

Crown Pastoral Land Tenure Review

Lease name: CASTLE DENT

Lease number: PO 196

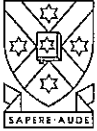
Public Submissions - Part 1

These submissions were received as a result of the public advertising of the Preliminary Proposal for Tenure Review.

May

06

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Department of Botany

University of Otago
Te Whare Wananga o OtagoDivision of Sciences
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September 16, 2005.

Manager,
Quotable Values Ltd.,
PO Box 13 443,
CHRISTCHURCH..**SUBMISSION ON PROPOSED TENURE REVIEW: CASTLE DENT PASTORAL LEASE**

Dear Sir,

Thank you for sending me a copy of this proposal for the tenure review of Castle Dent Pastoral Lease. I appreciate the opportunity to comment on this proposal based on my close knowledge of the vegetation of the area gained over many years of involvement with plant ecological research on the Lammerlaw/Lammermoor Ranges and Otago high country in general.

This is one of the very few preliminary proposals for tenure review of a pastoral lease where more than half (57%) of the total area of the leasehold property (2397 ha from the total area of 4173 ha) is being recommended for restoration to full Crown control and management, comprising: Conservation Area 1 of 2113 ha; Conservation Area 2 of 150 ha, Conservation Area 3 of 4 ha, plus 130 ha to be designated a Scenic Reserve (Area R1- Scenic). Within the 1776 ha proposed for freehold disposal a conservation covenant under the Reserves Act of approx. 85 ha, is also identified. These three proposed conservation areas and the scenic reserve are all endorsed.

The largest proposed Conservation Area (CA1) comprises narrow-leaved snow tussock grassland, small areas of wetland and flushes, and also gully shrublands, from 600 to 940 m elevation, and adjoins the Te Papanui Conservation Park for much of its boundary (eastern and northern). It is intended to add this area to the Park, to which it will provide an important addition. The proposed easement shown as "o-p" on the map for farm management access across part of the southwestern edge of this block is supported, as is the retention of the hut close to the road near the "yards" shown on the map just below (south of) the area outlined as "Enlargement B" on the map. The isolated, several hundred hectare area of proposed freehold adjoining this CA1 area on its southwestern boundary has important landscape values, as well as some remaining natural values although exotic grass cover of mainly browntop and sweet vernal predominates here. The landscape values of this block are worthy of long-term protection to the extent that a covenant protecting it from future afforestation, as well as from future management burning (given the tussock grassland dominance of the proposed CA1 area downwind (northeast) of this area and its vulnerability to wilding tree invasion as well as out-of-control fires), are both highly desirable and thus are recommended. Short of a desire to convert this area to exotic forestry, such a covenant should not restrict the future economic use of this block for grazing purposes.

Conservation Area 2 comprises an important 150 ha area of mixed indigenous shrubland along a slight but significant altitudinal gradient from the bed of the Tuapeka River to the ridge crest. I am pleased to endorse the proposal to add sufficient new fencing to the boundary of this Conservation Area (2) to make it stock proof. The upper boundary should desirably be along the legal (Young) road which would also provide ready public access to the conservation area as well as access for future management of the Castle Dent freehold property. This seems to be a preferable alternative to the proposed easement concession marked "v-w" on the map. The ecological importance of this

shrubland is enhanced by the presence of two relatively rare indigenous plant species, the daisy shrub *Olearia bullata* and the ground orchid *Thelymitra formosa*.

The small area (4 ha) of the proposed Conservation Area 3 is supported mainly because it adjoins the marginal strip and has been largely fenced from stock. Desirably it should be extended the few hundred metres downstream to link with the proposed Conservation Area 2, but this may be impracticable.

The Scenic Reserve of some 130 ha has been proposed to protect small stands and numerous isolated trees of silver beech among mixed manuka/kanuka woodland and associated shrubland "within and on the gully faces draining into western side of Bowlers Creek" along about 5-6 km of its course. These local stands of silver beech on Castle Dent and adjoining properties are regionally significant. The highly irregular nature of the proposed uphill boundary of this proposed reserve means that the new fencing required is substantial. Removal of the c. 45 ha enclave of proposed freehold land at the upper end of the proposed reserve, where the legal road runs through, would be most desirable and is recommended so as to: a) provide greater scope for natural forest succession; b) improve the configuration of the proposed reserve; and c) reduce the cost of installing and maintaining the fenced boundary with the freehold land.

The proposed Conservation Covenant (CC1) adjoining the west bank of the Tuapeka River, is intended to protect some 85 ha of kanuka dominated shrubland. Since this shrubland has important ecological values and could be considered seral vegetation which potentially could develop over time into a stand of silver beech forest, it clearly would be desirable to exclude stock (grazing by sheep and/or cattle is approved, as is topdressing and sowing seed "to the extent traditionally carried out"); otherwise the natural successional processes will be seriously affected. With burning prohibited the entire area, to be covenanted in perpetuity, predictably will become entirely dominated by woody vegetation although the more palatable woody species will be unable to establish so that the ecological potential of the area would never be fulfilled. Any grazing value of the covenanted area, however, will become minimal. Thus initial fencing is desirable and should be considered in order that the full ecological potential of the area can be achieved.

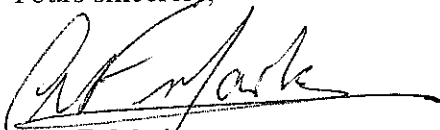
Commenting on the provisions proposed for access for the public and management purposes:

- a). The provision for public access to the easement "m-n" is stated as being "across existing freehold land from the Lawrence-Beaumont highway." This is essential, and must be assumed to be based on an existing agreement with the property owner, as stated in the preliminary proposal.
- b). The existing track along Bowlers Creek, shown as easement "m-n", appears suitable to access the proposed Scenic Reserve.
- c). The proposed easement "f-e-d" required for access from the top of the home block to the proposed Scenic Reserve, presumably is necessary because of particular limitations on Young Rd.
- d). The short track (shown as "d-g") from the Young Rd easement, should provide adequate access to the proposed Scenic Reserve, additional to that provided by the legal road running to the west off Young Rd one half km further to the north.

The "easement concession" for farm management, shown as "o-p" is acceptable (but it is not clear why easement "v-w" is necessary in relation to the easement already provided by Young Rd) while the existing "rights to convey water" granted to Trust Power Generation Limited, shown on the lines "q-r" and "s-t" on the maps, are also accepted.

I wish to thank you for the opportunity to comment on this proposal, which will contribute significantly to the intrinsic values and extent of Te Papanui Conservation Park, and other areas close to a main tourist highway.

Yours sincerely,



Alan F. Mark
Professor Emeritus

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19 September 2005

Team Leader – Tenure Reviews
Quotable Value Limited
Private Bag 13 443
CHRISTCHURCH

Attention: Barry Dench



Dear Barry

**CASTLE DENT PASTORAL LEASE
TENURE REVIEW SUBMISSION BY CROWN MINERALS**

The Commissioner of Crown Lands has invited public submissions on the tenure review of Castle Dent Pastoral Lease which occupies an area of some 4,173 hectares in eastern Otago.

An assessment of the area has shown that the northern and southern sectors of Castle Dent, and much of the surrounding land, is prospective for a range of metallic minerals and is currently partially overlain by granted prospecting permits.

Please find enclosed a written submission on this tenure review proposal.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Rob Robson'.

Rob Robson
Manager, Petroleum and Minerals Policy

**Crown Pastoral Land
Tenure Review**

Lease name: CASTLE DENT

Lease number: PO 196

**Preliminary Proposal
Submission of Crown Minerals
Ministry of Economic Development**

September 2005

**MINISTRY OF ECONOMIC DEVELOPMENT REPORT
TO QV VALUATIONS LIMITED ON TENURE REVIEW
OF CASTLE DENT PASTORAL LEASE**

1 INTRODUCTION

- 1.1 The Crown Pastoral Land Act 1998 provides a framework for tenure review of high country land in the South Island. In order to gain ownership of the land leaseholders may request that their lease be considered for tenure review.
- 1.2 Castle Dent Pastoral Lease ("Castle Dent") is currently subject to tenure review. The Commissioner of Crown Lands has invited submissions on a preliminary proposal for tenure review to Castle Dent Limited as lessees of the Castle Dent.
- 1.3 The purpose of this report is to document the known and potential mineral wealth in the land subject to the Castle Dent tenure review and to request that the Commissioner of Crown Lands takes this into consideration when finalising the substantive proposal decision.

2 CASTLE DENT PASTORAL LEASE

- 2.1 Castle Dent Pastoral Lease comprises 4,173 hectares of land in the Lammerlaw Range north west of Lawrence township. Castle Dent stretches 18.5 kilometers from State Highway 8 in the south to Lammermoor Peak in the North.
- 2.2 In brief, it is proposed that 130 hectares be designated as land to be restored to or retained in Crown control as scenic reserve, 2,267 hectares to be restored to or retained in Crown ownership as conservation area, and 1,776 to be passed into freehold ownership subject to some protective mechanisms.

3 CROWN MINERALS

- 3.1 Crown Minerals, a group within the Ministry of Economic Development, is the government agency that manages New Zealand's state owned oil, gas, mineral and coal resources known as the Crown mineral estate. Crown Minerals is responsible for the efficient allocation of prospecting, exploration and mining rights, the promotion of the mineral estate to investors, and ensuring that the Crown receives a fair financial return for the use of its mineral estate.
- 3.2 The Crown (on behalf of all New Zealanders) owns all in-ground petroleum, gold and silver and approximately half of the in-ground coal, non-metallic and other metallic minerals including industrial rocks and building stones.

4 MINERALS AND THE TENURE REVIEW PROCESS

- 4.1 The Associate Minister of Energy and Crown Minerals have previously registered their concern to both the Minister of Land Information and LINZ officials that the land tenure review process gives no consideration to the land's mineral value and potential for mineral development. In addition, it does not satisfactorily recognise that existing permit and licence holders have an ongoing interest in the land. As a consequence of the tenure review process, some land that is highly prospective for mineral development is passing into the Conservation estate where it will become more difficult, if not impossible in some cases, for individuals and companies to gain access to this land for the purpose of exploration and mining. This represents a significant loss of economic development opportunity.
- 4.2 The objectives of tenure review are set out in section 24 of the Crown Pastoral Land Act 1998 and include *"enabling reviewable land capable of economic use to be freed from the management constraints (direct and indirect) resulting from its tenure under reviewable instrument"*.
- 4.3 The economic benefits from mineral development can be substantial and should not be overlooked. If the land has high mineral potential and/or significant mineral content, consideration should be given to recognising this and ensuring that ongoing access to these resources is reserved in some way when determining future ownership and use of such land.

5 REGIONAL GEOLOGY

The regional geology of the Castle Dent area is dominated by Haast Schist and lies within chlorite subzone 4. Which is a strongly foliated quartzo-feldspathic schist. The strike is generally north west – south east, dipping at moderate to steep angles. The protolith of the schist is inferred to be volcanoclastic sandstone and mudstone.

6 LOCAL GEOLOGY

In the area surrounding Castle Dent the Haast Schist strikes north west – south east with variable dip, between 10° - 40°. This is a result of faulting and folding in the area. The main structural features in the area are the Lammerlaw Antiform to the north and the Tuapeka Fault to the south of the lease. Both these features trend north west – south east. At the apex of the antiform quartz lodes cutting the foliation at low to high angles and trending northwest are present. In the past these lodes have produced large quantities of gold. These lodes also contain pyrite, minor galena and other sulphides.

7 KNOWN MINERALISATION

- 7.1 Significant mineralisation has been identified around Castle Dent which is located less than 3 km from the site of the first Otago Goldrush, following the discovery of gold in Gabriel's Gully in 1861. The discoveries in the area were within placer formations known as the "Blue Spur Cement", deposits of which are preserved along the Tuapeka

fault system. It has been estimated that \$5 million worth of gold may have been won from the Blue Spur occurrence and from the alluvium in Gabriel's and Munro's Gullies.

- 7.2 Gold production peaked at Gabriel's Gully in 1896, and steadily declined to 1912. Gold mining however continued in the area until the mid 1930's. Mining methods included dredges and some underground mining.
- 7.3 In the late 1960's Asarco Developments (NZ) Limited investigated the area as part of an assessment of its Otago gold properties. This programme included geological mapping and bulk sampling at Weatherston's. The highest assay value for gold was 4.5 grains/cubic yard (approximately 380mg/m³).
- 7.4 From 1994 to 1996 Welcome Gold Mines Limited held a prospecting permit over the northern part of the Castle Dent lease area. A BLEG sampling programme was carried out over the permit area with follow up stream sediment sampling. Results were positive with numerous anomalous gold values identified.

8 CURRENT PERMITS AND MINERAL INTEREST IN THE LAND

- 8.1 Castle Dent is currently partially overlain by two granted prospecting permits that cover approximately 20% of the lease area. HPD New Zealand ("HPD") currently holds prospecting permit 39 261 over the northern section of Castle Dent, and Australasia Gold Limited ("Australasia Gold") holds prospecting permit 39 265 over the southern tip of the lease.
- 8.2 A map showing the relationship of Castle Dent to the two overlapping permits is appended to this report, along with a copy of each of the permit documents.
- 8.3 HPD is a wholly owned subsidiary of UK based company Patagonia Gold PLC. The company was formed in August 2002 to explore and develop precious metal properties in New Zealand where there exists a high expectation for the potential of a discovery of significant gold resources. HPD has assembled an interesting portfolio of prospects covering over 6,000 km² with an emphasis on the central Otago region where significant historical workings, but a lack of contemporary exploration, has been undertaken.
- 8.4 Prospecting permit 39 261 was granted to HPD on 12 March 2004 over 1,077 km² to prospect for a range of minerals for an initial term of 2 years. The permit overlies the northern sector of the lease. Work completed to date has included compilation of all relevant existing exploration data into a Onslow GIS, including all significant digital historical exploration data collected to date. A programme of stream sediment and rock sampling has also been undertaken throughout the permit area. This programme has identified some anomalous stream sediment samples for gold and arsenic.
- 8.5 Australasia Gold is an Australian registered gold exploration and mining company that is actively working on both sides of the Tasman. It is currently preparing an IPO soon to be launched in Australia seeking a listing on the Australian Stock Exchange. Australasia Gold has a portfolio of New Zealand prospects covering over 800 km² located primarily in central Otago.

- 8.6 Prospecting permit 39 265 was granted on 18 May 2004 to prospect for gold and silver over 101 km² for an initial term of 2 years. The majority of the permit area lies south of Castle Dent, however, it does overlap the southern extremity of the lease. Australasia Gold is undertaking the following work over the permit in accordance with the permit's work programme:
- compilation of all known existing geo-technical data into a GIS database;
 - geochemical sampling;
 - regional scale mapping;
 - interpretation of geology and production of prospect scale geological maps; and
 - input of new geo-technical data into GIS database

9 COMMENT

- 9.1 Prospecting is a relatively high risk business and the very nature of mineral exploration means that a company starts with a large area of land and with time it reduces the area after eliminating areas of no interest. Where early reconnaissance work under a prospecting permit justifies further exploration expenditure, a company will apply for an exploration permit. Progressively the size of the area will be reduced to only a fraction of the original area as the company seeks to delineate a mineable ore body. More often than not, however, a company will fail to identify economic mineralization and the permit will be surrendered or allowed to expire. Modern day prospecting and exploration techniques present little threat to the environment and yet the ultimate outcome of exploration can be the development of a mine with numerous economic spin-offs for the local economy.
- 9.2 Crown Minerals acknowledges that the transfer of land to the Department of Conservation does not generally preclude access to the land for the purpose of prospecting, exploration and mining. Permit holders can apply to the Department for an access arrangement under section 61 of the Crown Minerals Act.¹ However, because the Minister of Conservation's consideration of an application for access largely relates to conservation objectives, it is fair to say that it is often a difficult and/or lengthy process for an exploration or mining company to secure a workable access agreement on conservation land.

10 CONCLUSION

- 10.1 HPD's and Australasia Gold's current prospecting activities highlight the new interest being shown to assess the mineral potential of Castle Dent, the northern sector and southern tip respectively, and the surrounding area, and testifies to the economic mineral potential of the area.
- 10.2 To provide for the future assessment of the mineral potential of Castle Dent, it is critical that ongoing access to the land is available to exploration and mining companies. Whatever the outcome of the tenure review, Crown Minerals would want to see provision made to allow for future mineral exploration activities to be continued in this area.

¹ It should be noted that the Minister of Conservation must not accept an application for an access arrangement for those areas of high conservation value listed in Schedule Four to the Crown Minerals Act 1991.

- 10.3 Crown Minerals requests that the Commissioner of Crown Lands takes notice of the mineral potential of the area of current interest when finalising the substantive proposal for Castle Dent tenure review. Consideration should be given to the merits of some form of transitional provisions to ensure that future explorers and developers have a right to access to land on reasonable terms for the purpose of carrying out exploration and mining activities, and also any exploration and mining activities under subsequent permits granted in accordance with section 32 of the Crown Minerals Act 1991.

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Castle Dent Pastoral Lease and Overlying Permits

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PP 39 261

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Castle Dent Pastoral Lease

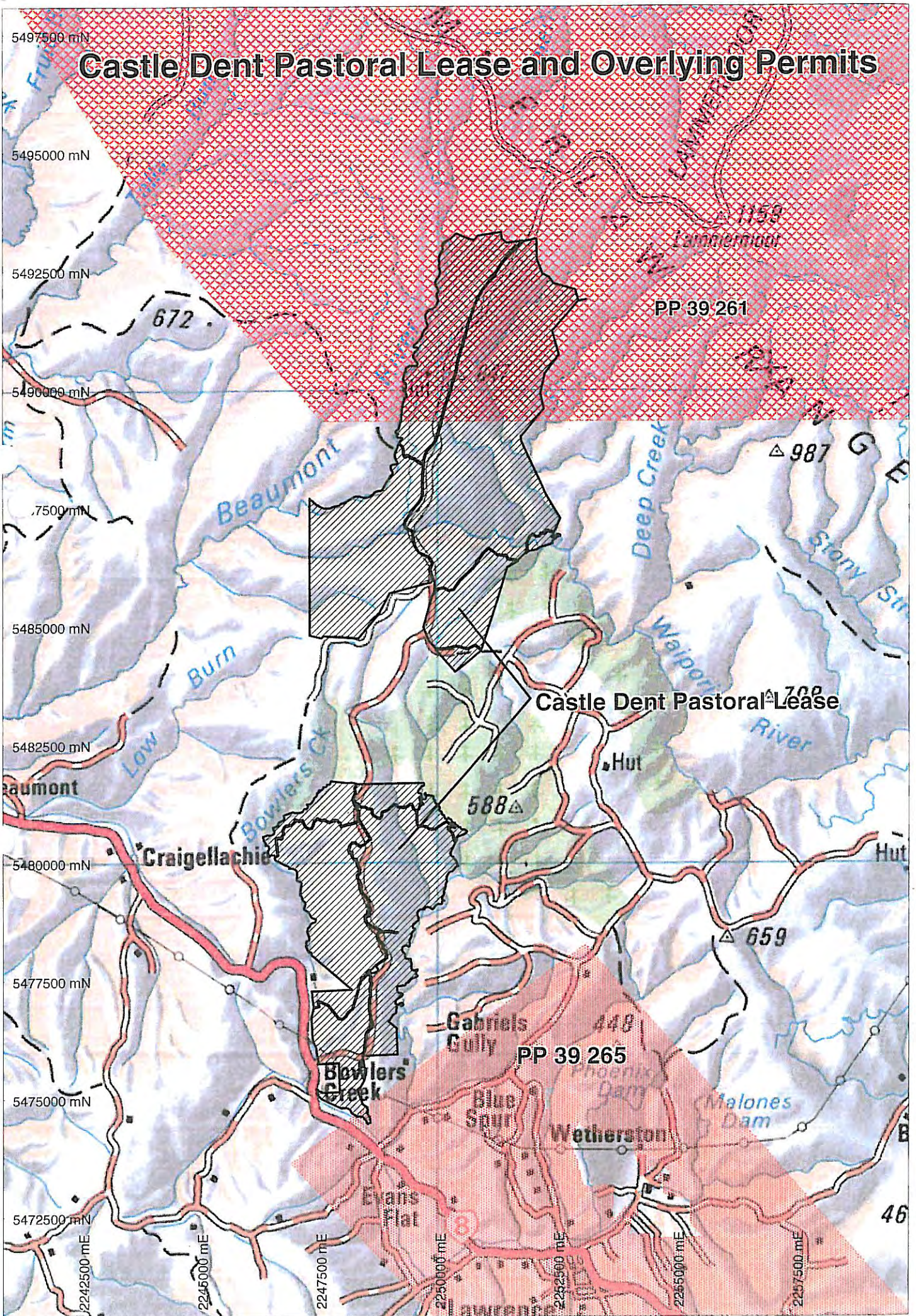
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PP 39 265

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PROSPECTING PERMIT 39 261
CROWN MINERALS ACT 1991

PERMIT HOLDER: HPD New Zealand Limited
C/- Russell McVeigh
Level 25, Royal and Sun Alliance Centre
48 Shortland Street
AUCKLAND

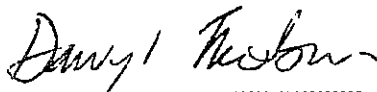
NOW THEREFORE: I, DARRYL FOSTER THORBURN, Group Manager Crown Minerals, acting under delegated authorities of 4 November 1997 and 3 April 2002, do

HEREBY GRANT to the Permit Holder a prospecting permit for the duration of two years commencing on the date hereof

WHICH HEREBY gives the exclusive rights to prospect for all crown owned metallic minerals covered by the Minerals Programme in the land described in the First Schedule and delineated on the plan attached hereto

UPON THE CONDITIONS specified in the Second Schedule hereto and subject to the Crown Minerals Act 1991 and any regulations made thereunder.

DATED at WELLINGTON this 12 day of March 2004



.....
Group Manager Crown Minerals

**FIRST SCHEDULE
PROSPECTING PERMIT 39 261**

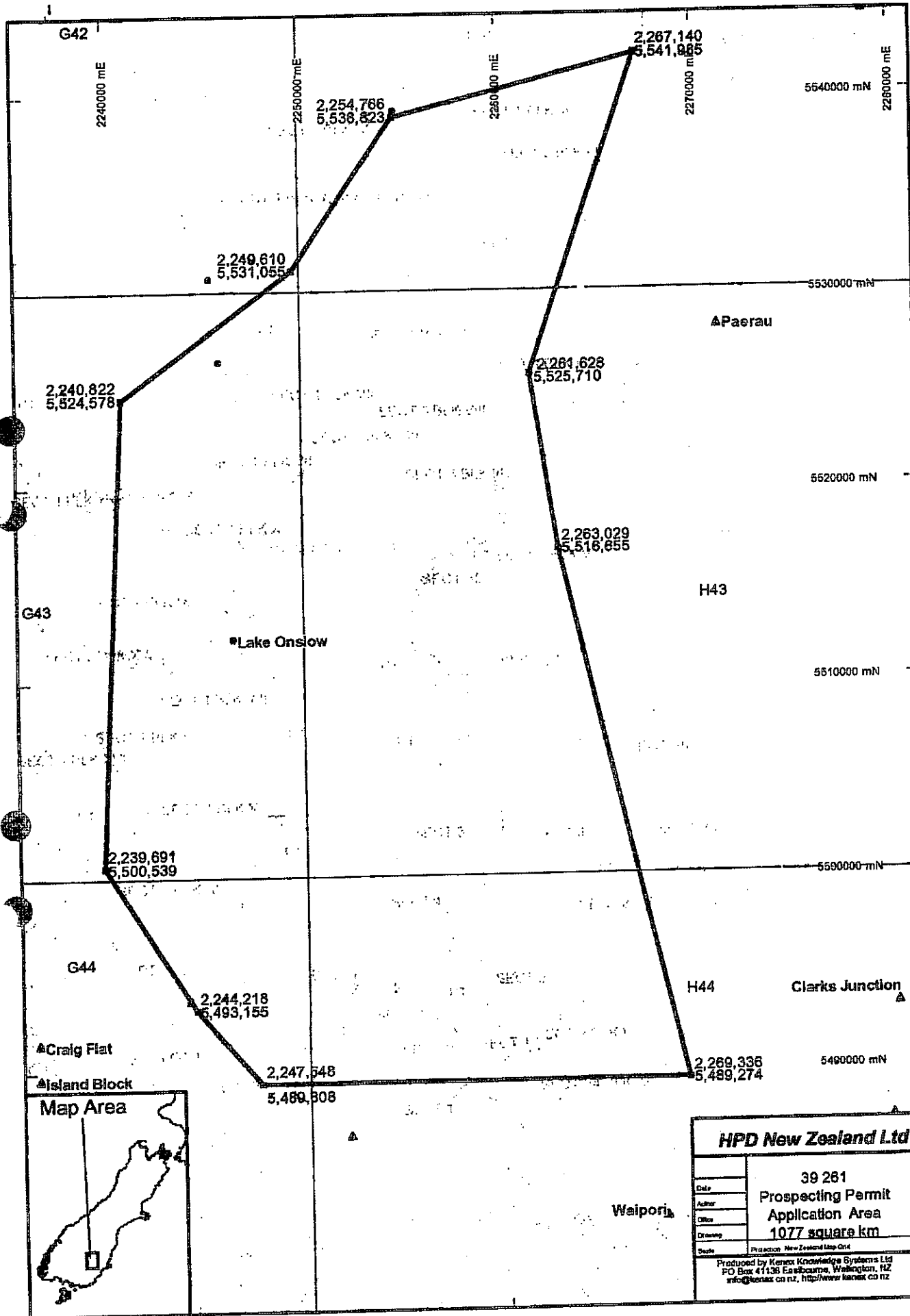
AREA: 1077 square kilometres

LAND DISTRICT: Otago

LOCAL AUTHORITY: Clutha and Central Otago District Councils and Dunedin City Council

DESCRIPTION OF PERMIT AREA:

All that area of land defined by bold black lines on the attached permit plan.



HPD New Zealand Ltd

39 261
 Prospecting Permit
 Application Area
 1077 square km

Projection: New Zealand Map Grid
 Produced by Kenex Knowledge Systems Ltd
 PO Box 41136 Eastbourne, Wellington, NZ
 info@kenex.co.nz, http://www.kenex.co.nz

SECOND SCHEDULE CONDITIONS OF PROSPECTING PERMIT 39 261

Work Programme

1. The permit holder shall make all reasonable efforts, to the satisfaction of the Chief Executive of the Ministry of Economic Development (the Chief Executive), to prospect the permit area in accordance with good industry practice, so as to clearly define the potential of the mineral resources to which this permit applies.
2. The permit holder make all reasonable efforts, to the satisfaction of the Chief Executive, to complete the following minimum work programme;

Within twenty four months of the commencement date of the permit:

- i Compile all known existing geo-technical data into a GIS database;
 - ii Complete regional geological mapping and geochemical sampling;
 - iii Interpret air photography and or other remote images; and
 - iv Complete a detailed rock chip, stream sediment and soil geochemical sampling of anomalous areas previously defined.
3. In accordance with Section 38 of the Crown Minerals Act conditions 2 i, ii and iii must be completed to have achieved substantial compliance with the work programme.

Reports

4. The permit holder shall report in accordance with prescribed regulations.

Fees

5. The permit holder shall pay any prescribed fees that apply to this permit.

THE CROWN MINERALS ACT 1991

PROSPECTING PERMIT No. 39 261

Group Manager Crown Minerals

TO

HPD NEW ZEALAND LIMITED

Area: 1077 square kilometres

MEMORIALS

**PROSPECTING PERMIT 39 265
CROWN MINERALS ACT 1991**

PERMIT HOLDER: Australasia Gold Limited
13 Woodland Close
Aldgate
SOUTH AUSTRALIA 5154

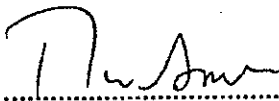
NOW THEREFORE: I, ROBERT SMILLIE, Manager, Exploration and Mining
Services Unit acting under delegated authorities of 2 February
2004, do

HEREBY GRANT to the Permit Holder a prospecting permit for the duration of 2 years
commencing on the date hereof

WHICH HEREBY gives the exclusive rights to prospect for gold and silver as defined in the
Minerals Programme 1996, in the land described in the First Schedule and delineated on the
plan attached hereto

UPON THE CONDITIONS specified in the Second Schedule hereto and subject to the
Crown Minerals Act 1991 and any regulations made thereunder.

DATED AT Wellington this 18th day of May 2004


.....
Manager, Exploration and Mining Services Unit

SCHEDULE 1


Prospecting Permit 39 265

Land District: Otago Land District.

Local Authority: Clutha District Council.

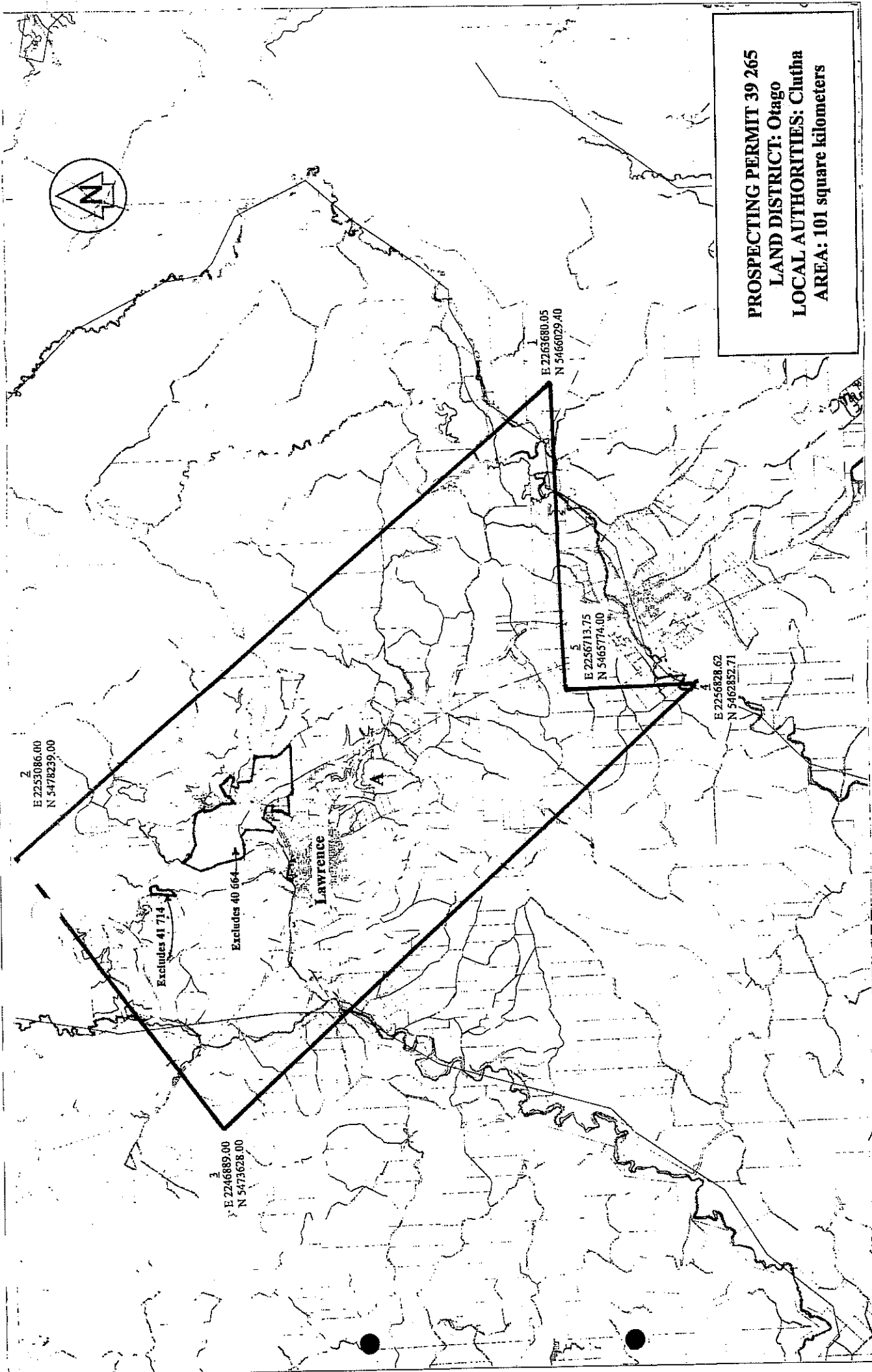
Area: 101 square kilometres.

All that area of land containing 101 square kilometres approximately, shown as A on the attached map.



Graham Cullen
Accredited Supplier
Lifestyle Research Ltd

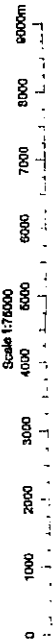
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PROSPECTING PERMIT 39 265
LAND DISTRICT: Otago
LOCAL AUTHORITIES: Clutha
AREA: 101 square kilometers



Lyfestyle Research Ltd



SECOND SCHEDULE CONDITIONS OF PROSPECTING PERMIT 39 265

Work Programme

1. The permit holder shall make all reasonable efforts, to the satisfaction of the Chief Executive of the Ministry of Economic Development (the Chief Executive), to prospect the permit area in accordance with good industry practice, so as to clearly define the potential of the mineral resource to which this permit applies.
2. The permit holder shall make all reasonable efforts, to the satisfaction of the Chief Executive, to complete the following minimum work programme.
 - (a) Within twenty-four months of the commencement date of the permit:
 - i Compile all known existing geo-technical data into a GIS database;
 - ii Complete geochemical sampling;
 - iii Conduct regional scale mapping;
 - iv Interpret geology and produce prospect-scale geological map or maps; and
 - v Input new geo-technical data into the GIS database.
3. In accordance with Section 38 of the Crown Minerals Act conditions 2(a) i, ii, iii, iv & v must be completed to have achieved substantial compliance with the work programme.

Reports

4. The permit holder shall report in accordance with prescribed regulations.

Fees

5. The permit holder shall pay any prescribed fees that apply to this permit.

THE CROWN MINERALS ACT 1991

PROSPECTING PERMIT No. 39 265

Manager, Exploration and Mining Services
Unit Crown Minerals

TO

Australasia Gold Limited

Area: 101 square kilometres

MEMORIALS