ADDITIONAL INFORMATION TO SUPPORT AN APPLICATION FOR AN EXPLORATION PERMIT FOR MINERALS

PROJECT NAME: WHITE MOUNTAINS

 $\mathbf{B}\mathbf{Y}$

WISHBONE GOLD PTY LTD

A.C.N. OCTOBER 2009

Rationale

The Lolworth area which is encompassed by the White Mountains Project lies within the north western outcrops of the Ravenswood-Lolworth Province. The Reedy Springs Batholith of Silurian age outcrops throughout the area and is bounded by Cape River Metamorphics of Proterozoic age zone structure along which much of the regional gold mineralisation is located. The Lolworth region is characterized 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 White Mountains project area covered by this EPM application (EPMA) is centred over the most prospective portion of the Lolworth region and includes several polymetallic (Au-Ag-Cu-Pb-Sb) historic mines and advanced prospects which have received extensive exploration over the past 40 years.

Major historical and exploration results to date are:

Discovery and historical mining of polymetallic Au-Sb-Cu mineralisation occurrences within and around this EPMA. The historical deposits include The Diecon (from 1910 to 1916) which produced 68 tonne of ore for 17.4kg gold bullion, Edwards (1915) which produced 310 tonnes of Antimony ore, Bradleys Jubilation and Clements Copper are copper prospects and NE Workings a gold prospect,

Within short vicinity of the EPMA several other discoveries had been made. The Little Wonder prospect was worked from 1913 to 1915 and produced 17 tonnes of ore for .669kg gold bullion. The Sunday School was worked in 1914 and produced 5 tonnes of ore for .268kg gold bullion. Other gold prospects in this area are Boulder Hill and Emu Dan.

Wishbone Gold Pty Ltd therefore believes that the Lolworth district is highly prospective and certainly warrants further structured exploration for intrusive related and epithermal style mineralisation.

Reasons

Previous discoveries have been made by the successful application of exploration techniques such as surface geochemistry, electrical geophysics, geological mapping, bedrock RAB drilling and target drill testing. With the advances in geophysics, especially airborne and ground magnetics systems, complemented by TM imagery and extensive geochemical datasets as well as new and revised models of mineralization, Wishbone Gold Pty Ltd still regard the area as being highly prospective.

The 40 year exploration history by both major and junior companies available to the company will act as a "springboard" to fast track exploration on the most prospective areas including previous mines. Further exploration methods will consider the success of those used by companies previously holding the EPMA area and follow up on several key leads by developing exploration programs around and not only within previously prospective areas.

Wishbone Gold Pty Ltd, with the technical backing of Terra Search Pty Ltd are able to provide resources to mount a concerted long lived exploration program within the district with the ultimate aim of discovery of large intrusive or epithermal hydrothermal system. Therefore, these are the very strong reasons to support this application for an Exploration Permit to cover the ground within the prospective Lolworth region.

Application Area

The application area totals 19 sub-blocks within the Mingela (8258) 100,000 map sheet, described as follows:

BIM: TOWNSVILLE (TOWN)

TOWN Block: 3345 Sub-blocks: q, r, v, w TOWN Block: 3417 Sub-blocks: a, b, c, d, e, f, g, h, j, k, m, n, o, p, r, s

Location is shown in Figure 3.

Geology

The project area occurs in the Ravenswood – Lolworth Province which consists of probable Silurian Reedy Springs Batholith and Proterozoic Cape River Metamorphics basement and Cambro-Ordovician sedimentary volcanic and metamorphic rocks intruded into Silurian granitoids (Metals, 1986). The Province is overlain by marine shelf and continental sedimentary rocks of Devonian-Carboniferous age. The Ravenswood-Lolworth Province generally trends east to east-west-southeast contrasting strongly to the surrounding provinces. To the north a north to northeast trend controls the rocks of the Hodgkinson and Broken River Provinces and Thomson Fold Belt to the south, and a north to northwest general trend within the New England Fold Belt to the east and southeast (Wyatt et al, 1970, Levington, 1981).

The Ravenswood-Lolworth Province has been previously mapped and examined by various geologists of the Commonwealth and State Governments in joint parties (Wyatt et al. 1970; Wyatt et al. 1971). These are set out in the 1:250,000 map sheets of the Townsville and Charters Towers area and explained in detail in Wyatt et al, 1970, and Wyatt et al, 1971. Descriptions of the regional geology have been produced in several exploration reports, notably Dalgarno (1967), Metals (1986), Hamilton (1987), Gannon (1988), and James (1997).

The oldest rocks in the area belong to the Charters Towers Metamorphics unit, which outcrop to the north and west of Charters Towers as the roof pendants in the Ravenswood Granodiorite Complex (John, 1985). These Metamorphics have been estimated to be Cambro-Ordovician in age (John, 1985). Similar in age are the Kirk River Beds that occur at the head of the Kirk River to the south east of the project area. The Kirk River Beds include an assemblage of micaceous shale, siltstone, lithic and feldspathic sandstone, and arkose (John, 1985).

All of the above units were intruded by the Ravenswood Granodiorite Complex (Hamilton, 1987). The intrusion of this complex was accompanied by a major orogeny which destroyed the existing sedimentary basin and produced a structural high which controlled later deposition. The intrusion of the Complex continued into the early Devonian (Hamilton, 1987).

The project area is mainly incorporated in the Reedy Springs Batholith, the largest element in the Lolworth section of the Complex. The Ravenswood Batholith and Lolworth Batholiths were intruded during the Siluro-Ordovician time (Wyatt et al, 1970). Rb-Sr dating has given a 481 myr Isochron (Middle Ordovician) for the first phase and around 420 my (Late Silurian) for the second phase (Metals, 1986). Several attempts have been made to classify the rocks of the complex with Clarke (1969) subdividing it into separate phases and recognizing 8 distinct subunits of the Batholith (John, 1985).

The earliest and most widespread phase is the main granodiorite. The Glenell Granodiorite has been distinguished as a slightly later phase. Several phases of granite and adamellite which are later than the granodiorite have been named by Clarke. These include the Mosgardies Adamellite, the Millaroo Granite, and the Kirklea Granite. They are referred to as the "late acid phase", as distinct from the main granodiorite phase, on the 1:250,000 geological maps of Townsville and Charters Towers (Wyatt et al, 1970, Wyatt et al, 1971). The Collopy Formation, of Mesozoic age, forms 'The Bluff', to the east of the Charters Towers area. The complex is intruded by a wide range of basic, intermediate and acid dykes, whose real ages and affinities cannot usually be determined, however most are believed to post date the granodiorite (John, 1985). A stratigraphic column of the major lithological units and corresponding mineralisation periods are outlined in Table 1 on page 16.

Structure

Some of the biotite and hornblende granodiorites of the first phase are foliated, suggesting a possible Middle Ordovician age for a major deformation event, which, particularly west of Charters Towers, affected the Cape River Beds, Mt. Windsor Volcanics and the Charters Towers Metamorphics (John, 1985). The major tectonic episode appears to have been the Siluro—Devonian orogeny which is expressed as a regional upwarp with granitic and early Palaeozoic rocks occupying the axial region. Drag folds suggest slight overturning to the northwest with north-easterly oriented fold axes. Attitudes of the late palaeozoic rocks reveal more localised areas of disturbance, the orientation of flow banding being the most obvious structural guide for the younger folding. The Collopy Formation is only gently folded with steep dips confined to faulted areas (Dalgarno, 1967).

Jointing and cleavage are developed in the Kirk River and Cape River Beds, and although there is evidence of folding in the Devonian - Carboniferous sequences, inducation and jointing are not as pronounced as in these older rocks (Dalgarno, 1967). A striking structural feature lying south of Mingela is the Alex Hill Shear zone, which trends west from House Camp Mill to Marmy Creek (figure 4). The zone is distinguished in aerial photographs by its strongly linear pattern. The rocks forming this linear pattern were mapped as mylonites in a report on Authority to Prospect No. 360M and were more recently mapped by the GSQ on the 1:100,000 Mingela sheet as Cambrian-Ordovician metamorphics (figure 4) (Rienks et al, 1996). This feature also wholly contains a sandstone outlier known as The Bluff which is regarded as being possibly Devonian in age. The 1:250,000 Townsville geological map sheet defines a broad zone of leucocratic granites adjacent to the shear zone (Wyatt et al, 1970). Some gold mineralisation, though outside the area covered by the Authority, appears to be related to the Alex Hill Shear Zone including Christian Kruck & Commotion and a number of unnamed workings which appear on the 1:250,000 geology sheet (Wyatt et al, 1970). A strong west-northwest fault trend diverges from the shear zone through the northern section of the Authority (Gannon, 1988).

The Alex Hill Shear Zone ranges from 2.4 to 6.4 km in width, and the degree of shearing is variable. Where the zone transgresses the Ravenswood Granodiorite, phyllite, schist and gneiss have developed (Metals, 1986). The shear zone has been displaced or truncated by a post Tournaissian northwesterly fault extending from Exley to Keelbottom Creek. Numerous east-west faults which occur in the region are probably controlled by the shear direction and displacement of Mesozoic sediments indicates the shear was still a line of weakness until then (Metals, 1986).

The shear zone is probably one of the features controlling the distribution of mineralization westward from Grass Hut to Salas Siding, Tanning and Marmy Creek (Metals, 1986). The shear zone parallels that of the Mosgardies Shear Zone to the south at Ravenswood. Interestingly, the Mosgardies Shear appears to be the controlling structure on the formation of the major gold producing E-W trending "Buck Reef" in Ravenswood (Metals, 1986). Most dates relating to the younger phase of the intrusion appear to be concentrated along an east-west zone in the axial region of the east west orientated batholith (Metals, 1986). It is also in this zone that the major gold mining centres were located and as more absolute dates became available, the evidence suggests that the younger intrusion episode was the more important economically (Metals, 1986).

Local Geology

In the center of the EPMA an intrusion of Ordovician – Silurian Granitoid which hosts a line of deposits namely The Diecon, Au; Edwards, Sb and NE Workings, Au. These deposits lie along strike in a general south west to north east trend. This zone separates the Granitoid intrusion to the north with an assemblage of Cape River Metamorphics, Neoproterozoic – Cambrian in age. The rocks of the metamorphics consist of mica schist; quartzite; quartz-feldspar-biotite gneiss; hornblende schist; cordierite, andalusite and staurolite hornfels; chlorite schist; and marble. This intrusive hosts several small AU deposits as well as unnamed small CU and Sb occurrences.

Mineralisation Models

Much of the previous exploration in the Lolworth Area has been focused primarily on known gold and base metal prospects.

The EPMA area has the potential to host mesothermal (Ravenswood style) precious metal mineralisation and associated sub volcanic breccia complex mineralisation (Mt Leyshon, Mt

Wright style deposits) (James, 1997). The gold model applied in this area is the classic Charters Towers style multiple mesothermal quartz sulphide lodes filling fissures within phases of the Reedy Springs Granodiorite Complex. A second style of mineralization targeted is the hydrothermally altered pipe of greisen affinity found at the Welcome deposit. Table 1 presents the dominant stratigraphy that hosts several of the major gold discoveries.

Historical Gold and Polymetallic Mining in the Lolworth area

Up until the 1980's limited prospecting had been undertaken on many of the old workings around the Lolworth region, with the bulk of the work being centered on the historical workings of The Diecon, Bradleys Jubilation, Edwards, Clements Copper, NE Workings, Boulder Hill, Little Wonder, Sunday School and Emu Dan.

It is reported in the Geological Survey of Queensland Bulletin that early prospecting was carried out in a haphazard manner with little really bona fide work. The historic workings were selectively developed on vertical "felsic" dykes and quartz reefs in the country rock, and this material was handpicked

PROPOSED PROGRAMME & BUDGET FOR EACH YEAR OF THE TERM

Summary

The principal aim of the White Mountains EPM application is to continue to explore for porphyry/epithermal precious and base metal mineralization.

The initial proposed exploration program comprises a review and ranking of all known historical mines, deposits and prospects to determine the best area(s) especially if an area has received a large volume of surface work but scant to minor drilling.

It is likely that ground magnetics will be used on the more advanced projects as this provides the most effective coverage of exploration tenure in a cost effective way. Great advances have been made in the detail and definition of magnetics over the past 10 years and it is likely that this can lead to the more rapid development of drill targeting. Initial RAB drilling will be employed complemented by geological mapping to target areas of potential. In years 3-5 RC drilling will be employed to follow up coincident geological, geochemical and geophysical anomalies. Further drilling will proceed if any mineralized intercepts are encountered in this drilling.

Year 1 Exploration Program and Budget Activity Expenditure (\$) (GST Exclusive)

Geological & Support Personnel 6,000 Geophysics (ground magnetics) 8,000 Field Supplies 1,500 Vehicles 2,500 Assays 1,000 Admin 1,000 TOTAL 20,000

Year 2 Exploration Program and Budget Activity Expenditure (\$) (GST Exclusive) RAB/RC Drilling 15,000 Geological & Support Personnel 5,000 Geophysics (ground magnetics) 4,000 Field Supplies 900 Vehicles 2,500 Assays 800 Admin 800 TOTAL 29,000

Year 3 Exploration Program and Budget Activity Expenditure (\$) (GST Exclusive) RC Drilling 16500 Geological & Support Personnel 2500 Geophysics (ground magnetics) 8000 Field Supplies 2500 Vehicles 4000 Assays 4000 Admin (Review and Reporting) 3500 TOTAL 41,000

Year 4 Exploration Program and Budget Activity Expenditure (\$) (GST Exclusive) RC Drilling 16500 Geological & Support Personnel 2500 Geophysics (ground magnetics) 8000 Field Supplies 2500 Vehicles 4000 Assays 4000 Admin (Review and Reporting) 3500 TOTAL 41,000

Year 5 Exploration Program and Budget Activity Expenditure (\$) (GST Exclusive) RC Drilling 16500 Geological & Support Personnel 2500 Geophysics (ground magnetics) 8000 Field Supplies 2500 Vehicles 4000 Assays 4000 Admin (Review and Reporting) 3500 TOTAL 41,000

Machinery used for the proposed exploration activities would consist of light vehicles, graders, small bulldozers (if drill pad is required) and a truck mounted drill rig.

RESPONSIBILITY AND MANPOWER

The project will be under the day-to-day supervision of qualified members of staff or contractors to Wishbone Gold Pty Ltd. Principal Geologist, Dr Simon Beams (Terra Search) will provide overall supervision for the project and may be contacted on matters relating to it. Work on the project will be accomplished by a geological team from Wishbone Gold Pty Ltd, based out of Charters Towers, consisting of a senior geologist/geologists/contract geophysicists, field assistants and various other support staff, along with contractors from drilling, earthmoving and geophysics companies as required. The project team will comprise:

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Dr Simon Beams, Ph.D. B.Sc (Hons), Principal Consultant Geologist (Terra Search Pty Ltd) - over 34 years of professional experience in mineral exploration for Au, base metals and uranium, and applied geochemical and petrological research. Has been involved in exploration primarily for gold and base metal targets in the Lachlan Fold Belt and North Queensland since 1980, including 5 years with Esso Minerals and Terra Search involved in active mineral exploration in the Ukalunda District. For the past 24 years has been Managing Director and Principal Geologist of Terra Search Pty Ltd. Has played a key role in the discovery and evaluation of several prospects/deposits in North Queensland including Grevillea, Reward, Mt Dalrymple and Mt Mackenzie extensions. Involved with several major exploration data management projects across Australia including working closely with the Queensland Department of Natural Resources & Mines on provision of comprehensive data sets to industry users. Has produced several key publications in the areas of mineral deposit geology and geochemistry, exploration data management, regolith relations, petrology and granite genesis and regional geology of North Queensland. Has long history of involvement with Government Instrumentalities in producing regional geological maps.

Matthew Farmer, B.Sc, Senior Project Geologist (Terra Search Pty Ltd) - over 23 years of professional experience. Since 1983 has worked as an exploration and mine geologist primarily for gold and base metal targets in SE Asia, North America, Africa and North Queensland. He has worked for a number of both Major and Junior companies over the past 10 years including Newmont, TVI Pacific and Tiberon Minerals. He has played a key role in the discovery and development of the Batu Hijau gold-copper mine, as well as Mesel sediment hosted gold deposit in Indonesia. Recent exploration experience includes work on the epithermal gold deposits of the Drummond Basin around Mt. Coolan.

REHABILITATION AND ENVIRONMENTAL PROGRAM

All work carried out by Wishbone Gold Pty Ltd will be in accordance with the Code of Practice, as outlined in the Department's "Schedule of General Exclusions and Conditions for Exploration Permits". It is envisaged that the proposed exploration methods will have minimal effect on the environment. Initial traversing will be done on foot and light four-wheel-drive vehicles, and where possible vehicles will keep to existing tracks. In areas of no tracks, vehicle traversing will be designed so as not to cause any soil erosion or damage to existing vegetation. Any earth works necessary for drilling programmes will be rehabilitated at completion of the program. A truck mounted drilling rig will be the only significant large item of equipment that will be used on site. Minor site preparation will be required to maintain personnel safety. All drill sites will be rehabilitated to as close to their natural state as possible, including:

all top soil will be preserved,

all drillholes, including open hole RAB, will be capped at ground level,

drill sumps, where used will be backfilled,

if a drill site is to impact on a water course, the drillhole will be redesigned to avoid disturbance.

Both Thalanga Copper Mines and sister company Copper Mines of Tasmania have a number of rehabilitation environmental experts on staff and should the need arise they would be called upon to assist with this project.

FINANCIAL AND TECHNICAL RESOURCES

Wishbone Gold Pty Ltd is a private company with an interest in developing exploration tenements throughout Queensland including the Ada Project in south western Queensland. This project is a major potash and salt deposit and is well advanced with engineering studies, including plant and mine design, being carried out prior to financing. Production is slated for 2010.

Mr Walter Doyle, a director of Wishbone Gold Pty Ltd and his family have been active in the Australian mining and exploration industry for many years. Responsible for the discovery and development of several Queensland projects including Plain Creek (uranium, thorium, phosphate) Gilberton, (uranium, gold, copper); Blue Doe, Edward, Bluff, Davenport, Return, Deep Creek, and The Pyramid, gold, silver/lead projects.

From a technical perspective this group is backed by Terra Search Pty Ltd, a fully independent, privately-owned mineral exploration services company, operating throughout Australasia since May 1987. Terra Search has managed exploration and data management projects across wide areas of QLD. Terra Search operates out of offices in Townsville with a field depot in Charters Towers within a 2 hour drive of the EPMA.

Terra Search has the equipment and demonstrated technical expertise to manage an entire exploration program on any scale, from ground generation and acquisition through to resource evaluation. Field crews are highly experienced in working in the more remote areas of northern Queensland.

REFERENCE LIST

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Levington, K.R. 1981. Geological evolution and economic geology of the Burdekin River region, Queensland. Bureau of Mineral Resources, Australia. Bulletin 108.