

UKALUNDA PROJECT

DETAILS OF EXPLORATION DATA, SEARCHES, GEOLOGICAL CONCEPTS/MODELS AND OTHER CRITERIA USED IN THE SELECTION OF THE AREA

Rationale

The Ukalunda EPM which is encompassed by the Ukalunda District, lies at the northern end of the Anakie Metamorphics which is bounded by deep seated structures along which much of the Drummond Basin gold mineralisation is located (figure 1). Ukalunda is characterised by widespread shows of mineralisation; a situation shared with many mining districts that host major ore bodies. This suggests that the geological setting is permissive for a major ore body to be present in the district. The larger historical deposits are the Sunbeam Mine which produced 600,000 ounces of silver with grades of up to 37 kg/tonne, the Carrington Ag Bi and Pyramid Pb-Ag mines.

The Ukalunda project area covered by this EPM application is centered over the most prospective portion of Ukalunda District and includes several polymetallic (Ag-Bi-Pb) historic mines and advanced prospects which have received extensive exploration over the past 30 years (figure 2).

Major historical and exploration results to date are:

- Discovery and historical mining of polymetallic Ag-Bi-Pb veins associated with the Pyramid ring structure. The larger historical deposits are the Sunbeam Mine which produced 600,000 ounces of silver with grades of up to 37 kg/tonne, the Carrington Ag Bi and Pyramid Pb-Ag mines. Drilling by Endeavour at Sunbeam returned narrow veins of barite/galena and minor tetrahedrite. The highest grade intersections were 27.2m @ 290.7 ppm Ag; 11.4m @ 5.1 ppm Ag. 1999 drilling by Rhodes Mining returned 13m @ 214 ppm Ag, 7m @ 131 ppm Ag, 21m @ 29.5 ppm Ag (Wolstencroft, 1999).
- More recent exploration testing of this style of mineralisation targeted the Birthday Gift and Renegade prospects where Sons of Gwalia returned results such as 3m @ 3.55% Pb, 25 ppm Ag, 12m @ 0.87% Pb, 2.36% Zn, 39 ppm Ag from Birthday Gift and 11m @ 17 ppm Ag from Renegade. Similarly at Origin Hill/Calvary Hill, Sons of Gwalia drill results include 3m @ 0.65 ppm Au, 1.2% Cu, 0.4% Pb, 0.4% Zn and 323 ppm Ag, 4m @ 115 ppm Au; 0.4% Cu; 22m @ 17.5 ppm Ag; 1m @ 0.48 ppm Au.
- At Mt Wyatt a large area of intrusive related veining and base and precious metal mineralisation has received the attention of explorers since its discovery as a large scale stream sediment anomaly by Longreach Metals in 1969. Chalcopyrite, galena and sphalerite and pyrite veinlets were intersected in holes

targeting soil anomalies in altered tonalite. Scattered gold results have been returned by various companies working in the area. Best results include 2m @ 3.7 ppm Au, 4m @ 0.8 ppm Au, costeans of 1m @ 2.77 ppm Au. This system has been targeted as the periphery of a major intrusive related mineralised system.

ADDITIONAL INFORMATION TO SUPPORT AN APPLICATION FOR AN EXPLORATION PERMIT FOR MINERALS PROJECT NAME: UKALUNDA

Follow up of BCL stream sediment gold anomalies has lead to the discovery of several gold bearing mineralised systems within the proposed EPM application or just outside.

The most significant systems located to date are:

- Python: silica sericite pyrite altered fragmental volcanics returned 4m @ 2.48 ppm Au and 4m @ 4.42 ppm Au from costeans.
- Polka Dot: thin gossanous zone within volcanoclastics. Drilling of silica sulphide lode returned 8m @ 0.32 ppm, 8m @ 1.9 ppm Au.
- Mt William Philpott: quartz veinlets associated with rhyolite dykes. 6m @ 4.58 ppm Au and 15m @ 1.0 ppm Au from trenching, ditch witch results 24m @ 0.26 ppm Au.
- There are 33 prospects in the Ukalunda EPM, 21 named and 12 unnamed.

Pyramid	Ag Au Cu Pb Zn
Silver King	Ag Au Pb
Venture	Ag Au Pb
Rob Roy	Ag Au Bi Cu Pb Zn
General Gordon	Ag Au Cu Pb Zn
Bonnie Dundee	Ag Au Cu Pb Zn
Stackpools	Ag Pb
Burdekin	Ag Au Bi Cu Pb Zn
Birthday Gift	Ag Au Cu Pb Zn
Daisey	Ag Au Bi Cu Pb Zn
Walhalla	Ag Au Bi Cu
Cumberland	Ag Au Bi Cu Pb Zn
Carrington South	Ag Au Bi Cu Pb
Carrington	Ag Au Bi Cu Pb
Holy Dollar	Au Bi Cu
Rosenthal	Au Bi Cu
Sunbeam	Ag Au Bi Cu Pb Sb Zn
Duncans	Au Cu
Whites Hope	Au Cu
Mt Wyatt	Au Cu Pb MT
Nuggity Gully	Au Cu Pb Zn

Prospects just outside the EPM application:

- Gettysberg: graphitic matrix quartz breccias hosted in quartz veined stockworked sandstones. Best drill results 8m @ 18.1 ppm Au, 28m @ 4.3 ppm Au, 26m @ 2.8 ppm Au.
- Sellheim prospect: similar to Gettysberg. Best drill results 68m @ 0.2 ppm, 11m @ 0.6 ppm Au, 4m @ 1.3 ppm Au.
- Powerline prospect: quartz breccia associated with quartz feldspar dykes. Best drill results 16m @ 1.18 ppm Au, 31m @ 0.4 ppm, 25m @ 0.46 ppm.
- Butterfly Gossan: silica breccia hosted in felsic volcanics. Elevated gold in rock chips and soils, best drill results 2m @ 0.27 ppm Au.
- Bell Creek: narrow epithermal veins in rhyolitic volcanics and narrow quartzpyrite veins. Best drill results 16m @ 0.4 ppm, 4m @ 3.5 ppm, 4m @ 2.1 ppm.

Several key geological elements make up the Ukalunda EPM:

- The numerous shows of polymetallic mineralisation and widespread surface geochem anomalism.
- The presence of a number of overlapping high level intrusive ring structures associated with mineralisation.
- The position at the northern end of the rib of Anakie Metamorphics which is bounded by deep seated structures along which much of the Drummond mineralisation is located eg. Lone Sister, Twin Hills, Yandan, Wirralie. This horst like feature is thought to control the development of pull apart basins in the overlying Drummond group and other dilatant features conducive to mineralisation.
- Extensional lozenges being generated between fault strands involving dextral shearing in NE structures, particularly those bounding the Anakie Metamorphics and Ukalunda Beds. This structural model was developed by ERA Maptec after examination of Dalrymple Resources' Gettysberg, Sellheim and Marrakesh properties on the western side of the Ukalunda district.
- The prospective Cycle 1 volcano sedimentary stratigraphy of the Drummond group.

NQ Minerals therefore believes that the Ukalunda District is highly prospective and warrants further exploration for intrusive related and epithermal style mineralisation.