



BACCHUS

R E S O U R C E S

LOST HILL PROJECT

EL31700 Annual Report For the Period 25/5/2018 to 24/5/2019

Tenure Holder: Bacchus Resources Pty Ltd
Project Operator: Bacchus Resources Pty Ltd
Commodity: Gold and base metals
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Authority	Grant Date	Expiry Date
EL 31700	25/5/2018	24/5/2024

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Abstract

The Lost Hill exploration licence, EL31700, covers an area of 1 graticule and is located approximately 140 km southeast of Darwin. EL31700 was granted to Bacchus Resource on the 25th May 2018 for a period of six years. An application to amalgamate EL31700 with EL31892, which was recently granted to Bacchus is currently being processed. During the first year of tenure, previous exploration was reviewed, with historical drilling and sampling data compiled into the company database.

EL31700 is located within the vicinity of a number of historical workings including the Great Northern, Great Western, Star of the North deposits, as well as the Goodall Mine which is located several kilometres to the south of this lease. Gold production is associated with quartz veins, lodes, sheeted veins, stockworks and saddle reefs, with most of the deposits found near or within the Pine Creek Shear Zone, which stretches from Katherine to Darwin, within the contact metamorphosed metasediments adjacent to the granite plutons of the Cullen Supersuite.

Exploration in Lost Hill will mainly focus on testing the potential for economic gold and base metal deposits within the metasediments of the Burrell Creek Formation.

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1. INTRODUCTION

This report details all exploration activities carried out on the Lost Hill Project (EL31700) by Bacchus Resources Pty Ltd during the first year of tenure.

1.1 Location and Access

EL31700 is located approximately 140km southeast of Darwin and is accessed via the Stuart Highway then various station and mining tracks via Goodall mine to the south or via the Mt Ringwood homestead to the north of the exploration licence (figure 1) .

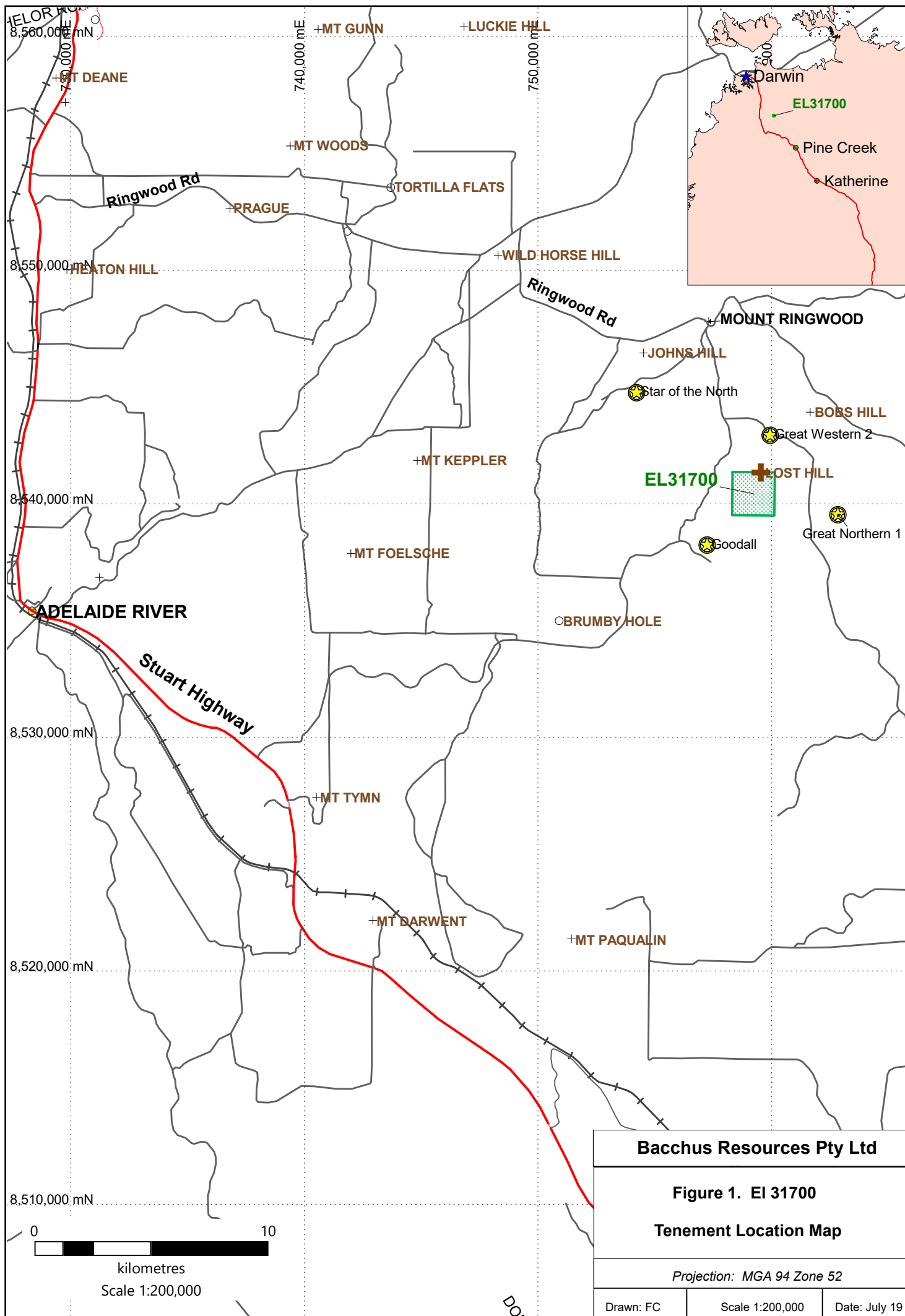
It is located within the Pine Creek (SD-5208) sheet. Access is generally possible with a 4WD vehicle during the dry season. Topography is generally gently to moderately hilly, incised by several minor creeks, with Lost Hill a prominent feature in the northern area of the lease. The vegetation is generally tall and mixed open woodland and tussock grasses.

1.2 Tenure and Land Status

EL31700 covers an area of 1 graticule and was granted to Bacchus Resources Pty Ltd on the 25th May 2018 for a period of 6 years.

Table 1: Authority details for Lost Hill Project

Tenement	Holder	Grant Date	Expiry Date	Area (units)
EL31700	Bacchus Resources Pty Ltd	25/5/2018	24/5/2019	1



2. GEOLOGY AND MINERALISATION

2.1 Regional Geology

The Lost Hill project area lies within the Central Domain of the Pine Creek Orogen. The Central Domain contains Early Proterozoic metasediments representing a preserved basinal sequence up to 14km thick, which unconformably overly gneissic and granitic Neoarchean basement.

This sequence was intruded by quartz dolerite sills of the Zamu Dolerite (1870 Ma), then tightly folded and metamorphosed to greenschist facies between 1860-1835Ma (Hollis et al 2011). This also resulted in generally northwest trending structures and geology. Widespread felsic volcanism followed, with I-type granites of the Cullen Supersuite intruded (1835 Ma). The metasediments underwent contact metamorphism, with previous metamorphic features overprinted in aureoles 500m to 2km wide surrounding granite intrusions.

Mineralisation in the Pine Creek Orogen is dominantly quartz vein hosted, often within anticlines, in greywacke and siltstones, for example Big Howley, Enterprise, Fountain Head and Woolwonga as well as well as the Goodall Mine located several kilometres south of Lost Hill. At the Enterprise mine, gold mineralisation occurs near the contact between the Mount Bonnie Formation and the Burrell Creek Formation. The gold is hosted in greywackes, siltstone, shale, mudstone and chert, within the Enterprise anticline, a simple, upright, moderately tight fold which plunges gently to the south. Extensive shearing and fracturing occurs throughout orebody, particularly concentrated close to the anticlinal axis.

2.2 Local Geology

EL31700 contains rocks of the Burrell Creek Formation, with some alluvium and quartz reefs. The sediments of the Burrell Creek Formation have been folded along ~N-S trending axes with a moderately steep dip ranging from 65-70°, and consist of metamorphosed slates, siltstones, mudstones and greywackes. In the field, mainly observe siltstones which often outcrop as a distinctive banded red/cream unit, massive lithic feldspathic greywackes, and shales. A distinctive linear NW trending regional aeromagnetic high passes over the NE corner of the licence and is thought to be a regional Proterozoic mafic dyke.

The Lost Hill project area lies within an area extensively explored by Western Mining during the mid 1980's. During this time considerable work was done on understanding the stratigraphic sequence for the Goodall Mine area and described in more detail by Hancock and Ward, 1988 as follows:

Burrell Creek Formation - Howley Anticlinorium	
Upper Wacke Sequence	≥1500 m thick unit Comprises medium grained, clast-supported, buff-weathering quartzo-feldspathic, tufaceous wackes, silts and lesser lithic pebble conglomeratic turbidity. The lower portion is a relatively distinctive, buff-weathering wacke.
Red Silty Unit	≥ 600m thick unit A relatively poorly exposed unit dominated by distinctive red-brown weathering phyllitic metasiltstone, graded and bedded phyllite, distinctive laminated phyllite and matrix-supported medium-grained quartzo-feldspathic wacke. Laminated chlorotic phyllite with thin tufaceous interbeds form a distinctive association in the unit. The unit can be internally considered as comprising a lower unit dominated by phyllite and matrix-supported wacke and an upper unit distinguished by laterally persistent wacke units, which include clast-supported lithologies similar to those that dominate the overlying wacke-rich unit. The top boundary is gradational in detail but defined by a thin but continuous wacke unit traceable around the structure in the area mapped in detail.
Bundey Sequence	≥1000 m thick unit Boldly outcropping, medium grained, tufaceous, quartzo-feldspathic wacke with matrix chlorite and muscovite and interbedded chlorite-sericite-quartz phyllitic metasiltstones. Graded, medium grained, clast-supported wacke dominant, and a distinctive sub-zone of wackes with nodules to 5 - 8 cm of quartz-ex-diagenetic chert occurs near the top. Thick phyllitic metasiltstones, often with local ex-andalusite and ex-cordierite spotting occur.
Lower Transitional Zone	~500 m thick unit Not mapped in detail, but reconnaissance observations structurally beneath the Bundey Sequence in the axial zone of the Howley Anticline indicate poorly outcropping, mixed successions of medium grained, quartz-feldspar wacke and significant thicknesses of ferruginous, probably ex-graphitic phyllite, reminiscent of the underlying Mt Bonnie Formation.

2.3 Gold Deposits in Lost Hill Project Area

Historically, gold has been mined from a number of workings surrounding the tenement, including the Great Northern, Great Western and Star of the North deposits, where 2,577 oz Au was reported to have been produced between 1896 and 1920, from small pits and shafts. The gold was found in concordant quartz veins and saddle reefs along the hinge-line of north-plunging anticlines.

More recently, the Goodall Mine, located several kilometres south of EL31700, produced 228,400 oz Au @ head grade of 1.99 g/t Au. The deposit (750m x 50m) consisted of a stock work of thin, conformable and cross-cutting quartz veins located ~60m east of the Howley anticlinal axis.

Currently, PNX are exploring Cookies Corner, located several hundred metres from the northern boundary of the Lost Hill project area, where gold mineralisation appears to be controlled by the intersection of north trending anticlinal hinges and NW striking faults and folds.

3 PREVIOUS EXPLORATION

Previous exploration in the area has focussed on surface sampling within the sediments of the Burrell Creek Formation, with gold the main target. Extensive exploration was carried out by Western Mining in the area, mostly focussing on the Bunday 1 gold anomaly; later the Goodall Mine, as well as a number of anomalous areas including Cookies Corner, located northwest of Lost Hill. Appendix 1 contains a detailed overview of previous tenure for the Lost Hill exploration licence.

Within Lost Hill, the most extensive exploration was carried out by Western Mining, within EL2361, with -#80 mesh soil sampling completed along 13 lines at 20m spacings, as well as rock chip sampling. More recently, exploration in EL24559 focussed on northern area of licence on the eastern flanks of Lost Hill, where gold has previously been found, with 5 soil samples (best result 0.47ppm Au) and 2 rock chip samples with best result of 44.5ppm Au (sample was obtained from 2 small string reefs at northern end of EL but location not provided). Refer to figure 2 for soil and rockchip sampling locations and results.

4 CONCLUSIONS

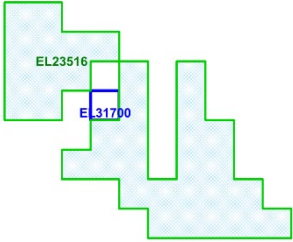
Previous exploration has not fully tested the potential for economic gold and base metal mineralisation. Of interest is the structural complexity, as well as proximity to a number of deposits in the area, including potential for extensions to the known mineralisation at Cookies Corner, which have not been fully tested. An initial reconnaissance of prospective areas, with surface sampling in areas of interest is planned for the second year of tenure.

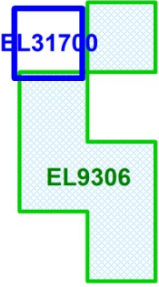
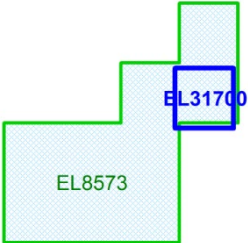
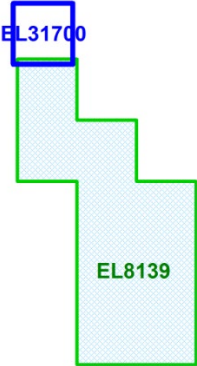
5 REFERENCES

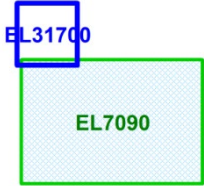
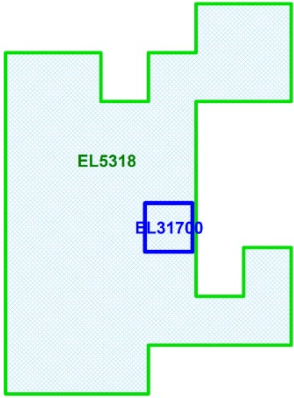
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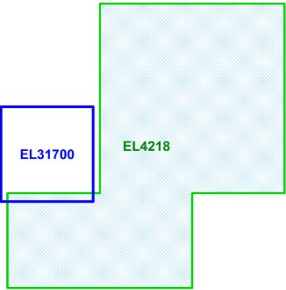
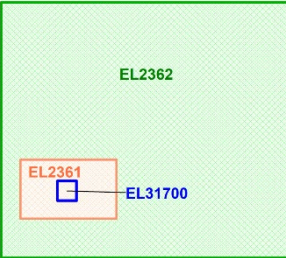
APPENDIX 1

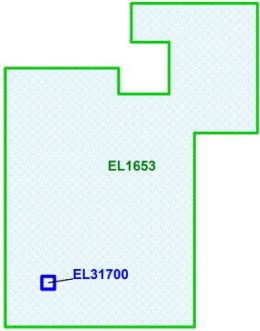
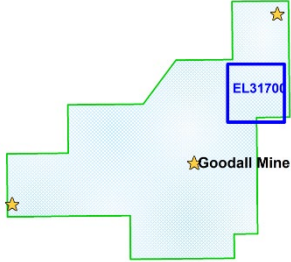
PREVIOUS WORK COMPLETED WITHIN EL31700

Tenure	Company Tenure period Commodities	Exploration Area (in relation to EL31700)	Report ID	Work Completed	Comments
EL24559	Gary Clarke 2005-2013 Gold	1 block- covering same area as EL31700 	CR2013-0920 CR2010-0641 CR2009-0588 CR2008-0488 CR2007-0407 CR2006-0374	- XRF, soil and rock chip samples collected from northern area of EL - Metal detecting for alluvial gold	- Apart from previously discovered gold in northernmost area of EL, no new areas found 5 soil samples (LH1-5) analysed at the lab; best result 0.47ppm Au 2 Rock chip samples (LH F, LH B); best result 44.5ppm Au (from 2 small string reefs at northern end of EL; co-ords not provided)
EL23516	Great Northern		CR2013-0383 CR2011-0266 CR2010-0247 CR2009-0240 CR2008-0186 CR2007-0160 CR2006-0115 CR2005-0141 CR2004-0244	drilled 23 RAB holes and collected 82 lag samples within EL 23516, with several zones of weakly anomalous Au geochemistry.	EL23516 surrounds but does not include EL31700
EL9648	Agricola Gold 1996-2003 Gold		CR2003-0395 CR2002-0385 CR2001-0335 CR2000-0363 CR2000-0234 CR2000-0057 CR1999-0003 CR1998-0095	- Rock chip sampling - Bulk sampling in NE corner of Lost Hill block (east slope of Lost Hill)	4 rock chip samples (GN 8,10,11,14), with best result of 2.10ppm Au from GN10 in NE corner - Along costeans with best result of 0.21ppm Au - Most work focussed in NE corner along east slope of Lost Hill. Two new areas of interest defined to west and SW of Lost Hill. Anomalous areas extend into areas of black soil cover. RAB drilling recommended. Terrain is difficult with heavy equipment required for clearing

Tenure	Company Tenure period Commodities	Exploration Area (in relation to EL31700)	Report ID	Work Completed	Comments
EL9306	Agricola Gold 1995-1999 Gold		CR2000-0203 CR2000-0202 CR1999-0006 CR1998-0039 CR1997-0072		Includes a narrow slice along southern side of EL31700, with no work completed within project area
EL8573 SEL10012	Dominion Gold Northern Gold 1994-2003 GBS Gold Australia 2003-2007		CR2003-0285 CR2002-0179 CR2001-0182 CR2000-0257 CR1999-0254 CR1998-0432 CR1997-0448 CR1996-0640 CR1996-0450 CR1995-0450	- Focussed on extensions to gold mineralisation found at Goodall Mine at North Goodall and Cookies Corner; with soil, rock chip, RAB and RC drilling completed - Relinquished the Lost Hill block in 1996. No work was completed in this block.	- Cookies Corner is located adjacent to EL31700 to the north. Gold mineralisation appears to be controlled by the intersection of north-trending anticlinal hinges and NW striking faults and folds. - Rock chip sampling at Cookies Corner returned up to 28.7g/t Au; 8m @ 2.48g/t Au from RC drilling; and 12m @ 5.15 g/t Au from surface, including 3m at 19.70 g/t from 3m.
EL8139	Dominion Northern Gold 1993-1997 Gold		CR1997-0211 CR1996-0529 CR1995-0667 CR1995-0468 CR1994-0471	- Aeromagnetic interpretation shows a bullseye magnetic high resembling that associated with the Goodall deposit 23 RAB holes drilled 140 Lag samples	- Includes a small area along south EL31700 - All work completed to south of EL31700 - No significant results returned

Tenure	Company Tenure period Commodities	Exploration Area (in relation to EL31700)	Report ID	Work Completed	Comments
EL7090	Page & Edwards, Northern Gold 1990-1996 Alluvial gold		CR1999-0066 CR1998-0033 CR1997-0018 CR1995-0848 CR1994-0060 CR1993-0109 CR1992-0674 CR1992-0026	- Excavated 5 test pits within creek channels within mining leases in NE block of EL7090 - Aircore, RAB drilling, soil and rock chip sampling, panning and metal detecting completed	- No work completed in EL31700 - test pits located in area containing the historic alluvial workings known as the Great Northern. Average grade BCM up to 0.56 - A few small rich nuggetty gold quartz reefs located
EL5318	WR Grace Western Mining 1987-1991		CR1991-0335 CR1991-0334 CR1990-0400 CR1990-0369 CR1989-0387 CR1989-0329 CR1989-0327 CR1988-0138	- Focussed on the C2-4, C6-8, C16-17 and Cookies Corner Prospects which are all outside the Lost Hill area. - Extensive gradient IP, geological mapping, soil and rock chip sampling, costeans, RC and diamond drilling completed	- no work completed within EL31700 - Previously held by WR Grace under EL's 1656, 4778, 2361, 2362 and 4919. - Lost Hill project area was incorporated into MLN1049 in 1988 - Cookies Corner Prospect is located ~200-500m north of Lost Hill, and ~600m to west of the Howley Anticlinal axis. Contains units of greywacke-siltstone-shale with minor quartz veining. Some intervals of moderate mineralisation, including up to 4m @3.45g/t from 46m in BYDC554, as well as long intervals of low-grade mineralisation intercepted.
EL4919	WR Grace Western Mining 1986		CR1987-0263 CR1987-0096		- Incorporated into EL5318 - Joint reported with EL2361-2362: see below for summary

Tenure	Company Tenure period Commodities	Exploration Area (in relation to EL31700)	Report ID	Work Completed	Comments
EL4218	Douglass; White Gold Mines, Zapopan 1983-1989 gold		CR1989-0541 CR1988-0156 CR1988-0153 CR1987-0113 CR1987-0078 CR1986-0244 CR1985-0238 CR1984-0214	- Airphoto interpretation and reconnaissance geological mapping - Rockchip sampling returned best result of 0.1 g/t	- no work completed in EL31700 - Airphoto interpretation indicated 2 possible anticlinal structures- not seen in field - As no evidence of favourable anticlinal structures or significant gold values, no further work completed
EL2362	WR Grace, Western Mining 1980 Gold, base metals		CR1994-0505 CR1987-0263 CR1987-0096 CR1987-0043 CR1986-0014 CR1985-0145 CR1984-0045 CR1984-0037 CR1984-0036 CR1983-0327 CR1983-0165 CR1983-0030 CR1982-0152	- Helicopter assisted selective rock chip sampling was carried out in 1981 by W J Fisher. - Concentrated on Bunday 1 area, with Anomaly 1 within it later becoming the Goodall Mine. - Small anomalies associated with quartz veins and reefs; extending between Johns Hill and south, adjacent to the Bunday anomalies were also explored, along a N-S corridor ~3km to west of EL31700.	- EL2362 covers a large area around EL2361 (does not include area covered by EL2361, or EL31700) - included here as work was completed over all areas at the same time, with area covered by EL31700 reported in both ELs. 469 samples were assayed for Au, As, Pb, Zn, Cu, Ag. Large number of anomalous gold results obtained from south eastern area. - Noted that over half the area consisted of black soil flats without outcrop, and most of the outcrop area lacked quartz reefs or ferruginous structures worth sampling.
EL2361	WR Grace, Western Mining 1980-1986 gold		CR1987-0263 CR1987-0008 CR1985-0277 CR1985-0100 CR1984-0244 CR1984-0045 CR1983-0322 CR1983-0321 CR1983-0038 CR1983-0030 CR1981-0200	- Detailed geological mapping, rockchip sampling, and soil sampling; with #80 samples taken at 20m spacing. - Costeans, RC and Diamond drilling	- Lost Hill project area is located within EL2361 Within Lost Hill Project area: - The Lost Hill project area is located on the Bunday sheet. Soil sampling was completed along 13 lines, at 20m intervals at either ~100m or 200m line spacing. (this area was not geologically mapped)

Tenure	Company Tenure period Commodities	Exploration Area (in relation to EL31700)	Report ID	Work Completed	Comments
EL1653	Optimal Mining Aquitaine/ Pan D'Or 1978-1983 Uranium, gold, base metals		CR1994-0505 CR1983-0036 CR1982-0037 CR1981-0027 CR1980-0245 CR1980-0242 CR1980-0241 CR1980-0069 CR1980-0040 CR1979-0052	- Exploration mainly focussed around the Mt Bundey granite (in NE area of EL1653) for uranium within folded units of the Koolpin Formation. Concluded that the area was still prospective for base metals - geological, photogeological, radiometric and airborne magnetic surveys completed	- Mapping indicated units of the Burrell Creek Formation were present, which lie well above the Koolpin Formation potential uranium-bearer. - Photogeological interpretation outlined an area including Goodall and Lost Hill area as Target Area 5 due to structural complexity of area, with a north trending fold axial trace interpreted slightly to east of Lost Hill within EL31700. - Radiometric survey over southern EL1653 indicated poor potential for uranium - The southern half of the EL, including EL31700, relinquished in late 1979.
MLN1049	Western Mining 1988-1997 Gold		CR1997-0481 CR1996-0558 CR1995-0414 CR1994-0556 CR1993-0728 CR1993-0429 CR1991-0334 CR1991-0333 CR1990-0425 CR1989-0835 CR1989-0387 CR1989-0193 CR1988-0280	Work focussed on the Goodall Mine area; no work was completed within Lost Hill	- Contains the Goodall Gold Project, located ~2km SW of Lost Hill- mined from 1987-1992, with ~4 MT of ore treated for 228,400 oz Au @ head grade of 1.99 g/t. - The Lost Hill block was relinquished in 1989