

Appendix 4

Reconnaissance Exploration at New Waterdrum (EL29068) September 2014

Summary

A field trip was made to the New Waterdrum area in September 2014 by a senior geologist (Jim McGregor-Dawson) and a senior agricultural scientist (Dave Howe). The purpose of the reconnaissance was to observe the geology of the area and try to locate the site of a previously reported high gold sample. In addition, a prospect with previous shallow drilling (7 holes) on auriferous quartz veins was located.

The co-ordinates reported for the location of the high gold sample were found to be incorrect. The reported site was actually on an alluvial fan of a small creek, with no outcrop in the vicinity. A search of the surrounding area failed to locate any mineralised material that could have been the source for the high gold sample.

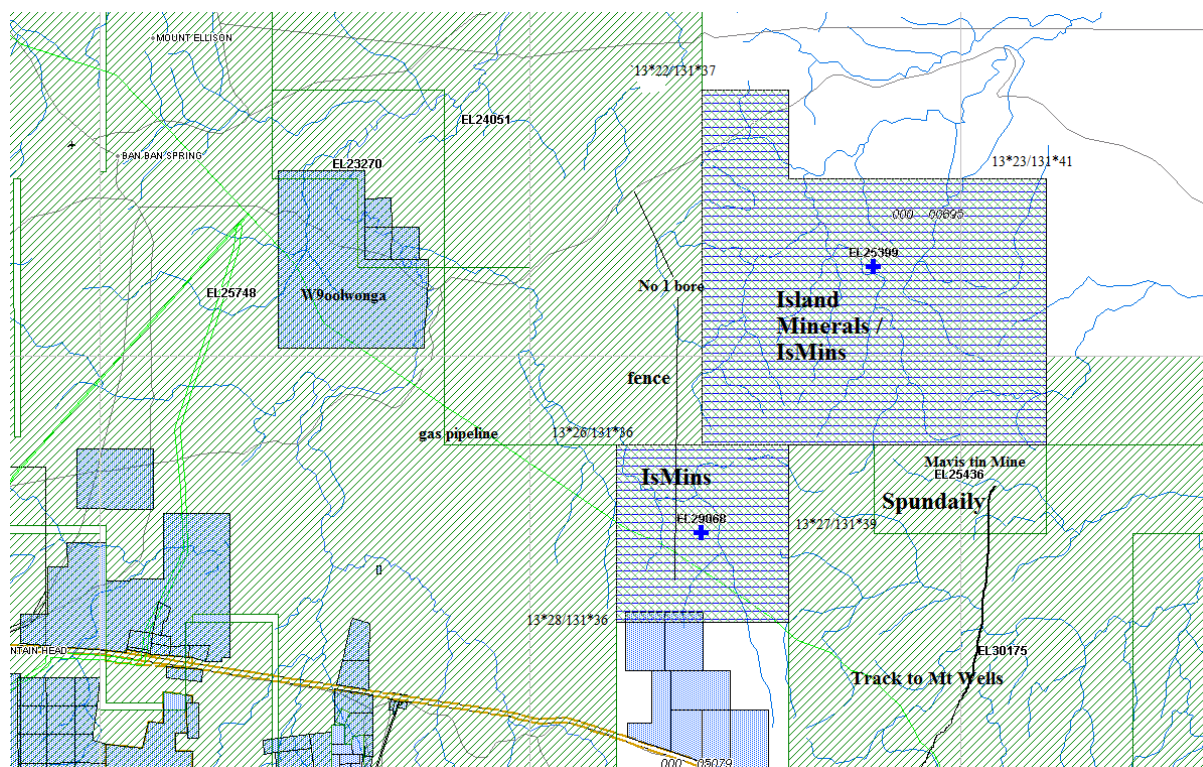


Figure 1. Location of Compass Creek (EL25399), Mavis (EL25436) & New Waterdrum (EL29068).

The search for the vein prospect with previous shallow drilling was located immediately north of the New Waterdrum tenement boundary, on ground held by Crocodile Gold. This was somewhat disappointing, but it is so close (<50m) that any southern extension of this zone (under alluvium) will be on the New Waterdrum tenement.

Table 1. Reconnaissance Notes on Geology and Terrane

Note No.	East (m) GDA94	North(m) GDA94	Comments
WD001	781748	8511704	Zamu dolerite exposed on the gas pipeline. The pipeline is trending 120 ⁰ to 300 ⁰ at this location and the dolerite is trending ~N-S
WD002	781795	8511375	Located on N-S fence-line. Contact with granite to Sth & SE with sediments to Nth & NW.
WD003	781906	8511486	Contact between granite to E and a ridge of quartzose-micaceous schist (metasomatised Mt Bonnie Fm?) to the west.
WD004	781900	8511536	Quartz-mica schist (hornfels) w/ dark red-brn Fe staining. Foliation trends 025 ⁰ to 030 ⁰ and dips 65 ⁰ to 75 ⁰ W. See photos 1 & 2 below.
WD005	782125	8511686	“Main hill” with the most northerly exposure of granite (photo 3). Quartz-mica schist & hornfels lie to the west (left). A quartz vein lies on the south slope of hill (photo 4), within the schist. No significant mineralisation.
WD006	782155	8511831	North base of slope of “main hill”. Traverse from here to road/fence at 781838mE & 8511953mN crossed only colluvium-elluvium – no rock outcrops present.
WD007	781865	8513445	Indicated location of high grade gold sample based on sample map. Area of alluvium with no rock exposure. Searched the surrounding area without success. Found an old grid line (53200N line) trending 060 ⁰ magnetic. Probably Anglo Gold soil line.
WD008	782386	8513540	This location is on an old grid line (53200N & 20600E) near the west base of slope of N-S trending ridge of altered fine grained siliceous (cherty) sediment.
WD009	782520	8513600	This is on the same grid line as above at 53200N & 20750E and is on the centre of the ridge (100+m slopes on either side), composed of bleached & altered fg sediment.
WD010	782611	8513643	Same grid line as above (53200N / 20850E) with this location being on the east base of slope of the ridge of altered fg sediment. This is now north of Ismin’s ground.
WD011	782513	8513377	Traversed the ridge to south to the middle of a broad drainage (this location) that cuts the N-S ridge of altered sediment. The drainage is trending 250 ⁰ mag (draining west).
WD012	782577	8513247	Continued traverse to South to the top of the hill (ridge - this location). The rock here is grey cherty fg sediment with buff to pale faun-brown weathered surface. See photo 5.
WD013	782380	8513130	West base of slope of hill noted above (WD012). Small exposure of outcrop showing structural trend (bedding?) of 050 mag ± vert consisting of fg cherty sediment.

[illegible]



Photo 1: Quartz mica schist dipping steeply west on granite contact (to left [East]).



Photo 2: Iron stained quartz-mica schist on granite contact.



Photo 3: Prices Springs Granite near the most northerly exposure of the granite.



Photo 4: Quartz vein on lower slope within quartz-mica schist, near granite contact.



Photo 5: Top of hill looking north to old Waterdrum. Grey cherty rock weathered to a buff colour on surface. No significant veining or mineralisation noted. Top of hill at 782577mE/8513247mN.



Photo 6: Low rise of outcrop & sub-outcrop of very fine grained grey to dark grey cherty sediment that weathers to a pale grey to buff colour on surface. Area of exposure is about 50 to 100m wide and several hundred metres trending in a NNW-SSE direction. Approximate centre of the exposure is 781583mE / 8513184mN. No veining or mineralisation found in this area.



Photo 7: Old claim corner at east edge of the low rocky rise (noted in photo 6). Location is 781629mE / 8513157mN.



Photo 8: Old drill collar of an angled hole (240⁰ tn) testing a weakly gossanous quartz vein that forms a low ridge (just north of Ismin's New Waterdrum tenement boundary).



Photo 9: Location of old drill hole; presumably drilled at 240⁰ tn, to test the outcropping quartz vein (low ridge).



Photo 10: Weakly mineralised quartz vein forming a low ridge. Tested by shallow drilling.



Photo 11: As above – weakly gossanous quartz vein forming a low ridge.



Photo 12: As above – weak gossan-limonite on fractures in quartz vein that forms a low ridge.