



Hercules Resources P/L
PO Box 240,
Launceston, Tasmania.

20 OCT 1998
TASMANIA

MICROFILMED
FICHE No. 014743

Annual Report

Exploration Licence 23/92

For Period September 1997 to September 1998

MINERAL RESOURCES		
EL 23/92		
20 OCT 1998		
APPROVED	DATE	BY
See folio 60		

Prepared by
Tim Akerman
Senior Geologist

October 15, 1998

98-4221

ANNUAL REPORT EL 23/92.
T AKERMAN - HERCULES RESOURCES P/L

1.0 Summary and Recommendations

- * Hercules Resources Pty Ltd (formally Mancala Pty Ltd) took up EL 23/92 to explore for gold.
- * The potential host rocks are the Palaeozoic Mathinna Group, which consists of a folded monotonous sequence of turbiditic sandstone, siltstone and mudstone.
- * A 4km portion of the regional gold lineament is located upon the EL. The structural setting of this region has many similarities to the New Golden Gate Mine.
- * Individual auriferous lodes in the region have extensive strike lengths up to 600m.
- * Mapping and sampling has conformed dextral shearing in the region.
- * Shoots within lodes contain grades up to 106 g/t.
- * Diamond drilling has identified a potential resource of 1,000 tonnes grading 12-15 g/t Au
- * Additional mapping, sampling, drilling and bulk sampling is recommended.
- * A joint venture has been signed with Low Impact Diamond Drilling Specialists (LIDDS). The agreement requires a minimum of 800 metres of diamond drilling to be conducted over a two year period. All reporting and statutory requirements are to be met by LIDDS for the two year term.

2.0 INTRODUCTION

The exploration license 23/92 extends from the Mangana region in the south to the Alberton region in the north, encompassing an area of 28 square kilometers.

The mining lease 6M/95, was relinquished by Tas Tiger Mines (June 1998) and the area has since been incorporated into the EL.

The northern portion of the EL encompasses the Alberton Goldfield, and the southern portion, a segment of the Dan's Rivulet Goldfield.

Gold is the main commodity being explored for, although historically sporadic occurrences of tin and tungsten are known, and are not excluded from the target parameters.

3.0 EXPLORATION OBJECTIVES AND RATIONALE

The objective of Hercules Resources exploration in EL 23/92 is to locate a substantial gold resource that would be amenable to a narrow vein, underground style mining. Hard rock, vein targets in the order of +5000 oz Au are sort. The prime target style is that of The New Golden Gate Mine, which produced in excess of 250,000 oz of gold.

Previous, modern exploration in the region has targeted large tonnage, relatively low grade opencut type resources. Previous production from the region has been derived from narrow vein resources and to a lesser extent alluvial workings. Extensive soil and stream sediment sampling programs of previous modern exploration companies have met with little success and have been hampered by technical difficulties.

Hercules Resources approach to exploration in the EL has had a basis in the extensive work undertaken in ML 6M/95, which was totally encompassed by the EL. The approach is two fold:

- 1) Specific targets generated from a combination of historical data, the application of recent generic models and detailed sampling and mapping.
- 2) Regional targets to be generated from geophysical data and a broad structural interpretation of the area.

To assist financially and to give technical advice (in relation to regional target selection) Hercules Resources is seeking joint venture partners for EL 23/92 and for the other tenements held by the company.

4.0 TENEMENT INFORMATION

Exploration Licence: 23/92

Area: 28 square kilometres

Land District: Cornwell and Dorset

Vicinity: Alberton

Municipality: Ringarooma and Fingal

Schedule:

Commencing at a north west corner at grid co-ordinates 566 000 metres E, 5 430 000 metres N, thence grid east to 570 000 metres E, 5 430 000 metres N, grid south to 570 000 metres E, 5 427 000 metres N, grid west to 569 000 metres E, 5 427 000 metres N, grid south to 569 000 metres E, 5 423 000 metres N, grid east to 570 000 metres E, 5 423 000 metres, grid south to 570 000 metres E, 5 421 000 metres N, grid west to 566 000 metres E, 5 421 000 metres N, grid north to the point of commencement.

Hercules Resources Pty Ltd purchased the tenement from Newcrest Mining Limited in 1994. As part of the agreement between the two companies, Hercules Resources has had to inform Newcrest of any voluntary reduction in size of the EL, and to offer the area to be relinquished to Newcrest, prior to formally reducing the area. The agreement also required Hercules Resources to offer the total EL to Newcrest on the third anniversary of the agreement if royalty payments from production had not commenced.

Hercules Resources conducted a voluntary partial relinquishment (April 1997) and has fulfilled the requirements with its agreement with Newcrest. Newcrest has advised Hercules Resources that they surrender any right to re-acquire the EL (Appendix 1).

Owing to the de-registration of Tas Tiger Mines, and the inability of a deregistered company to hold a mining lease, the area of ground which encompassed ML 6M/95 has reverted to EL 23/92 as of June 1998 (Appendix 2).

5.0 PREVIOUS EXPLORATION

Hercules Resources purchased EL 23/92 from Newcrest Mining Limited in June 1994. Newcrest engaged the services of consultant geologist Lindsay Newnham who compiled an extensive review of previous exploration (Newnham, 1992). This work combined with Pearson (1993) details the previous exploration to date within the EL. Recent work by Hercules Resources is detailed in Akerman (1996)

6.0 REGIONAL GEOLOGY

The regional geology of the EL has been detailed by geologists of the Tasmanian Mines Department on the 1:50,000 geological maps of Ben Lomond and Alberton. Recent reviews, specific to economic geology are provided by Taheri (1992 and 1993) and Keel et. al. (1994) as part of the Netgold Project.

The northern portion of the EL is located within the 70 km Mangana to Lyndhurst gold lineament. Within the approximately 2 km wide, north-westerly trending lineament, gold mineralisation is hosted by the probable Silurian to Devonian Mathinna Beds.

The Mathinna Beds consist of a monotonous sequence of interbedded, fine to medium grained, commonly graded quartz rich sandstone beds and pelrites (Taheri, 1993). The Mathinna Beds are unconformably overlain by probable Carboniferous and Permo-Triassic sedimentary sequences of the Parmeener Supergroup.

The Mathinna Beds have been intruded by granites and graniodiorites, of Devonian age, the thermal alteration halo of which is sporadically mineralised with tin and tungsten. The age of gold mineralisation is uncertain, although it is probable that deposition occurred concurrently with folding and cleavage development, prior to the Devonian granitic intrusives.

Regionally, the Mathinna beds are folded about northwest-trending axes to form small scale and kilometre scale wavelength tight to moderate folds. Axial plane cleavage development takes the form of a slaty cleavage in the pelitic units (Taheri, 1993). Folding is asymmetric with local steep overturning to the west in some cases (Pearson, 1993). A subsequent deformation has produced regional mega kinking about steep, northeast trending kink planes, and numerous steeply dipping kink-bands with both sinistral and dextral geometry's (Goscombe and Findlay, 1989, in Taheri, 1993).

The origin of gold mineralisation and its relation to the structure of the goldfield is uncertain, with a number of theories having been forwarded. Hill (1923), Powell (1991) and Keele et. al. (1994) have all invoked deep seated thrusts models while Taheri (1993) has modeled a pre-Permian extensional dextral jog with dextral transcurrent faulting. At present little field evidence is available to support or disprove the models.

7.0 WORK CARRIED OUT BY HERCULES RESOURCES PTY LTD

No field work was carried out by Hercules Resources during the reporting period.

Administration (Acquisition of Joint Venture Partner)

Following diamond drilling in 1996, Hercules Resources has sort a JV partner to aid in the exploration of EL 23/92 and to further up grade the delineated resource.

A documentation package and presentation was prepared and either directly presented to or dispatched to four Australian based companies and one international company.

Preliminary negotiations were held with Titan Resources N.L., Goldstream N.L., Pima Mining and Meekathara Minerals. Mineral Resources Tasmania co-ordinated a presentation and site visit by Echo Bay Mines of the USA.

All companies approached failed to find sufficient interest in the area to form a joint venture.

Following the failure to attract interstate and international companies, Hercules Resources approached Low Impact Diamond Drilling Specialists Pty Ltd (LIDDS) of Rosebery. The principles of this company were directly involved in the initial drilling program in 1996 and share Hercules Resources belief that a substantial gold resource exists on the EL.

Following negotiations, a joint venture document (Appendix 3) was signed. The major points of the agreement are:

- LIDDS will earn 50% equity in the EL by conducting an exploration program over a two year period.
- At least 800 metres of diamond drilling are required in the two year period.
- All reporting and statutory requirements are to be met by LIDDS.
- All environmental restrictions/reporting to be met by LIDDS.
- LIDDS will totally fund the exploration.
- LIDDS will manage the exploration with assistance if required from Hercules Resources.

It is understood that LIDDS will obtain technical advice from local geological consultants.

The recent company restructuring (forming Hercules Resources) has been directed at consolidating the company to its core activity, that of base metal mining. Consistent with this policy, extensive near mine exploration is currently being conducted at the Hercules Mine.

8.0 CONCLUSIONS

The portion of EL 23/92 located at headwaters of the Dorset River and Dan Rivulet is highly prospective for hard rock gold deposits. The regional structure in the area, postulated to be a dextral shear zone has been partially confirmed by mapping. The individual lodes of the Una and Hinemoa mine areas are extensive with strike lengths up to 550m. The setting has many similarities to the structural regime at the New Golden Gate Mine which produced over 250,000 oz of gold.

At Hinemoa, economic mineralisation has been located at the northern and southern extremities of the known workings. The prospects location, straddling the EL boundary, has precluded detailed work until a JV can be negotiated with the holder of the adjacent licence.

The area north of Hinemoa and south of Una is considered highly prospective as the regional structural elements appear to intersect in the region.

The east/west extent Una workings (50 to 70 metres) suggest that the extensive regional structure (Mangana to Lyndhurst) is confined in this region. Dextral shearing, strike extensive lode development and very high individual grades have been defined. Known individual lodes appear to be limited to 500 to 1000 tonnes of probably 15-30 g/t Au.

It is highly likely that the surface expression of the regional structure is duplicated at depth. Distinct possibilities exist of significant individual or multiply lode deposits being present at depth below the Una workings.

It is proposed that detailed creek and ridge mapping program be undertaken from the Mt. Albert Road saddle southward to the Hinemoa workings. The postulated presence of C and S fabric development and its association with high grades within the shear zone will be investigated.

Diamond drilling, both shallow and deep is proposed at sites which appear prospective based upon the results of mapping.

9.0 EXPENDITURE

Expenditure during the reporting period consisted of administration expenses associated with maintaining the tenement, expenditure associated with the preparation of the joint venture document and legal fees associated with the joint venture document.

Total expenditure amounted to \$4,600.

REFERENCES

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- Newnham, L.A. (1992) Exploration licences 22/92 and 23/92, North-East Tasmania
Review of previous exploration information. Unpublished report, Newcrest
Mining Limited.
- Pearson, D.F. (1993). Annual report for exploration licences 22/92 Tower Hill, 23/92
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- Powell, C. McA. (1991). Structure of the Beaconsfield and Lefroy goldfields. Report
1991/16 Division of Mines and Mineral Resources Tasmania.
- Taheri, J. (1992). Northeast Goldfields: A summary of the Tower Hill, Mathinna and
Dans Rivulet Goldfields. Report 1992/10, Mineral Resources Tasmania. 1993/34.
- Taheri, J. (1993). Northeast Goldfields: A summary of the Alberton Goldfield. Report
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APPENDIX 1

Newcrest Limited Correspondence

NEWCREST

MINING

LIMITED

ACN 005 683 625

534010

ref: T003-23/92

14 May 1997

Mancala Pty Ltd
PO Box 240
LAUNCESTON TAS 7250

For the attention of Mr Tim Akerman - Senior Geologist

Dear Tim

Exploration Licence No. 23/92 - Mathinna

Thank you for your letter dated 18th April 1997.

Newcrest advises that it does not wish to exercise its right to re-acquire EL 23/92 - Mathinna. Newcrest hereby notifies Mancala that it surrenders any right to re-acquire title.

Yours sincerely



LINDSAY W. ARMSTRONG
Properties Manager

cc John Holliday - Newcrest

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APPENDIX 2

MRT Correspondence



Tasmania

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MINERAL RESOURCES TASMANIA

A Division of
TASMANIA DEVELOPMENT AND RESOURCES

Enquiries: Dennis Burgess
Phone: (03) 6233 8341
Your Ref:
Our File: ML 6M/95 8DRB211.SK

12 June 1998

Tas Tiger Mines Pty Ltd
152 Best Street
DEVONPORT TAS 7310

Attention: Barrie Hall

Dear Mr Hall

MINING LEASE 6M/95 - ALBERTON

I refer to my letter of 26 May 1998 in which I advised you that I was waiting for legal advice in regard to status of leases where the lessee was a deregistered company.

I regret that I have now been advised that mining leases cannot be held by a deregistered company.

Tas Tiger Mines has been deregistered since 13 June 1996.

The area formerly covered by lease 6M/95 now falls into the surrounding exploration licence 23/92 held by Mancala Pty Ltd.

Yours sincerely

Dennis R Burgess
REGISTRAR OF MINES

c.c. K G Bird, Rosny Park
Mr B Bourke, Environment Tasmania, DELM, Hobart
Dorset Council, PO Box 21, Scottsdale, Tas 7260
Con Van Namen, Launceston
Mancala Pty Ltd, PO Box 240, Launceston Tas 7250

APPENDIX 3

Joint Venture Documentation

EL23/92

JOINT VENTURE AGREEMENT

BETWEEN

HERCULES RESOURCES PTY LTD

AND

**LOW IMPACT DIAMOND DRILLING
SPECIALISTS PTY LTD**

COPY
Final

September 1998

AGREEMENT made this 30th day of September 1998.

PARTIES:

HERCULES RESOURCES PTY LTD (ACN 056 204 267), a company incorporated in the State of Tasmania and having its registered office at 45B Cameron Street, Launceston, Tas 7250 ("Hercules").

LOW IMPACT DIAMOND DRILLING SPECIALISTS PTY LTD (ACN 079 634 692), a company incorporated in Tasmania and having its registered office in Rosebery, postal address PO Box 44, Rosebery, Tas 7470 ("LIDDS").

WHEREAS:

- A) Hercules is the registered holder of Exploration Licence 23/92, situated in the Mt Victoria area of North East Tasmania (expiry date October 2002).
- B) LIDDS seeks to earn a fifty percent (50%) interest in the Licence by totally funding and managing a diamond drilling programme to aid in the exploration of the Tenement.
- C) For this purpose Hercules has agreed to grant to LIDDS its consent to explore on the Tenement on the terms set out in this Agreement.

1. DEFINITION AND INTERPRETATION

- 1.1 For the purpose of this Agreement, unless the context otherwise requires, the following terms shall have the meanings respectively ascribed to them:-

"Act" means the Mineral Resources Development Act 1995 of Tasmania.

"Commencement Date" means the date of this Agreement.

"EL" and "Licence" means Exploration Licence EL23/92.

"Tenement" means the area of land which is subject to the Licence.

"Minister" means the Minister for the time being charged with the administration of the Mineral Resources Development Act 1995 of Tasmania.

"Department" means Tasmania Development and Resources.

"Agreement Period" means the period of two years after the signing of this Agreement, as dated at the head of this page.

- 1.2 (a) In the interpretation of this Agreement, unless the context otherwise requires, the singular shall include the plural and vice versa and in particular (but without limiting the generality of the foregoing) any word or expression defined in the singular shall have the corresponding meaning if used in the plural and vice versa and reference to any gender shall include the other genders.
- (b) References to "person" shall include reference to a body corporate or other legal entity.
- (c) The headings shall not form part of this Agreement and shall not be relevant to the construction of it.

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- (d) Unless the contrary intention appears, a reference in this Agreement to any Act or Code shall be read as a reference to any Act or Code amending, or in substitution for that Act or Code.
- (e) References herein to any agreement or other instrument shall be deemed to include references to the agreement or instrument as therein referred to or as amended from time to time.
- (f) Nothing in this Agreement shall be construed or implied that LIDDS is an agent for, acting for, or is the representative of Hercules. LIDDS is an independent contractor and is not a partner of nor agent for Hercules. LIDDS hereby indemnifies Hercules for any loss flowing from any failure by LIDDS to comply with the Act and Licence conditions.

2. WORK AND EXPENDITURE COMMITMENT

- (a) LIDDS must drill a minimum of 800 metres diamond drilling in the Tenement within the Agreement Period.
- (b) During the Agreement Period, LIDDS is completely responsible for maintaining the Licence in good standing and for meeting all statutory requirements of the Licence. LIDDS acknowledges that it has read and is familiar with the Licence and all its conditions including the minimum expenditure requirements. LIDDS must comply with all such conditions and requirements and indemnifies Hercules against all claims losses and demands arising from LIDDS' breach of this Agreement.
- (c) During the Agreement Period, LIDDS is completely responsible for meeting environmental standards and guidelines on the Tenement, providing the existing standard of environmental protection and management is approved by the Department prior to commencement of operations by LIDDS.
- (d) All costs associated with the work programme will be the responsibility of LIDDS.
- (e) For the purposes of completing the work programme, it will be the responsibility of LIDDS to enter into and perform arrangements with landowners and adjacent licence/lease holders in relation to compensation and all other matters in accordance with the Act or as required by the Department.
- (f) During the term of the Agreement Period, and prior to the commencement of drilling operations, LIDDS will supply to Hercules copies of all proposed work programmes. Hercules does not have the right to veto any such programme, but will provide advice and guidance as to the potential outcome of any such programme.
- (g) At no time during the Agreement Period may Hercules or LIDDS enter into dealings with respect to the Licence with a third party without initially informing and receiving consent of the other party.
- (h) LIDDS must comply with Section 29 of the Mineral Resources Development Act 1995 by carrying out any exploration efficiently and effectively and by carrying out any exploration and rehabilitation of land consistent with the standards specified in any relevant code of practice.

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3. COMPLETION

- (a) At a date coinciding with the end of the Agreement Period, LIDDS will supply to Hercules a detailed report on all work performed and costs thereof during the Agreement Period. Hercules reserves the right to audit the report and the work upon which it is based.
- (b) If via the reporting to Hercules by LIDDS (Sub-clause 3a), Hercules is satisfied that a minimum of 800 metres of diamond drilling has been conducted upon the Licence during the Agreement Period, Hercules will grant fifty percent (50%) equity in the Licence to LIDDS at no direct cost. LIDDS must, however, pay any stamp duty or other expenses of and incidental to the transfer of the Licence.
- (c) At conclusion of the 800 metres drilled within the Agreement Period, a joint venture of equal representation of Hercules and LIDDS may be formed for conducting further exploration work or for mining any commercially viable mineral deposit discovered on the Tenement. Any costs associated with the formation of a further joint venture agreement at the end of the Agreement Period will be shared equally between LIDDS and Hercules.
- (d) Any new tenement, such as a mining lease, which is formed or created within the existing Tenement as a result of this exploration will be jointly and equally held by Hercules and LIDDS, provided that LIDDS has fully complied with its obligations under this Agreement.

4. DATA

- (a) All information held by Hercules pertaining to the Tenement is to be made freely available to LIDDS for the duration of this Agreement.
- (b) During the term of the Agreement Period, LIDDS will supply Hercules with quarterly reports and an annual report of all activities conducted upon and costs associate with the Licence. The annual report is anticipated to be that which is supplied to the Department on the annual anniversary of the granting of the Licence (9th October, 1992).
- (c) Notwithstanding the reporting requirements of Clause 4(b), LIDDS will supply to Hercules copies of results of all analytical work conducted upon drill core as soon as they become available to LIDDS.
- (e) If at the end of the Agreement Period a joint venture is formed to further exploration or exploitation of the Tenement, the complete data of all works on the Tenement will become the property of that joint venture.
- (f) LIDDS must in a timely manner prepare and provide to Hercules any report required by the Director under Section 28(3) of the Mineral Resources Development Act 1995.

5. GOVERNING LAW

This agreement shall be governed by and constructed in accordance with the laws of the State of Tasmania and the parties hereby submit irrevocably to the jurisdiction of the Courts of the said State.

6. WARRANTIES

Hercules hereby warrants that at the date hereof:-

- (i) EL23/92 is and will be free of all liens, charges and encumbrances of any nature and that Hercules is the legal and beneficial owner of the Licence and no other person has or will

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have any right or title in respect thereof, and that Hercules has full and free right to enter into this Agreement.

- (ii) Hercules is not aware of any matter which it has not prior to the date hereof disclosed to LIDDS which would have a material adverse effect on the value of EL23/92.
- (iii) Hercules has not done or omitted and will not do (except in accordance with the Act) or omit to do any act as a result of which EL23/92 is or likely to be prejudiced or forfeited or cancelled and that pending completion of this Agreement Hercules will do no such act or omit to do any such act.
- (iv) LIDDS warrants that it has and will continue to have ongoing sufficient financial resources to fund the work programme and has technical expertise available to conduct the work.
- (v) LIDDS warrants that the Tenement will be kept in good standing and that LIDDS is not aware of any undisclosed matter which would increase the value of the Tenement.

7. DEFAULT

Either party may terminate this agreement if a breach by the other party has not been remedied within seven days after the giving of written notice of such breach.

8. WAIVER

This Agreement may only be amended in writing signed by the parties and no waiver shall be effective against a party unless such a waiver is in writing signed by such party.

9. FORCE MAJEURE

- (a) No failure or omission by LIDDS to conduct or observe any of the terms or conditions of this Agreement shall give rise to any claim against LIDDS or be deemed a breach of this Agreement if such failure or omission arises from any cause reasonably beyond the control of LIDDS. For the purpose hereof and without limiting the generality of the foregoing, inclement weather preventing access or reasonable operations upon the Tenement shall be deemed to be cause reasonably beyond control of LIDDS.
- (b) In the event LIDDS is, wholly or in part, prevented from or hindered in carrying out its obligations hereunder for any cause reasonably beyond the control of LIDDS, LIDDS shall give written notice to Hercules by the most expeditious means as soon as possible after the occurrence of the hindrance, and shall give further written notice as aforesaid promptly when such prevention or hindrance ceases to exist. The operation of this clause, however, shall not be conditional upon the giving of such notices. LIDDS, in relying on the provisions of this clause, shall use reasonable diligence in overcoming the prevention or hindrance in question and resume performance within a reasonable time thereafter.
- (c) All periods stipulated by this Agreement in relation to the term and works shall be extended by the amount of time lost due to force majeure as referred to in this clause.

10. SUCCESSORS AND ASSIGNS

This Agreement shall be binding upon and ensure for the benefit of Hercules and its successors and permitted assigns and LIDDS and its successors and permitted assigns.

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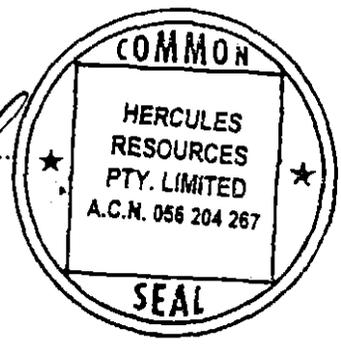
11. FURTHER ASSURANCES

The parties shall execute and deliver all such documents and shall do such things as shall be necessary or desirable for the complete performance of all their respective obligations under this Agreement.

IN WITNESS whereof the parties hereto have executed this Agreement the day and year first hereinbefore written.

The COMMON SEAL of Hercules Resources Pty Ltd) is hereunto affixed in accordance) with the Articles of Association) in the presence of).....

[Handwritten signature]
.....
DIRECTOR



.....
Secretary

The COMMON SEAL of Low Impact Diamond Drilling Specialists Pty Ltd) is hereunto affixed in accordance) with the Articles of Association) in the presence of).....

[Handwritten signature]
.....
DIRECTOR



.....
Secretary

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