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Annual Report on Exploration June 2000 to April 2001 - EL19/1993 and T2-MEL, Ringarooma and RLs Mineral Holdings Australia Proprietary Limited\* Duncan, D.McP.; Rhodes, L. EL19/1993; RL15/1987

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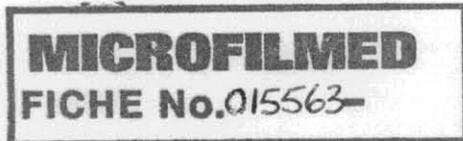
EXPLORATION LICENCES

EL 19/93 & T2-MEL, RINGAROOMA BAY

&

RLs 8715 & 8723, FOSTERS MARSHES

TASMANIA



ANNUAL REPORT ON EXPLORATION JUNE 2000 TO APRIL 2001

| MINERAL RESOURCES |            |          |
|-------------------|------------|----------|
| FILE REF:         |            |          |
| 12 APR 2001       |            |          |
| DOC. REF:         |            |          |
| OFFICER           | FOR ACTION | FOR INFO |
| EL19/93           |            | PT2      |
| See folio         |            | 74       |
| T2-MEL            |            | PT2      |
| See folio         |            | 61       |
| RESUBMIT TO       | DATE       |          |
| RL8715            | PT3        |          |

See folio 72

RL 8723 PT2

See folio 77

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Annual Report on Exploration June 2000 to April 2001 - EL19/1993 and T2-MEL, Ringarooma and RLs Mineral Holdings Australia Proprietary Limited\* Duncan, D.McP.; Rhodes, L. EL19/1993; RL15/1987

for

Mineral Holdings Australia Pty Ltd  
10th Floor,  
100, Collins St.,  
Melbourne Vic 3000

Compiled by

D. McP Duncan & McPherson Duncan & Associates  
18, Old Summerleas Rd  
Kingston Tas 7050

L. Rhodes  
Consulting Metallurgist  
PO Box 154  
St Marys Tas 7215

12th April 2001

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**Plan 1- Locality Map and Mineral Tenements, Ringarooma Project**

**Plan 2- Alluvial Tin Resources, Ringarooma Project**

**Plan 3- Alluvial Tin Resources and Geology, Ringarooma Project**

**Plan 4- Regional Geology and Offshore Sampling Sites, Ringarooma Project**

**Appendix 1 to 4**

**EL 19/93 & T2-MEL- Ringarooma Bay, & RLs 8715, 8723- Fosters Marshes-  
Annual Report 2001**

**ABSTRACT**

This report describes the work carried out on the evaluation of tin-bearing placers on licences 19/93, T2-MEL, 8715 and 8723 which are the main part of the Ringarooma Alluvial Project of Mineral Holdings Australia Pty Ltd.

A new assessment of the alluvial resources has been carried out and has identified an increased Inferred Resource of 194 Million cubic metres of potential tin wash offshore within the outlines of EL 19/93 and T2-MEL. Onshore, there is an indicated resource of 109 Million cubic metres of tin wash within the Fosters Marshes RLs 8715 and 8723 with additional resources in EL 38/97 Aberfoyle.

Projected grades of between 0.54 c/cu. m. and 9.32 c/cu. m. sapphires have been assigned to the above alluvial resources derived from studies of adjacent areas. At the higher values of projected grades, the sapphires may be more valuable than tin. The revised estimate for the contained tin, sapphires and accessory minerals is that the bulk value of the resource is between A\$79.5 million and A\$358.5 million onshore and is A\$307 million offshore.

Studies carried out on concentrates show that sapphires are not amenable to X-ray sorting but that zircons can be successfully beneficiated by this method at the coarser grain size of 0.8mm and above.

The much delayed bulk sampling offshore remains to be carried out reflecting the inherent high cost and uncertainty in the marine dredging industry. Negotiations are continuing with dredging companies. Studies involving smaller sampling devices on board trawler-type vessels have not shown a lot of promise.

A large number of local and overseas companies have been approached as potential joint venture partners and some have been sent further information. In this way, the marketing of this unusual consolidation of tenements covering the Ringarooma tin, sapphire and mineral sand province is continuing.

## **EL 19/93 & T2-MEL- Ringarooma Bay, & RLs 8715, 8723- Fosters Marshes- Annual Report 2001**

### **1.0 Introduction**

EL 19/93 was granted to Mineral Holdings Australia Pty Ltd on 28th April 1997 for a maximum of 5 years to 4th April 2002 over an area of 18sq km at Ringarooma Bay to cover the extension into State Waters of the tin-bearing palaeochannel of the Ringarooma River.

Subsequently, two adjacent ELs were applied for to secure additional areas-landwards and seawards- of potential for alluvial tin. T2-MEL was applied for on 19th May 1997 covering some 48 sq km in Commonwealth Waters under the Offshore Minerals Act 1994 and was granted for four years from 30th March 1998.

EL 20/97 was applied for on 20th May 1997 to secure the extensions of the palaeochannel both offshore around EL 19/93 and T2-MEL and onshore to connect up with the Retention Licences 8715 and 8723 at Fosters Marshes and to cover the Bowlers Lagoon area suspected of concealing a former branch of the Ringarooma River. On granting on 20th January 1998, EL 20/97 was amalgamated into EL 19/93 to give a combined area of 52 sq km expiring on 4th April 2002 (Plan 1).

Subsequently, EL 38/97 was granted on 6th March 1998 to the south of the RLs at Aberfoyle Hill to cover 4 sq km containing old alluvial tin workings to prospect for clay (bentonite), tin and gemstones.

These licences held by Mineral Holdings Australia Pty Ltd consolidate the potential alluvial tin resources in the Ringarooma Bay region both onshore and offshore and allow exploration to proceed in a coherent manner with subsequent economies of scale.

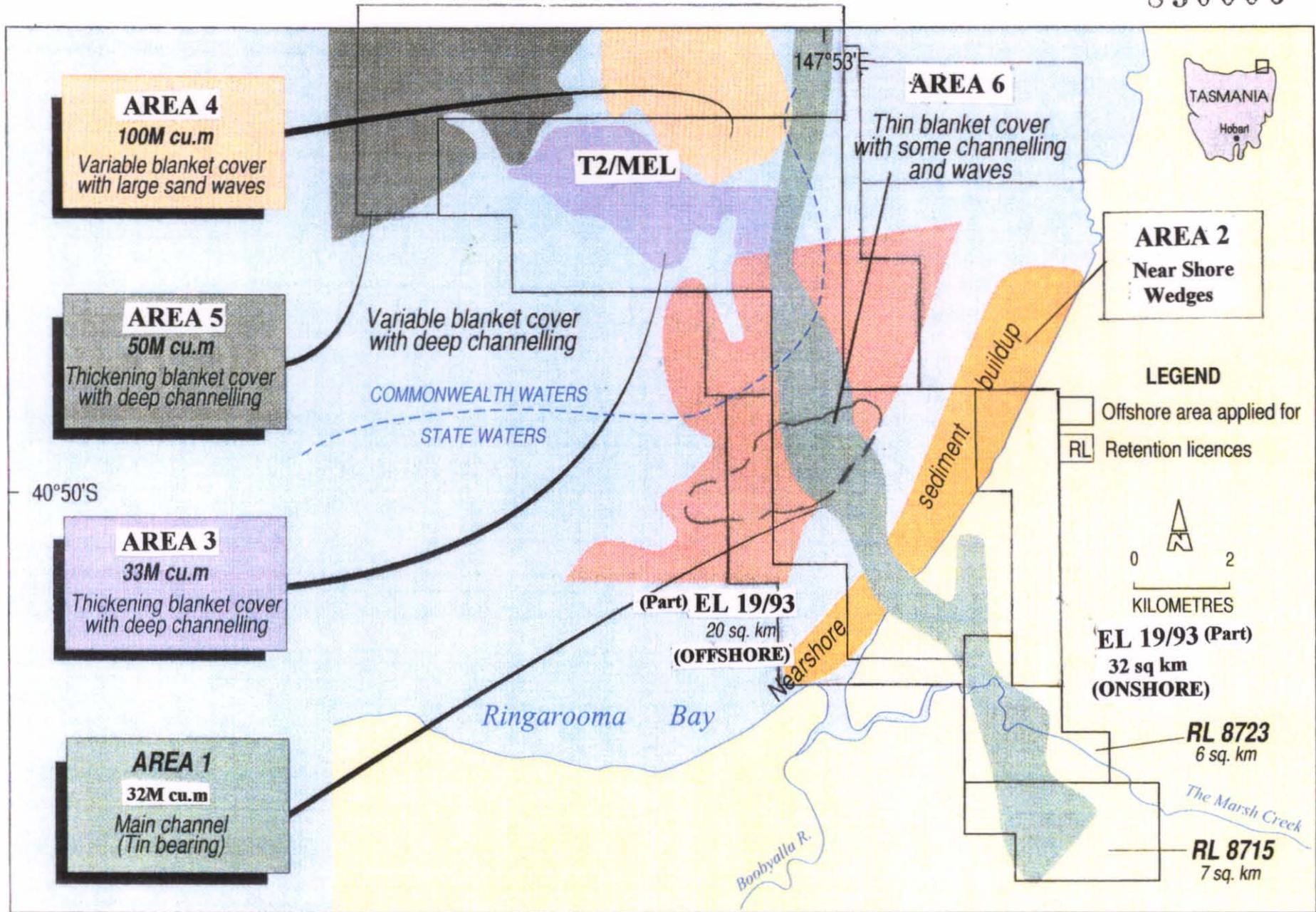
### **2.0 Previous Exploration**

The Ringarooma Tin Project of Mineral Holdings Australia Pty Ltd consists of the tin-bearing palaeochannel of the Ringarooma River in NE Tasmania. Previous exploration from the 1960s onwards by a number of companies, as summarised by MacArthur (1995), has shown that the onshore and offshore components of the channel contain indicated resources of 109M cu m at 64g tin/cu. m. and 16M cu. m. at 227g tin/cu. m. respectively. In total offshore, there is an inferred resource of 130M cu. m. of potential tin wash (Plans 2 & 3) within the area of the previous tenements.

The onshore geology of the area as mapped by Mineral Resources Tasmania (Moore, 1991) is presented in Plan 4 at 1:100,000 scale along with the tenement outlines and the proposed offshore bulk sampling sites.

Exploration on the present licences by Mineral Holdings has been fully described in the annual reports covering the period 1997-2000 (Duncan & Rhodes) and will not be repeated here.





THE RINGAROOMA ALLUVIAL TIN PROPERTY – TENEMENT PLAN AND POTENTIAL TIN RESOURCES

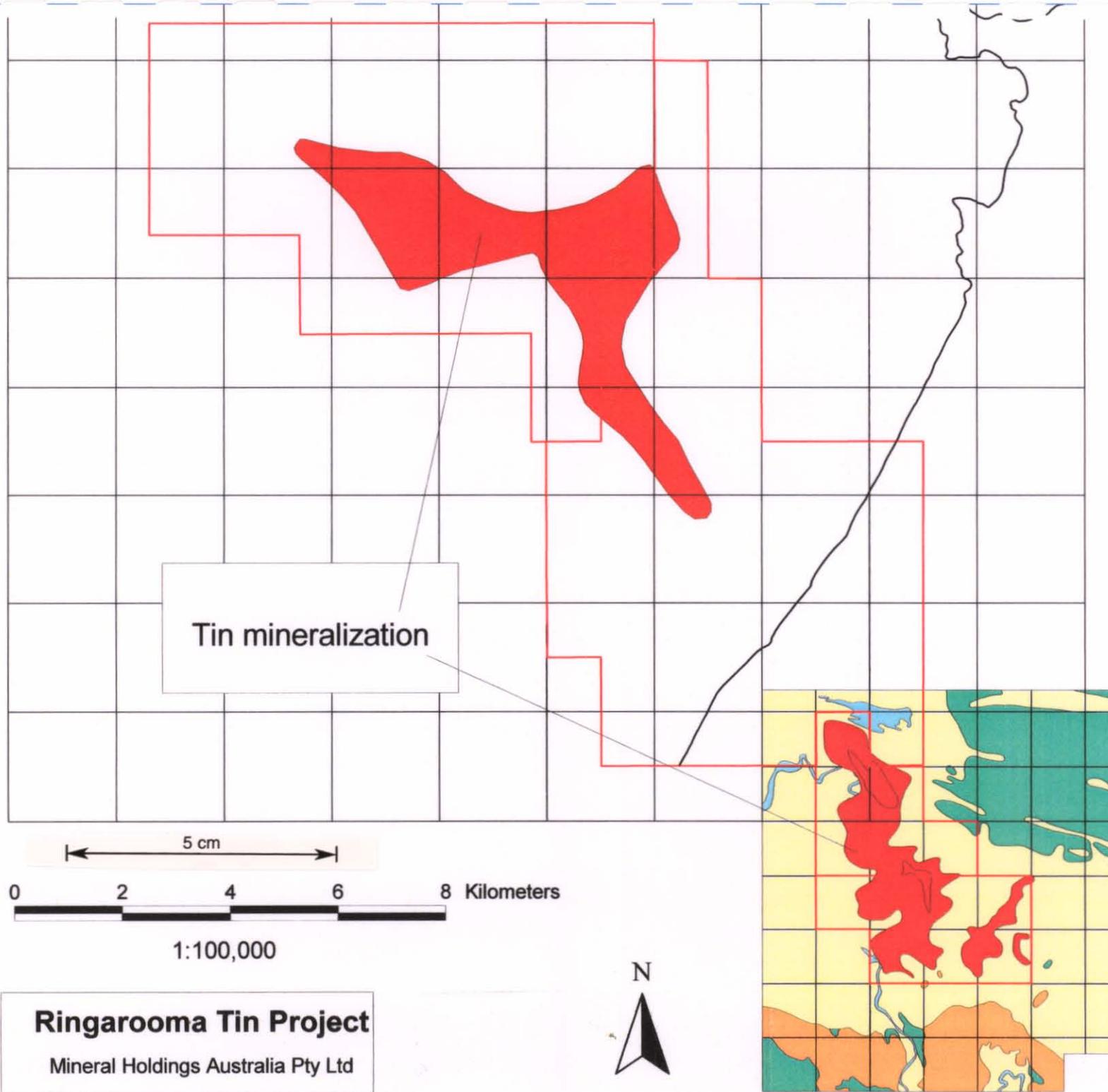
5 cm

PLAN 2

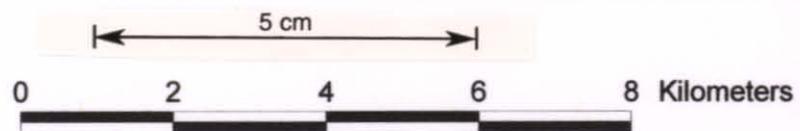
Figure 2

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PLAN 3 - ALLUVIAL TIN RESOURCES AND GEOLOGY



Tin mineralization



1:100,000

**Ringarooma Tin Project**

Mineral Holdings Australia Pty Ltd





### **3.0 Current Exploration**

The work program carried out on these licences in the current year consisted of an assessment of the potential sapphire content of the alluvials, the continuing marketing of the resources to attract joint venture partners, ongoing dredge negotiations and zircon separation tests.

#### **3.1 Dredge Negotiations**

The planned bulk sampling of the offshore alluvials has still not been carried out.

The frustrating problems encountered in placing a suitable contractor in Ringarooma Bay with the right technology, at the right time for the sea conditions, and at the right price have already been outlined in last year's annual report (Volume 1).

The Marcon Company were unable to carry out the dredging contract due to internal conflict and insolvency and the Pneuma gravel pump was impounded pending a resolution. This has meant considerable financial pain to Mineral Holdings as \$31,500 has been swallowed up in the process without any exploration results. Only the demobilisation fees of \$11,500 have been charged to the project account while the additional mobilisation fee of \$20,000 could have been charged. This underlines the expense of offshore exploration and the high risk attending the marine industry.

In the last year, studies were run with Marine Constructions & Towing Services Pty Ltd for a suitable vessel to use with a small sampling device to take samples up to 1 cu. m. from the sea bed. Two vessels were considered- either a scallop dredge or a trawler-type boat owned by the Australian Maritime College- with suitable attachments. The following instruments were considered with the help of the CSIRO Oceanographic Institute in Hobart- epibenthic sledges, the AGSO rock dredge, a Smith McIntyre vertical grab and a box corer (see Appendix). All were unsuitable for our purposes although a pipe dredge was considered a possibility.

However, the scheme was discontinued as, in the light of the quoted costs, it did not really satisfy the bulk sampling requirement as penetration of the sediments would be at a minimum and any sample would be a composite surface sample.

#### **3.2 New Assessment of the Alluvials**

The MacArthur Report (1995) - 'Pre-feasibility Review, Ringarooma Alluvial Tin Project'- which dealt with the insitu value of the resources both onshore and offshore and their economics of extraction has been upgraded by Consulting Geologist A J Mason. The new revised report, called the MacArthur-Mason Report (2000), increases the amount and value of the alluvial resources as it considers a more modern tin price, the larger areas of the present tenements and a value attributed to possible sapphire grades in the alluvials.

The inferred alluvial resources within the offshore tenements have been raised to 194M cu. m.

The assessed value of the sapphires has been reached from the considerable work carried out by Mineral Holdings in adjacent areas and in the upstream tributaries of the Ringarooma River catchment. The sapphire grade is expected to range between 0.54 c/cu. m. and 9.32 c/cu. m.

The revised estimates for the contained tin, sapphires and accessory minerals at a realised price of A\$9.00/kg tin is that the bulk value of the onshore indicated resource would be between A\$79.5 million and A\$358.5 million. Offshore, the inferred resource would have a bulk value of A\$307 million.

The revised report is submitted along with this annual report.

### **3.3 Sapphire and Zircon Beneficiation**

As part of a project to improve sapphire and zircon recoveries from the Ringarooma alluvials, some samples were tested in the Perth laboratories of Ultrasort Diamonds Pty Ltd. The company runs machines which sort diamonds from gravels by x-ray fluorescence methods (see Appendix).

A sapphire-bearing sample from NE Tasmania was run through their machines but it was found that sapphires do not fluoresce under the influence of x-rays. However, zircons showed some promise to be separable by this method so a number of zircon-bearing samples were assembled for testing.

Two samples tested were a 3-4kg concentrate from the Pioneer dressing shed tailings and a 578g composite concentrate sample from Spinel and Black Creeks. The third sample tested was from the Murray Basin mineral sand province.

Two samples- Pioneer and Murray Basin- were found to be unsuitable for testing in the X-ray sorters as they were less than 0.8mm, the minimum grain size for the machine.

The Spinel/Black Creek sample when tested revealed that separation of zircon could be achieved by this method provided that the grain size was sufficiently coarse. Of the total sample weight of 578g, 103g of zircon reported to the sorter concentrate and no zircon could be seen in the tailings.

This pilot test showed that the method could be technically feasible for zircon beneficiation from coarse concentrates such as can be produced from the upper Ringarooma tributaries but could not be applied at present for finer material in the beach sand range.

### **3.4 Marketing the Licences**

Efforts have proceeded to find suitable joint venture partners to carry out the large scale testing of the alluvials both onshore and offshore.

In the last twelve months, information has gone out to numerous companies to attract potential partners with the expertise to conduct the further evaluation of the deposits.

SouthernEra Resources of Toronto were contacted over the areas but have so far declined to be involved. Namco of South Africa have shown some interest and have been sent additional material for evaluation.

Additional companies recently canvassed are Norton Jackson, SA; Billiton Australia, Vic; Bemax Resources, Qld; Monto Minerals, Qld; Lion Selection group, Vic; Iluka Resources NL, WA; Centrex Resources NL, SA; Westralian Sands, WA; Ashton Mining Ltd, Vic; Marlborough Resources, NSW; and Namco, South Africa as well as Trans-Hex International, Canada; Kenmare; De Beers; Anglo Australian Resources; Auridium; Nimbus; Australian Bulk Minerals; Du Pont, USA; Kerr-McGee, USA; and Kronos, Norway.

Contacts have also been made with sapphire companies and interests overseas in North America and Gibraltar in the hope that equity can be attracted from these quarters.

#### **4.0 Future Exploration**

##### **4.1 Offshore Dredging**

The planned bulk sampling program of the offshore alluvials (details in previous reports) is still being pursued and negotiations are continuing with possible joint venture partners who may decide to take part in the proposed dredging or who may have their own ships and equipment for this task (eg Namco).

At the time of writing, negotiations have not been closed off with Marine Constructions as there are indications that they may get access to the Pneuma pump in the future. Meanwhile, a new round of quotations have been received from Van Oord and WestHam for larger dredges which are scheduled to enter Australian waters and present us with a new window of opportunity. Van Oord are proposing to bring the Jan Steen to Bass Strait in May/June 2001 for possible work with Esso and for the geotechnical work on the Basslink cable and WestHam have the Adventure or Discovery in Newcastle soon to be en route to Melbourne (see Appendix).

##### **4.2 Onshore Bulk Sampling**

Plans are well advanced to carry out a bulk sampling program on alluvial wash on the Great Northern Plains and these have been submitted to and approved by Mineral Resources Tasmania.

The proposed program is to sample with an excavator the most accessible alluvial wash which happens to be in the old mines and nearby areas around MacGregors and Aberfoyle former tin mines. The target wash exposed in the old mines is on EL 38/97 (further described in the annual report of that licence) or on SEL 22/99 just adjacent to the southern boundary of the Fosters Marshes RLs where the main bulk of the alluvial deposits is too deep for excavator access. The focus of the program is an area just

north of MacGregors where drilling by Wannex (West Australian Nickel) in previous years has revealed a wash layer with elevated tin values parts of the layer being within excavator range of 5-10m to base of wash.

The extracted samples in the 1-2cu. m. size range will be processed at a suitable site at MacGregors by a portable jig plant (details in Appendix) where the tin, sapphires and other heavy minerals will be concentrated for further beneficiation and grades calculated for the alluvial wash. As tin was the only mineral reported in the past, this will be the first test for other heavy minerals in the wash particularly sapphires and the grades will further influence the projected unit value of the resources in the Ringarooma Project both onshore and offshore.

## 5.0 Conclusions

1. The challenge of getting a suitable dredging contractor in Ringarooma Bay, on board a seagoing vessel, with an acceptable technology, at the right price and in the appropriate weather and sea conditions, is a difficult one reflecting the high risk attached to this marine industry. However, efforts are continuing.
2. An updated assessment of the mineral resources of the placers has increased the volume of the alluvials within the tenements and, depending on the grades of sapphire projected from studies in the Ringarooma River catchment, has the potential to substantially increase the bulk value of the resources. At the higher limit of projected grades, the sapphires may be more valuable than the tin.
3. Pilot studies using x-ray sorters from the diamond exploration industry have shown that there is no possibility of separating sapphires using x-ray fluorescence but that zircons could be beneficiated by that method provided the feed was above 0.8mm in grain size.
4. Attempts are continuing to attract potential joint venture partners to this consolidated package of tenements representing an unusual opportunity to take a leading position in a tin, sapphire and mineral sand province.

## 6.0 Environment

Field activity has been restricted to visits with potential joint venture partners. As no surface disturbance has taken place, there has been no requirement for rehabilitation.

## 7.0 Expenditure

Expenditure on exploration during the last twelve months, which includes an estimate for the March quarter, is as follows-

|          |          |  |
|----------|----------|--|
| EL 19/93 | \$29,649 | giving total since granting of \$138,200 |
| T2/MEL   | \$33,864 | giving total since granting of \$65,713  |
| RL 8715  | \$3,147  | giving total since granting of \$37,140  |

RL 8723

\$3,147

giving total since granting of \$48,608

Additional costs associated with the dredge contract cancellation and subsequent financial troubles of the Marcon Company meant the loss to Mineral Holdings of an additional \$20,000 for the gain of no exploration results. When this amount is levelled against the T2/MEL account, the real expenditure totals \$85,713.

## REFERENCES

Duncan, D. McP. and Rhodes, L. 1998. EL 19/93- Ringarooma Bay. Annual Report on Exploration-May 1997 to April 1998.

Duncan, D. McP. and Rhodes, L. 1999. EL 19/93 & T2/MEL- Ringarooma Bay. Annual Report on Exploration-May 1998 to April 1999.

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MacArthur, N.A. 1995. Pre-feasibility Review, Ringarooma Alluvial Tin Project. Report to Mineral Holdings Australia Pty. Ltd.

MacArthur, N.A. and Mason, A.J. 2000. Pre-feasibility Report, Ringarooma Alluvial Tin, Sapphire and Mineral Sand Project. Report to Mineral Holdings Australia Pty. Ltd.

Moore, W.A. 1991. Geology-Winnaleah. Scale 1:100,000. North East Tasmania Groundwater Resource Project. Mineral Resources Tasmania.

## APPENDIX

- 1) Dredge Instruments
- 2) Information on X-ray Sorters
- 3) Dredge Quotations
- 4) Jigs for Bulk Sampling

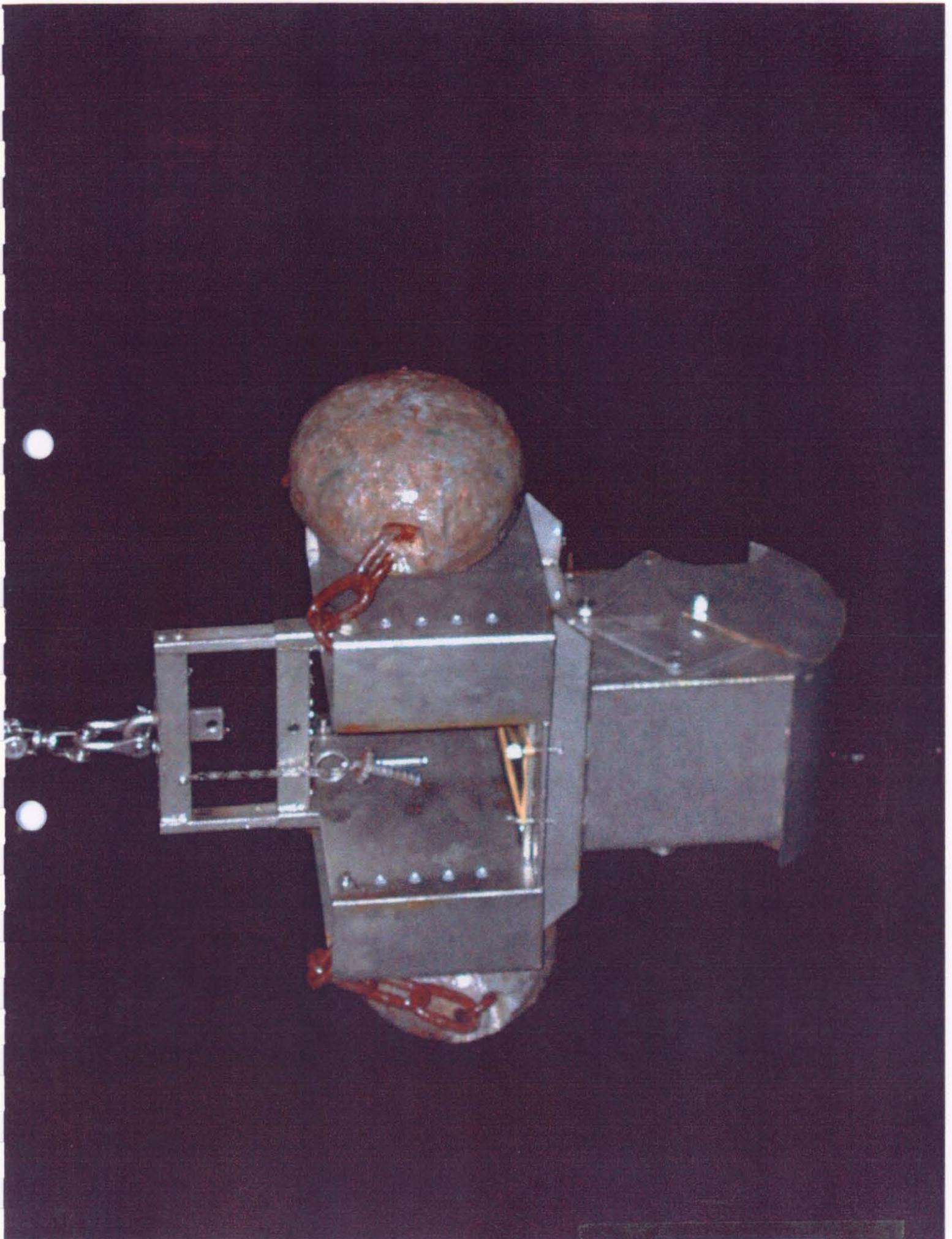
**KEYWORDS:** Ringarooma Bay, Alluvial Deposits, Tin, Sapphire, Gold, Ilmenite, Rutile, Zircon, Monazite.



"Sherman" the Eppibenthic Sled.



The AGSO Rock Dredge



BOX CORER

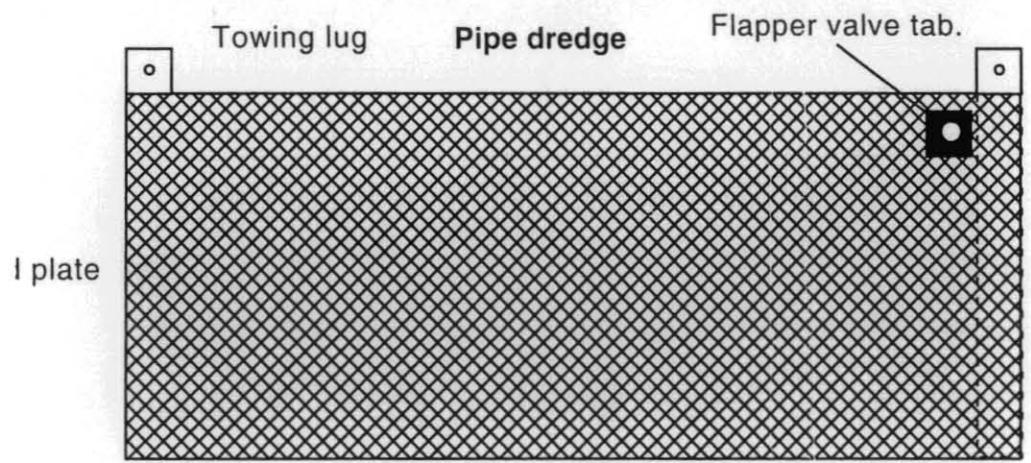


SMITH MCINTYRE GRAB

830016

Pipe Dredge.

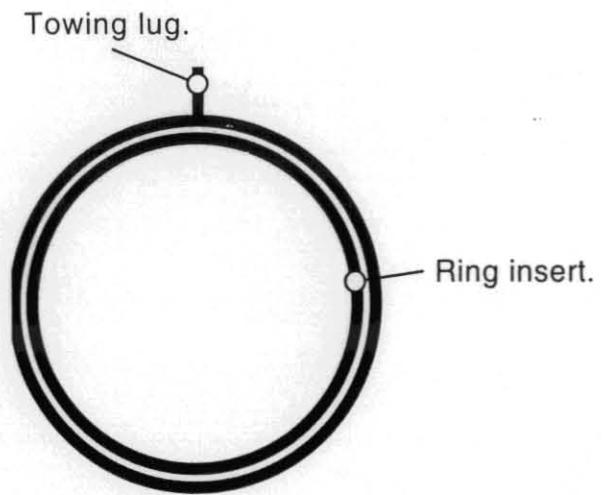
Dimensions: Length between 800 and 1000mm, Diameter between 300 and 400mm, thick walled piping. The length and diameter depends on the available pipe dimensions. Towing lugs 50mm \* 50mm \* 10mm. Hole in towing lug 10mm diameter. The end of the pipe should be sealed with 5mm plate with a series of 5mm holes to aid water flow.



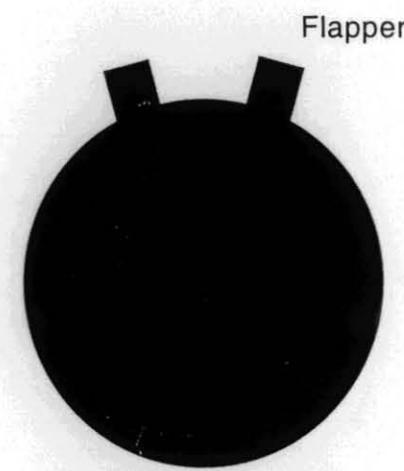
Side elevation.

Ring insert 50mm wide of similar material to piping.

PIPE DREDGE



End view.



Rubber insert, 10mm thick to form a flapper valve behind the ring insert. To be secured with screws through the tabs (60 \* 50mm wide) to the outside of the pipe.

COPY

**UltraSort Diamonds Pty. Limited** ACN 065 646 095

U3/4 Yelland Way BASSENDEAN Western Australia 6054

**Fax Cover Sheet**

**DATE:** 6/10/00      **TIME:**      **REF:** FX-1128  
**TO:** Mineral Holdings      **TEL:**  
**ATTN:** Neil Thomas      **FAX:** (03) 9650 3855  
**FROM:** Rob Jordan      **TEL:** 61-8-9379-1981  
**FAX:** 61-8-9279-1765  
**RE:** Sapphire recovery with X-Ray

Number of pages including cover sheet:

Message:

John Towie of IDL Perth, mentioned to me that you were searching for an automated way to extract sapphires from the gang material.

We believe and have been told that it is possible to extract sapphires from the gang material in the same way we extract the diamonds from gang material using an x-ray sorter.

The procedure used for diamonds is that the material is radiated by an x-ray source and the diamonds fluoresce under the x-ray. This fluorescence or illumination is detected by our sensitive optical system and the diamonds extracted from the gang material with a puff of air.

Our Perth test facilities consist of a number of different types of x-ray machines, which are used for test-work, demonstrations and bulk sample work for exploration companies.

A miner once approached us from India, who was keen to test the theory of extracting sapphires from the gang material using x-ray and was going to send us samples, but unfortunately this did not eventuate.

UltraSort would be keen to test the theory and would conduct the testing of a small sample, free of charge.

The options are for you to ship a small sample to us where we would process the sample through the machine and then ship the split fractions ( accept and reject) for you to analyse.

Alternatively, you, or your agent, could bring the sample and witness the testing.

The initial test-work would take less than one hour.

I look forward to your comments and if you require any further information do not hesitate to contact me.

Regards

### RTZ DIAMOND RECOVERY MACHINE

RTZ Diamond Recovery Machines have been used by leading diamond producers since 1967 for the final recovery of diamonds. The list of users printed on the back of this leaflet illustrates this point. During this time, the technique has proved itself such that this method of recovery is now the preferred metallurgical system for final diamond recovery.

The introduction of the RTZ Model 121 CA-10W heralds a new era in this field. Hitherto, the diamondiferous gravels had to be dried prior to X-Ray separation, a costly and sometimes hazardous process in view of the greater exposure of diamonds and the increased likelihood of theft.

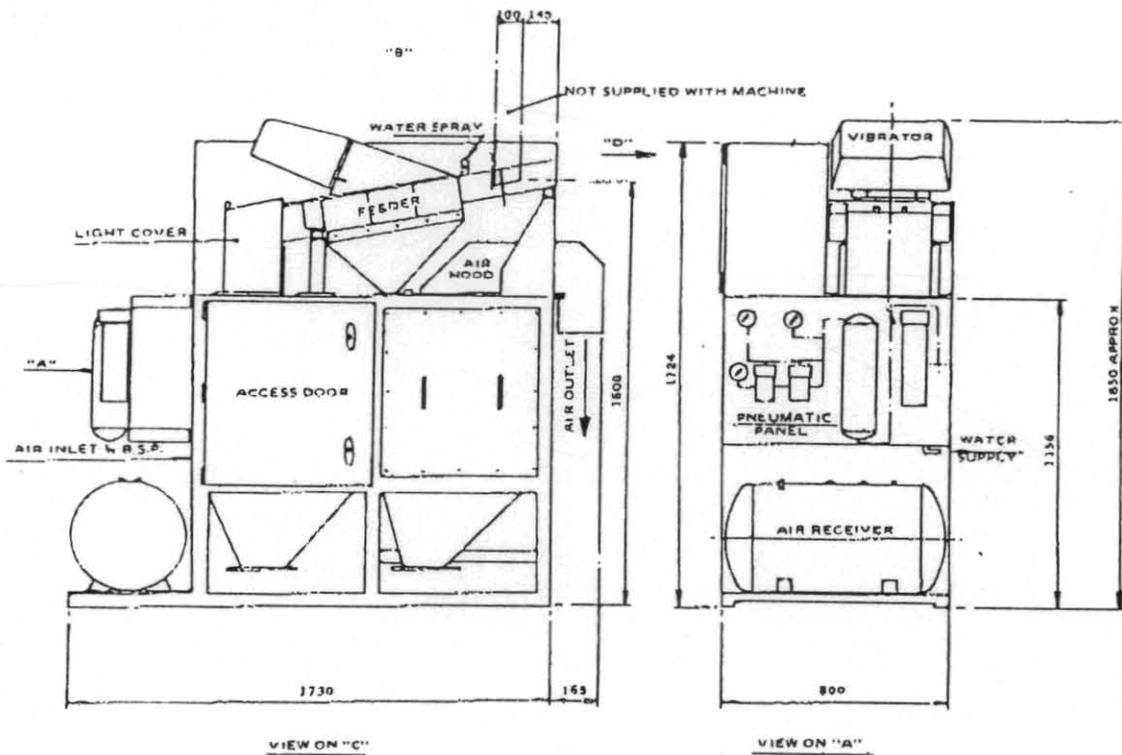
Material fed to this machine is completely wet, in fact a small amount of water is added to assist the feeding process.

#### Security:

The RTZ XR 121 CA-10W is a totally enclosed machine and entry can only be made through locked panels. The diamonds leave the machines through enclosed chutes. Maximum security is maintained throughout the process.

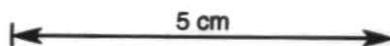
#### Application:

The machine can be used to upgrade any concentrates from any type of pre-concentration process such as heavy media separation, pans, etc. The machine can also be used on unconcentrated products and can even be used in the field for prospect work and eliminate insecure and inefficient jigs and pans which are frequently used in early prospect sampling.



NOTE:  
ALLOW 1.5m MINIMUM  
CLEARANCE AROUND  
MACHINE

**XR 121 CA-10W MACHINE**  
**BULK SORTING MACHINE**  
 FOR + 1 mm - 16 mm  
 WET MATERIAL

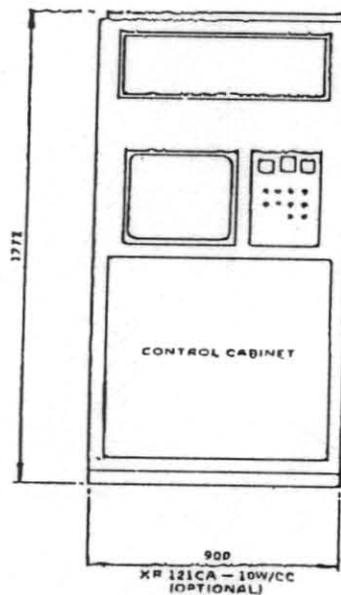
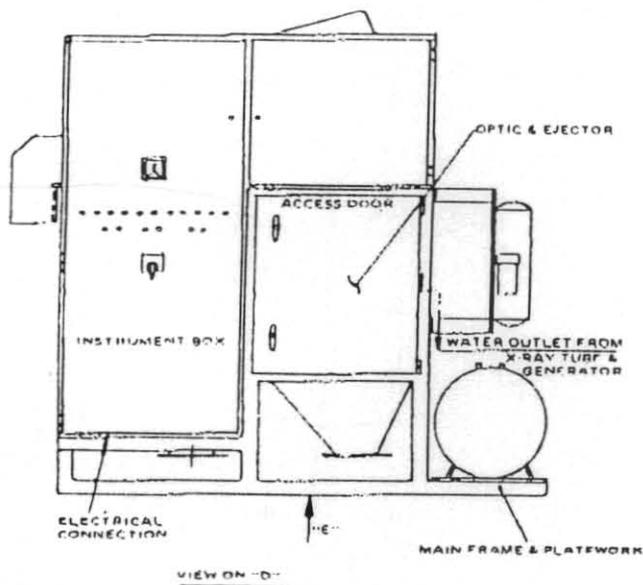


**FEATURES OF THE XR 121 CA-10W MACHINE**

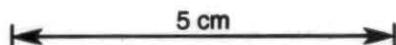
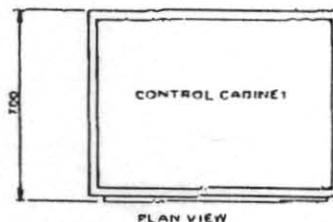
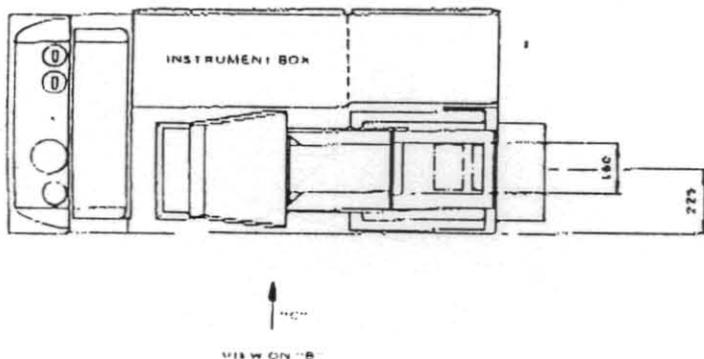
- The machine is constructed so that unskilled personnel can operate and maintain it.
  - All wearing parts are easily accessible and simply replaced.
- The machine is available in two versions:
- A simple machine with all controls and electronics housed in the same main frame;
  - A more complex machine with automatic self-checking and remotely situated control console housing all of the electronics: XR121 CA-10W/CC
- The electronics is of modular construction and uses the latest integrated circuit techniques affording simple fault finding and replacement by unskilled labour
  - No mechanical adjustments need be made to align optics, ejector and feed. All parts are engineered to fit to correct alignment.
  - Dual circuitry for all safety interlocks.

**TECHNICAL SPECIFICATIONS**

|                                  |  |
|----------------------------------|--|
| <b>Electric Power</b>            | 380V ± 10%, 3 phase, 50HZ ± 2%, 4kVa.  |
| <b>Compressed Air</b>            | 1000l/min at 7 bar + 10% Dewpoint at - 30°C. Maximum oil content 10 p.p.m.   |
| <b>Cooling Water (for X-Ray)</b> | Minimum 4l/min at a maximum pressure of 500 kPa. Maximum inlet temperature of 25°C. Potable water only may be used.        |
| <b>Feed Water</b>                | 20l/min at 2 bar. Potable water only may be used.  |
| <b>Gravel Size Range</b>         | +1 mm — 16 mm. Material to be screened so that the largest particle is no more than twice as big as the smallest particle. |
| <b>Throughput</b>                | (at average particle s.g. of 2.7 and equal size distribution)  |
|                                  | +2 mm — 4 mm      2000 kg/hr   |
|                                  | +4 mm — 8 mm      4000 kg/hr   |
|                                  | +5 mm — 10 mm     5000 kg/hr   |



**XR121 CA - 25W/CC ONLY**



18/01 01 TUE 16:08 FAX 61 3 9650 3855

TOMINEX / MHA

0

**UltraSort Diamonds Pty. Limited**

A.C.N. 065 646 095

U3/4 Yelland Way Bassendean Western Australia 6054

**Fax Cover Sheet**

|       |                                |       |                |
|-------|--------------------------------|-------|----------------|
| DATE: | 20/12/00                       | TIME: | REF:           |
| TO:   | Mineral Holdings Aust. Pty Ltd | TEL:  |                |
| ATTN: | Neil Thomas                    | FAX:  | 0396503855     |
| FROM: | Kerry Tubman                   | TEL:  | 61-8-9379-1981 |
|       |                                | FAX:  | 61-8-9279-1765 |
| RE    | Zircon test                    |       |                |

Number of pages including cover sheet: 1

Message:

Neil

I ran the sample from David Duncan, which was labeled as "Pan Conc. Composite Spinel Creek & Black Creek", through the SPS (Single Particle Sorter) yesterday, 19/12/00.

It was apparent that zircon was being ejected from the stream; this was confirmed by John Towie of IDL. John also quickly scanned the tailings and remarked that he couldn't see any zircon present.

Of the total sample weight of 578g, 103g reported to the sorter concentrate and appears to be totally zircon.

I spoke to David Duncan following the test and he requested that I return the sample splits to him for examination. He also asked that we retain the second sample of fine material (Pioneer Conc) for now.

Regards

Kerry

26/02/01

16:15

WESTHAM DREDGING SYDNEY + 61 3 9650 3855

NO. 725 02

**WestHam Dredging Company Pty Limited.**

ACN 000 340 241

**ADDRESS:** 122 ARTHUR ST., TELEPHONE:(02) 9959 5715  
 NORTH SYDNEY NSW 2060 FACSIMILE: (02) 9959 5721  
 P.O. BOX 1891 NORTH SYDNEY NSW 2059 AUSTRALIA

**FACSIMILE TRANSMISSION**

**TO:** Mineral Holdings **DATE:** 14/Feb/2001.  
**ATTENTION :** Mr Neil Thomas **No. OF**  
 Chairman **PAGES** 2 + 2  
**SUBJECT:** Offshore Sampling  
 Ringarooma Bay-Tasmania

Dear Mr. Thomas

Further to our previous submissions, we now have pleasure in indicating the following :

Mineral Holdings = the Charterer and WestHam the owner.

Brief details of our understanding of required sand sampling requirements

I) Location : Ringarooma Bay and King Island, off Tasmania.

Waterdepth : -4m to -35m LAT

II) Vessel : Self propelled split hopper barge WH Adventure or WH Discovery.  
 Details are attached.

Mobilised from/demobilised to

Option a) Newcastle, NSW and return or for

Option b) diverted on passage to Melbourne, Victoria.

III) Samples : Surface samples at seabed depths from 0 to 2m  
 Method of Sampling : Electrical Submersible pump

Collection Method : Dredged sample materials are pumped into large settlement bags made of appropriate geo-textile fabric

26/02/01

15:16

WESTHAM DREDGING SYDNEY + 61 3 9650 3855

|                  |   |           |
|------------------|---|-----------|
| Costing :        | Option a)   |           |
|                  | Mobilisation ex. Newcastle                                    | A\$55,000 |
|                  | Demobilisation return to Newcastle                            | A\$45,000 |
|                  | Discharge of samples in Newcastle.                            |           |
|                  | Option b)   |           |
|                  | Mobilisation on route to Melbourne                            | A\$30,000 |
|                  | Demobilisation to Melbourne                                   | A\$15,000 |
|                  | Discharge of samples in Melbourne                             |           |
|                  | Option a) and b) Submerged pump installation and restoration. | A\$25,000 |
| Charter Cost/Day |   | A\$15,000 |

Conditions :

- 1) BIMCO "SupplyTime" Charter Party to be adopted, as amended with this offer.
- 2) Subject to availability from other contracts
- 3) The cost of discharging the sampled material from the barge alongside a suitable wharf in Option a) and Option b) are 100% for the charterer's expense.
- 4) Weather delays are payable at full charter rates.
- 5) All marine insurances for the vessel and crew costs are for the owners account. All other personnel, supervisors, observers are to be covered for insurances, salaries, wages, keeping, transport, etc. by the Charterer, whether employed by the charterer or not.
- 6) Fuel, lubricants, victualing, fresh water and consumables are for the charterer's account.
- 7) Option a) is available, immediately after the modification are installed. Option b) would be available during our planned passage to Melbourne, which is presently envisaged during August/September 2001. Subject to 2) above.
- 8) Transport of personnel other than the barge crew is for the Charterer's Account.

Whilst I hope that the above details are adequate for your present purposes, we remain available for further information.

Kind regards,  
WestHam Dredging Company Pty Limited.



Frans Hoogerwerf  
General Manager

Att. Spec Sheet :  
Self Propelled Hopper Barges WH Adventure/Discovery

**FAX**

830024

**Van Oord ACZ**

50 YEARS AT WORK WHEREVER LAND AND WATER MEET

**Marine and Dredging Contractors  
Melbourne Office**

To: MINERAL HOLDINGS AUSTRALIA PTY LTD  
Attn: MR. NEIL M. THOMAS.  
Fax No: -

Fax Ref: 4277/WAC  
Date: 6 MARCH 2001  
Project No:  
Your Ref:

CC:  
Attn:  
Fax No:  
CC:

From: WALTER CAMBRUZZI  
Pages: 1 (incl. Cover sheet)

Subject: **AVAILABILITY OF VESSELS FOR WORK IN BASS STRAIT**

Dear Neil,

I am pleased to confirm our recent discussions concerning the possible usage of our vessels to do work in Bass Strait. We are currently awaiting acceptance of our proposal to Esso for bringing the Jan Steen to Bass Strait to do some work on the Blackback project in May/June 2001. We are also currently awaiting the outcome of bids we have submitted for use of the Jan Steen on survey works associated with the Basslink cable.

We are reasonably confident that the Jan Steen will be in Bass Strait in May/June and set up in such a way that we could utilise her for a sampling program on your project. Our position should be a lot clearer within the next few weeks and we will keep you informed of the outcomes. Once we are sure that the Jan Steen is coming to the area we can discuss timing and estimated costs

Kind regards,  
For Van Oord ACZ

Walter Cambruzzi  
Area Manager

*STAKE WATER  
w/ 6x MARCA  
JAN STEEN  
GEOMETRIC WORK  
MID MAY  
FROM  
GARD. MAY 2001*

*{ PNEUMATIC DUMP }  
{ IS AVAILABLE }  
..*

*BRAGGINS  
WCS,  
STONEY  
HEND,  
LOWE HEND,  
BRUCE HEND*

Van Oord ACZ  
Suite 6 117 Holmes Road  
Moonee Ponds Vic 3039  
Australia

Telephone: +61 (0)3 93260455  
Telefax: +61 (0)3 93261320  
E-mail: waltercambruzzi@msn.com.au

830025

# MAX-I-WELD INDUSTRIES

**GENERAL ENGINEERS  
MANUFACTURE OF  
ALLUVIAL MINING  
EQUIPMENT**

**WERRILL N.S.W. AUSTRALIA**

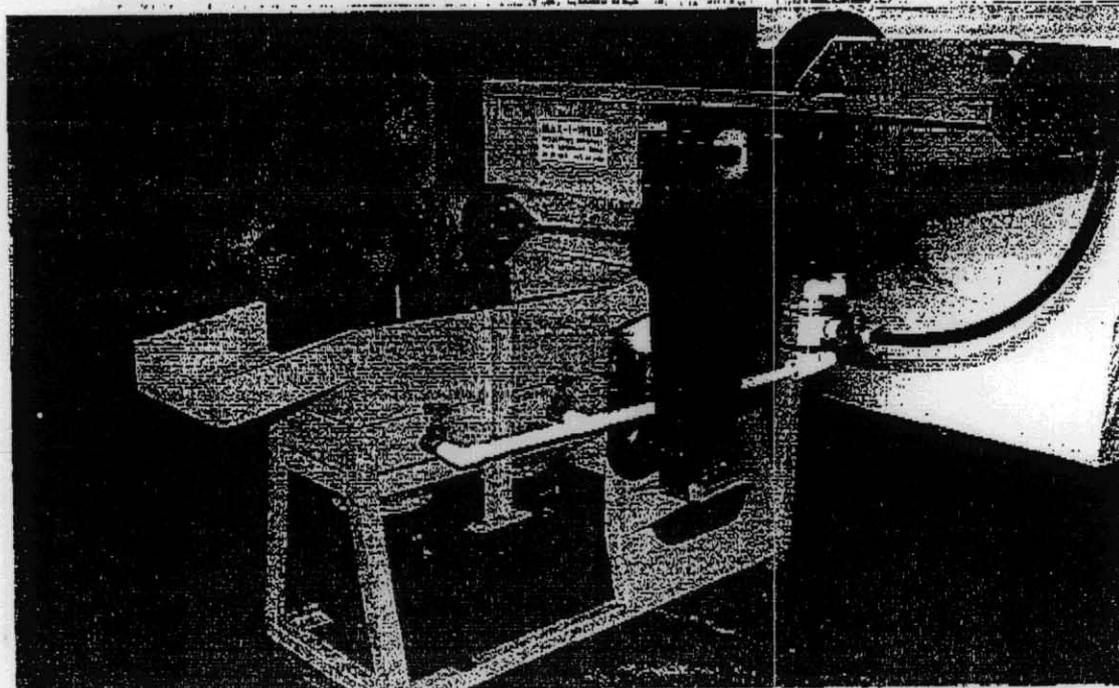
Telephone: (067) 22 2432

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Mobile: 0419 286 521

**International Callers**

011-61-67 { 22 2432 (phone)  
22 4936 (fax)



## JIG CONCENTRATOR

### APPLICATION

- THE RECOVERY OF GOLD AND GEM STONES FROM ALLUVIAL GRAVEL DEPOSITS

### FEATURES

- LIGHT WEIGHT AND COMPACT FOR ACCESS TO INACCESSIBLE LOCATIONS
- DRIVE 4HP HONDA MOTOR
- LAUNDER UNDER SPIGOTS WITH MAT FOR THE RECOVERY OF FINE GOLD
- TROMMEL MESH EASE OF REPLACEMENT OR DIFFERENT APERTURES
- CAPACITY 1-2 CUBIC METERS PER HOUR
- REQUIRES A 1 1/2" WATER PUMP
- BASKETS 1.5MM STAINLESS STEEL MESH
- BASKET SIZE TWO AT 300MM X 300MM
- UNDER BODY PULSATION
- STROKE ADJUSTMENT
- EASE OF WATER CONNECTION, ALL ADJUSTABLE.

APPENDIX 4