

47-092

MT. BISCHOFF  
Samples - Assays  
by  
Manson 23/9/1947

Mt Bischoff Samples - Assays  
by  
Manson 23/9/47.

540E

000

NOTE.—All communications on Departmental business to be addressed to the Chief Chemist and Metallurgist, Mines Office, Launceston.

8-36

540002



Tasmania.

Department of Mines Laboratory,

Launceston, 23rd September 1947.

TELEPHONES:  
LABORATORY ..... 845  
REGISTRAR OF MINES ..... 691  
INSPECTOR OF MINES AND EXPLOSIVES ..... 373  
G.P.O. Box, 225.

2011/H7  
DEPT. OF MINES  
1947  
Referred to Chief Geologist  
Filed by

MEMORANDUM.

Mt. Bischoff Samples.

Herewith in duplicate results of examination of samples of Greisen and Pig Flat ore submitted by the Government Geologist for determination of tin by vaning.

Some determinations were made by Mr. Porte at Waratah but all results reported herein both vaning and chemical were made in the Laboratory at Launceston.

However comparisons between the results reported and Mr. Porte's work are shown.

Discriptions of Samples.

<u>L'ton.</u>	<u>Reg. No.</u>	<u>No.</u>		
473.		11	- 4'0" wide	- Face of Crosscut North from No.3 Drive
474.		12	- 3'0" "	- Along West side of Crosscut First Section from Face South.
475.		13	- 3'0" "	- South and adjoining 12.
476.		14	- 3'6" "	- South and adjoining 13.
477.		15	-	- Grab Sample repeat of Sample No.6.
478.		16	- 5'0" "	- Repeat of Sample No. 7 and 8.
479.		17	- 3'0" "	- South and adjoining 14.
480.		18	- 3'0" "	- South and adjoining 17. On corner of No.3 Drive and Crosscut.
481.		19	- 4'0" "	- On north wall of No.3 Drive West and adjoining 18.
482.		20	- 3'6" "	- West and adjoining 19.
483.		21	- 3'0" "	- West and adjoining 20.
484.		22	- 3'0" "	- West and adjoining 21.
485.		23	- 4'0" "	- West and adjoining 22.
486.		24	- 3'6" "	- West and adjoining 23.
487.		25	- 3'6" "	- West and adjoining 24.
488.		26	- 3'8" "	- West and adjoining 25.
489.		27	- 3'8" "	- West and adjoining 26.
490.		28	- 3'8" "	- West and adjoining 27. to end of drive.
491.		29	- 5'0" "	- Across face of No. 3 Drive.
492.		30	- 4'6" "	- West wall of Crosscut North see sample No.15 and No.16 20' East of previous North and adjoining Crosscut(N.from No. 3 Drive.)
493.		31	- 4'6" "	

9

<u>L'ton.</u>	<u>Reg. No.</u>	<u>No.</u>		
	494.	32	-	- Grab sample after firing in rise. See samples 1-4.
		33	- 5'0" wide	- On corner opposite and South No.18 at intersection of No.3.Drive and Crosscut connecting Nos,1 and 3 Drives.
495		34	- 4'0" "	- South and adjoining 33.
496		35	- 4'0" "	- " " " 34
497		36.	- 3'6" "	- " " " 35 to No.1 Drive.
498	37 &38	-5'0"	"	- Pig flat pyrrhotite ore body about central section of ore body.
499	39 &40	- 5'0"	"	- South West and adjoining 37 & 38.
500	41 &42	- 5'0"	"	- " " " " 39 & 40
501	43	- 5'0"	"	- Repeat of 33.
502	44	- 18"	"	- East side of Crosscut between Nos.1 & 3 Drive shows cassiterite.
503	45	- 4'0"	"	- Crosscut to South from No.1 Drive. Face of Crosscut.
504	46 &47	- 3'6"	"	- East side Crosscut North and adjoining 45.
505	48	- 3'6"	"	- North and adjoining 46 & 47.
506	49	- 3'6"	"	- " " " 48
507	50 &51	- 5'0"	"	- Pig Flat South West and adjoining 41 & 42.
508	52	-		- Grab sample. Soft black decomposed material. Pig Flat.
509	53	-		- Grab Sample. Pig flat. Pyritic Slate? green in colour.
510	54	- 4'0"	"	- Leading Stope over No.1 Drive East end. Second ladder up.
511	55	- 4'3"	"	- South and adjoining 54.
512	56	- 4'3"	"	- " " " 55 but receding East.
513	57	- 4'0"	"	- 5 ft. East of 56 but extending South from 56.

Samples from Mine Trucks.

514	11/8/47	N/S	B Section
515	"	"	C "
516	"	"	D "
517	"	D/S	A "
518	"	"	B "
519	"	"	D "
520	"	A/S	A "
521	"	"	B "
522	"	"	D "
523	"	"	E "
524	12/8/47	N&D/S	A "

L'ton  
Reg. No.

525	12/8/47.	N&D/S	B	Section
526	"	"	D	"
527	"	N/S	F	"
528	13/8/47	N&D/S	A	"
529	"	"	B	"
530	"	"	C	"
531	"	"	D	"
532	"	"	F	"
533	"	A/F	A	"
534	"	"	D	"
535	"	"	E	"
536	"	"	F	"

003

SHEET NO. 4

L'ton Reg. No.	No.	Percent Tin		Percent	Vanning Chemical
		Vanning	Chemical		
473	11	0.23	0.54		42.6
474	12	trace	0.13		-
475	13	0.16	0.70		22.9
476	14	0.11	0.76		14.5
477	15	nil	nil		-
478	16	nil	nil		-
479	17	0.42	0.91		46.1
480	18	0.73	1.13		64.5
481	19	0.20	0.34		58.8
482	20	0.52	0.97		53.5
483	21	0.54	0.90		60.0
484	22	0.87	1.49		58.5
485	23	0.50	0.79		63.5
486	24	0.06	0.22		27.3
487	25	nil	nil		-
488	26	nil	nil		-
489	27	nil	nil		-
490	28	nil	nil		-
491	29	0.18	0.44		41.0
492	30	nil	nil		-
493	31	nil	nil		-
494	32	0.14	0.16		87.5
495	34	0.99	1.22		81.0
496	35	0.26	0.67		38.8
497	36	0.32	0.85		37.8
498	37/38	0.09	0.54		16.7
499	39/40	0.14	0.62		22.6
500	41/42	0.10	0.49		20.4
501	43	0.66	1.12		59.5
502	44	19.9	22.18		90.0
503	45	1.67	2.10		79.5
504	46/47	0.60	1.12		53.5
505	48	0.25	0.71		35.3

<u>L'ton.</u> <u>Reg. No.</u>	<u>No.</u>	<u>Percent Tin</u>		<u>Percent</u>	<u>Vanning</u> <u>Chemical</u>
		<u>Vanning</u>	<u>Chemical</u>		
506	49	0.6	1.03		58.2
507	50/51	0.1	0.64		15.6
508	52	0.25	0.34		73.5
509	53	0.28	0.88		31.8
510	54	1.48	1.75		84.5
511	55	3.60	4.23		85.0
512	56	trace	0.05		-
513	57	0.13	0.26		50.0

Samples Taken From Trucks.

514	11/8/47	B	0.47	0.69		68.2
515	"	C	0.70	0.90		78.0
516	"	D	0.14	0.19		73.7
517	"	A	0.56	0.64		87.5
518	"	B	1.04	1.31		79.5
519	"	D	0.18	0.23		78.5
520	"	A	0.75	1.15		65.3
521	"	B	1.55	1.95		79.5
522	"	D	0.99	1.30		76.3
523	"	E	1.03	1.33		77.5
524	12/8/47	A	0.31	0.46		67.5
525	"	B	0.83	1.19		70.0
526	"	D	0.66	0.80		82.5
527	"	F	trace	0.12		-
528	13/8/47	A	0.32	0.57		56.3
529	"	B	0.20	0.31		64.5
530	"	C	1.67	1.91		87.5
531	"	D	0.25	0.27		92.5
532	"	F	trace	0.05		-
533	"	A	0.35	0.58		60.4
534	"	D	0.11	0.17		64.6
535	"	E	trace	trace		-
536	"	F	trace	trace		-

Vanning V. Chemical assays.

Comparison of assays by the above methods show that it is incorrect to assume any definite relationship between the two methods of determination. Pig flat hard ore has previously shown that the percentage of the total tin recoverable by vanning is extremely low. However although the Greisen ore-body samples show in the main a fairly high proportion of the tin by vanning there are many notable exceptions such as Nos. 13 and 14; 22.9 and 14.5 percent respectively. All unusual results have been checked and also the majority of both chemical and vanning assays have been checked.

Check assays - vanning.

Comparison of results obtained in the laboratory and those undertaken by Mr. P. Porte at Waratah show a very satisfactory tolerance between the various operators. Figures shown below represent the registered number and the bracketed pair of figures; the first figure being our result and the second Mr. Porte's.

473 (0.23, 0.23), 474 (trace, trace), 475 (0.16, 0.15),  
 476 (0.11, 0.05), 479 ( 0.42, 0.40 ), 480 (0.73, 0.77 ),  
 481 (0.20, 0.16), 482 ) 0.52, 0.77 ), 483 (0.54, 0.67 ),  
 514 (0.47, 0.53), 515 (0.70, 0.65), 516 (0.14, 0.18),  
 517 (0.56, 0.60), 518 ( 1.04, 1.00), 519 (0.18, 0.30),  
 520 (0.75, 0.60), 521 ( 1.55, 1.54), 522 (0.99, 1.06),  
 523 (1.03, 0.89),

*Robert Hanson*  
CHIEF CHEMIST AND METALLURGIST.

DIRECTOR OF MINES,  
HOBART.

12th September, 1947.

HGWK/1.

MEMORANDUM :

The following is a complete list and description of samples taken recently at Bischoff :-

- Sample 1. - 3'6" wide - South side of West end of rise to F, in Drive 2.
2. - 4'0" " - North and adjoining 1.
3. - 4'6" " - South Wall of rise.
4. - 5'0" " - North Wall of rise.
5. - 4'0" " - Face of Crosscut to N. from Drive No. 3.
6. - - Grab Sample of ore after firing face of Crosscut 20' East of 5.
- 7 & 8. 5'0" " - Face of drive No. 6 Sample.

The foregoing samples were discarded owing to contamination by placing samples in concentrate bags.

- Sample 11. - 4'0" wide - Face of Crosscut North from No. 3 Drive.
12. - 3'0" " - Along West side of Crosscut First section from Face South.
13. - 3'0" " - South and adjoining 12.
14. - 3'6" " - South and adjoining 13.
15. - - Grab Sample repeat of Sample No. 6.
16. - 5'0" " - Repeat of Sample No. 7 & 8.
17. - 3'0" " - South and adjoining 14.

2.

- Sample 18. - 3'0" wide - South and adjoining 17.  
On Corner of No.3 Drive  
and Crosscut.
- " 19. - 4'0" " - On North wall of No. 3 Drive  
West and adjoining 18.
- " 20. - 3'6" " - West and adjoining 19.
- " 21. - 3'0" " - West and adjoining 20.
- " 22. - 3'0" " - West and adjoining 21.
- " 23. - 4'0" " - West and adjoining 22.
- " 24. - 3'6" " - West and adjoining 23.
- " 25. - 3'6" " - West and adjoining 24.
- " 26. - 3'8" " - West and adjoining 25.
- " 27. - 3'8" " - West and adjoining 26.
- " 28. - 3'8" " - West and adjoining 27.  
to end of drive.
- " 29. - 5'0" " - Across face of No.3 Drive.
- " 30. - 4'6" " - West Wall of Crosscut North  
see Sample No. 15 and No.16  
20' East of previous Crosscut.(N.from
- " 31. - 4'6" " - North and adjoining No.3  
No. 30. Drive).
- " 32. - - - Grab Sample after firing  
in rise. See Samples 1-4.
- " 33. - 5'0" " - On corner opposite and South No.18  
at intersection of No. 3. Drive  
and Crosscut connecting Nos. 1  
and 3 Drives.
- " 34. - 4'0" " - South and adjoining 33.
- " 35. - 4'0" " - " " " 34.
- " 36. - 3'6" " - " " " 35.  
to No. 1 Drive.
- " 37. - 5'0" " - Pig flat pyrrhotite ore body  
about central section of ore  
body.

- Sample 39.- 40. - 5'0" wide - South West and adjoining 37-38.
- " 41 - 42. - 5'0" " - " " " " 39-40.
- " 43. - 5'0" " - Repeat of 33.
- " 44. - 18" " - East side of Crosscut between Nos. 1 and 3 Drive shows cassiterite.
- " 45. - 4'0" " - Crosscut to South from No.1 Drive. Face of Crosscut.
- " 46 - 47. - 3'6" " - East side Crosscut North and adjoining 45.
- " 48. - 3'6" " - North and adjoining 46-47.
- " 49. - 3'6" " - " " " 48.
- " 50. - 51 - 5'0" " - Pig flat South West and adjoining 41-42.
- " 52. - - - Grab sample. Soft black decomposed material. Pig Flat.
- " 53. - - - Grab sample. Pig Flat. Pyritic Slate ? green in colour.
- " 54. 4'0" " - Leading Stope over No. 1 Drive East end. Second ladder up.
- " 55. 4'3" " - South and adjoining 54.
- " 56. 4'3" " - " " " 55. but receding East.
- " 57. 4'0" " - 5 ft. East of 56 but extending South from 56.

*A. G. Keith*

CHIEF GEOLOGIST.

Mr. W. St. C. Manson,  
Chief Chemist and Metallurgist,  
Department of Mines Laboratory,  
LAUNCESTON.