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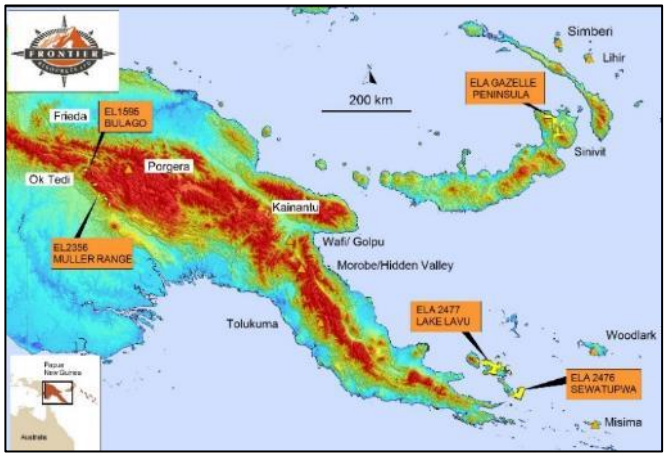
ASX: FNT

ASX Limited
Company Announcements Office

31st January 2017

TECHNICAL REPORT – QUARTER ENDED 31 DECEMBER 2016

Frontier Resources Ltd (ASX: FNT) is focussed on mineral exploration in Papua New Guinea (**PNG**) and its 100% interests in the Bulago and Muller Exploration Licences. PNG is recognised as being highly prospective and the Company is targeting copper+/- gold +/- molybdenum porphyries and intrusive related epithermal gold deposits in the Papuan Fold Belt.



The Fold Belt contains the Ok Tedi porphyry copper-gold Mine (located 120km WNW), Porgera intrusive/ epithermal related gold Mine (100km east) and Kili Teke porphyry copper-gold Deposit (50km east). The giant Grasberg porphyry copper-gold +skarns is in this same zone in West Papua.

SUMMARY

Bulago

Drilling was completed the Swit Kai Central Lower Horizon in late October, with four diamond core holes (161.3m total of HQ TT) targeting both flat lying conformable plus moderate SSW dipping gold mineralised zones.

The drill rig was moved to "Pad 2" in East Creek to obliquely target a 3.0m wide zone, 50-degree south dipping zone, that graded 45.2 g/t gold in previous jackhammer channel samples (refer ASX Announcement 4 July 2014) and five core holes (153.7m total of HQ TT) were completed. An along strike view to the NW of the East Creek area drilled is shown in the photo on page 3 (with the previously sampled intervals in pink tape).

Downhole assay intercepts from the East Creek drilling are listed sequentially below:

EZL001 **3.0m grading 11.76 g/t gold (including 1.0m grading 31.10 g/t gold)**, plus 2.0m grading 3.03, plus 1.0m grading 0.84, plus 1.0m grading 0.90 plus 0.8m grading 0.51 g/t gold.

EZL002 **4.0m grading 31.66 g/t gold, within 11.0m grading 13.37 g/t gold, including 1.0m grading 90.50 g/t gold**.

EZL003 **1m grading 11.90 g/t gold**, within 5m grading 4.13 g/t gold.

EZL004 2.2m grading 3.03 g/t gold, plus 7.0m grading 3.59 g/t gold, within 14.2m grading 2.55 g/t gold (including **1.0m grading 11.88 g/t gold**).

EZL005 **1.0m grading 12.55 g/t gold**, within 2.0m grading 9.26 g/t gold, plus 1.0m grading 2.93 g/t gold, plus 1.0m grading 2.70 g/t gold.

The drilling conducted at the Swit Kai Central Lower Zone was inadequate and all the CLD designated drill holes will need to be lengthened to reach the target zone (i.e. they were prematurely terminated).

Exploration targeting a possible repetition of the Swit Kai mineralisation was initiated. A hand trench was dug, based on lead/ zinc soil geochemistry and topographic analysis (flat spots). Gossan float was noted and this is encouraging (not random chance), but the trenches may not be deep enough.

A new zone of outcropping mineralisation was discovered on the walking track to the drill rig, between East Creek and the Central Lower Zone. The rock textures and mineralisation are very impressive and it appears to occur where the structure being drilled in East Creek with the EZL holes intersects the structure drilled on the Upper East Creek pad in April that returned 5.0m grading a weighted average of 13.92 g/t gold, from surface (Released to ASX 13/6/2016).

Exploration Licence Applications

Three Exploration Licence Applications were registered during the quarter and summary information is included herein. A comprehensive report has been loaded to the Frontier website for Sewatupwa and Lake Lavu. The Sinivit Report is still being compiled.

Evaluation of the resource estimations of the former Sinivit Mine, ELA 2515 were undertaken which shows that the mine area contains approximately 217,000 ounces of indicated and inferred resources of gold, grading 3.93 g/t, that is hosted in 1.7 million tonnes of ore. This is a foreign estimate (NI 43-101 Canada– refer to pages 14 and 15 for full details and caveats).

ELA 2477 – Lake Lavu (839 sq km) contains a large number of individual areas that are prospective for epithermal gold mineralisation. Frontier's aim is to discover a high-grade and/or high tonnage type epithermal gold deposit. Local epithermal deposits include the historic Misima and Wapolu Mines, the Woodlark Gold Reserve and the Imwauna, Gameta and Sehulea Deposits, that demonstrate the region has excellent gold mineralisation potential. Six main project areas, 18 named prospect areas and other stream sediment anomalies were identified,

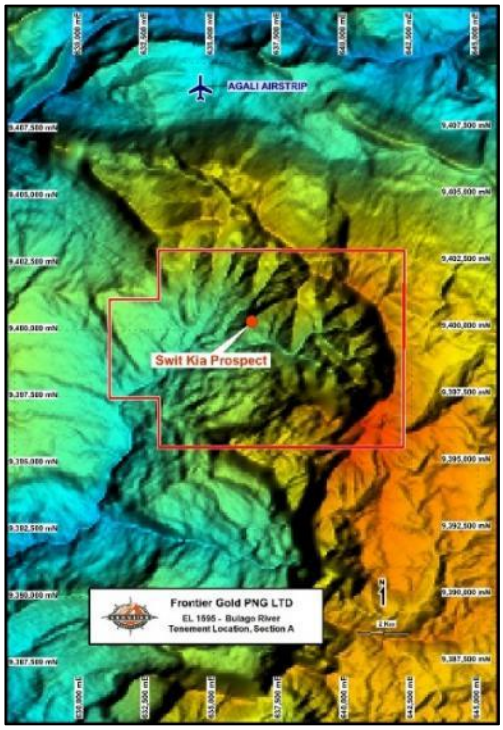
The Sewatupwa River ELA covers 436 sq km of the southern, SE central and eastern sections of Normanby Island, D'Entrecasteaux Island group contains anomalous gold /arsenic values in stream sediment samples, pan concentrate samples, rock float samples and soil anomalies at 6 prospect areas and 3 reconnaissance districts It also contains extensions to mineralisation not within the ELA at 6 zones.

BULAGO'S SWIT KAI CENTRAL LOWER HORIZON DRILLING

Five diamond core holes (153.7m total of HQ TT) were completed on the East Creek Lower Horizon, targeting a moderate/steep SSW dipping gold mineralised zone. The holes drilled an outcrop containing 1.0m grading 79.35 g/t gold, within 3m grading 45.17 g/t gold (J303-305) in jackhammer trench sampling (announced to ASX 4/7/2014). Drilling was from the hanging wall on the southern side of the outcrop, so the top section of each hole tested the 'higher-grade' zone.

The East Creek mineralised zone appears to be relatively tabular with an orientation of approximately 300 degrees magnetic and a dip of about 50 degrees to the south-west. Intercepts quoted/tabulated herein are all downhole (apparent) lengths. For example, hole 4 was vertical and it intersected the mineralised target

zone with an angle of incidence of approximately 40 degrees; this resulted in an apparent length of approximately 145% (of true), so its 14.2m downhole intercept is approximately 10m true width. The quoted intercepts have a minimum cut-off grade of 0.4 g/t gold, to encompass the entire gold mineralised interval (if it is not mineralised, the rock is generally below detection limit). Hole assays, depths, collar location and orientation information are tabulated below.



The assay results show that each hole returned a higher-grade intercept, that was associated with a significantly wider and lower grade gold intercept. The overall grade and length of the drill intercepts associated with the East Creek Lower Zone are relatively variable given the close proximity of each hole, suggesting coarse gold and a 'nugget effect'. Photos of some mineralised half core are included, with their respective assays and they show a wide variation in rock type, contained mineralisation and brecciation/ alteration. Unusually, there is strong to very strong arsenic, zinc and some lead mineralisation, which normally indicates high grade gold, but in this case, was not as definitive.

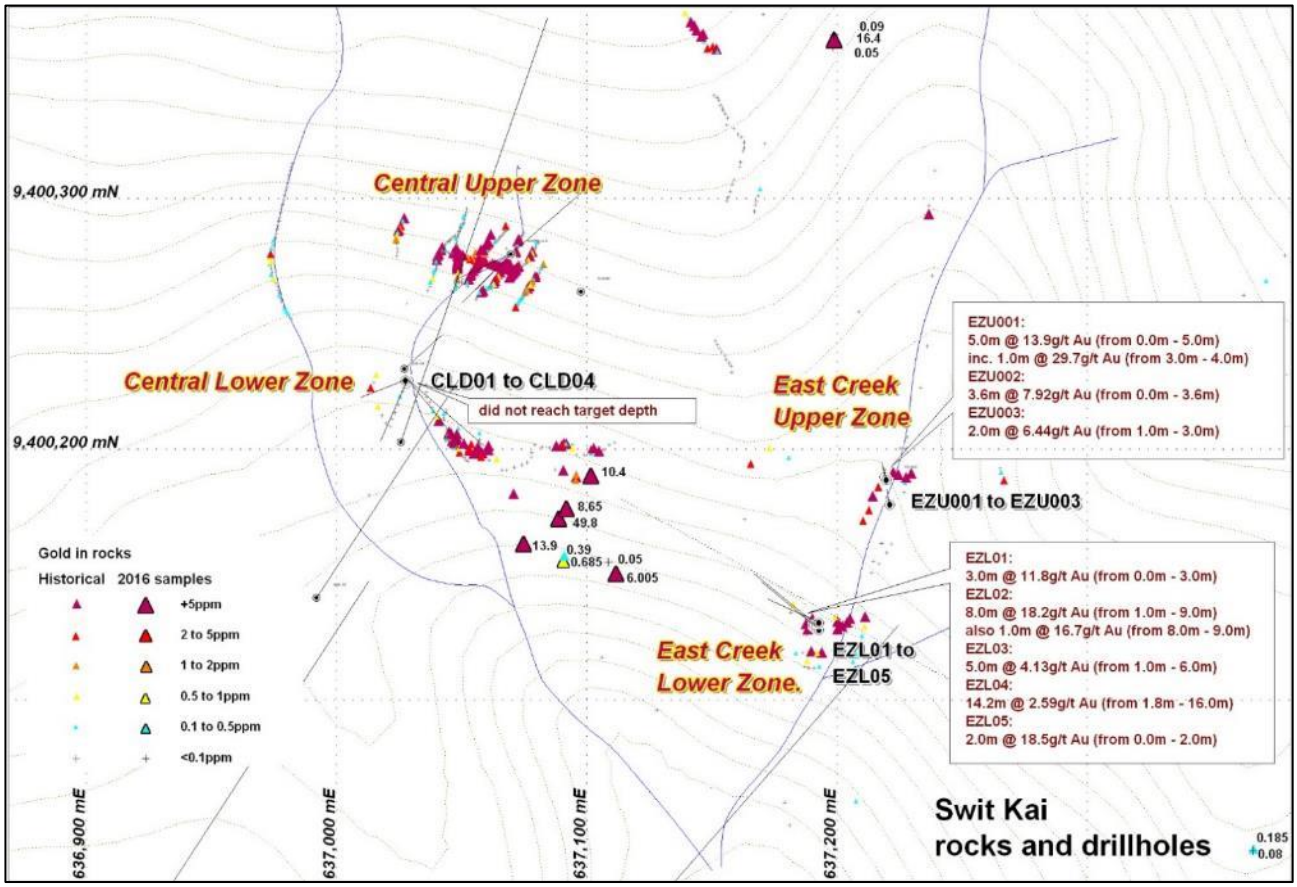
Brief geological logs are included for the East Creek holes, to allow cross reference to the core photos and draft plans /sections relating to the holes that are included in Appendix 1.

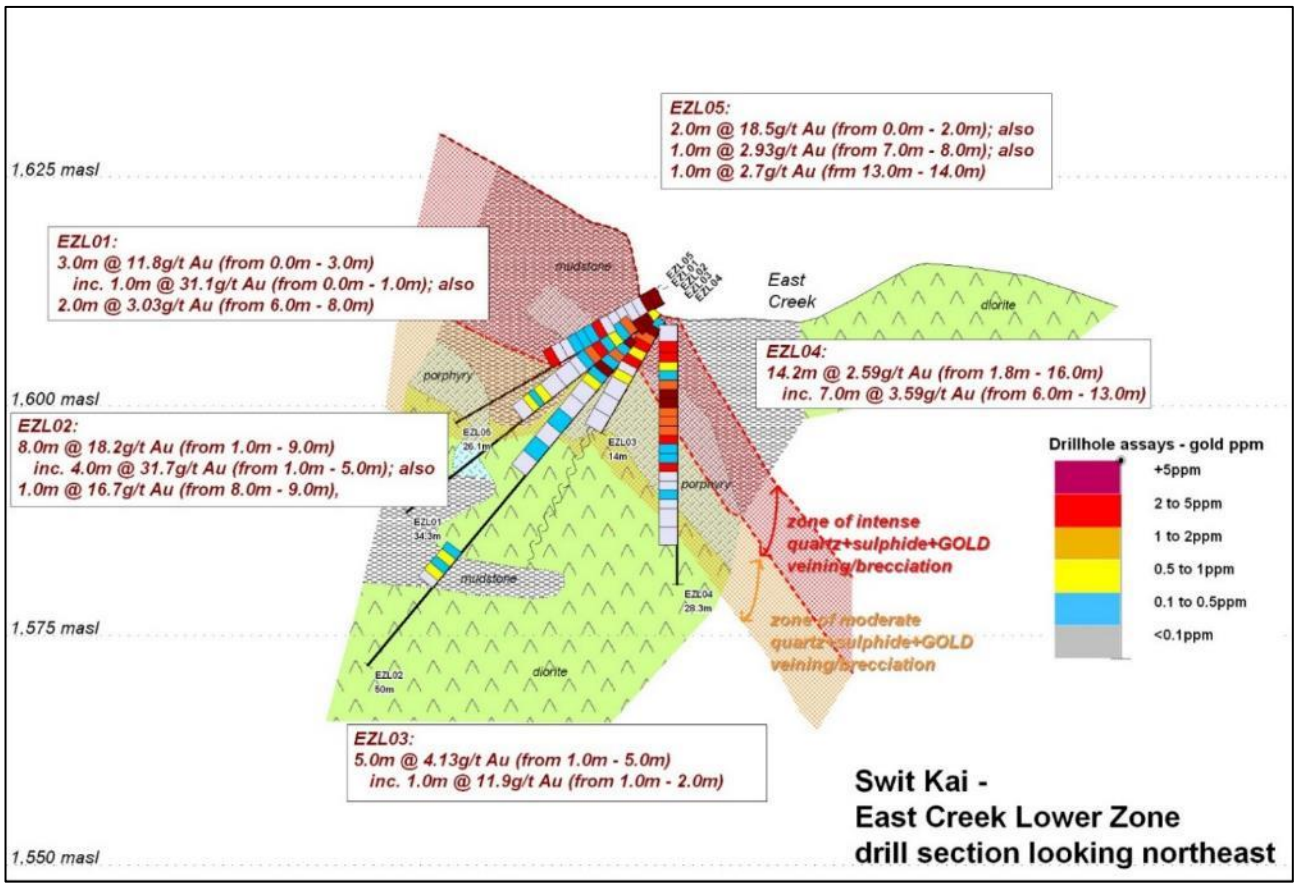
An altered and brecciated feldspar porphyry occurs on the footwall of this mineralised zone in each hole. The photos show the location of the drill pad looking NW.

The drilling conducted at the Swit Kai Central Lower Zone was inadequate and all 4 CLD drill holes will need to be lengthened to reach the target zone (i.e. they were prematurely terminated).

On demobilisation, the rig was heli-lifted to the SUG002 drill pad (that is located about 20m south of the CLD drill holes' pad), that returned 1.3m grading 27 g/t gold, as noted to the ASX on 4/7/2014). The hole lengthening will be undertaken during the next phase of drilling.

The SUG002 pad is on the hanging wall side holes from it will result in the best angles of incidence to the moderately dipping gold target zone. The rationale for originally drilling from the footwall side (CLD holes) was to try and intersect the 'horizontal plunge or sausage' that is thought to contain wider and higher grade mineralisation and this is not physically possible from the hanging wall side, because all such holes would all drill underneath the plunge, as per hole SUG002.


9,400,300 mN
9,400,200 mN
Central Upper Zone
Central Lower Zone
CLD01 to CLD04
did not reach target depth
East Creek Upper Zone
EZU001 to EZU003
East Creek Lower Zone.
EZL01 to EZL05
EZU001:
5.0m @ 13.9g/t Au (from 0.0m - 5.0m)
inc. 1.0m @ 29.7g/t Au (from 3.0m - 4.0m)
EZU002:
3.6m @ 7.92g/t Au (from 0.0m - 3.6m)
EZU003:
2.0m @ 6.44g/t Au (from 1.0m - 3.0m)
EZL01:
3.0m @ 11.8g/t Au (from 0.0m - 3.0m)
EZL02:
8.0m @ 18.2g/t Au (from 1.0m - 9.0m)
also 1.0m @ 16.7g/t Au (from 8.0m - 9.0m)
EZL03:
5.0m @ 4.13g/t Au (from 1.0m - 6.0m)
EZL04:
14.2m @ 2.59g/t Au (from 1.8m - 16.0m)
EZL05:
2.0m @ 18.5g/t Au (from 0.0m - 2.0m)
Gold in rocks
Historical 2016 samples
+5ppm
2 to 5ppm
1 to 2ppm
0.5 to 1ppm
0.1 to 0.5ppm
<0.1ppm
636,900 mE
637,000 mE
637,100 mE
637,200 mE
Swit Kai
rocks and drillholes


EZL05:
2.0m @ 18.5g/t Au (from 0.0m - 2.0m); also
1.0m @ 2.93g/t Au (from 7.0m - 8.0m); also
1.0m @ 2.7g/t Au (frm 13.0m - 14.0m)
1,625 masl
1,600 masl
1,575 masl
1,550 masl
EZL01:
3.0m @ 11.8g/t Au (from 0.0m - 3.0m)
inc. 1.0m @ 31.1g/t Au (from 0.0m - 1.0m); also
2.0m @ 3.03g/t Au (from 6.0m - 8.0m)
EZL02:
8.0m @ 18.2g/t Au (from 1.0m - 9.0m)
inc. 4.0m @ 31.7g/t Au (from 1.0m - 5.0m); also
1.0m @ 16.7g/t Au (from 8.0m - 9.0m),
EZL03:
5.0m @ 4.13g/t Au (from 1.0m - 5.0m)
inc. 1.0m @ 11.9g/t Au (from 1.0m - 2.0m)
EZL04:
14.2m @ 2.59g/t Au (from 1.8m - 16.0m)
inc. 7.0m @ 3.59g/t Au (from 6.0m - 13.0m)
mudstone
porphyry
diorite
East Creek
zone of intense quartz+sulphide+GOLD veining/brecciation
zone of moderate quartz+sulphide+GOLD veining/brecciation
Drillhole assays - gold ppm
+5ppm
2 to 5ppm
1 to 2ppm
0.5 to 1ppm
0.1 to 0.5ppm
<0.1ppm
Swit Kai -
East Creek Lower Zone
drill section looking northeast

EZL001										
	From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
	0.0	9.0	9.0	4.77	5.7	2,116	289	852	4,047	11
incl.	**0.0**	**3.0**	**3.0**	**11.76**	9.0	4,873	487	2,092	4,963	22
and	**0.0**	**1.0**	**1.0**	**31.10**	15.0	9,690	1,110	5,320	8,030	31
and	6.0	8.0	2.0	3.03	3.2	1,360	163	354	3,525	6
plus	14.0	15.0	1.0	0.90	3.1	4,270	133	562	1,840	13
plus	15.7	16.5	0.8	0.51	1.9	3,470	124	67	5,180	11
EZL002										
	From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
	0.0	11.0	11.0	13.37	15.5	7,140	875	1,491	5,162	16
incl.	**1.0**	**5.0**	**4.0**	**31.66**	**36.7**	16,270	2,073	3,203	10,580	31
and	**3.0**	**4.0**	**1.0**	**90.50**	**52.3**	27,700	2,320	5,370	12,900	49
and	6.0	7.0	1.0	1.00	3.7	1,570	137	353	3,280	7
and	**8.0**	**9.0**	**1.0**	**16.65**	5.2	3,340	436	1,810	1,330	6
plus	35.0	36.0	1.0	0.53	7.1	19	273	15	768	-
plus	37.0	38.0	1.0	0.79	9.4	22	311	38	3,240	-
EZL003										
	From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
	0.0	6.0	6.0	3.48	6.6	4,928	366	1,221	5,065	13
incl.	**1.0**	**4.0**	**3.0**	**5.61**	7.9	7,620	487	1,836	6,397	16
incl.	**1.0**	**2.0**	**1.0**	**11.90**	10.0	14,100	928	4,300	7,220	26
incl.	5.0	6.0	1.0	3.02	4.9	2,660	146	92	3,800	9
plus	7.0	8.0	1.0	0.67	1.3	2,610	102	149	1,770	12
EZL004										
	From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
	1.8	16.0	14.2	2.55	8.3	2,841	361	601	7,927	8
incl.	1.8	4.0	2.2	3.03	14.2	405	378	270	10,965	3
and	**6.0**	**13.0**	**7.0**	**3.59**	8.8	4,865	436	1,030	7,164	14
and	**7.0**	**8.0**	**1.0**	**11.88**	7.7	13,000	350	1,310	5,920	22
and	15.0	16.0	1.0	3.27	10.1	3,500	293	253	13,900	6
EZL005										
	From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
	0.0	**2.0**	**2.0**	**9.26**	10.2	10,285	305	1,759	2,880	29
incl	**1.0**	**2.0**	**1.0**	**12.55**	16.1	5,470	450	2,780	3,310	16
plus	7.0	8.0	1.0	2.93	0.7	90	84	49	355	-
plus	13.0	14.0	1.0	2.70	4.0	8,330	123	732	2,590	15

Frontier Resources Ltd - East Creek Lower Zone Drill Core Assay Results

EZL001

From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
0	1	1	31.10	15.0	9,690	1,110	5,320	8,030	31
1	2	1	3.04	6.8	2,830	189	553	2,590	20
2	3	1	1.15	5.1	2,100	161	402	4,270	16
3	4	1	0.17	4.1	144	226	179	2,120	4
4	5	1	0.77	7.5	686	374	218	7,440	7
5	6	1	0.28	6.0	818	212	248	4,680	8
6	7	1	4.75	4.6	1,200	223	272	6,020	5
7	8	1	1.30	1.8	1,520	102	435	1,030	6
8	9	1	0.40	-	53	45	39	240	3
9	10	1	0.07	-	154	57	67	180	2
10	12	2	0.06	-	231	68	96	414	-
12	14	2	0.03	-	93	64	20	150	2
14	15	1	0.90	3.1	4,270	133	562	1,840	13
15	15.7	1	0.13	-	845	96	94	372	4
15.7	16.5	0.8	0.51	1.9	3,470	124	67	5,180	11
16.5	18	1.5	0.04	-	143	66	14	331	-
18	20	2	not analysed						
20	22	2	not analysed						
22	24	2	not analysed						
24	26	2	not analysed						
26	28	2	not analysed						
28	30	2	not analysed						
30	32	2	not analysed						
32	34.3	1.3	not analysed						

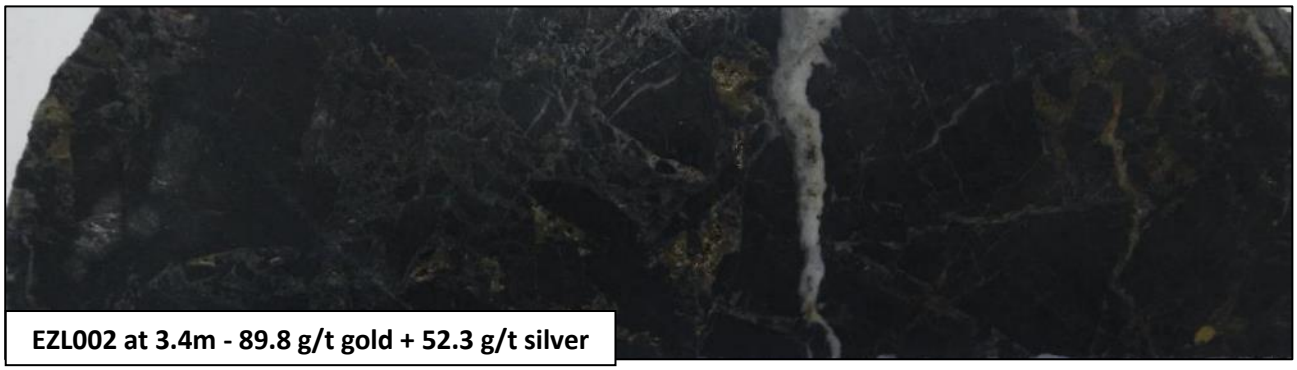
EZL002

From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
0	1	1	0.88	4.4	1,230	160	427	3,950	5
1	2	1	11.35	8.5	13,700	495	1,790	5,470	28
2	3	1	15.90	64.9	14,600	4,920	3,380	15,900	32
3	4	1	90.50	52.3	27,700	2,320	5,370	12,900	49
4	5	1	8.88	20.9	9,080	555	2,270	8,050	16
5	6	1	0.47	8.3	649	275	549	5,280	15
6	7	1	1.00	3.7	1,570	137	353	3,280	7
7	8	1	0.46	1.2	695	88	78	130	-
8	9	1	16.65	5.2	3,340	436	1,810	1,330	6
9	10	1	0.43	-	2,670	130	199	210	6
10	11	1	0.54	1.0	3,310	111	176	286	9
11	13	2	0.04	-	120	80	55	371	3
13	15	2	0.02	-	72	44	22	82	-
15	17	2	0.20	-	502	71	76	193	3
17	19	2	0.01	-	17	54	12	71	-
19	21	2	0.16	-	254	75	16	381	-
21	23	2	-	-	9	66	10	114	-
34	35	1	0.15	3.2	13	174	16	3,310	-
35	36	1	0.53	7.1	19	273	15	768	-
36	37	1	0.30	3.6	13	276	14	2,950	-
37	38	1	0.79	9.4	22	311	38	3,240	-
38	39	1	0.08	-	8	106	12	1,840	-

EZL003									
From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
0	1	1	0.21	2.2	1,110	83	158	1,800	3
1	2	1	11.90	10.0	14,100	928	4,300	7,220	26
2	3	1	1.45	7.5	4,010	303	770	5,710	9
3	4	1	3.47	6.3	4,750	231	438	6,260	14
4	5	1	0.80	8.6	2,940	504	1,570	5,600	14
5	6	1	3.02	4.9	2,660	146	92	3,800	9
6	7	1	0.09	1.7	41	120	50	1,470	-
7	8	1	0.67	1.3	2,610	102	149	1,770	12
8	10	2	0.05	-	607	82	56	178	-
10	12	2	0.04	-	26	61	21	81	-
12	14	2	0.05	-	305	83	61	253	-
EZL004									
From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
0	1.8	1.8	0.01	-	34	30	26	107	-
1.8	3	1.2	2.78	4.7	358	205	141	4,020	-
3	4	1	3.34	25.7	462	586	425	19,300	5
4	5	1	0.69	1.4	1,010	79	130	2,200	-
5	6	1	0.13	4.4	80	204	107	3,870	-
6	7	1	1.88	15.9	918	1,150	874	12,000	5
7	8	1	11.88	7.7	13,000	350	1,310	5,920	22
8	9	1	5.21	6.5	4,860	243	568	5,730	9
9	10	1	1.12	6.1	2,380	239	181	5,370	7
10	11	1	1.14	3.3	4,140	221	232	4,860	11
11	12	1	1.27	17.8	4,170	490	3,560	12,600	36
12	13	1	2.60	4.3	4,590	362	484	3,670	6
13	14	1	0.45	5.3	277	235	120	14,200	-
14	15	1	0.41	4.5	591	471	147	4,930	-
15	16	1	3.27	10.1	3,500	293	253	13,900	6
16	17	1	0.10	2.4	249	199	79	2,930	2
17	18	1	0.04	4.8	14	129	22	1,890	-
18	19	1	0.17	0.8	1,280	156	63	1,490	4
19	20	1	0.01	-	35	86	15	238	-
20	22	2	-	-	12	67	18	108	-
22	24	2	0.06	2.2	99	150	56	1,400	2
EZL005									
From m	To m	Length m	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm
0	1	1	5.97	4.2	15,100	160	737	2,450	41
1	2	1	12.55	16.1	5,470	450	2,780	3,310	16
2	3	1	0.03	1.4	87	33	42	128	3
3	4	1	0.09	2.6	39	79	133	342	9
4	5	1	0.04	1.2	44	53	52	123	4
5	6	1	0.03	0.8	123	78	58	100	-
6	7	1	0.02	1.0	108	89	50	72	-
7	8	1	2.93	0.7	90	84	49	355	-
8	9	1	0.15	0.8	918	124	216	1,040	4
9	10	1	0.40	1.7	1,990	127	332	999	6
10	11	1	0.10	1.2	473	75	194	720	-
11	12	1	0.02	-	57	66	37	115	-
12	13	1	0.04	-	34	43	30	115	3
13	14	1	2.70	4.0	8,330	123	732	2,590	15
14	16	2	not analysed						
16	18	2	not analysed						
18	20	2	not analysed						
20	22	2	not analysed						

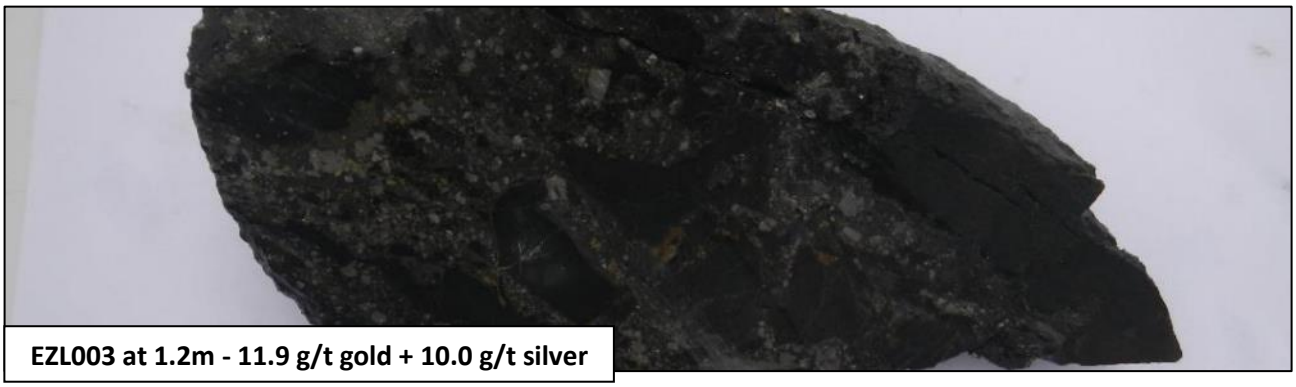
Selected cut core hand specimens are included and the photos are high enough resolution that the reader can enlarge them and see the brecciation, mineralisation and textures contained within the black mudstones.

EZL001 at 0.10m - 31.1 g/t gold + 15.0 g/t silver

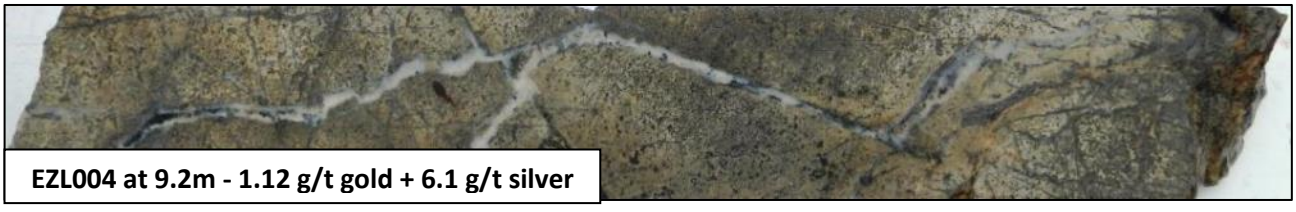


EZL002 at 3.4m - 89.8 g/t gold + 52.3 g/t silver

EZL002 at 8.5m - 17.2 g/t gold + 5.2 g/t silver



EZL003 at 1.2m - 11.9 g/t gold + 10.0 g/t silver



EZL004 at 9.2m - 1.12 g/t gold + 6.1 g/t silver

EZL005 at 0.2m - 5.97 g/t gold + 4.2 g/t silver

Hole EZL001
0.0-7.30m: black mudstone with zone of fracturing + brecciation, intensely veining by quartz-pyrite- galena-+/-sphalerite+/- adularia vughy forming strong stock working, narrow <20cm breccia zone from 0.10m-0.30m + strong galena+ sphalerite.
7.30-18.50m: pale grey, weakly porphyritic. diorite, strong sericite chlorite - pyrite- clay altered.
13.0m-16.50m: intensely quartz- sulphidic veined, (quartz-pyrite +/- galena+ sphalerite) veins/veinlets.
18.50-25.8m: strongly chloritised massive diorite, weak-mid fractured- control pyrite <1-2%.
25.8m to 35.7m: chlorite altered hornblende diorite.

Hole EZL 002
0.0m-8.4m: blk fractured mudstone mod-strong with multiple quartz- pyrite +/- galena +/- sphalerite vein with micro brecciation forming stock work. 5.0m-6.1m: clay- puggy shear zone.
8.4m-17.0m: pale potassic altered feldspar porphyry at 45° to core axis on top contact, silicified pale green with mod-strong quartz sulphide veining.
17.0m-34.6m: massive diorite with narrow (<30cm) quartz- sulphide breccia zone at 19.40m.
34.6m-39.0m: greenish grey siltstone with weak quartz- sulphide veining.
39.0m-49.6m: greenish massive propylitic altered diorite cut by weak /nil quartz sulphide.

Hole EZL 003
0.0m - 6.50m: good stockwork again quartz sulphide veined black mudstone.
6.50m -14.0m: massive chloritised diorite with weak or nil veining.

Hole EZL 004
0.0m - 1.8m: pad fill
1.8m - 3.9m: quartz-pyrite +/- galena-sphalerite veining < 1-5cm parallel core axis including some hairline veinlet forming stockworking.
5.05m - 9.15m: strongly silicified hydrothermal breccia its matrix - supported breccia with predominantly angular black mudstone coast + <1-2% intrusive set in fine grained milky to greyish chalcedonic quartz - sulphide+? k-feldspar /? adularia breccia matrix moderate stockworking.
9.15m – 9.54m: mudstone and strongly potassic altered feldspar porphyry intensely veined with multiple veining/veinlets of quartz-pyrite-galena-sphalerite with intense brecciation.
9.55m-12m: contact reign seemed to be focussed of intense vein + brecciation, veining occurs in the order of 2-3 cm wide cutting 10-15° to CA, certainly drilling down the structure out of mineralisation at 20.80m. terminated at 28.30m hole depth in solid mass porphyry altered Hornblende diorite.

Hole EZL 005
0.0m - 7.60m: black mudstone fractured cut by moderate quartz-pyrite- +/- galena-sphalerite veinlets + minor breccia zones at 0.0-0.30cm & at 0.70- 1.0m.
7.60m - 10.90m: potassic altered feldspar pervasively silicified and cut by veins/veinlets of quartz-pyrite-sphalerite-galena.
10.90m - 13.50m: black mudstone cut by weak- moderate multiple veins of quartz sulphide.
13.50m - 21.85m: black mudstone with weak quartz sulphide veining.
21.85m - 26.10m: propylitic altered massive diorite with no quartz sulphide veining.

There is excellent strike continuity potential that can now be easily drill accessed relative to the topography. Gold in soil anomalies along trend to both the east and west of the Lower Zone, indicate a strike length to +480m total. Gold anomalies in drainages to the west of Swit Kai indicate its unevaluated strike potential and drainages to the N and NW have never been sampled. The region has excellent mineralisation potential, with strong radiometric and aeromagnetic anomalies that require substantial evaluation.

The Central Lower Zone actually corresponds to the East Creek Upper Zone (both are sub-horizontal gold mineralisation on the same 'level') and the Central Upper Zone corresponds more to the East Creek Lower Zone (mod-high angle south dipping mineralisation). Conceivably, the highest-grade mineralisation would be where they intersect.

Holes CLD001-004 are located proximal to Equatorial hole 004, whose collar was dug up and its position is now known to be about 20m too far north on the previous plans.

ASSAY RESULTS FROM 14 ROCK SAMPLES COLLECTED ON THE SWIT KAI PROSPECT'S LOWER ZONE STRIKE WESTERN AND EASTERN STRIKE EXTENSIONS AND INFILL, EL 1595 – BULAGO

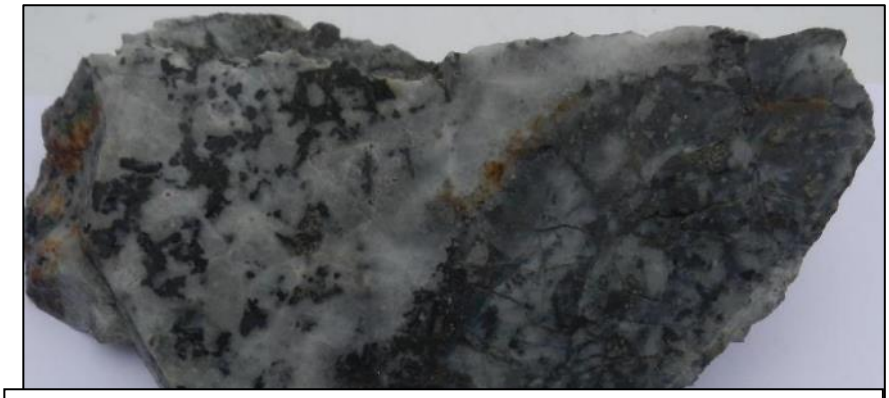
Limited exploration undertaken during the recent drilling program specifically targeted three topographic "flat spots" along and across strike from the known high-grade gold mineralisation, with hand trenching, mapping and sampling. Trench 3 with rock to 16.40 g/t gold + 54.7 g/t silver is outside the soil grid and represents a successful 'Wildcat' evaluation; this site is about 830m WNW of the East Creek drilling (EZL holes whose results were announced today). Trench 1 is located to the east of the EZL holes and is approximately 1,050m from the Trench 3 results. The second trench was dug on a lead/zinc soil anomaly south of Swit Kai and close to the main Bulago River and also represents a new discovery.

These geomorphological anomalies consist of small 'flat spots' (possible conformable mineralisation) with steep northern sides (possible moderate south dipping mineralisation) and were targeted because the mineralisation model for Swit Kai consists of both a moderate south dipping zone and a conformable sub-horizontal zone. These characteristics are reasonably expected to be repeated in other locations within the area, resulting in multiple gold mineralised zones as we have apparently observed.

These flat spots are also associated with strongly anomalous lead and zinc (with local gold) in soil geochemistry, further reinforcing the parameters of the mineralisation model and demonstrating that all such zones require concerted evaluation. There are many such geomorphological anomalies in the general Swit Kai and Bulago area and they are relatively simple to follow up and evaluate, in preparation for future drilling. Exploration possibilities will be demonstrated on a plan when the data can be meaningfully represented and released. Please note that the plan only shows the samples collected between the CLD and EZL holes.

Assays from the EZL drilling announced today show (again) that the high-grade gold is strongly correlated with zinc and arsenic (minerals being sphalerite and arsenopyrite), plus lesser lead (galena) mineralisation, hence the associated noted soil anomalies.

New sub-cropping and out-cropping mineralisation was also discovered over a >40m length and up/downslope on the walking track to the EZL hole drill pad, between the Central Lower Zone and East Creek drill pads. The rock textures and mineralisation are impressive and the location appears to be where the structure recently drilled in Lower East Creek intersects the structure that was drilled in the Upper East Creek in April 2016 (that returned 5.0m downhole grading a weighted average of 13.92 g/t gold, from surface - released to ASX 13/6/2016). This site will be hand trenched to determine the exact location of the mineralisation and ultimately should be drilled to test the economic potential between the CLD and EZL sites.



Link Zone Sample 649010 – 10.4 g/t gold + 19.6 g/t silver +1.23% arsenic + 0.09% copper + 0.17% lead + 2.05% zinc + 19ppm antimony

Sample 649006 returned 49.80 g/t gold + 135.0 g/t silver and interestingly 0.70% copper. Trench float samples 649004 and 649005 were located along strike to the east of the EZL drilling and contained weak gold mineralisation, but relatively more silver mineralisation (to 14.2 g/t silver), with very low arsenic, zinc and lead. Unfortunately, the trenching was generally not deep enough to be totally effective and samples were not flown out of the camp upon demobilisation to save money by avoiding an additional helicopter trip. They will be deepened and analysed after the resumption of exploration in 2017.

The work on Trench 2 demonstrated encouraging minor gossan floats near the Bulago River, which represent a major new target zone, as previously hypothesised. The assay results were sub-economic at 0.10 g/t gold, but support the model and demand continued evaluation at this location for substantial mineralisation.

Rocks were collected as possible from outcrop, subcrop and float; they were described, sometimes photographed and put into calico bags for analysis. Generally, a reference sample was collected for the camp.

Frontier Resources Ltd - Swit Kai Rock Assay Results												
Sample No	Sample Type	Gold g/t	Silver g/t	Arsenic ppm	Copper ppm	Lead ppm	Zinc ppm	Antimony ppm	Sample Information	Coordinates		
										Easting	Northing	RL m
649004	Trench Float	0.18	14.2	201	502	73	240	27	Trench- East of Pad 2, composite sample of oxid qtz-lmn vn in altered intrusive floats	637366	9400040	1658
649005	Trench Float	0.08	10.2	220	552	157	631	10	Trench- East of Pad 2, composite sample of oxid qtz-lmn vn in altered intrusive floats	637366	9400040	1658
649006	Suboutcrop	**49.80**	**135.0**	57,900	6,990	6,440	29,600	85	Central Lower Zone - Access track E of CLD01-4 collar. 40cm bldr of Qtz-sulph vn bx with py-gal-sph	637089	9400172	1590
649007	Suboutcrop	**8.65**	2.3	17,300	146	330	1,550	33	(C L Zone) - E of CLD01-4 collar. 30cm bldr of bleached dior with<10cm vn of qtz + gal-sph	637092	9400176	1601
649008	Suboutcrop	0.67	11.1	210	448	49	9,470	4	(C L Zone)- E of CLD01-4 collar. 40cm bldr of Qtz-sulph vn bx with py-gal-sph	637091	9400155	1604
649009	Suboutcrop	0.39	11.3	126	279	57	5,470	3	(C L Zone) - E of CLD01-4 collar. 40cm bldr of Qtz-sulph vn bx with py-gal-sph	637091	9400155	1604
649010	Suboutcrop	**10.40**	**19.6**	12,300	880	1,740	20,500	19	(C L Zone) - E of CLD01-4 collar. 25cm bldr silc bx with anglr dior clast in the mtx of qtz-gal-sph	637102	9400189	1589
649011	Suboutcrop	0.05	-	58	16	17	213	-	(C L Zone) - E of CLD01-4 collar. 50cm bldr of blk mudst vnd by py-gal-sph	637109	9400155	1615
649012	Suboutcrop	6.00	8.7	6,340	213	2,020	7,140	20	(C L Zone) - E of CLD01-4 collar. suboc of h bx with anglr blk mudst clast in mtx of qtz py-gal-sph	637112	9400150	1615
649013	Suboutcrop	**13.90**	**16.2**	16,900	1,300	806	23,100	35	(C L Zone) - E of CLD01-4 collar. Suboc of Qtz-sulph vn bx with py-gal-sph	637075	9400162	1617
649014	Trench Float	0.10	1.6	213	87	644	2,250	-	"Flat Spot"Trench # 2 - highly oxid, high density "gossan" float	637230	9399670	1475
649015	Outcrop	-	-	15	14	23	120	-	"Flat Spot"Trench # 3 Area NW of Camp - Oc in ck bank 10m E of Trench, 3m- clay-puggy Zone	636305	9400362	1555
649016	Trench Float	**16.40**	**54.7**	9,600	42	529	859	30	"Flat Spot"Trench # 3 Area NW of Camp -Flt of silicied qtz-sulph veined mudstone	636300	9400363	1559
649017	Outcrop	0.09	-	102	21	27	219	-	"Flat Spot"Trench # 3 Area NW of Camp - Oc on landslip, 3m- clay-puggy Zone	636300	9400365	1559

EXPLORATION SCHEDULE AND OBJECTIVES AT BULAGO

The exploration / drilling team is anticipated to mobilise to Bulago in early-mid February for a 3 month, multiple hole drilling program that will include two high priority porphyry copper -gold holes, in addition to further substantial drilling of the high-grade gold at the Swit Kai Prospect. The only possible delay will be aircraft (fixed and rotary) availability. I anticipate being onsite in later February and March to supervise the program.

The wet season at Bulago commences in about early May and drill pads /access are often in/by creeks/rivers, so our exploration program will likely finish late April. We can and are willing to work after April, but in general, costs increase due to logistical -aircraft supply constraints associated with the weather.

Frontier hopes to be able to undertake additional general exploration to:

- Further hand trench topographic +/- lead/ zinc/gold soil anomalies that appear to represent repetitions of the known high grade mineralisation and thus hope to define future and possibly more extensive drilling targets.
- Pan concentrate /stream sediment sample the watercourses to the northwest and north of Swit Kai Prospects, as they have never been systematically evaluated, but where reconnaissance sampled they have demonstrated significant gold anomalies. This region drains an intrusive that also has significant aeromagnetic and potassium radiometric anomalies requiring follow-up.
- Reconnoitre and also hand trench the major gold/zinc/lead soil anomaly in the central north of the Bulago Valley.

FRONTIER WON THE APPLICATION BALLOT FOR THE FORMER SINIVIT GOLD MINE (ML) AND ASSOCIATED FORMER EXPLORATION LICENCE (EL), PLUS MUCH OF OUR FORMER EAST NEW BRITAIN EL (FORMERLY JOINT VENTURED WITH OK TEDI MINING LTD), LOCATED ON THE GAZELLE PENINSULA, EAST NEW BRITAIN PROVINCE.

The EL application area has excellent access with an all-weather road from Sinivit to Rabaul (located 50km to the NE) and has landowners that are supportive of exploration and mining. New Guinea Gold Corp (NGG-TSX.V) operated the modest vat leach gold Mine from late 2007 until 2012 and finished processing ore in early 2013.

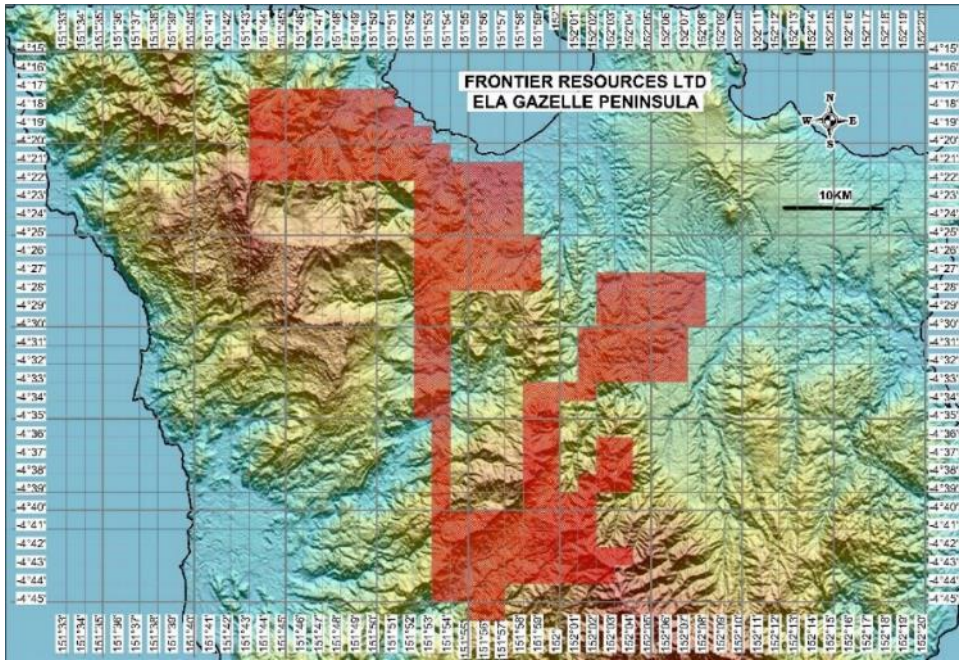
The quartz vein system is present for about 10 km within the EL application, so exploration potential is excellent. In addition, the area covering Frontier's former EL 1592 contains two large aeromagnetic porphyry copper -gold signatures and various other copper and gold prospects that have never been really explored.

The Application will now go through the normal process involving a Warden's Court Hearing, review /evaluation by the Mining Advisory Council with their recommendation to the Minister for Mining who decides to grant or refuse. The Hearing will likely occur in early February 2017. The Mining, Easement Lease and Exploration Licences were refused renewal 1 month ago, by the Minister for Mining. The expenditure commitment offered is K100,000 in Year 1 and K150,000 in year 2 (about A$ 42,000 in Year 1 and A$53,0000 in Year 2). There are no assumed liabilities.

The PNG Mineral Resource Authority Assistant Registrar informed me that NGG implied it would undertake a Judicial Review regarding the decision. However, NGG's last release to the TSX is dated November 20, 2015 (13 months ago), they have had multiple issues filing their required TSX regulatory documents, are yet to

announce the refusal of the ML to the TSX / their shareholders and thus likely do not have the financial capability to undertake a Judicial Review.

Chairman /Managing Director - Peter McNeil M.Sc. commented:
Frontier is very pleased that we have the opportunity to obtain and potentially re-develop the former Sinivit Gold Mine and explore the surrounding areas to increase total contained resources / reserves to enable a more efficient and profitable operation in the future. In addition, there are three porphyry copper targets that offer the Company excellent upside to the recently rapidly rising copper price.



I was a founding Director, Former President and Exploration Manager for NGG from 1996 until 2009, when I resigned to concentrate solely on Frontier Resources. The mineralisation was discovered by Esso in the early 1980's, who I started my career with in PNG in 1985. Sinivit was later drilled out by City Resources, for whom I supervised their Wapolu gold Project in Milne Bay. I have a very good understanding of the area and its gold and copper potential, plus already personally own virtually all existing digital and a lot of hard copy exploration data.

The data and intellectual property is mine, hence it is proposed that Exploration & Management Consultants Pty Ltd (EMC -in which I have a 50% interest) will obtain a 10% free carried interest in the EL if it is granted (subject to FNT shareholder approval or reversion of the EL title 100% to EMC).

Mining Associates Pty Ltd prepared an Independent Technical Report (called a 43-101) in October 2011 for NGG on the Indicated Resources on the Sinivit Gold Project, that covered an estimate of the mineral resources remaining at Sinivit Mine (also JORC compliant) and an appraisal of its exploration potential.

In addition, Mining Associates prepared a 43-101 report estimating an Indicated Resource at the Kavursuki gold Deposit (an unmined resource adjoining and to the north the Sinivit pits) in April 2013.
The 43-101 reports relating to the Sinivit and Kavursuki Resources can be obtained from the Canadian regulator SEDAR website, but have also been posted to the Reports section of the Frontier website (they are too large to include herein).

The October 2011 43-101 report noted *Resources remaining within the current pit design total 135,000t at 4.44 g/t gold for 19,200 ounces. No mining dilution or loss has been applied. This comes with a penalty of 0.35% copper. These in-situ resources remaining have not been modified with mining or metallurgical factors.*

The remaining resources and reserves at the 3 mined Sinivit deposits are unknown, but given the timeframes between issuing the 43-101 Sinivit Resource Estimation and the shutdown of mining, they cannot have been significantly depleted.

A comprehensive summary report will be complied by Frontier relating to the entire application area as soon as possible and will be posted on the Frontier website after completion. Facilities at site are believed to include an 80-man camp, office and core farm.

The EL application covers the strike extensions of the Nengmutka vein system to the north and south of the former ML, as well as a number of other exploration targets for precious and base metals.

In January 2006, NGG announced an Indicated Mineral Resource of 306,000 tonnes having an uncut grade of 5.3 g/t Au (4.0 g/t Au cut) covering the planned Southern, Central and Northern Oxide zone open pits. The Sinivit Gold Mine processed oxide ore from three shallow open pits within the Nengmutka vein system.

Commissioning commenced during the second half of 2007 and commercial production was achieved in April 2008. The mine produced approximately 23,550 oz. to the end of June 2011 and mining of oxide mineralisation was expected to be completed in that year. However, gold production was originally planned for 2,500 oz. to 3,000 oz. per month, but this was not achieved on a consistent basis due to issues with the VAT leach processing method.

THE FIGURES, TABLES AND TEXT BELOW ARE DERIVED/QUOTED FROM MINING ASSOCIATES' 43-101 REPORTS.

Geology and Mineralisation

The mineralisation at Sinivit, with current resources, is considered to be an epithermal style vein system with both low and high sulphidation alteration and mineralogy styles. Low sulphidation gold-telluride mineralisation was deposited within fractured silicified host rocks that are more typical of a high sulphidation system.

The Sinivit gold project consists of the Nengmutka vein system, which is hosted by the Nengmutka Volcanics, a flat-lying, epiclastic sequence of volcanic sandstone and conglomerate. The Nengmutka Volcanics are thought to represent a caldera margin deposit. There are indications from mapping and sampling (e.g. circular breccia targets with advanced argillic alteration) within the larger Sinivit project that the area may be prospective for buried diatreme-related gold-copper mineralisation (e.g. Wafi, PNG).

The Wild Dog structure has been traced at surface over a strike length of about 3 km, of which a central 900m makes up the strike length of the Sinivit resource area (Sinivit Gold Deposit). This vein system is hosted within the regional scale Nengmutka vein system which has a strike length of at least 10 km. It is estimated that some seventy per cent of the Nengmutka vein system within a 3-km radius of the Sinivit resource is non-outcropping, being capped by hydrothermal clays and younger volcanic ash. The parallel Gunsap Mountain structure lies approximately 1 km west of the Wild Dog structure and is predominantly clay covered although outcropping veins are present at its southern mapped extent.

The mineralisation at Sinivit occurs in multi-phase steeply dipping hydrothermal quartz tension veins which cross cut the more moderately dipping northwest trending silicified zones. Mineralisation is best developed near local cross structures. Later mineralisation fills open fractures and cavities in the quartz veins as dark sulphide stringers comprising copper sulphides (chalcopyrite with minor bornite, chalcocite and tennantite) with local occurrences of a wide variety of Cu-Bi-Pb-Ag sulphide, telluride and selenide minerals. Gold generally occurs as Au-Ag telluride minerals, and native 'mustard' gold occurs as a weathering product of these tellurides.

Intense tropical weathering and leaching has developed a surface profile depleted in copper and silver minerals. The Sinivit operation is currently mining this oxide material in three pits (northern, central and southern) on the Wild Dog structure. Further oxide resources are currently being delineated along strike at the Kavursuki Vein.

Exploration

Recent exploration carried out by NGG includes a 3D IP (induced polarisation) survey to define zones of sulphide mineralisation (chargeability) and/or silica mineralisation (resistivity). This work has highlighted some areas for future exploration. The results of the 3D IP survey, when taken in conjunction with the previous mapping of geology and alteration and previous surface sampling, provide ample justification for a substantial drilling program targeted at:

- Magiabe anomaly (possible diatreme related copper gold mineralisation);
- Gorocha Hill anomaly (interpreted dilational jog);
- Wild Dog & Kavursuki (potential depth extent of hybrid high-low sulphidation mineralisation);
- Shallow fences across strike length of Nengmutka vein system penetrating clay alteration cap and targeting vuhgy silica alteration; and

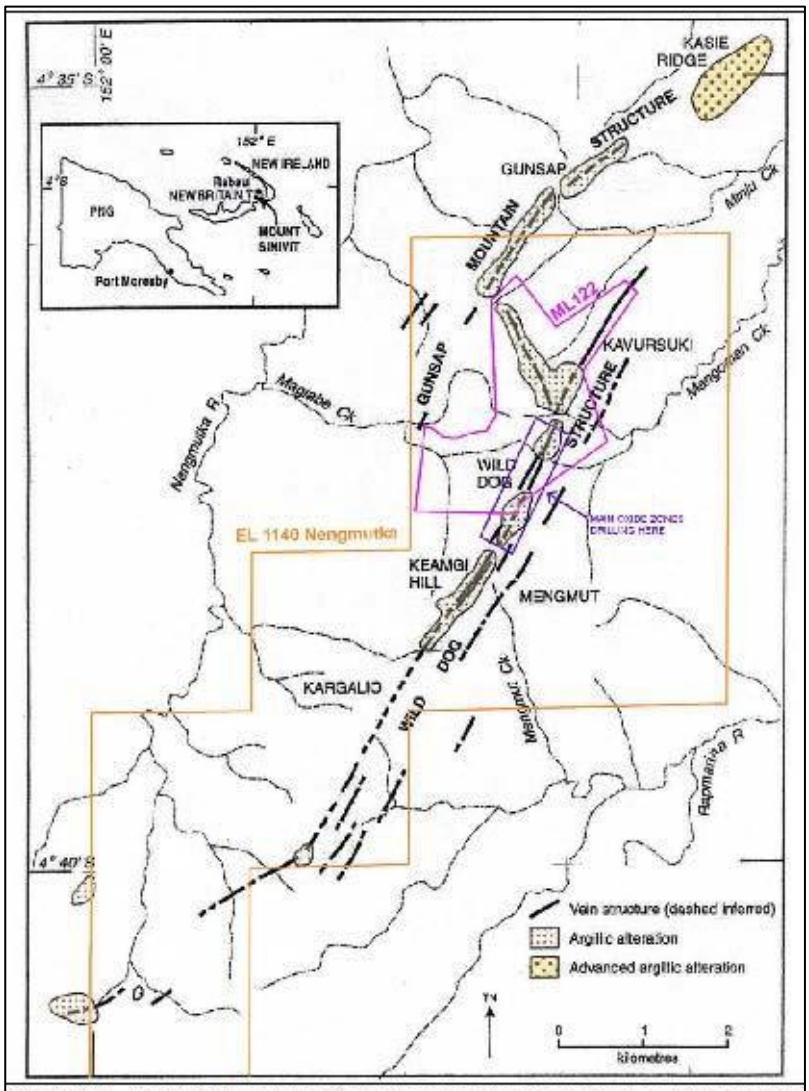
- Further 3D IP should be extended south throughout the tenement based on Wild Dog structure as intrusive hosted mineralisation (i.e. Regess Intrusive) along the structure may be resistive to IP.

Metallurgy

The oxide ore from the current operations is processed via vat and heap leaches. There are currently 17 vats and 2 heaps over vats reported by NGG to contain approximately 280,000 tonnes of material. Each vat has been leached with cyanide for varying time spans with gold recoveries estimated by NGG of about 66%.

Metallurgical testing was carried out in 2010 by a third party to determine distribution and possible recovery of gold remaining in the vat leached ore and to determine a recovery method for tellurium. Results indicated Tellurium would require an acid leach, subsequent gold leaching would require a basic leach.

There has been little metallurgical testing to determine the required process for optimum treatment of the primary sulphide ore, although recovery of this is likely to be based on a floatation circuit due to the copper and telluride mineralisation.



ML122 & EL1140 Location Map showing the Nengmutka vein system & Sinivit Mine location on the Sinivit (Wild Dog) vein
(Source: Stagg 2006)

Inferred Resources (above 1.5g/t)			
Vein	Tonnes	Gold (g/t)	Gold (oz)
Sinivit	1,084,000	4.0	139,200
Kavursuki	613,000	2.3	44,500
Indicated Resources (above 1.5g/t)			
Vein	Tonnes	Gold (g/t)	Gold (oz)
Sinivit	354, 000	3.92	44,300
Kavursuki	-	-	-

Resource Estimates

The Mineral resources for the Sinivit Gold Project have been estimated by MA for the preparation of this report and quoted above a 1.5g/t Au cut off. Southern Oxide, Central Oxide, Western Oxide (part of central oxide pit) and Northern Oxide are equivalent to the Southern Area as quoted in the 2005 Resource Estimates. These resource estimate figures have been classified as defined in the Canadian National Instrument 43-101.

- **The estimates are foreign estimates and are not reported in accordance with the JORC code.**
- **A competent person has not done sufficient work to classify the foreign estimates as mineral resources in accordance with the JORC code**
- **It is uncertain that following evaluation and/or further exploration work that the foreign estimates will be able to be reported as mineral resources in accordance with the JORC code.**
- **No physical exploration is required to be able to report these resources in accordance with the JORC code. Mining Associates could readily modify their 43-101 report to become JORC compliant**

for a fee. Otherwise the digital data utilised must be obtained and remodelled in Surpac and reported to the ASX.

- The timeframe to accomplish this task requires that first the EL must granted. As no physical exploration is required, there are no major issues with funding such an exercise and it would be done from existing funds or a capital raising would be undertaken to accomplish such.
- Additional information relating to the resource estimations is provided in Section 3 at the end of the Quarterly Report.
- Competent Person Statement:

The information provided in this market announcement provided under rules 5.12.2 to 5.12.7 is an accurate representation of the available data and studies for the Sinivit Mine Project and is based on information compiled by Peter A. McNeil - Managing Director of Frontier Resources, who consults to the Company via Exploration & Management Consultants Pty Ltd and is a Member of the Aust. Inst. of Geoscientists.

Inferred Resources by Area above 1.5g/t cut off

Area	K tonnes	Gold capped (g/t)	Copper capped (%)	Gold (koz)
Southern Oxide	47	2.8	0.40	4.2
Central Oxide	26	5.5	0.32	4.6
Northern Oxide	7	2.8	0.08	0.6
Northern Sulphide	1,004	4.0	0.37	129.8
Kavursuki	613	2.3	0.03	44.5
Total	1,697	3.4	0.25	183.7

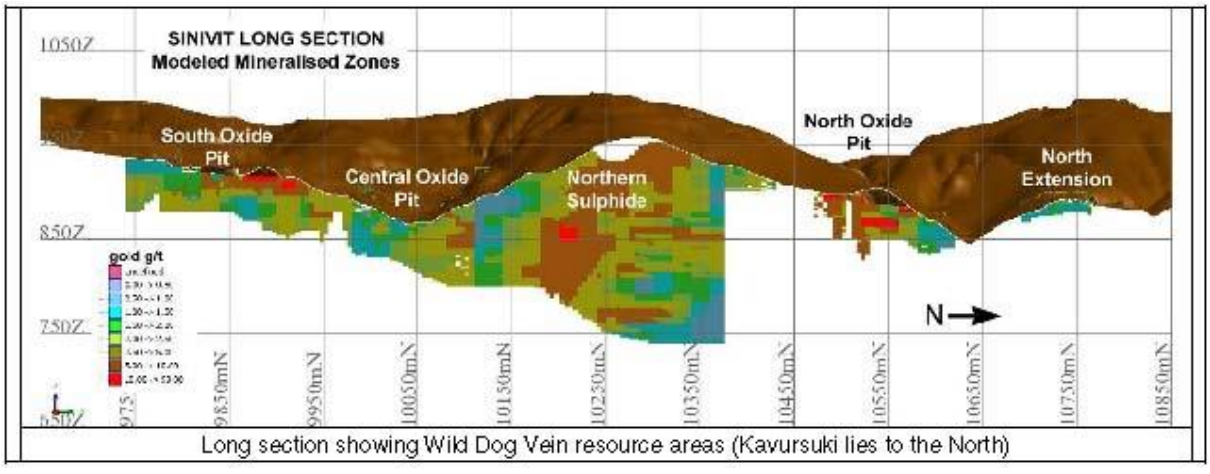
Indicated Resources by Area above 1.5g/t cut off

Area	K tonnes	Gold capped (g/t)	Copper capped (%)	Gold (koz)
Southern Oxide	103	4.4	0.67	14.6
Central Oxide	184	3.8	0.17	22.7
Northern Oxide	67	3.1	0.06	6.5
Northern Sulphide	-	-	-	-
Kavursuki	-	-	-	-
Total	354	3.8	0.29	43.8

Indicated Resources Remaining within Designed Pit Shell

PIT	Weathering	Tonnes	Gold (g/t)	Au Oz	Copper (%)
	Oxide	8,600	5.32	1,460	0.64
SOX	Fresh	29,300	6.77	6,370	0.97
	Oxide	33,200	3.06	3,260	0.10
COX	Fresh	54,600	3.91	6,860	0.16
	Oxide	1,500	2.52	120	0.03
NOX	Fresh	7,800	4.64	1,160	0.08
TOTAL		135,000	4.44	19,230	0.35

figures have been reported to significant figures; (discrepancies may occur in the addition of rounded figures) No inferred or measured has been defined with the Designed Pit Shells



Long section showing Wild Dog Vein resource areas (Kavursuki lies to the North)

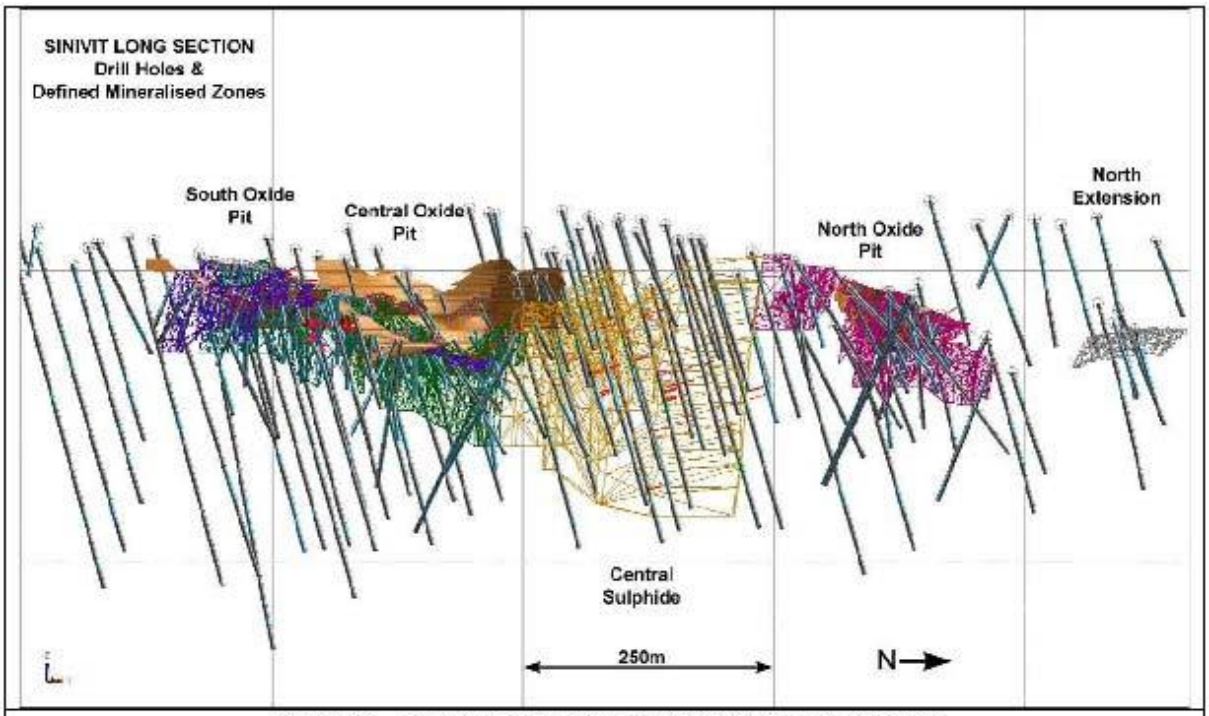


Figure 48. Long section showing drill holes and resource areas

Southern Oxide ("SOX"), Central Oxide ("COX") and Northern Oxide ("NOX") are equivalent to the 2005 Southern Area. The western oxide area is included Central Oxide.

Resources remaining within the current pit design total 135,000t at 4.44 g/t gold for 19,200 ounces. No mining dilution or loss has been applied. This comes with a penalty of 0.35% copper. These in-situ resources remaining have not been modified with mining or metallurgical factors.

Interpretation and Conclusions

The resource estimates reported here are reported in accordance with National Instrument 43-101 standards of disclosure of Mineral Projects (NI43-101). Classification of resource categories considered; sample density and type, geology continuity, density measurements, oxidation profile and Quality Assurance and Quality Control data.

The extensive grade control drilling available provides a high level of confidence in the estimate within the upper levels, at depth sparse diamond drill data is available.

This resource estimate has been constructed from "first principals" based on sectional interpretation of the geological controls and including the results of the recent grade control drilling at the Wild Dog Vein. Shallow diamond core data is available at Kavursuki.

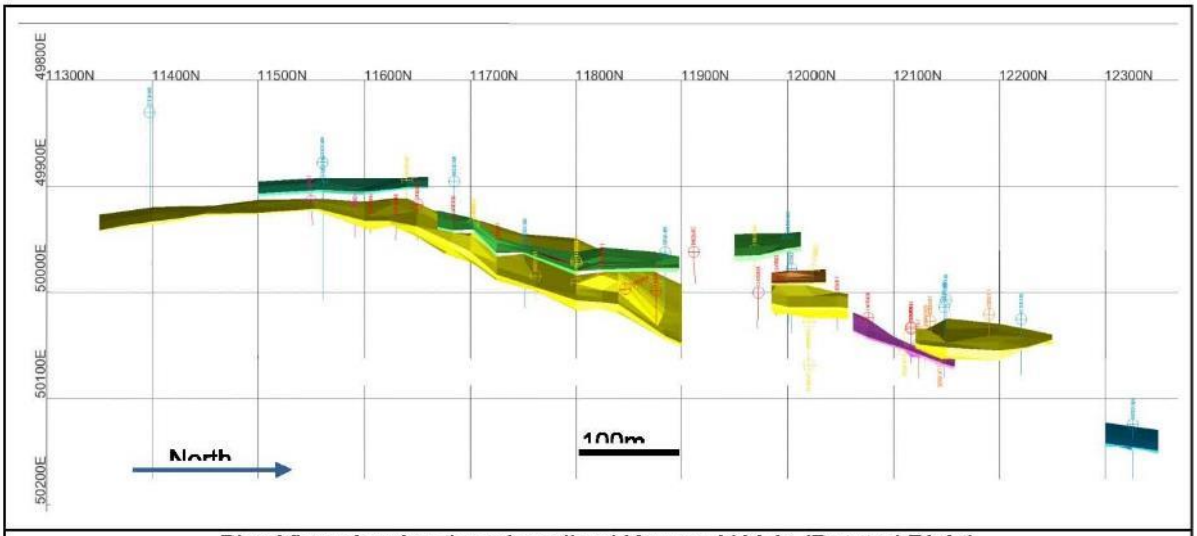
The recently completed drill holes and the Sinivit Resource Estimate are focused on the areas proximal to the Sinivit Gold Mine to define the best potential for near-term production. Only limited exploration drilling of the total complex has been undertaken and there remains good potential for further discoveries of gold, particularly at nearby prospects of Kavursuki, Mengmut and Keamgi Hill.

In terms of extensions of mineralisation and new resources, the Northern Sulphide Mineralisation is only drilled with exploration data on a broad pattern, and is thus of less confidence; the high-grade section 10,300mN in particular, requires more drilling to determine the strike extent of the prospective high grade (>10 g/t gold) mineralisation. The additional mineralisation further along strike in the same structure outlined at the Kavursuki Project area where a new inferred resource of 613kt at 2.3g/t for 44,500 ounces of gold is based on 30 diamond holes (2,170m) as reported.

Regionally, exploration success relies on discriminating between clay caps that overlay barren veins versus those that overlie gold-mineralised veins; therefore, future work therefore requires a combination of very specific surface sampling, clay mineralogy sampling/mapping (e.g. Portable Infrared Mineral Analyzer "PIMA"), ground geophysics and drilling.

The Kavursuki system was re-estimated in 2013 by Mining Associates, who estimated only Indicated Resources as noted below. A Long Section shows the Kavursuki system below.

Indicated Resources (above 1.5 g/t)			
Vein	Tonnes	Gold (g/t)	Gold (oz)
Kavursuki	283,000	3.7	33,000
Reported tonnage and grade figures have been rounded off from raw estimates to the appropriate number of significant figures to reflect the order of accuracy of the estimate. Minor variations may occur during the addition of rounded numbers			



Plan View showing the mineralised Kavursuki Vein (Rotated Right)

Interpretation and Conclusions

The Nengmutka Vein System, southerly extensions and lateral diatreme related copper style mineralisation, represent a major mineralised system containing both gold and copper mineralisation. Further exploration is likely to define significant gold and/or copper resources.

The presently defined Kavursuki mineralisation is hosted by the Nengmutka Volcanics, a flat-lying, epiclastic sequence of volcanic sandstone and conglomerate. The Nengmutka Volcanics are thought to represent a caldera margin deposit. There are indications from mapping and sampling (e.g. circular breccia targets with advanced argillic alteration) within the larger Sinivit project that the area may be prospective for buried diatreme-related gold/copper mineralisation (Sillitoe 2007).

The mineralisation at Kavursuki is considered to be an epithermal style vein system with low sulphidation alteration and mineralogy styles. Low sulphidation gold-telluride mineralisation was deposited within fractured silicified host rocks

The Kavursuki resource model is currently extends to 650 mRL which is 150 m below surface on limited deep drilling. To sufficiently define mineralisation of the vein extents to indicated resource category, a minimum 30 angled holes totalling approximately 4500 m would be required. This would enable 15 deep holes, one every 50 m along strike (3000 m). In addition the southern extents of the main vein require infill drilling on a 25 m x 25 m pattern, approximately 14 holes for 1500 metres. Flexibility in hole location and orientation would be advantageous as drill holes can be prioritised and modified as the programme progresses.

The results of the 2010 Three Dimensional Induced Polarisation survey and exploration and drilling results at Kavursuki and elsewhere, when taken in conjunction with the previous mapping of geology and alteration and previous surface sampling, provides ample justification for a substantial drilling program and/or re-development program targeted at:

- Definite the oxide resource at Kavursuki.
- Complete a feasibility study considering the conversion of oxide gold processing from vat/heap leach to CIP/CIL or some variant thereof (currently underway).
- Test the Magiabe anomaly (possible diatreme related copper gold mineralisation).
- Test the Gorocha Hill anomaly (interpreted dilational jog, possible gold and/or sulphide mineralisation).
- Test potential depth extent of sulphide mineralisation Wild Dog Vein and Kavursuki Vein. This low sulphidation epithermal mineralisation, mainly gold and copper, plus the Magiabe diatreme mineralisation constitutes the major potential of the Sinivit Project. This type of mineralisation, both at depth below the Sinivit structure, at the adjacent Magiabe diatreme and possibly elsewhere on the property warrants a major drill testing program.
- Test the Southern Sinivit structure initially by trenching and shallow drill fences across strike length of Nengmutka Vein System to the south of the mine, penetrating clay alteration cap and targeting vuggy silica alteration.

Mineral resources which are not mineral reserves do not have demonstrated economic viability.

The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. Narrow vein gold systems are notoriously difficult to predict the grade of due to complexity from variable thickness and grade.

The Project is in a high risk seismic area and therefore future development must take into account appropriate building codes in terms of potential earth movement and landslips, particularly in regard of tailings dams and flood control.

Recommendations

Identified mineralisation controls within the Kavursuki vein system including a low grade halo mineralisation and regular spacing of high grade shoots has assisted in identifying the Kavursuki Resource. Based on the block model outcomes, MA makes the following recommendations and comments:

The Kavursuki mineralised system has the potential to host a major orebody. The main potential is in definition of the sulphide resource:

- at depth below the known Sinivit and Kavursuki Zones
- in adjacent, known, diatreme copper mineralisation
- along strike to the south of the Sinivit Zone.

Definition of the potential of the system and the development of a process and mine plan for extraction of contained metals should be the main objective of the strategy forward.

The strategy could be achieved with a phased exploration/development plan as budgeted below. Phase 1 commences establishment of a new process plant and the related scoping study as well as further drilling. Phase 2 commences ongoing exploration related to successful Phase 1 drilling results.

Evaluation of the resource estimations of the former Sinivit Mine, Gazelle Exploration Licence Application 2515 (ELA) has been undertaken which shows that the mine area contains approximately 217,000 ounces of indicated and inferred resources of gold, grading 3.93 g/t, that is hosted in 1.7 million tonnes of ore.

Resources are tabulated below as Indicated (showing individual area estimates) plus as Inferred (global).

Frontier's Gazelle ELA summary (released on 16/12/2016) contained the Indicated estimates above (*) by Mining Associates (3/10/2011) for the Sinivit Oxide Zones, plus Inferred Resources for the Kavursuki Zone.

Mining Associates later re-estimated the Kavursuki Resources (11/4/2013) based on additional drilling and they were converted totally to Indicated status (** the table above).

As such, the Inferred Resources for Kavursuki (estimated 3/10/2011) were removed from the total Inferred and its subsequent re-estimation (11/4/2013) as Indicated Resources are included above. No re-estimation of

the resources by Frontier has occurred, just a merger of the information to reflect the revision. The Mining Associates' reports have been uploaded in their entirety to the Frontier website (as noted 16/12/2016) for review by interested parties.

Sinivit Gold Resources			
Zone	**Tonnes**	**Gold Grade (g/t)**	**Contained Gold (ounces)**
*Southern Oxide (3/10/2011 estimate)	103,000	4.40	14,600
*Central Oxide (3/10/2011 estimate)	184,000	3.80	22,700
*Northern Oxide (3/10/2011 estimate)	67,000	3.10	6,500
** Kavursuki (11/4/2013 estimate)	283,000	3.70	33,000
Total Indicated Resources (1.5g/t cut off)	**637,000**	**3.78**	**77,402**
Total Inferred Resources - All Areas (1.5g/t cut off)	**1,084,000**	**4.02**	**140,190**
Total Indicated + Inferred Resources	**1,721,000**	**3.93**	**217,592**

As noted in the general summary released on 16/12/2016, former operator at Sinivit supposedly re-commenced mining in late January 2012 and mined a fraction more of the oxide resources (subsequent to the 3/10/2011 estimation), but no production figures can be obtained; it is assumed to have been a very minor amount as the only production figures located showed 693 ounces extracted in Q2 2012.

- **The estimates are foreign estimates and are not reported in accordance with the JORC code.**
- **A competent person has not done sufficient work to classify the foreign estimates as mineral resources in accordance with the JORC code**
- **It is uncertain that following evaluation and/or further exploration work that the foreign estimates will be able to be reported as mineral resources in accordance with the JORC code.**
- **No physical exploration is required to be able to report these resources in accordance with the JORC code. Mining Associates could readily modify their 43-101 report to become JORC compliant for a fee. Otherwise the digital data utilised must be obtained and remodelled in Surpac and reported to the ASX.**
- **The timeframe to accomplish this task requires that first the EL must granted. As no physical exploration is required, there are no major issues with funding such an exercise and it would be done from existing funds or a capital raising would be undertaken to accomplish such.**
- **Additional information relating to the resource estimations is provided in Section 3 at the end of the Quarterly Report.**

Competent Person Statement:
The information provided in this market announcement provided under rules 5.12.2 to 5.12.7 is an accurate representation of the available data and studies for the Sinivit Mine Project and is based on information compiled by Peter A. McNeil - Managing Director of Frontier Resources, who consults to the Company via Exploration & Management Consultants Pty Ltd and is a Member of the Aust. Inst. of Geoscientists.

FRONTIER'S DRILLING STRATEGY AT EL 1595 IN 2017 WILL FOCUS ON EVALUATING THE PORPHYRY COPPER-GOLD POTENTIAL OF THE BULAGO VALLEY IN ADDITION TO THE HIGH-GRADE GOLD POTENTIAL AT THE SWIT KAI PROSPECT

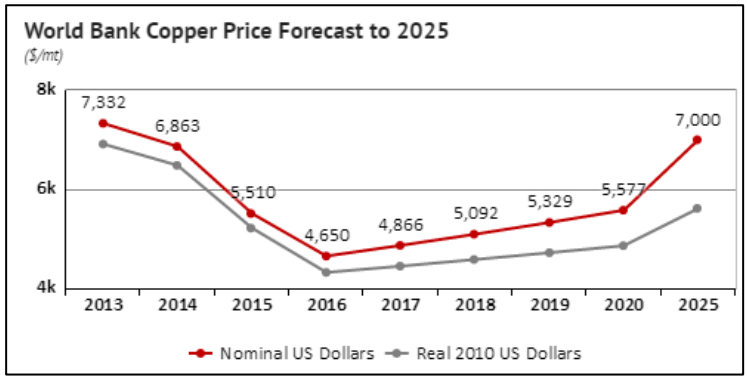
The porphyry copper-gold targets in the Bulago Valley include in its NW, strong gold in soils located to the west of hole BUL001 and also in the SW, strong copper + gold soils located to the east of hole BUL007.

The Company intended to drill a hole on a copper target last year, but funding was ultimately inadequate to enable the mobilisation of the required drill rods, fuel and consumables to the site. This goal was somewhat prescient, as the copper price started to rapidly move up on October 28th to peak approximately 30% up and then retract slightly.

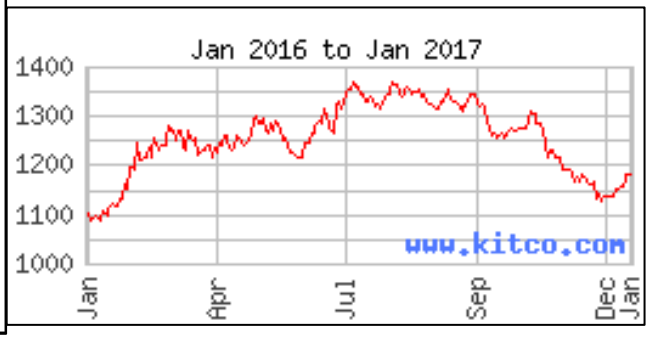
The copper price versus time graphs depicted show the 1 year copper price to the end of 2016, the World Bank forecast for copper to 2025 and the historical copper prices since 1975. The trends are positive and the World Bank plot projects improvement in the future copper price.

It is also encouraging to see that plots of the gold price versus time (attached) show that the price decline appears to have bottomed and have started to rise.

The Bulago regional image below shows the >4 square kilometre area of anomalous copper in soil geochemistry, with a significantly stronger northerly/north-north-easterly trending zone (located to the west of holes BUL007) and a north-north-westerly zone (located to the west of hole BUL001). Both trends could contain significant copper mineralisation at depth. The main intrusive related gold anomaly in the valley appear to trend dominantly north-north-easterly and traverse the entire eastern sector of the copper anomaly.



The Bulago Valley image below is an aeromagnetic susceptibility image, with copper drillhole assays plotted as histograms, plus copper ranges in soil assays as dots. It shows that the OK Tedi JV holes that were drilled into the peak of the magnetic anomaly did not return significant copper mineralisation, however, those drilled on the margins or shoulders of the anomaly did.



This year Frontier will target the shoulders of the magnetic intrusive, which also generally correspond to the better tenors of copper in soils.

The 3D magnetic model cross section looking north (below) demonstrates the significant depth extent of the Bulago intrusive (>2km) and associated possible copper mineralised zones on its margins (blue represent the strongly magnetic core). This is significant in the longer term, because the World Class Golpu porphyry copper deposit in Morobe Province (owned by Newcrest and Harmony) has its high grades in excess of about 1,000m depth.

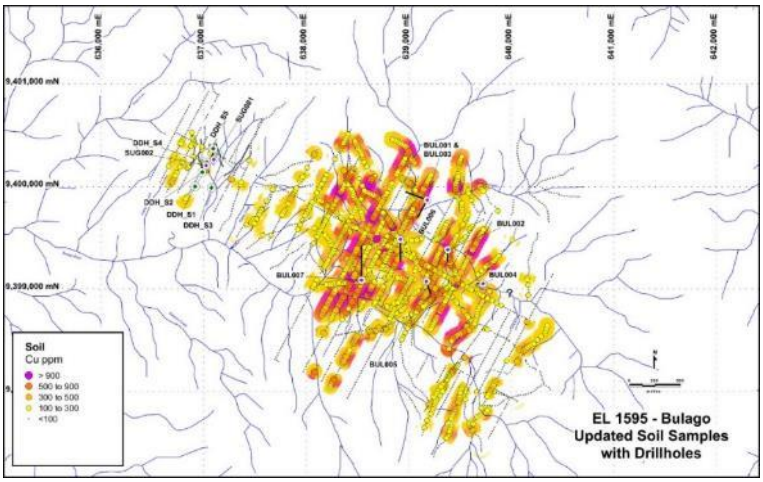
The EL scale image below shows an aeromagnetic RTP VD1 image, drillhole collars and possible skarn locations (magnetic anomalies) at the contact between the limestone and intrusive.

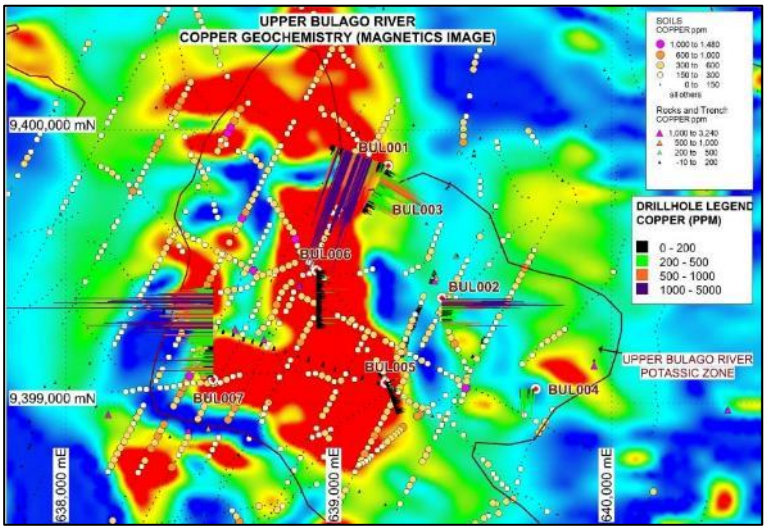
The FNT/OTML JV Bulago Valley drill hole copper intercepts (hole BUL001-007) below have been previously announced but are included for cross reference with the plans.

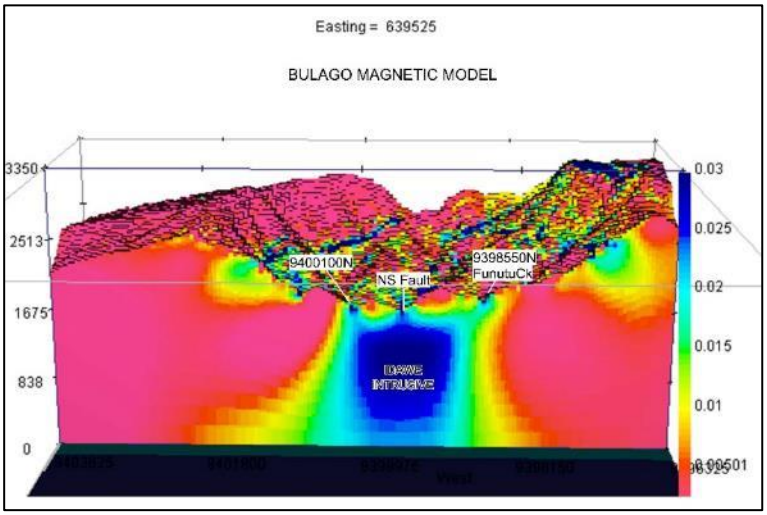
Skarns can be highly significant mineral deposits, often containing large tonnages of relatively higher-grade precious and base metal mineralisation. Mining company OK Tedi is now mining skarns that are associated with its porphyry copper mineralisation and the giant Grasberg Mine (West Papua), was discovered relatively close by (across the valley) more than a decade after its related Ertzberg skarns were mined.

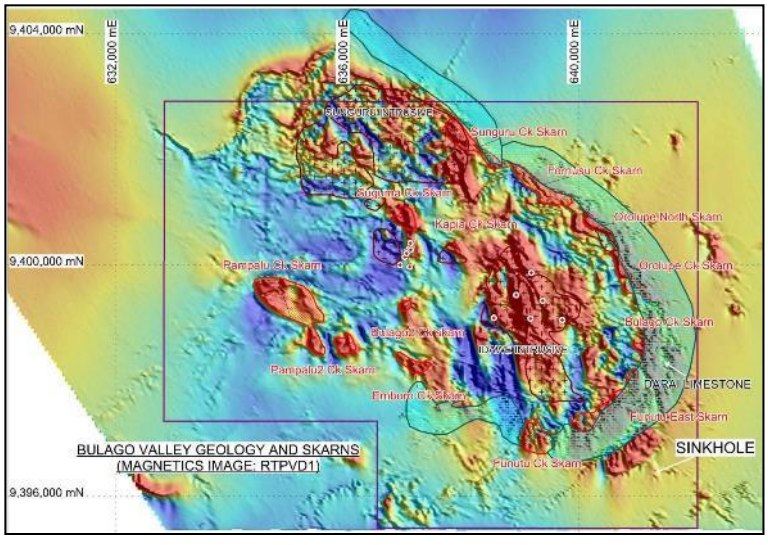
The skarn potential of the Bulago region had never been systematically evaluated, except for the collection of some float and outcrop rock samples and a brief evaluation of the Funutu area by Frontier in 2009 and further evaluation by former Joint Venture Partner OK Tedi Mining Ltd (OTML) (which demonstrated a high percentage of samples collected with between 0.1% and 0.2% copper and up to 0.2 g/t gold). These are significant values for initial reconnaissance.

Ten possible skarn mineralised areas were interpreted by Frontier through the aeromagnetics, proximal to the overlying









limestone contact and spaced relatively consistently all around the Bulago basin. These hypothesised skarns will be evaluated if possible, for copper-gold-zinc mineralisation (the higher prospectivity northern and eastern skarn targets show variable copper and gold in rocks up to the contact, but are difficult to access by foot due to the steep topography).

The EL scale image below shows the aeromagnetic susceptibility, drillhole collars and possible skarn locations.

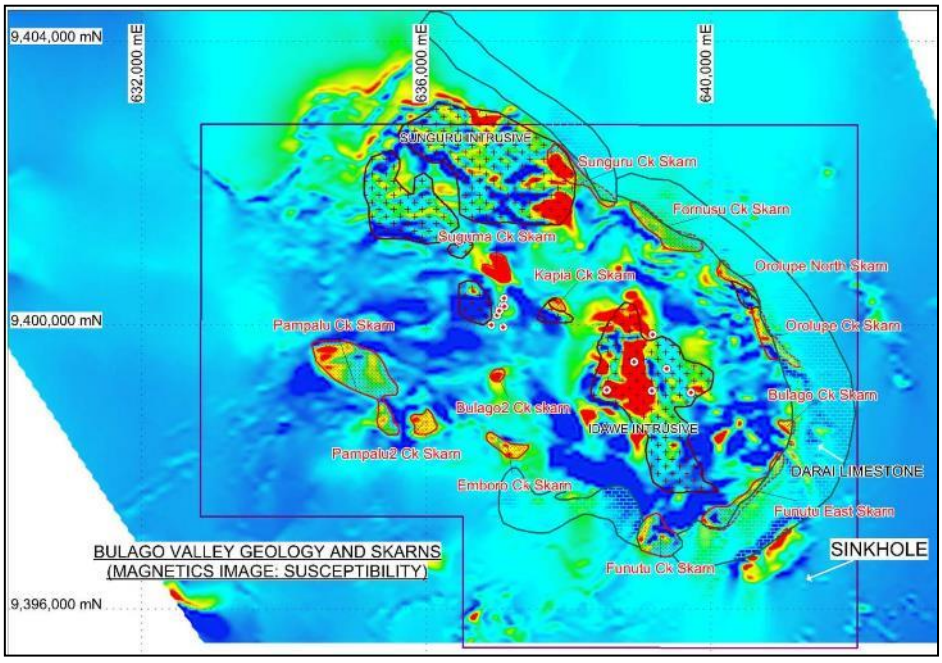
Known skarn mineralisation includes an historic float 'boulder' sample by Kennecott of pyrrhotite (magnetic!) skarn (that was probably sourced from the Funutu Skarn area in the far SE corner of the basin) that assayed 145g/t gold + 11g/t silver + 0.78% copper+ 8.6% zinc + 2.08% arsenic (released to ASX on 21st April 2016, p16).

The Funutu Prospect is located four kilometres to the SE of the Swit Kai Prospect and is defined by extremely consistent and high-grade gold in stream sediment silt and panned concentrate samples, up to 2.09 g/t gold and 180 g/t gold (respectively). There is zinc/ lead/ gold anomalous stream sediment geochemistry at Funutu and a significant lead in stream sediment anomaly (>56ppm) occurs proximal to its west, associated with very strong gold anomalous drainages. Frontier's grid based soil sampling in the central south of the grid (which did not extend quite far enough upslope to the south to cover the Skarn anomalies), have significant zinc/ lead and spotty gold anomalies.

EL 1595 - Significant Bulago Gold and Copper Drill Results

Hole ID		Intercept Length	Gold (g/t)	Copper (ppm)	From (m)	To (m)
BUL001		9.5m	0.32	137	29.5	39.0
plus		224.1m	0.06	**1255**	119.0	343.1
incl		76.1m	0.16	**1510**	267.0	343.1
plus		9.7m	0.21	124	359.5	369.2
plus		**12.7m**	**0.10**	**1061**	**371.8**	**384.5**
plus		2.4m	0.54	550	385.6	388.0
plus		21.0m	0.42	100	407.0	428.0
incl		**3.0m**	**2.04**	101	**422.0**	**425.0**
plus		1.3m	0.10	828	439.0	440.3
BUL002		**63.2m**	**0.10**	**1152**	**27.8**	**91.0**
incl		**0.9m**	**1.32**	585	**86.1**	**87.0**
BUL003		370.5m	0.06	347	19.1	389.6
incl		**75.9m**	0.04	674	63.5	139.4
plus		**5.9m**	**1.71**	92	**367.1**	**373.0**
plus		**2.0m**	**0.50**	178	**379.0**	**381.0**
BUL004		**1.5m**	**1.22**	280	**80.0**	**81.5**
BUL005		363.1m	0.09	95	0.0	363.1
incl		**2.0m**	**1.80**	173	**197.0**	**199.0**
BUL006		**1.5m**	**3.19**	158	**20.5**	**22.0**
plus		**1.6m**	**2.57**	199	**83.9**	**85.5**
BUL007		**346.0m**	**0.11**	**771**	**235.0**	**581.0**
incl		9.1m	0.13	720	62.0	71.1
plus		5.1m	0.22	327	113.9	119.0
plus		**12.0m**	**0.14**	619	**133.0**	**145.0**
plus		8.0m	0.14	320	175.0	183.0
plus		**103.3m**	**0.15**	639	**235.0**	**338.3**
plus		**61.0m**	**0.16**	**1017**	**350.0**	**411.0**
plus		5.3m	0.15	763	432.7	438.0
plus		**37.0m**	0.08	**1160**	**490.0**	**527.0**
plus		**44.2m**	**0.11**	**1352**	**538.8**	**583.0**

NB: BUL007 has very low Ag and As, with Mo increasing downhole.



The 1.5sq km area downslope from the Funutu skarn outcrop and to the west contains the strongest, most consistent and

coherent area of both panned concentrate and stream sediment assays in the entire EL. Many samples have greater than 10g/t gold in panned concentrate and >1.0g/t gold in stream sediments.

The Jabaru Prospect has the highest panned concentrate anomalies in the entire Bulago EL and is contiguous with, and located to the WNW of Funutu. The Funutu-Jabaru area is a highly consistent and strong zone of stream sediment and panned concentrate anomalism over a 3km strike length.

Downslope from the Funutu skarn outcrop, Equatorial gold discovered a 50m wide mineralised zone within intrusive with narrow veins that returned up to 20cm grading 197g/t gold + 363 g/t silver + 0.55% copper + 5.5% lead + 5.7% zinc, also 73.0g/t gold (repeat = 108g/t) + 200g/t silver + 0.38% copper + 2.63% lead + 4.8% zinc and 34.4g/t gold + 120g/t silver + 0.86% lead + 1.71% zinc (released to ASX on 21st April 2016, p17). These assays are similar to the Kennecott boulder but the lack of silver in the later; also, the narrow nature of these outcrop samples indicates the boulder came from elsewhere and probably upslope. Frontier failed to re-locate this particular zone in 2009, but Ok Tedi sampled it and confirmed similar grades.

Frontier in 2009, located highly mineralised skarn outcrop and float in the headwaters of Funutu Creek, just to the south of Funutu Prospect, proving the existence of in-situ skarn mineralisation. The skarn mineralisation consisted of massive sphalerite (zinc) and galena (lead), plus lesser chalcopyrite (copper). Massive magnetite (iron) skarn was also located. A semi massive sulphide outcrop that assayed 0.3m of 2.85 g/t gold + 230 g/t silver + 1.0% copper + 8.29 % zinc + 6.64 % lead (released to ASX on 21st April 2016, p17).

No meaningful exploration has previously been conducted at the Funutu Skarn Prospect; it has never been systematically mapped, outcrop rock or soil sampled, trenched or drilled.

Drainages located to the northwest and north of the Swit Kia Prospect will be evaluated by panned concentrate sampling for gold; inexplicably these major drainages have never been properly sampled but what exists has demonstrated very good gold pan concentrate and stream sediment anomalies to the immediate west of Swit Kia Prospect and the soil sample grid.

Frontier Resources Limited (**Frontier**) is pleased to announce that it is seeking Joint Ventures on mutually acceptable terms for any / all of its Exploration Licences and Applications in Papua New Guinea, to help gain funding for major exploration programs on the properties and reduce our fiscal exposure and risk.

Frontier believes that the Muller EL is an excellent region to discover potentially very large porphyry copper-gold deposits, but it is relatively remote and exploration is relatively expensive. Other companies appear to feel this could be the case also and with more fiscal resources at their disposal, the cost is not such an issue.

Ideally, Frontier would operate the exploration programs on behalf of any Joint Venture, though this is not a requirement. It has been recognised by possible partners that our exploration/operating cost base in PNG is substantially lower than that of any major company due to a number of factors, such as owning /operating our own equipment and more practical OHS policies.

A major gold miner approached Frontier in August to acquire the Muller EL and made an all cash offer for the Muller EL in Mid-September, that the Company tentatively agreed to (subject to Board and Mineral Resource Authority approval). The offer was tentatively accepted because the funds could have been productively utilised for additional exploration and drilling on Frontier's Bulago Project. The terms were subsequently modified and the magnitude of the cash offer was reduced, so Frontier's Board rejected it.

Data review of Frontier's projects was initiated by another major gold miner in mid-November and is ongoing. If they decide they are interested in a project (specifically Muller at this stage) it is likely a field trip will be undertaken in late January or February 2017 prior to any commitment, that would then involve additional due diligence and time. The process is not rapid.

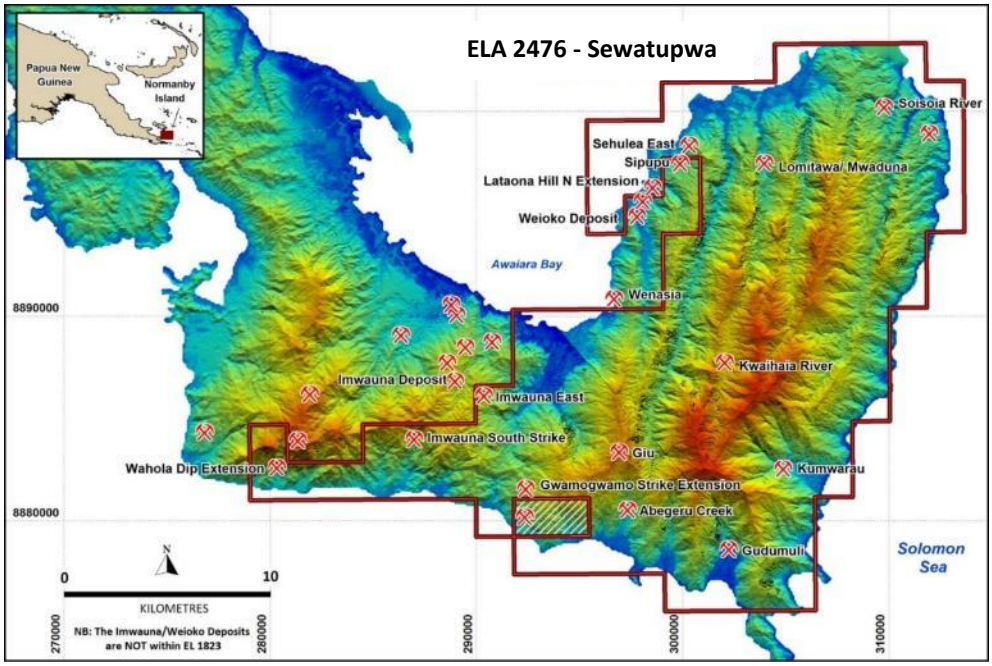
Brief discussions were also held late November /early December with a large Junior, but their attitude was nothing similar to Frontier's and those discussions were rapidly terminated.

Frontier commenced seeking additional expressions of interest and another major company has provided Frontier with a Confidentiality Agreement, so it can potentially commence a data review in 2017, to determine if Muller or any of the projects meet their investment criteria.

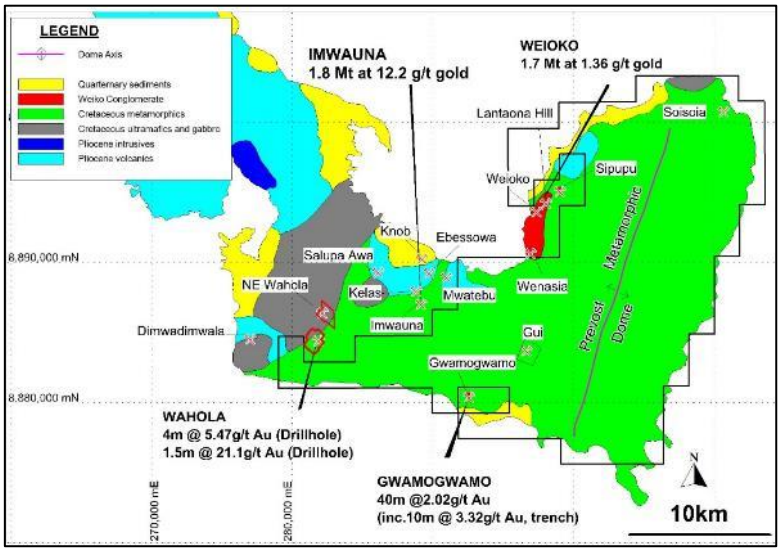
EXPLORATION LICENSE APPLICATION 2476 - SEWATUPWA.

Frontier applied for ELA 2476, covering ~436 sq km of the southern, SE central and eastern sections of Normanby Island, D'Entrecasteaux Island group, Milne Bay Province. The region is relatively underexplored and will provide (if /when granted) a new focus for Frontier, on a much lower exploration cost region with excellent higher grade epithermal gold mineralisation prospectivity. Better access and cost effectiveness enhances ultimate future development potential.

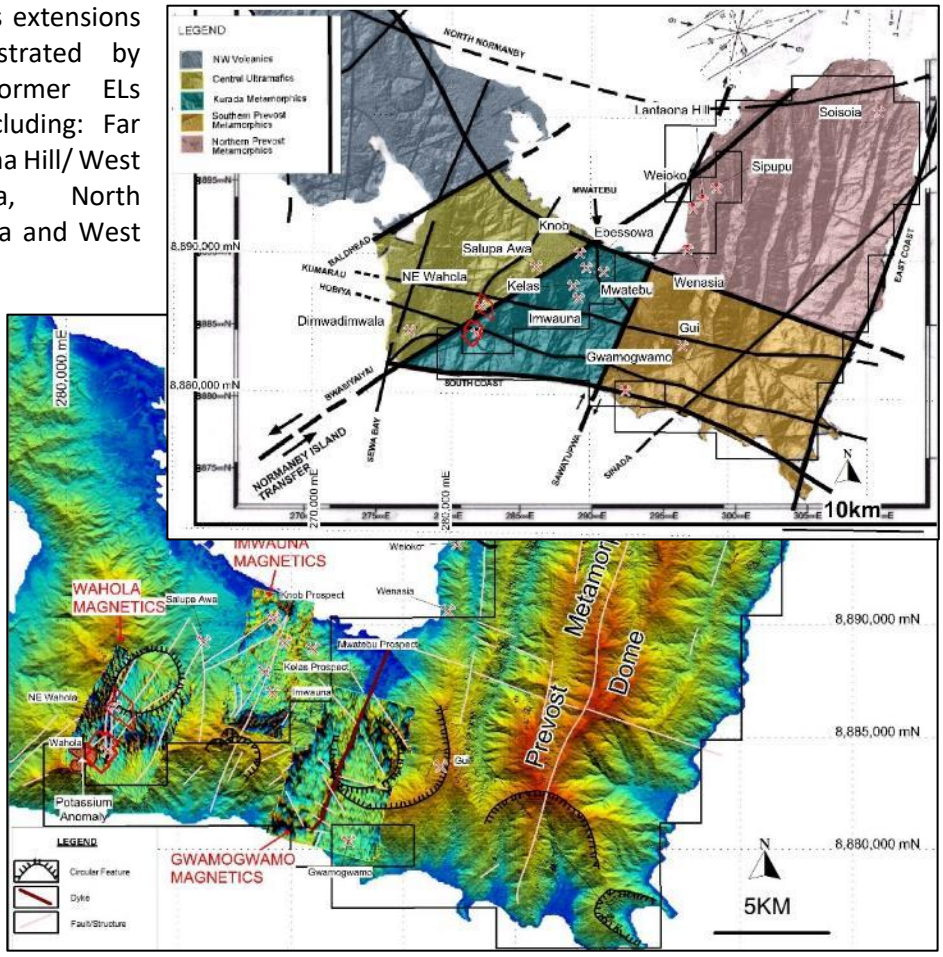
Chairman /Managing Director - Peter McNeil commented: "*I am very familiar with the area, having worked there since 1985 and the data and intellectual property is mine, hence it is proposed that Exploration & Management Consultants Pty Ltd (of which I have an interest) will hold a 10% free carried interest in ELA2476, subject to shareholder approval (or reversion of ELA title).*"



The Sewatupwa River ELA contains a number of geochemically anomalous zones with epithermal style gold mineralisation. There are anomalous gold /arsenic values found in stream sediment samples, pan concentrate samples, rock float samples and soil anomalies at 6 prospect areas including: North Gui /Gui, Sewatupwa, North Gwamo, North Sipupu, Lomitawa/ Mwaduna, Kwaiahia River and 3 reconnaissance districts including: Soisoia/ Kwanaula, Abegeru/ Gudumuli and Kumwarau rivers.



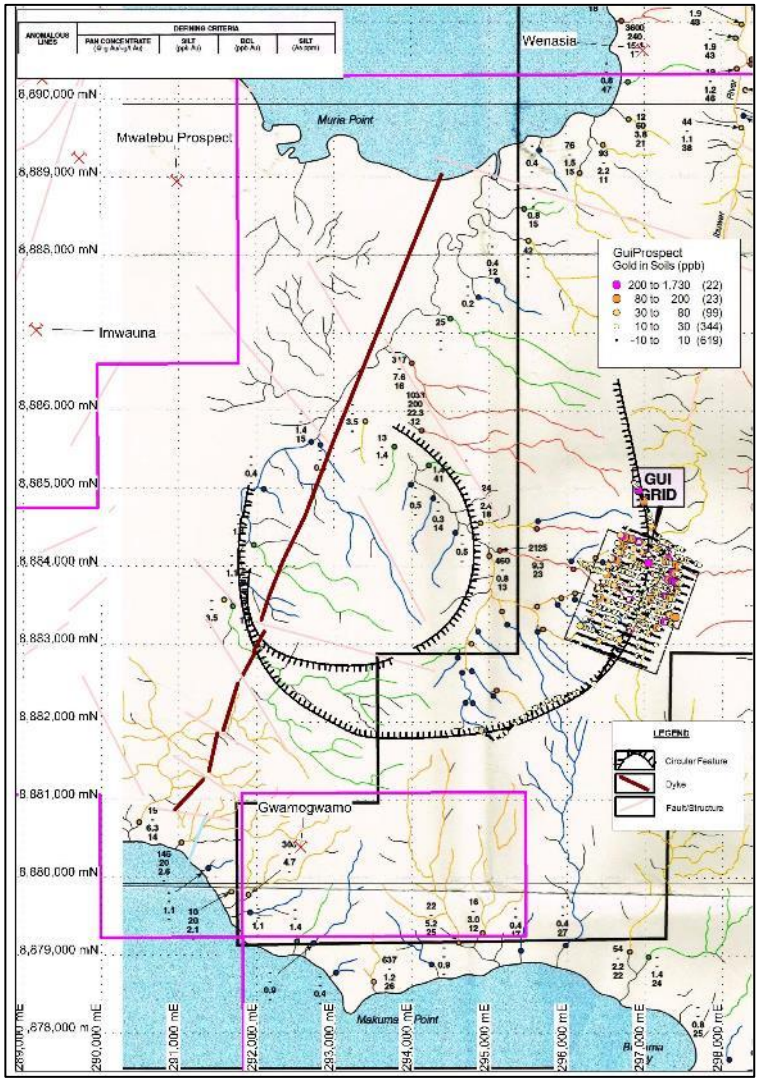
The application also contains extensions to mineralisation (demonstrated by previous explorers on former ELs 1069/1091) at 6 zones including: Far South Imwauna, North Lataona Hill/ West Sipupu, East Imwauna, North Gwamogwamo, West Wahola and West Weioko.



Details relating to these areas are described below including general information about prospects and mineralisation in adjoining, but excluded areas from the ELA, <u>to give context to results within the ELA</u> and their extensions. It is hoped to obtain the excluded main Gwamogwamo area, but this cannot be assured.

Esso began systematic gold exploration in 1982 (PA 469 covered the entire D'Entrecasteaux Island group) and conducted a reconnaissance program over PA555 in late 1986. I visited what became the Weioko Deposit during that program. Stream sediment and float sampling detected eight gold prospects.

The Imwauna high grade epithermal gold deposit is discussed herein as it is the main regional target type; it is located in former EL 1091 and is not located in ELA 2476, but is within 650m of it across strike at the closest point). Imwauna was discovered by Inco following up an Esso Pan Concentrate stream anomaly. An Inferred Mineral Resource was estimated to be 1.8 million tonnes at 12.1 g/t gold + 20 g/t silver (for the contained metal of 706,000 oz. gold and 1,160,000oz. silver, by New Guinea Gold Corporation in June 2008, documented by a NI43-101 report /compliant with the JORC Code).



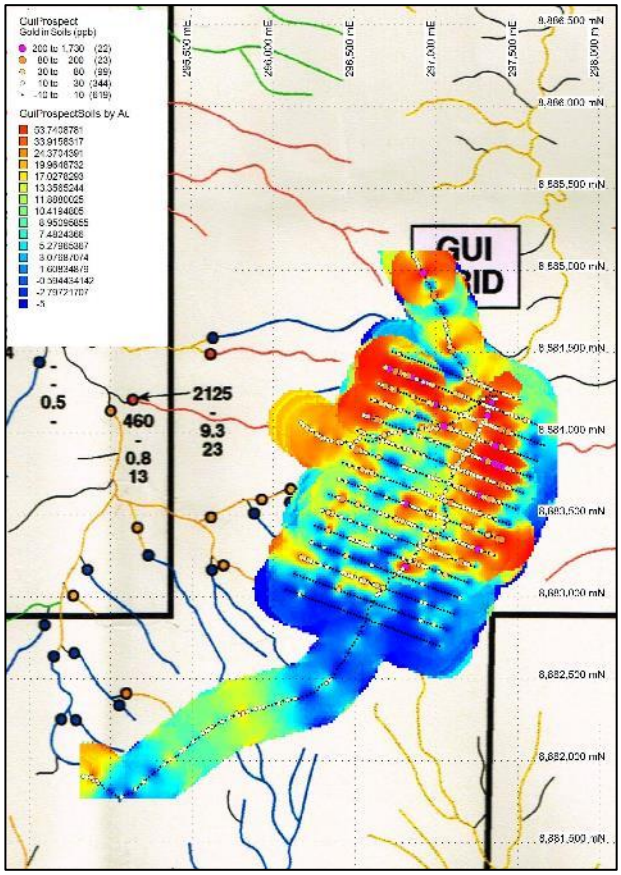
The Weioko epithermal gold Deposit is located in former EL1069/PA555. It is not located ELA 2476. ELA 2476 comes within about 340m across strike at the closest point. A JORC compliant Inferred Mineral Resource estimate was completed in June 2003 by New Guinea Gold Corporation of 1.7 million tonnes at 1.36 g/t gold plus 12.3 g/t silver.

Gui

A number of streams in North Gui area are strongly gold anomalous. Ridge /spur soil sampling shows the gold anomalism extends northwards from the Gui Prospect. This area has not been evaluated. Assays of pan concentrates highlighted a gold - anomalous area along the ridge to the north of Gui with a peak assay of 470 micrograms gold in follow up.

The Gui Prospect itself has anomalous gold assays from 530m of hand trenching including: 10m of 5.06 g/t gold, 5m of 5.29 g/t gold, 10m of 1.0 g/t gold, 6m of 2.30 g/t gold, 5m of 1.17 g/t gold, 5.5m of 1.31 g/t gold, 10m of 0.64 g/t gold, 5m of 0.86 g/t gold, 5m of 0.69 g/t gold,14.5m of 0.64 g/t gold, 75m of 0.99g/t gold and 6m at 1.75g/t gold.

A bulldozer track was later cut from Gwamogwamo to the Gui Prospect and a five hole RC drilling program (321m) was completed in an 800m long zone of coincident gold and arsenic in soils. Epithermal quartz veining was reported in the drill holes with a frequency that suggests a zone of stockworking, but the holes failed to intersect significant mineralisation and only one interval assayed greater than 0.1g/t gold (18 - 20m in GU001 = 0.51g/t gold).



Sipupu North

Vein prospecting was undertaken (plus rock chip (float and outcrop) and stream sediment (silts, pan concentrates, and BLEG's) sampling was completed. Significant epithermal veins were exposed in two creeks 300 metres apart. They were examined and systematically sampled in May 1997. Channel samples taken across the vein gave assays from 0.29 g/t to 4.88 g/t gold (over 1.6m). Float samples returned values up to 8.96 g/t gold.

The vein outcrops exposed were summised to be of the same vein, which ranged from 0.70m to about 3.50m. Sulphides are present in one vein in Kagapuratala Creek and they have an E-W strike radial to an inferred volcanic centre in Sipupu Bay. Host/wallrock to veining is a contorted psammitic quartz-muscovite schist.

The mapping and stream sediment sampling programme in the area requires completion and other historic anomalous rock chip samples require follow up geological work to determine their source and significance.

Aeromagnetic, radiometric and structural targets located in a 22km^2 drainage zone of generally coincident copper, Zn, Ag and Mn in silts with local gold anomalism and aeromagnetic responses (most of this area is in ELA 2476). A molybdenum in silt anomaly also occurs in the northern central part of the anomalous "Sewatupwa" drainages. The drainage geochemical anomaly also extends to the west of the excluded Gwamogwamo block. The bulk of this region has not been explored and its prospectivity is considered to be very good.

Gwamogwamo

Gwamogwamo Prospect at the south end of the "Sewatupwa" Zone and is a large copper- gold -silver system centred on gossans representing stacked lenses in chloritic greenschist rocks. It is apparent a large hydrothermal system has been active in the region. The trenching and drilling results show that economic intersections of both gold and/or copper are achievable.

The prospect straddles the boundary between former ELs and is an omitted block in ELA 2476 at this stage. It is hoped to ultimately include it in the ELA area when /if granted, so it is discussed herein to give context to the North Gwamo anomalies discussed herein.

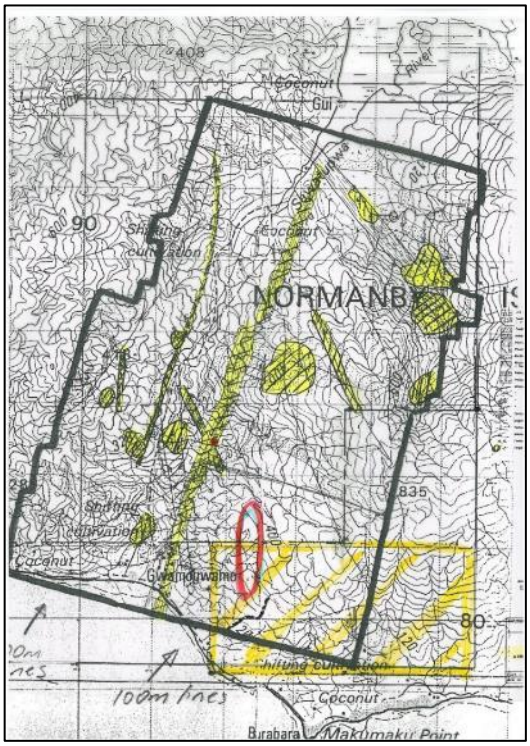
Two gossanous float samples on the beach at Gwamogwamo (within ELA 2476) had anomalous gold, silver and copper assays. The prospect consists of 3 large, sub-linear, coincident, basemetal plus gold in soil anomalies, over a + 2000m total strike length northwards into ELA 2476.

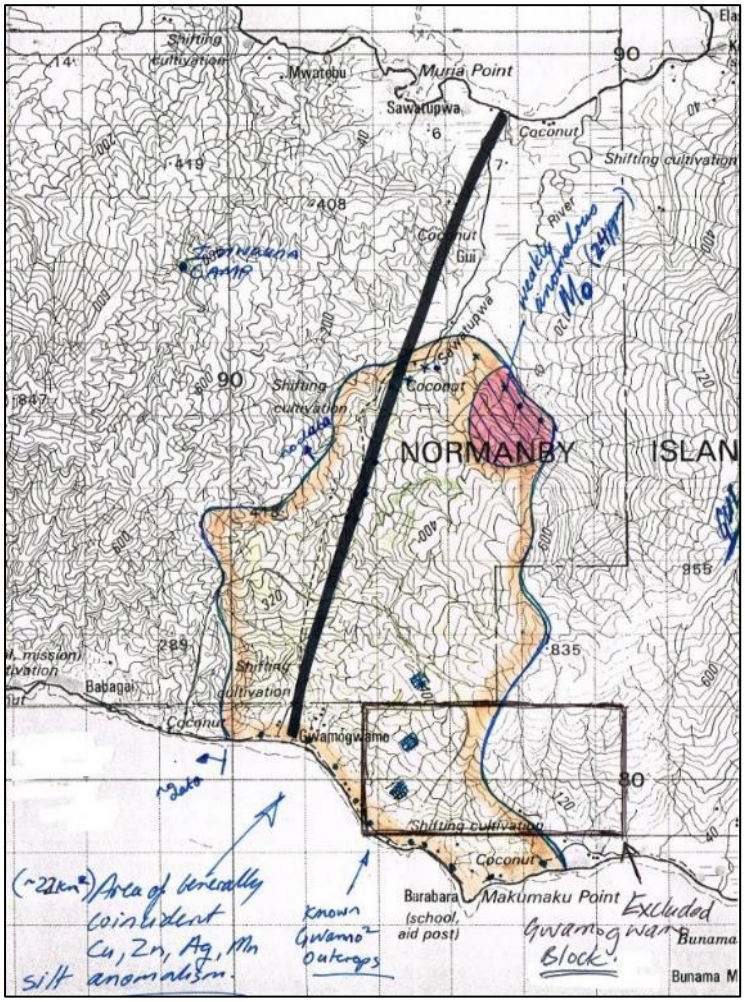
Hand-dug trenches were completed in ELA 2476 and assayed 25m of 0.342% copper plus 10m of 0.108% copper, 5m of 0.242% copper, 5m of 0.131% copper, 10m of 0.210% copper and 5m of 0.131% copper and 155m of 0.60g/t gold, with 0.48% copper and 8g/t Ag.

Bulldozer trench T3A tested the areas within the surface soil anomaly and these results need to be located.

Drilling was undertaken in two episodes with a 9-hole (377m) RC drilling program in 1996, then a 7-hole (303m) program in 1997 to total 16 RC holes for 680m.

The first hole (GRC001 -50m) was drilled at the northern end of the known soil anomalous zone in former EL 1091 and within ELA 2376. The hole did not intersect economic quantities of gold or copper (1-2m had 0.13 g/t gold, in mica-chlorite-quartz-pyrite schist), however, the observed strong to intense chlorite alteration was interpreted as an indicator of an extensive hydrothermal system.





1995 GWAMOGWAMO RECONNAISSANCE ROCK CHIP ASSAY HIGHLIGHTS

Sample Number	Assays		
	Au (g/t)	Ag (ppm)	Cu (%)
44040	2.29	35.5	0.868
44043	4.06	21.9	0.278
44074	0.571	<0.5	0.330
44076	1.019	5.6	0.166
44099	0.07	3	1.13
44107	0.11	6	0.78
44110	0.53	ND	ND

Other results were encouraging around the main gossan (9400 to 9500m N in the excluded block) with holes returning up to 7m of massive sulphide, often with disseminated or veinlet controlled sulphides for several metres on either side.

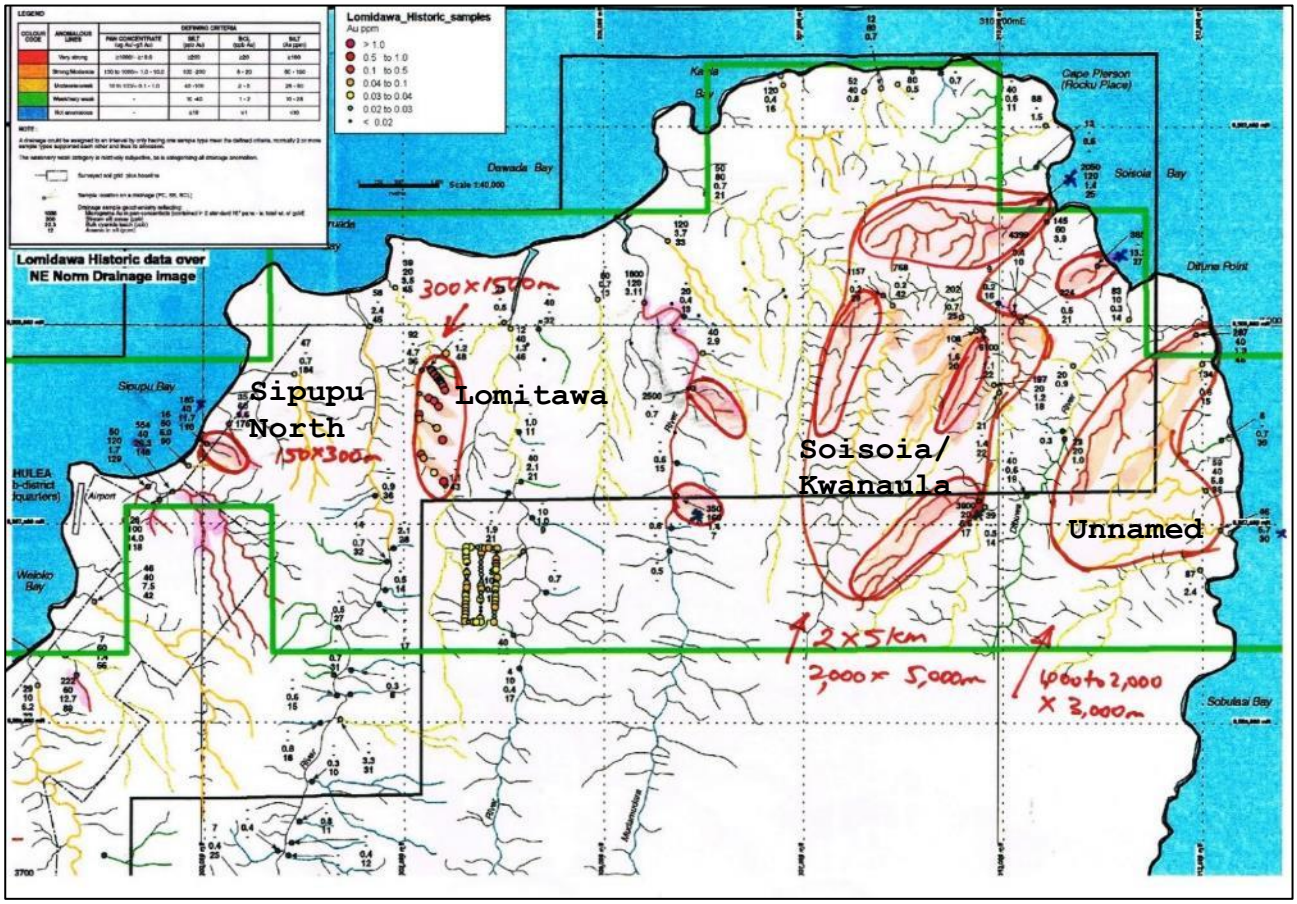
The favourable, pyritic horizon which hosts the massive sulphides appears to be of widespread occurrence. Several sub-parallel NNE trending structural zones and radiometric geophysical anomalies require follow-up sampling. Thus, there is still very good potential to locate a significant zone of massive sulphide mineralisation.

Lomitawa

Initial reconnaissance stream sediment sampling and limited ridge and spur soil sampling yielded pan concentrate gold up to 1.24 g/t gold, float up to 7.12 g/t gold with 86 g/t Ag and weakly anomalous soils (peak of 0.14 g/t gold) in a zone that averaged 0.100 g/t gold over 100m.

Regional reconnaissance comprised stream and ridge geological traverses, rock chip sampling (83 samples), stream sediment sampling (24 silt samples and 25 pan concentrates) and soil sampling (79 samples).

The quartz veins in the Lomitawa area contained up to 5.33 g/t gold but were only tens of cms thick and were separated by over 10 metres from each other. They require follow up exploration. There are potentially significant tonnages of sulphidic banded metamorphics that have assayed up to 0.77 g/t gold (but most samples have returned less than 0.3 g/t gold).



Lataona Hill

The Lataona Hill Prospect is located between the Weioko and Sipupu areas. It was delineated by the regional grid-based soil sampling with a defined area of 200m x >900m (>0.08 g/t gold and/or >300 ppm arsenic), with assays to 0.29 g/t gold and 1,560 ppm arsenic. Most of this soil anomaly is not located within ELA 2476, however, the most important section (Lataona Hill itself) is. The plan below shows IP chargeability and the former explorers comments. The boundary between ELA2476 and former EL 1069 is midway between the former explorers holes (just the northern hole was drilled).

The Prospect has good potential to host a bulk tonnage epithermal deposit, consisting of altered flat-lying beach sands and conglomerates that overlie highly altered Prevost Metamorphics. The beach deposits appear to be recent and younger than the Weioko Conglomerates. They have been moderately silicified with occasional limonitic stockworking and local brecciation. Pockets of highly silicified breccia have been located in large fractures.

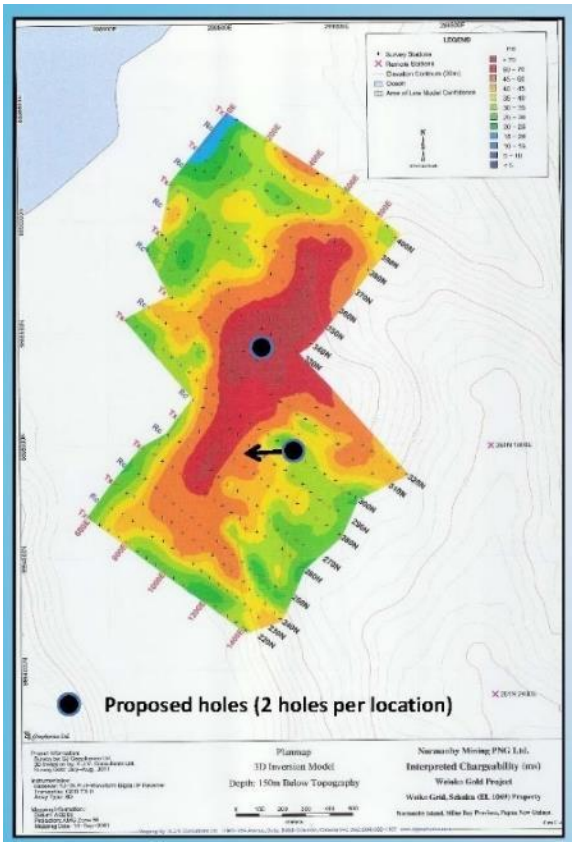
The metamorphics exposed are extensively clay altered which, together with abundant limonite veining, suggests an original high sulphide content. Structurally, the Lataona Hill area appears to have been subjected to north-south trending normal faulting, which appears to have block faulted the area and probably controlled the alteration and mineralisation.

Rock chip assays up to 3.15g/t gold have been returned from silicified, limonitic, stockworked and brecciated conglomerates that are very similar to those observed at Weioko. The underlying metamorphics have extensive hydrothermal clay alteration with limonite veining, suggesting an originally high sulphide content.

Grid-based soil sampling of the area defined a strongly anomalous arsenic/gold zone over a 900 x 250m area. The gold in soil values are over 0.08 g/t and the arsenic greater than 300 ppm. The highest assays were 0.29 g/t gold and 1,560 ppm arsenic. Bulldozer trenching around Lataona Hill and within the ELA enabled some channel sampling to be completed and the best results were: 92m at 0.36 g/t gold (with 3.4 g/t Ag + 700 ppm arsenic), 40m at 0.24 g/t gold (with 1.4 g/t Ag + 1,000 ppm arsenic) and 112m at 0.17 g/t gold (with <1.0 g/t Ag + 900 ppm arsenic). These intercepts were contained within an almost continuous (>0.1g/t gold) 'trench' and interval that ran 324m of 0.21 g/t gold.

Two RC drill holes were completed in 1997, prior to the completion of the IP and CSAMT surveys, to test extensive gold- and arsenic-in-soil anomalies coincident with widespread clay alteration. Wide zones of alteration with sulphide veining were encountered in these holes, but assay results were generally weakly anomalous. The best intercept was 2m grading 5.4 g/t gold and 9 g/t Ag in LAH002 which was located about on the boundary of the ELA drilling north (so the drill intercept is within ELA 2376). An additional hole was drilled within the ELA (and outside their own) by the last explorers but these results have not been located yet. The ELA E-W boundary cuts through the anomaly on the chargeability plan.

- 1.2 km long chargeability anomaly overlying v. strong resistivity response trending N-S along Lataona Hill
- Strongest chargeability occurs 150m below surface
- Anomalies appear to dip gently west, similar to Weioko geology
- Associated arsenic soil anomalies



Kwaiahia River prospect is based on the conceptual structural Jog Target base as observed from the N-S alignment of Kwaiahia River. These tensional structures are interpreted to host possible higher-grade epithermal gold mineralization. The exploration work conducted over the target area included 4 soil lines across the interpreted northeast trending tensional features and creek geological mapping. The epithermal-related floats consist of up to 5% of the main river float lithologies, which is a large relative percentage.

Soisoia River/ Kwanaula

The Soisoia area consists almost entirely of moderate to very strong drainage gold geochemical anomalism covering an area of at least 15 sq.km and located 7 to 13km ENE of the Sub-District Headquarters. The maximum pan concentrate assay returned was 27.2 g/t gold and it contained 6,100 micrograms of gold (in 2 standard 16" pans). This amount of contained gold is approximately 3 times the average of the 'strongly' anomalous pan concentrates. The area has been prospected for alluvial gold.

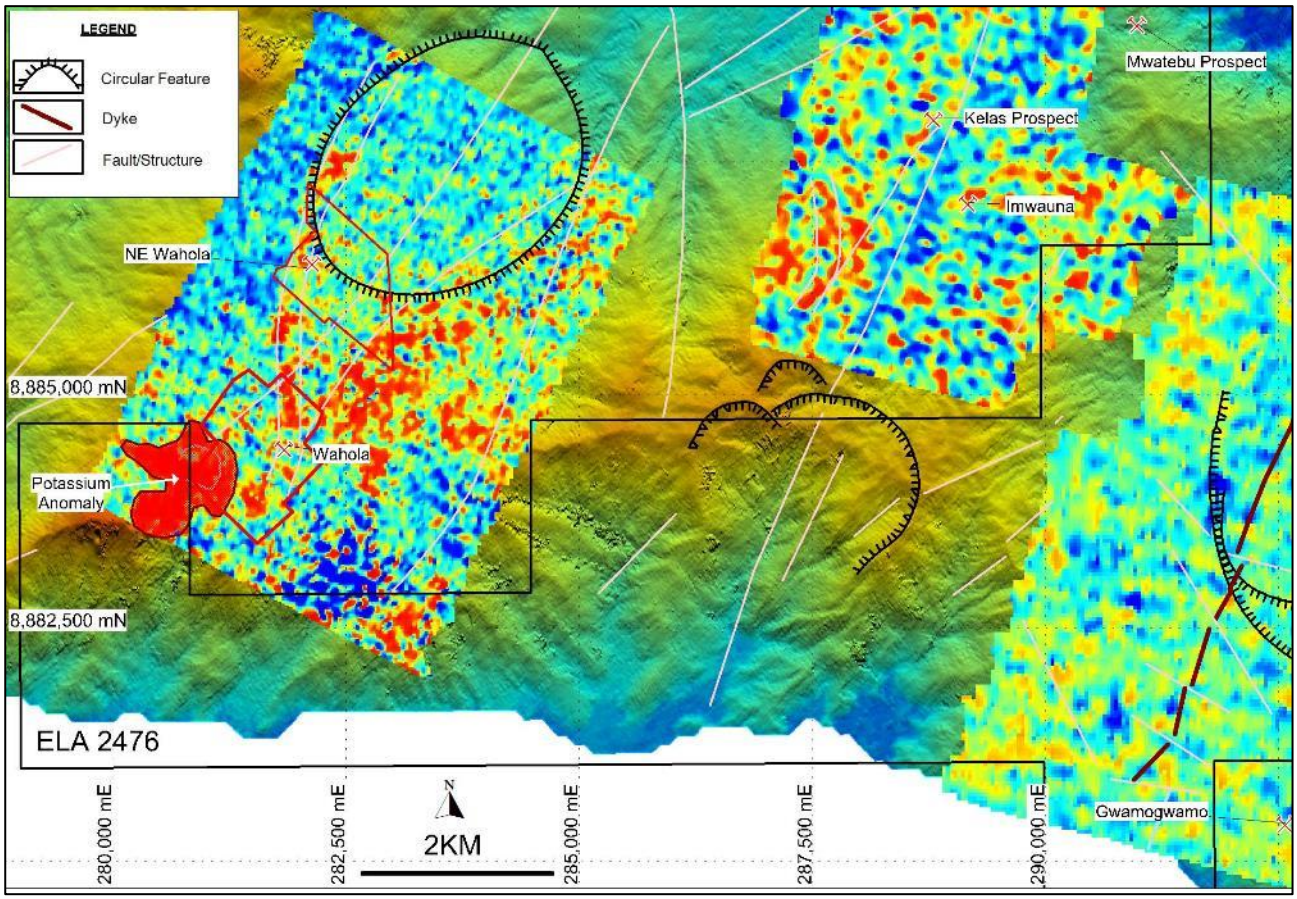
A total of only 12 rock-chip float samples (no outcrop) have been collected and the peak result was 0.311 g/t gold. No trenching or drilling has been undertaken. Thorough drainage sampling and reconnaissance mapping is required to assess the areas potential for large lower grade bulk tonnage disseminated / stockwork &/or high grade vein deposits. The bulk of the area is located in the Prevost Metamorphics. Some areas of weaker anomalism located on the north coast could be in ultramafics.

West Wahola

The West Wahola Prospect is located immediately east of the NNE trending, trans-island Bwasiaiai Fault and occurs within the interpreted Wahola thrust that has sinistrally offset the Bwasiyaiyai structure, creating an area of dilation which is favourable for hydrothermal fluids and mineral deposition. The thrust is interpreted as being up to 200m wide and is defined by a lineament of low magnetic signatures and high potassium radioelements. An increase in the radiometrics total count appears to be associated with the inferred position of the major fault zones and possible potassic alteration.

West Wahola has half of the 'Wahola' Prospect first order potassium radiometric anomaly in a 1 sub-block (1.6km across) 'block' apophysis located at the far west end of the ELA. It is located down thrust /dip and also and along NE regional strike, from a significant zone of gold mineralisation at the Wahola Prospect /grid (that not in ELA 2476, as seen on the plan below).

The Wahola Prospect (located proximal and to the NE, but not in ELA 2476) is discussed below. Wahola was discovered by Inco during regional stream reconnaissance follow up surveys, plus ridge and spur soil sampling between anomalous drainages. In 1989 soil and rock chip sampling defined linear and curvilinear gold and arsenic anomalies on an exploration grid. Shallow drilling intersected discontinuous zones of gold mineralisation associated with fault zones and geophysical anomalies (I was consultant geologist onsite for two weeks of the first drilling program).



The Wahola region is underlain by a low-angle fault that dips approx. 45° to the west and Inco modelled it as a normal or detachment fault. A number of steeper structures, interpreted as high-angle splays from the fault, are present in the upper plate. Considerable importance was assigned to these structures during Inco's exploration, modelled as localising "leakage" of fluids from the low angle fault during late brittle reactivation of these structures.

Basement rocks at Wahola consist of Kurada Metamorphics and ophiolitic ultramafics, separated by the westerly fault, that is overlain by a sequence of trachytes and volcanic breccias. Felsic (dacitic) stocks and dykes have been emplaced into the older lithologies.

Petrographic analysis of alteration to the Wahola lithologies indicated that the prospect may exhibit some characteristics typical of porphyry copper-gold deposits. Pervasive hydrothermal alteration consists of weak potassic and strong propylitic (epidote-chlorite-carbonate-quartz) zones overprinted by fracture-controlled quartz-carbonate veins.

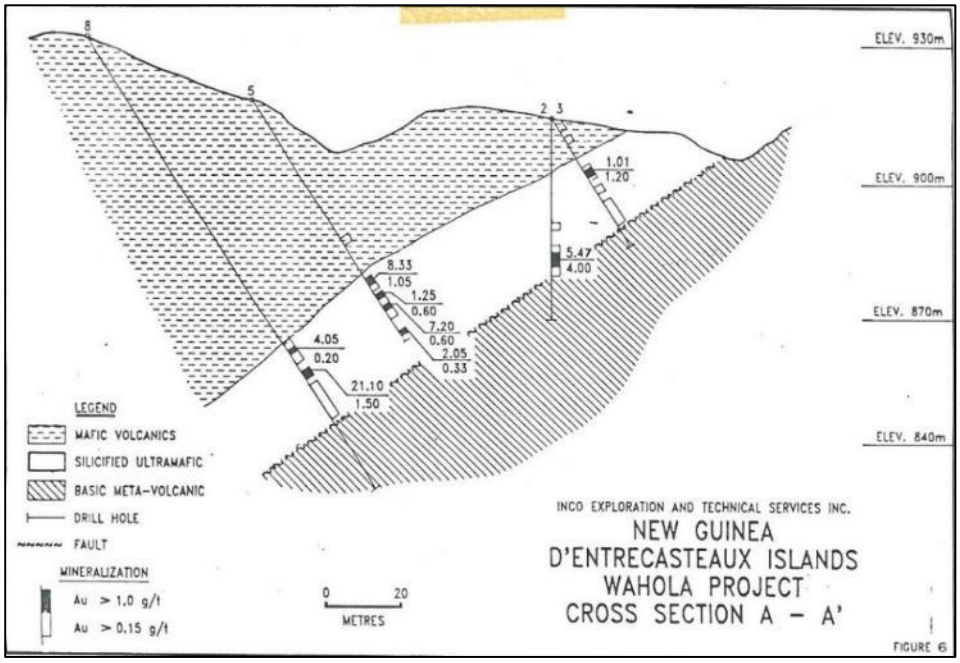
The question debated has been which way might a porphyry copper -gold deposit centre be located (and at what depth?). The cross section shows a systematic trend down the trust/dip and topographic slope to the SW into ELA2476 and the Bwasiyaiyai structural zone, so it is a possibility that it could be located in ELA 2476 associated with the intense potassium anomaly.

After initial stream sediment sampling (max. 3.03 g/t gold) and follow-up ridge and spur soil sampling (up to 0.308 g/t gold) between anomalous streams, grid-based soil sampling indicated strong linear and curvilinear gold and arsenic anomalies up to several hundred metres in length and to 200 m width. Rock float along soil lines recorded up to 16.90 g/t gold.

IP/Resistivity indicated three anomalous zones: (1) strongest in the east near the low angle fault, (2) in the western portion near a high angle fault, and (3) in NW, thought to relate to underlying ultramafics. Inco magnetics / radiometrics indicated three main features: (1) magnetic highs corresponding to lenses of serpentinite in the low angle fault zone, (2) a major structural break corresponding to N-S high angle fault in the western sector, and (3) a general N-S trend to magnetic data.

In the eastern portion of the grid, epithermal-style mineralisation (silicification, carbonate alteration) has been identified at immediately above a structure which separates the volcanic package from underlying mafic metavolcanics and meta-intrusive basement.

Hand trenching across normal faults returned initial assays up to 8 g/t gold (over 5 m) and indicated significant anomalies associated near both the low angle fault (SE portion of grid) and along main N-S high angle fault (west-central portion of grid).



Shallow drilling was designed to test the mineralisation associated with structures /geophysical anomalies and intersected erratic grades including 21 g/t gold over 1.5m (from 87.5m downhole) and 5.47 g/t gold over 4m (from 29m) in zones within 10m of structure. Vein/ stockwork mineralization is present in hole WSD-5 at 45.45-46.50m. This interval returned 1.05m grading 8.34 g/t gold with quartz-chlorite-carbonate veinlets and coarse pyrite / arsenopyrite.

Inco concluded that the mineralisation relating to the fault structures was epithermal in character and associated with felsic intrusions which intruded brittle structures during crustal extension (i.e. *that the mineralisation was associated with the emplacement of magmas generating the Normanby Volcanics*).

The interpretation by Inco was that the gold mineralisation was sub-economic, as zones of high-grade mineralisation associated with the faults were discontinuous and narrow. While acknowledging the potential, Inco did not test for porphyry-style mineralisation

The intrusives are uniform both texturally and in terms of geochemically signature. Alkali ratios and incompatible elements dacitic in composition, are consistent with high- K to shoshonitic calc-alkaline affinities typical of the late development of island arc, subduction- related sequences. The target is a region of enhanced structural complexity that has localised gold and copper bearing fluids.

Note: This is only an Exploration License Application at this stage and must have a Wardens Court Hearing with landowners, then be vetted by the Mining Advisory Council who makes a recommendation to the Minister. The Company will seek to expedite the process as possible so we can commence work as soon as/if granted by the Minister. It will also require shareholder approval.

A comprehensive Summary Report will be posted on the Frontier website on Friday 4th November 2016.

EXPLORATION LICENSE APPLICATION 2477 – LAKE LAVU

Frontier applied for an Exploration Licence covering ~839 sq km of the sections of Fergusson, Goodenough and Sanaroa Islands, D'Entrecasteaux Island group, Milne Bay.

The D'Entrecasteaux Islands are a relatively underexplored region and will provide (if /when granted) a new focus for Frontier, on a much lower exploration cost region with excellent higher grade epithermal gold mineralisation prospectivity. Better access and cost effectiveness enhances ultimate future development potential. It is intended to reduce the area ASAP by 50% into 3 non-contiguous blocks (as required at the end of year 2). Expenditure committed is K60,000 (~27,000) PA for the first 2-year term.

Executive Chairman Peter McNeil commented, "*I am very familiar with the area, having worked there since 1985 and the data and intellectual property is mine, hence it is proposed that Exploration & Management Consultants Pty Ltd (of which I have an interest) will hold a 10% free carried interest in ELA2476, subject to shareholder approval (or reversion of ELA title).*"

ELA 2477 contains a large number of individual areas that are prospective for epithermal gold mineralisation. Frontier's aim is to discover a high-grade and/or high tonnage type epithermal gold deposit. Local epithermal deposits include the historic Misima and Wapolu Mines, the Woodlark Gold Reserve and the Imwauna, Gameta and Sehulea Deposits, that demonstrate the region has excellent gold mineralisation potential.

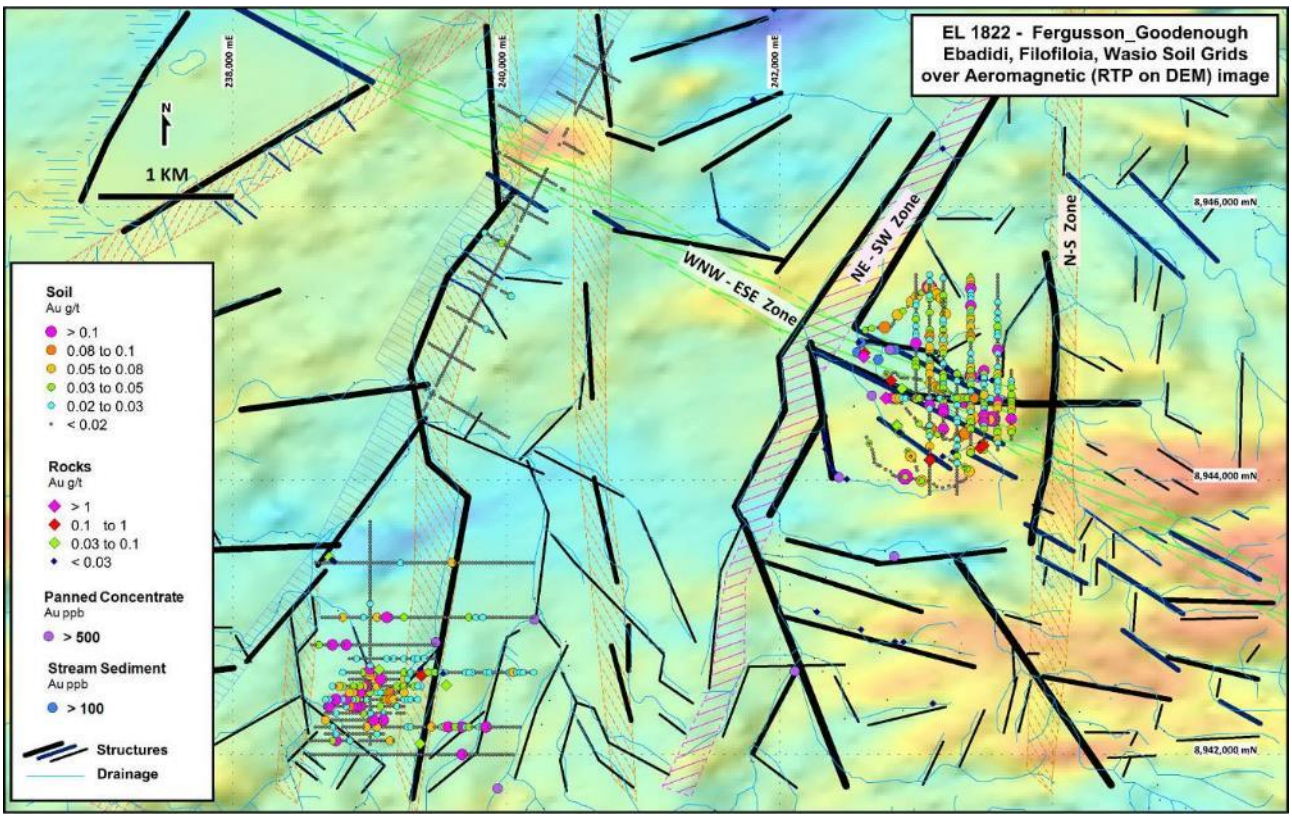
Six main project areas, 18 named prospect areas and other stream sediment anomalies were identified, being:

1. Wasio Project (Wasio, Filofiloia, Ebadidi and Daigu Prospects - central Fergusson Island)
2. Bolubolu Project (Yaheyahe =Bolubolu North, Motouya and Bolubolu South Prospects - Goodenough Island)
3. Sanaroa Project (Yaboa Hill - Sanaroa Island)
4. Bwaiya Project (Bwaiya, Boselewa, S Boselewa and Wiyoumaga - north central Fergusson Island)
5. Kukuia Project (Maygidi and Iaupolu - SW Fergusson Island)
6. Guayasi, Kalokalo and Kwailoi (NW -central Fergusson Island)
7. Muneia Uranium (North central coastal Fergusson Island)

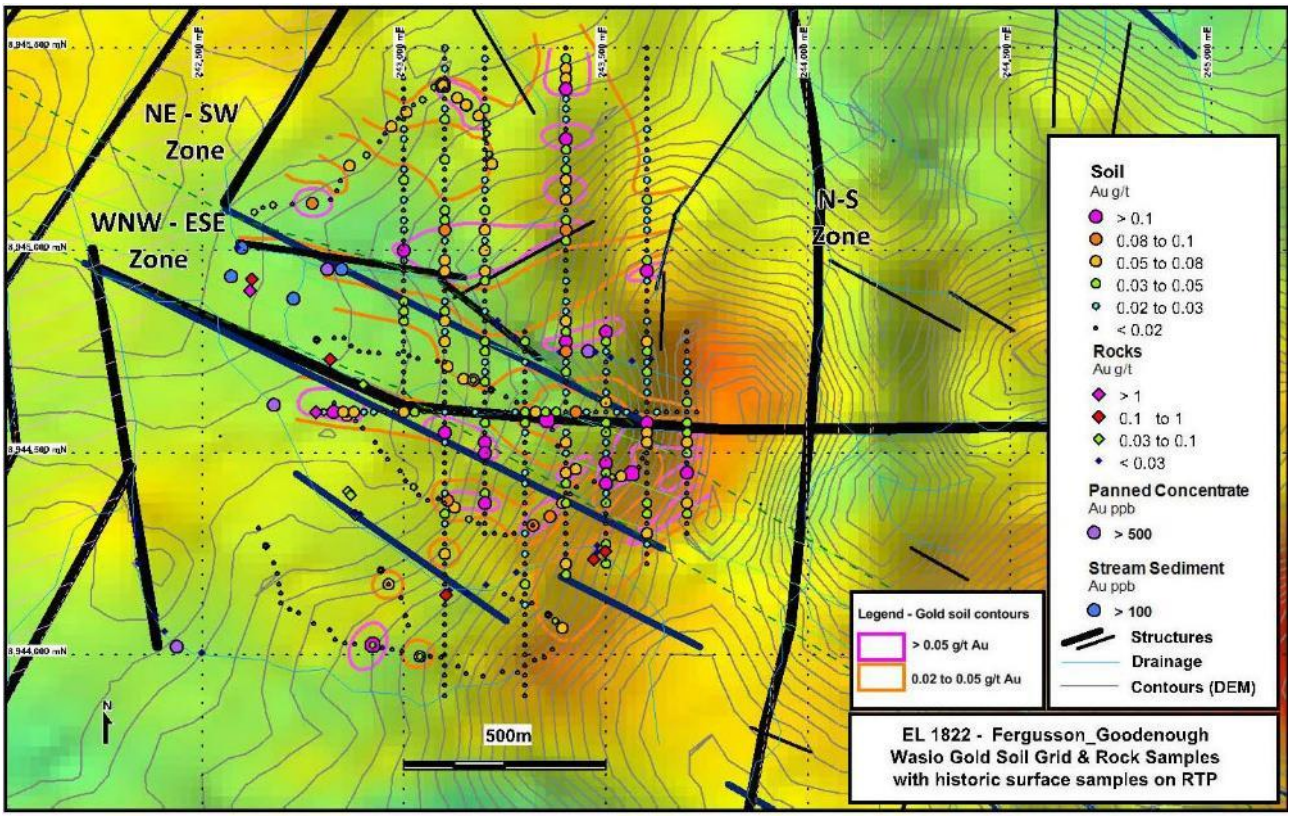
Wasio Prospect

Wasio was identified by anomalous pan concentrate and silt fraction gold assays, including a maximum of 44.5 g/t gold pan concentrate (+0.270 g/t Gold silt) and 12.0 g/t gold pan concentrate (+1.28 g/t gold silt). Anomalous gold and arsenic in -#80 stream sediments is suggestive of epithermal vein mineralisation.

Anomalous gold in Ridge and Spur soil samples occur over a 1.5 km^2 area and 15.6 g/t gold, 10 g/t gold and 0.88 g/t gold rock samples were collected from a quartz vein over 120m interval in a creek.



Grid based soil sampling subsequently demonstrated 3 major, structurally discrete zones with multiple higher grade internal gold sectors. The total anomalous area (>0.02 g/t gold) is about one and a half square kilometres (1.5 km^2) and it is open to the east over an eight hundred metre (800m) interval.



The soil grid and gold anomalies are located at/south of the nexus of three (3) major crustal level structures (trending NE-SW, N-S and WNW-ESE), that produce a triangular zone about 1,500 metres per side. The soil anomaly envelope has a WNW-SSE axis that is about 1,200 metres long and is between 1,000 metres wide at the NW end and 700m wide at the SE end. The higher grade internal zones however, have been interpreted to trend E-W to ENE.

Filofiloia

The Filofiloia prospect lies within the NE corridor of the Kukuia – Lavu fault system, with recorded alluvial gold workings in the prospect area. A soil grid was established over an area of 3.2km^2 and it demonstrated one major and 10 'satellite' gold anomalies from epithermal mineralisation associated with a granitic intrusion. The gold in soil anomaly is about 500 meters long and 200 meters wide with a peak grade of 0.52 g/t gold.

Minor magnetite skarn floats where observed within the creek and this could reflect skarn mineralisation elsewhere in the district. The Filofiloia Creek has possible hot springs and sinters located within the vicinity. Acid sulphate alteration is clearly visible within the strong argillised zones. Gold can also be precipitated within structures formed by the mixing of rising volatiles and oxygenated circulating surficial waters.

Ebadidi

The Ebadidi soil grid demonstrated ten weakly anomalous and disjointed gold in soil samples on 300 meter spaced lines, over a +2km strike length. The reconnaissance grid was designed to evaluate both the strong RTP aeromagnetic anomaly at the northern end of the grid and the length of a geophysical and structural anomaly on southern margin of the Kukuia - Lavu Rift Zone.

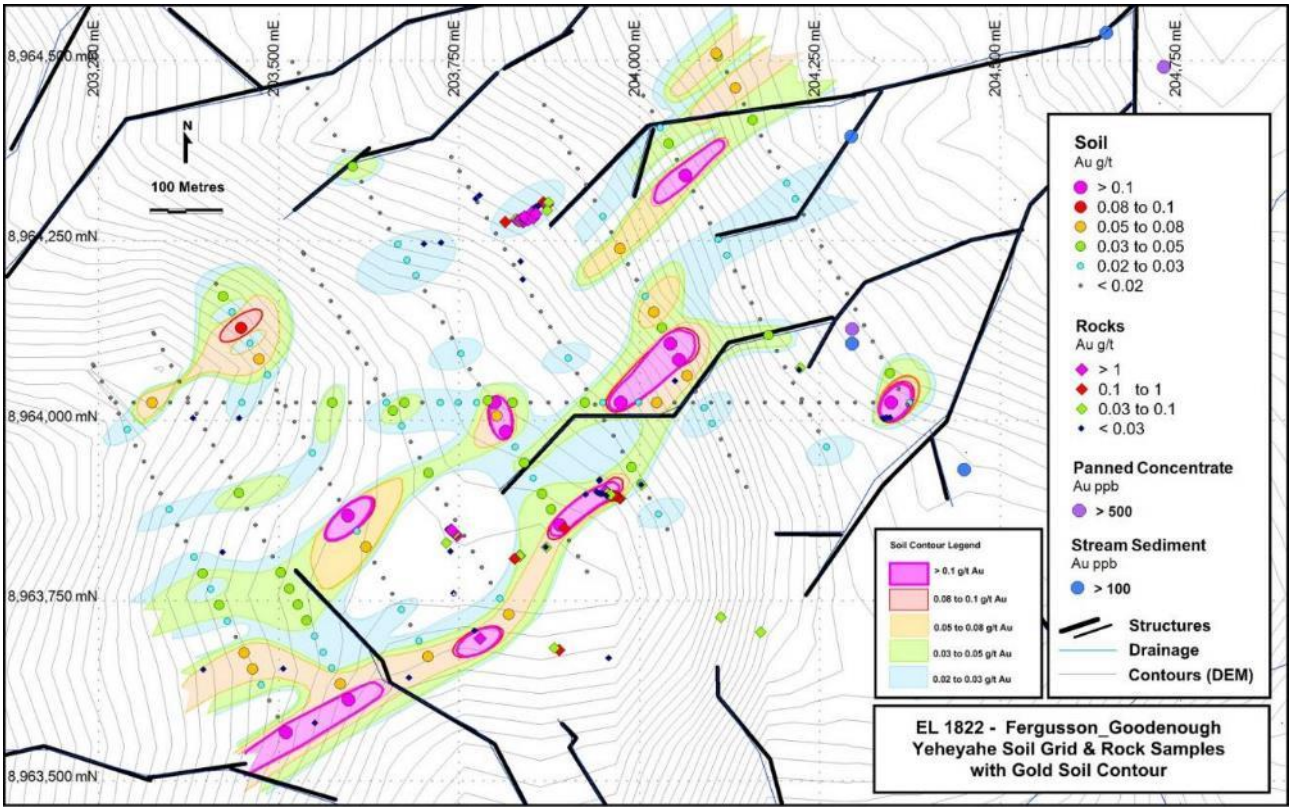
Yaheyahe

Results from bulldozer trenches at Yaheyahe (=Bolubolu North) included 39m of 2.10 g/t gold including 6m of 11.90 g/t gold (horizontal zone), and 8m of 4.90 g/t gold including 4m of 6.14 g/t gold, (vertical zone), 4m of 5.05 g/t gold, 5m of 1.540 g/t gold, and a float sample carrying 5.60 g/t gold and the highest rock being 24.70 g/t gold.

Grid soil sampling for the Yaheyahe Prospect was completed along with 8 short trenches. Soil sampling demonstrated gold anomalous soils over a +1,000m strike length from the SW to the NE and the limited hand trenching returned weighted assay averages to 14m of 2.99g/t gold and float rocks assayed to 17.10 g/t.

The best results were from Trench 6 (58 metres long) which was gold anomalous in 4 zones and included 14m of 2.99 g/t gold. Trench 2 was also gold anomalous with 2m of 3.68 g/t at the end of sampling and trench 4 contained 2 zones of gold and was strongly anomalous at the start of the sampling with 2m of 2.11 g/t gold. 12 of 18 outcrops sampled (66%) were greater than detection limit (>) and included 4.56 g/t, 1.83 g/t, 1.21 g/t and 0.22 g/t gold. In addition, 20 of 37 float rock samples were above detection limit and included 17.10 g/t, 5.63 g/t, 5.10 g/t, 4.96 g/t, 4.54 g/t, 0.62 g/t, 0.59 g/t, 0.58 g/t and 0.33 g/t. All samples were analysed for gold only.

Gold mineralisation is hosted in small disjointed/offset breccia bodies (most are 2-5m thick and apparently up to 20m in strike length) along foliation/schistosity within the metamorphic/gneissic rocks and there appears to be more quartz vein breccia/ stockwork within the area than previously indicated. Gold is hosted in NE-SW and NW-SE trending structures. Late epithermal quartz stockwork veining overprinting early silicification and brecciation is evidence of episodic deposition/ reactivation. Phyllic to argillic alteration is restricted to thin narrow alteration halos within the crushed/sheared wallrock of these veins, reflecting the compact / brittle nature of the metamorphic host rock.



Motouya

The Motouya Prospect is located between Bolubolu North and South Prospects and covers 4km x 1 km. Reconnaissance sampling returned 1.95 g/t gold in stream sediment and 1.78, 0.88 and 2.87 g/t gold in a rock float samples. A single soil anomaly of 0.668 g/t gold was noted. 5 rocks containing significant grades of gold including 1.26 g/t, 0.52 g/t, 0.35 g/t, 0.34 g/t and 0.30 g/t were assayed by Quintessential Resources Ltd. The best of the 2 outcrop samples returned 0.08 g/t gold.

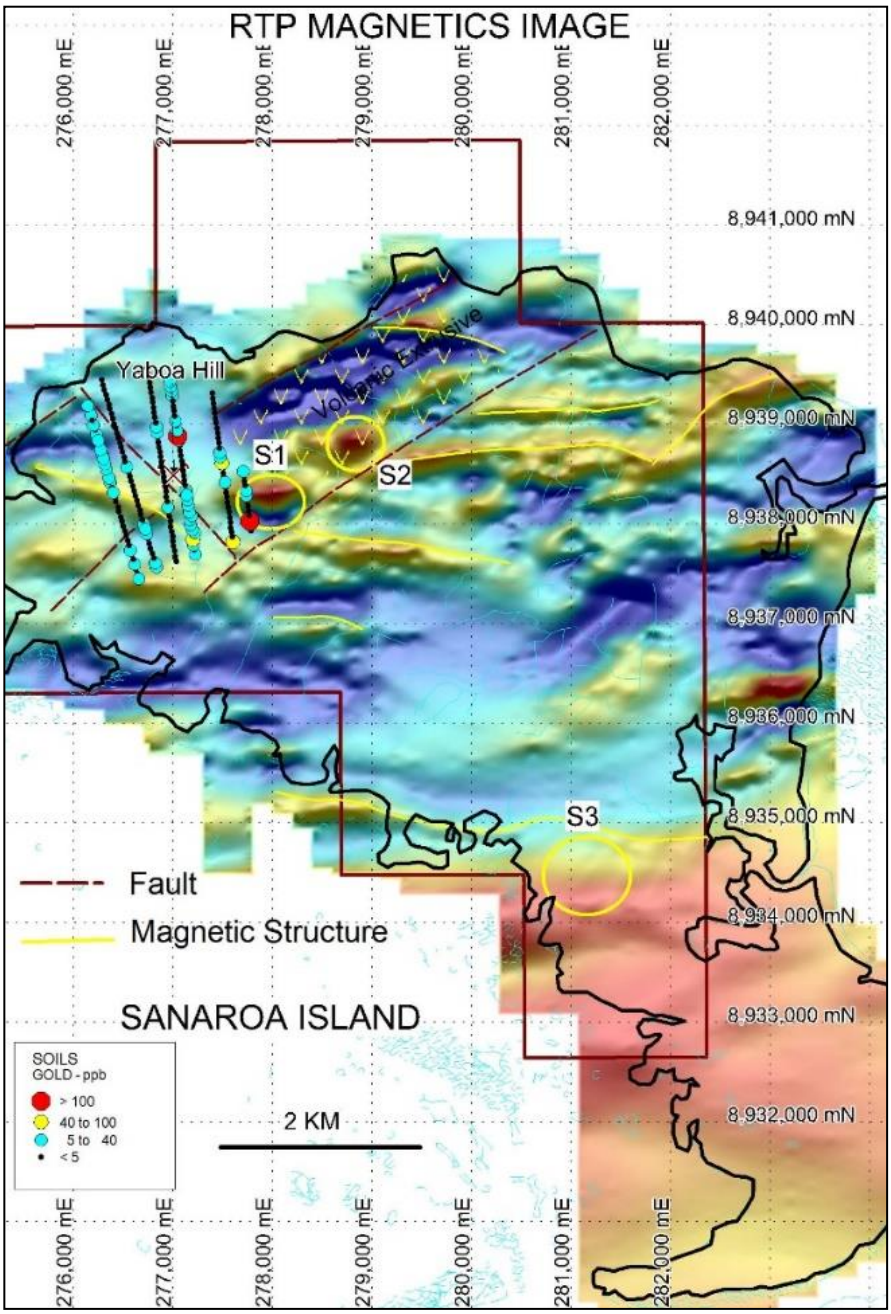
The source of the 78.4g/t gold float sample appears to be siliceous breccia bodies on the hanging wall of the Wakonai fault, that are similar in texture and appearance to those found at the Yaheyahe Prospect.

Bolubolu South

The Bolubolu South Prospect covers an area of strong silicification where sampling programs returned results such as 3.53 and 3.24 g/t gold in pan-concentrates, anomalous silt samples, rock float sample of 1.17 g/t gold and the best trench sample of 5m of 1.06 g/t gold. A large number of samples contained arsenic values greater than 1,000ppm to a maximum of 5,400ppm arsenic.

Sanaroa

Sanaroa Island is prospective for a major disseminated gold deposit, being underlain by strongly advanced argillic altered and locally silicified Quaternary rhyolitic to andesitic volcanics with active hot springs in the eastern part of the island.



The Yaboa Hill hydrothermal breccia area has been geological mapped, bulldozer costeaned and had one diamond core and four rotary air blast holes drilled. Altered and sulphide bearing volcanics and some breccias were intersected in the trenches and the drill holes. The trench mapping suggests that the volcanics become increasingly altered and brecciated towards the south with zones of chalcedonic quartz veining and pyrite noted in one trench.

This area returned several intercepts averaging better than 0.1 g/t gold, the highest being 0.44 g/t gold over 2.4m (other areas returned less than this value). Petrology from the drilling indicates an acid leach upper zone with a boiling zone beneath conducive for gold mineralisation. Refer to figures showing details of the Sanaroa Island trenching, drilling and sampling.

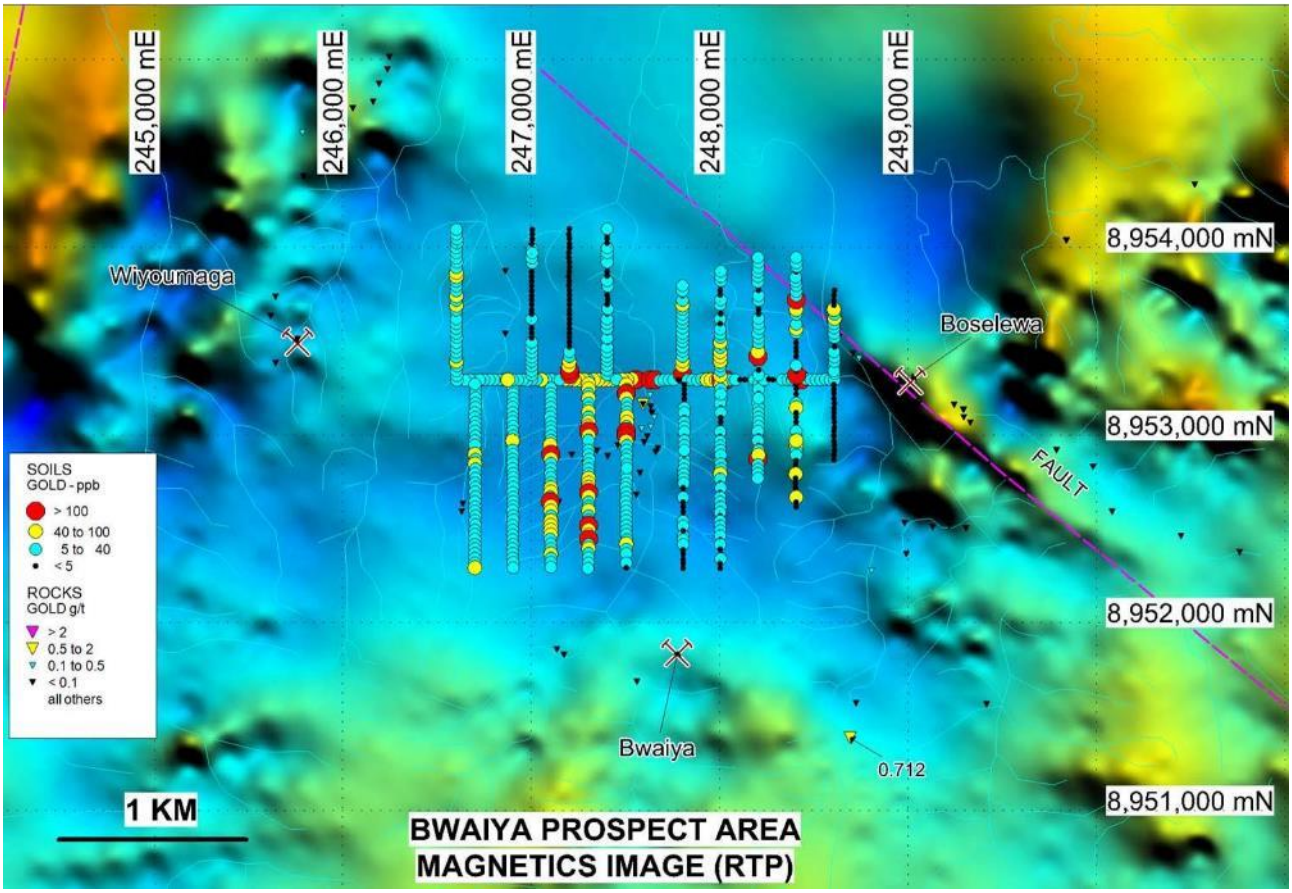
Bwaiya

Initial reconnaissance float sampling returned background to 2.89 g/t gold and showed potential for epithermal mineralisation. Grid soil sampling substantiated earlier ridge and spur sampling results with many soil samples > 0.05 g/t gold and a strong correlation with anomalous arsenic. Virtually all rock samples from Bwaiya contain greater than 100 ppm arsenic; the average for 49 rock samples was 410 ppm arsenic.

The alteration present is described as consisting of silica flooding, clay development and vuggy cockscomb quartz veins in volcanics and granitic rocks. Fresh and partly oxidized pyrite is abundant throughout the altered volcanics. Nearby brecciated ultramafics show local zones of strong silicification with black opaline silica and fine disseminated pyrite.

Based on petrological studies, the felsic volcanics and older intrusives (granitic) are noted to have been subjected to at least two phases of alteration: (i) a high temperature, potassic alteration with peripheral phyllic and propylitic alteration, and (ii) a low temperature, epithermal argillic alteration consisting of interlayered illitic clays + quartz + adularia + calcite, which has overprinted the higher temperature mineralogy. Gold mineralisation occurs in both felsic volcanics and intrusives and appears associated with the later epithermal stage of alteration.

The first trenching of the Bwaiya Prospect demonstrated consistent, but generally weakly gold anomalous mineralisation over a +1,000m strike length (SW-NE). The longest intercept was 66 metres grading 0.33g/t gold (T4) and the peak was 4 metres of 2.20g/t gold (T2).



Trench assay highlights are noted below:
Trench 1 - 40 metres of 0.10g/t gold.

Trench 2 - 58 metres of 0.30g/t gold.

Trench 4 - 66 metres grading 0.33g/t gold

Trench 5 - 36 metres grading 0.23g/t gold.

Trench 9 - 34 metres grading 0.15g/t gold.

Bwaiya River exposure - 14 metres grading 0.28g/t gold.

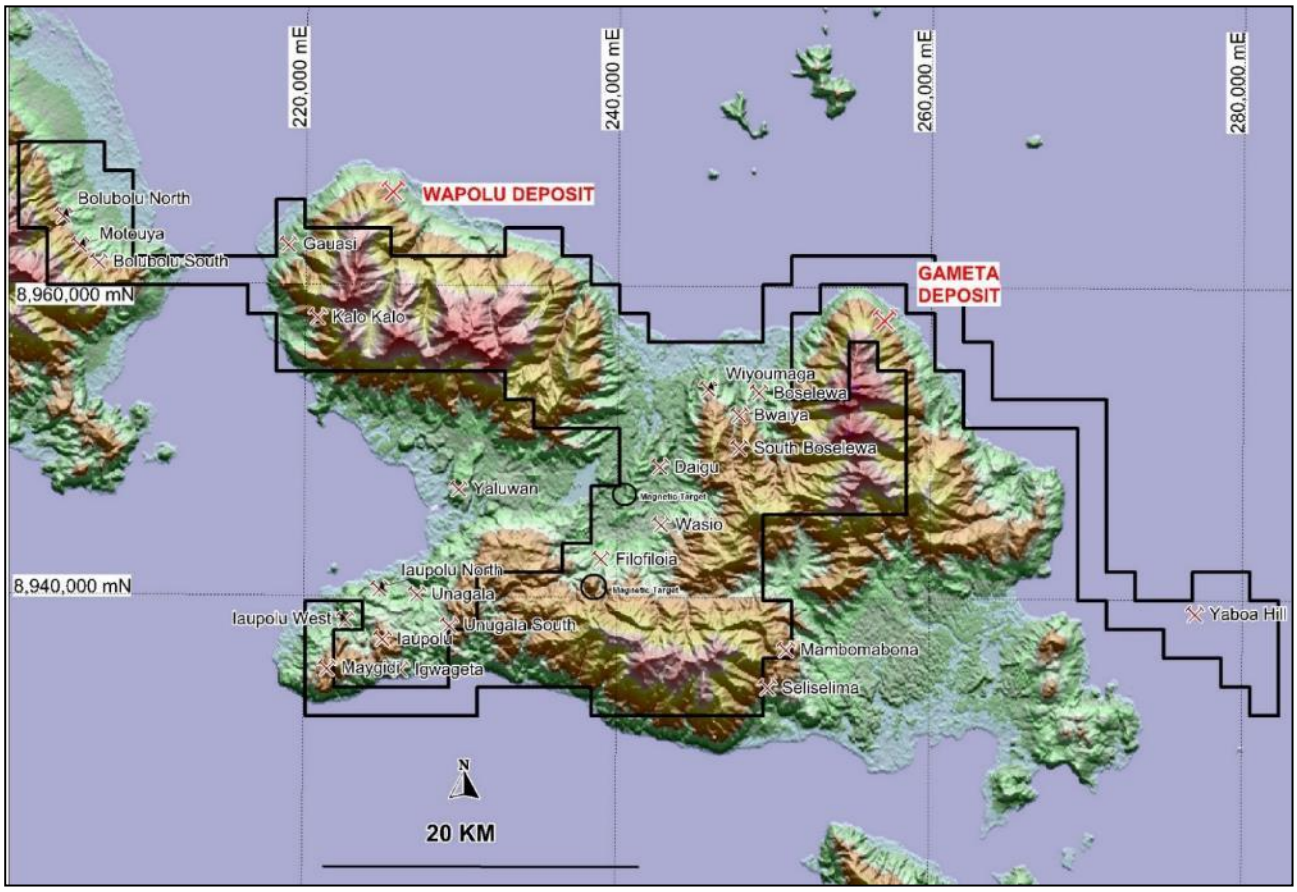
Wiumwana creek exposure - approx. 15 metres grading 0.18g/t gold.

The felsic volcanics and older granitic intrusives have been subjected to at least two phases of alteration: (i) a high temperature, potassic alteration with peripheral phyllic and propylitic alteration, and (ii) a low temperature, epithermal argillic alteration consisting of interlayered illitic clays + quartz + adularia + calcite, which has overprinted the higher temperature mineralogy. Gold mineralisation occurs in both felsic volcanics and intrusives and appears associated with the later epithermal stage of alteration.

DETAILS
Esso began systematic gold exploration in 1982 (PA 469 covered the entire D'Entrecasteaux Island group). Lake Lavu ELA is prospective for epithermal gold mineralisation and the Company's aim is to discover high-grade Gosawong style, high tonnage Misima type and epithermal gold deposits such as Woodlark, Imwauna, Wapolu, Gameta and Sehulea.

Descriptions of the prospects or gold/ toxic element anomalous areas are included below following the discussion on possible mineralisation in the district and geology. Many areas /prospects have only had cursory, follow up exploration completed and are very early stage, but several have also been bulldozer trenched or scout drilled with interesting results that require additional exploration.

A series of fairly self-explanatory plans are attached to this release to put the historic exploration results from the ELA into context. The reader can compare the number of samples on plans to the results in the text etc. to get a self-determination of an area's 'prospectivity'.



Note that the ELA boundaries are only plotted on plans 1, 2 and 3. The other Plans are historic with tenement boundaries and may or may not coincide with various parts of the current EL boundaries. The current boundaries have not been plotted on the various historic plans.

The reader is requested to cross reference between these plans to get a better appreciation of the locations of the prospects and the sampling and evaluation sequence that has occurred in the D'Entrecasteaux Islands that has led to such widely distributed but under-explored gold mineralisation.

Mineralisation & Geology

Fergusson, Goodenough and Sanaroa are part of the D'Entrecasteaux Islands in Milne Bay Province, and are situated east of the southeast tip of mainland PNG. The islands are mountainous, rising to heights in excess of 2,000 metres and consist of steep dome shaped ranges.

The gold potential of these islands was not significantly recognised prior to 1982 with small alluvial gold workings noted in several places but no evaluation or reporting undertaken on these occurrences. The islands were recognised as a new epithermal gold province with potential to host large Pleistocene to Recent gold deposits related to volcanism, major northeast trending rifts and west to north west trending, dome bounding fault zones and ultramafic rocks.

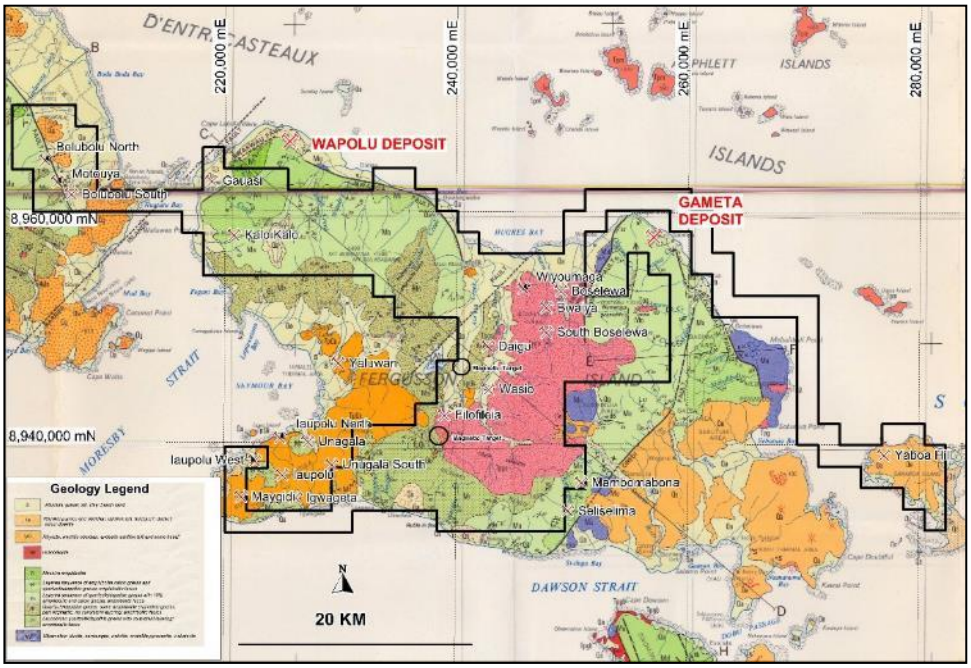
The four most important gold depositional zones are the Barrier Islands Rift / Graben, the Kukuia-Lavu Rift / Graben, the Oredi- Dei Dei Graben and the dome bounding faults that host the Wapolu Deposit on NW Fergusson and the Gameta Deposit on NE Fergusson. Structures which splay off the main rift / graben bounding faults are also important. The key to success is the suitable gold depositional hosts, including faults, dome bounding shears, ultramafic rocks and breccia zones of various types.

The mineralised styles recognised as viable exploration targets include:

- gold associated with active and fossil hot springs (epithermal gold), including gold in quartz stockwork and breccia zones within volcanics and altered basement gneiss.

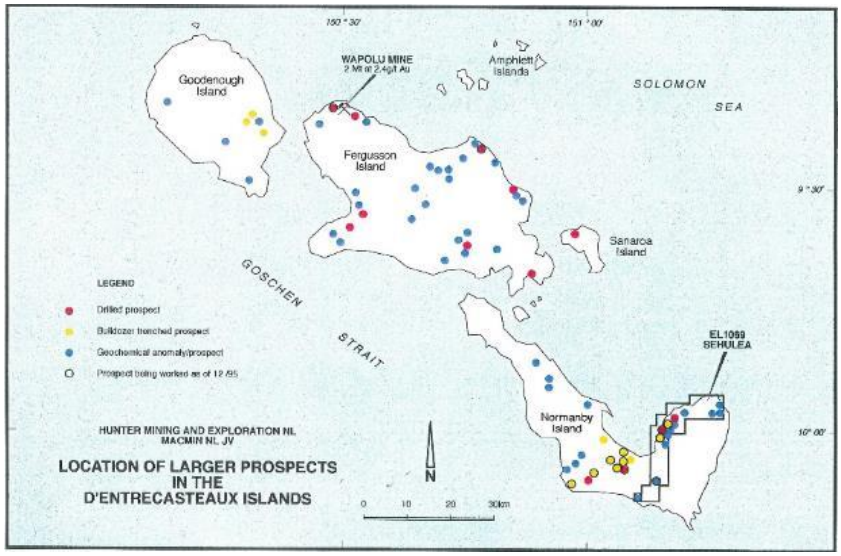
- gold associated with broad areas of silica / toxic element alteration within ultramafics (and volcanics & metamorphics) associated with graben bounding, decollement & cross-faults/ structures.
- Detachment related uranium deposits.

Various figures document the Sawalisu (Filofiloia, Wasio and Daigu) Prospects in central Fergusson. Refer to these plans for spatial location and numbers of samples etc.



Wasio Prospect

Wasio was identified by anomalous pan concentrate and silt fraction gold assays, including a maximum of 44.5 g/t gold pan concentrate (+0.270 g/t Gold silt) and 12.0 g/t gold pan concentrate (+1.28 g/t gold silt). Anomalous gold and arsenic in -#80 stream sediments is suggestive of epithermal vein mineralisation. Anomalous gold in Ridge and Spur soil samples occur over a 1.5 km^2 area and 15.6 g/t gold, 10 g/t gold and 0.88 g/t gold rock samples were collected from a quartz vein over 120m interval in a creek.



Grid based soil sampling at the Wasio Prospect demonstrated 3 major, structurally discrete zones with multiple higher grade internal gold sectors. The total anomalous area (>0.02 g/t gold) is about one and a half square kilometres (1.5 km^2) and it is open to the east over an eight hundred metre (800m) interval.

The soil grid and gold anomalies are located at/south of the nexus of three (3) major crustal level structures (trending NE-SW, N-S and WNW-ESE), that produce a triangular zone about 1,500 metres per side. The soil anomaly envelope has a WNW-SSE axis that is about 1,200 metres long and is between 1,000 metres wide at the NW end and 700m wide at the SE end. The higher grade internal zones however, have been interpreted to trend E-W to ENE.

Line cutting, reconnaissance mapping, rock chip sampling and traversing observed silicification and minor epithermal quartz veining hosted in weathered granodiorite on the top of the hill. Several zones of structurally controlled, argillic alteration with occasional epithermal quartz and minor sulphides were observed associated with the northeast trending structures. Abundant epithermal quartz floats were observed scattered in low lying creeks and gullies in the areas.

Rock floats collected displayed epithermal quartz veining within the host plutonic granodiorite. These all were sourced from north -west trending veins/dykes and eventually led to discovery of the highly-silicified diorite outcrop at higher elevations and portraying the east-west trending ridgeline. The peak float rock chip sample

assayed 16.5 g/t gold, the peak outcrop channel assayed 0.96 g/t gold and strong evidence of epithermal textures was noted within the granitic host, but from limited samples.

Wasio is located about 4 to 5km ENE of the Filofiloia Prospect, where exploration showed another excellent and cohesive gold in soil anomaly. The Filofiloia anomaly is quasi NE trending with an irregular shaped core to five hundred metres (500m) long and about two hundred metres (200m) wide, reinforcing the excellent prospectivity of this unexplored and undrilled gold district.

EL 1822 Wasio Prospect Rock Chip Assay Results

Sample Type	Gold (g/t)	Sample Number	Easting (m)	Northing (m)
Rock Float	0.16	702062	242623	8944929
Rock Float	2.94	702063	242617	8944901
Rock Float	0.06	702064	242897	8944670
Rock Float	0.12	702065	242817	8944730
Rock Float	16.5	702066	242781	8944600
Rock Outcrop Channel	0.09	702067	242859	8944404
Rock Outcrop Channel	0.08	702068	242866	8944396
Rock Cont. Channel	0.03	702069	242877	8944348
Rock Cont. Channel	0.01	702070	242877	8944348
Rock Outcrop Channel	0.01	702071	242891	8944347
Rock Float	1.56	702072	243102	8944149
Rock Float	0.27	702073	243102	8944149
Rock Float	0.02	702074	243202	8944172
Rock Outcrop Channel	0.45	702075	243469	8944237
Rock Outcrop Channel	0.55	702076	243469	8944237
Rock Outcrop Channel	0.96	702077	243497	8944256

Three hundred and sixty-eight (368) soil samples were collected on variable length, 200m spaced lines, designed to cover the region of anomalous historic ridge and spur assays. Two hundred and forty-three (243) of the soil assays were above detection limit (0.005 g/t gold), with forty-six (46) > 0.05 g/t gold including fifteen (15) ≥0.10 g/t gold and a peak of 0.69 g/t gold.

Seventeen rock float samples were also collected and results are also tabulated. All samples were analysed for gold only, but will be analysed for base + toxic elements to establish those trends in the future. Refer to the attached table for complete soil and rock assay results and the plans showing the soil results on various topographic and geophysical (aeromagnetic and radiometric) images.

Filofiloia

The Filofiloia prospect lies within the NE corridor of the Kukuia – Lavu fault system, which is evident as a magnetic low situated in the central part of the Graben, with recorded alluvial gold workings in the prospect area. Historical gold in pan concentrate samples returned 43.90, 26.0 and 18.0 g/t gold with correlating high arsenic, antimony and silver.

The basement mica gneiss is the main country rock that underlies the area. The Filofiloia creek was mapped and minor silicified floats bearing <1% py was collected. A heavily worked alluvial site was mapped and visible gold was observed as part of the sediment load in the streambed. The creek basically trends northeast along the Kukuia – Lavu rift.

A soil grid was established over an area of 3.2km$^{2.}$ A total of 625 samples were collected of 616 soil samples and 9 rocks were collected during the program. The Filofiloia creek was mapped and minor silicified floats bearing <1% py was collected. A heavily worked alluvial site was mapped and visible gold was observed as part of the sediment load in the streambed. The creek basically trends northeast along the Kukuia – Lavu rift. An intrusive granodiorite- diorite dykes of ~10m was mapped which could be the heat source of gold bearing fluids which in turn gets entrapped within the highly-foliated gneiss.

Grid based soil sampling of the Filofiloia Prospect successfully demonstrated one major and 10 'satellite' gold anomalies on the southern margin of the Kukuia - Lavu Rift Zone on Fergusson Island. Epithermal mineralisation is associated with a granitic intrusion at Filofiloia, in a region with historic small scale alluvial gold production.

The exploration defined a significant grid based gold in soil anomaly that is about 500 meters long and 200 meters wide with a peak grade of 0.52 g/t gold. The sampling targeted this area very well and the anomaly is well defined for future work on six, 50 to 100-meter spaced grid lines.

Mineralisation is clearly seen as structurally controlled. The NE Kukuia–Lavu rift and cross faulting allows fluid upflow and mineralisation. The free gold within the creek could have been sourced from the highly-foliated

gneiss and gold bearing quartz veins may parallel the foliations. Minor magnetite skarn floats where observed within the creek and this could reflect skarn mineralisation elsewhere in the district.

The system at the Filofiloia prospect reflects low sulphidation gold mineralisation, with low sulphide content. The Filofiloia Creek has possible hot springs and sinters located within the vicinity. Acid sulphate alteration is clearly visible within the strong argillised zones. Gold can also be precipitated within structures formed by the mixing of rising volatiles and oxygenated circulating surficial waters.

Filofiloia Prospect was discovered by anomalous pan concentrate samples within Filofiloia Creek (43.9g/t gold) and at the junction of Unawagolugolu/ Libulibu creeks (26.7g/t gold). The prospect lies within the NE trending Kukuia–Lavu graben which gives it an excellent 'address' for locating epithermal style gold deposition.

A geochemical soil grid 1.7km x 1.5km was established over the known inferred gold anomalous areas to test the surface gold distribution and potential. A total of sixteen (16) cross-lines unevenly spaced at 50m to 400m intervals was established with a 1.7km long baseline. All cross-lines were cut without a slope correction.

Six hundred and sixteen (616) soil and nine (9) rock float samples were collected and analysed for gold. The peak soil assay was 0.52 g/t gold. Two hundred and forty-eight (248) of the soil assays were above detection limit (0.01 g/t gold), including twenty (20) samples ≥0.10 g/t gold and including seven (7) samples ≥ 0.20 g/t gold. A total of three hundred and sixty-eight (368) soil samples were below the detection limit of 0.01 g/t gold. A small group of soil samples were analysed for base + pathfinder elements to establish those trends. Antimony is generally elevated along with arsenic and this will be a useful vector to mineralisation when the remaining soils are assayed for base metals.

EL 1822 Filofiloia Prospect Rock Chip Assay Results

Sample Type	Gold (g/t)	Sample Number	Easting (m)	Northing (m)
Rock Grab	0.04	702050	239369	8942077
Rock Float	0.03	702053	239558	8942504
Rock Channel	0.02	702054	239541	8942590
Rock Channel	bdl	702055	239376	8942621
Rock Channel	0.19	702056	239377	8942575
Rock Channel	0.03	702057	238703	8943440
Rock Float	bdl	702058	238724	8943419
Rock Channel	bdl	702059	238744	8943405
Rock Channel	0.03	702061	239068	8942617

Six (6) of nine (9) rock samples were above detection limit, with a peak outcrop channel sample of 0.19 g/t gold. The rock gold values are low but they have the correct textures and gangue mineralisation associated with epithermal deposits and will be useful vectors for future work.

Alteration is obscured due to highly weathered scree and debris. Outcrops that were mapped prodomiantly displayed clay–sericite alteration then it progressed into moderate silica–clay–sericite further downstream and approaching an area of dominant quartz float rocks.

Libulibu Creek is a current day gold panning site which has been heavily worked by the local landowners. It is dominated by weathered foliated gneiss with fragmented quartz and granodiorite floats. Gold occurs as nuggets and this was proven by panning a small nugget in the creek.

The Filofiloia Prospect is located about 14 km inland in the central part of Fergusson Island. The prospect area can be accessed by foot from the north and south coasts and the region can be supported cost effectively by boat from the Provincial capital of Alotau.

Ebadidi

The Ebadidi soil grid with a baseline line of 3km was, together with 10 short cross lines (375m – 760m length), spaced at 300m apart. A total of 298 soil samples were collected. The Ebadidi grid was tilted at a NE – SW orientation and soil sampling (gold only) demonstrated ten weakly anomalous and disjointed gold in soil samples on 300 metre spaced lines over a +2km strike length. The reconnaissance grid was designed to evaluate both the strong RPT aeromagnetic anomaly at the northern end of the grid and the length of a geophysical and structural anomaly on the southern margin of the Kukuia - Lavu Rift Zone.

Yaheyahe

Yaheyahe (=Bolubolu North), Motouya and Bolubolu South Prospects are located on eastern Goodenough Island. The Prospects are located in the south-central foothills about 6 kilometres from the north coast and is accessed by foot from the coast. The region is supported cost effectively by boat. I collected the rock on the right from Yaheyahe in 1993 and it assayed close to 1oz/tonne gold.

Mineralisation occurs in a similar geological environment to the Wapolu Deposit (on NW Fergusson) and has been traced over a strike length of 7 km. The prospects lie on the NW trending and NE dipping Wakonai Fault. The footwall rocks consist of leucocratic and amphibolitic gneiss while the hanging-wall rocks consist of sheared and brecciated ultramafics. Locally, Pleistocene volcanics overlie the hanging-wall ultramafics as do thick colluvium deposits which are shedding from the footwall gneisses. Combined brecciation and silicification with variable pyritisation of the ultramafics occurs along with anomalous gold, arsenic and molybdenum values.

Results from bulldozer trenches at Yaheyahe (=Bolubolu North) included 39m of 2.10 g/t gold including 6m of 11.90 g/t gold (horizontal zone), and 8m of 4.90 g/t gold including 4m of 6.14 g/t gold, (vertical zone), 4m of 5.05 g/t gold, 5m of 1.540 g/t gold, and a float sample carrying 5.60 g/t gold and the highest rock being 24.70 g/t gold.

Grid soil sampling for the Yaheyahe Prospect was planned in two stages. Stage 1 was to complete sampling of priority 1 sections of the nine crosslines plus the baseline while stage 2 was to sample extensions to selected soil lines (line 3,5,7&9) to the SE of the prospect. Unfortunately, only stage 1 sampling was completed due to time constraints.

A total of 278 soil samples at 25m spacing were collected totalling 6,925m of sampling. A total of 8 short trenches were cleared and sampled within the Yaheyahe prospect area. A total of 102x2m continuous channel rockchip samples were collected at a nominal 2m interval totalling 204 metres of sampling.

Outcrop and float samples of interesting rocks were collected from all prospects investigated. A total of 113 outcrop and float samples were collected during this program. Of these 54 samples were collected from Yaheyahe prospect area where historical samples

Trench Continuous Chip Channel Weighted Assay Averages

Trench Number	Trench Length	Sample Length	Gold (g/t)	Peak Gold Grade (g/t)	Cut Off Grade (g/t)
Trench 1	**26m**	**2m**	**0.06**	**0.06**	**Nil**
Trench 2	**20m**	**8m**	**0.11**	**3.68**	**0.25**
incl.		2m	3.68		1
Trench 3	**50m**	**2m**	**8**	**8**	**8**
plus		**2m**	**2.53**		**2.5**
plus		**2m**	**0.68**		**0.5**
Trench 4	**18m**	**4m**	**1.26**	**2.11**	**0.4**
incl.		2m	2.11		2
plus		**6m**	**1.39**	**2.09**	**0.5**
incl.		2m	2.09		2
Trench 5	10m	2m	BDL	BDL	nil
Trench 6	58m	6m	0.28	0.33	0.2
plus		**2m**	**2.11**		**2**
plus		**14m**	**2.99**	**5.67**	**1.3**
incl.		**8m**	**3.66**		1.5
plus		**2m**	**2.74**		**2.5**
plus		**4m**	**1.11**	**1.43**	**0.8**
Trench 7	8m	2m	BDL	BDL	nil
Trench 8	16m	2m	0.03	0.03	nil

Peak line Soil Assay Gold Results (>0.1 g/t)

Line Number	Gold (g/t)	Sample Number	Easting (m)	Northing (m)
BL	**0.17**	701470	204349	8964025
BL	**0.24**	701485	203974	8964025
BL	**0.17**	701492	203799	8964025
Line 1	**0.29**	701514	203510	8963567
Line 2	**0.17**	701539	203597	8963612
Line 3	**0.14**	701573	203596	8963868
Line 3	**0.1**	701585	203448	8964129
Line 4	**0.05**	701589	203819	8963731
Line 5	**0.24**	701617	203890	8963855
Line 5	**0.16**	701623	203815	8963985
Line 6	**0.03**	701652	203989	8963935
Line 7	**0.53**	701681	204055	8964085
Line 7	**0.13**	701682	204043	8964107
Line 8	**0.18**	701715	204063	8964341
Line 9	**0.07**	701743	204133	8964462

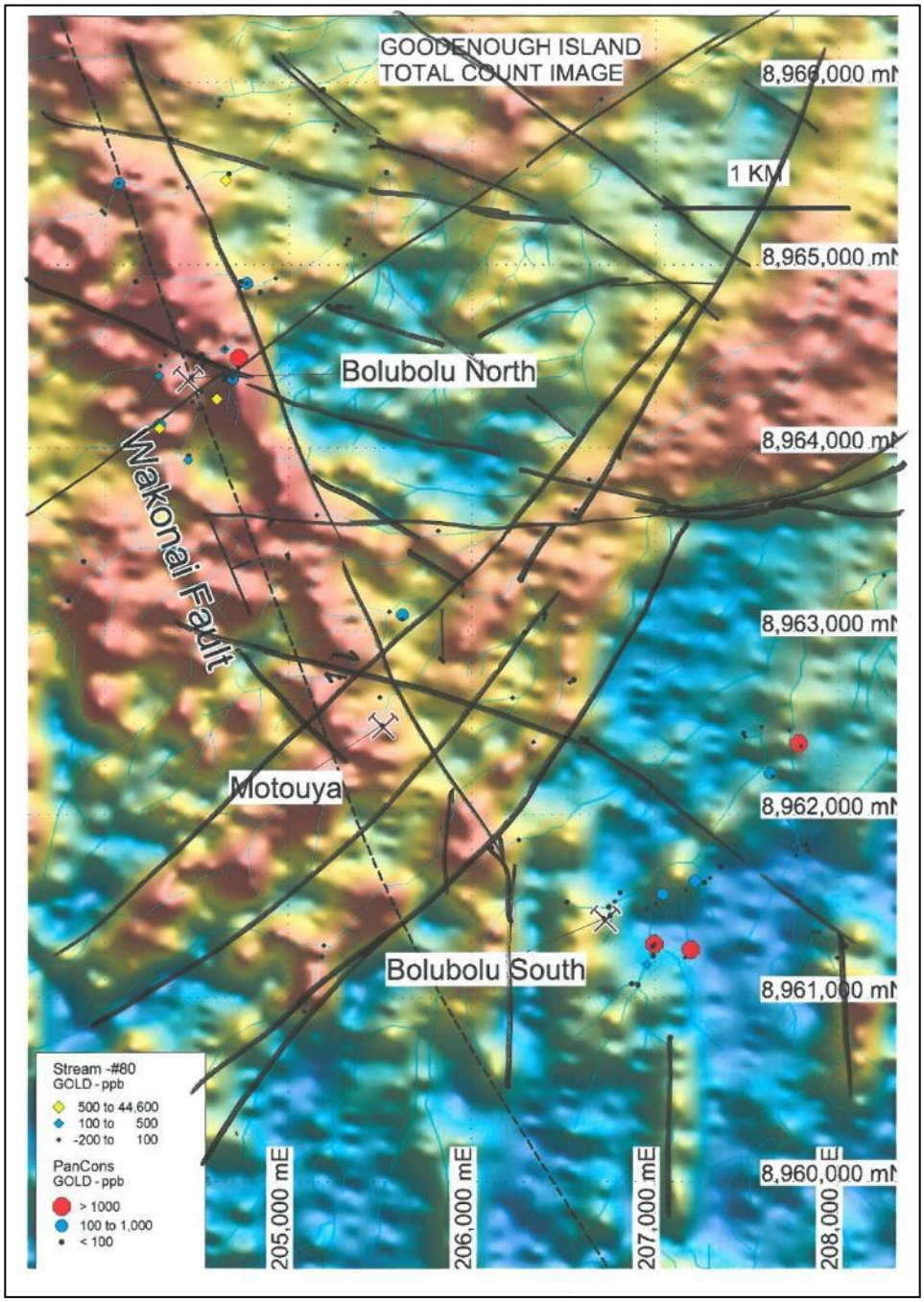
recorded a high of 15g/t gold while 59 samples were collected from Motouya prospect area where a single historical rock chip (? o/c or float) sample returned a peak value of 78g/t.

Grid based soil sampling of the Yaheyahe Prospect demonstrated gold anomalous soils over a +1,000m strike length from the SW to the NE. Limited hand trenching was completed and returned weighted assay averages to 14m of 2.99g/t gold and float rocks assayed to 17.10 g/t.

A 0.75 sq km soil grid (approx. 1,150 metres x 650 metres) was completed at Yaheyahe, where historical trenches and rock-chip sampling returned a peak value of 31 g/t gold. A total of 278 soil samples were collected on 10 grid lines for 6,925 linear metres of sampling. 125 samples were below detection limit; 27 samples were above 0.05 g/t gold and 12 of those samples contained >0.1 g/t gold. Each soil line contained an assay result(s) >0.1 g/t gold and the Baseline + Lines 3, 5 and 7 all had multiple anomalies that have been hand contoured.

204 metres of hand trenching was completed where warranted /possible at Yaheyahe in 8 trenches, with 102 x 2 metre continuous rock chip samples collected. The best results were from Trench 6 (58 metres long) which was gold anomalous in 4 zones and included 14m of 2.99 g/t gold. Trench 2 was also gold anomalous with 2m of 3.68 g/t at the end of sampling and trench 4 contained 2 zones of gold and was strongly anomalous at the start of the sampling with 2m of 2.11 g/t gold. Table 2 lists all significant trench gold assay results and associated cut off grades.

12 of 18 outcrops sampled (66%) were greater than detection limit (>) and included 4.56 g/t, 1.83 g/t, 1.21 g/t and 0.22 g/t gold. In addition, 20 of 37 float rock samples were above detection limit and included 17.10 g/t, 5.63 g/t, 5.10 g/t, 4.96 g/t, 4.54 g/t, 0.62 g/t, 0.59 g/t, 0.58 g/t and 0.33 g/t. All samples were analysed <u>for gold only.</u>



Gold mineralisation is hosted in small disjointed/offset breccia bodies (most are 2-5m thick and apparently up to 20m in strike length) along foliation/schistosity within the metamorphic/gneissic rocks and there appears to be more quartz vein breccia/ stockwork within the area than previously indicated. Gold is hosted in NE-SW and NW-SE trending structures. Late epithermal quartz stockwork veining overprinting early silicification and brecciation is evidence of

episodic deposition/ reactivation. Phyllic to argillic alteration is restricted to thin narrow alteration halos within the crushed/sheared wallrock of these veins, reflecting the compact / brittle nature of the metamorphic host rock.

It was noted that more quartz vein material is located in the area to the NW of the main grid between lines 1,2,3 and 4.

Motouya

The Motouya Prospect is located between Bolubolu North and South Prospects and covers 4km x 1 km. Reconnaissance sampling returned 1.95 g/t gold in stream sediment and 1.78, 0.88 and 2.87 g/t gold in a rock float samples. A single soil anomaly of 0.668 g/t gold was noted. At the Motouya Prospect, emphasis was placed on outcrop / float sampling (59 collected) plus geological mapping to confirm a gold anomalous float sample that returned 78.4g/t. 57 float and 2 outcrop samples were collected. The Motouya sampling had 32% of assays above the analytical detection limit with 5 rocks containing significant grades of gold including 1.26 g/t, 0.52 g/t, 0.35 g/t, 0.34 g/t and 0.30 g/t. The best of the 2 outcrop samples returned 0.08 g/t gold.

The source of the 78.4g/t gold float sample appears to be siliceous breccia bodies on the hanging wall of the Wakonai fault, that are similar in texture and appearance to those found at the Yaheyahe Prospect. The rocks are multiply brecciated and have epithermal quartz stockwork veining that appears to overprint early silica flooding, plus chalcedonic (grey silica) quartz and open, drusy, dogstooth quartz veins in gossanous floats. No trenching was done in this area and most of the samples collected are sulphide poor suggesting a structurally controlled low sulphidation gold- silver epithermal system.

Bolubolu South

The Bolubolu South Prospect covers an area of strong silicification where sampling programs returned results such as 3.53 and 3.24 g/t gold in pan-concentrates, anomalous silt samples, rock float sample of 1.17 g/t gold and the best trench sample of 5m of 1.06 g/t gold. A large number of samples contained arsenic values greater than 1,000ppm to a maximum of 5,400ppm arsenic.

Sanaroa

Sanaroa Island is prospective for a major disseminated gold deposit, being underlain by strongly advanced argillic altered and locally silicified Quaternary rhyolitic to andesitic volcanics with active hot springs in the eastern part of the island.

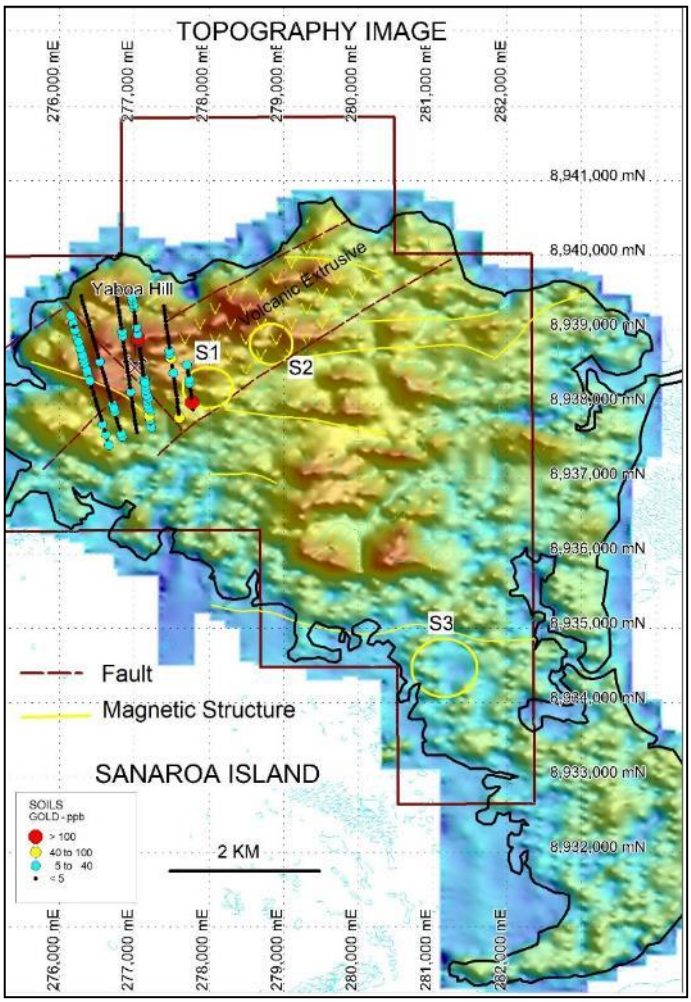
The Yaboa Hill hydrothermal breccia area has been geological mapped, bulldozer costeaned and had one diamond core and four rotary air blast holes drilled. Altered and sulphide bearing volcanics and some breccias were intersected in the trenches and the drill holes. The trench mapping suggests that the volcanics become increasingly altered and brecciated towards the south with zones of chalcedonic quartz veining and pyrite noted in one trench. This area returned several intercepts averaging better than 0.1 g/t gold, the highest being 0.44 g/t gold over 2.4m (other areas returned less than this value). Petrology from the drilling indicates an acid leach upper zone with a boiling zone beneath conducive for gold mineralisation. Refer to figures showing details of the Sanaroa Island trenching, drilling and sampling.

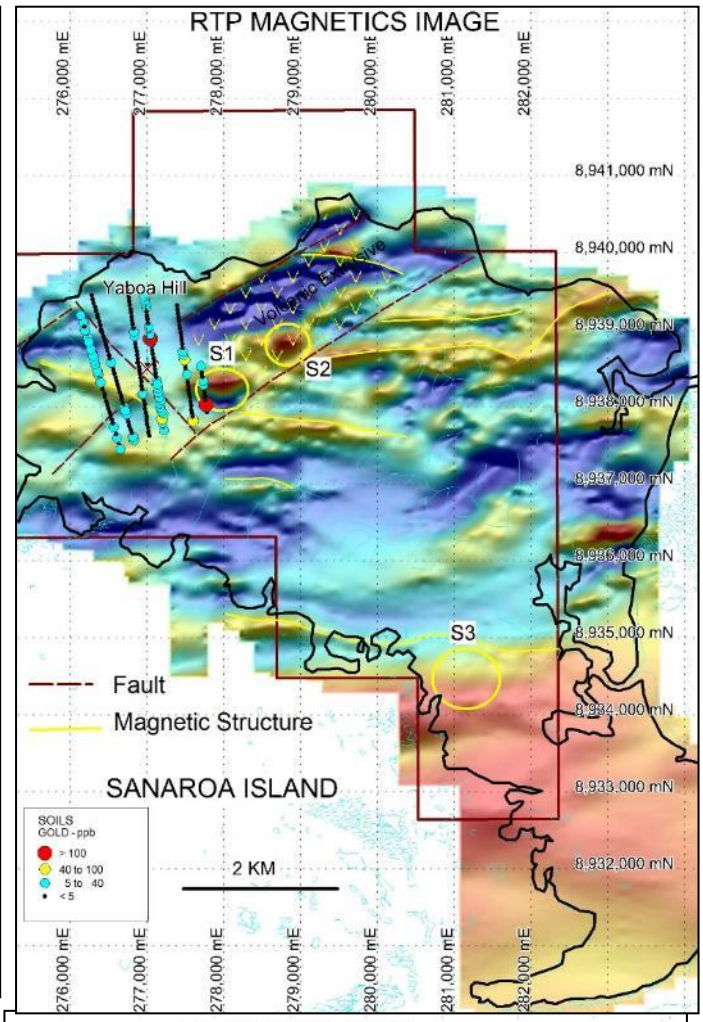
Bwaiya

The Bwaiya Prospect is in north central Fergusson Island and is underlain by altered felsic volcanics which probably unconformably overlie gneissic granodiorite. Fresh andesitic volcanics have also been mapped within the prospect area and ultramafics have been noted to the east and west of the immediate prospect area.

Initial reconnaissance float sampling returned background to 2.89 g/t gold and showed potential for epithermal mineralisation. Grid soil sampling substantiated earlier ridge and spur sampling results with many soil samples > 0.05 g/t gold and a strong correlation with anomalous arsenic. Virtually all rock samples from Bwaiya contain greater than 100 ppm arsenic; the average for 49 rock samples was 410 ppm arsenic.

The alteration present is described as consisting of silica flooding, clay development and vuggy cockscomb quartz veins in volcanics and granitic rocks. Fresh and partly oxidized pyrite is abundant throughout the altered volcanics. Nearby brecciated ultramafics show local zones of strong silicification with black opaline silica and fine disseminated pyrite.

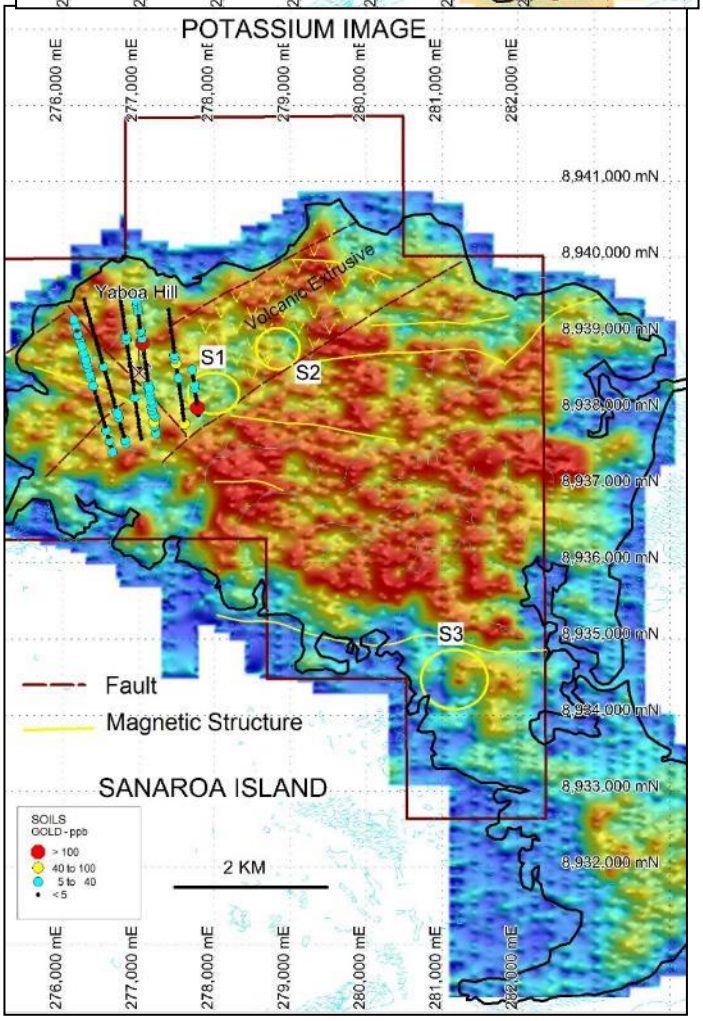




Based on petrological studies, the felsic volcanics and older intrusives (granitic) are noted to have been subjected to at least two phases of alteration: (i) a high temperature, potassic alteration with peripheral phyllic and propylitic alteration, and (ii) a low temperature, epithermal argillic alteration consisting of interlayered illitic clays + quartz + adularia + calcite, which has overprinted the higher temperature mineralogy. Gold mineralisation occurs in both felsic volcanics and intrusives and appears associated with the later epithermal stage of alteration.

The first trenching of the Bwaiya Prospect demonstrated consistent, but generally weakly gold anomalous mineralisation over a +1,000m strike length (SW-NE). The longest intercept was 66 metres grading 0.33g/t gold (T4) and the peak was 4 metres of 2.20g/t gold (T2).

Five hundred and thirty-six metres of hand trenching and continuous chip channel sampling was completed on the known gold /arsenic anomalies (with 85 collected), plus outcrop rock /creek continuous chip channel (21 collected) and outcrop rock chips (51 collected). Samples were analysed only for gold and there is a very high level of anomalism (<4% of assays below the detection limit).



Trench assay highlights are noted below:
Trench 1 - 40 metres of 0.10g/t gold (incl. 9 metres of 0.18g/t gold).

Trench 2 - 58 metres of 0.30g/t gold (incl. the peak result of 4 metres grading 2.20g/t gold).

Trench 3 - a best assay result of 1 metres of 0.12g/t gold.

Trench 4 - 66 metres grading 0.33g/t gold (incl. 2 metres of 0.52g/t + 2 metres of 0.61g/t).

Trench 5 - 36 metres grading 0.23g/t gold (incl. 1 metres of 1.28g/t + 1 metres of 0.80g/t).

Trench 6 - a best result of 4 metres of 0.10g/t gold.

Trench 7 - a best result of 4 metres of 0.14g/t gold.

Trench 8 - a best result of 6 metres of 0.11g/t gold.

Trench 9 - 34 metres grading 0.15g/t gold (incl. 4 metres of 0.27g/t).

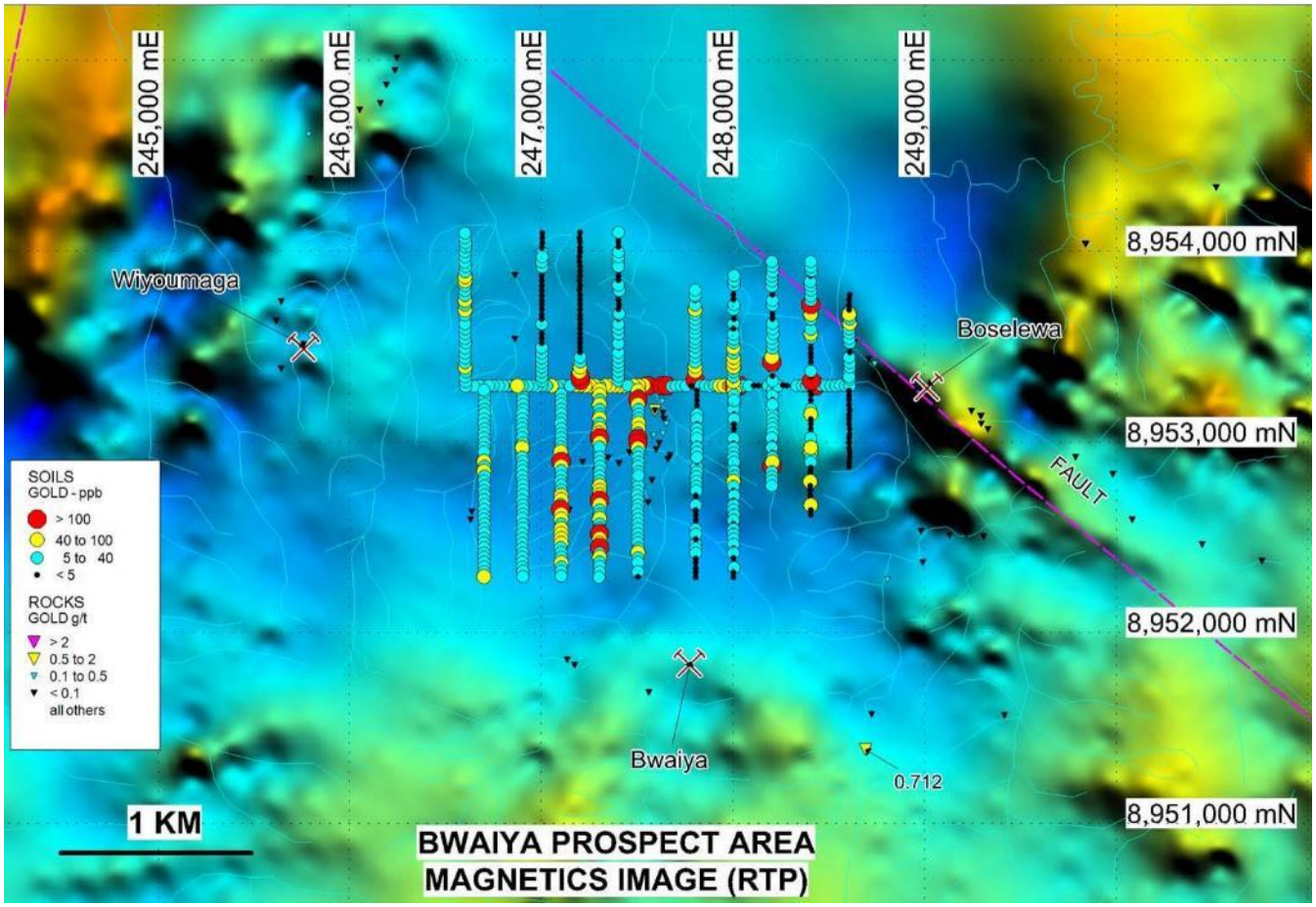
Trench 10 - a best result of 4 metres grading 0.17g/t gold (incl. 2 metres of 0.21g/t), within 44 metres of 0.07g/t.

Trench 11 - a best result of 26 metres of 0.08g/t gold.

Trench 12 - all 5 samples below detection

Bwaiya River exposure - 14 metres grading 0.28g/t gold (incl. 2 metres of 0.83 g/t).

Wiumwana creek exposure - approx. 15 metres grading 0.18g/t gold.



The soil geochemical grid of arsenic-gold anomalies at Bwaiya prospect is likely to be hosted in a Dilational ore environment. The northeast-southwest Kukuia Lavu rift acts as the main controlling structure. The main set of faults observed include the north-south and east-west structures. This set of north-south and east-west structures are likely to be extensional, tensional/jog faults/fractures and veins.

Area A. A northwest southeast to north-south trending structure intersects the major northeast-southwest controlling structures. This possibly later stage cross cutting structure may have re-activated the tensional

fractures/veins and contributed to the erratic arsenic-gold elongated soil anomalies. Trenches BT-01, BT-02, BT-03, BT-04 and BT-05 and the disputed trenches north of the soil grid are in close proximity to this interpreted complex structural intersection zone. The permeable feldspar phyric Diorite also provides a suitable lithological interface for silica precipitation and flooding. The soil arsenic-gold anomalies, outcrop/alteration mapping and pending trench results will provide useful information on the proximity of the gold bearing vein.

Area B. The surface arsenic-gold soil anomalies occur in an area where the east-west faults terminate against the inferred north-east controlling structure. The area is a suitable structure-intrusion-mesothermal (jasperoid altered felsic extrusive stock) target. Trenches BT-08-BT-09 and BT-10 are located within this area.

Area C: The Omara inferred fault appears also to cross cut the east-west and north-south faults. No trenching and scouting was undertaken due to disputes etc., however; the inferred structure and surface soil (gold+/-arsenic) anomalies appears similar to target Area A. The area will require detailed investigation if the landowners allow exploration to proceed in the near future.

Bwaiya Prospect is located 3.5 kilometres from the north coast in central-NE Fergusson Island. The prospect is accessed by foot from the coast and the region is supported cost effectively by boat.

Daigu Prospect

This prospect is defined by a two panned concentrate stream samples of 1.89 and 2.67 g/t gold on the edge of a 2km x 1km volcanic extrusive, evident in the airborne magnetics image. Other pan con samples were not anomalous. Three stream sediment samples were collected within the boundaries of this prospect. In two of these, visible gold was panned and they assay 1.89 g/t gold and 2.67 g/t gold respectively.

Kwailoi

The central northern area of Fergusson is still at an early stage of exploration. Low density stream sediment sampling has been completed over most of the area and defined the Boselewa, South Boselewa and Wiyoumaga areas, however considerable infill sampling is still required to adequately assess the area's potential. Detachment related uranium is an additional exploration target.

Boselewa

Fifteen rock float samples show high arsenic (to 1490 ppm) and antimony (to 100 ppm) values and one anomalous gold value of 0.18 g/t gold. The prospect area is underlain by strongly fractured and weathered ultramafic. Locally there are zones of chalcedonic silicification which appear to have an east to north-east trend and are apparently related to fault structures. These silicified zones can carry 5 to 10% disseminated pyrite. Granodiorite occurs immediately south of the prospect silicified zones.

This prospect is probably part of the same broad epithermal system as Bwaiya, with the host being ultramafic rock rather than volcanics. The high arsenic and antimony at surface suggests that the present surface is high in the epithermal system. Gold, if present, would occur at an unknown depth below surface.

South Boselewa

This prospect is based on one float sample of altered felsic volcanics which contained 0.712 g/t gold, 1400 ppm arsenic and 100ppm antimony. One stream sample taken upstream from the float recorded 0.007 g/t gold. The regional geology of the area is mapped as granodiorite and gneissic granodiorite with ultramafic xenoliths, however the occurrence of the altered and mineralized volcanic float indicates the presence of volcanics in the area. South Boselewa is located about 2 kilometres south of Boselewa prospect and two kilometres southeast of the Bwaiya prospect.

Wiyoumaga

Strongly anomalous arsenic, mercury and antimony cover 1km^2 of brecciated ultramafic with variable silicification, opaline veining and pyrite-arsenopyrite mineralisation. The structural preparation, silicification, veining and high trace element geochemistry are all positive indications for a possible gold zone at depth. Reconnaissance sampling returned low stream sediment and low panned concentrate results, with 0.015 g/t Gold and 0.023 g/t Gold, respectively. Out of the 32 samples collected, two rocks contained appreciable gold with 0.057 and 0.291 g/t gold and 13 had over 1,000 ppm arsenic (peak = 1.24%), between 50 and 181 ppm antimony and mercury to 17.4 ppm. Highest values from 32 samples included 0.057 and 0.291 g/t

gold. Trace element geochemistry (arsenic, mercury), veining and silicification indicate a possible gold zone at depth.

Maygidi

This is a two-sample anomaly on the western tip of the Kukuia Peninsula. A western drainage sample yielded a pan concentrate value of 18.1 g/t gold. No outcrop or float sampling appears to have been undertaken in this drainage. The eastern drainage sample yielded 0.083 ppm from the silt fraction and no pan concentrate appears to have been collected. No outcrop or float sampling has been undertaken from within the anomalous portion of this drainage. A number of outcrop samples were collected downstream from the eastern portion of the anomaly and all yielded less than 0.005 g/t gold.

Field investigation of the two creeks up-stream from the anomalous values is required and some ridge and spur soil sampling may be justified. The anomaly appears to be underlain by the contact between intermediate (to basic) and acid volcanics.

Other Stream Sediment Anomalies

A number of other gold anomalies have been outlined by regional stream sediment sampling. Some of the anomalies have been followed up in part although all require further evaluation to determine the source of the gold. This will variously involve infill stream sediment sampling, ridge and spur soil sampling, detailed mapping and chip sampling. In some areas bulldozer trenching, may be required. Of particular interest is the stream sediment anomaly in the northern part of central-Fergusson where a float sample contained 5.10 g/t gold. The source of this material has yet to be located.

Note: This is only an Exploration License Application at this stage and must have a Wardens Court Hearing with landowners, then be vetted by the Mining Advisory Council who makes a recommendation to the Minister. The Company will seek to expedite the process as possible so we can commence work as soon as/if granted by the Minister. It will also require shareholder approval.

A comprehensive Summary Report has been posted on the Frontier website.

STRATEGY GOING FORWARD REGARDING THE NEW D'ENTRECASTEAUX ISLAND ELAS AND A DESCRIPTION OF THE PROCESS TO OBTAIN AN EXPLORATION LICENCE IN PNG.

Strategy

Frontier recently applied for and registered for ELA's 2476 / 2477 in PNG and some shareholders have queried why take on more projects and another region instead of concentrating on Bulago /Muller.

ELA 2476 covers ~436 sq km of the southern, SE central and eastern sections of Normanby island and ELA 2477 covers ~839 sq km of the sections of Fergusson, Goodenough and Sanaroa Islands, D'Entrecasteaux Island group, Milne Bay Province, Papua New Guinea. The total area of each will be reduced to more manageable levels (in compliance with requirements for the 50% reduction at the end of each 2-year term – just done early).

The initial reason for the ELA's that I gave was that the region has much better access than the Highlands (no helicopter requirement!) and thus more exploration can be undertaken for less cost, to increase the ultimate probability of discovery.

The main reason however, was to acquire all the available quality prospects in the region prior to the ballot for the Imwauna Deposit ELA (66 sq km), Sehulea Deposit ELA (23 sq km) and Igwageta areas (63.3 sq km), on Normanby and Fergusson Islands (refer to the location plan below) on November 3rd.

I was in Port Moresby at opening time to lodge applications for them. Unfortunately, there were another 10 applicants, though one was disqualified immediately. The Registrar determined that he would carefully vet all the applications prior to the ballot, so the ballot was delayed until the morning of Tuesday 8th, commencing at 0900hrs local time. The email sent circulating the new time of the ballot was sent to 9 applicants, so Frontier has a 1:9 chance (11%) of obtaining Imwauna and better odds for the other areas, as several companies were only applying for Imwauna.

Imwauna has an Inferred Mineral Resource estimated to be 1.8 million tonnes at 12.1 g/t gold + 20 g/t silver (for the contained metal of 706,000 oz. gold and 1,160,000oz. silver, by New Guinea Gold Corporation in June 2008, documented by a NI43-101 report /compliant with the JORC Code).

I worked on Imwauna from 1993 to 2009 and know it well. It is my belief that the resource is overstated in tonnage – perhaps significantly. I also believe that the last explorer PNG Gold Corp (TSX-V) (after my association with the project finished) drilled it out on 12.5m centres and drilled deep holes that demonstrated the bottom of the system. Fortunately, they didn't test other well defined epithermal gold targets close by and those areas have potential to add to global resources.

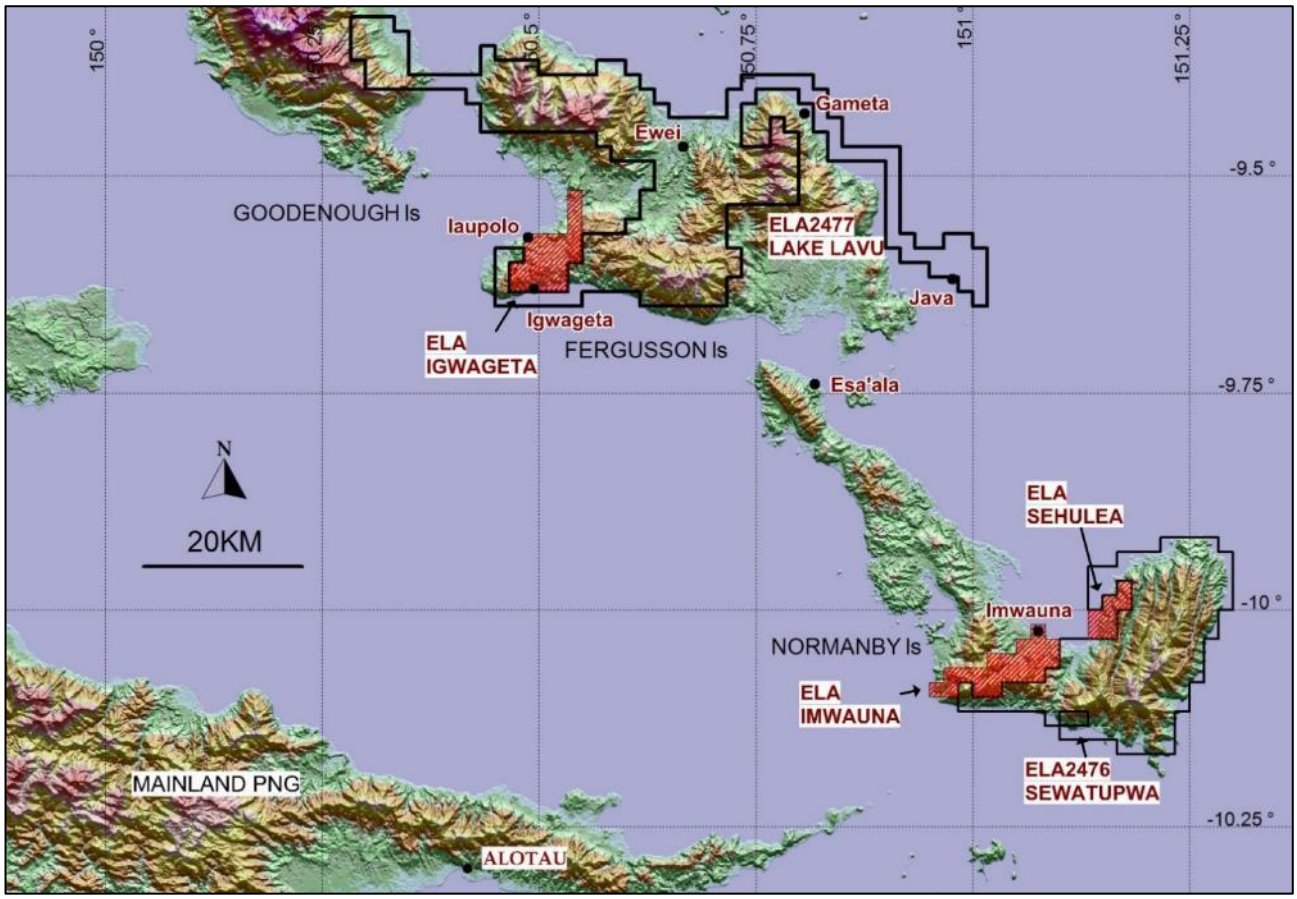
The Weioko epithermal gold Deposit had a JORC compliant Inferred Mineral Resource estimate completed in June 2003 by New Guinea Gold Corporation of 1.7 million tonnes at 1.36 g/t gold plus 12.3 g/t silver. Igwageta does not have a resource estimated, but has excellent exploration potential.

I have completed draft summary reports on each new ELA and they will be circulated in a separate release for shareholder's information.

Disclosure:
The ballot included 1 company in which I have full equity.

I originally applied for each of these ELs in 1992 (EL 1069- for Swan Resources NL), 1993 (EL 1091- for Macmin NL) and 2003 (EL 1324 – for my own Kanon Resources Ltd). My interests (former Quintessential Resources) also held Fergusson and Normanby Islands (as ELs 1822 /1823, with a 10% free carried interest) and conducted a significant amount of work on them. This is the precedent, in addition to the fact that Frontier has never operated in this region.

The Board of Frontier has agreed that my interests will receive a 20% free carried interest in the three possible projects up for ballot on Tuesday, if awarded by the Mineral Resource Authority and approved by Frontier shareholders (or the ELA reverts to my interests 100%).



Exploration Licence Applications

The PNG Mining Act of 1992 is based on Queensland Mining Act and is currently under revision.

It is first in first served for applications, or if more than 1 company applies at exactly the same time (i.e. opening normally) then a ballot/hat draw. ELAs can be subsequently pegged over by another company and if the first ELA fails, then the second is next in line for a chance of grant.

The process is to Lodge required documentation in triplicate and then about 3 months later conduct a Warden's Court Hearing to assess landowner's views (held at site on the ELA). The Warden reports to Mining Advisory Council, which ultimately makes a recommendation to the Minister that is usually accepted.

MRA (Mineral Resource Authority) fund the Warden's cost for Hearing but Company must get him from Hotel to site and back.

The process can take 8 months to a year normally after the Warden's hearing, but can be expedited somewhat. No reasons are given for decisions made by the MAC or Minister.

The Application fee is K5000 - about A$2,200.

ELs have 2 year renewable terms for perpetuity (in theory), with mandatory 50% reductions each 2-year term until the area is 100sq km or less (30 sub blocks).

Expenditure per latitudinal sub block increase each term and the first Term is only K90 ($40) per sub block.

For both ELA 2476 and 2477, the proposed expenditure is K60,000 per year each (about $50,000 for both/year). They are quite affordable for Frontier.

For the Imwauna, the proposed expenditure is K100,000 for year 1 and K250,000 for year 2 (about $42,000 for year 1 and $105,000 for year 2). Sehulea and Igwageta both have proposed expenditures of K40,000 per annum ($18,000 each/year), so these are also quite affordable for Frontier.

EL APPLICATION BALLOTS UNSUCCESSFUL

Frontier was unsuccessful in the ballots for all three ELA areas under consideration on Normanby and Fergusson Islands, Milne Bay Province, being Imwauna, Igwageta and Sehulea.

Frontier will now move forward in the district with the Sewatupwa and Lake Lavu ELAs that were taken out recently on Normanby and Fergusson Islands. As noted in their data summaries, there are many significant epithermal gold prospects that warrant extensive exploration and ultimately these will be targeted.

THE RIGHTS ISSUE ANNOUNCED ON NOVEMBER 29TH 2016 CLOSED ON MONDAY, 16TH JANUARY 2017, WITH 230 APPLICATIONS FOR 11,005,001 SHARES TOTALLING $330,150.16

Commenting on the successful Rights Issue, Frontier's Managing Director, Mr Peter McNeil said:

> *The Board of Frontier is delighted with the support shown by 230 of the Company's shareholders in a difficult market, especially for junior exploration companies. The funds raised will enable Frontier to continue to drill test high priority exploration targets at Bulago, commencing as soon as possible.*
>
> *The Frontier exploration / drilling team is anticipated to mobilise to Bulago in early February for a 3 month, multiple hole drilling program that will include two high priority porphyry copper -gold holes, in addition to further substantial drilling of the high-grade gold at the Swit Kai Prospect.*
>
> *The Company also hopes to be able to undertake additional general exploration at Bulago including hand trenching topographic +/- lead/ zinc/gold soil anomalies, undertaking pan concentrate /stream sediment to the northwest and north of Swit Kai and reconnoitring and hand trenching of the major gold/zinc/lead soil anomaly in the central north of the Bulago Valley.*
>
> *Frontier will also initiate exploration at the Muller EL as soon as practical/ possible.*

The Rights Issue offered eligible shareholders registered on the Record Date the ability to subscribe for New Shares on the basis of one (1) fully paid ordinary share for every three (3) held at an issue price of $0.03 per New Share.

The results of the Rights Issue are as follows:

Number of Entitlement Shares: 5,748,544
Number of Additional Shares: 5,256,457
Shortfall Shares: *4,657,864*
Total Number of Shares: 15,662,865

I note that my personal interests (Superfund, Company, self, wife) have subscribed for a total of $87,042.36 shares at 3¢ per share in the current Rights Issue for 2,901,412 shares, showing our belief in the future success of Frontier or colloquially "skin in the game". In addition, I will be seeking shareholder approval so I can obtain additional shares to take my total equity interests to 19.99%, as I cannot participate in the Rights Issue shortfall or placements without shareholder approval.

The Board of Frontier reserves the right to place the shortfall from the Rights Issue within the next three months.

FRONTIER RECEIVED FIRM COMMITMENTS FROM CONSULTANTS AND CONTRACTORS TO THE COMPANY TO SETTLE FUTURE FEES IN SHARES

The Company's professional consultants and contractors, including the Company's helicopter provider, have agreed to settle future fees totalling up to $200,000 in shares at conversion price of $0.03 per share (**Conversion**). The Conversion represents between six and twelve months of professional fees including $120,000 or 32 hours of helicopter service in Papua New Guinea.

Frontier currently has no existing debt with these consultants and contractors and the Conversion covers future work. The Directors note that the Conversion is an efficient way of enabling more exploration to ultimately be undertaken in PNG and are encouraged that these parties are pleased to participate in this manner in the Company's future which they all help make occur. Frontier's Directors are very pleased with the support being shown and the consultants' and contractors' belief in the Company's future endeavours.

This Conversion, specifically the helicopter service, will provide the Company the flexibility to save a substantial amount of budgeted expenditure from the Bulago/Muller exploration programs proposed in the Rights Issue Replacement Prospectus lodged on 8 December 2016. The savings will also be used to show enhanced financial viability to the PNG Mineral Resource Authority in regards of the Company's 3 new Exploration Licence Applications (including the recent Gazelle Peninsula ELA that contains the former Sinivit Mine and gold resources). Assuming these 3 ELAs are granted, some capital 'saved' in this manner could be used to fund exploration on their prospective gold and copper targets.

It is anticipated that a shareholders' meeting will be set as soon as practical in 2017 to seek shareholder approval for the Conversion.

THE COMPANY WISHES TO ADVISE THAT ITS PRINCIPAL AND REGISTERED OFFICE, AND POSTAL ADDRESS HAVE CHANGED WITH IMMEDIATE EFFECT TO:

Principal and Registered Office:
Unit 5, Ground floor
1 Centro Avenue
Subiaco WA 6008

Postal Address:
PO Box 510
Subiaco WA 6904

RELEASES SUBMITTED TO THE ASX DURING THE QUARTER INCLUDED:

24th January 2017 - Change of Directors' Interest Notices

19th January 2017 - Rights Issue Raises $330,150 for Drilling and Exploration in Papua New Guinea

12th January 2017 - Company Update and Drilling at Bulago to Commence Early-Mid February 2017

11th January 2017 - 2017 Bulago Exploration to Focus on Copper in Addition to High Grade Gold

3rd January 2017 - Evaluation of the Sinivit Mine Resource Estimates Shows Total Indicated and Inferred Resources of Approximately 217,000 Ounces of Gold Grading 3.93 g/t

3rd January 2017 - Extension of Closing Date for Rights Issue

23rd December 2016 - Agreement to Issue Shares In lieu of Fees Totalling $200,000

21st December 2016 - Joint Venture Discussions Being Undertaken on PNG Projects

19th December 2016 - Unreserved Apology to New Guinea Gold Corp For Error in Reporting

16th December 2016 - Frontier Wins Ballot for Former Sinivit Gold Mine ML / EL Areas Plus Highly Prospective Sections of our Former East New Britain EL

8th December 2016 - Change of Registered Office

23rd November 2016 - Newly Discovered Zone of On-Strike Strike Rocks Assay to 49.80 g/t Gold + 135 g/t Silver Associated with the Swit Kai Moderate South Dipping Lower Horizon, Apparent Gold Mineralised Strike Length is >1,000m long on this Basis

23rd November 2016 - Swit Kai - East Creek Drill Core Assays to 4m of 31.66 g/t Gold Downhole

8th November 2016 - EL Application Ballots Unsuccessful

7th November 2016 - Frontier Strategy and General Update

7th November 2016 - EL Application 2477 - Lake Lavu

3rd November 2016 - EL Application - Sewatupwa River

For additional information please visit our website at www.frontierresources.com.au

FRONTIER RESOURCES LTD

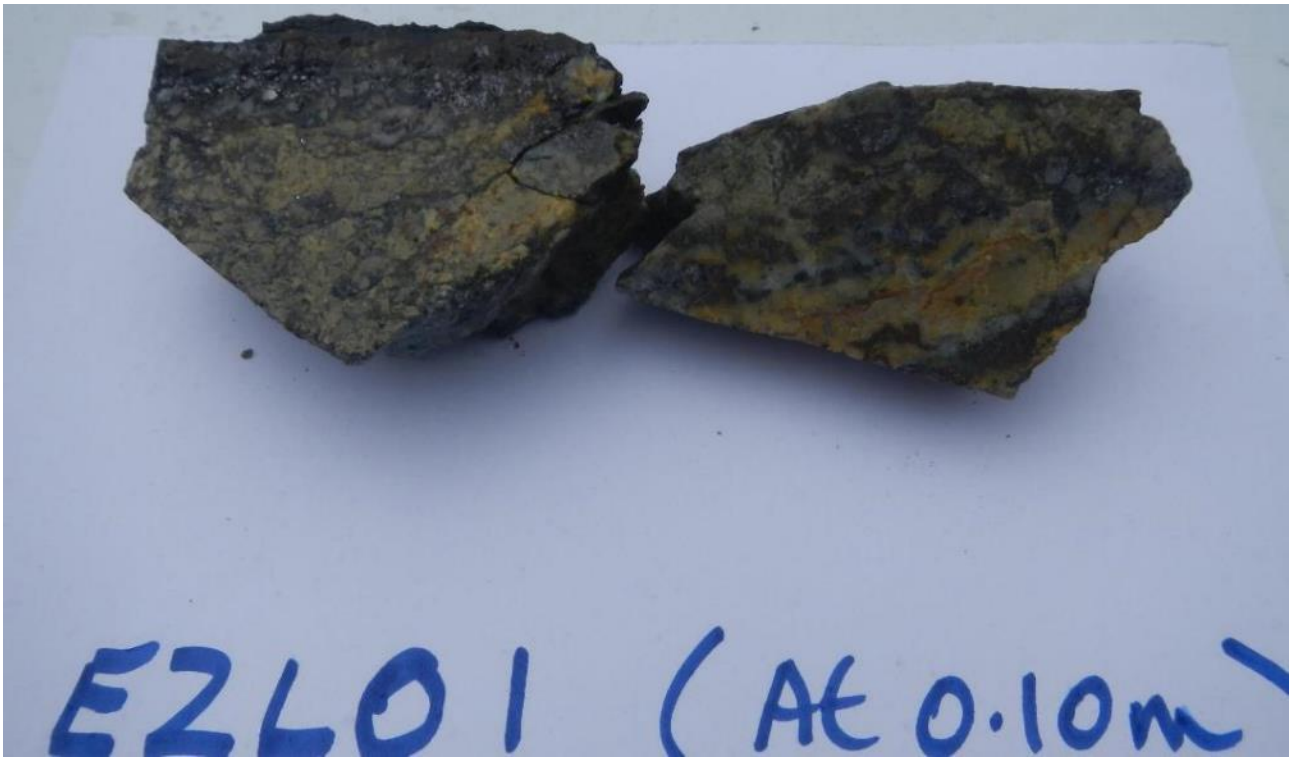
P.A. McNeil, M.Sc., MAIG
Chairman and Managing Director

Competent Person Statement:

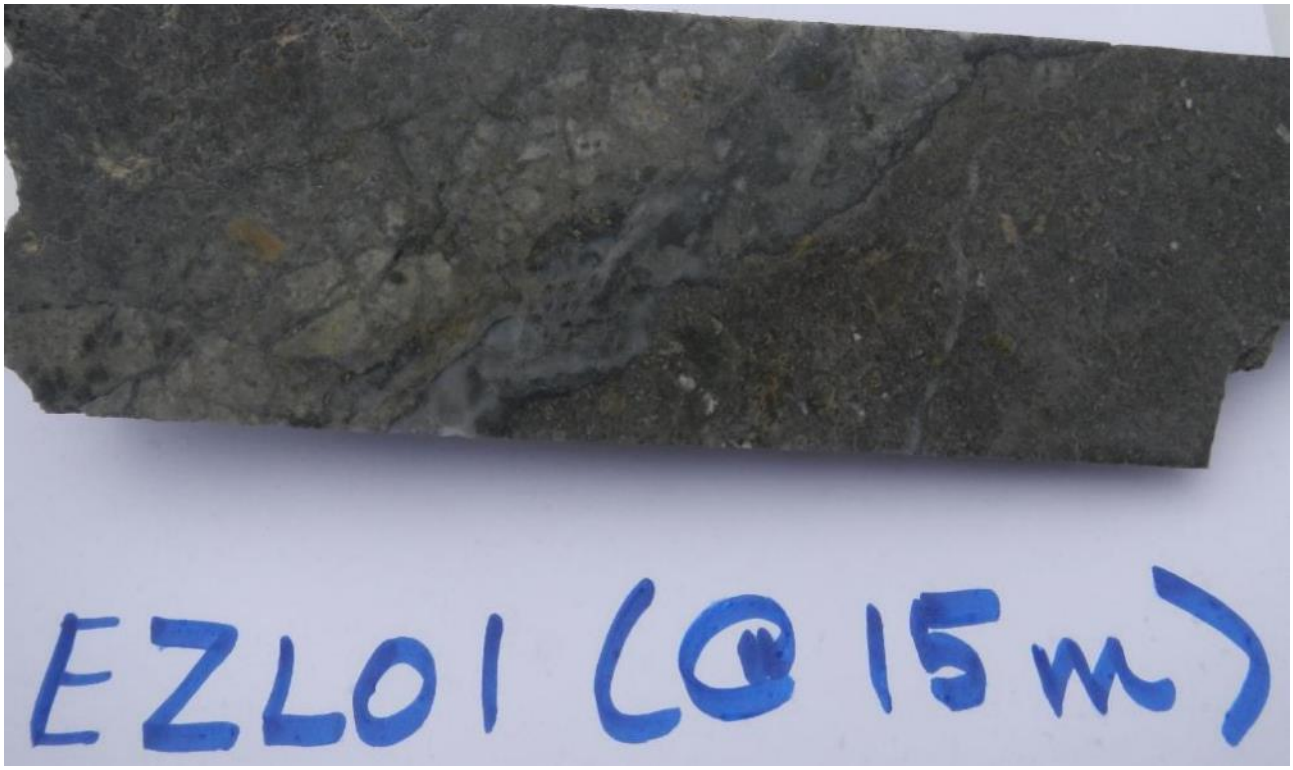
The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by, or compiled under the supervision of Peter A. McNeil - Member of the Aust. Inst. of Geoscientists. Peter McNeil is the Managing Director of Frontier Resources, who consults to 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 2012 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.

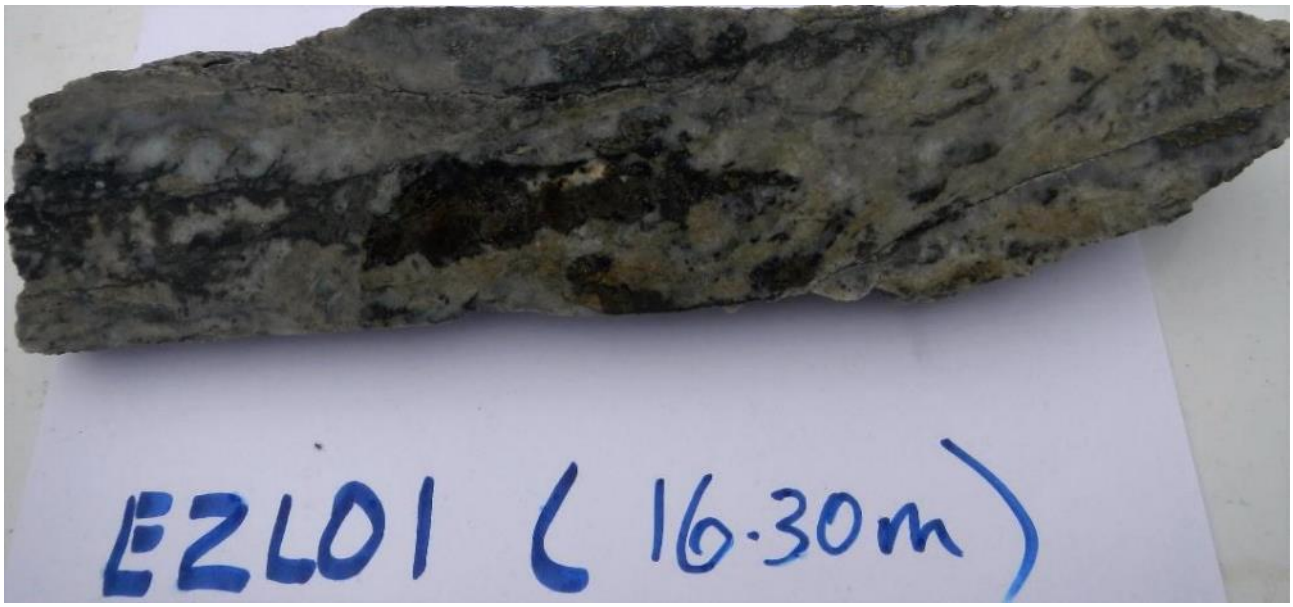
APPENDIX 1.

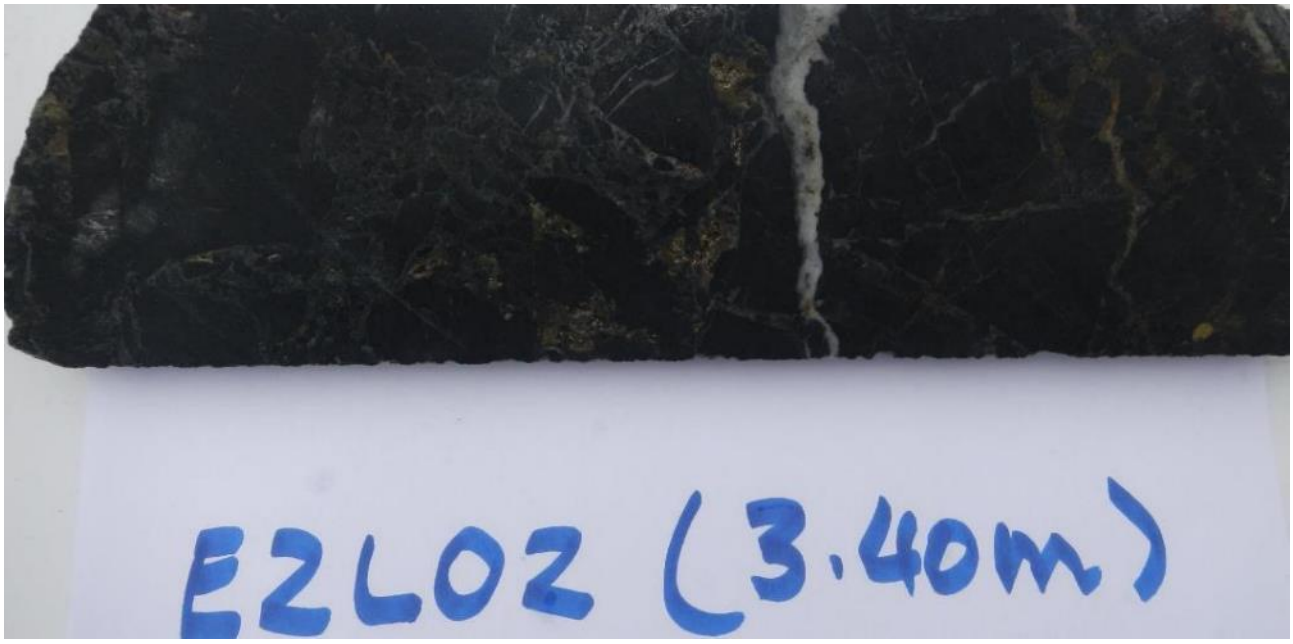
Photos of East Creek Drill Core and other related information for EL 1595 – Bulago, Papua New Guinea.




EZL01 (At 6.10m)


EZL01 (@ 15m)


EZL01 (16.30m)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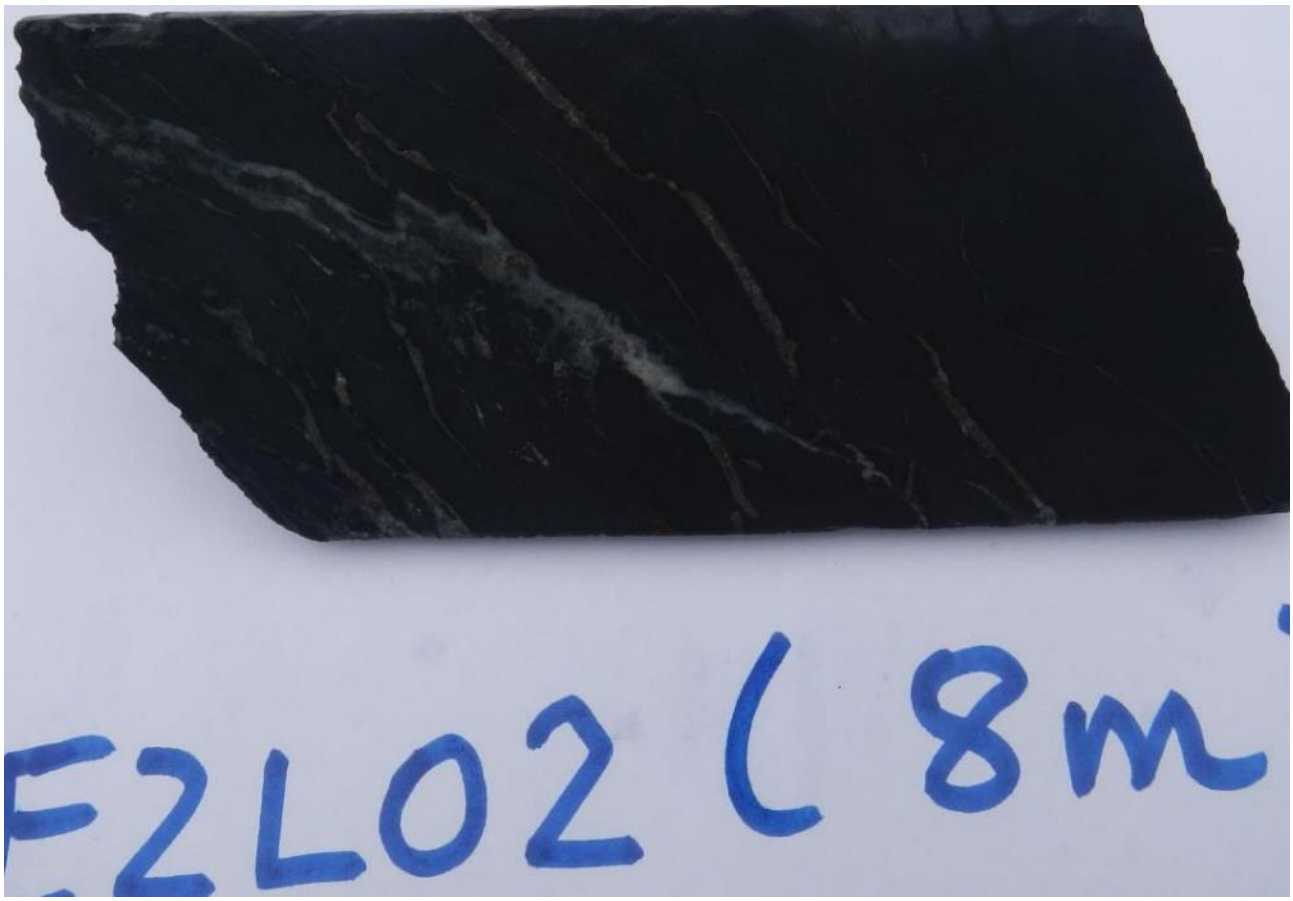
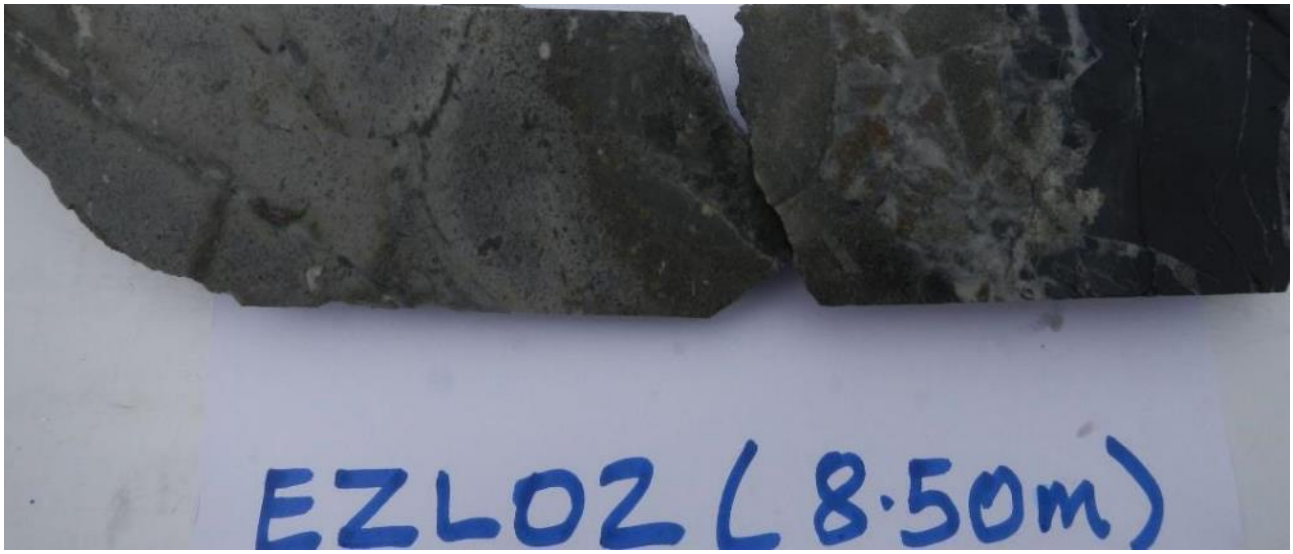
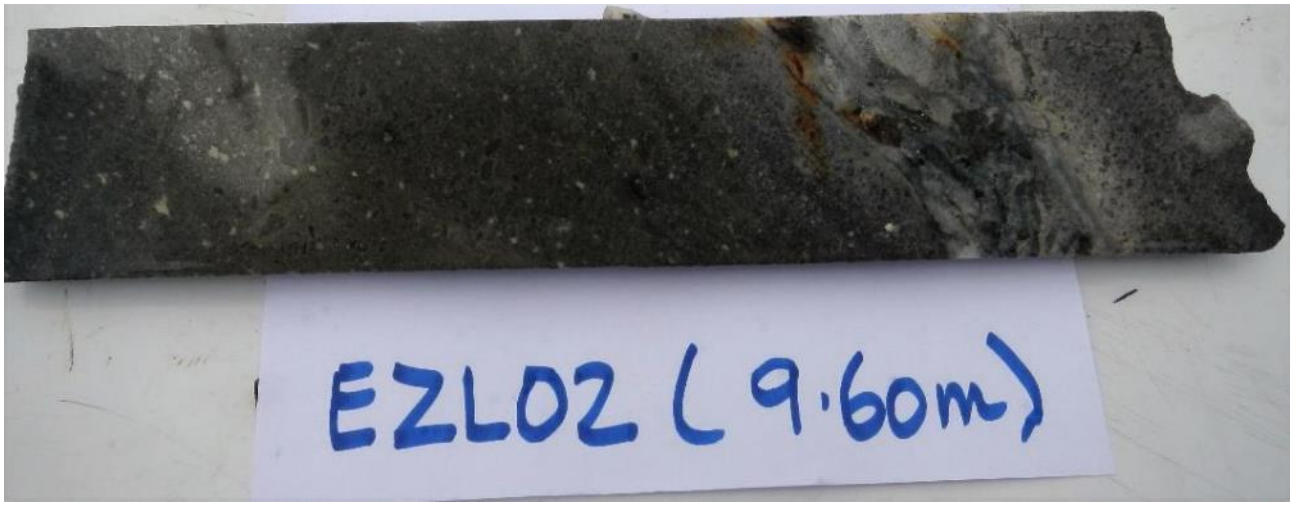
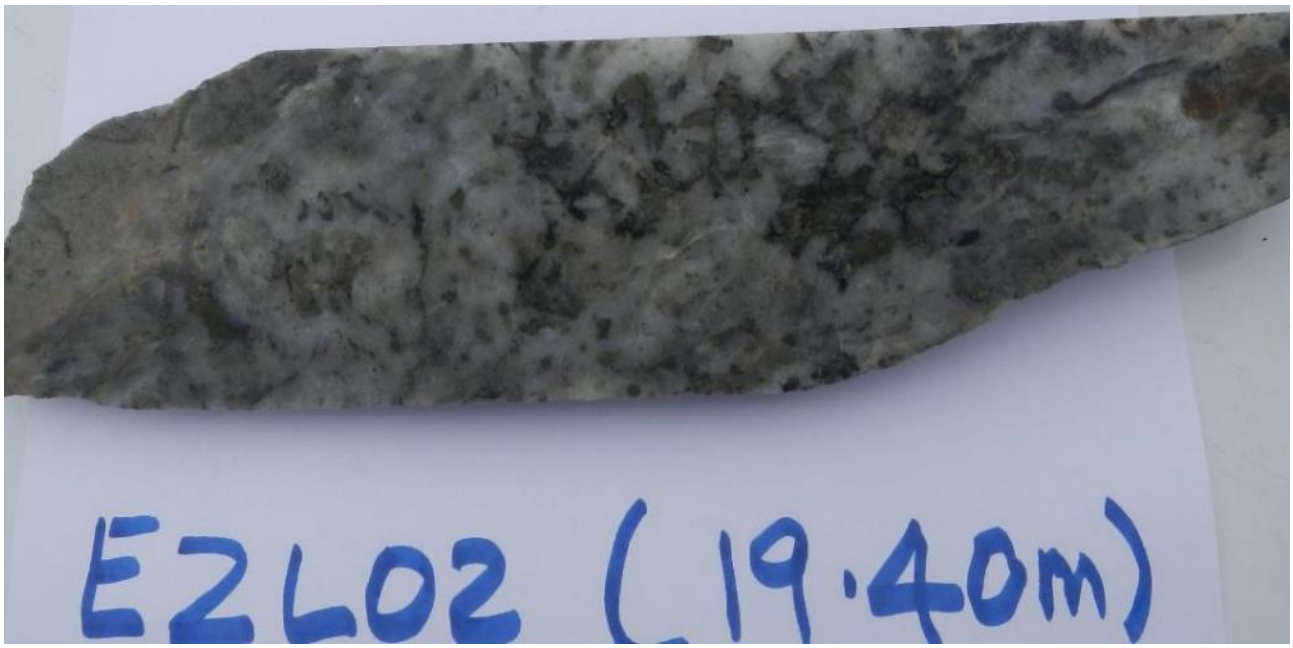
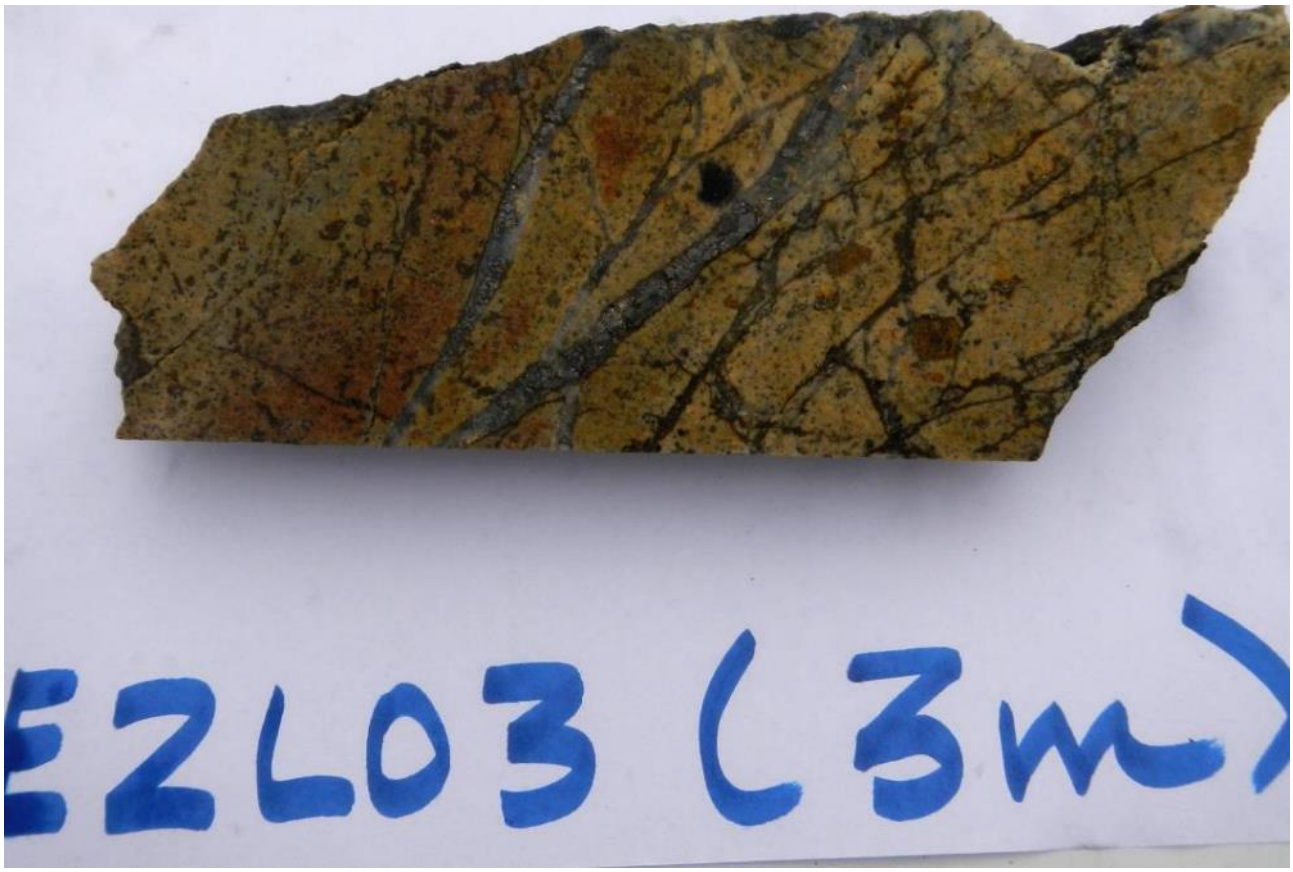

EZLO2 (8m

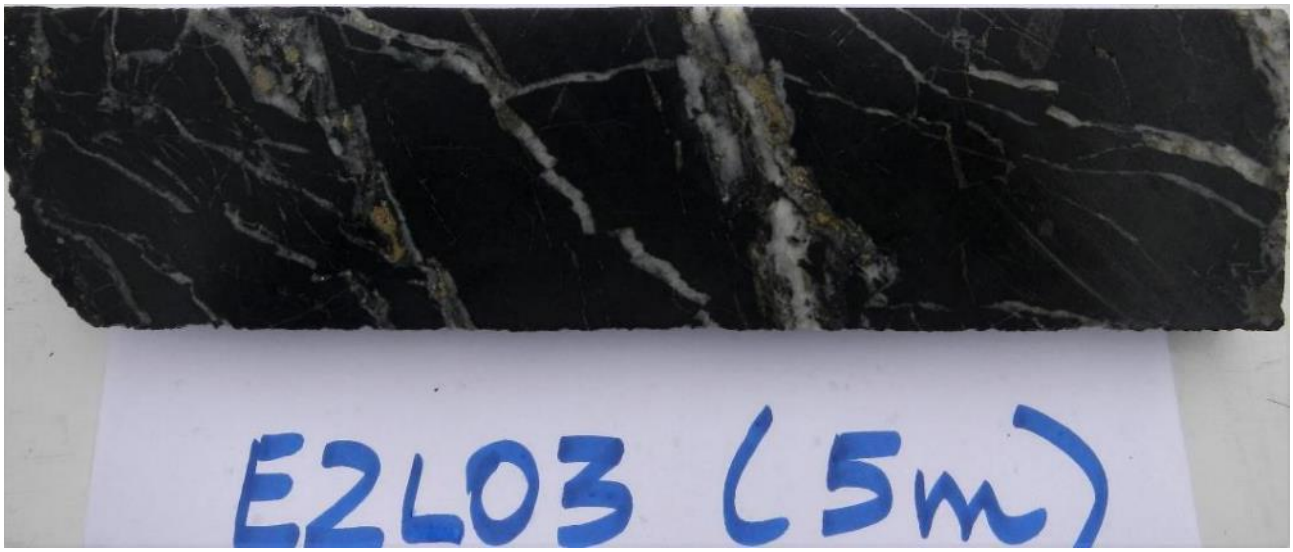

EZLO2 (8·50m)

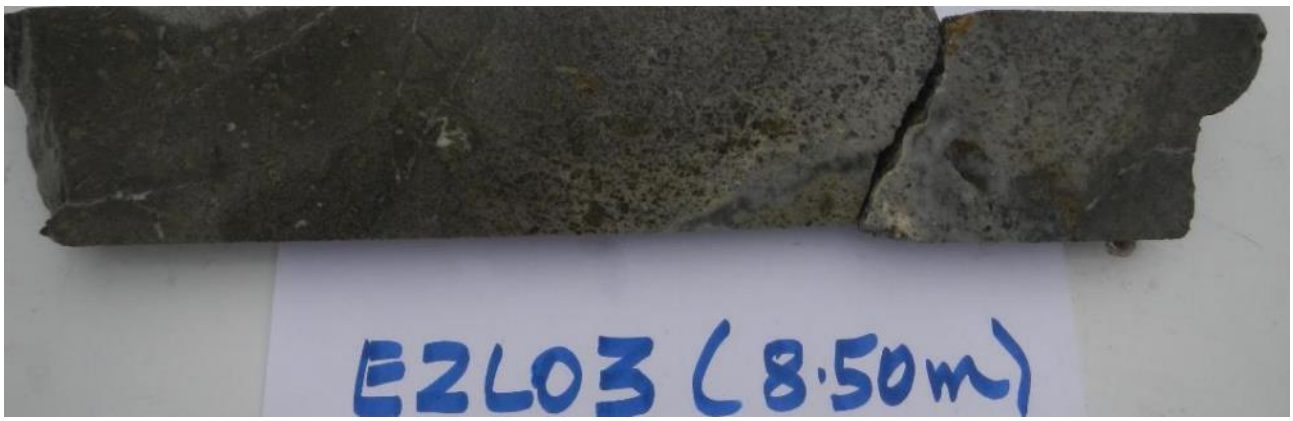

EZLO2 (9·60m)


EZL02 (19.40m)

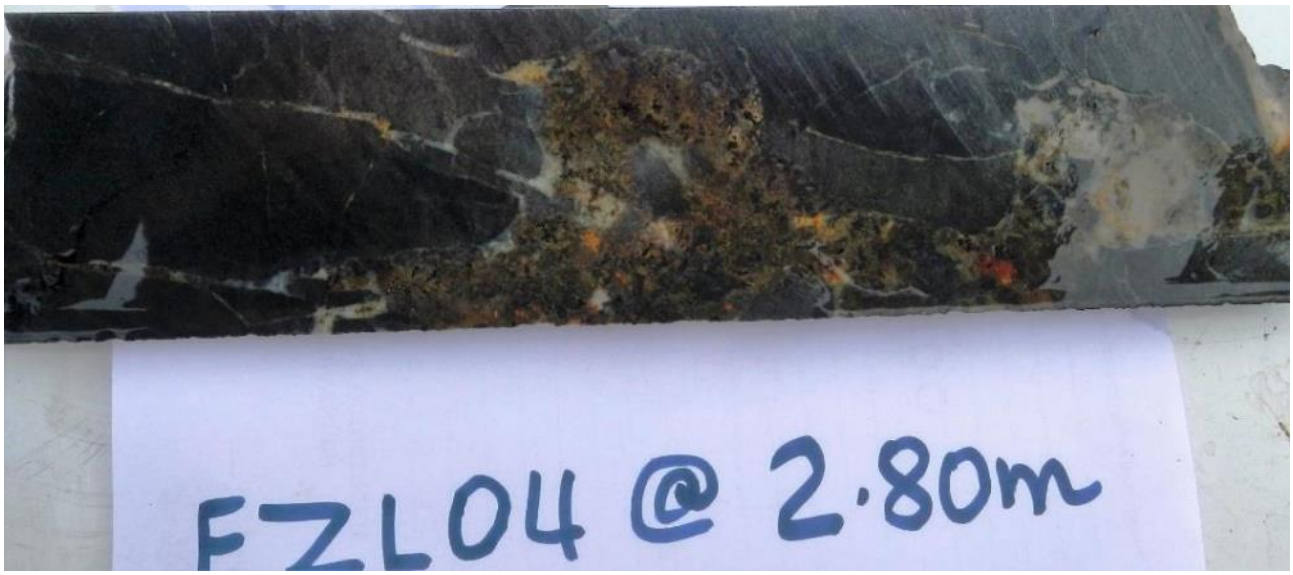

EZL03 (1.20m)


E2L03 (3m)

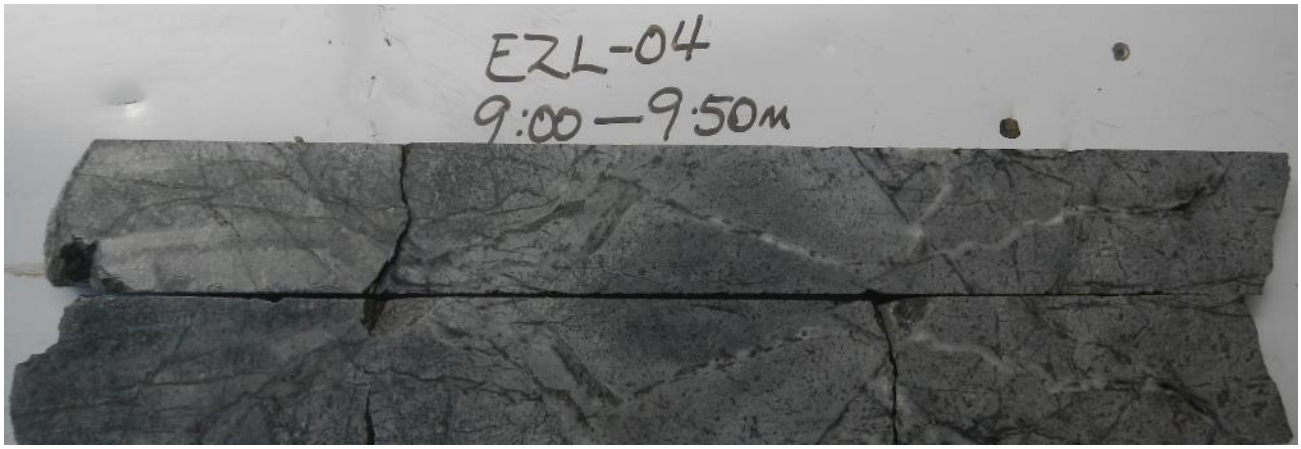

E2L03 (5m)

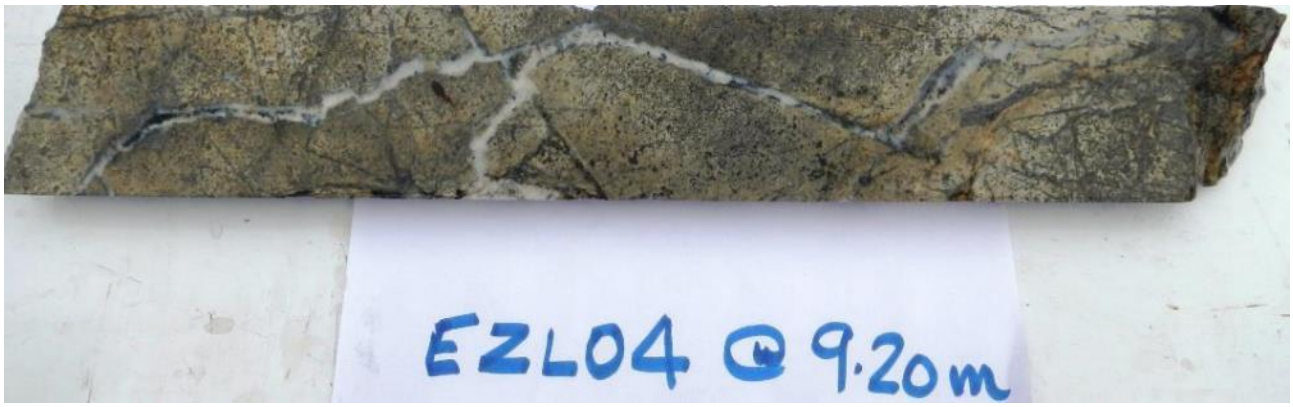

E2L03 (8.50m)

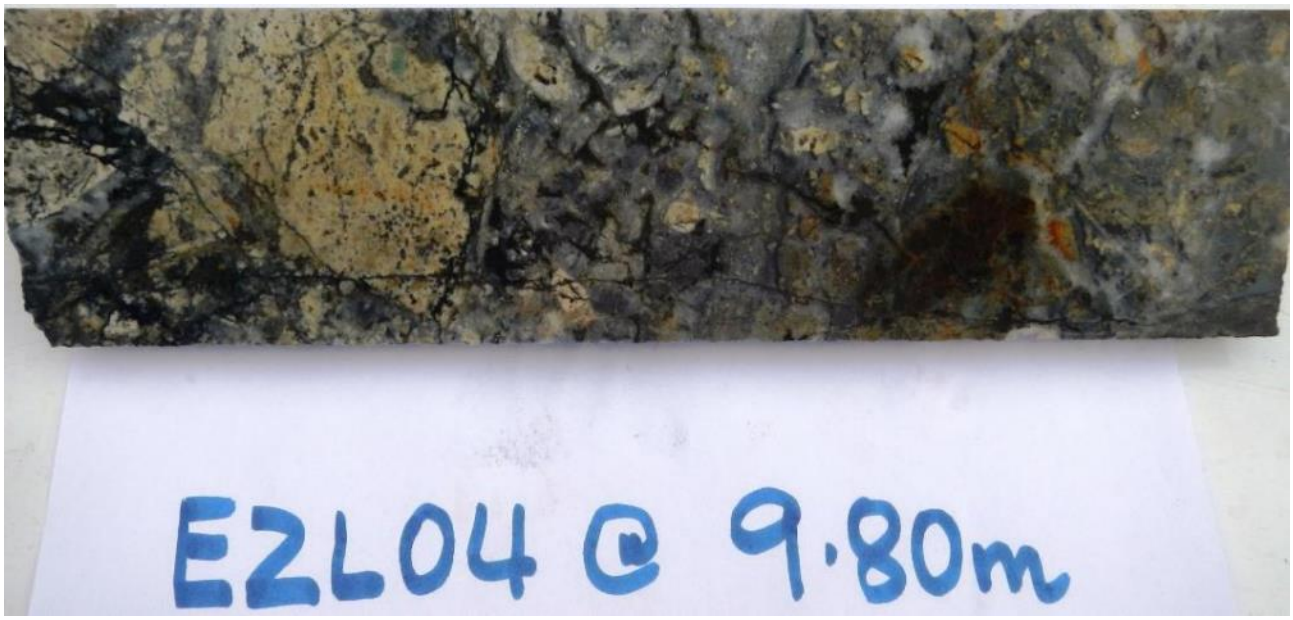

EZL04 @ 2.20m

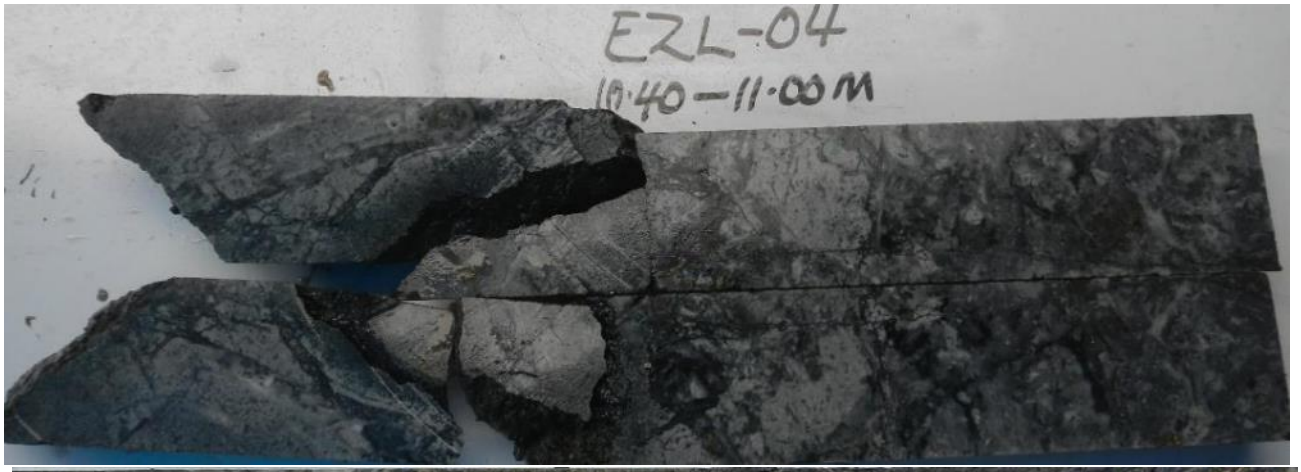

EZL04 @ 2.80m

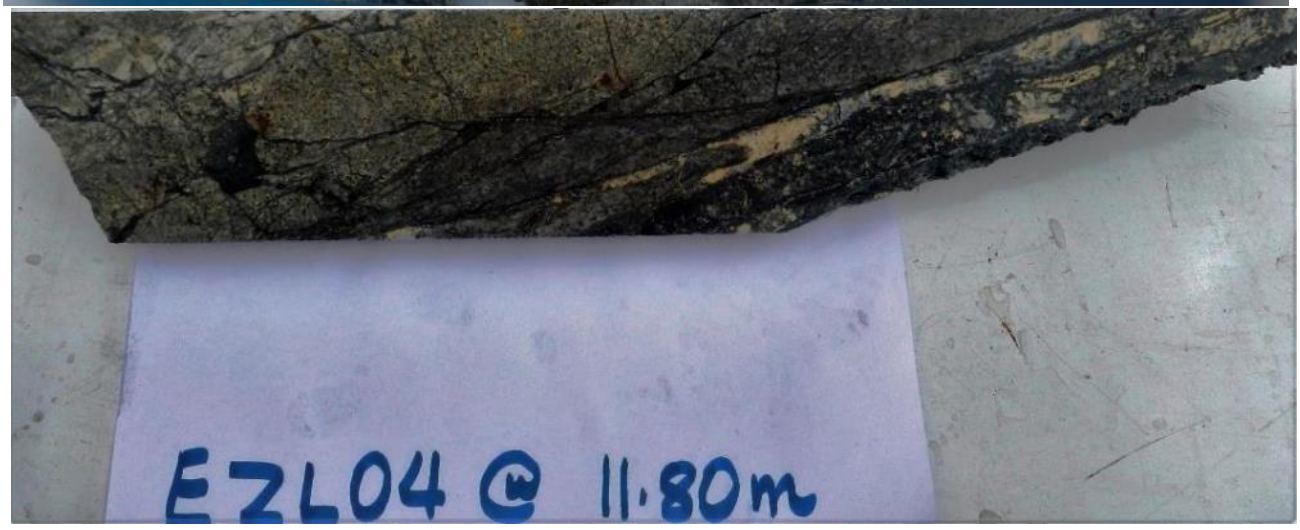

EZL04 6.5-8.30m

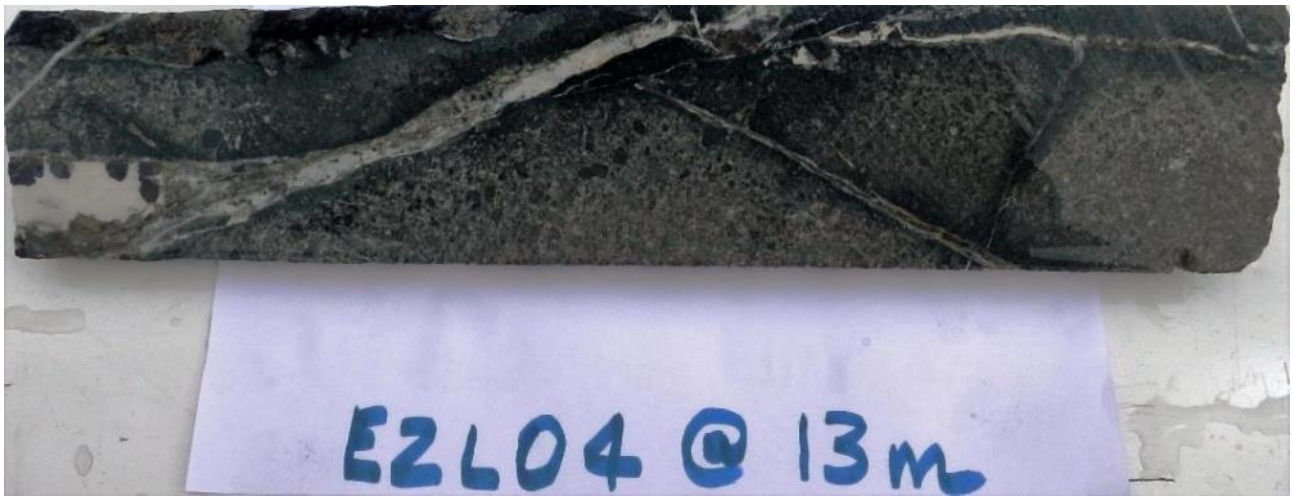

EZL-04
9:00—9.50m

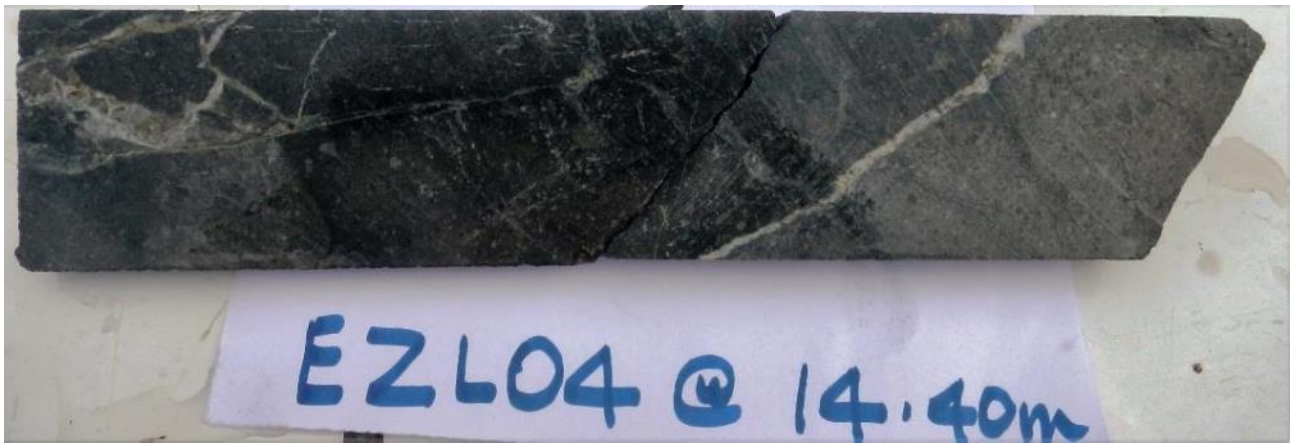

EZL04 @ 9.20m

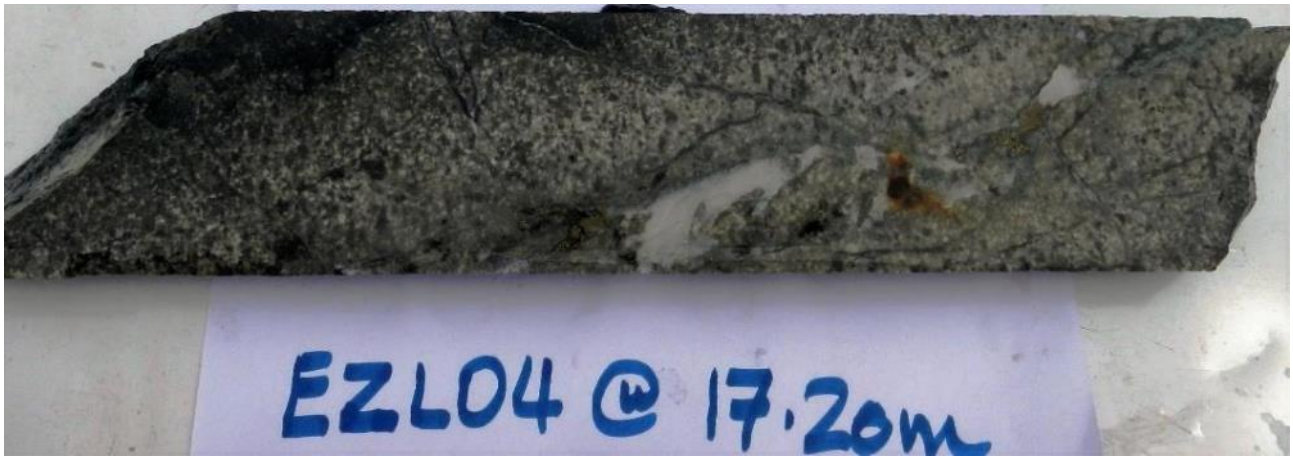

EZL04 @ 9.80m

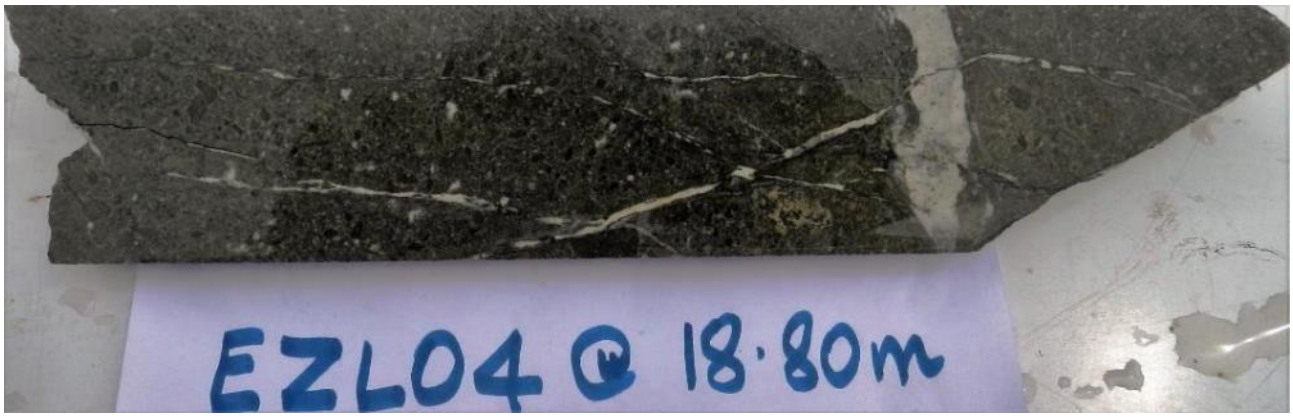

EZL-04
10.40-11.00M

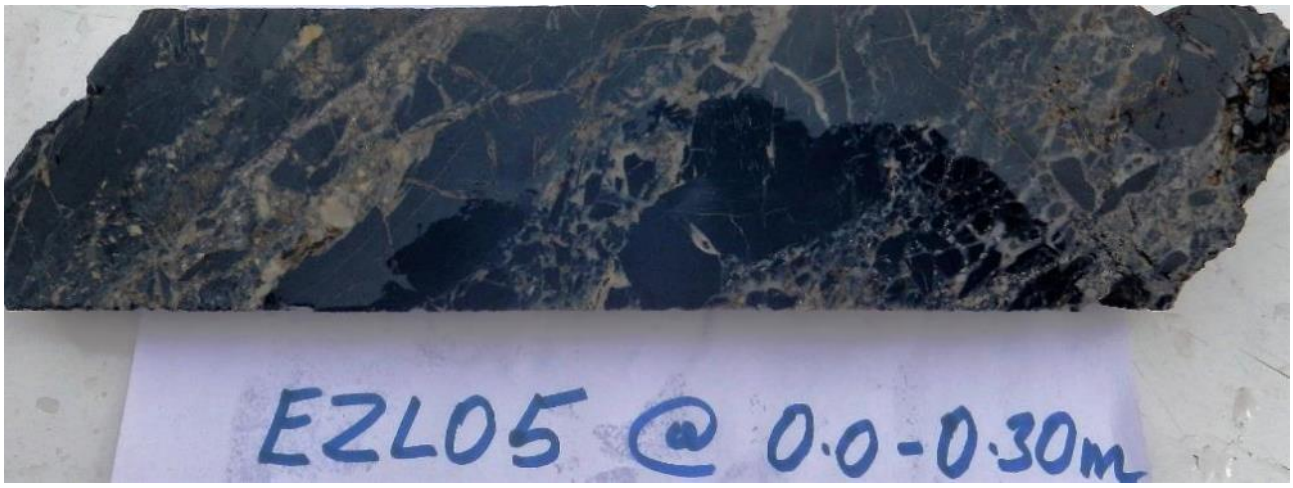

EZL04 @ 11.80m


EZL04 @ 13m

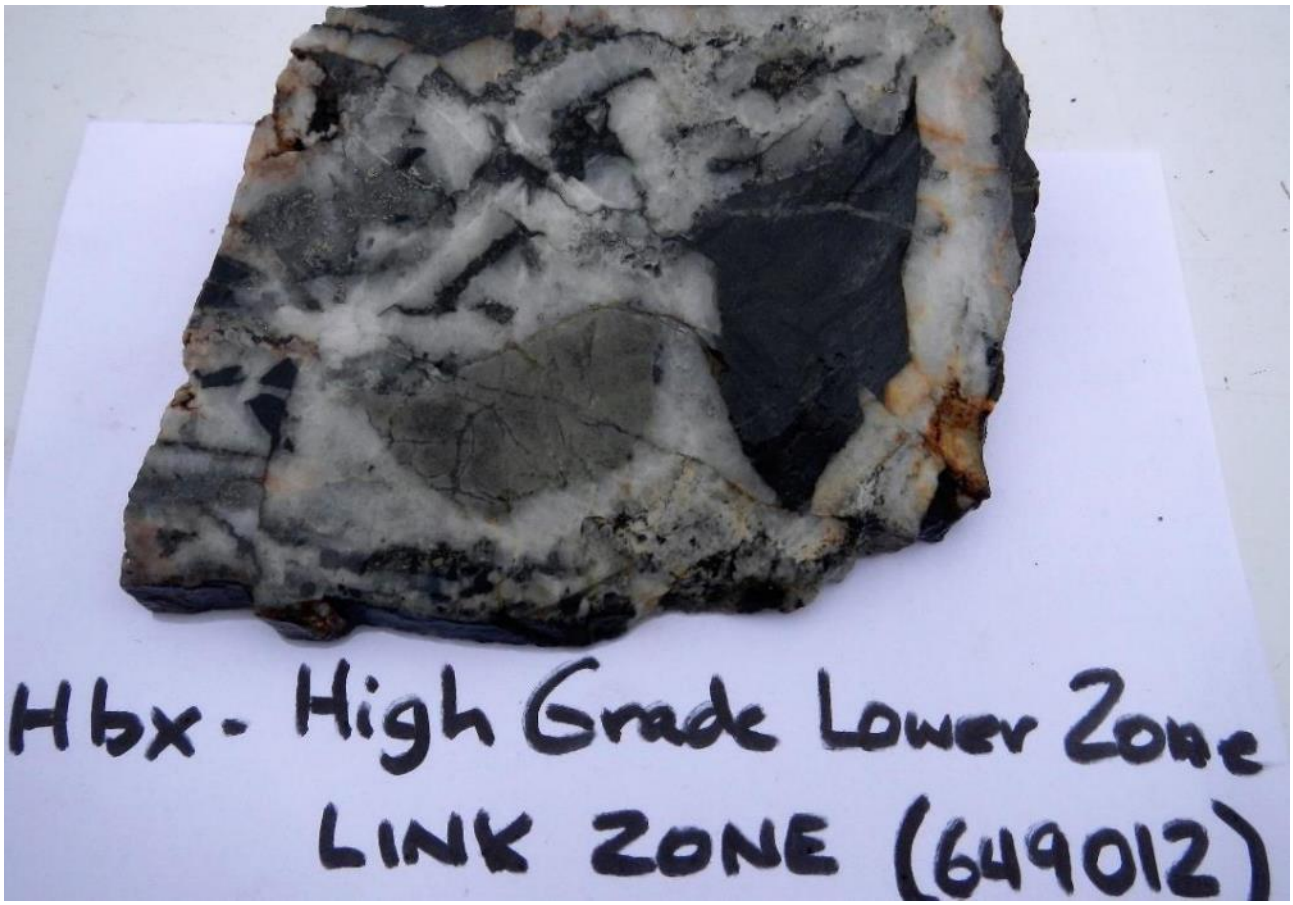

EZL04 @ 14.40m


EZL04 @ 17.20m


EZL04 @ 18.80m


EZL05 @ 0.0-0.30m


Hbx - High Grade Lower Zone
LINK ZONE (649010)


Hbx - High Grade Lower Zone
LINK ZONE (649012)


SWIT KAI PROSPECT
EL: 1595
EZL-02
14/10/2016
BOX 1
&
BOX 2
0.00
1.60
3.10
4.60
6.10


SWIT KAI PROSPECT
EL: 1595 BOX 3
EZL-02 &
14/10/2016 BOX 4


SWIT KAI PROSPECT
EL: 1595 BOX 5
EZL-02 &
14/10/2016 BOX 6


SWIT KAI PROSPECT
EL1595 BOX 7
EZL-02 &
15/10/2016 BOX 8


SWIT KAI PROSPECT
EL1595 BOX 9
EZL-02 &
15/10/2016 BOX 10


SWIT KAI PROSPECT
EL1595 BOX 11
EZL-02 &
15/10/2016 BOX 12
START
END

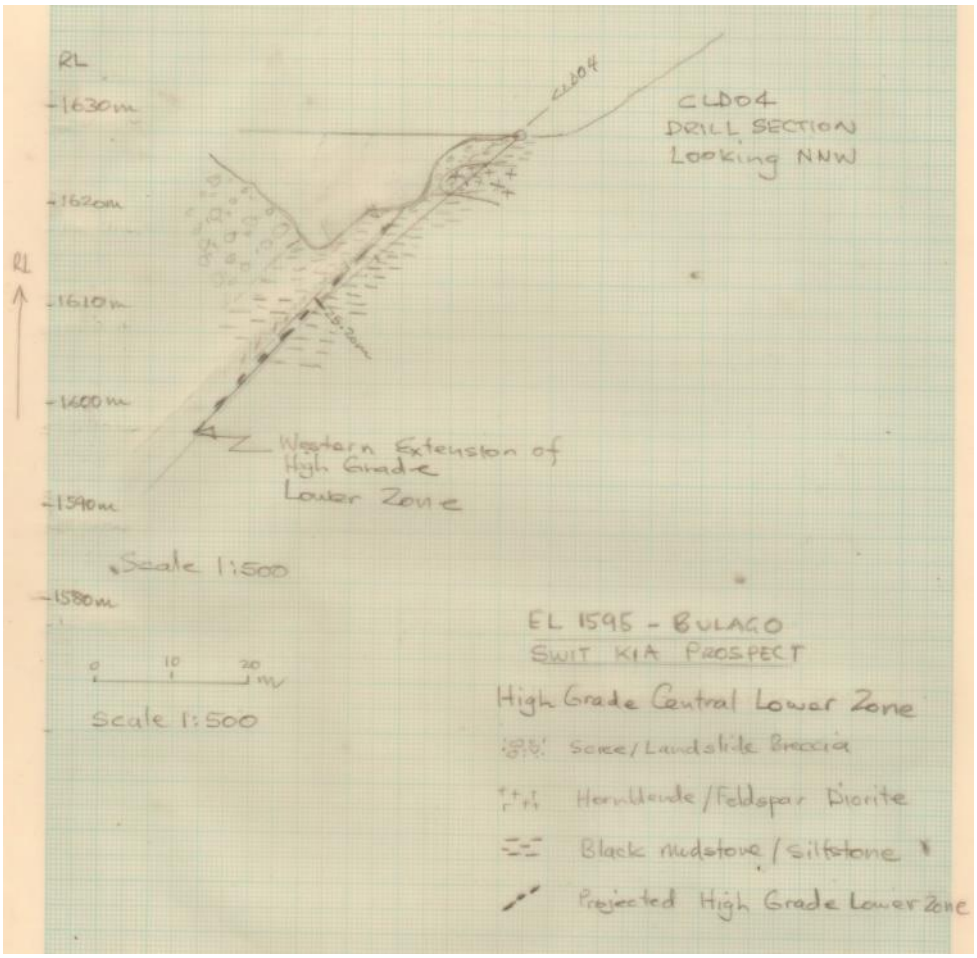

SWIT KAI PROSPECT
EL1595 BOX 11
EZL-02 &
15/10/2016 BOX 12
START
END

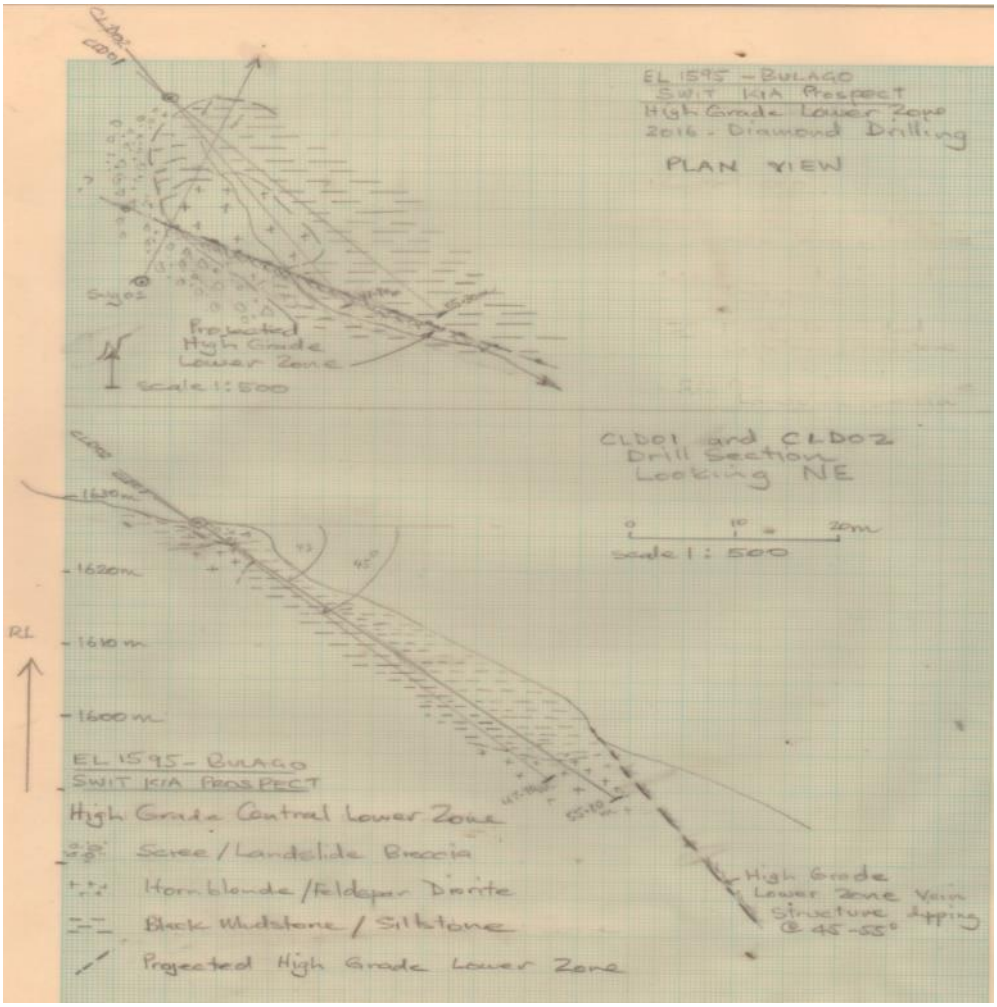

SWIT KAI PROSPECT
EL: 1595 BOX 1
EZL-03 & BOX 2.
18/10/2016
START

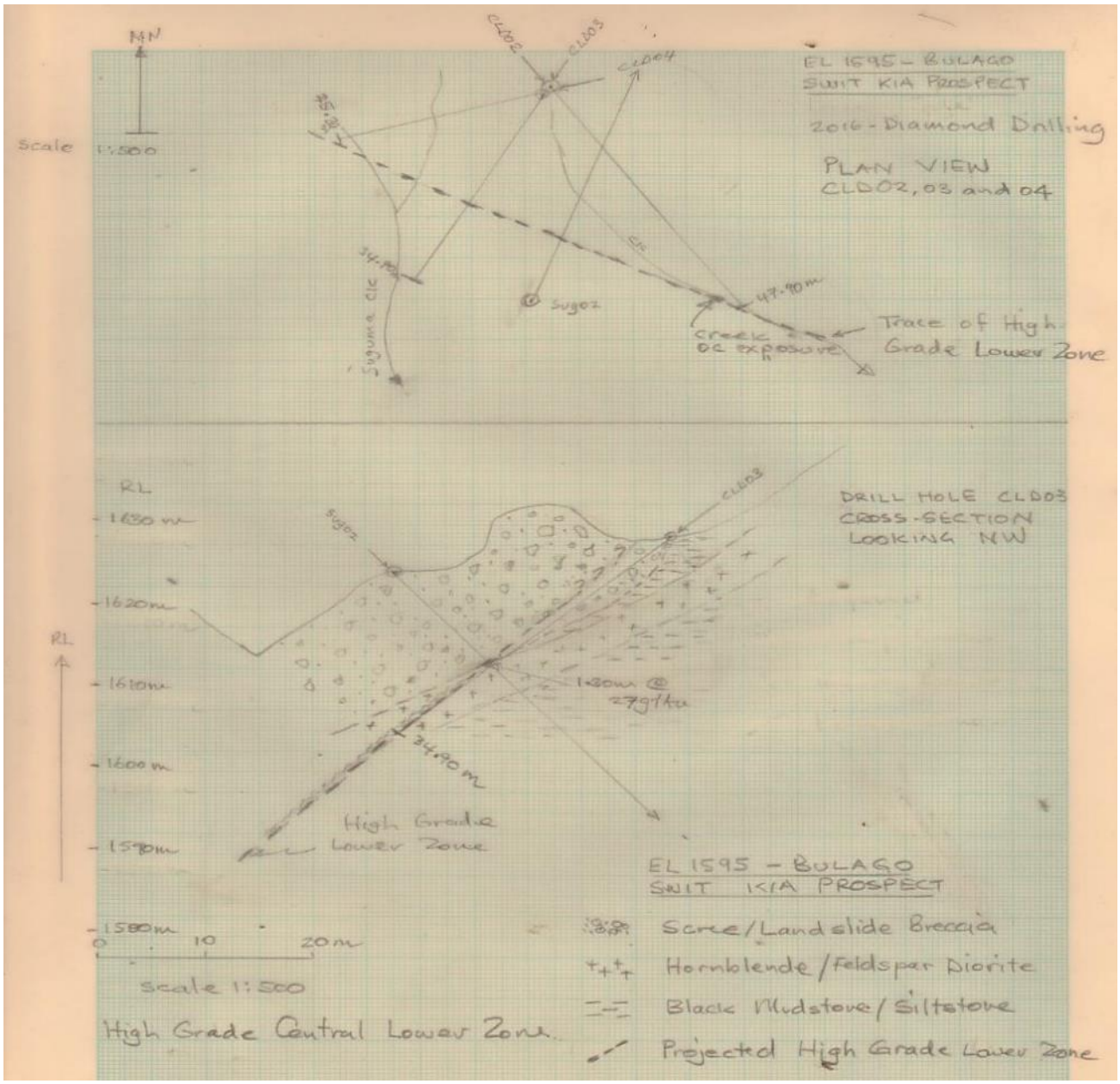

SWIT KAI PROSPECT
EL: 1595 BOX 1
EZL-04 & BOX2
21/10/2016
START
5m → 649199
6m → 649200
7m → 649201

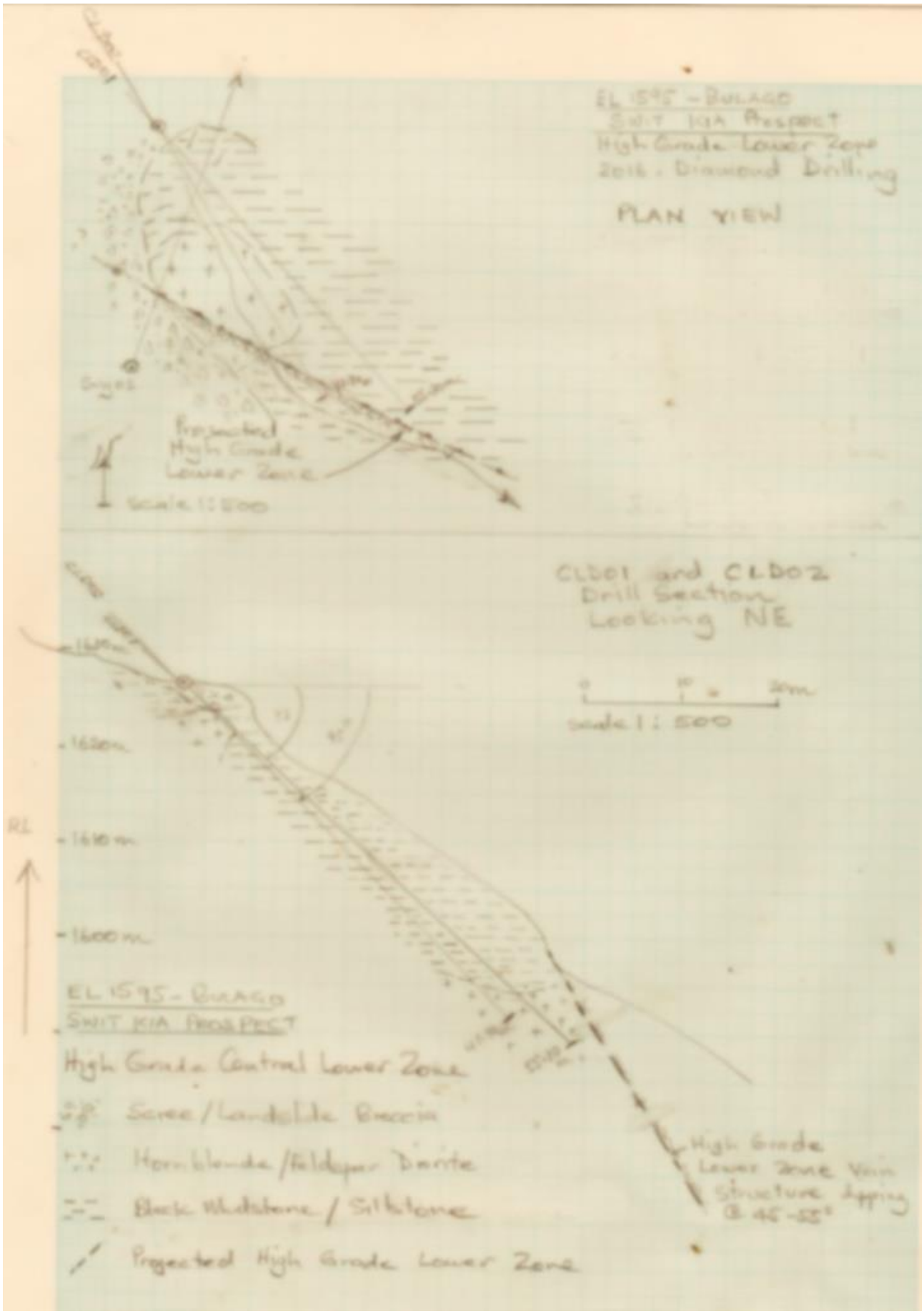

SWIT KAI PROSPECT
EL: 1595 BOX 3
EZL-04 & BOX 4
21/10/2016
9m 649203
11m 649205
649206
13m 649207
SWIT KAI PROSPECT
EL: 1595 BOX 5
EZL-04 & BOX 6
21/10/2016
649209
649210
649211
649212
649213
649214


SWIT KAI PROSPECT
EL: 1595
EZL-04
21/10/2016
BOX 7
&
BOX 8
START
START


RL
1630m
1620m
1610m
1600m
1590m
1580m
CLD04
CLD04
DRILL SECTION
Looking NNW
Western Extension of
High Grade
Lower Zone
Scale 1:500
0 10 20 m
Scale 1:500
EL 1595 - BULAGO
SWIT KIA PROSPECT
High Grade Central Lower Zone
Scree/Landslide Breccia
Hornblende/Feldspar Diorite
Black mudstone/siltstone
Projected High Grade Lower Zone


EL 1595 - BULAGO
SWIT KIA Prospect
High Grade Lower Zone
2016 - Diamond Drilling
PLAN VIEW
Projected
High Grade
Lower Zone
Scale 1:500
CLD01 and CLD02
Drill Section
Looking NE
0 10 20m
scale 1:500
RL
1630m
1620m
1610m
1600m
EL 1595 - BULAGO
SWIT KIA PROSPECT
High Grade Central Lower Zone
Scree/Landslide Breccia
Hornblende/Feldspar Diorite
Black Mudstone/Siltstone
Projected High Grade Lower Zone
High Grade
Lower Zone Vein
Structure dipping
@ 45-55°


EL 1595 – BULAGO
SNIT KIA PROSPECT
2016 - Diamond Drilling
PLAN VIEW
CLD02, 03 and 04
Scale 1:500
MN
CLD02
CLD03
CLD04
Sugoz
Sigume clc
34.90m
47.90m
Trace of High Grade Lower Zone
creek bc exposure
DRILL HOLE CLD03
CROSS-SECTION
LOOKING NW
RL
1630 m
1620m
1610m
1600 m
1590m
1580m
1.80m @ 27g/t
34.90 m
High Grade Lower Zone
0 10 20m
scale 1:500
High Grade Central Lower Zone.
EL 1595 – BULAGO
SNIT KIA PROSPECT
Scree/Landslide Breccia
Hornblende/Feldspar Diorite
Black Mudstone/Siltstone
Projected High Grade Lower Zone


EL 1595 – BULAGO
SWIT KIA PROSPECT
High Grade Lower Zone
2016 - Diamond Drilling
PLAN VIEW
Projected
High Grade
Lower Zone
Scale 1:500
CL001 and CL002
Drill Section
Looking NE
0 10 20m
Scale 1:500
RL
1630m
1610m
1600m
EL 1595 - BULAGO
SWIT KIA PROSPECT
High Grade Central Lower Zone
Scree / Landslide Breccia
Hornblende / Feldspar Dacite
Black Mudstone / Siltstone
Projected High Grade Lower Zone
High Grade
Lower Zone Vein
Structure dipping
@ 45-55°

JORC CODE 2012

SECTION 1 -- SAMPLING TECHNIQUES AND DATA

SAMPLING TECHNIQUES

Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.

The Exploration Manager is generally onsite for the entire Exploration program and if he is not onsite there is always a Senior Geologist onsite or the Managing Director onsite to supervise. The staff are professional with individual decades of experience and they always attempt to conduct the programs according to well established exploration best practice /norms. Additional information is provided below.

DRILLING TECHNIQUES

Core was drilled HQTT (triple tube) by a CSD500 'man-portable' drill rig and was removed from the inner tube into 1m long core trays, being broken to fit as appropriate.

MEASURES TAKEN TO MAXIMISE SAMPLE RECOVERY AND ENSURE REPRESENTATIVE NATURE OF THE SAMPLES

Downhole sample recovery was maximised by the drillers utilising appropriate downhole drilling consumables at the appropriate times to 'consolidate' or hold the rock together, combined with the fact that we utilise our own rig and drillers who are not paid meterage (speed) bonuses and are therefore more careful with core recovery than normal commercial drillers (working on meterage bonuses).

Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.

Recovery is normally excellent at >95% overall. Where there is core loss, there is no apparent relationship between recovery and grade. No sample bias appears to have occurred due to loss of fine material when this did occur. We do not get a gain in material.

Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies

The core has been geologically and geotechnically logged in sufficient detail to support appropriate Mineral Resource estimation, mining and metallurgical studies

Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.

The core was preliminarily logged and marked up for sampling (normally on a 1m or 2m basis, depending on the Exploration Managers estimate of the intervals' mineralisation potential), measured for recovery and photographed. After being cut and sampled the remaining ¾ core was geologically and geotechnically logged in detail.

The total length and percentage of the relevant intersections logged

100% of the core was logged, but not necessarily sampled unless it was noted to be megascopically mineralised / veined or brecciated by the Exploration Manager or Site Supervisor.

SUB-SAMPLING TECHNIQUES AND SAMPLE PREPARATION

If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.

Core samples were obtained from the drilling and utilised, so this is not applicable. Outcrop rock samples were collected from the surface and were wet or dry depending on the prevailing weather conditions.

For all sample types, the nature, quality and appropriateness of the sample preparation technique.

The whole core was appropriately diamond saw cut to quarter core to ensure representativeness relative to any structural /mineralisation orientations. The quarter core was then put into consecutively numbered calico bags for analysis.

Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate /second-half sampling.

Quarter core was cut to ensure representativeness relative to any structural /mineralisation orientations. No second quarter core sample analyses have been undertaken, but could be if deemed appropriate due to high grade samples that could induce a 'nugget' effect.

Whether sample sizes are appropriate to the grain size of the material being sampled.

The sample size is appropriate for the exploratory phase of work and allows residual samples to be available for use for comparative assaying and later metallurgical testing. Additional assaying is normally undertaken on the same pulp of very high grade samples to ensure their quoted assay accuracy prior to release.

QUALITY OF ASSAY DATA AND LABORATORY TESTS

The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.

All analyses were appropriately requested relative to the target type and expected assay ranges and were undertaken by SGS Australia – Townsville, Australia.

Sample Preparation for core and rocks was by method PRP88, that involved drying, crushing to 6 mm and pulverizing to 75µm on a 3.0kg or less sample weight.

Gold was determined by fire assay code FAA505, using lead collection technique with a 50-gram sample charge weight. Detection limits are 0.01– 10,000 g/t

Base metals were determined by a 4 acid ICP-OES finish, code DIG40Q. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. With most silicate based material, solubility is to all intents and purposes complete, however, elements such as Cr, Sn, W, Zr and in some cases Ba, may prove difficult to bring into solution. Some minerals may dissolve, or partly dissolve and precipitate the element of interest. Examples are silver, lead in the presence of sulphur/sulphate, barium in the presence of sulphur/sulphate, Sn, Zr, Ta, Nb through hydrolysis

The solution from the DIG40Q digest is presented to an ICP-OES for the quantification of the elements of interest. Code: ICP40Q, with detection limits of: Ag 0.5 – 200 ppm, Cu 5 – 10000 ppm, Ni 5 – 10000 ppm, Te 10 – 10000 ppm, Al 100 – 400000 ppm, Fe 100 – 1000000 ppm, P 20 – 100000 ppm, Th 10 – 10000 ppm, As 3 – 10000 ppm, Hf 20 – 10000 ppm, Pb 5 – 5000 ppm, Ti 10 – 20000 ppm, Ba 5 – 10000 ppm, K 100 – 200000 ppm, Rb 5 – 10000 ppm, U 10 – 10000 ppm, Be 0.5 – 5000 ppm, La 0.5 – 10000 ppm, S 20 – 50000 ppm, V 1 – 10000 ppm, Bi 5 – 10000 ppm, Li 1 – 10000 ppm, Sb 2 – 5000 ppm, W 10 – 10000 ppm, Ca 50 – 400000 ppm, Mg 20 – 1000000 ppm, Sc 0.5 – 500 ppm, Y 0.5 – 5000 ppm, Cd 1 – 5000 ppm, Mn 5 - 10000 ppm, Se 10 – 10000 ppm, Zn 5 – 10000 ppm, Ce 10 – 10000 ppm, Mo 5 - 10000 ppm, Sn 2 – 1000 ppm, Zr 1 – 10000 ppm, Co 1 – 10000 ppm, Na 50 – 200000 ppm, Sr 1 – 10000 ppm, Cr 10 – 20000 ppm, Nb 10 – 10000 ppm, Ta 20 – 10000 ppm.

If the sample contained more of the element than the method was capable of determining it was re-run using and 'Over-Range' method 4 acid – ore grade, assay grade method code DIG41Q. The sample weighing 0.2g (df=500) is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible.

Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.

Acceptable levels of accuracy and precision were established. Industry standard reference samples were introduced into the sample sequence every 10 samples as a check on the laboratory. No blanks or duplicates were introduced, although generally samples with significant assay results were re-analysed using the same sample pulp and no external laboratory checks were undertaken.

For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.

These machines were not utilised by Frontier and the laboratory is accredited and has its own internal procedures and parameters to ensure representative readings are made and reported.

VERIFICATION OF SAMPLING AND ASSAYING

The verification of significant intersections by either independent or alternative company personnel.

Two geologists were onsite at all times and verified the intercepts drilled. The Managing Director, if not onsite, verified intersections by inspecting all core via photography.

The use of twinned holes

No holes were twinned as this is unnecessary at this stage of exploration drilling and metallurgical samples are not yet required.

Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.

The Exploration Manager manually entered the primary data into his laptop in the field and later transferred it to the Managing Directors laptop via USB memory stick. Assay data is provided by the laboratory as a CSV file that the Managing Director manipulated to produce weighted average assay results depending on specific cut-off grades and intervals. This data is stored on the Managing Director's laptop as the primary database. Physical hardcopy data and representative core and rock specimens are stored at the Frontier office in Perth, WA with backup copies onsite at the project area.

Any adjustments to assay data.

No adjustments were made to any assay data, however, where available the assay results were averaged and the average result was reported. All gold assay results are reported herein. ICP assaying produces 1 result per element unless it is over-range, in which case an over-range method was utilised to obtain the actual assay value, as noted above.

ACCURACY + QUALITY OF SURVEYS USED TO LOCATE DRILL HOLES (COLLAR + DOWN-HOLE SURVEYS), TRENCHES, MINE WORKINGS AND OTHER LOCATIONS USED IN MINERAL RESOURCE ESTIMATION

No Mineral Resource has been estimated.

Specification of the grid system used.

Map datum is AGD 066 and PNG is covered by 1:100,000 topographic plans that have 40m contour intervals. DTM plans from SRTM or aeromagnetics have 10m contour intervals.

Quality and adequacy of topographic control

Topographic control is determined by handheld GPS and/or tape and compass surveying and is adequate at this stage of exploration.

DATA SPACING AND DISTRIBUTION

Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.
No Mineral Resource has been estimated.

Whether sample compositing has been applied.
No sample compositing was undertaken

ORIENTATION OF DATA IN RELATION TO GEOLOGICAL STRUCTURE
Whether the orientation of sampling achieves unbiased sampling of possible structures to the extent this is known, considering the deposit type.
The sampling conducted achieves unbiased sampling of possible structures to the extent this is known and /or possible relative to physical constraints on the location of the drill rig and / or the orientation of the outcrop sampled relative to its strike and dip. The diagrams and plans contained show relatively what the angle of incidence is relative to the structure being drilled.

If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported.
The orientation of the holes is noted above and the orientation of the outcrops are noted as possible in the body of the text. Where possible the true widths have been estimated, and indicated in the text. There is no attempt to introduce sampling bias, but in very steep and difficult areas it is often difficult/impossible to be able to drill in the best location and therefore you must drill from where you can. All reasonable attempts are made to drill in the best location possible, however, drilling from one pad is much more economical than drilling for separate pads and as such it is routinely undertaken in that manner producing vertical and /or horizontal fans of drill holes.

SAMPLE SECURITY
The measures taken to ensure sample security
Samples were retained in the custody of company staff onsite until despatched by helicopter for freighting via an accredited fright handler or they were in some cases hand carried (checked airline bagged) by the Managing Director to Australia. Samples were collected from the freight agent by the laboratory and taken to their facility for analysis or delivered to the laboratory by the Managing Director.

AUDITS OR REVIEWS
Industry standard practices are used and no audits or reviews of sampling techniques and data have been undertaken to date.

SECTION 2 -- REPORTING OF EXPLORATION RESULTS

TENURE
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.
Exploration Licences are subject to the Papua New Guinea Mining Act of 1992. Tenure is secure if the EL holder complies with the agreed work and expenditure programs, but can be insecure if the region is deemed 'in the National Interest' for some reason. Terms are 'infinitely' renewable 2 year periods and are subject to a Wardens Court Hearing to ascertain the landowners attitude toward the exploration.

EL 1595 is currently under renewal and while it is past its renewal date, it is technically active until / if NOT renewed by the Minister. The Wardens Court Hearing was positive and there is no reason known to suggest that this outcome would occur. Full details of Frontiers tenements are tabulated below.

Frontier Resources Ltd Exploration Licence Information

	Licence No.	Date From	Date To	Ownership	Area (SQ KM)	Lat. Sub Blocks
Bulago River*	EL 1595	7/07/2014	6/7/2016	100% Frontier Gold PNG Ltd	100	30
Muller Range	EL 2356	31/12/2015	30/12/2017	100% Frontier Copper PNG Ltd	187	56
Sewatupwa River	ELA 2476	Application only		90% Frontier Copper PNG Ltd	436	131
Lake Lavu	ELA 2477	Application only		90% Frontier Copper PNG Ltd	839	252
Gazelle	ELA 2515	Application only		90% Frontier Copper PNG Ltd	703	211
* Under renewal - Hearing completed					**2,264**	**SQ KM**

NB: The Papua New Guinea Mining Act of 1992 stipulates that ELs are granted for renewable 2 year Terms (subject to Work and Financial Commitments) and the PNG Government maintains the right to purchase up to 30% project equity at "Sunk Cost" if/when a Mining Lease is granted.

EXPLORATION DONE BY OTHERS
Exploration completed by previous explorers has been systematically and comprehensively documented in previous releases and Quarterly Reports to the ASX. Any historic exploration quoted herein is noted to be such.

GEOLOGY
Deposit type, geological setting and style of mineralisation.
Targets on all properties are intrusive and epithermal related gold, plus porphyry copper-gold - molybdenum.

DRILL HOLE INFORMATION

A summary of all information material to the understanding of the exploration results

Hole Number	COORDINATES		RL	Azimuth ˚		INCL.°	EOH Depth
	Easting	Northing	(m)	(AMG)	(MN)		
CLD01	637027	9400217	1627	131	137	-43	55.30m
CLD02	637028	9400224	1627	141	147	-45	47.90m
CLD03	637021	9400223	1627	204	210	-43	34.90m
CLD04	637027	9400217N	1627	249	255	-40	25.20m
EZL01	637150	9400117	1573	309	315	-38	34.30m
EZL02	637151	9400117	1573	309	315	-50	50.0m
EZL03	637151	9400116	1573	309	315	-60	14.0m
EZL04	637152	9400115	1573	309	315	-90	28.30m
EZL05	637152	9400118	1573	294	300	-30	26.10m
					Total Metreage =		316.0

DATA AGGREGATION METHODS

Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail

All assays are tabulated herein so the reader can visually see what each assay result is within each reported intercept. Higher grade intercepts within the weighted assay average tabulated results are all noted.

The assumptions used for any reporting of metal equivalent values should be clearly stated.

No metal equivalent values reported.

RELATIONSHIP BETWEEN MINERALISATION WIDTHS & INTERCEPT LENGTHS

If the geometry of the mineralisation with respect to drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.

The diagrams and plans contained herein show relatively what the angle of incidence is to the structure being drilled. The orientation of the holes and the outcrops are noted as possible in the body of the text. Intercepts are noted as downhole intercept but where possible the true widths have been estimated, and also indicated.

BALANCED REPORTING - Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.

All Exploration assay results are comprehensively reported.

OTHER SUBSTANTIVE EXPLORATION DATA

Other exploration data, if meaningful and material should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances

All Exploration work undertaken is comprehensively reported.

FURTHER WORK

The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).

Future work is discussed in the text, as it has been planned to date. Future work is potentially subject to modification if interpretations are modified or exploration objectives change.

Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.

Plans and sections are included as possible, that highlight the areas of possible extensions to mineralisation and show the main geological interpretations. Future drilling areas are shown, as reasonable and possible, or the areas described in the text of the document.

Section 3 -- Estimation and Reporting of Mineral Resources

Mining Associates Pty Ltd prepared an Independent Technical Report (43-101) in October 2011 for NGG on the Indicated Resources on the Sinivit Gold Project, that covered an estimate of the mineral resources remaining at Sinivit Mine and an appraisal of its exploration potential.

In addition, in April 2013, Mining Associates prepared a 43-101 report estimating an Indicated Resource at the Kavursuki gold Deposit (an unmined resource adjoining and to the north the Sinivit pits).

The 43-101 reports relating to the Sinivit and Kavursuki Resources can be obtained from the Canadian regulator SEDAR website, but have also been posted to the Reports section of the Frontier website.

DATABASE INTEGRITY

Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.

Original assay data was received via CSV files that was compiled into a database. This data was manually validated by cross checking (auditing) of assay and geological results.

SITE VISITS

Comment on any site visits undertaken by the Competent Person and the outcome of those visits.

The mineralisation was discovered by Esso in the early 1980's, who I started my career with in PNG in 1985. Sinivit was later drilled out by City Resources, for whom I supervised their Wapolu gold Project in Milne Bay. I was a founding Director, Former President and Exploration Manager for NGG from 1996 until 2009, when I resigned to concentrate solely on Frontier Resources. I last visited the site, including the Kavursuki vein system, in 2009 when mining was underway at Sinivit.

Mr Ian Taylor (employed by Mining Associates Limited of Brisbane, Australia) visited the site six times totalling approximately six weeks in 2010/2011, as part of production and data management support for the Sinivit Mine. He conducted a summary review of geology and resource models and estimated the Resources noted herein.

GEOLOGICAL INTERPRETATION

Confidence in the geological interpretation of the mineral deposit.

Open pit mining has proved the viability of the existing interpretation, so confidence is high.

Nature of the data used and of any assumptions made.

Since 2005, 195 diamond holes for a total of 24,142 m have been drilled at the project. Since mining commenced in 2007, 750 RC grade control holes were drilled for 20,948 m and trenching was widely used to assess the various veins within the Sinivit Project.

The Kavursuki Project Inferred resource of 613kt at 2.3g/t for 44,500 ounces of gold was based on 30 diamond holes (2,170m).

The effect, if any, of alternative interpretations on Mineral Resource estimation.

No alternative interpretations on Mineral Resource estimation were required because open pit mining had proved the viability of the existing interpretation and modelling.

The use of geology in guiding and controlling Mineral Resource estimation.

Geology was the primary guide in estimating the Mineral Resource. It was used to produce the sections for interpretation and modelling /wireframing.

The factors affecting continuity both of grade and geology.

The mineralisation at Sinivit is considered to be an epithermal style vein system with both low and high sulphidation alteration and mineralogy styles. Low sulphidation gold-telluride mineralisation was deposited within fractured silicified host rocks that are more typical of a high sulphidation system.

The Sinivit gold project consists of the Nengmutka vein system, which is hosted by the Nengmutka Volcanics, a flat-lying, epiclastic sequence of volcanic sandstone and conglomerate.

The Wild Dog structure has been traced at surface over a strike length of about 3 km, of which a central 900m makes up the strike length of the Sinivit resource area (Sinivit Gold Deposit).

The mineralisation at Sinivit occurs in multi-phase steeply dipping hydrothermal quartz tension veins which cross cut the more moderately dipping northwest trending silicified zones. Mineralisation is best developed near local cross structures. Later mineralisation fills open fractures and cavities in the quartz veins as dark sulphide stringers comprising copper sulphides (chalcopyrite with minor bornite, chalcocite and tennantite) with local occurrences of a wide variety of Cu-Bi-Pb-Ag sulphide, telluride and selenide minerals. Gold generally occurs as Au-Ag telluride minerals, and native 'mustard' gold occurs as a weathering product of these tellurides.

Intense tropical weathering and leaching has developed a surface profile depleted in copper and silver minerals. The Sinivit operation mined oxide material in three pits (northern, central and southern) on the Wild Dog structure. Further oxide resources have been delineated along strike at the Kavursuki Vein.

DIMENSIONS

The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.

The Sinivit mineralisation has been defined near surface within a one kilometre length of a ten-kilometre-long structural zone. This structural zone is known to contain sporadic, largely untested or unexplored gold mineralisation over its entire length. The horizontal width is generally 10m in the upper oxidised portions, with portions of better mineralisation up to 20m thick horizontally. Below the oxide boundary the vein narrows with depth, down to 2m thick.

The oxide ore has been largely mined out.

ESTIMATION AND MODELLING TECHNIQUES

The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.

Statistical analysis of the grade data was carried out using the Surpac geological and mining software package.

Resources are reported above a cut-off of 1.5g/t Au, are based on holes drilled to August 31 2011 and are depleted with mining to June 30th 2011.

The resource estimates were constructed from "first principals" based on sectional interpretation of the geological controls and including the results of grade control drilling at the Wild Dog Vein. Shallow diamond core data was available at Kavursuki.

Classification of resource categories considered; sample density and type, geology continuity, density measurements, oxidation profile and Quality Assurance and Quality Control data.

Both grade control and exploration drilling were used to interpret and estimate the internal resource at the Sinivit Gold Project. Trench data was utilised for geological continuity only.

The drillhole assays were composited on 2m intervals to correspond to the mining bench height and the majority of sample lengths within the database, and basic statistical analyses were conducted.

East-west cross sections spaced six metres apart were used to create a three-dimensional geological interpretation, where grade control drilling exists, and 25 metre cross sections where only exploration drilling exists (Northern Sulphide and Kavursuki). This interpretation was used to constrain the block model estimate.

The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.

The Mineral Resource estimate does not take check estimates, previous estimates and/or mine production records into account. Previous resource estimates were not JORC compliant.

The assumptions made regarding recovery of by-products.

No assumptions made regarding recovery of by-products.

Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).

The October 2011 43-101 report noted Resources remaining within the current pit design total 135,000t at 4.44 g/t gold for 19,200 ounces, with a penalty of 0.35% copper. These in-situ resources remaining have not been modified with mining or metallurgical factors.

In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.

Categories are allocated by block by domain, based on sample spacing and type, number of informing samples, geological continuity and Krige estimate confidence.

Block Model extents cover interpreted mineralisation with a block size of 20mN x 5mE x 8mRL for estimation with sub-blocking for volume to of 5mN x 1.25mE x 2mRL.

The block model results were checked against the raw input data and nearest neighbour estimates.

The search ellipse is an-isotopic in the orientation of the plane, with reduced down dip and cross strike extents. The dimensions of the search ellipse were influenced by variogram ranges in the minor directions.

The dimensions for the block models were chosen using the extents of the original drillhole data and considering the orientation of the veins. Longer in the north-south direction and narrower in the east-west direction, the depth of the blocks was determined by bench height. The blocks within the block model were selected as a compromise between the grade control and exploration drill spacing. In addition, the final file size and computing time were considered. Sub-blocking within parent block was permitted; this allows more detailed volumes to be calculated from the block model without over-smoothing the estimation by estimating into small blocks.

Any assumptions behind modelling of selective mining units.

Grade interpolated into a constrained block model by domain using ordinary kriged estimation in one pass with anisotropy applied. Estimates were validated against informing samples and nearest neighbour estimates.

Any assumptions about correlation between variables.

No specific assumptions were made about correlation between variables that are not noted herein.

The issue of mixed sample supports (grade control vs exploration drill holes) was considered negligible as domains SOX, COX and NOX are strongly dominated by the grade control drilling and are not extrapolated to depth. The domains with no grade control drilling have relied on diamond core data and the domains are modelled accordingly. Each domain is estimated independent of adjacent domains, minimising the effect of mixed sample support.

Description of how the geological interpretation was used to control the resource estimates.

The mineralisation at Sinivit occurs in multi-phase steeply dipping hydrothermal quartz tension veins which cross cut the more moderately dipping northwest trending silicified zones. East-west section interpretations were made at a 0.5g/t gold

halo, from which three dimensional wireframes were constructed for each domain. The base of Oxidation was projected 10m below topography with local adjustments where drill data existed.

Discussion of basis for using or not using grade cutting or capping.
Capped gold grade estimates were made, grade capping was varied for gold domains, between 97.5 and 99th percentile dependent on vein. Copper was estimated with uncapped data.

The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.
The data was manually validated by NGG.

MOISTURE
Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.
Tonnages are estimated on a natural moisture basis.

CUT-OFF PARAMETERS
The basis of the adopted cut-off grade(s) or quality parameters applied.
Resources are reported above a cut-off of 1.5g/t Au.

MINING FACTORS OR ASSUMPTIONS
Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.
The in-situ resources remaining have not been modified with mining factors. No mining dilution or loss has been applied.

METALLURGICAL FACTORS OR ASSUMPTIONS
The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.
The in-situ resources remaining have not been modified with metallurgical factors.

The oxide ore from the previous operations was processed via vat and heap leaches. There were 17 vats and 2 heaps over vats reported by NGG to contain approximately 280,000 tonnes of material. Each vat has been leached with cyanide for varying time spans with gold recoveries estimated by NGG of about 66%.

Metallurgical testing was carried out in 2010 to determine distribution and possible recovery of gold remaining in the vat leached ore and to determine a recovery method for tellurium. Results indicated Tellurium would require an acid leach, subsequent gold leaching would require a basic leach.

There has been little metallurgical testing to determine the required process for optimum treatment of the primary sulphide ore, although recovery of this is likely to be based on a floatation circuit due to the copper and telluride mineralisation.

A cursory sampling program for tellurium ("Te") content was carried out in June 2010 consisting of grab samples from the top 1.5 m depth. Copper, gold and tellurium were assayed across a range of size fractions. Average tellurium assay results ranged from 76.0 ppm to 329.5 ppm.

A composite sample of 50 kg consisting of 2.1 to 7.5 kg samples from thirteen of the vats was treated as follows: Leach sample size 125g, Grind 80% <38micrograms, Leach temperature of 70 degrees C, Leach reagent 75g/l H2SO4, Solid: liquid ratio of 25%:75%, Leach time of 4 hours.

This resulted in tellurium recoveries in the 70-86% range, Gold to be determined, Leachate: 33-78 g/l Te, Significant Fe+2, Al & Mn transfer into leachate.

Petrographic and SEM (scanning electron microscopy) analysis were also carried out in 2010 to define the gold and telluride mineralogy. Results showed tellurides tetradymite and rickardite usually restricted to quartz, and gold-silver telluride altaite usually as inclusions in pyrite and chalcopyrite.

ENVIRONMENTAL FACTORS OR ASSUMPTIONS
Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.
The Minister of Environment and Conservation of the Government of PNG granted approval for the Environmental Plan for ML122, subject to conditions, on 29th January 1996. Subsequently further botanical, avifauna, forestry and baseline water quality studies have continued to be carried out.

In December 2003, the Secretary of the Department of Environment and Conservation was informed that Macmin and GMNH intended to proceed with the development of the Sinivit Project. Douglas Environmental Services of Port Moresby, PNG was commissioned to prepare an Environmental Management and Monitoring Plan addressing the conditions of the granted Environmental Plan and reflecting legislative changes brought about by the introduction of the PNG Environment Act 2004.

The EMMP and a Construction Phase Waste Management Plan were submitted to the Department of Environment and Conservation in May 2004 and approved between May and July 2005. Water Permit renewals were lodged in November 2004 and granted in July 2005.

Thus, mining was already occurring under an existing and approved environmental plan. It was not necessary to further consider these factors.

BULK DENSITY

Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.

Historical Density records were not sighted, historical resources have used 2.5 and 2.6, and current resource uses 2.6 for fresh material and 2.5 for oxidised material. Average Kavursuki Ore measures 2.64

A bulk density of 2.6 was assigned to material below the base of oxidation, (base_ox1.dtm); material above the oxide dtm was assigned a bulk density of 2.5.

Density measurements were made on 106 core and rock chip samples during September and October 1995. These samples were selected from surface to 30 m depth from each of the Southern, Central and Northern Oxide zones. Nearly all of the samples were closely clustered around and average of 2.61 t/m3.

In 2011, 79 density measurements were collected from the Kavursuki Vein, footwall and Hanging wall within 50m of the surface. The 2011 data confirms the readings taken in 1995 with the average density reading of 2.62 t/m3. Ore material is marginally denser at 2.64 t/m3.

Complicating the density model is the lack of detail in the oxide boundary; only 166 close spaced grade control holes and all 30 of the Kavursuki diamond drilling, have depth of weathering recorded in the database. Base of oxidation is recorded in all grade control logs

The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.

The bulk density was measured using the water immersion method on core samples. The rock is sufficiently competent that wax coating was not necessary. Different rock and alteration zones within the deposit were evaluated.

Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.

Bulk density was determined by the average of direct determinations and therefore assumptions were not required.

CLASSIFICATION

The basis for the classification of the Mineral Resources into varying confidence categories.

The classification of the Mineral Resources into varying categories confidence was done relative to drill density and sectional interoperation.

Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).

Appropriate account was taken of all relevant factors.

Whether the result appropriately reflects the Competent Person's view of the deposit.

The result appropriately reflects the Competent Person's view of the deposit.

AUDITS OR REVIEWS

The results of any audits or reviews of Mineral Resource estimates.

There have been no audits or reviews of the Mineral Resource estimates.

DISCUSSION OF RELATIVE ACCURACY/ CONFIDENCE

Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.

Resources have been classified in compliance with the National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101), as Indicated and Inferred.

In terms of extensions of mineralisation and new resources, the Northern Sulphide Mineralisation is only drilled with exploration data on a broad pattern, and is thus of less confidence; the high-grade section 10,300mN in particular, requires more drilling to determine the strike extent of the prospective high grade (>10 g/t gold) mineralisation.

The additional mineralisation further along strike in the same structure outlined at the Kavursuki Project area where a new inferred resource of 613kt at 2.3g/t for 44,500 ounces of gold is based on 30 diamond holes (2,170m) as reported.

The extensive grade control drilling available provides a high level of confidence in the estimate within the upper levels, at depth sparse diamond drill data is available.

Inferred Mineral Resource
The inferred resources at Sinivit and Kavursuki are defined by broad spaced diamond drilling generally on a 50 x 50m centres providing limited sampling and geological intercepts from which to interpolate the grade and geological continuity. Surface expression is defined by trench sampling.

The inferred Northern Sulphide Mineralisation is only drilled with exploration data on a broad pattern, and is thus of less confidence; the high-grade section 10,300mN particularly, requires more drilling to determine the strike extent of the prospective high grade (>10 g/t) mineralisation. The inferred resource estimate for the Kavursuki Project area has identified two high grade shoots (>10g/t) and current exploration is targeting shallow oxide resources associated with this vein, particularly the high-grade shoots.

Indicated Mineral Resource
The indicated resources at Sinivit are of high confidence at top end of indicated given the extensive grade control drilling available, a high level of confidence can be placed in the estimate within the upper levels. The indicated resources are those resource blocks within 10 vertical metres of grade control drilling, there is sufficient data from grade control drilling and open pit exposures on the vein to assure grade continuity, though highly nuggetty as expected in an epithermal vein deposit, and geological continuity.

According to NGG's QA/QC procedures, the following samples are taken or inserted into the sample stream.

• Field Duplicate Samples ("FD"): Usually every 2 months or when sufficient samples have been dispatched, a selection of results are re-split form the coarse rejects stored on site and submitted as a filed duplicate. The field duplicates are sent a regular batch and are prepared and assayed like any other sample. The results can be examined as a duplicate sample. This sample is used to monitor sample batches for poor sample management, contamination and tampering and laboratory precision. FD assesses precision.

• Field Blank ("FB"): Samples of a "blank", known to contain low level of economically interesting metals are inserted into the sample stream. Field blanks are usually inserted at a planned rate of one every 20 samples. Blanks assess contamination.

• Referee Laboratory duplicates – Field duplicate pulps are sent for check assay to another laboratory i.e. Genalysis in Townsville. The results are then plotted against the original ALS results to check for anomalous results, contamination or equipment failure or calibration trends (bias).

In addition, the independent laboratory ALS also conducts its own internal QC monitoring as noted above.

The above described QC methods, namely routine blank, duplicate and internal laboratory standards as well as the laboratory check assaying are considered adequate for the determination of accuracy and precision.

The introduction of QC protocol commenced in 2010 and there is a lack of QC monitoring data for exploration results prior to this. In addition, there needs to be procedures set up for the introduction of field blanks and CRM (or umpire laboratory checks). The inadequacy of the pre2010 QA/QC data is offset by the grade control drilling and reconciliation being conducted in the open pit mining operation. This supports the opinion that the assay data can be used within the context of the lower confidence level of inferred resources for the mineral resource estimate. In areas of high density grade control drilling and open pit exposures, it is considered that the data is adequate to define grade and geological continuity for indicated confidence level mineral resources.

The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.
Statements are specified in relation to local and global estimates, with relevant tonnages as indicated.

These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.
It is not possible to compare the statements of relative accuracy and confidence of the estimate with production data, as that information is not available. The mine produced approximately 23,550 oz. Au to the end of June 2011 and it was expected that mining of oxide mineralisation would be complete by 2011. Gold production was originally planned for 2,500 oz. to 3,000 oz. Au per month but was not achieved due to issues with the VAT leach processing method.