



AU, CU, PB, ZN, AG PROJECT, WESTERN AUSTRALIA

SHANGRI LA

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SUMMARY

- Close to Kununurra and Victoria Highway.
- Polymetallic hydrothermal quartz vein type deposit.
- Historical assay results include: up to 5.35% Cu, 9.53% Pb, 5.15% Zn, 22g/t Au, and 522g/t Ag.
- Historical exploration target of 30,000 tonnes averaging: 300g/t Ag, 5.6g/t Au, 7.6% Pb, with copper and zinc credits.

LOCATION

The licence is located just 10 kilometers west of Kununurra, the central town of the Northeast Kimberley region in Western Australia (*Figure 1*), just to the Northside of the Victoria Highway.

REGIONAL GEOLOGY

The regional geology, including in the project area, the majority of rocks west of the NNE-trending Ivanhoe Fault belong to the Palaeoproterozoic Speewah and overlying Kimberley Group. East of this prominent fault the Mesoproterozoic Carr Boyd Group of sediments is outcropping.

Within the sedimentary rocks of the Speewah Group six main units can be distinguished comprising mainly sandstone, feldspathic sandstone, siltstone and mudstone with minor volcanic tuff. The six units are from bottom to top: O'Donnell Formation, Tunganary Formation, Valentine Siltstone, Lansdowne Arkose, Luman Siltstone and Bedford Sandstone. (*Figure 2*). Other prominent NNE trending linear features recognized within the project area include (from east to west) the Silver Hills Fault, Deception Range Fault and the Dillon Spring Fault, the latter being west

PROJECT SUMMARY

Area:

10Ha

Commodities:

(Au, Cu, Pb, Zn, Ag)

Tenure:

P80/1849 (17 July
2021)

of the tenement boundary. A considerable vertical displacement along these faults is suspected together with a horizontal sinistral component. Secondary faults or splays off these main faults generally trend in a NW or ENE direction. Smaller northerly trending sub-parallel to parallel faulting is commonly observed several hundreds of metres away from the principal fault zone.

The base metal mineralization is related to these NE trending sinistral faults. At Shangri-La there are six en echelon mineralised quartz veins associated with a north-east trending axis of an anticline. The quartz veins trend north and north-west over a strike length of up to 300 metres, dipping 10-30 degrees north, containing primary and supergene sulphides. Galena, sphalerite, chalcopyrite, bornite and tetrahedrite are the most common species at the mine as disseminations or irregular bands and patches within the quartz. The most abundant mineral assemblage is cerussite, bindheimite, malachite-linarite-chalcocite or associated copper sulphides.

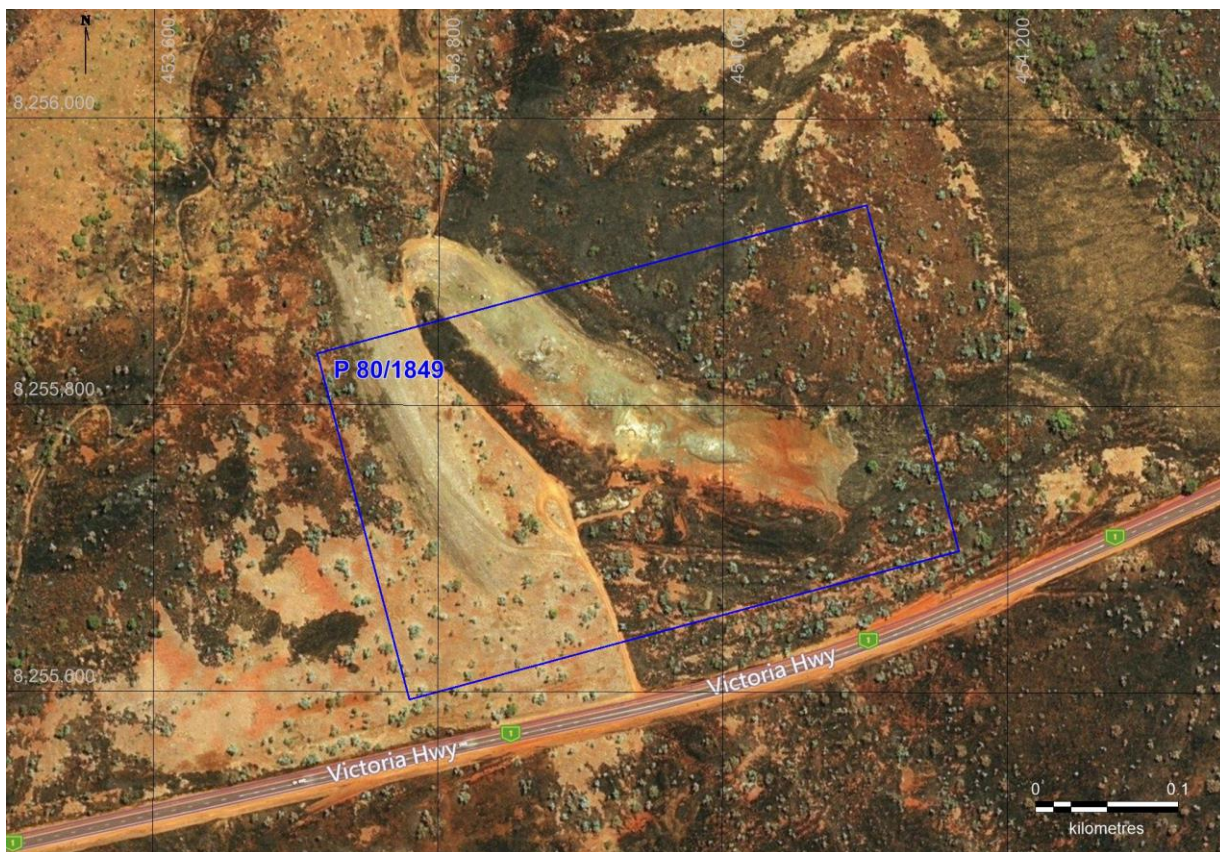


FIGURE 1. LOCATION OF THE SHANGRI LA PROJECT.

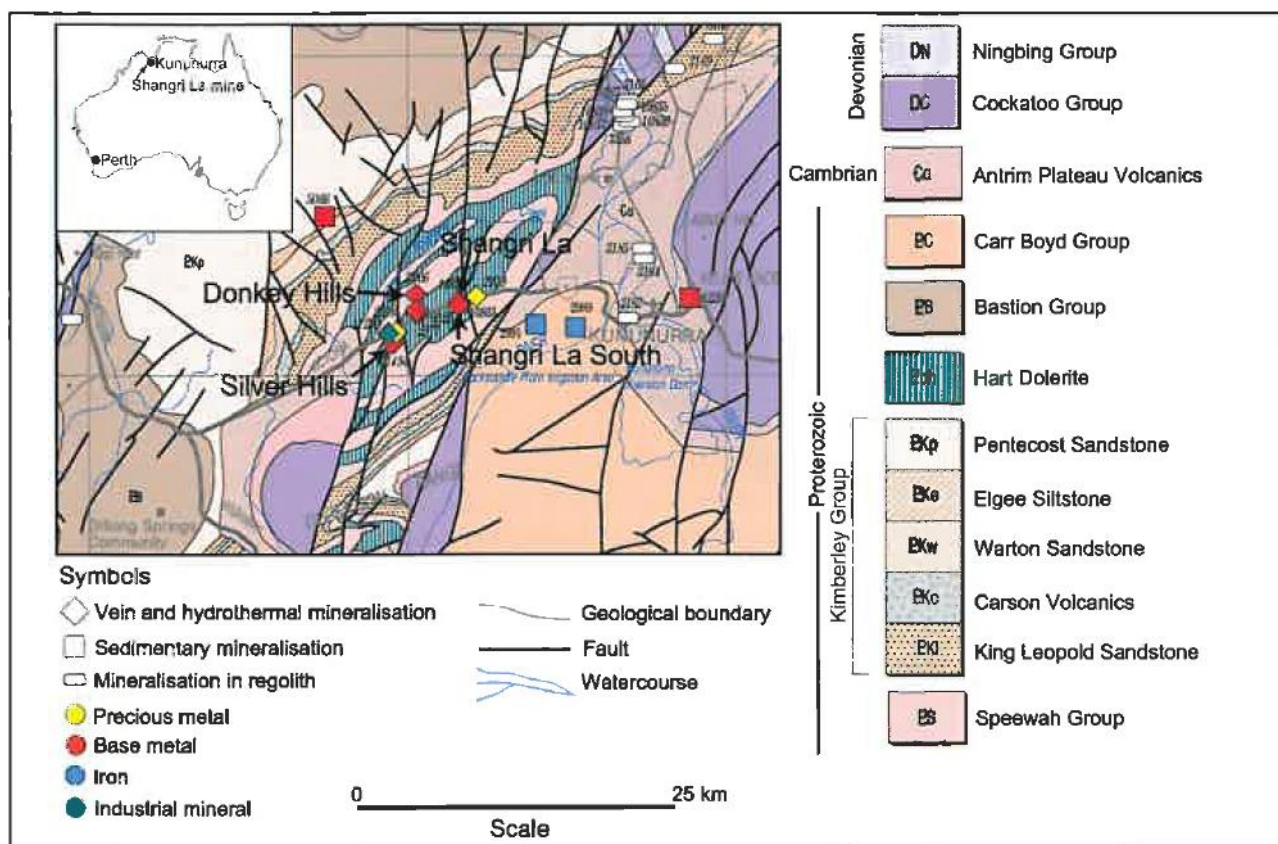


FIGURE 2. GEOLOGICAL MAP OF THE AREA SURROUNDING THE SHANGRI LA DEPOSIT

MINERALISATION

From previous work it is evident that the vein and hydrothermal mineralization in the project area is structurally controlled and is hosted by the Hart Dolerite. Polymetallic quartz veins pervade the Hart Dolerite which is intruded into the Valentine Siltstone of the Speewah Group. The sediments and intruding dolerite form an anticline or dome and mineralized veins are associated with the northeasterly trending fold axis. Mineralization also occurs near a major quartz-filled fault zone, the Silver Hills Fault.

The mineralized veins contain galena, sphalerite, chalcopyrite, bornite and tetrahedrite where fresh and cerussite, anglesite, chrysocolla, azurite, chalcocite and covellite where oxidized. Antimony is present and gold and silver are associated with the copper rather than the lead.

The general trend of the range is approximately 240° and southeastern dips between 10° and 40° are most common. In the northeastern area of foothills, however, anticlinal folds with NE-trending axes are present. There are several major NNE trending faults along which vertical displacements have been observed resulting into block faulting. This direction is parallel to a major regional linear feature, the Ivanhoe Fault, which separates the Bandicoot Range from older rocks hosting lead-copper-zinc-silver mineralization. One of the more substantial mineralized occurrences are found within the licence.

PREVIOUS EXPLORATION

The Shangri-La polymetallic base metal deposit in the Kununurra area was discovered by P. Costeo in 1967 during the construction of the Kununurra to Wyndham road. The road was apparently built over outcropping mineralized rock. Subsequent work by Conwest Australia NL and Acme Holdings NL included sampling, mapping and drilling identified a small resource but records of this early work are incomplete. Some bulk sampling was undertaken but there has been no recorded production. A few years later similar mineralization associated with a major fault was found at Silver Hills 5.5 km WSW of Shangri-La.

Another base metal deposit was located directly south of Shangri-La by a private syndicate. The Shangri-La South deposit was investigated in the early seventies in some detail by Thiess Bros Pty Ltd.

Other similar style deposits were found by H.F. Moder and E.M. Moder in the eighties in a number of nearby locations around Silver Hills and Donkey Hills further to the north. High grade ore was extracted at a small scale from Silver Hills.

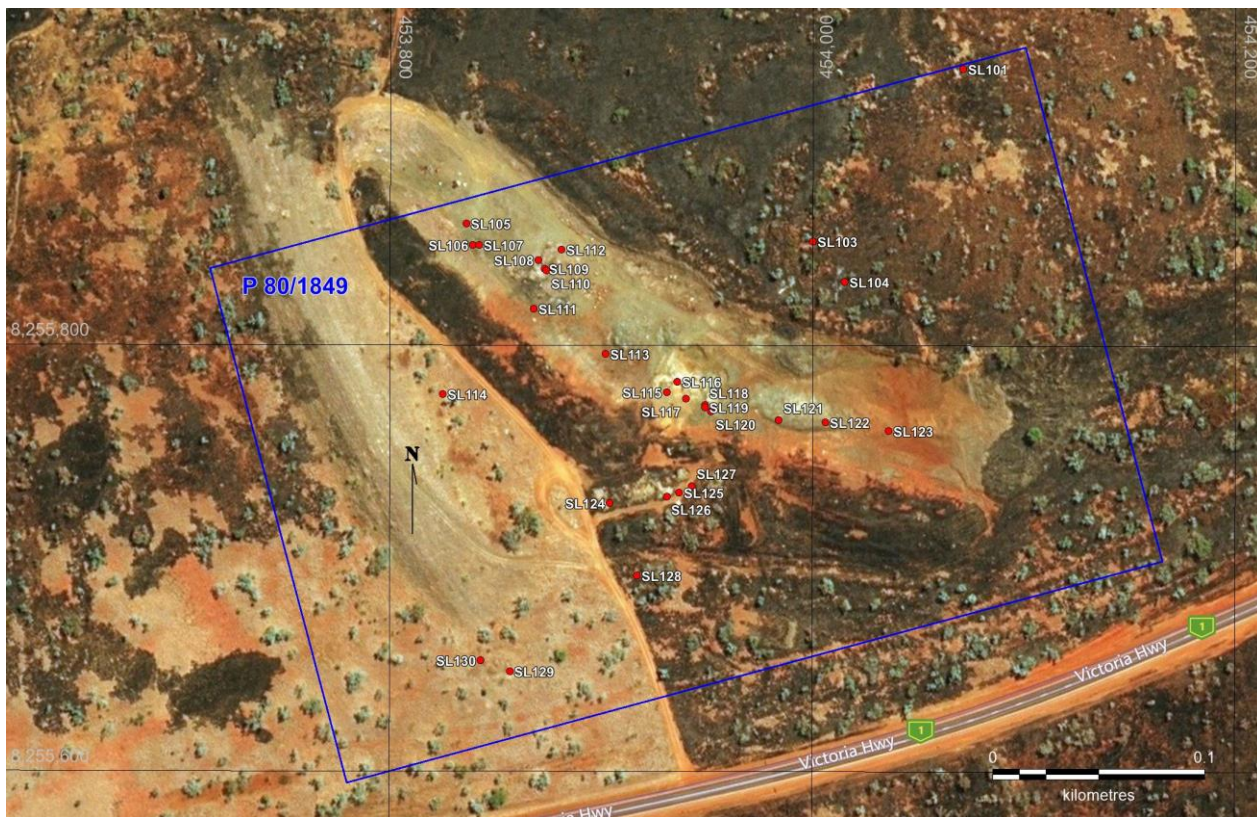


FIGURE 3 – ARC EXPLORATION ROCKCHIP SAMPLING LOCATIONS, 2010 (REFER TABLE 2 FOR RESULTS)

FURTHER POTENTIAL

At Shangri- La there are six en echelon mineralized quartz veins in Hart Dolerite striking WNW. The veins can be traced for up to 300m. Acme Holdings NL, Conwest Australia NL and other parties drilled and mined the deposit in two open cuts but there are very few data available on this early work. Some 1450m of wagon drilling was carried out and ore was reported to have been intersected to a depth of 80m. Also mentioned was a drill intercept of 435 g/t gold at a depth of 25m. An estimated ore reserve of 34,500 tonnes averaging 7.6% lead, 301.69 g/t silver and 5.59 g/t gold was outlined distributed in three ore shoots. Extracting and stockpiling of ore commenced in early 1970 but there are few details about tonnage and grade extracted.



FIGURE 3. SHANGRI LA NORTH PIT (LOOKING NORTH WITH KU-12 DRILL BAGS VISIBLE)

SampleID	HoleID	From	To	Sample Type	Au-ppm	Ag ppm	As ppm	Co ppm	Cu ppm	Fe %	Pb ppm	Sb ppm	Zn ppm
KU0027	KU-01	26	27	1M	0.714	0.62	11510	20.7	976	4.38	8.2	48.49	53
KU0028	KU-01	27	28	1M	11.738	2.86	2377.9	18.5	1476	3.28	20.5	38.27	55
KU0065	KU-01	64	65	1M	0.071	1.24	26.9	18	737	4.61	36.9	42.18	104
KU0088	KU-03	21	22	1M	0.621	10.07	28429	51.5	5956	4.74	26.1	1615.6	276
KU0089	KU-03	22	23	1M	0.419	9.16	18176	23.2	3944	4.17	24.8	1428.9	96
KU0123	KU-03	56	57	1M	0.599	0.46	53301	25.9	210	7.56	9	51.94	46
KU0125	KU-03	58	59	1M	0.964	0.77	21469	42.4	585	3.79	12	41.64	26
KU0167	KU-04	28	29	1M	0.03	1.67	1581	15.6	2158	6.48	93.2	263.69	98
KU0635	KU-11	1	2	1M	0.004	0.14	13.8	46.3	90	8.09	27.9	7.89	607
KU0637	KU-11	3	4	1M	0.002	0.45	19.9	54	102	10.1	102.6	7.07	571
KU0638	KU-11	4	5	1M	0.008	0.5	19.9	56.1	101	11.7	132	5.91	1306
KU0639	KU-11	5	6	1M	0.006	0.76	21.5	64.6	107	12.1	275.3	11.13	3340
KU0640	KU-11	6	7	1M	1.167	12.7	26.7	20.1	917	4.03	4300	105.73	6352
KU0641	KU-11	7	8	1M	0.716	9.92	74	23.4	761	10.1	9900	58.58	2918
KU0642	KU-11	8	9	1M	0.04	2.74	40.2	43.9	93	9.86	559.6	19.61	8325
KU0643	KU-11	9	10	1M	0.018	1.19	19.8	80	84	8.1	230.7	9.41	503
KU0645	KU-11	11	12	1M	0.007	0.25	8.3	44.5	95	8.15	86.4	5.78	552
KU0712	KU-12	0	1	1M	0.04	0.77	62.4	25.7	34	5.93	138.5	18.39	2346
KU0713	KU-12	1	2	1M	1.807	6.21	89.9	17.7	273	3.02	6800	22.19	255
KU0714	KU-12	2	3	1M	0.016	2.48	54.4	41.6	43	10.3	399	32.92	302
KU0715	KU-12	3	4	1M	0.019	2.51	43	41	67	9.11	205.2	55.09	157
KU0716	KU-12	4	5	1M	0.002	1.31	30.8	45.7	77	8.56	54.6	31.74	129
KU0786	KU-10	14	15	1M	0.003	0.18	38.8	39.9	98	7.27	21.3	5.22	717
KU0787	KU-10	15	16	1M	2.984	6.95	3610	51.4	2338	5.56	6400	399.76	648
KU0788	KU-10	16	17	1M	1.573	9.36	1690.9	21.2	1989	3.33	14000	449.13	900
KU0789	KU-10	17	18	1M	8.471	31.5	2596.5	35.8	3406	5.62	14700	1159.3	2092
KU0790	KU-10	18	19	1M	0.41	3.44	1043.6	31.9	939	4.9	1574.1	231.15	1702
KU0791	KU-10	19	20	1M	0.615	3.48	262.5	87.3	767	14	2600	169.52	523
KU0793	KU-10	21	22	1M	0.721	0.25	63.2	89.2	65	13.5	140.2	16.25	434
KU0852	KU-13	26	27	1M	0.634	1.52	2933.2	51.2	92	9.32	3400	28.93	161
KU1071	KU-07	0	4	4M	0.345	3.12	5473	22	1705	11.4	4000	31.14	2765

TABLE 1. SIGNIFICANT ASSAYS RECEIVED AT SHANGRI LA AND SILVER HILLS (NOTE: KU-11&12 ARE WITHIN SHANGRI LA LICENSE)

Sample_ID	MGA_N	MGA_E	Au	Ag	Co	Cu	Fe	Pb	Zn
	metres	metres	ppm	ppm	ppm	%	%	%	%
				4A/MS	4A/MS	4A/OE	4A/OE	4A/MS	4A/OE
				0.01	0.1		0.01		
SL101	8255930	454071	0.02	0.7	1.3	0.0037	0.86	0.022	0.010
SL103	8255849	454000	0.028	1.49	2.3	0.0311	0.91	0.015	0.002
SL104	8255830	454015	0.021	2.07	3.8	0.0249	1.2	0.086	0.025
SL105	8255857	453836	0.011	1.15	11.3	0.024	4.58	0.009	0.011
SL106	8255847	453839	6.486	51.61	38.4	4.5068	2.95	2.888	0.156
SL107	8255847	453842	1.918	197.46	66.8	0.4746	1.42	6.433	1.842
SL108	8255840	453870	2.803	64.38	11.5	0.8501	1.63	3.981	0.373
SL109	8255836	453873	9.769	162.25	47.9	5.3497	2.09	1.683	0.194
SL110	8255835	453874	6.452	22.95	20.5	0.3006	1.47	1.721	0.350
SL111	8255817	453868	15.413	32.57	23.6	0.8905	1.27	1.575	0.250
SL112	8255845	453881	9.342	175.04	15.6	1.2185	1.21	3.535	0.451
SL113	8255796	453902	5.662	70.01	18.4	0.4498	2.17	9.333	4.293
SL114	8255777	453825	5.187	225.7	4.2	0.8615	1.28	4.859	0.603
SL115	8255778	453931	0.467	40	8	0.0889	2.24	0.528	0.136
SL116	8255783	453936	14.657	522.75	16.4	3.368	2.6	9.525	1.339
SL117	8255775	453940	22.416	184.93	19.3	0.5277	1.77	5.980	2.504
SL118	8255772	453949	5.701	144.99	29.8	0.542	3.03	8.774	5.145
SL119	8255771	453949	2.813	37.86	6.4	0.1748	2.8	2.756	1.429
SL120	8255769	453952	1.773	38.26	47.1	0.2657	2.73	7.270	2.761
SL121	8255765	453984	0.152	2.44	6.3	0.0218	2.05	0.377	0.104
SL122	8255764	454006	16.651	308.9	9.5	0.6405	1.2	2.745	2.778
SL123	8255760	454036	7.572	22.68	8.3	0.0652	8.33	0.801	1.284
SL124	8255726	453904	13.247	319.3	9.7	0.6871	1.53	4.756	1.944
SL125	8255731	453937	9.362	215.91	2	0.9664	1.34	11.76	0.204
SL126	8255729	453931	4.383	324.89	3.7	0.8143	1.21	8.308	0.356
SL127	8255734	453943	7.388	345.23	16.3	1.5016	2.12	11.7	0.713
SL128	8255692	453917	0.287	18.33	9.2	0.0749	2.92	0.817	0.034
SL129	8255647	453857	0.445	243.97	3.9	0.1309	1.5	0.492	0.029
SL130	8255652	453843	6.395	60.81	6.8	0.1339	4.63	2.138	0.150

TABLE 3. SUMMARY OF VEIN OCCURENCES IN AND AROUND SHANGRI LA

Prospect	Site description	Lithology	Large-scale structures	Vein description	Alteration	Grades
Shangri La	3–5m deep opencut (A17708), now 100m by 40m and 8m deep (A43894)	Hart Dolerite	NE-trending structure on E side of mine related to vein set	Mineralised area 200 m by 2–5m; veins at least 300m long (A17708); vein sets striking between W and NW and dipping 20°E; irregular stockworks of quartz and carbonate veins several centimetres wide occur over several metres along pit wall	Not described	30,000t at 301g/t Ag, 5.6g/t Au, 7.6% Pb, Cu and Zn credits. ~10% of est reserve has been mined (A17708). 14oz/ton Au at 80ft. Sampling returned consistently high Au (max. 14.4g/t), Ag (max. 420g/t) and Pb (max. 14.5%), and Cu and Zn to a lesser degree (A107708); has not been drilled out (A17708); bulk sample: 1.45% Cu, 7.37% Pb, 650g/t Ag, 21.3g/t Au (A43894); not much visible mineralisation left (A43894); mineralisation enriched between surface and water table (~16m)
Shangri La South	Two small opencuts ~200m S of main Shangri La pit	Not described	Not described	Small quartz veins	Not described	Samples returned up to 7.8g/t Au. No drilling (A17708).
Donkey Hills	Undeveloped when A17708 written; abundant quartz scree led to search for in situ veins that were sampled and turned out to be mineralised	Dolerite	Photointerpreted NE-trending fault zone subparallel to SHF	500m by 300m area containing flat lying to steeply dipping, grey-green quartz veins that pinch and swell “rapidly” and form large blows with lengths of 20–30m; intense quartz stockworks and stringers in places	Not described	Largest occurrence of auriferous quartz veins in the area (A17708); arsenopyrite in veinlets or disseminated, and scordite; rock-chip samples: 0.5–2g/t Au; trench samples: 0.1–1g/t Au; slightly elevated Cu (up to 1600ppm), otherwise low base metal and Ag content; strongly limonitic and gossanous quartz grab samples: 3.0g/t Au and 5.0g/t Au
Donkey Hills South	Quartz float over an area of 100m by 130 m	Epidotised dolerite (contact metamorphosed? Granitic float from “late intrusive” a few hundred metres S of the prospect)		At least four narrow, short quartz veins revealed by trenching; stringer zone identified	Not described	Malachite and galena in some of the quartz float; patchy, but strong, base metal and Ag mineralisation; 5–25cm wide mineralised zone at S end of Trench 11: 5.95g/t Au, 1450g/t Ag, 7.4% Cu, 4.4% Pb. All other samples had 0.1–1g/t Au.