

# PORTLAND HOLDINGS PTY. LTD.

11m 2 14m @ 15m  
70 70 70

ered Office :  
John Street  
eston

26 ATLAS DRIVE  
ST. HELENS  
TASMANIA 7216  
P.O. Box 71, St. Helens  
Telephone 149

P.M.	A.O.	CC	CC&M
RECEIVED			
26 APR 1973			
ANSWERED			
DEPT OF MINES			
REF. No. 2444/73			

17th. April 1973.

Mr. J.G. Symons,  
Director of Mines,  
Hobart.

Dear Sir, Great Northern Plains.

Further to a telephone request by Mr. Egan and subsequent conversation with Mr. Noldart for the supply of copies of log sheets of bores on our leases last year I have advised Mr. Noldart that it will take some time to make these available but in the meantime it is suggested that the plans by Mr. P.B. Nye accompanying my letter to you of the 6/4/73 may be useful to Mr. Noldart in conjunction with details as set out below:

No.	Co-ordinates.	Depth.	Bottom and remarks.
✓ 97.	10200 N 6200 E	20 ft.	Soft Slate.
✓ 1249	10400 6400	18	" "
✓ 131.	10600 6600	29	" "
132.	10600 7000	61	" "
✓ 133.	10800 6800	50	bottomed in black mud.
137.	10600 6800	45	10' through hard quartzite. ( appears to be dolerite)
146.	10800 7000	79	Slate.
28.	10800 7600	50	Fine Sand, no bottom.
2.	10800 8400	47	" " " "
171.	10800 8600	35	Soft Slate.
✓ 147.	11000 7000	56	" " 20 to 60 ft in fine Sand
✓ 148.	11000 7200	76	" "
✓ 25.	11000 7400	50	Fine sand and mud. no bottom.
✓ 26.	11200 7600	50	" " " "
✓ 18.	11400 8200	32	Granite.
✓ 19.	11200 8000	55	Fine sand. no bottom.
✓ 62.	11600 8400	14	Soft Slate.
✓ 64.	11800 8600	17	" "

Bore 124 on the plan should read 129. The descriptions of the bores are those supplied by the drillers. Of the bores listed above bores 2, 171, 132 and 147 have values of 0.26, 0.3, 0.37 and 0.9 lbs concs.p.c.y. About half of the bores in the deep lead area have not been bottomed as the drilling was primarily conducted for the possible use of the "Dorset dredge" which has a dredging depth of fifty feet.

yours truly,

*W. Stc. Manson*  
W. Stc. MANSON.

FORSTERS MARSHES AREA

PROPOSED PRELIMINARY DRILLING

DEPARTMENT OF MINES  
DRILLING LINE No. 17

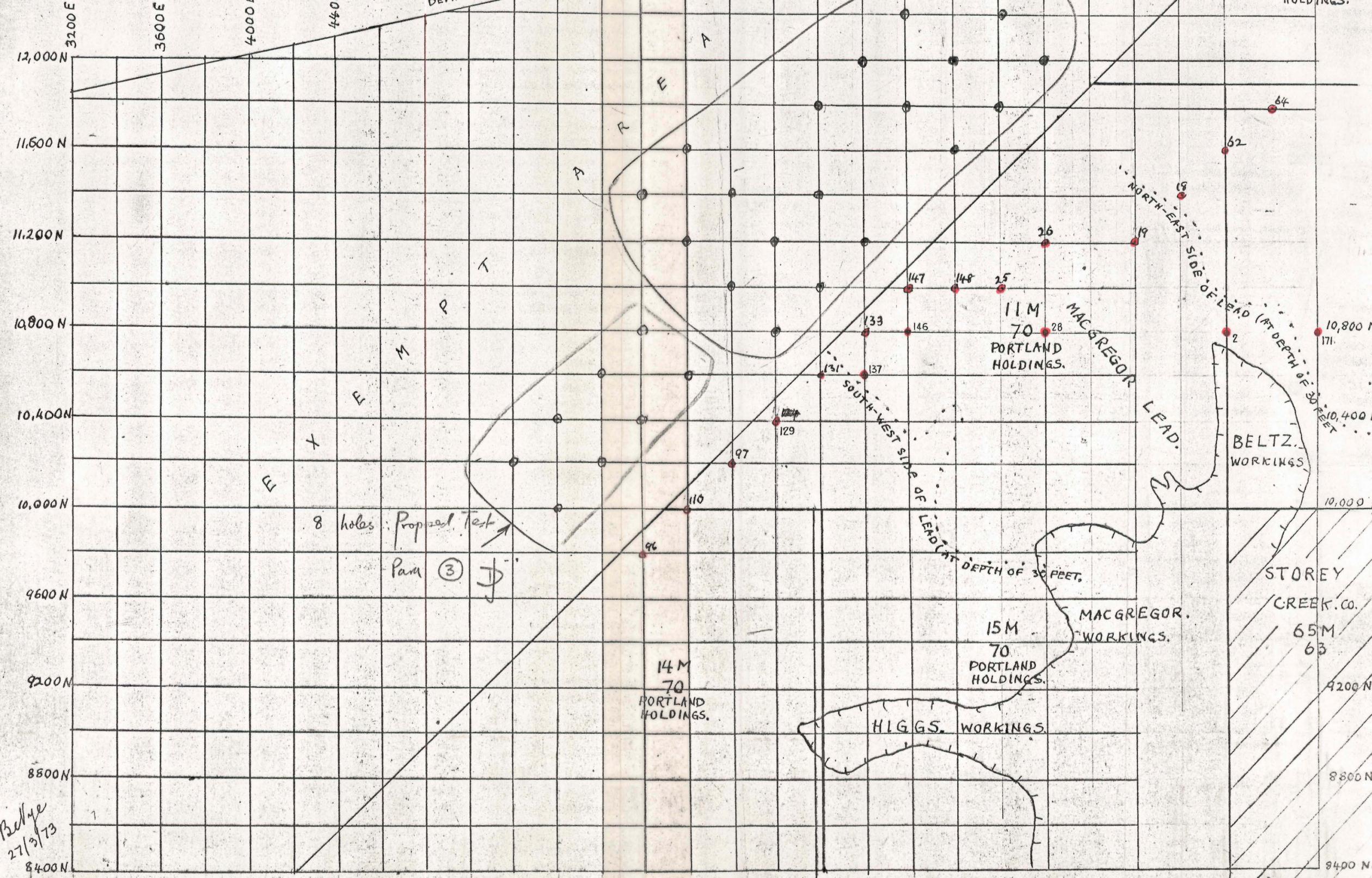
SCALE  
1 INCH = 400 FEET.

19 holes Proposed Testing  
Para ①. J.

PROPOSED HOLES ... ○  
LEAD

LINES 15 AND 16 have been drilled to the south of 14 but their positions are not known at present.

118M  
70  
PORTLAND HOLDINGS.



8 holes Proposed Test  
Para ③. J.

14M  
70  
PORTLAND HOLDINGS.

15M  
70  
PORTLAND HOLDINGS.

BELTZ WORKINGS

STOREY CREEK CO.  
65M  
63

HIGGS WORKINGS

MACGREGOR WORKINGS

MACGREGOR LEAD

ABell  
27/3/73  
8400N

REPORT FOR MINEFIELDS EXPLORATION

GLADSTONE PROSPECT (PLAN AND SECTIONS ONLY).

BY P.B. NYE

24 - 4 - 71

LOANED TO THE DEPARTMENT

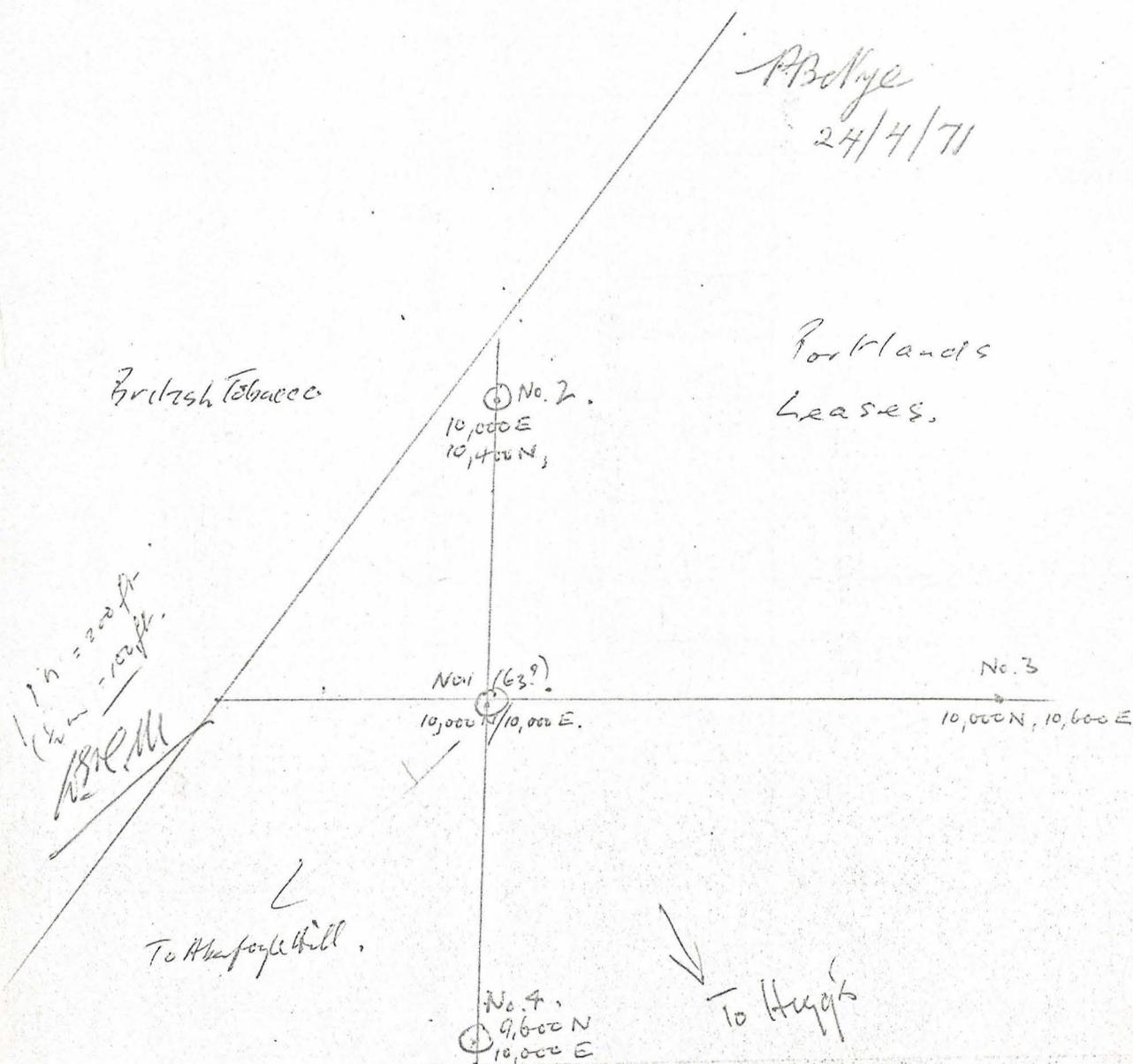
NOV. 1972

FOR COPYING BY

W. S.F.C. MANSON.

NOTE

On the Drilling Records, the Sample numbers appear on the same lines as the ~~the~~ description of the Sample. However, the Geological Section does not correspond to the descriptions numbers but is drawn to a scale of 1 inch to 10 feet, that is, it is a true section drawn to scale



LEGEND FOR GEOLOGICAL SECTIONS - GLADSTONE PROSPECT



brown silt and mud



brown, green or grey clay with sand - sandy clay.  
- marine clays.



brown, green or grey clay with gravel.  
- marine clays.

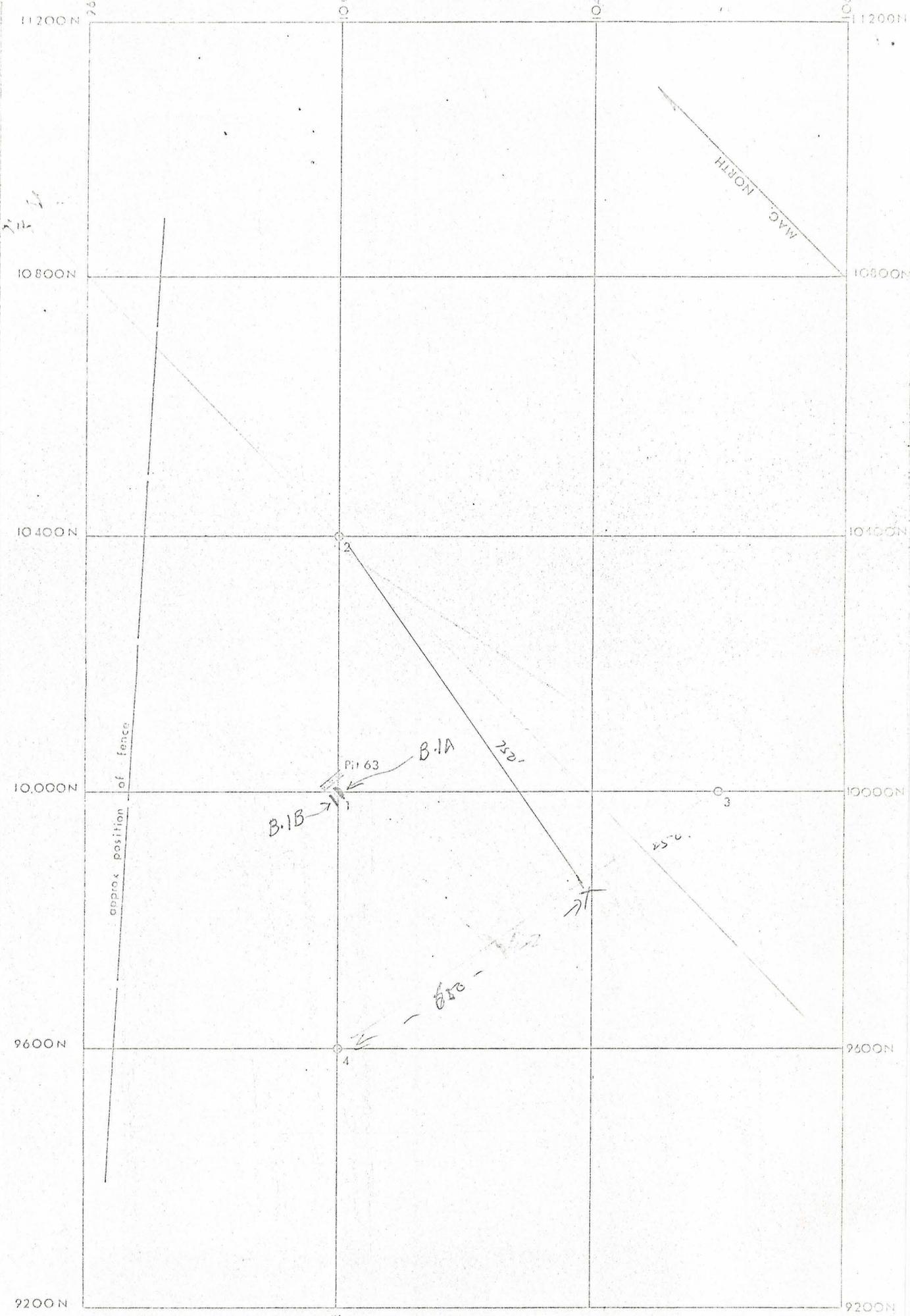


brown or grey gravel wash - (quartz wash)  
in clay.



brown clay with ironstone modules.

Vertical scale of geological sections 1" = 10 feet



Area 4  $2 \times 3$   
 Area 7 triangle 2, 3, 4.  
 $2 \times 3$   
 $2 \times 2 = 750 \text{ ft.}$   
 $\times 3 = 250 \text{ ft.}$   
 $\times 4 = 670$

243,750  
 93,750  
 247,500 sq ft

at 27,500 sq ft/acre assume 247,500 sq ft  $\approx$  60,000 tons.

MINEFIELDS EXPLORATION N L X 82  
 GLADSTONE PROJECT  
 DRILL HOLE LOCATIONS

Scale 1 inch to 200 feet

Oct 1970

GLADSTONE PROSPECT

DRILLING RECORD

HOLE N° ..... 1 ..... CO-ORDS .. 10000 N ..... 10000 E ..... FINAL DEPTH ..... 33' ..... REDUCED LEVEL 5000.00 FEET .....  
 DRILLED BY ..... TAS TERRY ..... DATE COMMENCED ..... 17 OCTOBER 1970 ..... DATE COMPLETED ..... 18 OCTOBER 1970 ..... RECOVERY ..... % .....  
 TYPE OF RIG ..... PERCUSSION ..... LOGGED BY ..... G. GRANGER ..... SAMPLED BY ..... G. SPARKES ..... EXT. DIAM. CUTTING SHOE ..... 0.54 FT. ....

DRILL RECORD				GEOLOGICAL LOG	GEOLOG. SECT.	SAMPLING					
Date	From	To	Advance			Sample Number	Theoretical Volume Cub. Feet	Actual Volume Cub. Feet	Wt. of Concentrate Grams	Metal Content in Concentrate % Sn	Grade of Sample Sn lbs/cub. ft.
17.10.70	0	5'	5'	Dark brown silt and mud - (fine <sup>some</sup> quartz sand)		GS.1				Tr	
"	5	8'	3'	Light brown to grey sandy clay (fine <sup>some</sup> quartz sand)		GS.2				Tr	
"	8	11'	3'	Light grey clay and gravel - (medium to coarse sand)		GS.3				0.18	
"	11	14'	3'	Green clay with quartz gravel ( " " " )		GS.4				0.09	
"	14	19'	5'	Green clay - (with some medium quartz sand)		GS.5				-	
"	19	23'	4'	Brown clay - some green clay patches and ironstones		GS.6				-	
18.10.70	23	28'	4'	" " " " " " " "		GS.7				-	
"	28	31'	3'	" " " " " " " "		GS.8				-	
"	31	33'	1'	Brown green and grey clay with dolerite fragments		GS.9				-	
"				Hole completed at 33' due to hardness of formation							
				NB Casing stopped at 16'							

63

*Samples analysed / recd. for Melb. May 1971*  
*5, 6, 8, 9 (Hole 1), 14, 15, 16 (Hole 2), 18, 19,*  
*22, 23, 24 (Hole 3) & 28, 29, 30 (Hole 4)*

*Samples submitted to M.D./L.H. 10/5/71*  
*was: 5, 2, 3, 24. as slowny not precise*

MINEFIELDS EXPLORATION N.L.

GLADSTONE PROSPECT

DRILLING RECORD

HOLE N° ..... 2 ..... CO-ORDS ..... 10400 N ..... 10000 E ..... FINAL DEPTH ..... 32' ..... REDUCED LEVEL ..... 4992.30 FEET .....  
 DRILLED BY ..... TAS TERRY ..... DATE COMMENCED ..... 19 OCTOBER 1970 ..... DATE COMPLETED ..... 20 OCTOBER 1970 ..... RECOVERY ..... % .....  
 TYPE OF RIG ..... PERCUSSION ..... LOGGED BY ..... G. GRANGER ..... SAMPLED BY ..... G. SPARKES ..... EXT. DIAM. CUTTING SHOE ..... 0.54 FT. ....

DRILL RECORD				GEOLOGICAL LOG	GEOL. SECT.	SAMPLING				
Date	From	To	Advance			Sample Number	Theoretical Volume Cub. Feet	Actual Volume Cub. Feet	Wt. of Concentrate Grams	Metal Content in Concentrate % Sn
19.10.70	0'	5'	5'	Dark brown silt and mud - some brown clay at 5'						Tr
"	5'	9'6"	4'6"	Grey sandy clay						Tr
"	9'6"	14'6"	5'	Grey clay with gravel - wash gravel						0.06
20.10.70	14'6"	20'	5'6"	" " " " " "						Tr
"	20'	25'	5'	Grey sandy clay						
"	25'	30'	5'	Brown clay - some green & grey clay and ironstones						
"	30'	32'	2'	" " " " " " " "						
				Hole completed at 32' - formation too hard -						
				NB casing stopped at 22'						

MINEFIELDS EXPLORATION N.L.

GLADSTONE PROSPECT

DRILLING RECORD

HOLE N° 3 CO-ORDS 10000 N 10600 E FINAL DEPTH 32' REDUCED LEVEL 5003.90  
 DRILLED BY TAS TERRY DATE COMMENCED 21 OCTOBER 1970 DATE COMPLETED 22 OCTOBER 1970 RECOVERY %  
 TYPE OF RIG PERCUSSION LOGGED BY G. GRANGER SAMPLED BY G. SPARKES EXT. DIAM. CUTTING SHOE 0.54 FT.

DRILL RECORD				GEOLOGICAL LOG	GEOLOG. SECT.	SAMPLING					
Date	From	To	Advance			Sample Number	Theoretical Volume Cub. Feet	Actual Volume Cub. Feet	Wt. of Concentrate Grams	Metal Content in Concentrate % Sn	Grade of Sample Sn lbs/cub. ft.
21.10.70	0'	4'	4'	Dark brown silt and mud							
				Brown clay with gravel at 3'							
"	4'	7'	3'	Grey clay with gravel (medium grained quartz)		GS.18					
"	7'	12'	5'	" " " " " "		GS.19					
22.10.70	12'	17'	5'	Grey clay and wash gravel - some large quartz wash stones		GS.20				0.16	
"	17'	20'	3'	" " " " " "		GS.21				0.26	
"	20'	25'	5'	Brown clay (some green clay) with gravels - (quartz wash)		GS.22					
"	25'	30'	5'	Brown clay - some ironstone module bands and grit		GS.23					
"	30'	32'	2'	Brown clay with ironstones and grit		GS.24					
				Clay becoming hard with stratifications of grey and brown clay.							
				Hole completed at 32' - formation too hard - NB casing to 26'							

MINEFIELDS EXPLORATION N.L.

GLADSTONE PROSPECT

DRILLING RECORD

HOLE N° 4 CO-ORDS 9600 N 10000 E FINAL DEPTH 25' REDUCED LEVEL 4999.40  
 DRILLED BY TAS TERRY DATE COMMENCED 23 OCTOBER 1970 DATE COMPLETED 23 OCTOBER 1970 RECOVERY %  
 TYPE OF RIG PERCUSSION LOGGED BY G. GRANGER SAMPLED BY G. SPARKES EXT. DIAM. CUTTING SHOE 0.54 FT

DRILL RECORD				GEOLOGICAL LOG	GEOL. SECT.	SAMPLING					
Date	From	To	Advance			Sample Number	Theoretical Volume Cub. Feet	Actual Volume Cub. Feet	Wt. of Concentrate Grams	Metal Content in % Concentrate Sn	Grade of Sample Sn lbs/cub. ft
23.10.70	0'	5'	5'	Dark brown silt and mud - at 2' brown clay & gravel						Nil	
"	5'	10'	5'	Grey silty clay - silty to sandy						Nil	
"	10'	15'	5'	Grey clay with gravel - ( gravel wash quartz )						Nil	
"	15'	20'	5'	Hard grey clay with gravel (medium to course grain)							
"	20'	23'	3'	Hard grey clay with some gravel							
"	23'	25'	2'	Hard brown gritty clay - too hard to drill							
				Hole completed at 25' - formation too hard							
				NB casing to 25'							

S.P.L. 60

Amended to S.P.L. 53  
Converted to lease

Short Report on the Tin-bearing areas held by  
messrs W. G. C. Manson and M. L. Watts on the  
Great Northern Plain near Gladstone, Tasmania

These areas are situated on the Great Northern Plain to the north-west of Gladstone. Mr Manson has an S.P.L. located to the east & north-east of the northern part of Consolidated Lease 65M/63 held by Storey's Creek T.M. Co. Mr Watts' Prospecting area is located to the north, north-west & west of the northern part of the above Consolidated Lease. To the north of the Consolidated Lease, the two areas abut, but elsewhere they are separated by that Lease.

The northern portions of the two areas are situated to the north of numerous old workings such as the Canary, Beltz and others. These workings were, in general, started on the southern fall from the Great Northern Plain to the valley of the Ringarooma River, and probably in gullies & small creeks draining into that River on the flats along it. They were advanced in a general northerly direction.

The tin-bearing alluvial deposits were worked by hydraulic sluicing methods using water from the Mount Cameron Water Race. The amount of water available was probably not large and the pressure head not great. The pressure would diminish as the workings were extended to the north and the bottom <sup>ROSE</sup> rose in order to maintain a sufficient grade in the tail races to carry the tailings away. It is probable that some of the operators used hydraulic elevators in order to overcome the problem of the grade in the tail races, but the amount & pressure of water would have limited these operations.

The workings were, therefore, probably conducted under some difficulty. The rate at which the ground could be sluiced would not have been

great, and this would affect adversely the economics of the operations. These conditions may explain why the workings ceased where & when they did. The only alternative explanation would be that the grade of the tin deposits had decreased to a figure that did not permit profitable operations.

In the old workings, the tin deposits, as seen in the faces & sides, consist of fine sandy drifts with pebbles at several horizons. The pebbles were mainly quartz & the sizes from 1 to 3 inches.

Messrs. Manson & Watts have had shaft sunk to depths of 10 to 12 feet & bore-holes put down to similar depths. Arrangements are being made to have holes bored to greater depths. The material in the shafts is similar to that in the old workings. It appears therefore that portions at least of their areas contain the extension of the deposits worked in the old workings.

The alluvial deposits on the Great Northern Plain are probably part of the drifts that were laid down by streams such as the ~~Great~~ Chusssel Roe River, Mount Cameron Creek and other streams from Mount Cameron; these will be termed the Chusssel Roe System. These drifts were laid down when this part of north-eastern Tasmania sank relatively to the sea, and, at the same time, that similar drifts were deposited in the ~~Argarooma~~ valleys of the Rugarooma River & its tributaries. It should be stated here that before the subsidence, the Rugarooma R. flowed past the western end of Mount Cameron, but that after the basalt flows covered the drifts in the Rugarooma valley, the river was forced to the north-eastern side of its valley, and broke through a saddle and flowed past the eastern end of Mount Cameron.

The Rungaroma River has established itself on the northern on south-western side of the plateau. The history of the River between the breaking into the plateau Rongaroma and the establishment in its present course is not known. It could have flowed over the Great plateau plain and either eroded then existing rockiness on the deposited sediment on left. It could only be the river established its present course but it has formed alluvial flats along its course, the flats being composed largely of single deposits. A detailed geological survey would be necessary to determine as much as possible of the history of the Rungaroma River since it broke into the plateau Rongaroma River.

In the old (Stenton) workings, on the left side of the river, near the Rungaroma River, some deposits with fossils up to at least 15 meters in diameter are present. It would seem possible that they were formed by the Rungaroma River, but they appear in part of the western face of a deposit of about 12 feet with drift about them, and if they were formed by the Rungaroma River, as were the drifts above them. In general, it is considered that these coarse gravels were not formed by the Rungaroma River, but either by a former stream of the plateau Rongaroma, or first on a beach along a shore that formed part of a bay into which the streams of the plateau Rongaroma flowed. It is not clear whether the sea ever extended as far inland as the Great plateau plain or whether any land in the formation of the plateau occurring there is another matter that could only be determined by a detailed geological survey.

Testing any such survey, it will probably be assumed that the drifts on the Great plateau

are part of the Mussel Roe System of deepleads. The drifts extend through at least most of the areas held by Messrs Manson & Watts except where removed by old workings and perhaps in the two ~~areas~~ localities to be discussed below.

East of Beltz workings there is a tract of country in which boulders of a cemented coarse grit occur. Mr Manson pointed out this tract is discernible on aerial photographs of the district. It is held tentatively that the grit forms a bed occupying the slight rise in the surface in that locality. Under this view, the drifts would lie beneath the grit.

The second locality lies to the east or north-east of the 5 acre reserve of the Mount Cameron Water Race situated near Oberfoyle Hill. The soil over this locality resembles that over granite, but no granite crops out. The nearby Oberfoyle Hill was not visited but may be occupied by granite.

The depth of the drift on Great Northers Plain is not known, but is probably not uniform. In the old workings the depth ranges up to 30 feet at least, but is generally less.

The bedrock in the district is either granite or slates & quartzites, but it has not been exposed in many of the workings. In many of the workings the bottom of the drift sluiced is a fine sand or drift. This bottom may have represented a level at which the grade of the deposits decreased, but, on the other hand, it may have been one to which the operators were forced to work because of their insufficient water supply and lack of fall for the tail races.

There is little or no information about the material below the sand or fine drift especially as regards its thickness & grade. The boring campaign of Messrs Manson & Watts will be so

Dykes contacts  
in floor of pits. ||  
J.

Good indications  
of J. in  
||  
J.

depths sufficient to test at least part of the material below the sand or fine drift, as to whether the boring will be extended to bedrock will be presumably by the depths to that ~~point~~ bottom, the grade of the drift & of course the capacity of the boring plant.

The boring campaign is necessary to determine the extent, thickness and grade of the tin-bearing ~~drifts~~ drifts preparatory to consideration as to whether they can be profitably worked. The boring campaign should therefore, be continued.

Melbourne  
26/8/69

P. B. Nye  
(P. B. NYE)

D of M	S & A	CG	CC & M	D.S.M.S.
RECEIVED				Reg. 1
17 OCT 1969				E & IL
ANSWERED				
DEPT. OF MINES				
REF. NO.				

