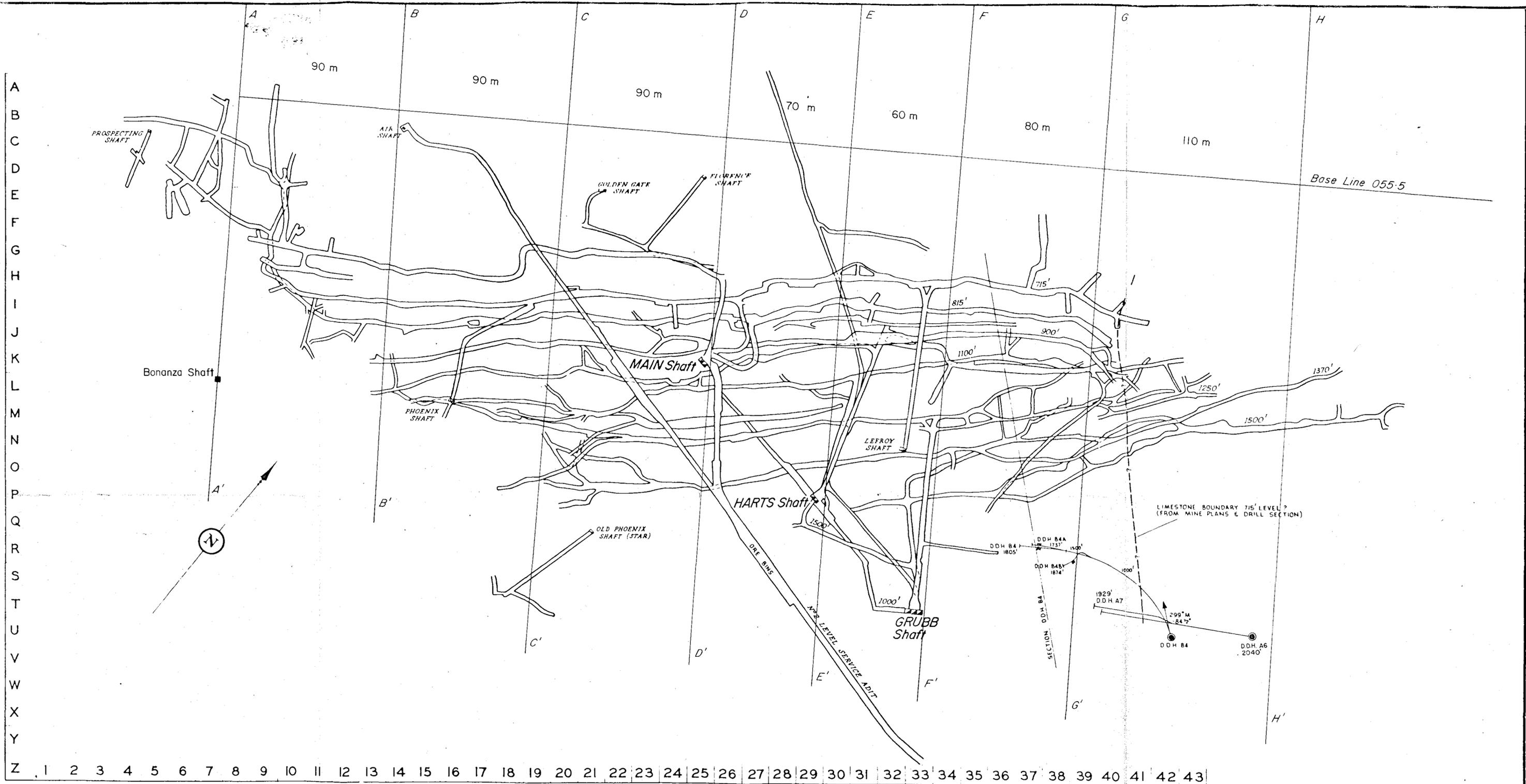
DIAGRAMMATIC SKETCH SHOWING
RELATION OF PROPOSED BORE
TO LODES & WORKINGS

SCALE: - 200 FEET TO 1 INCH

Traced from copy provided by Tasmanian
Mines Department Some distortion of scale

Q.J. Henderson 1940

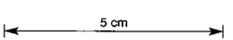
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79-1546 Copy 1.

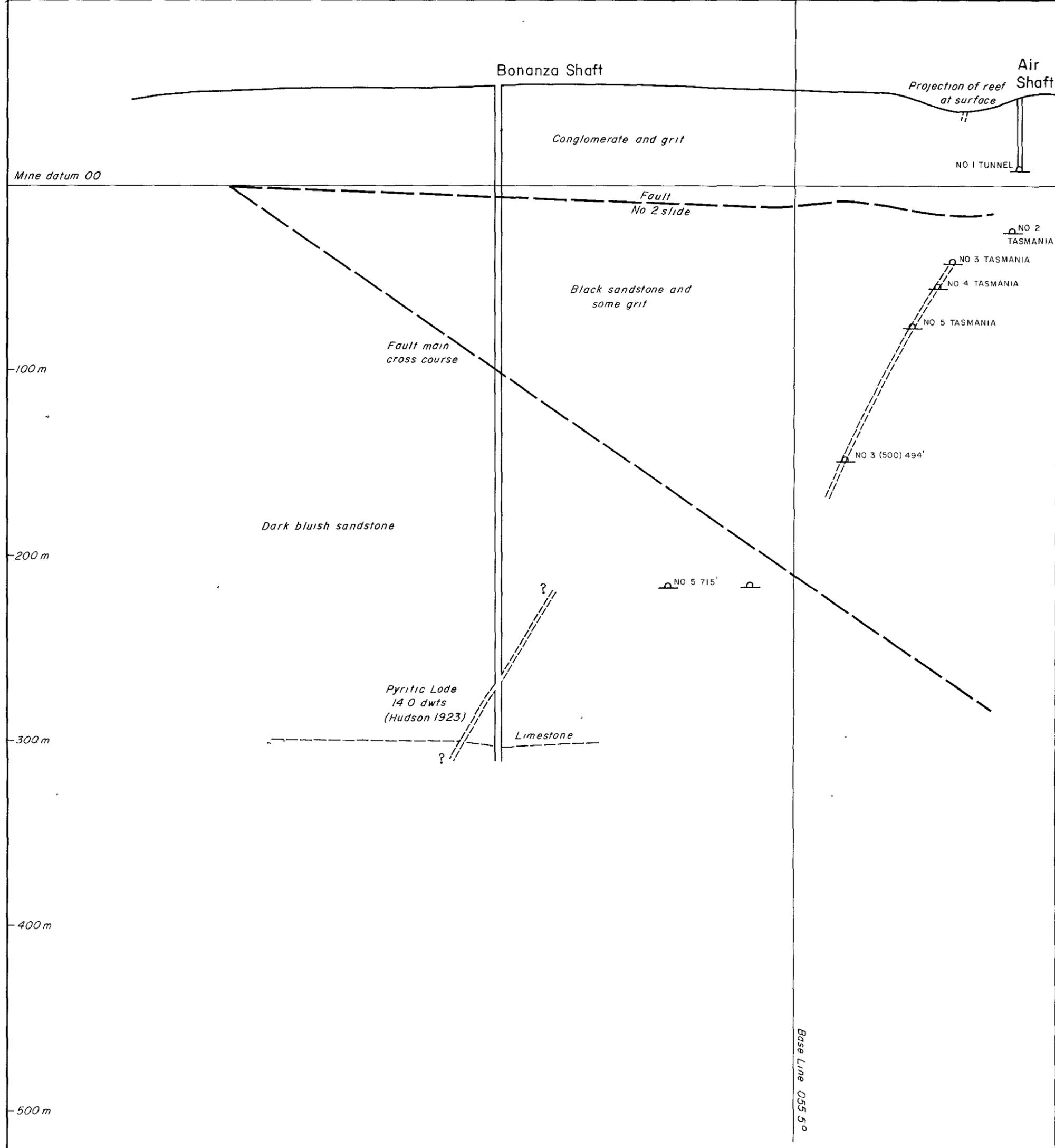
174007

NOTE: MINE PLAN & GRID AFTER THE TASMANIA G.M. CO. LTD



After: Dept Mines - TASMANIA
UNDERGROUND PLAN
TASMANIA MINE - BEACONSFIELD
 DATE: May 1967
 SCALE OF FEET: 0 50 100 150
 GEOLOGIST:
 DRAUGHTSMAN: D. Handberg
 MAP SHEET & N° 2

Prepared by:
Watts, Griffis and McQuat and Associates
 Consulting Geologists and Engineers
 159 Kent St., Sydney
 for:
ALLSTATE EXPLORATIONS N.L.



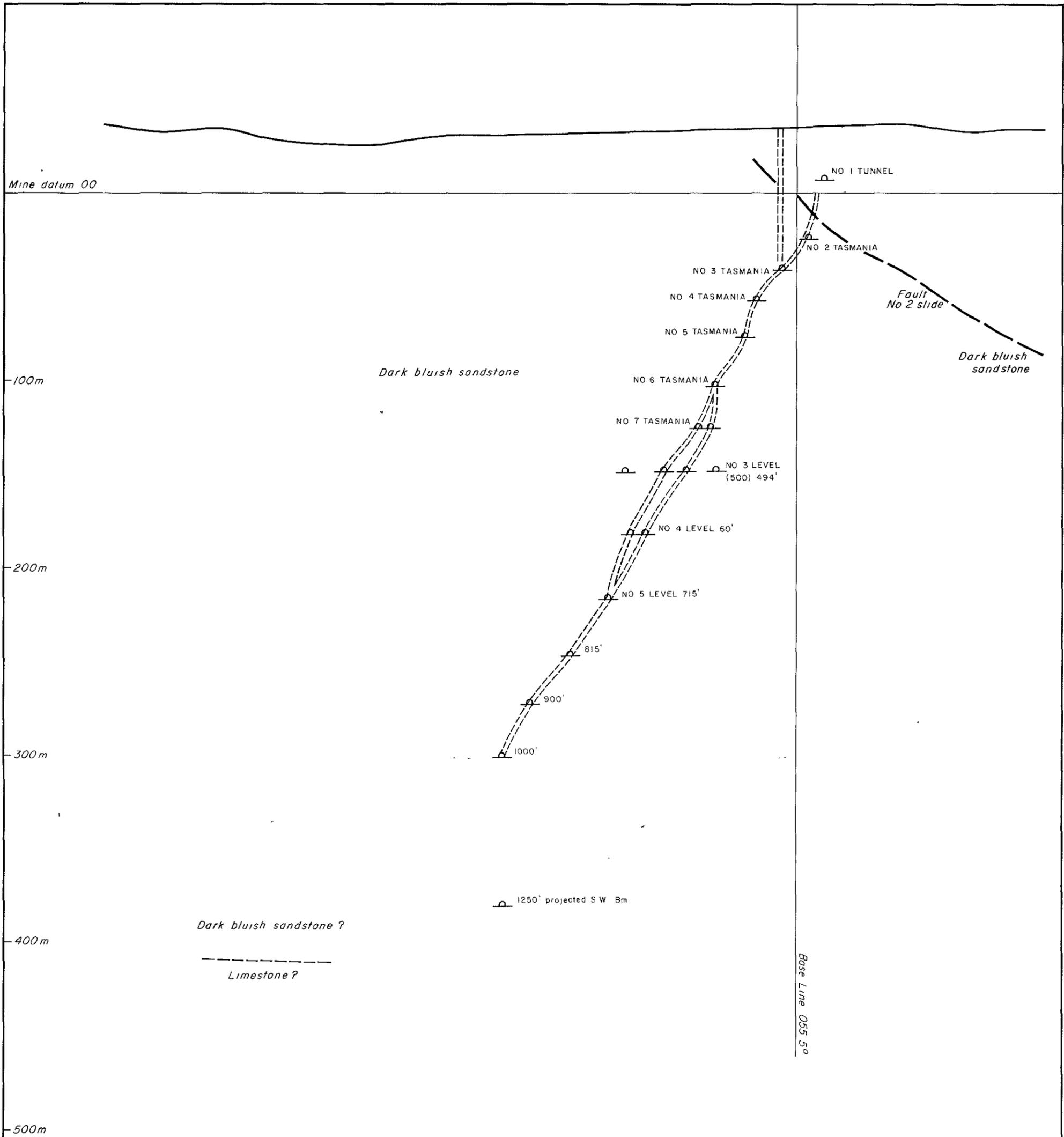
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ALLSTATE EXPLORATIONS N.L.
E.L. 17/73 BEACONSFIELD TASMANIA
SECTION A A'

Section bearing 325 5° 79-1346
 SCALE 1 2000 copy 1

Compiled from Tasmanian Mines Department plans 2418-30
 3206
 3038
 Allstate Explorations N.L. Map No 2
 Compiled by T E Bates April 1979

5 cm

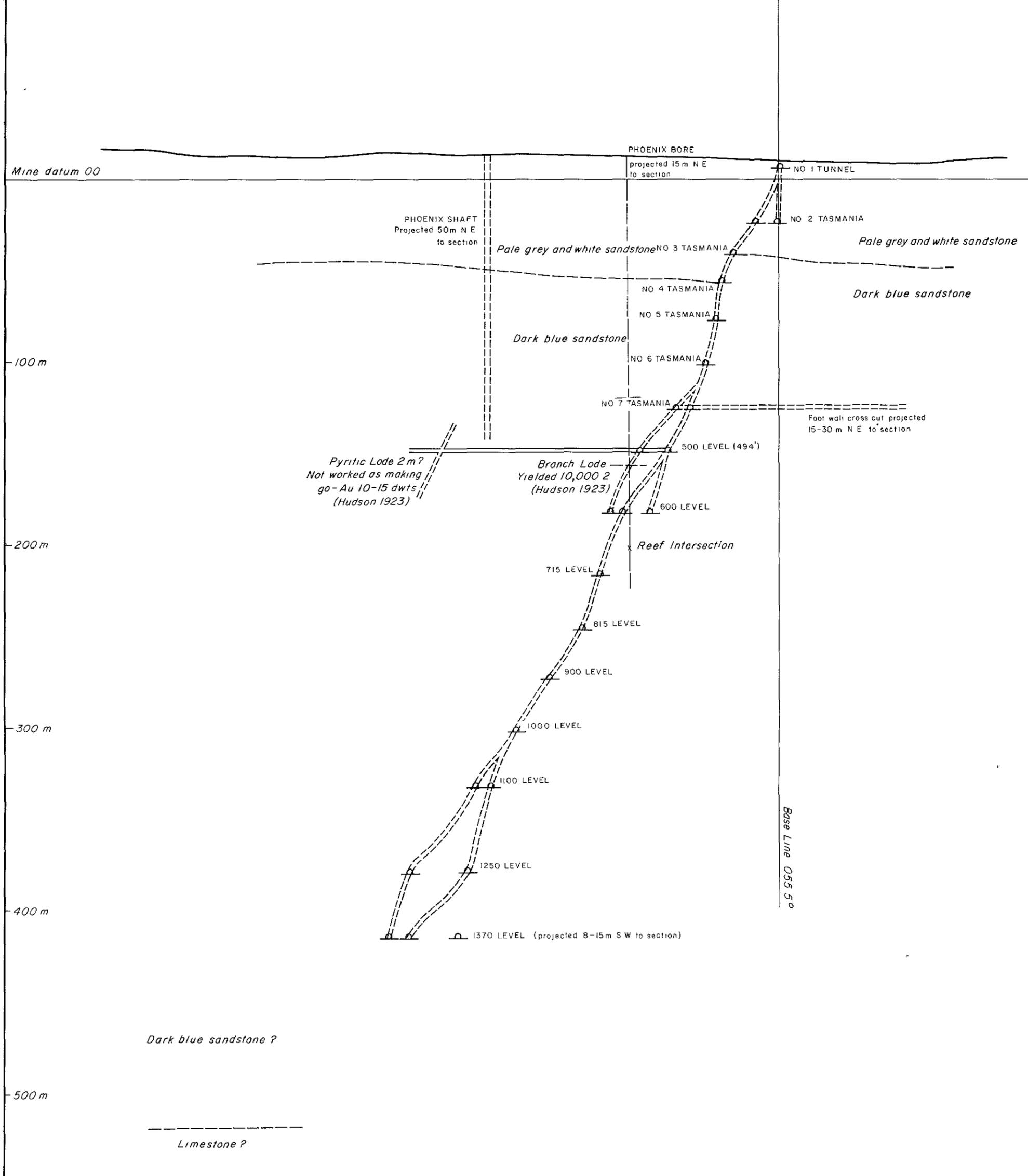


174009

ALLSTATE EXPLORATIONS N.L.
 E.L. 17/73 BEACONSFIELD TASMANIA
 SECTION B B'

Section bearing 325 5°
 SCALE 1 2000
 Compiled from Tasmanian Mines Department plans 2418-30
 3206
 3038
 Allstate Explorations N.L. Map No 2
 Compiled by T E Bates April 1979

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ALLSTATE EXPLORATIONS N.L.
E.L. 17/73 BEACONSFIELD TASMANIA
SECTION C C'

Section bearing 325 5°

SCALE 1 2000

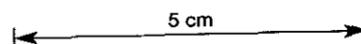
Compiled from Tasmanian Mines Department plans 2418-30

3206

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Allstate Explorations N.L. Map No 2

Compiled by T E Bates April 1979

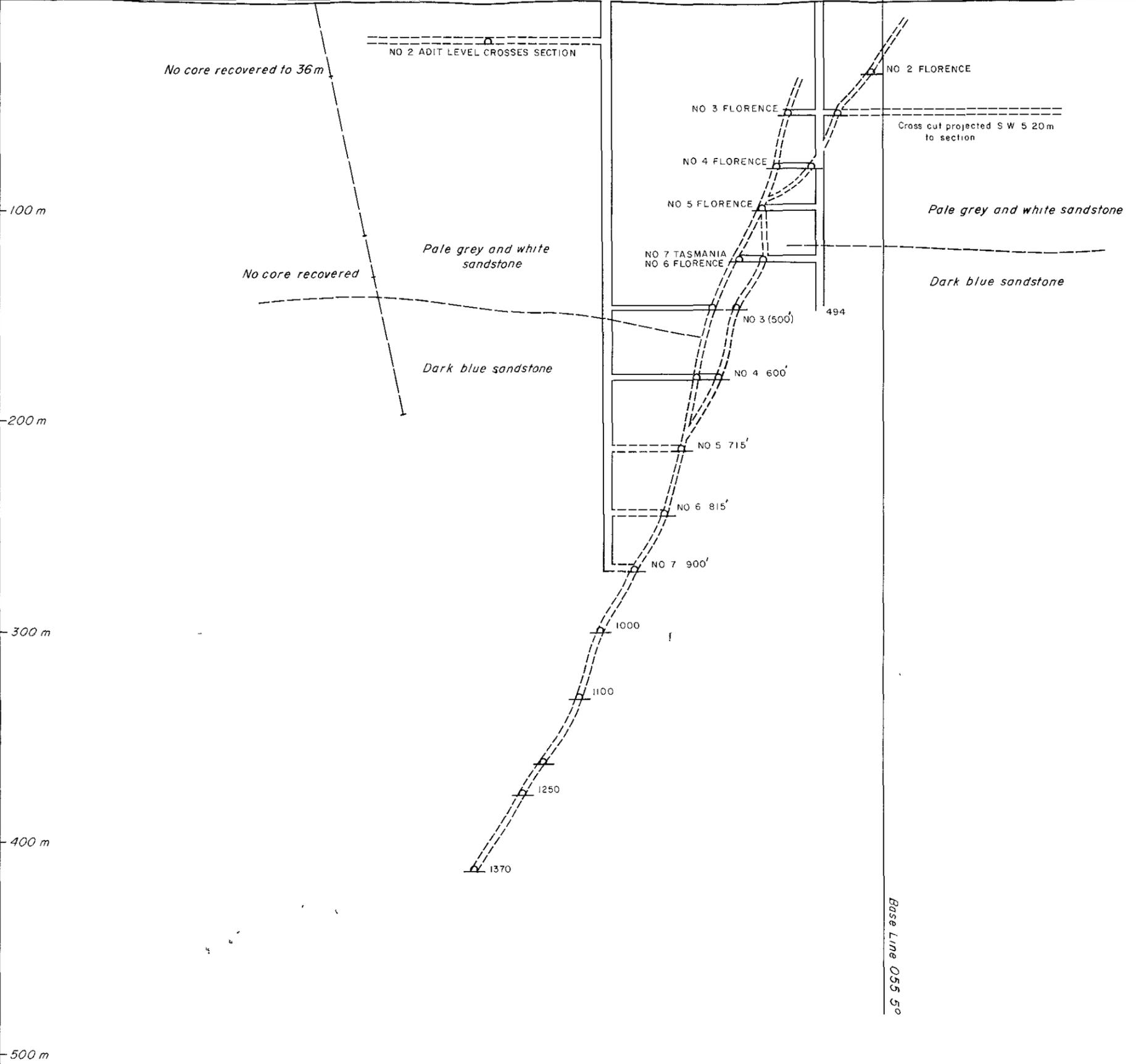


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copy 1.

DDH B5
Mine datum 00 Projected SW to section 30-40 m

New Main Shaft

Florence Shaft



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ALLSTATE EXPLORATIONS N.L.
E.L. 17/73 BEACONSFIELD TASMANIA
SECTION D D'

Section bearing 325 5°

SCALE 1 2000

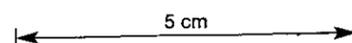
Compiled from Tasmanian Mines Department plans 2418-30

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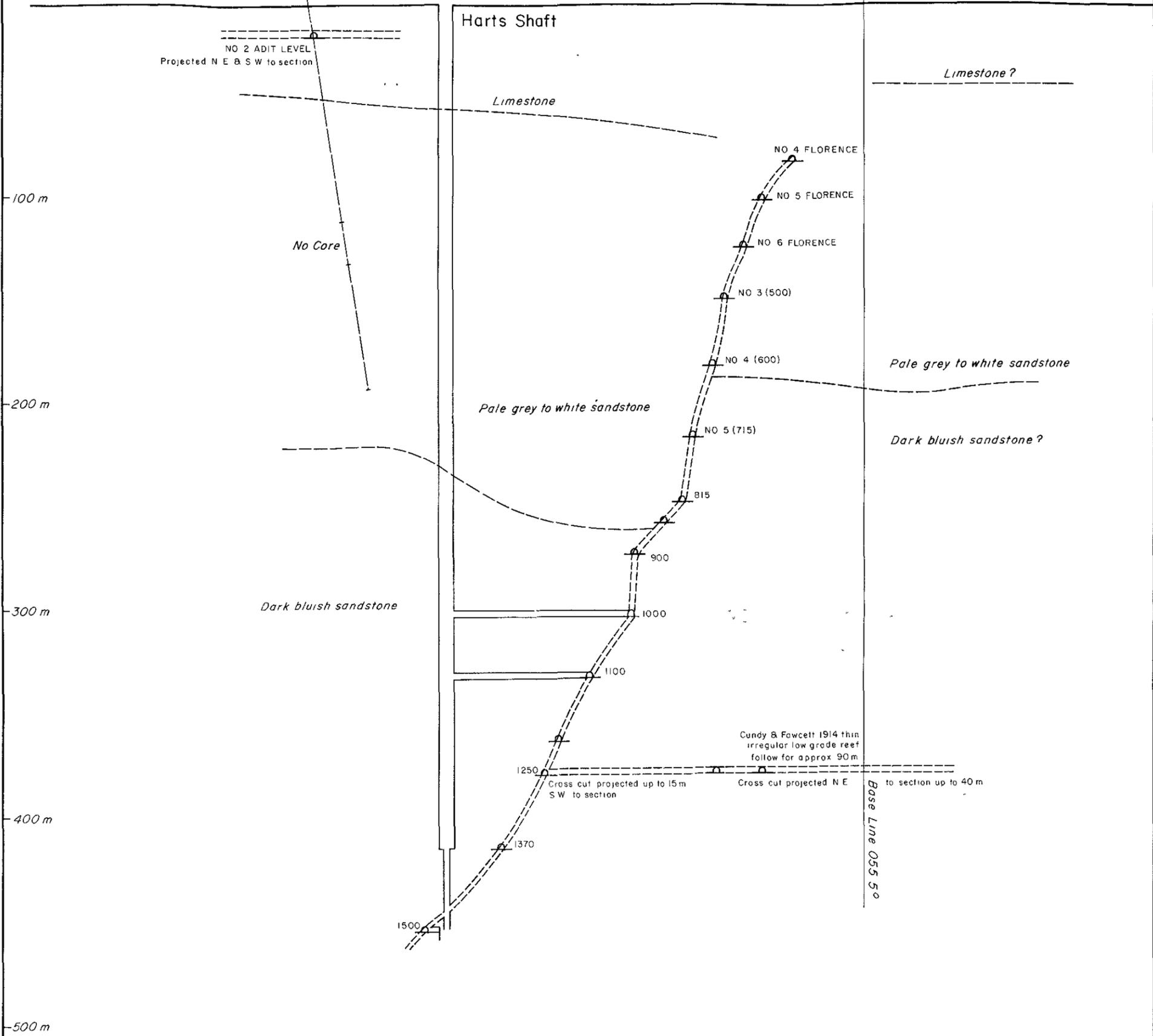
Allstate Explorations N.L. Map No 2

Compiled by T E Bates April 1979



49-1346 copy 11

Mine datum 00
D D H B5
Projected N E to section



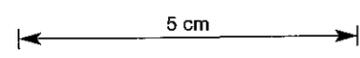
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ALLSTATE EXPLORATIONS N.L.
E.L. 17/73 BEACONSFIELD TASMANIA
SECTION E E'

Section bearing 325 5°

SCALE 1 2000

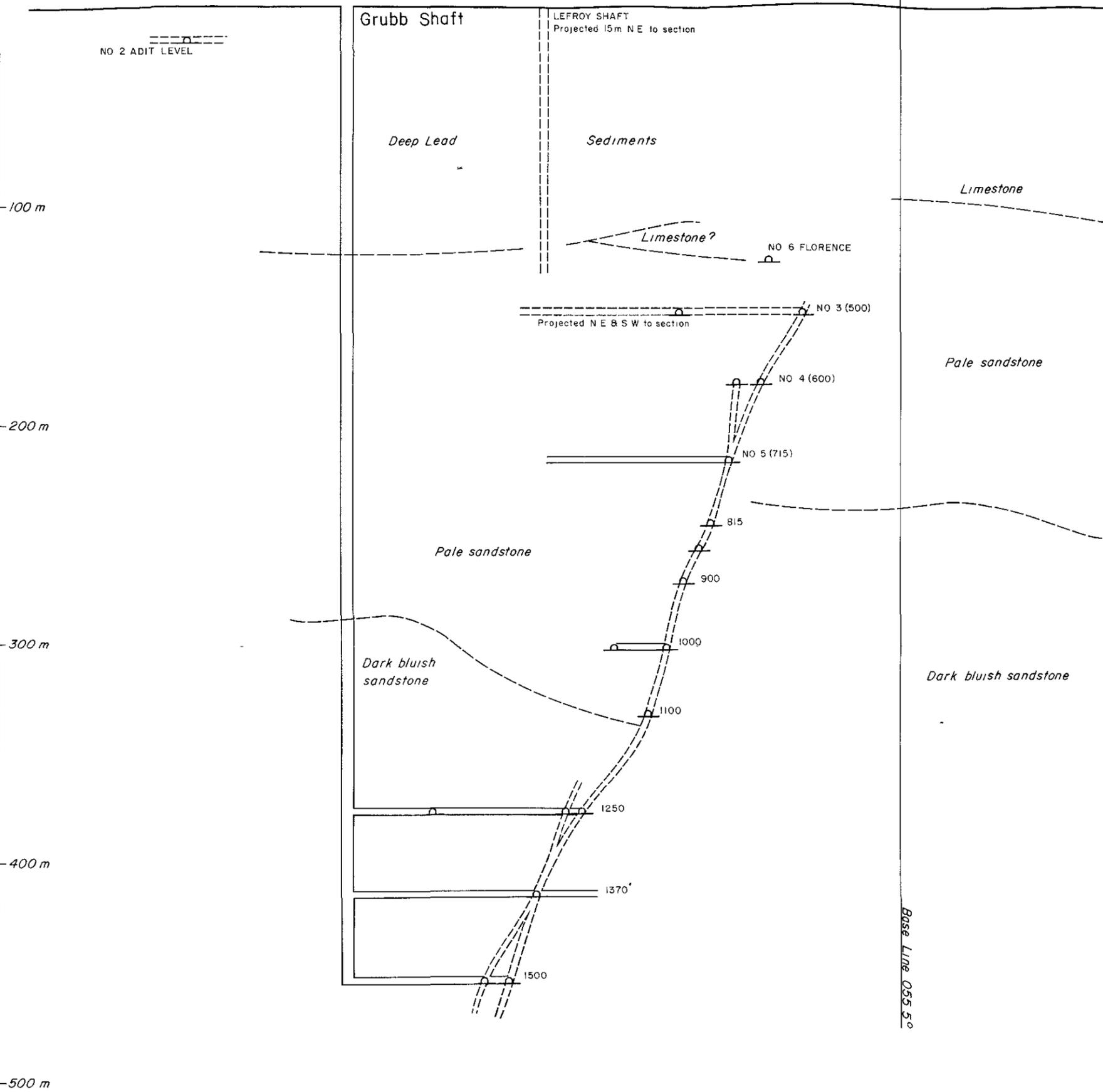
Compiled from Tasmanian Mines Department plans 2418-30



3206
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Allstate Explorations N.L. Map No 2
Compiled by T E Bates April 1979

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Mine datum 00



174013

ALLSTATE EXPLORATIONS N.L.
 E.L. 17/73 BEACONSFIELD TASMANIA
 SECTION F F'

Section bearing 325 5°

SCALE 1 2000

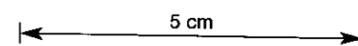
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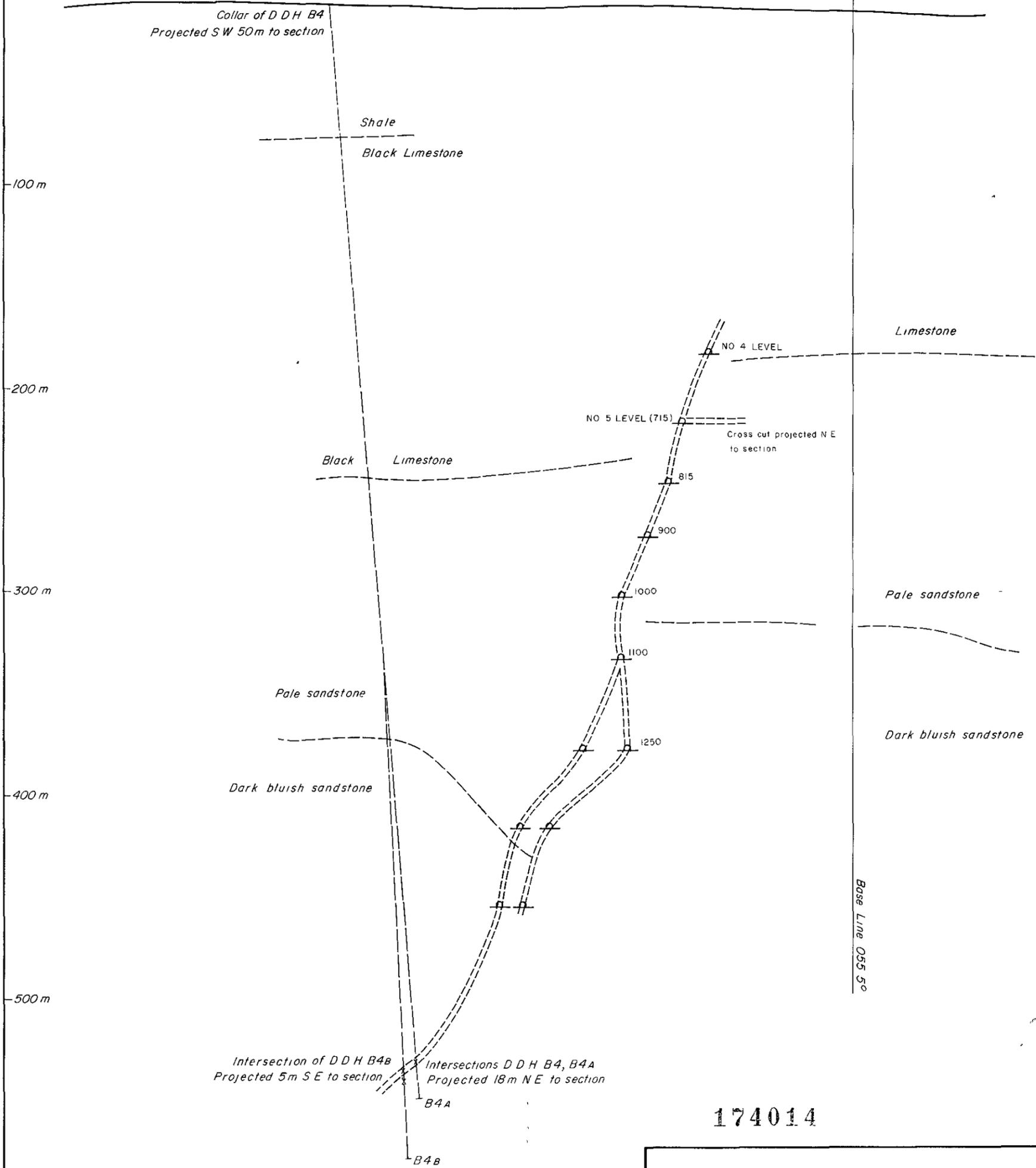
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1 Photos 94E1-16L

Mine datum 00



174014

ALLSTATE EXPLORATIONS N.L.
 E.L. 17/73 BEACONSFIELD TASMANIA
 SECTION G G'

Section bearing 325 5°

SCALE 1 2000

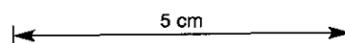
Compiled from Tasmanian Mines Department plans 2418-30

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Allstate Explorations N.L. Map No 2

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49-1316 copy 1

4874

Mine datum 00

EAST TASMANIA BORE

DDH A6
Projected NE to section

100 m

200 m

300 m

400 m

500 m

Shale

Top of Limestone

Limestone

Pale sandstone

Pale sandstone

Base of Limestone

1370

1500

Dark sandstone

Base Line 055 5°

Dark sandstone?

A6

174015

ALLSTATE EXPLORATIONS N.L.
E.L. 17/73 BEACONSFIELD TASMANIA
SECTION H H'

Section bearing 325 5°

SCALE 1 2000

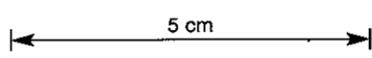
Compiled from Tasmanian Mines Department plans 2418-30

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Allstate Explorations N.L. Map No 2

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