NOTES ON THE DUNOLLY QUARTER SHEET 53d SW

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No. 1 Half a mile east from this locality there is an outcrop of quartz-mica-diorite.

No. 2 Limonite and ferruginous sandstone.

No. 3 Several holes sunk by prospectors in the creek about 10 feet deep appear to have bottomed on pink and white decomposed granite or quartz-mica-diorite.

No. 4 Here is a very small outcrop of a dyke, the rock is much decomposed and has somewhat the appearance of a porphyritic quartz mica diorite. A sample of quartz and ironstone from the cap of the dyke was assayed at the Geological Survey Laboratory, No. 154, Assay No. 589, 16.5.1906. It contained a trace of gold and no silver.

No. 5 Hole in ferruginous sandstone. Not bottomed.

No. 6 The metamorphic rocks here strike East 10 deg. north.

No. 7 White quartzite.

No. 8 Mica schist strike west 20 deg. south.

No. 9 Rose-colored quartz. Micaceous schists and quartz veins with small crystals of mica, strike of beds west 40 deg. south.

No. 10 Rose-colored quartz.

No. 11 Pink colored quartz with felspar and muscovite mica.

No. 12 Much outcropping quartz.

No. 13 Dark nodular micaceous schists.

No. 14 A limited outcrop of sandstone occurs here in some respects resembling centre country. The strike of the strata is east 5 deg. north .

No. 15 A wide flat quartz and ironstone lode.

No. 16 Soft black nodular slate.

No. 17 Bluish slate and laminated quartz strike north 10 deg. west and dip to east 10 deg. north at 65 deg. The slates are somewhat contorted.

No. 18 Centre country with quartz spurs.

No. 19 Laminated quartz in dark blue slate.

No. 20 A large outcropping sandstone bed having a strike of north 10 deg. west has here dominated the trend of the ridge.

No. 21. Centre country, quartz spurs in sandstone, and black slates with a pitch of 40 deg. north.

No. 22 Dark blue slate with a strike of north 10 deg. west and a dip east 10 deg. north at 60 deg. Graptolites were collected here.

No. 23 Sandstone with a strike of north 20 deg. west and a dip east 20 deg. north at 57 deg. One chain further east there is centre country, showing a pitch north 20 deg. west at 35 deg.

No. 24 Dark blue "book" quartz in dark blue slate. Three chains further east the sandstone forms a ridge striking north 10 deg. west and dipping east 10 deg. north at 65 deg.

No. 25 The gullies here trend with the strike of a thick bed of sandstone, which strikes north 10 deg. west and dips east 10 deg. north at 62 deg.

No. 29 Sandstone with quartz spurs strike north 5 deg. west.

No. 30 Banded buff-colored pitted slates (at a depth probably olive green). One chain further east an outcrop of mottled quartz occurs with dark blue inclusions which are finely laminated and probably altered portions of slate.

No. 31 "Book" quartz (laminated).

No. 32 Dark blue slate and quartz, striking north 10 deg. west.

No. 33 Two chains north graptolites occur in dark blue slate. There is here a thin seam of quartz and pyrites, like an indicator striking north 5 deg. west and dipping east 5 deg. north at 70 deg.

No. 34 Book quartz 8 inches thick, strike north 5 deg. east.

No. 35 Centre country with a pitch north at a very low angle.

No. 36 A wide belt of sandstone with quartz spurs occurs in centre country. Suitable for a building stone. Strike of beds north 5 deg. west and dip east 5 deg. north.

No. 37 "Book quartz (laminated)

No. 38 Black slate, and a large quartz reef in green slate occurs three chains further to the west.

No. 39 A decomposed brown lamprophyre dyke divides into two portions 18 feet apart.

No. 40 Here a slight elevation is caused by a large outcrop of quartz.

No. 41 "Book" quartz with a parallel similar outcrop two chains to the east.

No. 42 Sandstone striking north 10 deg. west and dipping west at 71 deg. Quartz occurs on a floor which dips south at 22 deg. One chain to the east the strata dip east at 60 deg.

No. 43 Sandstone strikes north and south agreeing with trend of a gully.

No. 44 Decomposed lamprophyre dyke, "book" quartz and quartz spurs.

No. 45 A quartz spur outcrops for half a chain, striking north 5 deg. west and sandstone with flat floors of quartz.

No. 46 Quartz laminated and in centre country strike north 5 deg. west and dips west 5 deg. south at 84 deg, two chains further to the west there is a 4 inch vein of "book" quartz.

No. 47 The strata here strikes north 10 deg. west and dips west 10 deg. south at 72 deg. In it there is some "book" quartz near centre country, and 2 chains further east some quartz outcrops.

No. 48 Laminated quartz. Centre country.

No. 49 Sandstone with a strike north 10 deg. west and a dip east 10 deg. north at 50 deg. The pitch is north 10 deg. west at 44 deg.

No. 50 "Book" quartz.

No. 51 "Book" quartz laminated. There is also an outcrop of "book" quartz three chains further to the west.

No. 52 Ferruginous "book" quartz 4 inches thick.

No. 53 Decomposed lamprophyre dyke. Centre country with big beds of sandstone pitching southerly at 10 deg. Along the centre country sandstones here are some well rounded nodules of sandstone which appear to occur in places in this goldfield, along the lines of folding, but they are not of common occurrence.

No. 54 Sandstone with a strike of north and south and a dip west at 70 deg. The cleavage dips east at 30 deg. and the pitch is north at 10 deg.

No. 55 A centre country "nose" here pitches south at 52 deg., a little gully trends round the outcrop.

No. 56 Book quartz and rounded nodules and white quartzite occur in centre country.

No. 58 Book quartz and 2 chains further west there is a big sandstone band strike north 10 deg. west dip east 10 deg. north at 64 deg

No. 59 Graptolites in centre country the fossils are badly preserved two anticlinal folds of the strata join here from the south.

No. 60 6 inches of laminated quartz and ironstone strike north 10 deg. west.

No. 61. Centre country pitch of anticlinal south at 28 deg.

No. 62 Pink quartz

No. 63 Centre country pitches south at 25 deg.

No. 64 Good centre country "nose". Pitch south at 16 deg inclines easterly in depth. Dip on east 40 deg. on west 75 deg. There is radial fissuring.

No. 65 Centre country "nose" pitch south at 20 deg. A gully trends round the "nose" from the east and crosses the axis of the fold where there is an outcrop of slate. The small gap on the south has been formed by weathering on the slate bands which there outcrop in the folded country.

No. 66 Large outcrop of white quartz 90 feet long by 15 feet wide strike north 12 deg. west, a cleavage in the quartz dips east 20 deg. north at 20 deg. One chain further west sandstone strikes north 15 deg. west. A gully on the west conforms to the sandstone outcrop.

No. 67 A small hill here is due to the outcrop of a mass of quartz.

No. 68 Centre country, the sandstone here has been worked for building stone; it yields a limited quantity of flags 8 inches thick. the strike is north 10 deg. west and the dip east 10 deg north at 74 deg.

No. 69 Quartz and ironstone outcrop 12 to 14 feet wide, it is white quartz stained on the outside with limonite a few inches thick in places.

No. 70 Bands of ferruginous slate, sandstone with a few quartz veins outcrop above the surface and exhibit cavernous weathering.

No. 71 A small circular outcrop of quartz.

Moles 73—143. Dunolly Q.Sheet.

No. 73. Ferruginous sandstone with limonite bands, strike N.15°W.

No. 74 This sandstone contains sandstone nodules resembling those which occur along some of the centre country lines.

No. 75 Sandstone beds striking N. 15°W., with approximately vertical quartz veins and floors.

No. 76 Outcrop of massive sandstone with an east dip. In it there is a horizontal floor of quartz 1" thick.

No. 77 "Book" quartz. A quartz floor 2 in. wide dips W. 15°S. at 30°. Near here some sandstone has been obtained for rough flagging.

No. 78 Outcrops of massive sandstone dipping west at 70°. In part ferruginous and exhibits cavernous weathering there are some ferruginous nearly horizontal quartz seams.

No. 79 Yellow spotted slates.

No. 80 Outcrop of quartz spurs and green and yellow pitted slates strike N. 15°W.

No. 81 Centre country with radial fissuring strike N.20°W. and dip E. 20°N. at 75°. The pitch is to the north at 10°.

No. 82 Hole, green and yellow pitted slates with quartz spurs.

No. 83 Centre country is exposed in the by-wash of a dam. The strata strike is N. 20°W., a quartz vein in green pitted slates has a favourable appearance for gold.

No. 84 Sandstone with rectangular jointing which produces columnar structure. Strike N. 20°W., dip W. 20°S. at 52°.

No. 85 Centre country pitching to the south at a low angle.

No. 86 Centre country. Dip on to the east is 50°, and to the west 70°.

No. 87 Centre country pitching south at 32°.

No. 88 Centre country pitching south.

No. 89 Sandstone with numerous thread-veins of quartz, which agree with the strike N. 25°W.

No. 90 A bed of quartzite.

No. 91 Pitted green slates and associated quartz spurs.

No. 92 Centre country pitching south at 27°. Quartzite occurs here.

No. 93 Centre country pitching south at 37°.

No. 94 Centre country striking N. 20°W. and pitching south at 14°.

No. 95 The sandstone has been used for building purposes.

No. 96 Re-formed granite detritus and ferruginous sandstone showing limonite and small well water-worn pebbles.

No. 100 Saccaroidal quartz.

No. 101 Pink quartz veins outcrop in the schists.

No. 102 Nodular schists striking N. 35°W.

No. 103 An outcrop of nodular schists.

No. 104 Silky micaceous schists.

No. 105 Dark nodular slates.

No. 106 Nodular black slates striking N. 15°W.

No. 107 Lead 12' deep; red clay and sub-angular gravel composed of ironstone slightly metamorphised slate, massive and laminated quartz and some red ironstone. Nuggets of 7 oz. & 30 oz. were discovered here and two chains up the lead a patch of 10 oz. of gold was obtained.

No. 107 Clay and subangular gravel. Drift 6 ft.

No. 108 Sandstone striking N. 5°W. and dipping E. 5°N. at 73°. Quartz floors pitch S. 40°W. at 18°. Other sandstone beds dip west, suggesting an anticlinal fold.

No. 109 Yellow slates.

No. 110 Greenish-bluish slates.

No. 111 Green-blue slates.

No. 112 Centre country pitching south.

No. 113 Sandstone containing rounded nodules in centre country with a south pitch.

No. 114 Green slates N. 20° W.

No. 115 Green slates and sandstones.

No. 116 Sandstone strike N. 5°W., dip E. 5°N. at 70° with quartz on floors pitching south at 36°.

No.117 Pink, yellow and black slates.

No. 118 An outcrop of red slate; 5 chains to the east slates strike N. 15°W., and at 10 and 13 chains further west yellow slates.

No. 119 Graptolites were obtained here in the creek bed in dark blue slate and 6 chains further east sandstones have been worked for flagging. The strike is N. 15°W., dip W. 15°N. at 75°. Floors of quartz pitch S. 30°W. at 20°.

No. 120 Bands of slate black, green and blue.

No.121 Old shaft about 30' deep showing strata vertical. There is a 3 in. vein of quartz in white slate.

No.122 Black slates.

No.123 Indicator in white slate with numerous hollow cubes formed by the removal of crystals of pyrites.

No.124 An anticlinal fold is well exposed in the creek bed, it pitches south at 10°. Quartz spurs occur in it.

No.125 Sandstone N. 10°W., dip E. 10°S. at 60°. Quartz on floors pitches S.10°W. at 20°.

No.125A There has been a small space of ground surfaced up to an outcrop of quartz and ironstone in white slate. This should be further prospected as it appears to be the source of the alluvial gold.

No.126 Fissured sandstone and greenish yellow slate striking N.10° W. A quartz vein occurs here, dipping S.30°W. at 55° and striking E. 30°S.

No.127 Big outcrop of sandstone like centre country. The sandstone exhibits radial fissuring. Three chains further to the east there is a mottled bluish green and rose coloured quartz reef.

No.128 The western side of what is apparently a big folded bed of sandstone has been removed by weathering.

No. 129 A small amount of surface work has been done here on a big quartz reef which dips to the east, and the alluvial has been worked up to it. A specimen was found containing 26 oz. of gold. The strata dip east at 52°.

No.130 A small heap of tailing not more than 100 tons has been cyanided.

No.131 Quartz veins exposed in a small railway cutting occur in the decomposed granite. At the 131 Mile Post there is a quartz gravel in re-formed granite detritus.

No.132 Mica schist, the mica crystals are larger than those usually seen.

No.133 Nodular mica schist with a strike of N. 50°W.

No.134 Sugary white and rose-coloured quartz. Four chains further to the west there is an outcrop of sandstone which are very lith

altered by the slates have become nodular. The strike is E. 30°S. and the dip is N. 30° E. at 70°.

No.135 Pink quartz veins. The strike of the beds here is N. 40°W.

No.136 Nodular micaceous schist.

No.137 Black nodular slates.

No.138 Dull red and bluish quartz. Two chains further west there is vitreous bluish quartz with some mica and ironstone.

No.139 Loose quartz from here has been used for road-making material.

No.140 Graptolites were noted here in soft pale blue slate. Two chains further to the east there is a band of ferruginous red and bluish slate.

No.141 Saccaroidal red quartz.

No.142 Graptolites were collected here from dark blue slates and a very hard red slate.

No.143 Duprey's Indicator. The strata are thinly bedded dark blue and black slates, which strike N. 15°W. and dip to E. 15°N. at 68°. A slickensided wall agrees with the country rock which pitches south at 15°. A floor or slide showing some quartz crosses the indicator. Graptolites were found here.

No. 73 Centre country strike north 20 deg. west dip west 20 deg. south at 60 deg. the pitch south 20 deg. east at 30 deg. the dip of the axis of the fold is to the east at 73 deg.

No. 144 Large outcrop of quartz and ironstone strike north 20 deg. west at 5 chains to the east there is ~~sugary~~ quartz with blue mottlings.

No. 145 In the drain on the roadside there is 4 feet of yellow clay with sub-angular local gravel.

No. 146 A quartz reef, Coushman's Indicator ~~Reef~~, 3 feet thick which contains some felspar, dips west at 65 deg. The country rocks are green pitted slates striking north 5 deg. west and pitching northerly at 14 deg. A floor with quartz dips at 27 deg. to west 30 deg. north. There has been a "little prospecting" done here. Three chains further west sandstones and quartz and ironstone strike north 5 deg. west.

No. 147 Indicator, a slickensided wall carries a little quartz. The rocks are decomposed slates which strike about north and south and dip east at 44 deg. The Indicator dips to north east at 75 deg. Half a chain further south there is a shallow hole, pitted green slates here strike north 10 deg. west and dip east 10 deg. north at 60 deg. There is a wall here which strikes west 15 deg. south and dips to south 15 deg. east at 65 deg.

No. 148 The course of a gully here is decided by the outcrops of bands of sandstone which strike north 5 deg. west.

No. 149 A hole here 8 feet deep has been sunk on an indicator. The strata are green slates pitted, strike north 5 deg. west dip east 5 deg. north at 51 deg. and pitch northerly at a low angle. There is a crosscourse, to a "floor" which carries a little quartz; it strikes east 10 deg. north and dips to south 10 deg. east at 67 deg. The indicator is a movement plane with half an inch of quartz and ironstone strike north 15 deg. west and the dip is to east 15 deg north at 80 deg. A slide comes in from the west carrying a little quartz and ironstone, and runs approximately with the country rock and dips easterly at 23 deg.

No. 150 Sandstone strikes north and south about vertical ~~or~~ pitches to north at 5 deg, and 4 chains further west there is an indicator at a shallow hole on green slate strike north 5 deg. east and dips east 5 deg. south at 75 deg; there is a "floor" which strikes east and west and dips south at 30 deg.

No. 151 There is a hole here which has been sunk for building stone on a sandstone band which strikes north 25 deg. west and dips to east 25 deg. north at 60 deg. Two chains further west there is an outcrop of quartz and ironstone.

No. 152 Hole here; there is a crosscourse which strikes east 10 deg. north and dips north 10 deg. west at 85 deg; it carries a 2-inch vein of quartz country rock green slates which strike north 25 deg. west and dips to east 25 deg. north at 78 deg. Agrees in strike and dip with an indicator, there is a well striated wall and 1 inch of quartz and ironstone in the Indicator.

No. 153 Chart here, there are some small pieces of magnesite on the waste heap and fragments of green slate, a quartz reef strikes north 10 deg. west and dips to the east.

No. 154 Sandstone strike north 25 deg. west dip east 25 deg. north at 50 deg. A floor here carries 1 inch of quartz it dips to west 20 deg. south at 24 deg.

No. 155 Sandstone here has been excavated for building stone.

No. 156 There are several short outcrops of quartz here; one is 6 yards long and 8 yards further north there is another measuring 4 yards in a north to sout direction. Many short outcrops of quartz were noted during the survey some were nearly circular and but a few yards in diameter.

No. 157 A shaft here on a quartz reef 5 feet wide there are pitted green slates, and pieces of magnesite on the waste heap.

No. 158 An Indicator worked by Mr. Powell here in green slates; it strikes north 15 deg. west and dips to west 15 deg. south at 38 deg. The green slates strike north 10 deg. east.

No. 159 Building stone has been obtained here from a sandstone band, and one chain further west sandstone strikes north 20 deg. west and a costean has been sunk on green slates.

No. 160 A cross reef here has been worked in very hard sandstone the reef is 2 feet wide and strikes east 20 deg. south and dips south 20 deg. west at 70 deg. No particulars available.

No. 161 Middletons and Powell's Indicator. Strike of Indicator about north and south dip east at 53 deg. pitch of strata thin banded green and yellow slates north at 20 deg. Centre country passes about half a chain on the west; the pitch is north at 18 deg. to 22 deg., and the inclination of the axis is to the east at 75 deg. approximately.

No. 162 Indicator 3 chains to the east north 5 deg. west strike and dip is east 5 deg. north at 81 deg. A "floor" with a little quartz and ironstone pitches south at 20 deg.

No. 163 Indicator in almost vertical green slates; a cross course here strikes west 20 deg. south and dips to south 20 deg. east at 65 deg; it carries a little quartz and ironstone. Three chains furth r east is a hole on a big quartz reef in green pitted slate which strike north 15 deg. west and dip west 15 deg. south at 65 deg. Both strata and reef appear to pitch to the south.

No. 164 Somewhat sandy slate has been altered to crystalline nodular schist.

No. 165 Nodular schist.

No. 166 Nodular schist.

No. 167 Quartz reef, the quartz is very glassy and contains some felspar; the rocks are nodular schists.

No. 168 Quartz reef; the quartz is white and rose-colored; the rocks are nodular micaceous schists.

No. 169 Quartz reef, strike north 20 deg. west, the country rock sand micaceous slate strikes north 15 deg. west.

No. 170 Fine grained micaceous schists and 4 chains further east the is slate wit large spots.

No. 171 At several shallow holes here loose quartz for road-making material has been obtained.

No. 172 There is a hole here on a quartz reef 1 foot wide which dips west at 85 deg. and strikes about north and south; a cross-course strikes west 20 deg. north and dips to north 20 deg. east at 65 deg. The reef is in green slates, 3 chains furthe east there is axis surfacing done; the source of the supply o the gold has not been located.

No. 173 There are heavy boulders of subangular quartz and ironstone in the head of the Grumblegut Lead.

No. 174 The highest point of this ridge is a nearly circular outcrop of somewhat sugary quartz and ironstone about half a chain in its largest diameter.

No.174A Lees and Bowles obtained 85 ounces of gold from 2 nailcans of quartz here. (Donelly Express 4th July 1902.)

No. 175 Rose colored quartz and some felspar in green slate which strikes north 10 deg. west and 3 chains further east is 3 inches of quartz in green slate both strike north 10 deg. west and dip to east 10 deg. north at 80 deg.

No. 176 Somewhat sandy slate strike north 10 deg. west, dip east 10 deg. north at 60 deg.; some quartz veins dip west by at 75 deg.

No. 177 Like centre country sandstones strike north 10 deg. west and dip west 10 deg. south at 64 deg; they pitch northerly at 20 deg. A quartz reef here contains some felspar and a dark green mineral probably hornblende.

No. 178 Sandstone has been excavated for building stone; strike north 10 deg. west, dip easterly at 70 deg.

No. 179 Shallow holes on quartz spurs in green slate which strikes north 10 deg. west and dips to east 10 deg. north at 80 deg. There are two quartz reefs; one dips easterly at 80 deg. and one dips westerly at 64 deg; a north and south slide dips west at 60 deg. The quartz encloses fragments of green slate. There is a floor of quartz which dips northerly and carries a 2-inch vein of quartz.

No. 180 Sandstone has been excavated for building stone; strike north and south; dip east at 70 deg. pitch south at 12 deg.

No. 181 Indicator, quartz and ironstone in pitted green slate strike north 15 deg west; a slide "floor" comes in from the east and dips west at 45 deg. There is surfacing up to the Indicator.

No. 182 Centre country, sandstones strike north 5 deg. west and dip east 5 deg. north at 55 deg. One chain further west the dip is westerly at 63 deg.

No. 183 Centre country strike north 30 deg. west; pitch is northerly at 16 deg. the axis inclines to the east. There is some radial fissuring in the sandstones. Four chains further to the west there is a shaft about 30 feet deep; green and othe pitted slates, dip easterly; a slide dips easterly and nearl flat spurs of quartz dip easterly. One chain further west quartz and ironstone 1 foot thick dip east at 55 deg. and pitch north at 15 deg. Green pitted slates strike north 15 deg. west.

No. 184 Shaft 12 feet deep on a vertical quartz reef 3 feet thick which strikes north 15 deg. west. Two chains further west there is a shallow hole on a big quartz reef in pitted slate

No. 185 An Indicator lode exposed in alluvial workings probably the source of some of the alluvial gold which has been obtained here. One chain further east an ironstone lode strikes north 10 deg. east.

No. 186 Indicator strike north 10 deg. west; dip east 10 deg. north at 81 deg. Sandstone and green slates pitch southerly at 18 deg. Three chains further east sandstone has been worked for building stone.

No. 187 Sandstone north 15 deg. west; dip west 15 deg. south at 67 deg; a 1-inch floor of quartz dips to north 35 deg. west at 21 deg. The cleavage dips easterly at 52 deg.

No. 188 Quarry in sandstone for building stone; strike north 10 deg. west; dip west 10 deg. south at 70 deg. pitch southerly at 5 deg.

No. 189 Continuation of the sandstone layer from the quarry on the north, strike north 10 deg. west, dip west 10 deg. south at 55 deg; pitch southerly at 15 deg; cleavage dips easterly at 60 deg, there are a few small quartz spurs some of which are flat.

No. 190 A hole here 12 feet deep; the top sinking is in red ferruginous sandstone below is white reformed granite.

No. 191 Sandstone and quartz reef north 30 deg. west; dip is to the east.

No. 192 Outcrop of metamorphic schistose rock would do for rough building stone, facing reservoir embankments etc. Two chains further west is a similar outcrop.

No. 193 In a railway cutting decomposed mica schists strike north 20 deg. east at 74 deg and nodular schists and sandstones with quartz spurs. Some limonite is now forming from water oozing from the rock. The quartz spurs which are mostly in the sandstones strike from north 10 to 40 deg. west.

No. 194 Holes on a quartz reef in nodular ~~micaceous schists~~ which strike north 25 deg. west and dip westerly. Floors striking nearly east and west pitch steeply to the north.

No. 195 Hole in sandstone strike north 30 deg. west vertical quartz spurs dip at a low angle to the westerly. In a hole 1½ chains to the northwest the strata have a westerly dip.

No. 196 Strike north 15 deg. west. Incipient mica schists strike north 15 deg. west.

No. 197 Slates and sandstones strike north 15 deg. west and dip easterly small "floors" of quartz dip north at 30 deg.

No. 198 Sandstone north 10 deg. west dip east 10 deg. north at 84 deg. with quartz floors dipping south at 10 deg.

No. 204 Hard blue hornfels.

No. 205. Shaft 12 feet deep in a ferruginous conglomerate.

No. 206 A small outlying portion of the once continuous Older Pliocene lead, which starting near Goldsborough extended along the Burnt Creek Valley to Gooseberry Hill. Gold has been obtained around each remnant. The wash consists principally of water worn and well waterworn white quartz pebbles. In places these gravels along this old lead are cemented and form a hard ferruginous conglomerate.

No. 207 Several nuggets of about 20 ounces in weight and one of 52 ounces are said to have been found on the White or Western Lead. The sinking is about 20 feet deep, bottom is irregul and in the wash boulders of well waterworn white quartz occur up to 2 ft. 6 inches in diameter.

No. 208 A sample of the decomposed granite from an exposure in the creek bed was secured for testing as to value for pottery making.

No. 209 This lead was never rich and only yielded half wages. The largest piece of gold found on this lead was 1 ounce 7 dwts. The gold is very well waterworn.

No. 199 Strata here nodular slates; strike north 25 deg. west; a quartz reef - Rokatir's - strikes north to south and dips to east a little ~~[illegible]~~ work has been done on it and there is felspar on the quartz.

No. 200 A lead appears to head here at quartz and ironstone spurs which have been scratched a little at the surface. The spurs strike north 15 deg. west. One chain further to the east some working along quartz spurs trend north 10 deg. west and dip to east at 54 deg. "Flat" spurs of quartz occur which pitch southerly; the pitch carrying the spurs from the surface probably is the reason why no alluvial gold has been obtained in the gully nearby on the south. This place may be worth further prospecting.

No. 201 A quartz and ironstone lode strikes north 10 deg. west and dips east 10 deg. north at 70 deg; there are several lodes of quartz and ironstone close together.

No. 202 Shanty Jack's Gully. There is a red streak lead in the terrace; sinking in one place is 4 feet and two chains further east the sinking is to 10 feet and half a chain to the south in the gully in the Recent alluvium the sinking is only 2 feet. The alluvial material in the lead consists mostly of clay and sub-angular fragments of white quartz and cherry red ironstone, and red ferruginous slate. The alluvial material has mostly been derived from quartz and ironstone lodes which occur in ferruginous slates. The ironstone at the matrix is brown and dull red in colour; further down the lead it becomes cherry red.

No. 203 Where the lead occurred at the higher level it was apparently payable; on the lower level the gold appears to have been scattered and too poor to work.

No. 210 There is a post here which is said to mark the line of strike of the Sydenham Reef which has been worked to the south of the country shown on this quarter sheet. ~~[illegible]~~ Survey line by Mr. W. G. Counsman.

No. 211 Molesses Lead, the wash consists of small well waterworn pebbles of white quartz, some small amethystine quartz crystals occur in the wash. The bedrock is decomposed granite a sample was obtained for testing for its value in pottery making.

No. 212 Salmon's Lead, a small piece of shallow lead. There is well water worn and sub-angular quartz gravel, some of it is ~~[illegible]~~ cemented. The largest piece of gold obtained weighed 2 ounces 7 dwts. One man obtained 6 ounces in 2 weeks. The lead is said to have been good when worked in the early mining days.

No. 213 Hole 10 feet deep; there is quartz gravel on top and some cemented gravel, bottom on decomposed granite.

No. 214 Hole 4 feet deep in reformed granite conglomerate.

No. 215 Irregular lead at Pavo's is shallow and sandy, there are well water worn and sub-angular pebbles of quartz etc. An attempt was made to work the shallow sandy surfacing by a dry blower but the stuff was considered too poor to pay.

No. 216 Hole here 5 feet deep sunk through a felspathic sandstone bottomed on granite.

No. 241 The rocks here are less metamorphosed than those of the range on the east, the black slates have undergone some small amount of alteration. The country is scrubby, with heavy undergrowth and small box saplings.

No. 242 Black slate with chiastolite.

No. 243 A very small vein of quartz was noticed in this granite.

No. 244 There is here a bed of Kaolin and reformed granite with some water worn grit. The strike of these Tertiary beds appears to be east and west and there is apparently a dip to north There is also ferruginous sandstone with well waterworn pebbles.

No. 245 Mica schist.

No. 246 Hole here with grey sandstone and subangular gravel and impure kaolin.

No. 247 Hole with 3 feet of subangular shingly gravel of schist and quartz and 7 chains further to the west some pebbles of chiastolite schist and pebbles from a granitic dyke.

No. 248 Holes 5 feet deep with gravel which is composed of subangular dark nodular slate, quartz schists and granitic dyke stones.

No. 249 A reef was worked here in a granitic dyke in metamorphic country. It is said to have been poor.

No. 250 Large subangular quartz boulders at shallow alluvial workings. In workings 5 chains further north, there are boulders of quartz one foot in diameter and about 4 feet of wash; the bottom appears to be decomposed granite.

No. 251 Altered dark blue slate.

No. 252 There are several shallow holes here on a quartz spurry formation about 1 foot wide which has a strike of north 50 deg. west and dips to west 60 deg. south at about 80 deg. The country rock is nodular schists.

No. 253 Indurated black slate, 2 chains further to the east is nodular slate and one chain further to the east is dark slate with a mineral which has a star-like arrangement and may be chiastolite.

No. 254 Nodular black slate.

No. 255 A quartz spur which is nearly horizontally bedded outcrops here, it is 3 feet thick, the strike is north 30 deg. west; 9 chains further to the west a shaft has been sunk on a reef which strikes north 40 deg. west and dips to east 40 deg. north at 70 deg; it is 2'6" to 3 feet thick bluish in colour and occurs in nodular sandy slates and sandstones.

No. 256 Granite outcrops a few chains further north.

No. 257 Nodular schistose and dark hornfels rocks. The rocks on the eastern side of the range are harder than those on the western side nearer to the granite the more the rocks have been indurated.

No. 258 Hornfels schist.

No. 259 Nodular micaceous schist north 35 deg. west.

No. 260 Grey nodular schists.

No. 261 Micaceous schistose rock strike north 55 deg. west, two chains further west nodular feebly micaceous schists occur The rocks are only slightly metamorphosed.

No. 262 Altered dark nodular schist north 35 deg. west.

No. 263 A hole here on a quartz reef in black slate, the quartz is part vitreous and part sugary; three chains further west a quartz reef in black slate strikes north 30 deg. west.

No. 264 Hole here 4 feet deep, a quartz reef 4 ft. 6 ins., and a band of soft dark blue slate agree in strike and dip, strike north 40 deg. west and dip to west 40 deg. south at 70 deg.

No. 265 Fissured sandstone here has been used for building stone.

No. 266 Surfacing begins here, the ground has been surfaced up to an outcrop of nodular schist with quartz veins. The soil here is dark red in colour. A nugget of 13 ounces was found here, the rest of the gold was as a rule in pieces weighing less than 1 dwt.

No. 267 The Arcadian Reef near Wilson's hut. The reefs are associated with dark blue slates. The strata are vertical in places, in others dip westerly at 80 deg. North 30 deg. west strike of reefs and strata.

No. 268 O. Stevenson's Indicator. This indicator has been worked in an inclined shaft the underlay is westerly at 70 deg, the rocks are silky nodular micaceous schists. There is a somewhat similar occurrence in the next hole on the east.

No. 269 A small amount of prospecting has been done here for an indicator; the strike of the workings is north 50 deg. west and that of the strata is north 40 deg. west.

No. 270 Sandstone with quartz spurs which are somewhat granitic and contain felspar and mica.

No. 271 The alluvial has been surfaced up to this reef. On this surfacing the largest piece of gold obtained below the 9 lb. nugget would not weigh over 1 dwt. The good gold was not in the creek bed but in the highest surfacing south of the creek. The gold appears to have been derived from the Inkerman reefs. The soil of the surfacing is dark red in colour.

No. 272 There is a quartz spur here in a silky nodular schist and a "floor" which pitches to the south.

No. 273 Tate's Indicator. There is alluvial working on the south, holes 7 feet deep, but the gold has not been traced to a matrix.

No. 274 A hole 3 feet deep, some quartz and manganic oxide.

No. 275 There is a small amount of granitic dyke stone here.

No. 276 Nodular micaceous schists, strike north 30 deg. west.

No. 277 Some surface prospecting here in loose widespread quartz.

No. 278 In the Inkerman lead there are pebbles of black altered slate micaceous schist, and book or stone indicator quartz also boulders of cement, ironstone pebbles are numerous. The quartz stones as a rule are not angular but in places a few were noted well. These are probably the remains of an older lead, waterworn.

No. 279 A band of sandstone outcrops strike north 20 deg. west dip east 20 deg. north at 50 deg. A small amount of building stone has been obtained here.

No. 280 A shaft 40 or 50 feet deep quartz spurs in green and other colored pitted slates dip westerly.

No. 281 Some cement here.

No. 282 There is a shaft here on a large quartz spur which dips westerly at 52 deg. North 20 deg. west appears to be the strike of the workings but is no very reliable. Green pitted slates strike north 10 deg. west and dip to east 10 deg. north at 70 deg. There is water in the shaft.

No. 283 Dark blue slates with hollow cubes due to the removal of crystals of iron pyrite.

No. 284 Dark blue slates strike north 25 deg. west.

No. 285 A small quarry has been opened here in dark blue and black slates. The material appears to be too soft to have much commercial value.

No. 286 Hole here 4 feet deep; there are some very well waterworn pebbles like stones that have been waterworn in an old lead.

No. 287 A remnant of the cemented material from the old high level lead of the Burnt Creek valley; the capping of the gravels on the Ordovician rocks is very thin; some quartz boulders are 18 inches in diameter. This is the highest point of the lead noticed. The Church of England is here. Quartz spurs in pitted green slates strike north 5 deg. west.

No. 288 Alluvial workings 4 to 6 feet deep in red clay and sub - angular gravel which is in placed cemented; a small piece of gold half an ounce in weight was found here on the surface but no more was obtained.

No. 289 A shaft; ironstone layers dip easterly at about 50 deg. One chain to the south an outcrop of quartz and ironstone strikes north 15 deg. west.

No. 290 Book quartz.

No. 291 Quartz reef 1 foot thick, North 20 deg. west dip, dip 10 deg. north at 80 deg. It agrees with the strata in strike and dip. The rocks are dark blue slates which contain hollow cubes from which crystals have been removed. One chain further to the east is the Belltopper reef; there is a dark blue slate with hollow spaces left by the removal of crystals of pyrites.

No. 292 Book quartz and dark blue slate

No. 293 Belltopper reef at the deep shaft, see sections etc. the quartz contains manganic oxide.

No. 294 Hole 4 feet deep on a quartz reef; some of the quartz is sugary, some is pink in colour some contains silvery mica The reef is 3 feet thick striken north and south and dips easterly at 66 deg.

No. 295 In Nuggetty Gully north of this number, a 42 lb. nugget and others of less weight were found; a short way higher up the gully there is a small quartz vein in dark blue slate. Book quartz occurs in the wash of the gully which is sub-angular. On the north side of the gully above where the nuggets were found there is a cross reef also bands of dark blue slate with hollow cubes from which crystals of pyrites

/have..

have been removed. Book quartz in these blue slates at the junction of the cross reef would be an indicator and it is probable that these nuggets were formed in some such position. The cross reef should be traced south easterly until it crosses the various bands of dark blue slate. The small quartz leader mentioned and the strata strike north 10 to 15 deg. to west and dip westerly at 80 deg A floor here pitches to north 10 deg. west at 73 deg; it carries some ironstone.

No. 296 A shaft here in dark blue slate strike north 10 deg. west and dip east 10 deg. north at 80 deg; there is a quartz reef here 6 feet thick, in the slates are hollow spaces left by the removal of crystals of iron pyrites.

No. 297 Dark blue slate with spaces left by the removal of crystals of pyrites also mottled blue quartz.

No. 298 Sugary quartz pink in colour.

No. 299 Silky micaceous slate strike north 10 deg. west the sandstone which adjoins it is in a normal condition.

No. 300 Dark blue slates north 15 deg. west contain holes formed by the removal of crystals of pyrites.

No. 301 Micaceous sandstone becoming schistose and fine-grained sandstone somewhat contorted strike east 10 deg. south and dip south 10 deg. west at 62 deg.

No. 302 Brown silky micaceous slightly nodular nodular slates.

No. 303 Nodular silky micaceous schist strike west 20 deg. north.

No. 304 Nodular silky micaceous schist.

No. 305 Pink and white sugary quartz with white mica.

No. 306 Nodular mica schist.

No. 307 Mica schists and hornfels. A sample of manganic oxide was collected here for assay.

No. 308 A hole in ferruginous conglomerate has been bottomed on decomposed granite. There is houldery gravel here, at the surface.

No. 309 Shaft 12 feet deep strata dip easterly at 70 deg.

No. 310 Quartz reef strike north 10 deg. west; a small amount of work has been done on it; 2 chains further north there is a hole 8 feet deep, quartz spurs which are horizontal or have a small dip to the west have been worked to a small extent There is also a quartz reef half a chain further north. It dips westerly at 65 deg. lower down the dip is less steep Green slates here dip easterly at 60 to 70 deg.

No. 310A The lead here for an acre or more in extent has been "paddocked" and it is said to have been rich and southerly to the creek. The sinking was about 8 feet deep; there are a few well waterworn pebbles of white quartz, their appearance suggests that they were formed in a pre-existing high level lead.

No. 311 Shaft on the Golden Crown Reef the quartz is stoped and the reef appears to have had a small dip to the east. Two chains further north the reef was worked 3 to 4 feet wide; it dipped easterly at 80 deg. Two chains further west a quartz reef and country rock strike north 10deg. west and dip to east 15 deg. north at 64 deg. Country rocks sandstone and yellow and green slates.

No. 318 A quartz reef here strikes north 15 deg. west it dips westerly at 70 deg; From this reef the ground has been surfaced for 2½ chains to the east. No dark blue slate could be found on the waste heaps but small pieces of decomposed dyke stone were noted.

No. 313 Hole on a quartz reef; no dark blue slate could be found on the waste heap but as the quartz is mottled blue and white such slate probably occurs below.

No. 314 Quartz reef north 15 deg. west; book quartz here and dark blue slate, there is some magnesite, the strata and reef are about vertical.

No. 315 Dark blue slate and two chains further east book quartz and dark blue slate with holes formed by the removal of crystals of pyrite. The outcrop of slate is very wide upwards of 5 or 6 chains the strike is north 30 deg. west.

No. 316 Bluish and white quartz laminated, but not as much as book quartz.

No. 317 Laminated blue white and pink quartz; the quartz is in a big sandstone layer and has been exposed in alluvial workings 6 feet deep.

No. 318 Ironstone and book quartz; the layers of quartz are arranged horizontally in places, thus are somewhat contorted and vitreous and in part slightly sugary white or dark red in colour; layers 600 30 to an inch North and south much slickensiding. STRIKE

No. 319 A soft brown decomposed felsite dyke crosses the railway cutting; it is 4 to 8 feet thick and there is a little ironstone and vitreous quartz on both sides of the dyke and half an inch veins of quartz, some flat, some diagonal, some vertical. North 50 deg. west strike of the dyke and the dip is west 50 deg. south at 60 deg; strata slates and sandstones strike north 25 deg. west and dip east 25 deg. north at 63 deg.

No. 320 Hole 10 0 feet deep, ferruginous sandstone and white quartz gravel, botton decomposed granite.

No. 321 Shingly subangular gravel formed from fragments of schistose rocks.

No. 322 Ferruginous sandstone with very small and well water worn pebbles of quartz and reformed granite or decomposed granite

No. 323 A tongue of granite comes in from the south: it occupies a hollow, it is porphyritic granite wit crystals of felspar and black mica.

No. 324 The sandstones become crystalline and almost quartzite and there is a band of gneissose rock which may be a small crushed granite dyke.

No. 325 Nodular dark micaceous schist.

No. 326 Decomposed red nodular micaceous schists and 4 chains further east dark nodular micaceous schists.

No. 327 Schistose rock some of which has been used for building stone.

No. 328 Schistose rock, cleavage at various angles has resulted in "pencil" fracture.

No. 329 Silky brown nodular schists and slate altered to rock with very fine crystalline particles. Two chains further ~~on~~ west an outcrop of quartz 20 feet ~~across~~ nearly circular. occurs

No. 330 Coutcan on a quartz reef which dips westerly at about 45 deg.

No. 331 There is an engine shaft here well timbered and said to be 400 feet deep. The lode dips westerly at ~~a~~ from 50 to 65 deg. There are 3 or 4 quartz veins. The country rock has a strike of north 15 deg. west and a dip of 80 deg to East 15 deg. north; the country rock appears to pitch to the south at 15 feet from the surface; the lode at the surface workings dips less steeply than in places. In the mullock heap there is some pale blue slate but no dark blue slate was noted.

No. 331A ~~Coutcan~~ The reef here on the east strikes north 35 deg. west it is the continuation of the Christmas Reef; there is ~~no holes here on the~~ a line of centre country here. There is a shaft here in the gully with water near the surface and there appears to be a fair sized ~~reef~~ quartz reef containing felspar and a mineral resembling decomposed hornblende, fragments of green slate occur in the quartz. On the north side of the gully there is a cut on a quartz and ironstone lode 3 feet thick and a bit of surface prospecting on a quartz reef half a chain to the east which has a strike of north 20 deg. west. ~~Gold~~ Fine gold and nuggets were obtained about here. Weights and exact positions could not be ascertained.

No. 332 Holes here in the alluvial have bottomed on a decomposed felsite dyke similar in character to a number which have been noticed on the area of this survey.

No. 333 The stones in this lead are of local origin mostly quartz and slate and ironstone; all are subangular.

No. 334 An indicator exists here, dark blue slates with holes caused by the decomposition of iron pyrites contain laminated red quartz. This place appears to be worthy of a little surfacing prospecting by one who understands indicators.

No. 335 In the railway cutting there are soft red and yellow slates strike north 20 deg. west, dip east 20 deg. north at 75 deg.; one of the ordinary soft brown decomposed dykes is exposed and agrees in strike and dip with the strata.

No. 336 A quartz and ironstone lode here in well slickensided indicating a well-~~defined~~ marked movement plane exists below.

No. 337 Black slates slightly nodular strike north 60 deg. west.

No. 338 Vitreous and sugary bluish quartz with white mica.

No. 339 The rocks are crystalline and schistose and the quartz indicates the proximity of granite and occurs in "eyes".

No. 340 Nodular micaceous schist.

No. 341 Mica schist.

No. 342 The rocks are metamorphic, schists with granitic quartz.

No. 343 Gneissose veins through the schists. Four or five chains further west the rocks become very crystalline and gneissose.

No. 344 There is here a very small outcrop of a granitic dyke.

No. 345 Subangular granite gravel water worn been derived from the old metamorphic rocks; mud and some small well waterworn quartz pebbles.

No. 346 The outcrop of a large quartz reef forms the top of the ridge.

No. 347-348 Book quartz.

No. 349 In this cutting there are very fine sandstones and sandy sandstones and blue and white slates and pitted yellow slates; no dykes were noted here.

No. 350 Pink sugary quartz.

No. 351 A short outcrop of one of the usual felsite dykes of the field, colour yellow,buff,brown,dark red; it contains mica which is in smaller crystals than those of some of the same dykes further eastward along strike; it appears to pass into ironstone with some quartz.

No. 352 Decomposed brown felsite dyke similar to many on the survey. There is a cut 8 feet deep on a quartz reef which strikes north 20 deg. west. This place is worthy of some surface prospecting as the original prospector probably did not recognize the dyke and gold may occur in or along its side Some loaming would be useful.

No. 353 A small outcrop of mottled blue quartz.

No. 354 Nodular schists.

No. 355 Nodular micaceous schists.

No. 356 Silky nodular schists with spurs of quartz and ironstone strike north 50 deg. west.

No. 357 Book quartz.

No. 358 Contorted gneissose rock and nodular micaceous schists.

No. 359 A small round outcrop of pink quartz.

No. 360 Silky nodular schists west 10 deg. north.

No. 361 Silky nodular blue schists.

No. 362 Granitic dyke stone and three chains further west there are some short and thin granitic dykes.

No. 363 In the bank of the gully there is an outcrop of ferruginous sandstone and conglomerate formed mostly of subangular pebbles in ferruginous sandstone; there are some well water-worn quartz pebbles the size of wheat grains.

No. 364 Gneissose schists.

No. 365 A dyke formed of large irregular crystals of white and pink vitreous quartz and pale yellow and white felspar. Thin plates of white mica coat the felspar crystals. By hand picking the felspar could be separated from the quartz as some pieces are 6 inches in diameter and the material makes a very fine glaze for pottery. The dyke is 4 feet wide and outcrops for about 1 chain; it strikes north 35 deg. east. The granite here occurs in a hollow place as it yields more readily to denudation than the schists and hornfels of the Bealiba Range One cwt. of this felspar was forwarded to the Franco-British Exhibition held in 1908.

No. 366 Book quartz.

No. 367 Book quartz.

No. 368 Book quartz 6 inches thick, blue ferruginous and vitreous.

No. 369 Graptolites in dark blue slate were found at the eastern end of the railway cutting, in several layers of dark blue slates traces of graptolites may be found

No. 370 Six inches of blue and white book quartz.

No. 371 Hole 6 feet deep in local subangular gravel etc.

No. 372 There is an outcrop of a quartz and ironstone lode through the Post Pliocene deposit of clay sub-angular gravel etc.

No. 373 Blue and white book quartz.

No. 374 Small fragments of blue and white book quartz were noted here.

No. 375 Book quartz.

No. 376 One of the ordinary brown felsite dykes with thin veins of quartz somewhat vitreous of a faint bluish colour, three chains further east is a laminated quartz and ironstone lode.

No. 377 Black slate with hollow cubes from which crystals of pyrite have been removed.

No. 378 An ironstone lode with some quartz outcrops 4 feet above the surface; it has hollows due to cavernous weathering and weather resembles "The Rock" east of Inkerman and "The Cave Rock" east of Taylor's orchard.

No. 379 Dark slate with hollow cubes due to the removal of crystals of pyrite and a quartz vein which strikes east 30 deg. south. The exposure is limited but in some respects it resembles a saddle reef. A little surface loaming here should be done.

No. 380 Sandstone strike east and west dip to 48 deg. this may be the pitch of centre country; the exposure is small.

No. 381 Quartzite.

No. 382 Quartzite and altered pitted slates; the rocks here are not much altered.

No. 383 Quartzites.

No. 384 Here and for 18 chains to the east there is a lot of quartzite at the surface.

No. 385 Dark nodular micaceous schist strike east 40 deg. south.

No. 386 Quartzite and hornfels schist.

No. 387 a short outcrop of white and bluish quartz and nodular mica schist.

No. 388 Hornfels and silky nodular micaceous schist with quartz spurs strike north 40 deg. west.

No. 389 Mica schist with quartz spurs which dip no theasterly at 85 deg. The rock is crystalline dense and hard, some sandstones here are altered to almost quartzite.

No. 390 Here there is a prospecting shaft said to be upwards of 100 feet deep. No records are obtainable. On the waste heap there is much clean white sand with well waterworn pebbles up to the size of peas. The shaft appears to have been sunk to decomposed granite.

No. 391 Loose fragments of quartz suggest that a quartz vein occurs here in the granite.

No. 392 Quartz veins in sandstone and slate have been worked a little at the surface; a small quantity of alluvial gold has been obtained in the adjacent gully.

No. 393 One inch of book quartz.

No. 394 Two inches of book quartz, and three chains further east there is 9 inches of book quartz.

No. 395 Book quartz.

No. 396 Book quartz.

No. 397 In the railway cutting there is a decomposed felsite dyke which agrees with the strike of the strata. There is also another similar dyke which is nearly flat. Sixteen yards to east of the 134-mile post there is a big decomposed dyke then a synclinal fold, and two chains further west there is another decomposed dyke which continues to nearly four chains west of the mile post and at 4 chains west of the mile post there is a quartz and ironstone lode 18 inches thick which dips easterly. Six chains west of the mile post there is a band of dark blue slate which strikes north 10 deg. west and dips to west 10 deg. south at 80 deg. There are traces of graptolites in the slates; an attempt was made to secure some fossils but the band was faulted and none was obtained.

No. 398 Seven feet of brick earth and stratified local gravel occur in the creek bank. A quartz reef 1 foot thick strikes north 10 deg. west and dips east 10 deg. north at 35 deg.

No. 399 Quartzite.

No. 400 Micaceous schists and hornfels with pink quartz veins strike north 35 deg. west and dip to east 25 deg. north at 60 deg.

No. 401 Micaceous schists

No. 402 Scrogge's shaft, approximate depth 50 feet, the sinking appears to have been through clays, white sand, ferruginous sandstone with very small well waterworn pebbles, pink reformed granite and it appears to have bottomed on decomposed granite with much silver mica

No. 403 Dyke crimson and brown 1 foot thick similar to the others on the survey, and a quartz and ironstone lode strike north 30 deg. west.

No. 404 Soft dark red sandstones.

There are a few more note numbers on Dunolly plan.

No. 16

LIST OF NUGGETS FOUND IN THE AREA WITHIN THE DUNOLLY QUARTER SHEET

WEIGHT IN OZ.	LOCATION	DEPTH IN FT.	GEOLOGICAL FORMATION
2316	Welcome Stranger Nugget, Bulldog Lead near Moliagul.	2	Recent
504	Nuggety Gully, 1 mile south of Goldsborough	Shallow	Recent
480	Old Lead, Township of Dunolly	50	Newer Pliocene
324	" " " " "	50	" "
300	Wattle Gully, near Christmas Reef	10	Post Pliocene
216	Burnt Creek Lead, between Hard Hill and the Cemetery.	30	" "
204	Old Lead, Township of Dunolly	50	Newer Pliocene
200	White Patch, Wattle Gully	14	Post Pliocene
170	Old Lead near junction of Shanty Jack's Gully	25	Newer Pliocene
150	" " " " " " " "	25	" "
144	Pensam's Gully, branch of Old Lead	Under 10	Recent
144	Burnt Creek Lead, north of Herbert's orchard	14	Post Pliocene
120	Milkmaid Gully	Shallow	Recent
120	" "	"	"
115	Old Lead, near the junction of McNab's Gully	25	Newer Pliocene
108	Milkmaid Gully, Inkerman	Shallow	Recent
100	White Patch, Wattle Gully	14	Post Pliocene
100	" " " "	14	" "
100	Norman Gully, (branch of Burnt Creek)	14	" " "
100	Broadman's Flat, Wilson's Lead	20	" "
95	Turkey Flat, Burnt Creek Lead	20	" "
84	Milkmaid Gully, Inkerman	Shallow	Recent
84	Nuggety Gully, one mile south of Goldsborough	"	"
80	Burnt Creek, just north of Herbert's orchard	14	Post Pliocene
80	Fleming's Point, Old Lead	40	Newer Pliocene
70	Head of Jones's Creek	15	Post Pliocene
70	Turkey Flat, Burnt Creek Lead	20	" "
70	New Year's Flat, Burnt Creek Lead	20	" "
70	Near the junction of the Old Lead with McNab's Gully	25	" "
60	Fleming's Point, Old Lead	40	Newer Pliocene
60	" " " "	40	" "
60	At junction of Clay and Charlies Gullies with Old Lead	20	Recent
56	Pott's Gully, Inkerman	Shallow	"
52	Old Lead, half a mile below the Reservoir	20	Newer Pliocene
52	Wattle Gully at Burnt Creek Lead	14	Post Pliocene
50	White Patch, Wattle Gully	14	" "
50	Wattle Gully near Christmas Reef	10	" "
50	Fleming's Point, Old Lead	40	Newer Pliocene
50	Old Lead at junction of Sporting Flat Gully	35	" "

50	Upper Sporting Flat, Tributory the Old Lead	Shallow	Post Pliocene
50	New Year's Flat, Burnt Creek	20	" "
50	Turkey Flat, Burnt Creek	20	" "
50	Clay Gully, " "	Shallow	" "
45	Fleming's Point, Old Lead	40	Newer Pliocene
40	Old Lead at the Reservoir	Under 10	Recent
40	Head of Catch-me-if-you-can Lead	Shallow	"
40	One mile N.W. of Goldsborough Railway Station	15	Post Pliocene
36	Old Lead, near junction of McNab's Gully	25	Newer Pliocene
36	Old Lead, half a mile below Reservoir	20	" "
36	Old Lead, near junction of McNab's Gully	25	" "
32	Wattle Flat at Burnt Creek Lead	14	Post Pliocene
32	Burnt Creek Lead, ¾ mile above Wattle Flat	12	" "
31	Old Lead, near junction of Shanty Jack's Gully	25	Newer Pliocene
30	Old Lead, Township of Dunolly	50	" "
30	Upper Sporting Flat	Shallow	Recent
30	Old Lead, near junction of Shanty Jack's Gully	25	Newer Pliocene
30	Old Woman's Gully, head of Old Lead	Shallow	Recent
30	Head of Jones Creek Lead	15	Post Pliocene
30	" " " " "	15	" "
30	White Lead one mile S.E. of the Township of Dunolly	Shallow	Newer Pliocene
30	Wattle Flat Gully near Christmas Reef	10	Post Pliocene
28	One mile N.W. of Goldsborough Railway Station	15	" "
28	Burnt Creek Lead just north of Herberts orchard	14	" "
27	Curran's Reef at Railway Line, Goldsborough	Under 10	Post Pliocene
27	One mile N.W. of Goldsborough Railway Station	15	" "
27	Old Lead at junction with Sporting Flat Gully	35	Newer Pliocene
26	Wattle Gully at Burnt Creek Lead	14	Post Pliocene
26	" " " " " "	14	" "
26	The Basin, Burnt Creek Lead	20	" "
26	Pott's Gully, Inkerman	Shallow	Recent
26	Burnt Creek Lead, just north of Herbert's orchard.	14	Post Pliocene
25	Old Lead just below the Reservoir	15	Recent
25	Burnt Creek Lead, ¾ mile N.W. of Goldsborough Railway Station.	20	Post Pliocene
22	Bismarck Lead	20	" "
22	Turkey Flat, Burnt Creek Lead	20	" "
20	Old Lead, at junction of Snake Gully	40	Newer Pliocene
20	Old Lead, at junction of Sporting Flat Gully	35	" "
20	Upper Sporting Flat, tributory of Old Lead	under 10	Post Pliocene
20	Old Lead, at junction of Clay and Charlies Gullies.	20	" "
20	Old Womans Gully, Head of Old Lead	Shallow	Recent
20	Quarter of a mile S.E. of the Goldsborough Township.	"	"
20	White Gate, Wattle Gully	14	Post Pliocene

20	The Basin, Burnt Creek Lead	20	Post Pliocene
20	" " " " "	20	" "
18	Old Lead, near junction with McNab's Gully	25	Newer Pliocene
18	Quarter of a mile S.W. of Goldsborough	15	Post Pliocene
18	Burnt Creek Lead, just north of Herbert's orchard.	14	" "
18	Wattle Flat, at Burnt Creek Lead	14	" "
17	Old Lead at junction of Clay and Charlies Gully.	20	Recent
17	Old Lead, at the Reservoir	10	Post Pliocene
17	Clay Gully, Burnt Creek	Shallow	" "
17	Burnt Creek Lead, just north of Herbert's orchard.	14	" "
17	Pott's Gully, Inkerman	Shallow	" "
16	Wattle Gully and Burnt Creek Lead	14	" "
15	Upper Sporting Flat, tributary of the Old Lead	under 10	" "
15	" " " " " " "	10	" "
15	Milkmaid Gully, Inkerman	Shallow	Recent
15	Broadman's Flat, Wilson's Lead	20	Post Pliocene
15	" " " "	20	" "
14	Fleming's Point, Old Lead	40	Newer Pliocene
14	Pott's Gully, Inkerman	Shallow	Post Pliocene
13	Old Lead, ½ a mile below Reservoir	20	Newer Pliocene
13	Old Lead at the Reservoir	Under 10	Recent
13	Old Lead, just below the Reservoir	15	"
12	Old Lead at the junction of Snake Gully	40	Newer Pliocene
12	Old Lead, at junction of Clay and Charlies Gullies.	20	Recent
12	Head of Jones Creek Lead	15	Post Pliocene
12	Wattle Flat at Burnt Creek Lead	14	" "
12	" " " " " "	14	" "
12	" " " " " "	14	" "
12	White Patch, Wattle Gully	14	" "
11	Wattle Flat and Burnt Creek Lead	14	" "
11	Old Lead at the Reservoir	Under 10	" "
11	Clay Gully, Burnt Creek Lead	Shallow	" "
10	Old Lead at junction of Sporting Flat Gully	35	Newer Pliocene
10	White Lead, south of Pretty Jane Creek	20	" "
10	Clay Gully, Burnt Creek	Shallow	Post Pliocene
10	Frenchman's Gully, Burnt Creek	Shallow	Recent
10	Wattle Gully at Burnt Creek Lead	14	Post Pliocene
10	" " " " " "	14	" "
10	" " " " " "	14	" "
10	White Patch, Wattle Gully	14	" "
10	" " " "	14	" "
10	" " " "	14	" "
9	Wattle Gully at Burnt Creek Lead	14	" "
9	Wilson's Lead, Broadman's Flat	20	" "

9	Wilson's Lead, Broadman's Flat	20	Post Pliocene
8	Wattle Flat at Burnt Creek Lead	14	" "
8	" " " " " "	14	" "
7	Head of Jones Creek Lead	15	" "
7	Clay Gully, Burnt Creek	Shallow	" "
7	White Patch, Wattle Gully	14	" "
7	" " " " "	14	" "
7	Wattle Gully, near Christmas Reef	10	" "
7	Branch of the Burnt Creek Lead between Inkerman and Moliagul.	Shallow	" "
7	Wilson's Lead, Broadman's Flat	20	" "
6	Old Lead at junction of Clay and Charlies Gullies.	20	" "
6	Milkmaid Gully, Inkerman	Shallow	Recent
5	Nuggety Gully, 1 mile south of Goldsborough	Shallow	"
5	Branch of Burnt Creek Lead between Inkerman and Moliagul	Shallow	"
3	Milkmaid Gully, Inkerman	Shallow	"
3	Wattle Flat at Burnt Creek Lead	14	Post Pliocene
1½	Wattle Flat " " " "	14	" "

APPENDIX I.

Notes on the Dunolly quarter sheet.

No. 1. Half-a-mile east from this locality there is an outcrop of Quartz-Mica-Diorite.

No. 2. Limonite and ferruginous sandstone.

No. 3. Several holes sunk by prospectors in the creek about 10' deep appear to have bottomed on pink and white decomposed granite or quartz mica diorite.

No. 4. Here is a very small outcrop of a dyke, the rock is much decomposed and has somewhat the appearance of a porphyritic quartz mica diorite. A sample of quartz and ironstone from the cap of the dyke was assayed at the Geological Survey Laboratory - No. 154, Assay No. 589 16/5/1906. It contained a trace of gold and no silver.

No.5. Hole in ferruginous sandstone - not bottomed.

No.6. The metamorphic rocks here strike E.10°N.

No.7. White quartzite.

No.8. Mica schist strike W. 20°S.

No.9. Micaceous schists and quartz veins, with small crystals of mica - strike of beds W. 40°S.

No.10 Rose-coloured quartz.

No.11 Pink-coloured quartz with felspar and muscovite mica.

No. 12 Much outcropping quartz.

No.13 Dark nodular micaceous schists.

No.14 A limited outcrop of sandstone occurs here, in some respects resembling centre country. The strike of the strata is E. 5°N.

No.15 A wide flat quartz and ironstone lode.

No.16 Soft black nodular slate.

No.17 Bluish slate and a laminated quartz - strike N.10°W. and dip to E. 10°N. at 65°. The slates are somewhat contorted.

No.18 Centre country with quartz spurs.

No.19 Laminated quartz in dark-blue slate.

No.20 A large outcropping sandstone bed, having a strike of N.10°W. here dominated the trend of the ridge.

No.21 Centre country, quartz spurs in sandstone and black slates with a pitch of 40° north.

No.22 Dark blue slate with a strike of N.10°W. and a dip E.10°N. at 60°. Graptolites were collected here.

No.23 Sandstone with a strike of N. 20°W. and a dip E. 20°N. at 57°. One chain further east there is centre country showing a pitch N.20°W. at 35°.

No.24 Dark blue "book" quartz in dark blue slate, three chains further east the sandstones striking N.10°W. and dipping E. 10°N. at 65° form a ridge.

No.25 The gullies here trend with the strike of a thick bed of sandstone, which strikes N.10°W. and dips E.10°N. at 62°.

No.29 Sandstone with quartz spurs strike N.5°W.

No.30 Banded buff-coloured pitted slates (at a depth probably olive green). One chain further east an outcrop of mottled quartz occurs with dark-blue inclusions, which are finely laminated and probably altered portions of slate.

No.31 "Book" quartz (laminated).

No.32 Dark-blue slate and quartz, striking N.10°W.

No.33 Two chains north graptolites occur in dark-blue slate. There is here a thin seam of quartz and pyrites, like an indicator, striking N.5°W. and dipping E.5°N. at 70°.

No.34 "Book" quartz 8 in. thick - strike N.5°E.

No.35 Centre country, with a pitch north at a very low angle.

No.36 A wide bed of sandstone with quartz spurs occurs in centre country. Suitable for a building stone. Strike of beds - N.5°W. and dip E.5°N.

No.37 "Book" quartz (laminated).

No.38 Black slate and a large north and south quartz reef in green slate occurs 3 chains further to the west.

No.39 A decomposed brown lamprophyre dyke divides into two 18 ft. apart.

No.40 Here a slight elevation is caused by a large outcrop of quartz.

No.41 "Book" quartz with a parallel similar outcrop two chains to the east.

No.42 Sandstone striking N.10°W. and dipping west at 71°. Quartz occurs on a floor which dips south at 22°. One chain to the east the strata dip east at 60°.

No.43 Sandstone striking north and south, agreeing with trend of a gully.

No.44 Decomposed lamprophyre dyke, "book" quartz, and quartz spurs.

No.45 A quartz spur outcrops for half-a-chain, striking N.5° W. and sandstone with flat floors of quartz.

No.46 Quartz laminated and in centre country strike N.5°W. and dip W.5°S. at 84°. Two chains further to the west there is a 4 in. vein of "book" quartz.

No.47 The strata here strikes N.10°W. and dips W.10°S. at 72°. In it there is some "book" quartz near centre country, and two chains further east some quartz outcrops.

No.48 Laminated quartz, centre country.

N° 12 ~~A considerable amount~~ much outcropping of quartz outcrops ~~here~~

N° 13 Dark nodular micaceous schists

N° 14 ~~Where is~~ a limited outcrop of sandstone occurs here, ~~which~~ in some respects resembling centre country. The strike of the strata is E 5° N., ~~and no pitch could be noted.~~

N° 15 A wide flat quartz & ironstone lode.

N° 16 Soft black nodular slate.

N° 17 ~~Ell~~ Bluish slate and dammiated quartz ~~reef~~ strike N.10.W. and dip to E 10° N at 65° The slates are somewhat contorted

N° 18 Centre country with quartz spurs ~~occurs here~~

N° 19 Dammated quartz in dark-blue slate.

N° 20 ~~The outcrop of~~ A large outcropping bed of sandstone ~~band which~~ having a strike of N 10° W has ~~been the cause of the~~ a lode dominated the trend of the ridge.

21 Centre Country, Quartz spurs in sandstone, and ~~centre country~~ black slates with a pitch of 40° northwards at 40°

* 22 Dark F blue slate with a strike of N 10° W and a dip E 10° N ~~10° N~~ at 60°. Graptolites were collected here. ~~see N°~~

? 3 Sandstone with a strike of N.20°W. and a dip E 20° N at 57°. ~~A reef of quartz one inch thick dips westerly at 42°.~~ One chain further East there is centre country ~~which has~~ showing a pitch ~~of 25° S~~ N 20° W. at 35°.

N° 24 Dark-blue "book" quartz in dark blue slate, ~~& 3½~~ Three chains further east the 1st sandstone outcrops ~~and forms~~ form a ridge ~~striking~~ N10°W and dipping E 10° N at 65°. ~~It contains quartz spurs~~ ~~The cleavage here of a band of slate on which is enclosed in~~ & the sandstone does not agree in strike with the strata it is north and south.

N° 25 The gullies here ~~agree in~~ trend with the strike of ~~the~~ a thick band of sandstone, which strikes N 10° W and dips E 10° N at 62°. ~~The sandstone bars can be traced at the surface for some distance N & S.~~

N° 29 Sandstone with quartz spurs strike N 5° W.

N° 30 Banded buff-coloured pitted slates (~~thick~~ at a depth ~~are~~ probably olive green). One chain further east ~~is~~ an outcrop of mottled quartz occurs with dark-blue inclusions which are finely laminated and ~~are~~ probably altered portions of slate.

N° 31 "Book" quartz (laminated)

N° 32 Dark-blue slate and quartz ~~rock both~~, striking N10°W.

N° 33 Two chains north graptolites occur in dark-blue slate. There is here a thin seam of quartz & pyrites, like an indicator, strikes of slates N 5° W and dipping E 5° N at 70°. ~~This is the first find of graptolites~~ N°

N° 34 Book-quartz 8 in. thick. Strike N 5° E. (Sample taken)

No 35 Centre country ~~is hard~~ with a pitch ~~to the~~ north at a very low angle.

N° 36 ~~Thick~~ sandstone band with quartz spurs occurs in centre country. ~~Would be~~ Suitable for a building stone. Strike 70 bearing N 5° W and dip ~~is to~~ E 5° N. ~~at~~, ~~2 chains further West is 2" of book quartz.~~

N° 37 "Book" quartz (laminated)

N° 38 Black ~~slate~~ slate, and occurs 3 chains further West ~~A large north & south~~ quartz reef in green slate ~~strike of reef N 8° W~~

Camptophyre

N° 39 ~~A~~ a decomposed brown ~~diorite~~ dyke ~~here~~ divides into two portions ~~they are~~ 18 ft. apart. ~~and join on the north & South~~

~~Here a slight elevation~~

N° 40 A ~~hill is here~~ is caused by a large outcrop of quartz.

N° 41 "Book" quartz ~~here~~ with a parallel similar ~~and also on~~ outcrop two chains to the east.

42 Sandstone strikes N10°W ~~&~~ dips ~~W~~ W at 11°. ~~there is~~ Quartz occurs on a floor which dips south at 22°. One chain to the east the strata dip ~~easterly~~ at 60°.

N° 43 Sandstone strikes N & S agreeing with trend of a gully ~~and appears in its trend with the outcrop of the~~ sandstone band.

N° 44 Decomposed ~~Camptophyre~~ ~~diorite~~ dyke, ~~and~~ "Book" quartz, & quartz spurs. ~~also numerous quartz spurs~~, there ~~are~~ is another quartz spur 2 chains to the W.

N° 45 A quartz spur outcrops for ± a chain, strikes N 5° W. and sandstone with flat floors of quartz.

46 Quartz ~~with~~ laminated and in centre country ~~rock~~ strike N 5° W. and dips W 5° S at 84°, two chains further to the west there is a 4 inch vein of "Book" Quartz.

47 The strata here strikes N10°W and dips W10°S at 72°. In it there is some "Book" quartz near and centre country, and 2 chains further east some quartz ~~a spur~~ outcrops ~~8 yards long and 1 yard wide~~, ~~many of the quartz outcrops on the field are very short and some are nearly circular~~

48 Laminated quartz. ~~and Line of~~ centre country.

49 Sandstone with a strike N10W. and dip E 10°N at 50°. The pitch is N10W at 44°.

50. "Book" quartz. (laminated)

51 "Book" quartz (laminated) and ironstone 2" thick and 3 chains further west. There is also an outcrop of "Book" quartz 3 chains further to the west.

52 ~~Fragments of~~ Ferruginous "Book" quartz 4" thick.

53 Decomposed ~~dyke~~ Lamprophyre dyke. Centre country, with big beds of sandstone pitching southerly at 10°. Along the centre country sandstone, there are some well rounded nodules of sandstone, which appear to occur in places in this goldfield ~~lying at random~~ along the lines of folding, but they are not of common occurrence. ~~The sandstone is much fissured and it weathers into oblong billets~~

N° 54 Sandstone with a strike of N x S, and a dip W at 70°. The cleavage dips E at 30° and the pitch is N at 10°.

N° 55 A centre country "nose" here pitches S at 52° a little gully trends round the outcrop

N° 56 Book quartz and rounded nodules and white quartzite occur in centre country

N° 58. Book quartz, and 2 chains further N west there is a big sandstone band strike N10W dip E 10°N at 64°

N° 59 * Graptolites in centre country the fossils are badly preserved two anticlinal folds of the strata join here from the South.

N° 60 6" of laminated quartz & ironstone strike N10°W

N° 61 Centre country, pitch of anticlinal south at 22°

N° 62 Pink quartz

N° 63 Centre country pitches S at 25°

N° 64 Good centre country "nose" pitch South at 16° it inclines easterly in depth dip on East. 40° on West 70° 75° there is radial fissuring

N° 65 Centre country "nose" pitch South at 20° A gully trends round the "nose" from the east and crosses the ~~centre co~~ axis of the fold where there is an outcrop of slate. ~~An outcrop of slate in the folded country causes the~~. The small gap on the south has been formed by weathering on the slate bands which there outcrop in the folded country.

N° 66 Large outcrop of ~~gr~~ white quartz 90' long by 15' wide strike N 12 W, a cleavage in the quartz dips E 20° N at 20° (this was photographed) one chain further west sandstone strikes N 15° W. a gully on the west conforms to the sandstone outcrop

67.

67 A small hill here is due to the outcrop of a mass of quartz

N° 68 Centre country, the sandstone here has been worked for building stone it yields a limited quantity of flags 8" thick the strike is N 10° W the dip E 10° N at 74°

N° 69 Quartz & ironstone outcrop 12 to 14 feet wide, it is white quartz stained on the outside with iron oxide, with limonite a few inches thick in places.

70 Bands of ferruginous slate & sandstone with a few quartz veins outcrop above the surface and exhibit cavernous weathering

71 A small circular outcrop of quartz

72 Centre country strike N 20° W dip W 20 S at 60° the pitch S 20 E at 30° the dip of the axis of the fold is to the east at 73°

N° 73 Ferruginous ~~slate and~~ sandstone with ~~and~~ laminate bands, strike N 15° W.

N° 74 This sandstone ~~here~~ contains sandstone nodules resembling those which occur along some of the centre country lines

N° 75 Sandstone (bed strikes N 15° W, with approximately vertical quartz veins ~~also quartz on~~ and floors.

N° 76 Outcrop of massive sandstone, with an east dip. ~~in a gully.~~ In it there is a horizontal floor of quartz 1" thick. ~~It~~ forms a ledge 1' wide and 20' long the dip here is easterly.

N° 77 "Book" quartz ~~and 2 chains further~~ east is sandstone strike N 10° W and dip ~~easterly~~ E 10° N at 65° A quartz floor with 2" of quartz wide dips at 30° to W 15° S. Near here some sandstone has been obtained for rough flagging.

78

N° 78 ~~Outcrop~~ Outcrops of massive sandstone dip NW by N at 70° ~~It is~~ In part ferruginous and exhibits cavernous weathering there are some ferruginous nearly horizontal quartz ~~layers~~ seams. ~~near by horizontal~~

N° 79 Yellow spotted slates

N° 80 Outcrop of quartz spurs, and green & yellow pitted slates strike N 15 W.

N° 81 Centre country with radial fissuring ~~pitch is N at 10°~~ strike N 20 W dip E 20° N at 75° the pitch is to the north at 10°

N° 82 Coolean Hole, green and yellow pitted slates with quartz spurs.

N° 83 Centre country is exposed in the bywash of a dam the strata ~~to~~ strike is N 20° W a quartz vein in green pitted slates ~~have a~~ has a favourable appearence for gold.

84 Sandstone with ~~a perfect sample of~~ rectangular jointing which produces columnar structure. Strike N 20° W dip W 20° S at 52°

N° 85 Centre country pitches ~~to the South~~ at a low angle.

N° 86 Centre Country Dip on the east is 50°; and to the ~~on the~~ west 70°

N° 87 ~~Sandstone in~~ Centre country pitches ~~southerly~~ at 32°. ~~a sample of pitching mica scared, marked XOX~~

N° 88 Centre Country pitching ~~southerly~~.

N° 89 Sandstone with numerous ~~threads~~ veins of quartz, which agree with the strike N 25° W.

N° 90 A band ~~of very coarse sandstone has been altered to~~ bed quartzite. ~~grains of quartz and felspar may be recognized.~~

N° 91 ~~Hole~~ Pitted grain slates and ~~quartz~~ silicated spurs.

N° 92 Centre country pitching ~~southerly~~ at 27°. some Quartzite occurs here.

N° 93 Centre country ~~here~~ pitches ~~southerly~~ at 37°. ~~the gully from the east bends round it.~~

N° 94 Centre country striking N 20° W dung pitching ~~southerly~~ at 14°.

N° 95 The Sandstone here has been used for building purposes

N° 96 Reformed granite detritus and ferruginous sandstone shaping limonite with and small well water worn pebbles.

N° 100 ~~Sugary~~ Sacrodal quartz.

N° 101 Pink quartz veins outcrops in the schists & hornfels.

102 Nodular schists striking N 35° W.

103. An outcrop of nodular schists, here somewhat resembles centre country

104 Silky micaceous schists.

105 Dark nodular slates.

106 Nodular black slates, striking N 15° W.

107 Lead 12' deep; red clay & sub angular gravel composed of ironstone, slightly metamorphosed slate, massive & laminated quartz & some cherty red ironstone. Mr J. Williams of Jones's Creek says the best washdirt in the lead was a dark red gravel. Nuggets of 7ozs & 30ozs were dispersed here and two chains up the lead a patch of ten ozs of gold was obtained.

N° 107 6' of drift - Clay and sub angular gravel. Duff 6ft.

N° 108 In the drain on Tarnagulla road Sandstone striking N 5° W and dipping E 5° N at 73°. floors with Quartz veins pitch S. 40° W at 18° Other sandstone beds dip to W'ly & west- so there may be suggesting an anticlinal fold. but the evidence is not conclusive.

109 Yellow slates.

110 Greenish-bluish slates

111 Green-blue slates.

112 Centre country pitching to south

113 Sandstone here in centre country with a southerly pitch; containing rounded nodules.

114 Green slates N 20° W.

115 Green slates & sandstones. chain on the east strikes N20° W.

116 Sandstone strike N 5° W dip E 5 N at 70° with quartz on floors ~~pitch~~ pitching southerly at 36°

117 Pink yellow and black slates.

118 An outcrop of red slate 5 chains to the east slates strike N 15° W and at 10 ~~&~~ at 13 chains further west yellow slates ~~outcrop~~.

119 Graptolites were obtained here in the creek bed in dark blue slate and 6 chains further to East sandstones have been worked ~~a bit~~ for flagging. The strike is N 15° W dip E 15° N at 75° Floors of quartz pitch ~~N~~ S 30° W at 20° ~~Ft small flags 2" thick may be obtained in~~

120 Bands of slate ~~Black~~, greenish, blue.

121 Old shaft about 30' deep. shows strata vertical. There is a 3" vein of quartz in ~~a~~ white slate.

122 Black slates.

123 Indicator ~~working~~ in white slate with numerous ~~pyrite holes~~ hollow cubes formed by the removal of crystals of pyrites.

124 An anticlinal fold is well exposed in the creek bed, it pitches southerly at 10°. Quartz spurs occur in it ~~(see photo N°)~~

125 Sandstone N 10° W, dip W 10° S at 60° quartz on floors pitches S 10° W at 20°.

125 A Where has been a small ~~race~~ space ~~of~~ ~~gravel~~ of gravel surfaced up to an outcrop of quartz and ironstone in white plate. This should be further prospected as it appears to be the source of the alluvial gold.

126 Fissured sandstone & greenish yellow slate strikes N10°W a quartz vein occurs here dips to S30°W at 55° and strikes E30°S. ~~the strike of the quartz vein~~

127 Big outcrop of sandstone ~~strikes~~ like centre country. The sandstone exhibits radial fissuring. 2 chains further to the east there is a quartz reef ~~which~~ is mottled bluish green & rose coloured.

128 ~~The~~ The Western side of what is apparently a big folded bed of sandstone has been removed by weathering.

129 ~~A hole here in a big quartz reef, & one decomposed brown mica~~ 1½ chains further N a small amount of surface work has been done here on a big quartz reef which dips to the east, and the alluvial has been worked up to it. ~~(see plan & Bullocks notes maybe one after placer)~~ a specimen was found at the claim 26 oz of gold in it. ~~there is another hole 1 chain further north here there is a~~ quartz reef 1 foot wide which contains felspar reef & country rock dips easterly at 52° ~~on the 2 chains W west of these holes there is another reef which strikes N20°W A has been opened N & S for 4 or 5 chains~~

130 A small heap of tailing not more than 100 tons has been ~~treated with~~ cyanided. ~~A quartz reef here has been prospected a little at the surface (see notes by A Hockey) a dam~~

131 Quartz veins occur here exposed in a small railway cutting in decomposed granite. At the 131 Mile Post there is a quartz gravel in ~~&~~ reformed granite ~~formation~~ deposits ~~rests on a layer of reformed granite of a yellow colour which contains a few quartz pebbles.~~

132 ~~A~~ Mica schist, the mica crystals are larger than those usually seen ~~in the local schists~~

N° 133 Nodular mica schist, with strike of N 50° W.

N° 134 Sugary white and rose-coloured quartz. Four chains further to the West there is an out crop of ~~rocks~~ the sandstones which are very little altered but the plates have become nodular. The strike is E 30° S & the dip is N 30° E at 70°.

N° 135 Pink quartz veins and 6 chains further east there is some sugary white quartz with red nodules The strike of the veins here is N 40° W.

136 Nodular micaceous schist.

137 Black nodular plates.

138 Sugary quartz in colour dull red and bluish, and two chains further west there is a ~~shallow hole 2' deep at which there~~ is vitreous bluish quartz with some mica & marstone.

139 Scattered Loose quartz from here has been used for road making material.

*140 Graptolites were noted here in soft very pale blue slate. Two chains further to the east there is a band of ferruginous red and bluish plate.

141 Sugary Saccaroidal red quartz

N°142 * Graptolites were collected here from a dark blue slate and also on one face from and of a very hard red plate. An excavation was made and a considerable quantity of the fossils were collected

Dupuy's Indicator

143 x * Indicator, The country rocks, the strata are thinly-bedded dark blue & black slates, which strike N 15° W & dip to ~~W 15° S~~ E. 15° N. at 68°. A slickensided wall agrees with the country rock which pitches southerly at 15°. A floor or slide - showing with same quartz crosses the indicator. ~~The dip W 15°~~ Graptolites etc were found here.

N° 144 Large outcrop of quartz & ironstone strike N 20° W at 5 chains to the east there is mg grey quartz with blue mottlings

N° 145 In the drain on the road side there is 4 feet yellow clay with sub angular local gravel.

N° 146 Another one Indicator. A quartz reef 3 feet thick, which contains some felspar dips W by at 65° the country rocks are green pitted slates, they strike N 5° W & pitch N by at 14°. A "floor" with quartz dips at 27° to W 30 N. There has been a little prospecting done here
Three chains further west Sandstones and quartz and ironstone strike N 5° W

Another one Indicator

N° 147 Indicator a slickensided wall carries a little quartz. The rocks are decomposed slates which strike about N & S. & dip eastly at 44°, the Indicator dips to NE at ~~76~~ 76°. Half a chain further south there is a shallow hole pitted green slates here strike N 10° W & dip E 10 N at 60° there is a ~~wall~~ wall here which strikes W. 15° S. & dips to S. 15° E. at 65°

148 The course of a gully here is decided by the outcrops of bands of sandstone which strike N 5° W.

149° A hole here 8' deep has been sunk on an indicator. The strata are green slates pitted strike N 5° W dip E 5° N at 5 1/2 pitched N by at a long way off There is a cross course to a "floor" which carries a little quartz it strikes E 10° N & dips to dips to S 10° E at 67°. The indicator is a movement plane with 1/2 an inch of quartz and ironstone strike N 15° W & the dip is to E 15° N at 80°, a slide comes in from the West it carries a little quartz & ironstone, & ~~dips~~ runs approximately with the country rock & dips W by at 23°

N°. 150 Indicator here
* Sandstone strikes nort & south about vertical pitches to north at 5° and 4 chains further west there is an indicator at a shallow hole on green slate strikes N 5° E the ~~country rock~~ & dips E 5° S at 75° there is a "floor" which strikes E & W & dips south at 30°

N°. 151 There is a hole here which has been sunk for building stone on a sandstone band which strikes N 25 W & dips to E. 25°. N. at 68°. Two chains further west there is an outcrop of quarty and crustane.

N° 152 Hole here ~~on~~ there is a cross course which strikes E 10° N & dips N 10° W at 85° it carries a 2" vein of quarty country rock, green slate which strikes N 25° W & dips to E 25° N at 78° agrees in strike & dip with ~~a wall which~~ ~~cour~~ an indicator there is a well striated wall & 1" of & quarty & crustane in the Indicator

153 Shaft here, ~~saw~~ there are some small pieces of magnesite on the waste heap and fragments of green slate, & quarty reef strikes N. 10° W & ~~has a~~ dips to the E east.

154 Sandstone strike N 25° W. dip E 25° N at 50° a floor here carries 1" of quarty it dips to W 20° S at 24°

N°155 Sandstone here has been excavated for building stone

N° 156 There are several short outcrops of quarty here one ~~on~~ is 6 yards long and 8 yards further North there is another measuring ~~but~~ 4 yards ~~A~~ in a N to S direction. Many short out-crops of quarty were noted during the survey some were nearly circular and ~~but~~ a few yards in diameter. &

No 157. A shaft here on a quartz reef 5' wide there are pitted green slates, & pieces of magnesite on the waste heap.

N° 158 An Indicator, worked by Mr Powell. here in green slates, ~~which~~ strikes N 15° W & dips to W 15° S. at 38. The green slates strike N 10° E

N° 159 Building stone has been obtained here from a sandstone band. and one chain further West the sandstone strikes N 20° W and a costean has been sunk on green slates.

N° 160 A cross reef here, has been worked in very hard sandstone the reef is 2' wide it strikes E 20° S and dips to S 20° W at 70° No particulars available.

N° 161 Middleton's and Powell's Indicator. Strike of Indicator about N. & S. dip E at 53° pitch of strata thin banded green and yellow slates N at 20°. Centre county runs about ½ a chain on the West the pitch is N at 18° to 22° & the inclination of the axis is to the East at 75° approximately.

162 Indicator 2 chains to the East N 5 W strike & dip is E 5° N at 81° a "floor" with a little quartz and Iron stone pitches South at 20°

163 Indicator in almost vertical green slates a cross course ~~reef~~ here strikes W 20 S & dips to S 20° E at 65°. it carries a little quartz & iron stone. Three chains further east is a hole on a big quartz reef in green pitted slate which strike N. 15° W. and dip W 15° S at 65°.
Both strata and reef appear to pitch to the South

164 Somewhat sandy slate has been altered to crystalline nodular schist.

165 Nodular schist

No 166 Nodular schist

N° 167 Quartz reef, the quartz is very glassy and contains some felspar, the rocks here are nodular schists.

168 Quartz reef the quartz is white and rose-coloured the rocks are nodular micaceous schists

169 Quartz reef, strike N 20° W the country rock sandy micaceous slate strikes N. 15° W.

N°170 Fine grained micaceous schists and 4 chains further east there is slate with large spots

171 At several shallow holes here loose quartz for road-making material has been obtained.

172 There is a hole here on a quartz reef 1' wide it dips W at 85° & strikes about N. and S a cross course strikes W 20° N & dips to N 20 E at 85° the reef is in green slates 3 chains further east there is some prospecting done the source of the supply of the gold does has not been located

N° 173 Where are heavy boulders of subangular quartz and ironstone in the head of the Grumblegut Lead

No 174 The highest point of this ridge is a nearly circular outcrop of somewhat sugary quartz and ironstone about ± a chain in its longest diameter,

N°174^ Messrs Lees & Bowles obtained 25 ozs proof gold from 2 waikcans of quartz here (Purdy Expires of 4th July 1882)

175 Rose coloured quartz and some felspar in green slate which strikes N 10° W, and 3 chains further east is 3" of quartz in green slate both strike N10W and dip to E 10° N at 80°

176 Somewhat sandy slate strike N10W dip E 10N at 60° some quartz veins dip W by at 75°

177 The centre country sandstones strike N 10° W & dip W10S at 64° & pitch southerly at 20° a quartz reef here contains some felspar & a dark green mineral probably hornblende.

Notes

N° 178 Sandstone has been excavated for building stone
strike N10°W dip E'ly at 70°

179 Shallow holes on quarty spurs in green slate ~~country rock~~
which strikes N 10° W & dips to E 10 N at 80°
There are here two quarty reefs one dips E'ly at 80° & one
dips W'ly at 84° a N & S slide dips west at 60°
The quarty encloses fragments of green slate
There is a flow of quarty it pitches dips N'ly.
& carries a 2" vein of quarty

180 Sandstone has been excavated for building stone
strike N. & S. dip east at 70° pitch South at 12°

N° 181 Indicator, quarty and ironstone in pitted green slate strike N 15° W a slide "floor" comes in from the east & dips west at 45°. There is surfacing up to the Indicator

182 Centre Country, sandstones strike N 5° W & dip E 5° N at 55° one chain further west the dip is W by at 63°.

183 Centre Country strike N 20° W pitch is N by at 16° the axis inclines to the east. There is some radial fissuring in the sandstones. Four chains further to the west there is a shaft about 30' deep green and other pitted slates
184 dip E by a slide dips E by and ~~very~~ nearly flat ~~fissures~~ veins of quarty dip E by. One chain further west quarty and ironstone 1' thick dips east at 55° & pitches N at 15° green pitted slates strike N 15° W.

184 Shaft 12' deep on a vertical quarty reef 3' thick which strikes N 15° W. Two chains further west there is a shallow hole on a big quarty reef in pitted slates.

185 An Ironstone lode exposed in alluvial workings probably it is the source of some of the alluvial gold which has been obtained here. One chain further east an ironstone lode strikes N 10° E

186 Indicator strike N 10° W dip E 10° N at 81° sandstone and green slates pitch S by at 18° Three chains further east sandstone has been worked for building stone.

187 Sandstone N 15° W dip ~~west~~ W 15° S at 67° a "floor" of quarty dips to N 35° W at 21°. The clear-age dips E by S at 52°.

188 Quarry in sandstone for building stone strike N 10° W dip W 10° S at 70° pitch S by at 5°.

Begin at 196

N° 189 Continuation of the sandstone layer from the quarry on the N. north strike N10°W dip ~~E 10 N at 60°~~ W 10°S at 35° pitch Sly at 15° & cleavage dips Ely at 60°, there are a few small quartz spurs some of which are flat

190 A hole here 12'? deep the top printing is in red ferruginous sandstone below is white reformed granite.

191 Sandstone and quartz reef N30°W dip is to the east.

192 Outcrop of metamorphic schistose rock would do for rough building stone, facing reservoir embankments etc. Two chains further west is a similar outcrop.

193 In a railway cutting decomposed mica schists strike N20° E at 74° and nodular schists and sandstones with quartz spurs. Some limonite is now forming from water oozing from the rock. The quartz spurs which are mostly in the sandstones strike from N. 10 to N 40 W

194 Holes on a quartz reef in nodular micaceous schists which strike N 25° W and dip Wly. Floors striking nearly E and W pitch steeply to the N. north.

195 Hole in sandstone strike N. 30. W. vertical quartz spurs dip at a low angle to the ~~west~~ Wly.
In a hole 1½ chains to the N.W the strata have a Wly dip.

196 ~~Sandstone etc~~ Strike N 15° W Incipient mica schists strike N 15 W.

197 Slates and sandstones strike N15° W & dip Easterly small "floors" of quartz dip S. at 30°

198 Sandstone N10°W dip E 10° N at 84° with quartz floors dipping S. at 10°

Notes

207 Hard blue horsels.

205 Shaft 12 fr deep in a ferruginous conglomerate.

206 A small outlying portion of the once continuous Older Pliocene lead, which starting near Goldsbrough, extended along the Burnt Creek ~~&~~ Valley to Gooseberry Hill. and ~~further down Burnt Creek~~. Gold has been obtained around each the remnant. ~~The~~ gravel and cement on this hill are shallow but a tunnel was driven under the hill in the bedrock by a Frenchman miner but no gold was obtained by this work
The wash consists principally of waterworn and well waterworn white quartz ~~gravels~~ pebbles. In places the gravels along this old lead are cemented and form a hard conglomerate. ~~in places this is~~ ferruginous.

207 Several nuggets of about 20 ozs in weight, and one of 52 ozs are ~~alot~~ said. ~~The miners to have been found about here in~~ stated to have been brought in the White or Western Lead. ~~The pits at which all of them were obtained could not be definitely ascertained.~~
The pinkuig is about 20' deep, the bottom is irregular, and in the wash boulders of ~~quartz~~ well waterworn white quartz occur up to 2 ft 6 in in diameter, ~~were noted.~~

208 A sample of the decomposed granite from an exposure in the creek bed was secured ~~for~~ for testing as to value for pottery making.

209 This lead was never rich and only yielded half wages. ~~Italian Joe got 30 ozs in two years~~ The largest piece found on the lead was 1 oz. 7 dwts. ~~Later finds of 20 oz piece as said to have been obtained~~ The gold is very well waterworn. ~~The lead only yielded about half "wages."~~

Notes

N° 199 Strata here, modular slates strike strike N 25° W. a quarty reef - Rokahr's, - strikes N to S and dips E to east a little work has been done on it there is felspar in the quarty,
3 chains further east there is an outcrop of quarty and ironstone which forms a little ridge.

200 A lead appears to head here at quarty & ironstone spurs which have been scratched a little at the surface. The spurs strike N. 15° W. One chain further to the east some working along quarty spurs trend N. 10. W and dip to E by at 52° flat spurs of quart occur which pitch pitch southerly the pitch carrying the spurs from the surface probably as is the reason why no alluvial gold has been obtained in the gully next near by on the South. This place maybe worth further prospecting

201 A Quarty & ironstone lode strikes N 10° W & dips to E 10° N at 70° there are several bands of quarty and ironstone close together

202 Shanty Jacks Gully. There is a red streak lead in the terrace sinking in one place is 2' and two chains further east the sinking is to 15' and half-a-chain to the South in the gully in the Recent alluvium The sinking is only 2'
The alluvial material in the lead consists mostly of clay and sub-angular fragments of white quarty and cherry red ironstone, and red ferruginous slate. The alluvial material has mostly been derived from quarty and ironstone lodes which occur in ferruginous slates
The ironstone at the matrix is brown and dull red in colour further down the lead it becomes cherry red.

203 Where the lead occurred at the higher level it was apparently payable on the lower level the gold appears to have been scattered and too poor to work.

Notes

210 There is a post here which is said to mark the line of strike of the Sydenham Reef which has been worked on to the south of the county shown on this quarter sheet Survey line by Mr W. G Conchman

211 Mc Isaacs Lead, & the wash consists of small well water worn pebbles of white quartz, some small amethystine quartz crystals were occur in the wash. Yield — The bed rock is decomposed granite a sample was obtained for testing for its value for pottery making

212 Salmon's Lead a small piece of shallow lead There is well water worn and sub angular quartz gravel, some of it is cemented. The largest piece piece of gold obtained weighed 2 dwt 7 grs One man obtained 6 ozs in 2 weeks. The lead is said to have been good when worked in the early mining days.

213 Hole 10' deep there is quartz gravel on top then and some cemented gravel, bottom on decomposed granite

214 Hole 4' deep in reformed granite conglomerate.

215 Lead Irregular lead at Pavo's was worked by a miner named Lucas who states

215 The lead is shallow and sandy, there are well water worn and sub angular pebbles of quartz etc. An attempt was made to work the shallow sandy surfacing by a dry blower but the stuff was considered too poor to pay.

216 Hole here 5' deep, sunk through a felspathic sandstone bottomed on granite

Notes

217 A considerable area here has been surfaced by W^m Hughes & it is shallow the bottom is reformed granite, and granite

218 ~~The slope to the North & to the South has an elevation of 2°~~ The ground here slopes upward towards the north and south at 2°

219 A shallow hole here appears to have bottomed on granite

220 A hole here in reformed impure granite with some well water worn quartz pebbles

221 A hole here 10' deep there is some gravel in it and it appears to have been bottomed on granite

222. Ferruginous conglomerate 6' feet deep thick it & the gravel in it is both sub angular and well water worn.

223 Subangular gravel and conglomerate

224 Hole here 7' deep there is cement and bouldery gravel. There is some surfacing to the lead on the west, there is a cherry tree in the lead here which is to be referred to in the report.

225 Hole 15' quartz gravel and ironstone on reformed granite, and 4 chains further east a hole in reformed granite with quartz gravel.

226 Sandstone with some very small well water worn quartz pebbles.

227 Hole 6' deep in reformed granite conglomerate with well water worn quartz pebbles.

228 Shallow hole here with well water worn grit and gravel

229 A very small outcrop of grano-diorite through the Post Pliocene accumulations. The rock is partly decomposed it contains some crystals of felspar, hornblende, and mica which are larger than in normal granite

230 Holes here 12' deep bottom on granite and 4 chains further to the west holes bottom on schist so this spot is about on the junction of the granite and Ordovician rocks.

231 Shallow holes here bottom on schist and a rock which is granite or a granite dyke

232 Dark nodular schist

233 Quartzite

234 There is a hole here (Calder's Reef) and a tunnel a few feet below the surface schists here dip Wly at 70° a fault dips to Ely at 45° direction of the tunnel S.E. on a granitic quartz vein which is nearly vertical strike of it N. 40° W

235 Shaft 20' deep there are some rather vitreous & granitic quartz spurs, some of the spurs dip with the country rocks Wly others dip Ely.

236 Slightly altered black slate

237 Crystalline black hornfels.

238 Dark crystalline nodular hornblendic schists

239 Nodular black slates

240 Ferruginous slate and ironstone and altered

Notes

240 black slates; - four chains further to the east is a band of black slate with chiastolite? crystals

241 The rocks here are less metamorphosed than those of the range on the east, the black slates ~~show some~~ have undergone some small amount of alteration. The country is scrubby, with healthy undergrowth and small box saplings

242 Black slate with chiastolite?

243 A very small vein of quartz was noticed in this granite.

244 There is here a bed of Kaolin & reformed granite with water worn grit. The strike of these Tertiary beds ~~is~~ appears to be East & West & there is apparently a dip to north very ~~a~~ small amount. There is also ferruginous sandstone with ~~well~~ well water-worn pebbles.

245 Mica schist

246 Hole here with ~~gray~~ ~~sand~~ gray sandstone and subangular gravel and impure kaolin

247 Hole with 3' of subangular shingly gravel of schist and quartz and 7 chains further to the west some pebbles of chiastolite schist and pebbles from a granitic dyke.

248 Holes 5' deep with gravel which is composed of subangular dark nodular slate, ~~subangular~~ quartz schists and granitic dyke stones.

249 A reef was worked here in a granitic dyke in metamorphic country. It is said ~~not~~ to have been of poor.

250 Large subangular quartz boulders at shallow alluvial workings in workings 3 chains further north there are boulders of quartz 1' in diameter there is about 4' of wash the bottom appears to be decomposed granite

Notes

251 Altered dark blue slate

252 There are several shallow holes here on a ~~spr~~ quarty spurry formation about 1 foot wide which has a strike of N50°W & dips to W. 50° S. at about 80°. The country rock is nodular schists.

253 Indurated black slate, 2 chains further to the east is nodular slate & one chain further to the east is dark slate with a mineral which has a star-like arrangement & may be chiastolite.

254 Nodular Black slate

~~255~~ ~~Another~~ A flat quarty spur is exposed here it is 3' thick, strike N. 30° W; and 9 chains further to the west is a shaft

~~256~~ on a reef which strikes N 40° W, dip E 40 N at 70° the quarty 2' 6" to 3' thick is bluish & occurs in nodular sandy slates and sandstones

255 A quarty spur which is nearly horizontally bedded out crops here, it is 3' thick the strike is N. 30. W.; 9 chains further to the west a shaft has been sunk on a reef which strikes N 40 W and dips to E 40 N at 70° it is 2' 6" to 3' thick bluish in colour and occurs in nodular sandy slates, and sand stones

256 Granite outcrops a few chains further north.

257 Nodular schistoze and dark hornfels rocks

The rocks on the eastern side of the range are harder than those on the western the nearer to the granite the more the rocks have been indurated.

258 Hornfels schist

259 Nodular micaceous schist N 35° W

260 Dark nodular schists.

Notes

261 Micaceous schistose rock strike N 35° W, two chains further to the west nodular feebly micaceous schists occur the rocks are only slightly metamorphosed.

262 Altered dark nodular dark schist N 35° W

263 A hole here on a quartz reef in black slate, the quartz is part vitreous & part sugary, 3 chains further W west a quartz reef in black slate strikes N 30° W.

264 Hole here 4' deep, a quartz reef, 4'6" and a band of soft dark blue slate agree in strike and dip, strike N 40 W & dip to W 40° S at 70°

265 Ferruginised sandstone here has been used for building (stone

266 Surfacing begins here, the ground has been surfaced up to an outcrop of nodular schist with quartz veins. The soil here is dark red in colour. A nugget of 13 ozs was found here, the rest of the gold was as a rule ~~not over 1 dwt in weight~~ in pieces weighing less than 1 dwt.

267 The Arcadian Reef near Wilson's hut. The reefs are associated with dark blue slates The strata are vertical in places, in others dip W westerly N 30° W strike of reefs & strata. (at 80°

268 G Stevenson's Indicator. This indicator has been worked in an inclined shaft the underlay is W by at 70° the rocks are silky nodular micaceous schists There is a somewhat similar occurrence in the next hole on the east.

269 A small amount of prospecting has been done here for ~~quartz spurs which~~ as indicator the strike of the workings is N 50° W & that of the strata is N 40° W.

270 Sandstone with quartz spurs which are somewhat granitic & contain felspar and mica.

271 The alluvial has been surfaced up to this reef. On this surfacing the largest piece of gold obtained below the 9lb nugget would not weigh over 1 dwt. The good gold was not got in the creek bed but in the highest surfacing south of the creek The gold appears to have been derived from the Inkerman reefs. The soil of the surfacing is dark red in colour.

272 There is a quartz ~~leads~~ spur here in a silky nodular schist and a "floor" which pitches to the south.

273 Tates indicator There is alluvial working on the south, but holes 7' deep the gold has not been traced to a matrix

274 A hole 3' deep, some quartz & manganic oxide

275 There is a small amount of granitic dyke stone here.

276 Nodular micaceous schists, strike N 20° W

277 Some surface prospecting here in loose wide spread quartz

278 In the Inkerman Lead here there are pebbles of black altered slate, micaceous schist, & hard ~~as~~ indicator stone indicator quartz also boulders of cement, ~~as~~ constant pebbles are numerous. The quartz stones as a rule are subangular but in places a few were noted well there are probably the remains of an older lead. water worn

Notes

279 A band of sandstone outcrops strike N 20° W dip E 20° N at 50° a small amount of building stone has been obtained here.

280 A shaft 40' or 50' deep quartz spurs in green & other coloured pitted slates dip W by.

281 Same cement here ~~for name of gully see cut with 1 Pike Goldfield~~

282 There is a shaft here on a large quartz spur which dips westerly at 52° N 20° W ~~is~~ the strike of the workings but is not very reliable appears to be Green pitted slates strike N 10° W & dip to E 10 N at 70° There is water in the shaft.

283 Dark blue slates with hollow cubes due to the removal of crystals of iron pyrite

284 Dark blue slates strike N. 25° W

285 A small quarry has been opened here in dark blue and black slates. The material appears to be too soft to have much commercial value.

286 Hole here 4' deep there are some very well water pebbles like stones that have been waterworn in an older bed.

287 An remnant section of the cemented material from the old high level bed of the Burnt Creek valley the capping of the gravels on the Ordovician rocks is very thin there some boulders 18" in diameter
This is the highest point of the lead noticed The Church of England is here. Quarry spurs in pitted green slates strike N 5° W

288 Alluvial workings 4' to 6' deep in red clay and sub angular gravel which is in places cemented, a piece of gold

Notes

288 half an-ounce in weight was found here on the surface but no more was obtained

289 A shaft, ironstone layers dip Wly at about 50° 1 chain to the south an outcrop of quartz & ironstone strikes N.15°W.

290 Book quartz.

291 Quartz reef 1' thick N20°W dip E. 10N at 80° it agrees with the strata in strike & dip. The rocks are dark blue slates which contain hollow cubes from which crystals have been removed. One chain further to the east is the Bell topper reef at a bought shed here there is a dark blue slate with hollow spaces left on by the removal of crystals of pyrites.

Bell topper at deep shaft at quinjake

292 Book quartz and dark blue slate

293 Bell topper Reef at the deep shaft see sections etc. The quartz contains manganic oxide

294 Hole 4' deep on a Quartz Reef some of the quartz is sugary some is pink in colour some contains silvery mica the reef is 3' thick strikes N & S and dips easterly at 66°

295. In Nuggety gully north of this number, a 42 lb nugget, & others of less weight were found, a short way higher up the gully there is a small quartz vein in dark blue slate. Book quartz occurs in the wash of the gully which is sub angular. ~~In the~~ On the N north side of the gully above where the nuggets were found there is a cross reef also bands of

dark blue slate with hollow cubes from which crystals of pyrites have been removed Book quartz in these blue slates at the junction of the cross reef would be an indicator and it is probable that these nuggets were formed in just some such position.

The cross reef should be traced South easterly until it crosses the various bands of dark blue slate

The small quartz leader mentioned and the strata strike N 10° to 15° to west & dip W^ly at 80° degrees a flat here pitches to N 10 W at 73° it carries some iron stone

296 A shaft here in dark blue slate strike N 10° W & dip E 10 N at 80°, there is a quartz reef here 6" thick in the slates are hollow spaces left by the removal of crystals of iron pyrites

297 Dark blue slate with spaces left by the removal of crystals of pyrites also mottled blue quartz

298 Sugary quartz pink in colour

299 Silky micaceous slate strike N 10° W the sandstone which adjoins it is in a normal condition

300 Dark blue slates N 15° W contain holes formed by the removal of crystals of pyrites.

301 Micaceous sandstone becoming schistoze & fine grained sandstone somewhat contorted strike E 10 S & dip S 10° W at 62°

302 Brown silky micaceous ~~micaceous~~ slightly nodular slates

303 Nodular silky micaceous schist strike W 20° N

Notes

304 Nodular silky micaceous schist

305 Pink and white sugary quart with white mica

306 Nodular mica schist

307 Mica schists and hornfels. A sample of manganic oxide was collected here for assay.

308 A hole in ferruginous conglamerate has been bottomed on decomposed granite. There is boulders gravel here, at the surface (See note later concerning)

309 Shaft 12' deep strata dips E by at 70°

310 Quartz reef, strike N.10°W. a small amount of work has been done on it; 2 chains further north there is a hole 8' deep quartz spurs which are horizontal or have a small dip to the west have been worked to a small extent there is also ~~a vertical quartz reef 2 an inch thick which reaches the surface~~ ½ a chain further North there is a quartz reef ~~310^~~ 2'6" thick it dips W by at 65° lower down the dip is less steep green slates here dip E by at 60° to 70°

310^ The lead here for an acre or more in extent has been "paddocked" out & it is said to have been rich here & southerly to the creek The sinking was about 8' deep There are here a few well water worn pebbles of white quartz, their appearance suggests that they were formed in a pre existing high level lead.

311 Shaft on the Golden Crown Reef the quartz is stoped out & the reef appears to have had a small dip to the east. Two chains further north the reef was worked 3' to 4' wide it dipped E by at 80°

311
308 Two chains further west ~~reef~~ a quarty reef & country rock strike N 15° W & dip to E 15° N. at 64°, country rocks sandstone & yellow & green slates

312 A quarty reef here strikes N 15° W it dips W by at 70° from this reef the ground has been surfaced for 2½ chains to the east. No dark blue slate could be found on the waste heaps, but small pieces of decomposed dyke stone were noted

313 Hole on a quarty reef no dark blue slate could be ~~as~~ found on the waste heap but as the quarty is mottled blue and white such slate probably occurs below.

314 Quarty reef N 15° W, Book quarty here and dark blue slate, there is some magnesite, the strata & reef are about vertical

315 Dark blue slate & 2 chains further east ~~the~~ book quarty and dark blue slate with holes formed by the removal of crystals of pyrite. The outcrop of slate is very wide upstands of 5 or 6 chains the strike is N. 20° W.

316 Bluish and white quarty laminated, but not as much as book quarty.

317 Laminated blue white & pink quarty the quarty is in a big sandstone layer & has been exposed in alluvial workings 6' deep

Notes

318 Ironstone & Book Quartz the layers of Q are arranged horizontally in places there are somewhat contorted & vitreous & in part slightly mgary white or dark red in colour. layers 20 to an inch N & S strike much slickensiding.

319 a soft brown dec. felsite dyke cuts the railway cutting it is 4 to 8' thick there is a little ironstone & vitreous quartz on both sides of the dyke & 2 inch veins of quartz some flat some diagonal some vertical N50°W strike of the dyke and the dip is W 50° S. at 60°, strata slates and sandstones strike N 25° W and dip E 25° N at 63°

320. Hole 10' deep, ferruginous sandstone & white quartz gravel bottom decomposed granite

321 Shingly subangular gravel formed from fragments of schistose rocks

322 Ferruginous sandstone with very small & well water worn pebbles of quartz and decomposed granite or decomposed granite

323 A tongue of granite comes in from the south it occupies a hollow, it is porphyritic granite with crystals of felspar and black mica

324 The sandstones become crystalline almost quartzite there is a band of gneissose rock which may be a small crushed granite dyke.

325 Nodular dark micaceous schist.

326 Decomposed red nodular micaceous schists and 4 chains further east dark nodular micaceous schists

Notes

327. Schistoze rock some of it has been used for building stone.

328. Schistose rock, much cleavage at various angles has resulted in "pencil" fracture.

329 Silky brown nodular schists & slate altered to rock with very fine crystalline particles. Two chains further west are outcrop of quartz 20' across nearly circular

330 ~~Open cut~~ Costean on a quartz reef which dips W by at at about 45°.

331 There is an engine shaft here well timbered said to be 400' deep The ~~reef~~ ~~dips~~ lode dips W by at from 30° to 65° There are 3 or 4 quartz veins. The country rock has a strike of N 15° W & a dip of 80° to ~~the~~ E 15° N The country rock appears to pitch to the south at 15° feet from the surface the lode at the surface workings dips less steeply than in places. In the mullock heap there is some pale blue slate but no dark blue slate was noted

331A See note

332 Holes here in the alluvial have bottomed on a decomposed felsite dyke similar in character to a number which have been noticed on the area of this survey.

333 The stones in this lead are of local origin mostly quartz and slate and ironstone all are subangular

334 An indicator exists here, Dark blue slates with holes caused by the decomposition of iron pyrites contain ~~a~~ laminated red quartz. This place appears to be worthy of a little surface prospecting by one who understands indications

331A The reef here on the east strikes N35°W it is the continuation of the Christmas Reef There is a line of centre country here. There is a shaft here in the gully with water near the surface, there appears to be a fair sized quartz reef the quartz contains felspar and a mineral resembling decomposed hornblende fragments of green & slate occur in the quartz.
On the north side of the gully there is a cut on a quartz and ironstone lode 3' thick. & a bit of surface prospecting on a quartz reef ± a chain to the east it has a strike of N20°W.
Fine gold and nuggets were obtained about here weights and exact positions could not be ascertained.

Notes

335 In the railway cutting there are soft red and yellow slates strike N 20° W dip E 20° N at 75°, one of the ordinary soft brown decomposed dykes is exposed & agrees in strike and dip with the strata

336 A Quartz and ironstone lode here is well slickensided indicating a well-marked movement plane exist below.

337 ~~Dar~~ Black slates slightly nodular strike N 60° W

338 Vitreous and sugary ~~quartz~~ bluish quartz with white mica

339 The rocks are crystalline and schistoze and the quartz indicates the proximity of granite and occurs in "eyes" (Dr Hewitt)

340 Nodular micaceous schist

341 Mica schist

342 The rocks are metamorphic, schists with granitic quartz

343 Gneissoze veins through the schists. Four a 5 chains further west the rocks become very crystalline & gneissoze.

344 There is now a very small outcrop of a granitic dyke

345 Subangular quartz gravel which has been derived from granite and metamorphic rocks; sand and some small well water worn quartz pebbles

346 The outcrop of a large quartz reef forms the top of the ridge.

Notes

347 - + 348 Book quartz

349 In this cutting there are very fine sandstones and sandy mudstones and blue and white slates and pitted yellow slates no dykes were noted here

350 Pink pegary quartz

351 A short outcrop of one of the usual felsite dykes of the field colour yellow buff brown dark red it contains mica which is in smaller crystals than those of some of the same dykes further eastward along strike it appears to pass into ironstone with some quartz.

352 Decomposed brown felsite dyke ~~dyke~~ similar to many on the survey there is a cut 2' deep on a quartz reef which strikes N 20° W. This place is worthy of some surface prospecting as the original prospector probably did not recognise the dyke and gold may occur in or along its side some loaming would be useful.

353 A small outcrop of mottled blue quartz.

354 Nodular schists

~~Sea of this is covered~~

355 Nodular micaceous schists

356 Silky nodular schists with spurs of quartz & Ironstone strike N. 5° W

357 Book quartz

358 Contorted gneissose rock and nodular micaceous schists

Notes

359 A small round pink outcrop of pink quartz

360 Silky nodular schists W 10° N

361 Silky nodular blue schists

362 Granitic dyke stone and 3 chains further W west there are some short, thin granitic dykes

363 In the bank of the gully there is an outcrop of ferruginous sandstone and conglomerate formed mostly of subangular pebbles in ferruginous sand-stone, there are some well water worn quartz pebbles the size of wheat grains.

364 Gneissoze schists

365 A dyke formed of large irregular crystals of white and pink vitreous quartz & pale yellow & white felspar. Thin plates of white mica coat the felspar crystals. By hand picking the felspar ~~crystals~~ could be separated from the quartz as some ~~of them~~ pieces are 6" in diameter ~~and~~ the material ~~may be of use for glazing purposes~~ makes a very fine glaze for pottery. The dyke is 4' wide and outcrops for about 1 chain it strikes N 35° E. The granite here occurs in a hollow place as it yields more readily to denudation than the schists of the ~~range~~ Bedilba Range

One cwts of this felspar was forwarded to the Franco-British Exhibition held in 1908.

3

366 Book quartz

367 "

368 6" of Bookquartz 6" thick, blue ferruginous & vitreous.

Notes

369 * Graptolites in dark-blue plate were found at the eastern end of the railway cutting, in several layers of dark blue plates traces of graptolites maybe found.

Fossils

370 Disc inches of blue and white ~~b~~Book Quarty

371 Hole 6' deep in local subangular gravel etc.

372 There is an outcrop of a quarty & ironstone ~~lode~~ lode through the Post Pliocene deposit of clay subangular gravel etc.

373 Blue and white ~~b~~Book Quarty

374 small fragments of blue & white book + quarty were noted here

375 Book quarty

376 One of the ordinary brown felsite dykes with thin veins of quarty somewhat vitreous of a faint bluish colour, 3 chains further east is a laminated quarty and ironstone lode.

377 Black ~~quarty~~ slate with & hollow cubes from which crystals of pyrite have been removed.

378 An ironstone lode, with some quarty. outcrops 4' above the surface it has hollows due to cavernous weathering & resembles "The Rock" East of Inkerman and "The Cave Rock" E of Taylors orchard.

379 Dark plate with hollow cubes due to the removal of ~~f~~crystals of pyrite and a quarty vein which strikes E. 30° S.

379 The exposure is limited but in some respects it resembles a saddle reef. A little surface trenching here might be should be done.

380 Sandstone strike East & West dip to South at 48° This may be the pitch of centre country the exposure is small.

381 Quartzyte.

382 Quartzyte and altered pitted slates the rocks here are not much altered

383 Quartzytes

384 Here and for 18 chains to the east there is a lot of quartzyte at the surface.

385 Dark nodular micaceous schist strike E 40° S.

386 Quartzyte and hornfels schist.

387 A short outcrop of white and bluish quartzy (mica schist. & nodular

388 Hornfels and silky nodular micaceous schist with quartzy spurs

389 Mica schist with quartzy spurs which (strike N 40° W. dip N.E. ½ at 85° the rock is crystalline dense and hard some sandstones here are altered to almost quartzite.

390 Here there is a prospecting shaft said to be upwards of 100 feet deep. No records are obtainable. On the waste heap there is much clean white sand with well water worn pebbles up to the size of peas. The ~~hut~~ shaft appears to have been sunk to decomposed granite.

391 Loose fragments of quartzy suggest that a quartzy vein occurs here in the granite.

392 Quartz spurs in sandstone and slate have been worked a little at the surface a small quantity of alluvial gold has been obtained in the adjacent gully.

393 One inch of book quartz.

394 Two inches of book quartz, and three chains further east there is 9 inches of book quartz.

395 Book quartz

396 " "

397 In the railway cutting there is a decomposed ~~&~~ felsite dyke it agrees * with the strike of the strata. There is also another similar dyke which is nearly flat. Sixteen yards east of the ~~mile post~~ 134 mile post there is a dyke in centre country. West of 39 the mile post there is a big decomposed dyke ~~in~~ then a synclinal fold, and two chains ~~further west of the~~ mile post further west there is another decomposed dyke which continues to nearly four chains west of the mile post. and at ~~f~~ 4 chain west ~~of~~ the mile post there is a quartz and ironstone lode 18" thick which dips E by. Six chains west of the milepost there is a band of dark blue slate which strikes N10W and dips to W 10°S at 80° there are traces of graptolite in the slates an attempt was made to secure ~~f~~ some fossils but the band was faulted out and none were obtained.

398 ~~The~~ Seven feet of brick earth and stratified local gravel occur in the ~~&~~ Creek bank. A quartz reef 1' thick strikes N10W & dips E 10° N at 35°.

399 Quartzite

400 Micaceous schists and hornfels with pink quartz veins strike N 25° W and dip to E 25° N at 60°.

401 Micaceous schists

402 W^r agge's shaft, approximate depth 50', the sinking appears to have been through clays, white sand, ferruginous sandstone with very small well water worn pebbles, pink reformed granite & it appears to have bottomed on ~~it~~ decomposed granite with much silvery mica

Notes.

403 Dyke crimson and brown 1' thick similar to the others on the survey; and a quartz & iron stain lode strike N 30° W.

404 Soft dark red sandstones.

There are a few more Note Numbers on the Donnelly Plan

No. 12 Much outcropping quartz.

No.13 Dark nodular micaceous schists.

No.14 A limited outcrop of sandstone occurs here, in some respects resembling centre country. The strike of the strata is E. 5°N.

No.15 A wide flat quartz and ironstone lode.

No.16 Soft black nodular slate.

No.17 Bluish slate and a laminated quartz - strike N.10°W. and dip to E. 10°N. at 65°. The slates are somewhat contorted.

No.18 Centre country with quartz spurs.

No.19 Laminated quartz in dark-blue slate.

No.20 A large outcropping sandstone bed, having a strike of N.10°W. here dominated the trend of the ridge.

No.21 Centre country, quartz spurs in sandstone and black slates with a pitch of 40° north.

No.22 Dark blue slate with a strike of N.10°W. and a dip E.10°N. at 60°. Graptolites were collected here.

No.23 Sandstone with a strike of N. 20°W. and a dip E. 20°N. at 57°. One chain further east there is centre country showing a pitch N.20°W. at 35°.

No.24 Dark blue "book" quartz in dark blue slate, three chains further east the sandstones striking N.10°W. and dipping E. 10°N. at 65° form a ridge.

No.25 The gullies here trend with the strike of a thick bed of sandstone, which strikes N.10°W. and dips E.10°N. at 62°.

No.29 Sandstone with quartz spurs strike N.5°W.

No.30 Banded buff-coloured pitted slates (at a depth probably olive green). One chain further east an outcrop of mottled quartz occurs with dark-blue inclusions, which are finely laminated and probably altered portions of slate.

No.31 "Book" quartz (laminated).

No.32 Dark-blue slate and quartz, striking N.10°W.

No.33 Two chains north graptolites occur in dark-blue slate. There is here a thin seam of quartz and pyrites, like an indicator, striking N.5°W. and dipping E.5°N. at 70°.

No.34 "Book" quartz 8 in. thick - strike N.5°E.

No.35 Centre country, with a pitch north at a very low angle.

No.36 A wide bed of sandstone with quartz spurs occurs in centre country. Suitable for a building stone. Strike of beds - N.5°W. and dip E.5°N.

No.37 "Book" quartz (laminated).

No.38 Black slate and a large north and south quartz reef in green slate occurs 3 chains further to the west.

No.39 A decomposed brown lamprophyre dyke divides into two 18 ft. apart.

No.40 Here a slight elevation is caused by a large outcrop of quartz.

No.41 "Book" quartz with a parallel similar outcrop two chains to the east.

No.42 Sandstone striking N.10°W. and dipping west at 71°. Quartz occurs on a floor which dips south at 22°. One chain to the east the strata dip east at 60°.

No.43 Sandstone striking north and south, agreeing with trend of a gully.

No.44 Decomposed lamprophyre dyke, "book" quartz, and quartz spurs.

No.45 A quartz spur outcrops for half-a-chain, striking N.5° W. and sandstone with flat floors of quartz.

No.46 Quartz laminated and in centre country strike N.5°W. and dip W.5°S. at 84°. Two chains further to the west there is a 4 in. vein of "book" quartz.

No.47 The strata here strikes N.10°W. and dips W.10°S. at 72°. In it there is some "book" quartz near centre country, and two chains further east some quartz outcrops.

No.48 Laminated quartz, centre country.