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ANNUAL REPORT OF THE MINISTER OF MINES
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PART D -- Special Report
by

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Jamieson-Lanes Creek Area - This area lies on the west side of the North Thompson River and may be reached from Kamloops by a road on the west side of the river; Lanes Creek being 12 miles and Jamieson Creek 15 miles distant from that city. The area includes the following groups of claims and properties: In the vicinity of Jamieson Creek-- Homestake, Molly Gibson, Francis (Mackay) group, Gold Bug, Hykaway's, Bear Cat; between Jamieson and Lanes Creek-- Shue Fly, Polestar, Lakeview; and in Lanes Creek and its tributary, Porphyry group and the Royal Inland.

Three short roads and numerous pack-horse trails furnish access westward in to the area. A road beginning half a mile north from Lanes Creek goes for $1\frac{1}{2}$ miles to the Inskip ranch; another commencing half a mile south from Jamieson Creek leads to the Hyde ranch; and another goes for half a mile up Jamieson Creek from the road to an irrigation dam; formerly a wood-road followed up this creek for three miles, but high water has washed out the small bridges.

For the most part the area consists of rolling and partly open range-land, but above 3000 feet and on the steep slopes into Jamieson Creek, dense growths of small to medium-sized conifers prevail; details of local topography will be given in the individual descriptions of the properties to follow.

Two cross-cutting stocks of granite characterize the area. The northerly of these has a minimum diameter of 1 miles and is exposed north-easterly from Jamieson Creek, on the Homestake and Molly Gibson claims. Jamieson Creek and a narrow area of sediments intervene between this, and the southerly stock. Outcroppings of this stock extend southward along the west valley-side of the North Thompson for 2 miles, to within 1 mile of Lanes Creek, and westward for about a mile and a half. The granite is a peculiar type; it weathers to a yellowish surface, is medium-grained, and contains conspicuously blocky orthoclase and sodic plagioclase in about equal amounts, considerable quartz and small amounts of greenish biotite. In view of the sodic nature of the plagioclase and lack of monzonite texture the rock is described better as a granite rather than a quartz monzonite.

The emplacement of these granite stocks was followed by the intrusion of numerous feldspathic dykes. These include feldspar

porphyry and feldspar-quartz porphyry that transect the intruded rocks for some distances from the granite. A characteristic of these dykes is the widespread occurrence in them of short quartz veins filling transverse fissures and extending only from wall to wall of the dyke.

The intruded rocks include a few outcrops of altered greenstone and a series of slightly metamorphosed sedimentaries that commonly strike north 20 degrees west and dip 25 degrees north-easterly, although there are local variations to north-easterly strikes and south-easterly dips. The sedimentaries comprise black argillites, paper shales, phyllites, quartzites and hornfels, all somewhat limy. That a considerable thickness of these rocks occurs is indicated by the fact that in traverses up Jamieson and Lanes Creeks, which flow south-easterly, the author found the same group of rocks to prevail for 6 miles up either creek.

The mineral deposits in the area consist of sparsely mineralized quartz veins, containing small amounts of gold. The following vein-types occur:

- (1) The filling of 1 set of fractures of a conjugate fracture-system in the granite, such as those on the Homestake and Molly Gibson.
- (2) Filling transverse fissures in porphyry dykes, such as those on the Gold Bug, and Francis.
- (3) Irregular lenses in the sedimentary cover-rocks. This is the commonest type.

The sulphides found in the quartz include small amounts of pyrite, galena, sphalerite, and arsenopyrite. For the most part the veins lack persistence both along their strike and dip, and none have so far been proved to have values high enough or sufficiently persistent to indicate commercial ore.

Three of these properties have been known for some time; Dawson describes the Homestake occurrence in his Kamloops Memoir published in 1896; The Molly Gibson has been described in the Minister of Mines Report for 1899, and the Polestar in the same Report for 1913.

Most of the recent work on the various properties has been done, however, since the increase in the price of gold to \$35.00 an ounce.

A bibliography of the properties includes: the Geological Survey of Canada, Part B, Volume 7, 1896, on the Kamloops

map-sheet, and the Geological Survey of Canada Summary Report, 1921, Part A, on the North Thompson area; and the Annual Reports of the Minister of Mines for 1899, 1901, 1904, 1913, 1930, and 1931.

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Homestake.-- The Homestake property comprises only the Homestake Crown-granted claim located as such in 1904 though previously staked; and owned by O. Redpath (deceased), Catherine C. Way, and Thomas Bulman, all of Kamloops.

The workings and cabin lie between elevations of 2500 feet and 2700 feet on the gentle slopes of a semi-open hill-top, approximately 1 mile north-west from the highway and $\frac{3}{4}$ mile north-east from Jamieson Creek. They may be reached by a pack-horse trail $1\frac{3}{4}$ miles long which leaves the west side of the highway at a place approximately $\frac{1}{2}$ mile north of the highway bridge across Jamieson Creek.

The deposit consists of quartz veins, some filling fissures that follow the direction of most prominent jointing in a stock of granite, and others representing replacement from such fissures to form thick, lenticular bodies. These veins pinch and swell noticeably along both strike and dip, from a maximum of 15 feet to a mere joint. In one good exposure, as many as five veins were seen across a 20-foot width; these however, pinched and swelled along the plane of the confining joint in the granite. The workings explore only the three widest and most continuous veins on the property; these veins vary in strike from north 30 degrees west to north 45 degrees west and in dip from 60 degrees to 80 degrees south-west. The sulphide content of the quartz is small, and consists of predominant pyrite with a little galena, sphalerite and arsenopyrite.

The granite is a peculiar type. It weathers to a yellowish surface; is medium-grained and contains conspicuous blocky feldspars, orthoclase and sodic plagioclase in about equal amounts; considerable quartz, and small amounts of biotite; with the plagioclase non-calcic it could be termed a quartz monzonite, but in view of the sodic nature of the plagioclase and lack of monzonite-texture it is deemed preferable to call it granite.

Of the surface workings, most of which were caved, 8 open-cuts, 1 adit, and 3 shafts were seen by the writer. That most of the underground workings have opened up considerable bodies of quartz is indicated by numerous conspicuous dumps of quartz.

120 feet north 10 degrees west from the cabin an adit, now completely caved, has been driven into the hillside at north 30 degrees west, encountering slightly mineralized quartz and granite as evidenced by material on the dump.

In the same direction, north 30 degrees west up the hill and 60 feet, 80 feet, and 100 feet respectively from this adit, 3 open-cuts in the granite expose parts of 3 quartz lenses, ranging from a few inches to 7 feet in thickness. A picked sample from the uppermost cut, containing galena and pyrite, assayed: Gold, 0.42 ounces per ton; silver, 12.2 ounces per ton.

Forty-five feet in a direction north 60 degrees west, an inclined shaft, now completely caved but of reported depth 75 feet (Annual Report of Minister of Mines 1930, page 190), has been sunk at an angle of 60 degrees to the south on a quartz vein that appears to have a width of 15 feet, as estimated from its occurrence both in and out of the shaft.

Twenty-five feet below the prominent top of the hill, which is 450 feet, north 15 degrees east and approximately 175 feet above the inclined shaft, a small cut exposes a 15-inch quartz vein containing a small amount of pyrite and galena therein striking north 10 degrees west, and dipping 70 degrees south-west. It is to be noted that the attitude of this vein is definitely that of the jointing in the granite forming the surrounding low bluffs.

A second shaft, elevation approximately 2650 feet, has been sunk for approximately 30 feet from a point 370 feet south 50 degrees west from the shaft first described. The south wall shows three two-inch quartz veins, these are represented on the north wall only as a zone of slight shearing containing a small amount of quartz. The shaft was inaccessible at the time of examination but the dump showed quartz carrying considerable pyrite, a little arsenopyrite, galena and sphalerite. A sample of this quartz assayed: Gold, 0.1 ounces per ton; silver, 4.0 ounces per ton. Between twenty-five feet and 50 feet north-west from this shaft, two strippings expose the possible north-westward continuation of the quartz as a 12-inch vein in the typical granite.

150 feet in a direction south 35 degrees west from the 2nd there is a 3rd shaft about 10 feet deep which has been sunk on a branching quartz vein, ranging from 10 inches to 2 feet in width, from north 45 degrees west to north 10 degrees west in strike, and from vertical to 45 degrees south-west in dip. The quartz contains considerable pyrite.

An 18-inch quartz vein, associated with smaller ones, all striking north 20 degrees west and dipping 60 degrees south, occurs in a cut 200 feet south 10 degrees west from the 3rd shaft. This cut is 20 feet up from the base of some steep, rocky bluffs and is approximately 75 feet lower in elevation. Some 200 feet south-west around the base of the bluffs a lenticular quartz vein is exposed. The quartz is 18 inches to 2 inches in width, strikes north 30 degrees west and dips 65 degrees south-west.

The only sediments seen in any of the workings were some badly mashed shales in a caved trench in the flat, open area, some 400 feet south-west from the rocky bluffs.

Molly Gibson.-- The Molly Gibson is a Crown-granted claim located in 1896. It adjoins the Homestake immediately on the south-west and extends down the open bluffy hillside to within 600 feet (vertical) of Jamieson Creek.

The workings are few, and the writer only found one caved, and evidently shallow, shaft, and 2 open-cuts. The shaft is at an elevation of 2300 feet and some 1200 feet horizontally south from the most southerly or 3rd Homestake shaft. The walls of the Molly Gibson shaft show a quartz vein, 1 foot wide, striking north 30 degrees west and dipping 25 degrees south, in a 3-foot zone of shearing in the granite. The quartz contains small amounts of galena and pyrite.

Approximately 500 feet to the south-west there are 3 small cuts on a lenticular quartz vein varying from 10 inches to 3 feet in width. The strike is north 20 degrees west and the dip is steeply southward. The quartz shows no sulphides.

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Francis Group.-- The Francis group includes six claims, the Francis, Alexander, City, Ethel, Jenny and Brass Tacks, variously staked in 1933, 1934 and 1935, and owned by George Mackay, Kamloops.

There are two groups of workings. The first group, including the cabin, is on Jamieson Creek, 3600 feet upstream from the dam on this Creek, the dam being $1\frac{1}{2}$ miles north-west from the highway, and may be reached by road as far as the dam and thence by good trail to the workings. A wood-road was formerly available, but this road crossed the creek several times and the log bridges have been washed away. The second group, an adit and an open-cut, lies at an elevation of 1150 feet on the open hillside approximately 1500 feet north-west from the dam, and may be reached by following the road to the "Hyde place" for three-quarters of a mile from the highway, the workings being only a few hundred feet north-west from this road. NE-24

A working 2500 feet upstream from the dam consists of a right-angled cut 50 feet above the trail, which has been driven along a pink feldspar dyke for 18 feet at north 30 degrees west on a 30-degree upslope, and from the south-east end of this slope, driven for 17 feet at north 60 degrees east on a downslope of 30 degrees. The dyke is 4 feet thick, strikes north 10 degrees east and dips 20 degrees south-east, cutting paper-thin shales at a small angle. The dyke is cut by numerous ladder veins of quartz, which terminate at the dyke-shale contact, vary from 2 inches to one vein 12 inches thick, and contain small amounts of pyrite, arsenopyrite and chalcopyrite. A sample across the 12-inch vein assayed: Gold, trace; silver, trace. One of picked material assayed: Gold, .01 ounces per ton, and silver, 0.2 ounces per ton.

The adit, at an elevation of 1450 feet and 200 feet in a direction 550 feet east from the cabin, has been driven 59 feet in a direction north 70 degrees east across alternating shales and coarser-grained limy sediments, all of which have been intruded by numerous sill-like quartz stringers; the sediments strike north 20 degrees west and dip 25 degrees north-east, although the uniformity of attitude is modified by numerous small drag folds of amplitude varying from 1 inch to 1 foot. A shaft, 10 feet deep, has been sunk at the face of the adit on a fractured zone 2 feet wide, striking north 10 degrees west and dipping 80 degrees east. There is no mineralization in the zone.

Two hundred feet horizontally and 225 feet vertically in a north-east direction from the adit, a pit, measuring 10 feet in each direction, has been dug across the full width of a feldspar-porphry sill that is traversed by numerous quartz ladder veins; these are lenticular, varying in thickness from $\frac{1}{4}$ to 3 inches and containing small amounts of pyrite.

The sill is in paper-shales that strike north 20 degrees west and dip 55 degrees north-east. Below the adit and only 10 feet above the creek bed, there are the remains of three caved adits, which were presumably wholly in old creek gravels. Blasting in a feldspar-porphyry sill, striking north 40 degrees east and dipping 30 degrees south-east, 300 feet west from and 700 feet above the dam, has exposed some small quartz ladder veins, The mineralization has been slight.

The workings south-west from Jamieson Creek consist of an open-cut at an elevation of 1750 feet, and approximately 500 feet north of the Hyde road, and of an adit at an elevation of 1650 feet and 235 feet horizontally at north 47 degrees east from the cut.

ALEXANDER

NE-85

The cut, approximately 15 feet in diameter, is on a quartz-feldspar porphyry dyke, similar in attitude to that in the adit below, of which it is the probably continuation. The adit has been driven south 38 degrees east for 30 feet, south 15 degrees west for 20 feet and south 45 degrees west for 10 feet. For 30 feet from the portal it cuts lustrous black phyllites and then enters a feldspar-porphyry sill, that strikes north 25 degrees east, dips 25 degrees south-easterly, and has a minimum width of 10 feet. The sill is cut by quartz gash veins up to 8 inches wide and these contain small amounts of pyrite, galena and sphalerite.

NE 86

Gold-Bug.-- The Gold Bug group includes the following mineral claims, variously staked in 1933, 1935 and 1936: Gold Bug, Eagle, Iron Cap, King Tut, Golden Axe and Porcupine. They are owned by Mike Salk and associates of Kamloops, B. C.

The workings are between elevations of 2800 feet and 3000 feet, on the north-west side of a small creek that is the first tributary upstream entering Jamieson Creek from the south-west.

The property is reached by a trail $4\frac{1}{2}$ miles long from the dam on Jamieson Creek. This route follows the old wood-road up the creek for 3 miles to the tributary creek, and is quite passable for horses, but from here the trail climbs the steep clay side-hills up the side creek and at present is unsuitable for pack-horses. Near the camp and workings the sparsely-wooded hillside slopes steeply and uninterruptedly to the creek bottom some 400 feet below.

The mineralization consists of quartz-filled fissures in sill-like intrusions of feldspar porphyry, and of irregular quartz lenses in sediments, which vary from shales to phyllites and include small thicknesses of biotite hornfels. The workings include a small open-cut, two vertical shafts, and workings therefrom.

The open-cut is 70 feet south 18 degrees westerly from the cabin and exposes a few small blebs of quartz in porphyry.

The first shaft is 120 feet above the cabin and 240 feet horizontally in a direction south 70 degrees east from it. This shaft is 28 feet deep and has been sunk on a quartz-filled fissure which cuts 2 sills of feldspar porphyry. From the collar to 15 feet down the shaft cuts porphyry, then $1\frac{1}{2}$ feet of shale, then 3 feet of porphyry, after which it cuts shale for the remaining $8\frac{1}{2}$ feet to the bottom. The shale-porphyry contacts, which are conformable, strike north 60 degrees east and dip approximately 40 degrees southerly. The vein, which strikes north 25 degrees west, and dips steeply north-east, varies in width from 4 inches to 6 inches and contains little sulphide. It is to be noted that the vein-fissure and contained quartz are considerably dissipated in the $1\frac{1}{2}$ -foot middle shale-layer, and that in the lower shale layer, the fissure and the quartz have disappeared, indicating the incompetency of the shale to carry a clean-cut, open fissure, after the manner of the massive porphyry.

From the bottom of this shaft a level has been driven north 75 degrees east for 28 feet. Except for the roof, parts of which are in the lower porphyry sill, this adit, as well as the lower two, is in sediments which vary from shales to phyllites and to more massive quartz biotite hornfels.

Seven feet from the main shaft, another has been sunk from the first level to the second, 8 feet below. This has been driven south 67 degrees east for 20 feet. From this level two shallow shafts have been sunk, one, 5 feet from the face and 9 feet deep, and the other, 9 feet deep, from near that shaft extending between the first and the 2nd levels.

From this latter shaft a short level has been driven north 10 degrees east for 8 feet.

In all these levels the mineralization consists of short lenses of quartz in the shales. These lenses have no continuity along either their strike or dip. The maximum width of most lenses is 8 inches, and the sulphide mineralization is sparse, consisting of small amounts of pyrite and galena.

Four samples were taken across the various lenses in these levels and with one exception from the third level down which assayed gold, trace, silver, 0.6 ounces per ton, they assayed nil in gold and silver.

The upper shaft is 75 feet above the first and 110 feet north 60 degrees west from it. This shaft is 35 feet deep but the absence of ladders made it inaccessible. However, it could be seen that the shaft is partly in porphyry and partly in wavy phyllite, the latter containing numerous small lenses of quartz.

NE. 87

Hykaway. -- The workings on the Hykaway group are 700 feet north-west from the Gold Bug cabin and approximately at the same elevation. They consist of one short adit and 2 strippings.

The adit has been driven north 10 degrees west for 17 feet from the cap; near the face a shaft has been sunk for 8 feet across an irregular contact of limy-phyllite and porphyry. The deposit consists of numerous gash veins of slightly mineralized quartz ranging from 1 inch to 4 inches wide in the porphyry, that extends from the portal to the phyllite shales of the shaft.

18 feet south 35 degrees westerly from the adit a stripping 12 feet long exposes porphyry containing veins similar to those in the adit.

The second stripping is south 25 degrees east and 157 feet down the slope from the adit. This is an irregular area 20 feet by 10 feet which shows numerous lenticular quartz-calcite veins pinching and swelling along the schistosity of the phyllite which strikes north 60 degrees east and dips 30 degrees south. A little pyrite is the only sulphide in the veins.

NE-88

Bear Cat.--- The Bear Cat group includes 8 mineral claims, Bear Cat Nos. 1 to 8 inclusive, staked in 1934 and owned by G. P. Miles and associates of Kamloops and Vancouver.

The only working, an adit, is at an elevation of 2500 feet on the north-east side of a small creek, the second one upstream flowing eastward into Jamieson Creek. The working may be reached from the dam on Jamieson Creek by 4 miles of trail which partly follows the old wood-road up Jamieson Creek; and then by another half a mile of steep trail up the tributary creek. The topography in the immediate vicinity of the adit consists of partly wooded steep hillsides and of bluffy gullies leading into the narrow creek bed.

The adit has been driven south-easterly for 80 feet, 70 feet of this being on a lenticular quartz vein, dipping steeply eastward, and ranging in width from 14 inches at the portal, to 6 feet at the top of winze, 40 feet in, which has been sunk 16 feet on the vein, to a knife edge at 70 feet and then disappearing as a joint in the wall-rock. The vein-quartz is sparingly mineralized with pyrite, chalcopyrite, sphalerite and galena, sampling of which showed only traces in gold and silver. The wall-rocks comprise limy phyllites and schists that strike north 25 degrees east and dip steeply south-easterly but near the portal they are highly contorted and 15 feet in, a small indefinite anticlinal structure occurs. Numerous cross-joints in the wall-rocks have been filled by $\frac{1}{2}$ -inch quartz-calcite stringers.

NE-89, 90

Shue Fly.-- The Shue Fly group consisted of the Shue Fly Nos. 1 to 7 inclusive, and Shue Fly No. 10 mineral claims staked in 1934, owned by R. M. Reid and associates of Louis Creek, B. C.; these claims have, however, since expired.

The workings are situated on an easterly sloping open hillside between elevations of 2700 feet and 3000 feet equidistant between Jamieson and Lanes Creeks.

The property may be reached in part by a switch-back road $1\frac{1}{2}$ miles long leading from the west road up the North Thompson, from a point $\frac{3}{4}$ mile south of Jamieson Creek to the old Hyde ranch. From the ranch the open range affords easy horse travel to the workings, 1 mile to the west and north-west.

In the vicinity of the workings the area is semi-open range-land partly covered by scattered groves of small pine; near the adit the ground slopes steeply to the east but near the open-cuts the slope, still eastwards, is much less steep.

Three groups of workings were visited by the writer. These consisted of the south showings, comprising 1 adit and a large open-cut westward therefrom; the central showings comprising a group of 5 pits, $\frac{1}{2}$ mile north 30 degrees westward from the adit; and the north showings, comprising a group of 2 pits one-half a mile north 30 degrees east from the central group.

NE-89

NE-90

The adit, at an elevation of 2700 feet, has been driven west into the side of the hill for 21 feet from the cap, the outer 9 feet being open-cutting. Five feet in from the cap a nearly vertical 1 to $\frac{1}{2}$ inch quartz-calcite stringer strikes north 25 degrees west across the adit; at the face another similar one occupying a tight slip strikes north 45 degrees west and dips 65 degrees south-west. In the face, also, there is a quartz veinlet $\frac{1}{2}$ inch to 1 inch thick which contains some pyrrhotite. This strikes north 25 degrees west and is vertical. The wall-rock consists of dense, highly altered greenstone which in the face is jointed and contains finely disseminated pyrite and pyrrhotite, and of a contorted band of silicified argillite between 5 feet and 9 feet from the cap; this strikes north-west across the adit and is approximately vertical.

Fifty feet under the north end of the hill above the adit and approximately 100 feet above, an open-cut exposes an area of quartz 6 feet by 6 feet: this is quite lenticular, the maximum and minimum thickness being 3 feet and 2 inches respectively. The lens is in a feldspar porphyry dyke, which is 15 feet wide, strikes north 85 degrees west, and dips steeply towards the north. With the exception of another

porphyry dyke, of indeterminate attitude, the remaining rock on the hilltop above the west of the open-cut is massive greenstone containing minute amounts of disseminated pyrrhotite.

The central group, one-half mile north 30 degrees west from the adit, consists of a group of 5 open workings randomly distributed. On the south-east, Nos. 1 and 2 workings consist of two 10-foot open-cuts, No. 2 being 35 feet in a direction north 60 degrees west from No. 1. No. 1 is across alternating biotite schists, shales and quartzite bands containing disseminated pyrite; the various beds striking north 30 degrees east and dipping 20 degrees. No. 2 is across similar rocks but on the sloping face it exposes a quartz vein containing a little galena; the vein strikes north-east and dips 30 degrees south-easterly.

NE-89 { No. 3 is a shallow pit 8 feet in diameter, 82 feet in a direction north 27 degrees east from No. 2. It exposes an 8-inch to 10-inch barren quartz vein lying between a quartzite band and schists which strike north 20 degrees west and are nearly vertical. No. 4 is a 20-foot trench 146 feet in a direction north 52 degrees west from No. 3. It has been driven north 73 degrees west across schists and 2-inch to 3-inch quartzite bands. Three feet from the face it cuts a quartz lens pinching from 6 inches to 2 inches, and containing some galena, pyrite and chalcopyrite.

No. 5, 60 feet north 10 degrees west from No. 4, is a 10-foot area of irregular blasting in a quartz lens up to 12 inches thick, which lies both with the schist and across it. The quartz contains some pyrrhotite, sphalerite, galena and chalcopyrite. One hundred feet and 250 feet south-west from here there are two outcrops of feldspar-porphyry.

NE-90 { The north showings consist of two 10-foot pits situated $\frac{1}{2}$ mile north 30 degrees east from the central groups. They represent blasted pits in typical feldspar-porphyry that is traversed by $\frac{1}{2}$ -inch gash-veinlets of quartz and calcite, containing small amounts of pyrite, galena and sphalerite.

NE-91

Polestar.-- The Polestar property comprises but one claim, the Polestar, Crown-granted and owned by the Frances Gold Mines, Limited, 829 West Pender Street, Vancouver, B. C. L-1012

The claim is at an elevation of 3350 feet and approximately 1 mile north-east from Lanes (Noble) Creek.

It is reached by $1\frac{1}{2}$ miles of switchback road from the west road up the North Thompson River to Inskip ranch, thence by 2 miles of good pack-horse trail to the property.

The workings are on the southerly slopes of rounded knoll lying in open range land.

The rock formation is coarse feldspar porphyry, containing in one place a silicified remnant of phyllite. Lenticular quartz veins occur in the porphyry, and vary in thickness from 8 feet in the shaft, to a few inches in the open-cuts.

The workings consist of 3 strippings irregularly distributed for 52 feet in a direction north 50 degrees west, and an inclined shaft 70 feet in a direction south 40° west from the south-east end of the strippings.

The shaft is 35 feet deep and slopes at an angle of 42 degrees in a direction south 70 degrees east. It has been sunk on a quartz lens which, in the immediate vicinity of the shaft, is 8 feet wide, strikes north 17 degrees east, and dips 42 degrees south-east. The footwall-rock is bleached porphyry. The hanging-wall of the vein was not visible in the shaft. Sulphides are not abundant in this quartz, only small amounts of galena being present. A picked sample of this material assayed; Gold, 0.08 ounces per ton; silver, 8.6 oz. per ton. That higher-grade material has heretofore been found is indicated by the Annual Report of the Minister of Mines for 1913.

The 3 strippings have been attempts to find the continuity of this 8-foot quartz lens along its strike to the north-east. The strippings disclose only small disconnected lenses of quartz in porphyry. In the most north-westerly stripping 18 feet long an 8-inch lens of quartz has much the same strike as the vein in the shaft, and furthermore is on the projected strike and dip of the shaft-quartz. The most south-easterly stripping, 22 feet long, exposes 2 portions of an 8-inch vein which strikes north 55 degrees west and dips 60 degrees north-east. The centre stripping, 12 feet long, shows only porphyry and debris. The porphyry in these strippings is cut by 2 shear-zones which strike north-west and dip north-east.

These zones are only a few inches wide, but the porphyry in them has been transformed into paper-schist. On the north-east side of the north-west trench a small patch of silicified argillite is exposed. This strikes north 60 degrees west and dips 70 degrees north-easterly. This is, however, not extensive, the main exposures in the vicinity of the workings being porphyritic granite.

NE-92

The Lakeview group formerly consisted of 8 mineral claims, Lakeview Nos. 1 to 8 inclusive, staked in 1934 by R. M. Reid of Louis Creek, and variously owned by a group of Kamloops people. These claims have all lapsed.

The group, at an elevation of 3550 feet, was located in moderately timbered range land which slopes gently to the south-west and south-east. The workings lie 500 feet north-west from O'Connor Lake, a small shallow lake 1 mile north-east from the forks of Lanes and Macauley Creeks.

The property is reached from the main west road up the North Thompson River by $1\frac{1}{2}$ miles of steep switchback road to Inskip's ranch thence by 3 miles of good pack-horse trail through open country to the workings.

The workings consist of 2 open-cuts and 2 shallow pits. The lower cut has been driven north 35 degrees east for 20 feet into the grassy hillside; it is mostly in overburden but the last 6 feet are in altered porphyritic olivine-basalt, containing abundant olivine and augite. This is cut by a vertical shear-zone 2 feet wide, striking approximately east-west; there are no sulphides in this zone.

The second open-cut lies transverse to the first, the middle of it being 30 feet up the hill in a direction south 30 degrees west from the first. The work consists of a shallow stripping on a quartz vein for 16 feet in a direction north 40 degrees west and a 6 foot by 6 foot pit 2 feet deep on the north-west end. The quartz vein strikes north 40 degrees west, dips 45 degrees north-easterly, and ranges from 2 inches to 24 inches in width. It carries small amounts of pyrite, chalcopyrite and arsenopyrite. The country rock is massive silicified argillite and contains fine pyrite for a distance of 1 foot from the vein.

A sample taken from the north-west end of the pit and across 2 feet of quartz containing a little pyrite, chalcopyrite and some arsenopyrite assayed: Gold, .01 oz. per ton; silver, trace. A sample of the wall rock on the south-east end of the pit and for 8 inches from the hanging-wall of the quartz vein assayed: Gold, nil; silver, nil.

The vein has not been traced along its strike; of two pits lying north-west along the strike, one shows only silicified country rock, the other only debris. Within 500 feet north-east from the second trench there are four scattered outcrops of coarse feldspar-porphyry, which are in contact with silicified argillite on the south-east; excepting that found in the first trench, no other augite porphyry was exposed at the time of examination.

N.A.C.

Porphyry Group.-- The Porphyry group includes 3 mineral claims, the Porphyry, Argyllite and Red Oxide, staked in 1936 and owned by Joseph H. Reid and associates of Kamloops, B. C.

The workings are on the valley bottom of Lanes (Noble) Creek, and include one group 900 feet west of the North Thompson highway and another group $\frac{3}{4}$ of a mile upstream on Lanes Creek from the highway.

Of the group near the highway, one adit has been driven north-west for 52 feet across interbedded black argillites and grey chert bands the latter probably representing highly silicified argillite. A 2-foot feldspar dyke was cut 10 feet in from the portal. The sediments strike north 50 degrees west and dip 30 degrees south-west; the dyke strikes north 50 degrees east and is approximately vertical.

The mineralization consists of numerous small pyrite nodules in the argillite and of a $\frac{1}{2}$ -inch stringer of quartz in a side-swiped portion on the north-east wall.

120 degrees south-west from the first, a second adit has been driven north 17 degrees east for 15 feet and north 30 degrees west for 18 feet across the contact, at 15 feet from the portal, of a highly altered greenstone dyke on the south-west, and sediments such as those in the first adit. The contact strikes north 30 degrees west and dips 60 degrees north-easterly. Pyrite is present as nodules in the argillites; there are no quartz veins.

The workings, three quarters of a mile upstream on the Argyllite and Red Oxide claims consist of 2 Or 3 small cuts which, in addition to the creek bed, expose crumpled argillites veined by numerous $\frac{1}{2}$ inch to $\frac{1}{8}$ inch quartz stringers; both argillite and quartz containing disseminated pyrite. Samples of this material assayed a trace in gold and silver.

Royal Inland.--- The Royal Inland group consists of 4 mineral claims, Royal Inland Nos. 1 to 4, located in 1935 and owned by Jas. H. Reid and associates of Kamloops. These claims are at an elevation of 4000 feet on Macauley Creek, the cabin and workings being near the junction of Macauley and Williams Creeks; these creeks are the head-water-tributaries of Lanes (Noble) Creek.

The property is reached from the main west-road up the North Thompson River by $1\frac{1}{2}$ miles of steep switchback road to Inskip's ranch, thence by 5 miles of good pack-horse trail; $2\frac{1}{2}$ miles of which is through open range, the remaining $2\frac{1}{2}$ miles through a dense growth of small timber.

In the vicinity of the only working, which is in the creek bottom, the valley of Macauley Creek, though steep-walled, is less than 100 feet deep; the surrounding topography consists of the low rounded hills marking the south-eastern side of the Tranquille Plateau. The forest cover consists of a dense growth of small conifers.

The main working is an open-cut and shallow shaft on the north-east side of Macauley Creek. This cut has been driven north 10 degrees east for 12 feet and south 80 degrees east for 6 feet: at the end of this a shaft has been sunk 6 feet from the floor, which is now approximately 2 feet below the portal.

The cut and shaft indicate that mineralization has occurred along the contact of a feldspar-porphyrty intrusion and shales. The contact strikes north 70 degrees east and is vertical; the shales strike north 55 degrees east and dip 55 degrees south-east.

Along the contact the 2 adjoining rocks have been considerably altered by mineralizing solutions. The shales have been irregularly silicified for as much as 3 feet from the contact, the porphyry has been silicified and carbonatized over a zone approximately 5 feet in width; disseminated grains of cubic pyrite are common in this zone. A bulk sample of this altered and mineralized porphyry assayed: Gold, nil; silver, nil. The only additional mineralization is the development of $\frac{1}{4}$ inch veinlet of calcite, quartz and pyrite in a short gouge-filled fissure of average east-west strike and vertical dip. A bulk sample from this veinlet assayed: Gold, .01 ounces per ton; silver, 0.1 ounces per ton.

Two small and intersecting faults cut and displace the contact; these faults strike 0 degrees west and south

35 degrees west, dip 10 degrees north and 90 degrees respectively. A sample taken from the intersection of these faults assayed: Gold, nil; silver, nil.

On the south-west side of Macauley creek and approximately 500 feet below the first working described, some small blasts cut in a 10 foot by 10 foot bluff expose some $\frac{1}{2}$ inch to 2 inch quartz-calcite stringers cutting quartzites and intruding feldspar porphyry; the quartzites strike north 60 degrees east and dip 45 degrees south-east; the porphyry strikes north 25 degrees east and dips 45 degrees north-west.
