

Gas No 4

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THE HOUSETOP AREA
LAUREL CREEK ~ BLYTHE RIVER
DISTRICTS
by Allan Pearsons

The Housetop Area, Laurel Ck ~ Blythe R.
by
A. Pearson
26/3/27

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THE HOUSETOP AREA

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LAUREL CREEK AND BLYTHE RIVER DISTRICTS

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INTRODUCTION Following the investigations of the Loongana and Upper Leven River Districts, The Niarana Prospecting Syndicate instructed the writer to proceed to the House Top Area which includes the Laurel Creek and Blythe Rivers and continue the investigation in that area. In view of the fact that Alluvial and Lode formations of Tin occur in this District the object of this investigation was to endeavour to locate any Alluvial or Detrital deposits or Lode formations of Tin or other Minerals that may be of commercial value

GENERAL STATEMENT

The work outlined in this report was carried out during the period from the 28th February to the 13th March 1927, a total of 14 days. The Field work was carried out with the aid of Devon 3 D Land Chart and the Housetop Mineral Chart, the geological sketch map plotted on these charts is on the scale of 2 inches to 1 mile.

ACKNOWLEDGEMENTS

Mr. J.T.Harrison of Burnie accompanied the writer as Field assistant on this trip and the knowledge and usual energy displayed by him was of the utmost assistance during the carrying out of this work.

CLIMATE AND GENERAL CONDITIONS.

This District, like the Loongana District, is also one of fairly heavy rain fall. The chief waterway being the Blythe River which has a North Easterly trend, and empties in Bass Strait at Heybridge a small settlement situated mid-way between Burnie and Penguin. Laurel Creek, the next largest stream in this district is the chief tributary of the Blythe River. These two streams constitute the main drainage system of the Housetop District, and have numerous permanent smaller tributaries emptying into each of them, at the time of this investigation many dry stream beds of a small nature were met with which doubtless act as drainage channels during the wet season. The country in this area is comparatively open and only on a few occasions was dense scrub containing Horizontal and Beaura met with which acted as a retarding agent in any way. White Top stringy bark gum and Peppermint are the chief Timbers of this district, but occasionally Celery Top Pine it met with. Occasional trees of Blackwood, Manuka, Sassafras and Myrtle are to be found but no extensive growths occur.

LOCATION AND AREA

Housetop Lies 27 miles South West of Penguin the nearest township and Railway. It is connected by good Metal road for a distance of 23 miles, the nearest point to the Mountain, and then by winding track a further 4 miles. This area can also be approached from Loongana by pack-track about 15 miles. Burnie, 11 miles on the West side of Penguin, and Ulverstone, 7 miles on the East side of Penguin are the nearest sea ports and are connected both by rail and road.

GEOLOGICAL MAP.

The Geological Map accompanying this report deals with the House Top area, which includes the greater portion of the country between the Blythe River and Laurel Creek. The Map although based on Land and Mineral Charts of the House Top District was drawn largely from notes of surveys performed in connection with the Field work. Prismatic Compass being used for this work.

GEOLOGY

The primary rock formations of the House Top Districts included in this investigation, and which cover the greater portion of the area surveyed, are Granites belonging to the Devonian period. At one point along the road cutting, 4 miles South of Loyeatea Post Office, the small section of Slates belonging to the Zeehan series is exposed. On the Eastern side of the area Basaltic Lava flows cover the Granite and appear to be extensive. Numerous beds of Tertiary gravels occur in the form of plains, and are situated in the depressions between the hills. Recent Alluvium is also present in connection with the majority of waterways.

SEDIMENTARY ROCKS.RECENT

The chief Sedimentary formations in this area are connected with Blythe River and Laurel Creek. The Blythe River channel is for the most part comparatively narrow, and the width of Alluvium proportionately small, no great width being noted, except in one or two places. Laurel Creek has larger areas of Alluvial material but this stream is also cut deep channels and shows no very extensive area of Alluvium. Most of the tributaries of the above mentioned stream has areas of Alluvium ranging from a few yards to one or two chains in width, with a depth of from 3 to 8 feet.

TERTIARY

Numerous areas of Tertiary Gravels occur scattered throughout the area surveyed. These sediments, which are mostly in the form of Button Grass Plains ranging in size from one or two acres, up to large areas containing hundreds of acres. In the majority of cases these Alluvial deposits are of no great depth, and are covered with a black peaty soil.

P A L A E O Z O I C R O C K SCAMBRO - ORDOVICIANZEEHAN - DUNDAS SERIES

On the west side of Laurel Creek, on Land section held in name of Templar, a small out crop of Cambro-Ordovician Conglomerate occurs. A formation of Blueish - Grey Slates is exposed in the road-cutting about 4 miles south of Loyeatea Post Office. Only a few feet in width are exposed at this point. The above were the only formations of Cambro-Ordovician of any consequence met with during this investigations.

ACIDIC DIVISION

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GRANITES

The most wide spread Igneous Rock in the area surveyed is Granite. The area between Laurel Creek and the Blythe River is entirely one big Granite exposure, which extends practically to the Loyeatea Road on the East side.

B A S I CBASALT

Basalt occurs on the East Side of Loyeatea Road for a considerable distance and at one or two points crosses to the Western side of the Road where it contacts with the Granite.

ECONOMIC GEOLOGY

The only kinds of Ore deposits met with in the Area dealt with in this Report are connected with Porphyry Dykes, and Placer Deposits. The first mentioned being of Primary origin, and the second being of secondary origin.

M I N E R A L O G Y

The variety of Minerals met with during the investigations of the House Top area are limited and owing to no systematic prospecting being carried on, no formations of minerals of commercial value have been discovered.

The following is a List of the more important Minerals occurring in the District:-

LODE FORMING MINERALS

Oxides:-

Cassiterite
Limonite
Hematite
Magnetite
 specularite
Ilmenite

Phosphates:-

Monazite

Native Elements:-

Gold.

Silicas:-

Tourmaline
Quartz
Zircon

Sulphides:-

Pyrite

ROCK FORMING MINERALS

Orthoclase
Plagioclase
Muscovite
Sericite
Biotite

O X I D E S

CASSITERITE:- (Tin Ore) Tin Dioxide, Sn O₂, the most important Ore of Tin, is found sparsely distributed over the bigger portion of the House Top, District, and is associated with the Talus and Alluvial deposits.

LIMONITE:- Hydrated Peroxide of Iron is the chief constituent of the capping of the Lodes inspected by the writer. It is an Oxidisation product of Iron, and Iron bearing Minerals.

HEMATITE:- Peroxide of Iron, is associated with Limonite and occurs under similar conditions.

MAGNETITE:- Sesquioxide of Iron occurs as a massive formation contacting Slates and Granite and underlying Basalt at Loyatea.

SPECULARITE:- Proxide of Iron is the crystalline form of Heamatite. Occurs scattered throughout the House Top Area in association with Porphyry.

ILMENITE:- Titanniferous Iron. Fe Ti O₃, occurs in large quantities throughout the sediments derived from the Granite

NATIVE ELEMENTS

GOLD :- (Au) Fine specks were noticed during the washing of one or two streams.

SULPHIDES

PYRITE:- Iron Disulphide, Fe S₂, occurs in the Lode formations mentioned in this Report.

PHOSPHATES

MONAZITE:- Phosphate of Cerium, Lathanum, and Didymium, (Ce La Di) PO₄, with also Thoria and Silica, is found widely distributed throughout the House Top area, associated with Cassiterite, and Tourmaline in the Alluvial Deposits derived from the Granites.

SILICATES

TOURMALINE :- Boro-Silicate of Alumina is found widely distributed throughout the District. The Black variety is extremely abundant and is associated with Quartz in viens. Zeuxite, the Green and Blue Variety was not met with by the writer during this investigation.

ZIRCON:- Zirconium Silicate Zi Si O₄, occurs associated with Ilmenite, Tourmaline etc in sediments derived from the Granite

M.I.N.I.N.G PROPERTIES

About 20 years ago Mr. T.B.Moore held 2 forty acre sections on Laurel Creek for Minerals, and opened up a lode formation on these sections. On the East Bank of Laurel Creek, a trench and 3 tunnels have been driven, and on the West side 3 small trenches have been cut, and a shaft sunk about 60 feet.

The workings on the East side are as follows:-

A Trench (marked No. 1 on Plan) has been put in at an angle of N 60 Degrees E, and has been cut for 40 feet in length with a width of 4 ft 6 in, and runs in depth from surface to about 14 feet. This crosscut exposes Gossanous Material for the full length of cut. Sample No. 4 was taken from this cross cut, and assayed by Mr. W.D.Reid, Cheifl Government Chemist and Assayer. Results shown on Analytical Certificate. The distance from the water edge to the mouth of this trench is about 1 chain.

A few feet further up stream and starting from the water edge is a tunnel (marked No. 2 on Plan) driven into the Bank, 45 feet, through a formation of Gossanous material which carries bands of hard quartz. This tunnel is driven at an angle of 60 degrees N^oE.

Secondary Silica was met with in this tunnel, the Gossanous Material was sampled for assay (Sample No. 5) and was assayed by Mr. W.D.Reid.

Between this tunnel and the trench mentioned above a smaller tunnel has been put in 8 feet (marked X on Plan) showing the Gossanous formation. No samples were taken from this point.

Out 1 chain further up stream from Working No. 2, is another tunnel (marked No. 3 on Plan) driven at an angle of North 35 degrees East for 20 feet into the Hill. This tunnel also cuts the Gossanous formation, and was sampled for analysis. Assay sample No. 6 taken from this tunnel.

From working No. 3 for a distance of about 30 feet up stream, the Gossanous material still exists, but at this point appears to contact with the Granite. This point was also sampled for analysis. Sample No. 7.

The workings on the western side of Laurel Creek are not extensive but are detailed as follows:-

Almost directly opposite No. 3 is a short trench (No. 4 on Plan) about 6 feet long, put into the Gossanous material. No samples were taken from this point.

About 21 feet south of this cut another short trench (No. 5 on Plan) has been put into the Gossanous formation for a distance of 4 feet. No samples were taken from this trench.

36 feet South from working No. 5 is still a further cross-cut put in for a distance of 30 feet (No. 6 on Plan) exposing the Gossanous material. No samples were taken from this working for analysis.

Thirty feet West from working No. 6, a shaft has been put down to a depth of approximately 60 feet. At the time of this investigation the shaft had fallen in and no opportunity was afforded the writer of inspecting it thoroughly. The tip at the head of the shaft shows Cambro-Ordovician Conglomerate.

After an investigation of these workings the writer pegged an Extended Prospecting Area of 320 acres, in the name of Mr. G.D. Gardner, under Prospecting Licence No. 625.

On the East side of Laurel Creek and about 2½ miles North of the above mentioned workings are Two 40 acre prospecting claims held in the names of Messrs H. Radford and M. Langham, residents of Riana Districts. A small amount of development work has been done on these sections and is detailed as follows:-

18 Chains from Laurel Creek a small shaft has been sunk to a depth of 12 feet, with a narrow cross-cut 20 feet long leading to it. Material from this formation carries Specularite in abundance, and Limonite, also the writer thought he detected traces of Manganese. This formation is situated in a porphyry dyke. Sample No. 1 was taken from this formation for analysis.

A short distance East from the above formation is a parallel formation, which has been exposed at a tree butt. Sample No. 2 was taken from this point for analysis.

Twenty chains North of the above mentioned exposure, a trench 25 feet long has been cut on this formation. The material exposed here is Porphyritic and carries a large amount of Specularite. Serecite Mica also appears to be present. Sample No. 3 was taken from this trench for analysis.

On the West side of the Blythe River a small stream has been worked for Alluvial Tin. These workings are 4 chains long with a width of 10 feet. No information regarding the quantity of Tin taken from this working could be obtained, but dishes ^{found} on each side shows no values of Tin worth considering. A formation of Gossanous Material is exposed at this point, and although no work has been done on it the Writer grab-sampled it, which sample gave the following results. (Sample No. 8)

Cassiterite (Sn O₂) Trace.

An out crop of Magnetite has been exposed along the Loyatea Road but not sufficiently enough to get any definite data regarding it.

Sample No. 9 was taken from this out-crop.

Sample No. 10 also taken from this point and assayed for Aluminium showed the following:-

Alumina (Al₂O₃) 16.48 per cent

SEDIMENTARY DEPOSITS

The writer panned dishes from all Recent and Tertiary deposits met with in the Area surveyed. The tin Content of the Alluvium in the streams and plains of this area is in a very fine state of division, and sparsely distributed throughout the wash, and being associated with Tourmaline, Monazite, Ilmenite, and Zircon, also in a fine state of division, would not permit of it being worked at a profit.

KEY TO PLAN OF MINE WORKINGS ON LAUREL CREEK

Working No. 1. Trench running at an angle of N 60 degrees E. Length 40 feet, width 6 feet 6 inches. Depth, from surface to 14 feet. Sample No. 4 taken from this trench.

Working marked X. Short tunnel driven 8 feet. Not sampled for analysis.

Working No. 2. Tunnel driven 45 feet at an angle of N 60 degrees E. Sample No. 5 taken from this tunnel.

Working No. 3. Tunnel driven for 20 feet at an angle of N 35 degrees E. Sample No. 6 taken from this tunnel.

Working No. 4. Trench 8 feet long. No samples taken for analysis.

Working No. 5. Trench 4 feet long. No samples taken for analysis.

Working No. 6. Trench 30 feet long. No sample taken for analysis.

The above mentioned workings are all driven into the Gossanous formations exposing it for a considerable distance.

Working No. 7. Shaft put down 60 feet. No samples were taken from this working, on account of the shaft having fallen in. Nothing of any consequence was noticed at the Tip at Shaft head.

Denotes the contact of the formation ^{with} of the Granite.

TABLE OF DISTANCES (approximately)EAST SIDE OF LAUREL CREEK.

From Working No. 1 to No. 2.	18 feet.
do No. 2 to No. 3.	30 "
do No. 3 to Contact	30 "

WEST SIDE OF LAUREL CREEK

From Working No. 4 to No. 5.	21 feet
do No. 5 to No. 6	36 "
do No. 6 West to Shaft	30 "

CONCLUSION.

The foregoing remarks serve to point out that although up till the present time no Deposits of Commercial value have been discovered in the House Top District, yet the conditions existing are favourable for Ore occurrences.

On every hand evidences of Mineralization are apparent, and it is probable that payable Ore bodies will be located in this district, but only after the expensiture of a good deal of capital.

The writer, during this investigation, surveyed 15 square miles of country, and with the exception of a very small area, Granite of a Devonian period was met with, and with the Granite is associated Minerals of value, but not commercially so.

In view of the fact that no detailed examination of the House Top district has been made previously, and very little prospecting has been done, but, as already stated, it would require considerable capital to prove the Field.

Alan Pearson

LAUNCESTON. 26th March 1927.

LEGEND (Supplement)

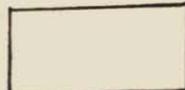
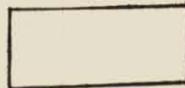
/ Deronian.

Granite.



Deronian.

Porphyry.



NOTE:

NO PLAN
ACCOMPANYING
THIS REPORT.

Alan Pearson
Lawrence
26-3-27