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INSPECTION OF  
F. E. ATKINSON'S  
TIN PROSPECT

APRIL  
1966

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## CONTENTS

	Sect.
Introduction	1
Location and access	1
Holding	1
History of past Operations and Productions	1
Geology & Topography	1
Description of the Lodes	1
Terms of Sale	1
Conclusion and Recommendations	1

### List of Drawings

Drg. No. 39 -	F. Atkinson's Tin Prospect Springhill area	1
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# REPORT ON AN INSPECTION OF F. ATKINSON'S TIN PROSPECT.

APRIL 13th, 1966.

## INTRODUCTION

On April 4th. & 7th. 1966, A. Sturm and E. Kalmberg in the company of F. Atkinson visited the latter's tin prospect; 7½ hours were spent on the property in which a rapid inspection was made of the entire workings. The majority of the time was spent, however, in a more detailed examination and sampling of 3 lodes at present being worked by the owner.

The workings were previously visited by W. J. Fisher and E. Larsen in 1963, and at that time were considered too small to be of interest to the Company. However, on the basis of Mr. Atkinson's statement that his work since that visit revealed some promising features, the present inspection was made.

## LOCATION AND ACCESS.

Located at approximately  $131^{\circ} 42' 45''$  longitude and  $13^{\circ} 38' 45''$  latitude (see 1 mile Burrundie Sheet) and approximately 16 miles northwest of Pine Creek.

Access by means of Burrundie road from the 140 mile on Stuart Highway. From the highway, travel 5.8 miles along the road and then turnoff on a track to the left; thence 1.9 miles to the workings on top of a hill (Note - at 1.0 miles from the turnoff is a track to the right, keep straight, and at 1.4 miles is a fork - keep right).

## HOLDING.

The workings are covered by Prospecting Area 111B, held in the name of F. Atkinson - 96 shares (96/96th. interest). This tenement expires on 17th June 1966, at which time application for lease ~~on-claim~~ by Mr. Atkinson to retain this interest (must be made.) (See photostats in geology office copy)

## HISTORY OF PAST OPERATIONS AND PRODUCTIONS.

Earlier operations were apparently by the Chinese (their old camp being not far from the workings). No search of past production records has been made.

Mr. Atkinson stated verbally that in March 1965 he extracted 7 tons 3 cwt. from No. 1 Lode, and in October, 10 tons from old dumps the latter assaying about 1½% Sn. At present, he estimates he has a further 8 tons stockpiled from the No.1 Lode.

Crushing of the 7 ton 3 cwt. parcel at the Mt. Wells Battery yielded 550 lb. of concentrate assaying 54.6% Sn. with 0.5% lost in tails. This gives a calculated head grade of 2.36% Sn. This concentrate was sold to Sydney Smelting Co. Pty. Ltd. for a return of \$411 after Impurity penalties and Insurance premiums. (See photostats in geology office copy)

## GEOLOGY & TOPOGRAPHY.

The country rock is Lower Proterozoic siltstone of the Burrell Creek formation, which strike about  $310^{\circ}$  and dip steeply to the N.E. The surface strata on the slopes adjacent to the prospect dip flatly S.W. but this is attributed to surface creep.

# REPORT ON AN INSPECTION OF F. ATKINSON'S TIN PROSPECT.

(CONT.)

## GEOLOGY & TOPOGRAPHY (CONT.)

Local relief in the vicinity of the workings is about 175', and is steep and rugged.

## DESCRIPTION OF THE LODES.

The lodes occur as a number of narrow gash veins of quartz-cassiterite along the crest of a hill, most of which are gouged out by numerous trenches and small pits. Little time was spent in examining these as they are now filled with rubble.

On the northeastern end of the hill are three en echelon veins at present being worked by Mr. Atkinson.

Vein No.1 is exposed for 50' on the surface, dips  $40^{\circ}$ - $70^{\circ}$  N.E., strikes about 310', averages about 3" in width. A small tunnel driven along the lode about 20' beneath the surface indicated the lode continues a further 40' narrowing to 1" at the end (see attached plan), and presumably pinching out. The vein was sampled at 10' intervals along this tunnel. It is from this lode that Mr. Atkinson obtained the 15 tons of ore. The cassiterite grade from this lode is coarse grained with crystal clusters occurring up to  $1/4$ " in quartz.

Vein No.2 is parallel to No.1 and dips about  $45^{\circ}$  N.E., is 60' long and 5" wide where it is exposed at the southern end of the trench.

Vein No.3 extends for at least 96' (judging from the trench length) dips  $43^{\circ}$  N.E. and was only  $1\frac{1}{2}$ " wide where it was exposed at the north and south ends.

Near the bottom of the northern end of the hill, an adit has been driven 275' on a bearing of  $172^{\circ}$  to intersect the veins at approximately 150' below the surface workings. The veins do not live to this depth. Mr. Atkinson suggested the veins could be pitching to the S.E. and that the Adit therefore passed beneath the veins. While this is a possibility there was no real evidence to suggest this and it is considered unlikely.

## TERMS OF SALE.

Mr. Atkinson offered to sell his entire interest in the workings including the present ore stockpile of about 8 tons for \$2000.

## CONCLUSION AND RECOMMENDATIONS.

The economic outlook of the prospect has not substantially changed since Mr. Fishers and Mr. Larsens visit. The veins are too narrow and too shallow in depth to support a Company operation, and it is recommended that Mr. Atkinson's offer be rejected.





## ASSAY RESULTS

SAMPLE No	DESCRIPTION.	WIDTH (REPRESENTED)	ASSAY % Sn.
V106R	CHANNEL SAMPLE QTZ-Sn NO1 VEIN	1 1/2"	6.67
V107R	" " " " "	2 1/2"	0.50
V108R	" " " " "	3"	0.29
V109R	" " " " "	3"	0.33
V110R	" " " " "	3"	0.06
V111R	APPROX 5' UP DIP FROM V110R	4 1/2"	0.22
V112R	CHANNEL SAMPLE QTZ-Sn VEIN NO1		6.98
V113R	CHIP SAMPLE ALONG 1/4" VEIN EXPOSED ON MAIN ADIT WALL & BACK.	1/4"	NIL (BY PANNING)
V114R	CHIP SAMPLE ALONG 26' LENGTH OF 2-3" QTZ VEIN MAIN ADIT.	2.5"	0.04
V115R	SAMPLE OF PINK SILTSTONE?	—	—
V116R	CHIP SAMPLE VEIN NO1	3"	7.18
V117R	CHANNEL SAMPLE VEIN NO3	2"	0.27
V118R	SAMPLE OF HANGING WALL ROCK (SILTSTONE).	—	TRACE (BY PANNING)

VEIN NO3

1" WIDE

V118R, V117R

2" QTZ Sn LODE

VEIN NO2

ADIT APPROX 150' BELOW SURFACE

GREY SILTSTONE.

5" QTZ-Sn LODE

VEIN NO1

QTZ-Sn LODE ON SURFACE  
SAME LODE ~12' DOWN DIP BELOW SURFACE

DOWN TO SMALL ADIT.

QTZ-Sn LODE 2 1/2"-4" WIDTH  
(ORE DUMP FROM HERE)

V112R

1/4" QTZ VEIN

V113R

2-3" FLAT  
DIPPING QTZ VEIN.

V114R

PINK ALTERED  
SILTSTONE

V115R

42' TO ENTRANCE OF  
ADIT.

QTZ Sn LODES.  
SILTSTONE.

## UNITED EXPLORATION PTY. LTD.

Investgtd	AGS.	FATKINSON'S TIN PROSPECT	
Date	4.4.66	SPRINGHILL AREA.	
Accuracy	Compass & Tape.	Long. 131° 42'	Lat. 13° 32'
DRG No	39		