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Company Announcements Office

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Sudest Exploration Licence Granted in PNG: Frontier Grab Rock Assays to 256 g/t Gold

- The Sudest Exploration Licence is located in the World Class Misima Mine Gold Corridor in Milne Bay, eastern Papua New Guinea. No drilling has been completed, even though alluvial gold was first discovered in PNG here in 1888 and 2 small high-grade gold hard rock mines have operated (Figures 1 and 2).
- Frontier have mobilised an exploration team of 2 geologists and 5 field technicians to Sudest to complete trenching and 2 soil grids covering 6 sq km (Figure 3), to define additional trenching and future drilling targets.
- Systematic stream sediment and panned concentrate sampling by the last explorer (Placer Pacific - operator of Misima Mine) demonstrated gold in drainage anomalies over a 45 kilometre strike length along the western 2/3 of the island (Figures 2 and 4).
- Frontier's 1/2 day reconnaissance check grab outcrop rock samples from historic hand trenches dug at the Adelaide Prospect demonstrated assays up to 256 g/t gold with 19 g/t silver (and down to detection limit in unmineralised rock) confirming the historic results.
- Previous trench sampling/assaying west of the Adelaide Mine (in 1991 & 1997) returned up to 2m of 104.5 g/t along with 2m of 15.35 g/t, 2m of 16.0 g/t and 2m of 11.6 g/t gold. Refer to Table 1 & Figures 5 + 6 for complete results.
 - Historic rock grab rock sampling in trenches included assay results of up to 299.6 g/t and 151.2 g/t gold.
 - Visible gold was observed in a creek outcrop that historically assayed only 2m of 4.05 g/t gold, showing the strong possible assay 'nugget' effect.
- The Cornucopia historic Mine is located about 1.5 kilometres east of Adelaide.
 - Trench sampling ~300m NW of the Cornucopia Mine in 1997 returned gold results to 6m of 10.96 g/t gold in one of four trenches dug. Refer to Table 1.
 - Rock grab sampling of quartz veining in trenches included assays to 36.4 g/t and 14.5 g/t gold.
- Placer Pacific commented in 1997 that the limited prospect scale work at Adelaide and Cornucopia had defined an east-west trending area of 2,200 by 400m that contains anomalous gold in ridge and spur soils to 9.66 g/t. The region is now being soil sampled on a grid basis to define the gold mineralised zones.
- No drilling has ever been undertaken on Sudest and less than 5% of the strike of the 45 km anomalous zone has been cursorily evaluated by soil geochemistry, yet results demonstrated to date are very promising.
- Frontier intend to aggressively pursue the attractive exploration targets demonstrated by the high grade gold in trenches/float rocks, abundant alluvial gold in drainages plus variably altered intrusives with compositions commonly associated with mineralised porphyry systems.

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Figure 1.

DETAILS

Frontier Resources Ltd is pleased to announce that it was granted EL 1594 -Sudest Island (100%) on March 12, 2012, for the normal renewable period of two years.

Placer Pacific was the last company to explore on Sudest; they selected it for its “potential to host an economic gold reserve containing at least 1 million ounces of gold”. Sudest is approximately 100 km south-east of the former Placer owned Misima Deposit from which about 5 million ounces of low-grade epithermal gold was extracted (Figure 1). Work undertaken by Placer included reconnaissance / semi-detailed geological mapping, stream sediment /pan concentrate /BLEG, ridge/spur soil, rock chip/hand trench sampling, plus petrographic analysis/ fluid inclusion studies. However, no serious evaluation work was completed.

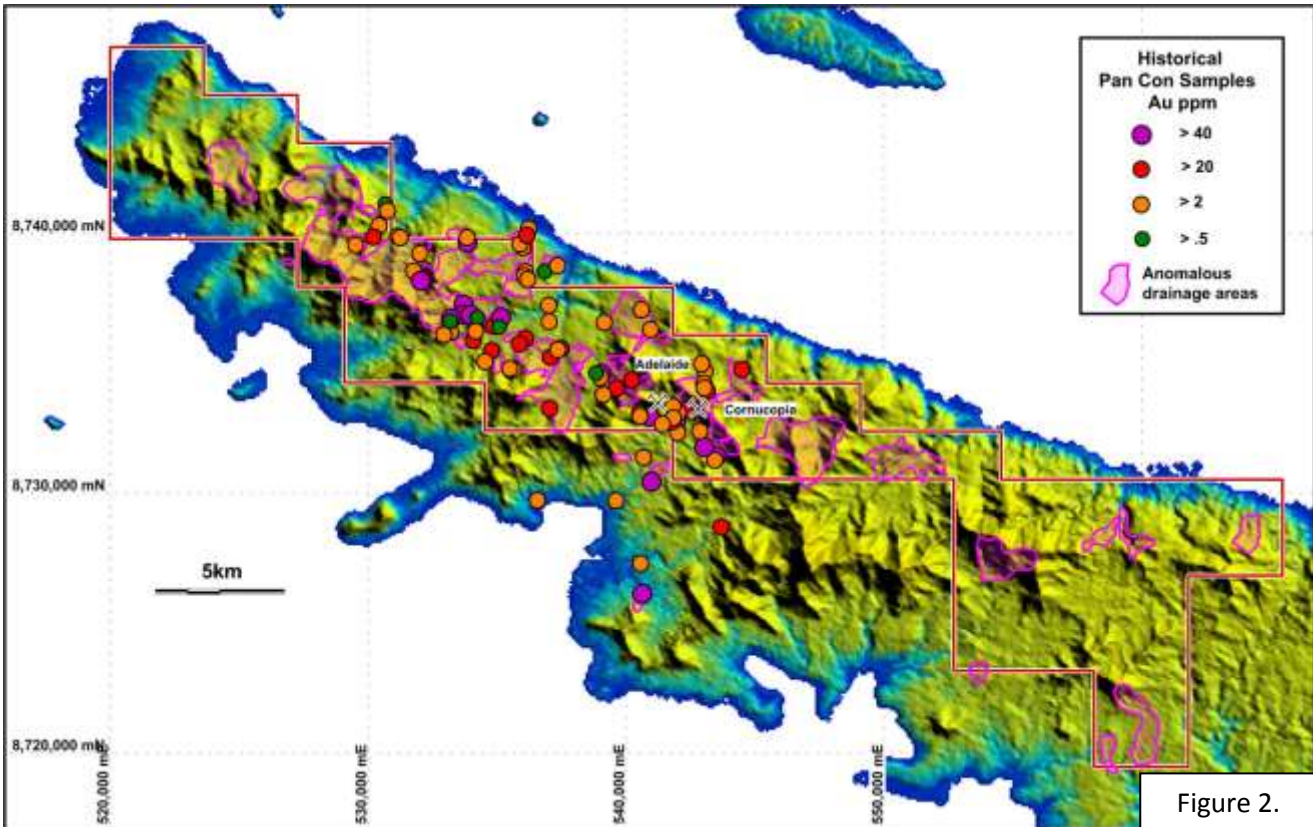


Figure 2.

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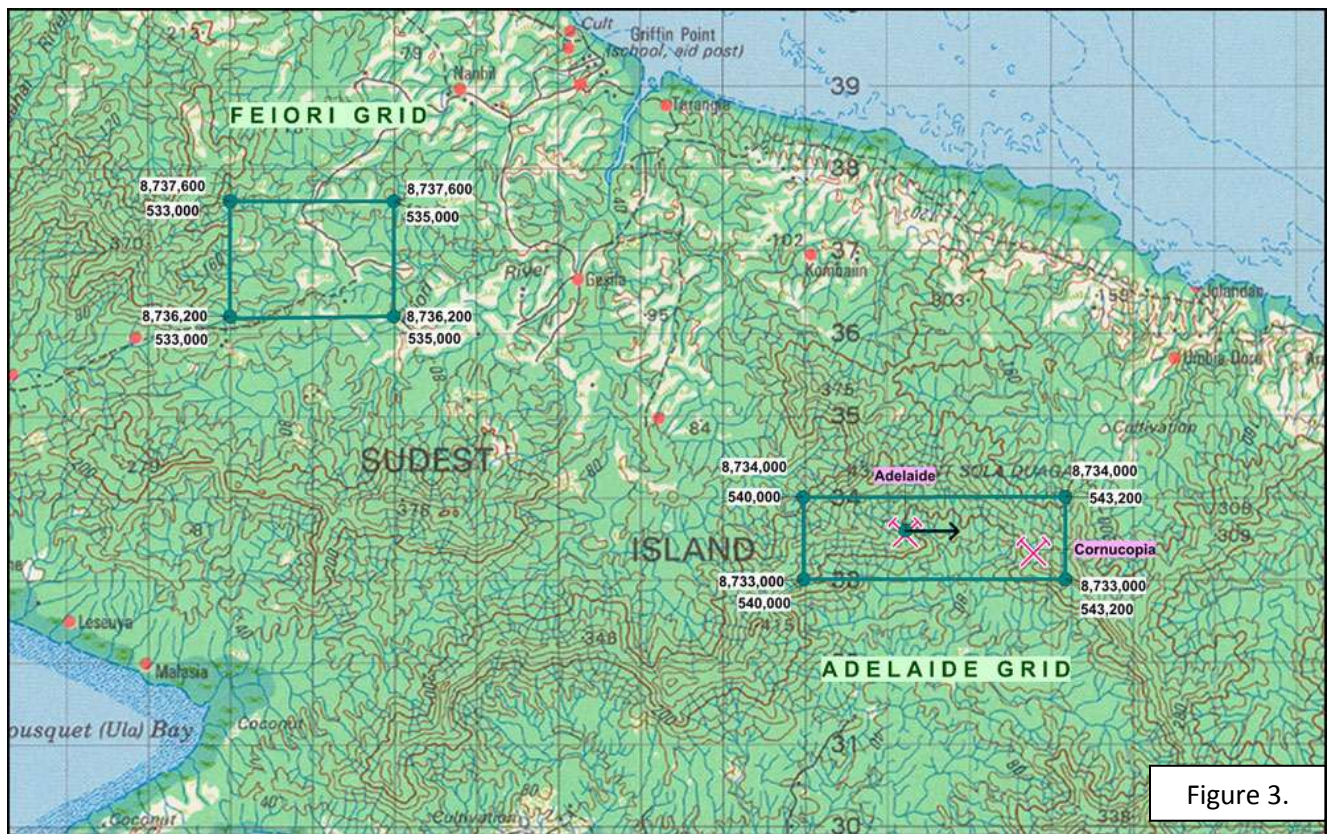


Figure 3.

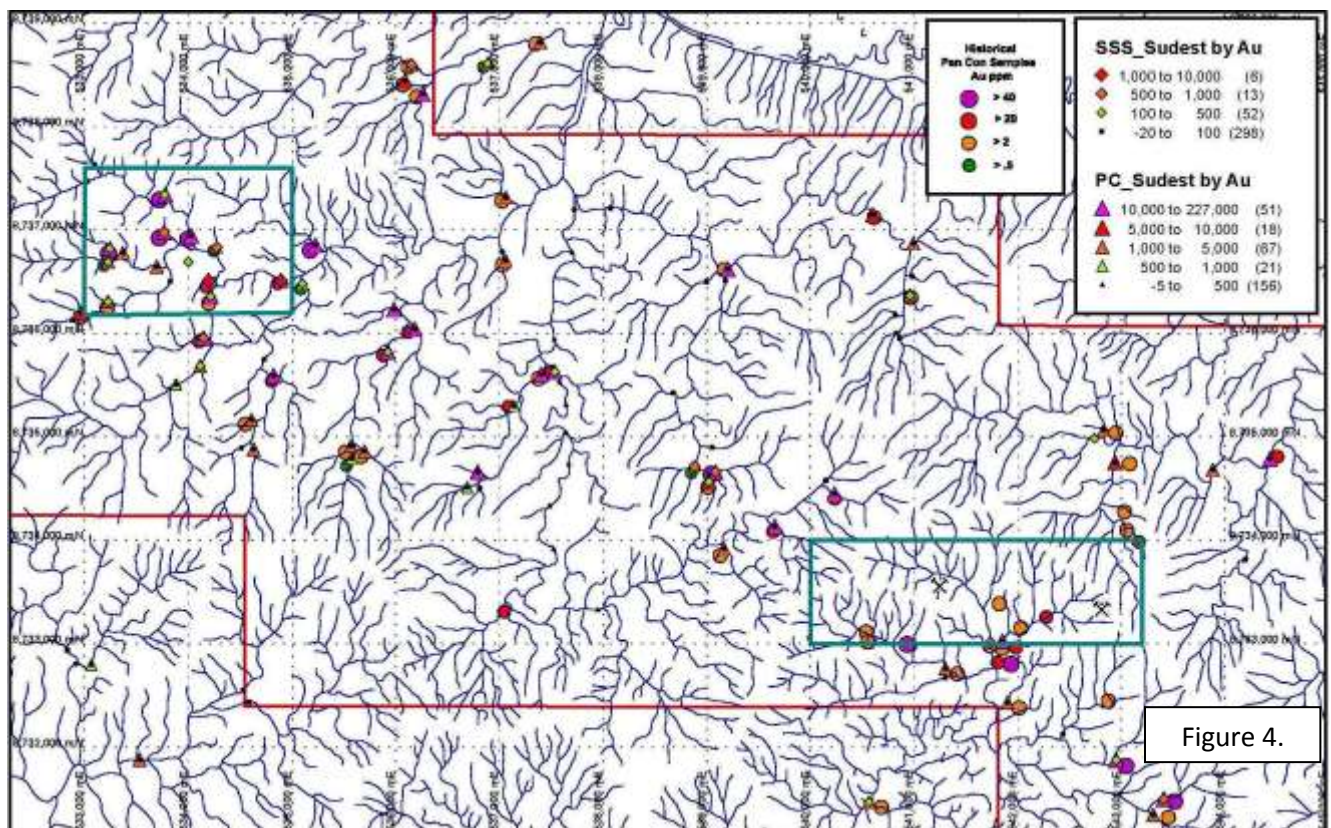


Figure 4.

The Placer work program located a 45km NW-SE striking zone defined by the anomalous drainage geochemistry (Figures 2 and 4). This zone appears to fall in line with the known steep, northerly dipping faults at the Adelaide Prospect.

Anomalous gold assay results (g/t) in stream sediments included 0.785 and 1.41 at Small 4-Mile, 1.49 at Nanhil, 0.808 at Cornucopia, 0.782 at Pamela, 0.635 at Gesila and 1.05 and 0.914 at Tauge – Big 4-Mile. Lower tenor gold results were also returned but it is noted that much of Sudest is mineralised in drainages.

Highlights of anomalous gold assay results (g/t) in panned concentrates included 387.0, 173.0, 64.0, 27.0, 15.5 and 21.6 at Adelaide, 202.0, 56.5, 33.8 and 21.8 at Cornucopia, 134.0, 129.0, 51.9, 43.5, 35.3 and 31.00 at Tauge, 214.0, 121.0, 71.9, 29.4 and 23.0 at Gesila / 4-Mile and 23.0 and 16.0 at Griffin Point. These are the high values, but lower tenor values were also recorded. See Figures 2 and 4.

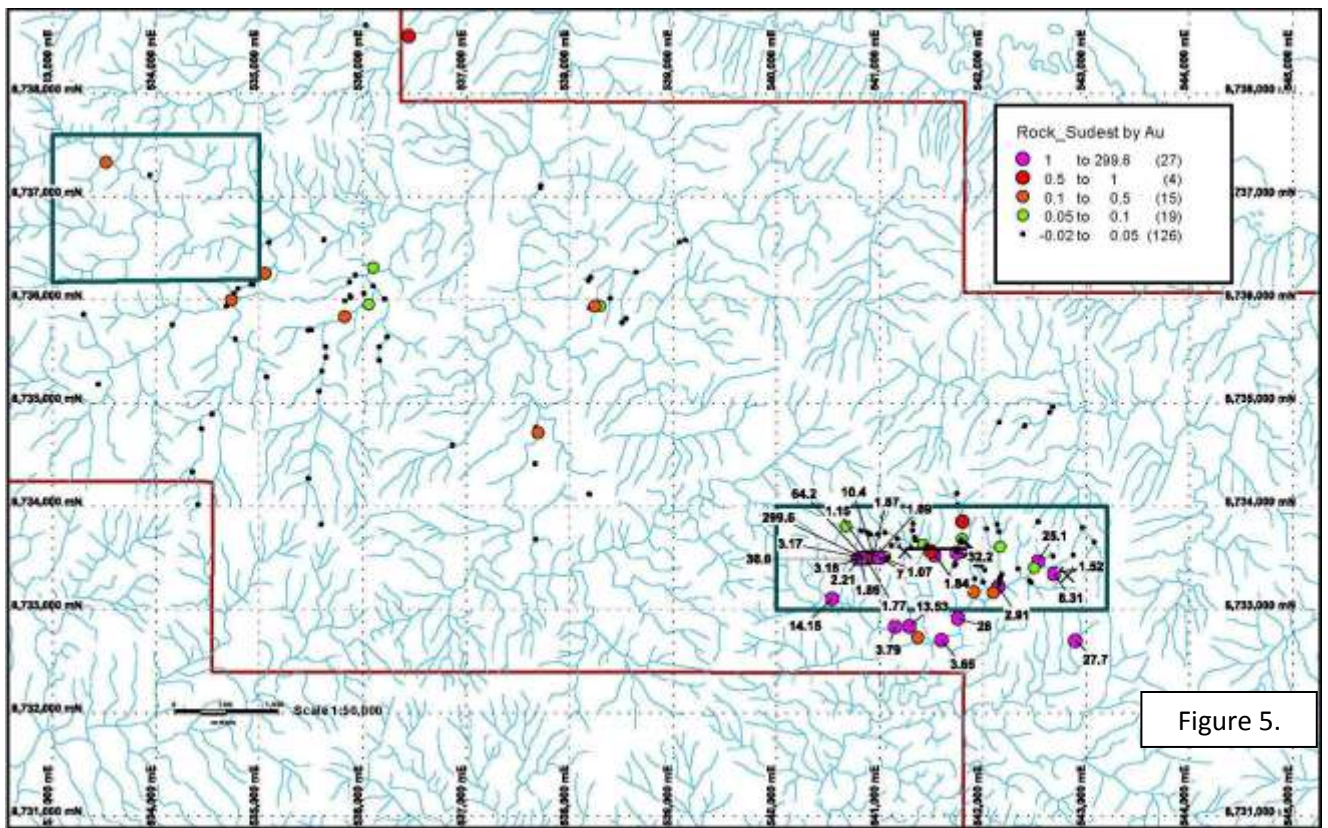


Figure 5.

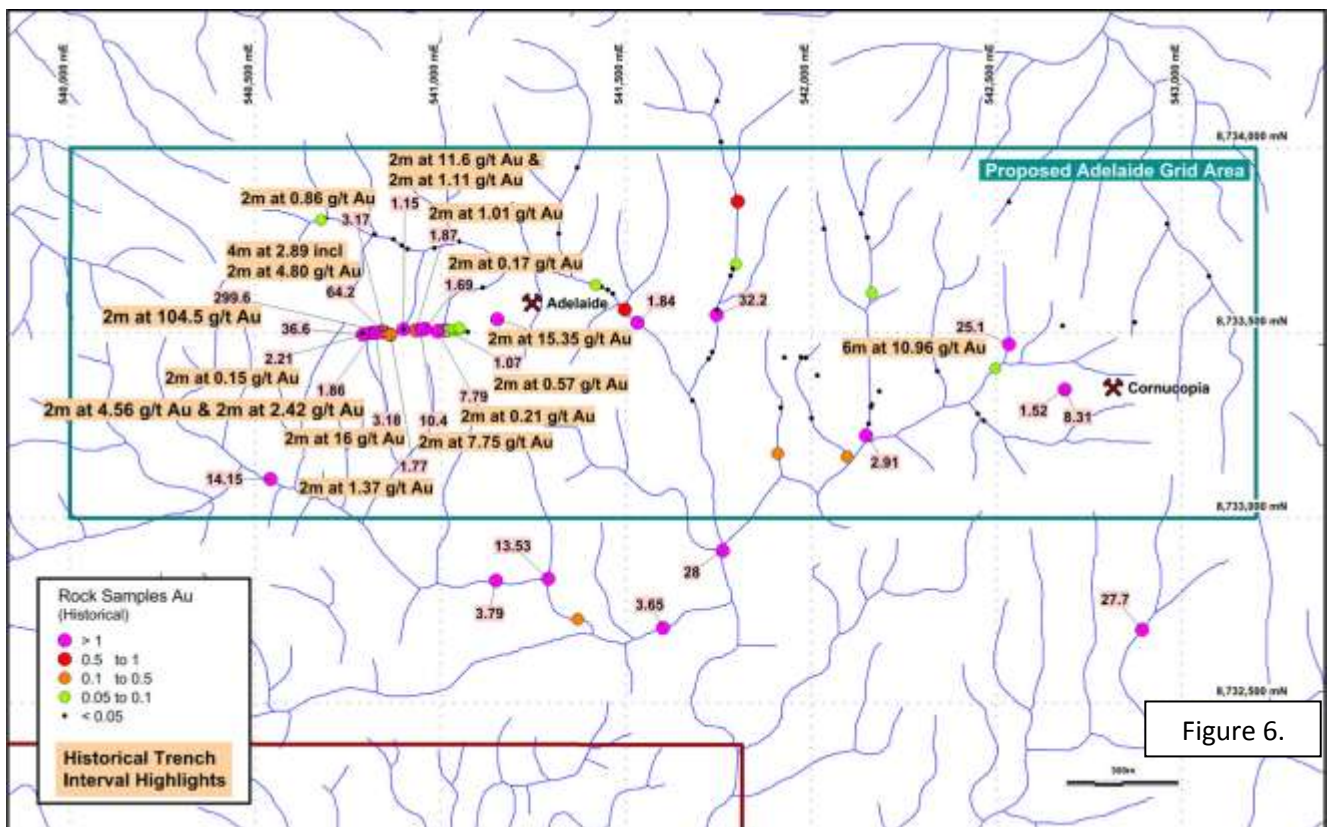


Figure 6.

Strongly anomalous gold assay results (g/t) in float rock chips included: 86.0, 42.5, 28.0, 27.7, 14.15 and 13.53 at Cornucopia and 260.0, 169.8, 132.7, 125.9, 46.0, 32.2, 30.9 and 28.35 at the Adelaide Prospect. Outcrop gold samples (g/t) included 4.05 and 0.974 at Adelaide and 0.41 at Small 4 Mile Prospect (Figures 5 and 6). The BLEG samples assayed a high of 2540ppb Au from the Cornucopia area and panned concentrate /BLEG results support an approximate east-west trending gold anomalous zone.

Soil sampling (limited ridge and spur) defined an anomalous (~0.035ppm Au isopleth) east-west trending zone of 2200 x 400m. The zone extends from the Mt Adelaide Prospect to Cornucopia. This trend agrees with the overall east-west mineralisation trend. Thirteen soil samples contained more than 0.1 g/t Au with the highest value being 9.66 g/t Au from Mt Adelaide area. Grid based soil sampling between Mt Adelaide and Cornucopia is being undertaken now on a 3.2 x 1.0 km grid, to better define the anomalous zone.

Table 1.

EL 1594 Sudest Trench Assay Compilation.

| Adelaide Trenches | | | | |
|---------------------|--------------------------------|---------------------|---------------|---|
| Trench No | Gold in Trench Assays | Interval From -- To | Trench Length | Rock grab samples in trench (measured from the start) |
| AT-01 | 2m of 0.57 g/tAu | 0-2m | 2m | - |
| AT-02 | 2m of 0.51 g/tAu | 2-4m | 14m | 6.10 g/tAu at 2.1m |
| AT-03 | 2m of 0.05 g/tAu | 20-22m | 24m | 1.03 g/tAu at 18.5m |
| AT-04 | 4m of 0.22 g/tAu | 4-8m | 8m | 5.79 g/tAu at 4.2m |
| AT-05 | 2m of 0.18 g/tAu | 8-10m | 10m | 2.98 g/tAu at 5.5m |
| AT-06 | 2m of 7.75 g/tAu | 70-72m | 74m | 2.16 g/tAu at 62.2m |
| AT-06A | 3.9m of 0.76 g/tAu | 4-5.9m | 5.9m | |
| AT-07 | 2m of 0.16 g/tAu | 0-2m | 8m | |
| AT-08 | 4m of 6.36 g/tAu | 10-14m | 18m | |
| incl. | 2m of 11.60 g/tAu | 12-14m | - | 13.01 g/tAu at 12.5m |
| AT-09 | 4m of 2.89 g/tAu | 0-4m | 24m | 151.2 g/tAu at 2.0m |
| incl. | 2m of 4.80 g/tAu | 2-4m | - | 22.70 g/tAu at 2.3m |
| plus | 2m below detection | 4-6m | - | 4.97 g/tAu at 5.0m |
| plus | 4m of 0.20g/tAu | 20-24m | - | 26.60 g/tAu at 22.0m |
| AT-10 | 4m of 52.50 g/tAu | 0-4m | 8m | |
| incl. | 2m of 104.50 g/tAu | 0-2m | 8m | |
| AT-11 | 2m of 0.86 g/tAu | 4-6m | 10m | 2.36 g/tAu at 5.8m |
| AT-12 | 2m of 1.37 g/tAu | 28-30m | 34m | |
| AT-13 | 2m of 16.0 g/tAu | 0-2m | 5m | |
| AT-14 | 2m of 4.56 g/tAu | 6-8m | 12m | 24.25 g/Au at 7.5m |
| plus | 2m of 2.42 g/tAu | 10-12m | 12m | |
| AT-14A | 2m of 0.015 g/tAu | 0-2m | 7m | |
| AT-15 | 2m of 0.028 g/tAu | 0-2m | 28m | |
| AT-16 | 2m of 0.05 g/tAu | 0-2m | 24m | |
| AT-17 | 2m of 0.10 g/tAu | 2-4m | 16m | |
| AT-18 | No assays available | | 42m | |
| AT-19 | 2m of 0.005 g/tAu | 2-4m | 16m | |
| AT-20 | 2m of 0.025 g/tAu | 10-12m | 12m | |
| AT-21 | 2m of 0.27 g/tAu | 2-4m | 6m | |
| AT-22 | 4m of 7.90 g/tAu | 4-8m | 8m | 1.25 g/tAu at 5.0m |
| incl. | 2m of 15.35 g/tAu | 6-8m | 8m | |
| AT-23 | 2m of 0.027 g/tAu | 0-2m | 6m | |
| AT-24 | 2m of 0.19 g/tAu | 2-4m | 6m | |
| AT-25 | 2m of 0.78 g/tAu | 2-4m | 8m | |
| AT-26 | No assays available | | 10m | |
| AT-27 | No assays available | | 6m | |
| AT-28 | 2m of 1.012 g/tAu | 6-8m | 8m | |
| Cornucopia Trenches | | | | |
| Trench No | Gold in Trench Assays | Interval From -- To | Trench Length | Rock grab samples in trench (measured from the start) |
| CT-01 | No assays available | | 154m | 3.55 g/tAu at 32.0m |
| CT-02 | No assays available | | ? | 1.020 g/tAu at 228m |
| CT-03 | No assays available | | ? | |
| CT-04 | 2m of 1.11 g/tAu | 10-12m | 138m | |
| | 2m of 2.42 g/tAu | 12-14m | | |
| | 6m of 10.96 g/Au | 28-34m | | 14.49 g/tAu |
| | incl. 2m of 20.53 g/tAu | 32-34m | | 36.40 g/tAu |

DETAILS

Property description and location

The Sudest Island tenement, EL 1594, covering 267 km² (80 sub blocks), is located at the eastern end of the Louisade Archipelago and is the largest island in the Calvados chain in the Milne Bay Province of Papua New Guinea. It contains the first known gold occurrence in PNG and provides for epithermal and mesothermal gold targets from extensive gold in drainages.

The Calvados island chain represents a drowned mountain landscape. A fringing coral reef surrounds all but approximately 10km of the coastline. The island lies between 11.20'S and 11.40'S and 153.05'E and 153.47'E, is about 74 km long and 15km wide and is only sparsely inhabited with a population of perhaps 5000 people.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

Sudest Island is lightly settled with 12 different clans living in widely settled villages along the coast. The people depend mainly on subsistence farming with little cash income. A rush of Australian miners to Sudest Island in the late 1880's pioneered the gold mining industry in PNG. However production was small and most miners moved on to the more accessible islands of Misima and Woodlark and then to other fields. Up to 1969 activity was quite sporadic and at a low level. The local Sudest people have shown little interest in working this gold for themselves.

Every village or clan has a chief who is usually the eldest. He is the decision maker for the clan. People have contact with the national government through their elected representative in parliament. Elected local government councils representing each community maintain contact with both provincial and national governments. There are a number of community schools serving the villages. Medical services are provided on a weekly basis by a nursing team based on Nimoa Island which is 1.5 km NW of Sudest Island.

Logistics for exploration and development are very good. The coast is readily accessible by boat, while inland areas can be reached by foot tracks.

Personnel and cargo are often shipped from Misima by small local boats. Average travel time is about 8 hours. Tagula airstrip, situated at the western end of the island, is capable of handling light aircraft. Past operating airlines have ceased flying to Sudest for economic reasons. There is little infrastructure within the island.

Sudest Island is generally hilly and is elongated east west sub parallel to the trend of the archipelago. Similarly the central ranges, the topographic high of which is Mt Rio at 800m, follow the east west trend. The southern flanks of the ranges are generally steep before sloping off gently towards the coastline. The topography on the northern side is irregular but gentle with rounded undulating hills. The principal streams on the island are Four Mile Creek flowing to the north and Tambamba Creek to the south. Coral reefs and narrow deep-sea passages are common around Sudest.

Tropical rain forest covers most of the centre and southern parts of the island. The ridges and spurs on the northern side are grassy with narrow strips of rain forest confined to valleys. There are two distinct climatic patterns. December to April is the wet season, when heavy rain is accompanied by strong south-westerly winds. From April to October it is fairly dry with only occasional rain. Annual rainfall averages in excess of 3000mm. Cyclones from the south-west develop occasionally between December and February, but more usually they pass further south in the Coral Sea. It is generally hot and humid with daily temperatures ranging from 28C to over 30C.

History

Tenure

After long periods of intermittent exploration, primarily for alluvial gold, Prospecting Authority 43 (P) covering most of the western end of Sudest Island was granted to J Avenell and M Steer on 29 September 1969. The property was optioned out to Minjur Mines Pty. Ltd. in 1970. Sudest Dredging and Mining Pty. Ltd. obtained title to PA 43 (P) in 1974 but due to lack of finance they relinquished title in the same year. Later BHP took up tenement PA 225 P to carry out a rock chip sampling and panned concentrate sampling programs. The tenement was surrendered in 1980.

In 1986 R.McNabb, previously a partner in Sudest Dredging and Mining, applied for PA 648 for all of the Calvados Island Chain. Initially, he held the tenement in trust for Papua New Guinea Oil and Mining Ltd., later Pacific Arc Exploration N.L and then Muswellbrook Energy and Minerals Ltd.

Later in 1987 Sudest Island was covered by PA's 694 and 919. Pagini Resources N.L., acquired PA 694 through a joint venture with the previous titleholders, a consortium headed by Base Resources Ltd. Gloversville Pty Ltd applied for PA 919.

In 1991 title to PA 694 was granted to Yela Gold Pty Ltd. Placer (PNG) Exploration in 1995 acquired for a two year period two Exploration Licences, which covered the entire Sudest Island, an area of about 1157 km². EL 1149, Griffin Point, occupied an area of 261 km² towards the western half of central Sudest Island.

Exploration

The first commercial discovery of alluvial gold in PNG was made by a Mr Whyte, a prospector from Cooktown, at about the same time as the declaration of Sovereignty of Papua on 4 September 1888. At the time of William McGregor's visit in October 1888 there were up to 200 miners searching for alluvial gold in creeks particularly on the north side of the island (Four Mile Creek - Feiori soil grid area).

Davies (1959) reports that production from the small colluvial deposits at Sudest was 311kg. The first auriferous reefs, the Caledonian claims, were found on the western end of the island in 1890-1891. Three tonnes of ore, which was shipped to Sydney, yielded a grade of 50g/t Au and 10g/t Ag (Davies, 1959). This prospect was abandoned in 1894. Griffin Point became the centre of activity and at nearby Mt Adelaide gold containing quartz reefs were discovered by McCord in 1893.

The British New Guinea Mining Company installed a 10 head stamp battery in 1896, crushing started in 1897 but the mine closed in 1899 due to cyclone damage. There are no production records from this activity. In 1938 Morley found a gold containing lode at Cornucopia but work was soon abandoned. While no production from this operation is recorded, Davies, 1959, noted that sampling gave assays to 171g/t and a one tonne parcel of ore sent to Port Kembla assayed 34g/t.

The first definite record of eluvial mining is that carried out by H Pierce and T Craig who worked around the Four Mile Creek area near Griffin Point. French (1966) reports that other areas of interest for gold exploration include Sinabada Creek near Embablia and between Nanhil and the Feiori (Four Mile Creek) Estuary.

The earliest intensive exploration was carried out under PA 43(P) by Avenell and Steer in 1969-1970. They were mainly concerned with alluvial gold but they did carry out more wide ranging stream sediment sampling. The property was optioned out to Minjur Mines Pty. Ltd. in 1970. After an exploration program for base metals, alluvial and lode gold supervised by R McNabb, the option was allowed to lapse by Minjur Mines. This exploration suggested the existence of "relatively small alluvial gold operations in the Griffin Point drainage systems, which were not economic under existing operating costs and gold price structure" McNabb(1976). In 1974 Nichols reported that previous prospectors may have overlooked two possible lode prospects – at Little Four Mile Creek and in a zone just north of Lewaga Creek. These areas will be re-examined by Frontier.

Carlile and Akiro (1980) report that BHP was granted authority (PA 225P) to carry out a work program – rock chip sampling on known lode occurrences and panned concentrate sampling from creeks to test alluvial gold potential, however BHP surrendered the tenement in 1980. During the program a possible fault-controlled prospect was identified at Rewe on the south-east of the island.

On behalf of Pacific Arc Exploration N.L., Keyte and Tischler (1987) carried out a first pass reconnaissance program on PA 648 (the entire Calvados Island Chain). This work involved collecting a total of 110 soil samples over several lines, 137 panned concentrates and 178 rock chip samples. As many islands of the chain had been worked for eluvial/alluvial gold, the related drainages gave good results for gold in panned concentrates. Most rock chip and rock float samples showed very little or no gold. They considered that the high values from panned concentrates in previously mined areas on Sudest may be significant. They suggested that gridding and soil sampling of the area would give a better assessment of potential. The majority of exploration effort done by Pagini Resources was concerned with the evaluation of alluvial resources.

Seitlinger, in his 1991 report for Yela Gold Pty Ltd, noted an east-west trending, north dipping quartz reef system with free visible gold at Mount Adelaide. Rock chip sampling gave grades of up to 299.6 g/t from the veins, which were traced on the surface for 266m with ≤ 1.3 m exposed thickness. He also reported locally high grade quartz veins with up to 204.5 g/t gold obtained from old workings at the Cornucopia Prospect, about 1.5 km east of Mt Adelaide. Seitlinger suggested that the mineralisation occurred within fault controlled quartz stringers and veins associated with arsenopyrite and pyrite. See Table 1 for trenching completed to date and refer to figures 4 and 5 for the locations of samples.

Placer's work (in 1996) included reconnaissance and semi-detailed geological mapping, stream sediment, pan concentrate and rock chip sampling, petrographic analysis and fluid inclusion studies. The program demonstrated a 45 km long east-west zone of highly anomalous gold chemistry in drainages (see Ambang, Kari and Koesi, 1996). The presence of alluvial gold and gold in float rocks, and variably altered intrusives show similarity to mineralised porphyry systems elsewhere in the Pacific.

During Placer's second year follow up work was carried out at the Adelaide and Cornucopia Prospects. Work included BLEG (-20#) and panned concentrate sampling, upper B-horizon soil sampling and trench sampling of pre-existing and new trenches. A 2m trench sample assayed 104.5 g/t gold and a rock sample returned 151.2 g/t gold both samples being from Adelaide. A soil sample taken from a 2200m x 400m anomalous zone between Adelaide and Cornucopia gave a value of 9.66g/t Au. Panned concentrate results assayed a high of 68000ppb (68 g/t) and BLEG samples a high of 2540 ppb (2.54 g/t) from the Cornucopia area, Kari (1997). Refer to Figures 2, 3 and 4 for all drainage samples and their locations.

Geology

Placer geologists note that the source of the gold appears restricted to several east-west trending sub-parallel quartz veins of 1 to 2m thickness of unknown strike and dip extent. Structural intersections with more brittle deformed rocks are favourable and prospective target areas along with gold in soil anomalies for the next phase of detailed exploration.

Gold bearing metamorphic quartz veins appear to be hosted by east-west trending structures with associated minor sulphides. Observed sulphide mineralisation consists of chalcopyrite, covellite, chalcocite, pyrite and arsenopyrite at Cornucopia /Mt Adelaide Prospects. Free gold was observed associated with strong limonite stained, quartz- sericite- chlorite \pm sulphide alteration.

As per the geological mapping, trench mapping at the Mt Adelaide and Cornucopia Prospects did not reveal significant alteration or quartz veining. The weathered schist and associated thin manganese-quartz veinlets returned low gold values. Assay results show that gold mineralisation is probably restricted to white-grey quartz veins.

The presence of variably altered intrusive suites with mineralogical composition similar to a mineralised porphyry system offers an attractive environment for further detailed exploration. It is assumed that there is an intermediate-acid intrusion at depth to provide heat and metal-bearing fluids to drive the hydrothermal system. Other factors such as the presence of K-feldspar alteration and sulphide mineralisation suggest evidence of fluid mixing at some depth.

Frontier's Check Sampling

Frontier undertook a very brief (1/2 day) reconnaissance check grab outcrop rock sampling exercise in the historic hand trenches dug at the Adelaide Prospect, with a total of 36 samples collected; this was done without the aid of compiled plans showing the location of the anomalous intercepts. Eighteen samples were below the detection limit of 0.01 g/t gold, 9 samples ranged from 0.01 to 0.10 g/t gold, four samples were from 0.1 to 1.0 g/t gold and 5 samples demonstrated assays > 1.0 g/t, including 1.25 g/t, 1.87 g/t, 2.91 g/t and 256 g/t gold (with 19 g/t silver). Frontier's limited sampling confirmed the tenor of the historic assays.

No drilling has ever been undertaken on Sudest and less than 5% of the strike of the 45 km anomalous zone has been cursorily evaluated by soil geochemistry, yet results outlined to date are very promising.

For additional information relating to Frontier Resources, please visit the Company's website at www.frontierresources.com.au or feel free to contact me.

FRONTIER RESOURCES LTD



P.A. McNeil, M.Sc.

CHAIRMAN / MANAGING DIRECTOR

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by, or compiled under the supervision of Peter A. McNeil - Member of the Aust. Inst. of Geoscientists. Peter McNeil is the Managing Director of Frontier Resources, who consults to the Company. Peter McNeil has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2004 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter McNeil consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

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