MAYDENA SANDS PTY LTD

ACN 111 938 428 ABN 65 111 938 428

RETENTION LICENCE NO. 2/2003

MAYDENA, TASMANIA

ANNUAL REPORT

TO

09 January 2009

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DECEMBER 2008

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ABSTRACT

The focus of field activities this year was on completion of air photography over the tenement and silica rock sampling, particularly at the Midway Prospect. The former resulted in a topo-plan for the proposed processing plant area. Results for the latter area suggested further potential for better quality material, albeit still only suitable for the production of “standard” or metallurgical silicon of possible interest to TEMCO and its silico-manganese plant, subject to tests in progress.

Further consideration of the hydraulic transport method of sand slurry from quarry to processing site as an alternative to trucking was deferred due to indicated high capital costs, as was the construction of a small pilot plant for the same reason.

Apart from continuing market interest in the silica flour products, new possibilities are emerging for the better quality silica rock material in the company’s tenements for metallurgical and road engineering purposes, as well as in the PV industry. These opportunities will be followed up in the coming year, despite the worsening economic climate and threats of an extended deep global recession.

Keywords:

Maydena; Midway Prospect;
Silica rock;
Marketing;

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1. INTRODUCTION

At the end of April, 2005, Maydena Sands Pty. Ltd. replaced J.J. McDonald & Sons Mining Pty. Ltd. as owner/operator of this tenement without interruption to programme continuity.

This report outlines activities by Maydena Sands Pty. Ltd. in regard to the fifth year's activities relating to its Retention Licence 2/2003, granted for a four year period to 09.01.2008 and renewed for one year to 09.01.2009.

This tenement has its origins in EL 17/1998 previously held and operated by J.J. McDonald &Sons Mining Pty. Ltd. It is located just south of the sealed Gordon River road approximately 4 km west south west of Maydena and about 90 km by road from Hobart (Fig.1). There is good access to and within the prospect area. Power, water, housing and basic facilities are readily available from within a short radius of the prospect. The narrow gauge rail-line from New Norfolk to Maydena is being progressively upgraded for passenger traffic. A 700m long gravel airstrip is located 3 km north west of the silica sand deposit.

The primary target for investigation and assessment remains the deposit of silica sand and its silica flour matrix located largely to the west of the Eastern Quarry, about 1 km south east of Pine Hill (Fig.2).

The overall aim of the investigations is to determine if a commercially viable operation can be established, based on products derived from the silica sand resource in the tenement.

In view of the upsurge of interest in the use of solar power locally and overseas, renewed attention was also directed at the high quality silica rock potential of the tenement. The latter raw material is used in the production of high purity silicon metal which is an essential component of photovoltaic cells. Also, of potential interest is the coarser, higher purity sand fraction for use in the manufacture of solar cell cover glass with high light transmissivity characteristics.

This year's main activities towards the overall aim were:

- Completion of topo-contour plan of proposed processing area.
- Silica rock float sampling at the Midway Prospect.
- Capex estimates for a small pilot plant.
- Continuing marketing efforts for silica flour and co- or by-products.
- Continuation of site planning for quarry and processing plant.

2. PREVIOUS WORK

Exploration by Pioneer Silicon Industries Pty. Ltd. in 1988/89 identified a lag deposit of hard silica rock at the Western Quarry containing a small resource of material deemed suitable for the manufacture of silicon. (Fig.2). From this, approximately 19,000 tonnes of crushed, screened silica rock was produced in 1991 and 1992 for shipment. 10,000 tonnes were consigned to Pioneer's silicon smelter at Electrona and about 9,500 tonnes went to Temco's Bell Bay ferrosilicon plant. Extraction, by Duggans Pty. Ltd. under M.L.1396 P/M, virtually ceased upon closure of the Electrona smelter in 1992, although a small parcel of 850 tonnes of silica rock is reported to have been mined in 1995. At the end of the earlier exploration work, an occurrence of white silica sand was located between Pine Hill and the Styx Road in an area now known as the Eastern Quarry Area. Pioneer investigated this deposit in the vicinity of the Eastern Quarry by 23 shallow RC drill holes. Preliminary estimates suggested a resource in the order of some 0.75 – 1.5 million cu. m. of mostly low iron silica sand containing about 10% of high grade lump silica. Pioneer ceased operations at Electrona before any of this material could be used for silicon production.

Assay results from a number of subsequent, excavator generated pit samples by the North West Bay Co. Pty. Ltd. supported the high quality of the resource and, together with sizing determinations on a bulk sample, indicated that the sand might be suitable for the manufacture of table ware glass.

During its tenure of EL 17/1998, which contained these deposits, J.J. McDonald & Sons Pty. Ltd., using the air core drill sampling method, completed 43 drill holes totalling 553 m which outlined a raw material resource of about 6 million tonnes of loose silica ranging in size from very coarse to very fine.

The drilling also demonstrated that the deposit is more variable, complex and higher in iron oxides and other impurities than previous data suggested.

Laboratory sizing determinations indicated that the deposit is a possible source of silica flour as well as glass sand, while geological mapping pointed to a small resource potential for hard rock silica as well.

Bench scale beneficiation tests and bulk sample processing tests, including acid wash tests on samples of the glass size fraction sand, showed that the -250 micron fraction could be upgraded to a high quality product containing only about 50ppm Fe2O3 without major environmental impact, with lower levels of iron a possibility.

Sources of good quality limestone and dolomite were identified in relative proximity to the silica sand deposit for eventual acid neutralization uses.

The company's activities in the marketplace identified the natural silica flour as potentially the deposit's most important component economically. This material provided the major focus for ongoing geological, processing and marketing activities, though the coarser size fractions and hard-rock potential remain of interest for future attention under the appropriate market conditions.

Details of past activities and outcomes are provided in reports listed in the Bibliography. (See Section 8 below).

In late 2004, J.J. McDonald & Sons Mining Pty. Ltd. formed a new holding and operating company, Maydena Sands Pty. Ltd., to which all of the former company's interests in the Maydena area were transferred in April 2005.

Since then, all activities are being conducted under the new Company name.

3. ACTIVITIES FOR PERIOD

The range of significant activities engaged in this year included the following:

3.1 Work Done

- Aerial photography - completed.
- 1:1,000 contour plan of proposed processing area – completed.
- Midway Prospect – mapping and sampling of silica rock float along 5 lines – completed.
- Analysis of silica rock float samples.
- Ongoing and intermittent conceptual planning for quarry and processing site layout.
- Laboratory bench top processing of the -600 micron size fraction of two silica sand samples for possible application in the production of solar cell glass for the PV industry.
- Analysis of the size fractions produced.
- Three test samples submitted to Tasmanian Advanced Minerals.
- Scope-of-Work-Outlines with cost estimates to cover some front end engineering and environmental tasks associated with the development of the quarry and proposed processing plant sites. (SEMF and GHD).
- Preliminary investigation by consultant into the use of slurry transportation of sand from proposed quarry to proposed processing site.
- Beneficiation: obtained preliminary cost estimates for mobile pilot test plant.
- Site visit with DIER officers to the proposed processing site to identify and discuss possible road traffic issues.
- Environmental: Discussions with MRT, Forestry Practices Board and Freshwater Systems re threatened hydrobiid snail in area drainage system.
- Hydrobiid snail survey completed.

- Site visits and discussions with potential farm-in parties including:

  Fortune River Group

  Heemskirk Consolidated Limited – discussions only

  Tasmanian Advanced Minerals

  NU Energy

- Marketing-related contacts or meetings with:

  Stratum Resources – Sydney – Silica flour, silica rock and silicon

  OHC, Berlin – Silica flour

  Iwatani – Silica flour and silica sand

  Itochu – silica flour

  TEMCO – Silica rock

  Latrobe Magnesium – Silica rock

- 20kg (approx.) test sample of silica rock delivered to TEMCO.
- Community Relations: Regular contacts with Maydena Development Association maintained.

3.2 Statistical Summary

Aerial photo coverage	No. of runs	:	2 (E-W on AGD Grid)
	Linear	:	10 line km (approx.)
	Area	:	14 sq.km (approx.)
No. of silica rock bulk samples (TEMCO)		:	1 x 20kg (approx.)
No. of rock samples analysed		:	18 (Midway Prospect)
No. of (TAM) silica sand head samples analysed		:	3
No. of samples analysed by TAM		:	7
No. of PV sand samples		:	8
Total No. of analyses		:	454
No. of sizing determinations		:	6

3.3 Expenditure

To Dec 2007	:	$276,222.00
Period Jan – Sep 2008	:	$ 51,951.00
Estimate Oct – Dec 2008	:	$ 4,600.00 (approx.)
Estimated Cumulative Total for period of tenure	:	$332,773.00 (approx.)

4. RESULTS

4.1 Photogrammetry

The survey-controlled 2008 aerial photography completed earlier this year by Qasco over the tenement was combined with year 2000 images to produce a 1:1000 scale topo-contour plan of the proposed processing plant site south of the Gordon River Road. This was done to provide topographic and drainage information to guide and assist site layout planning. Adequate ground information was obtained for the western part of this site where clear-felling occurred in 1998-2000. However, accurate topo information and ground detail in the eastern half of the area up to the Styx Road was difficult to obtain due to extensive and thick vegetation cover which precluded observation of ground points for contouring purposes. As a consequence, topo data and drainage courses in this segment are approximate only with the latter especially requiring verification. It is likely that the accurate courses of the drainage in this area will need to be determined by detailed ground survey in due course.

4.2 Silica Flour

Three 1kg raw material samples were submitted to TAM for preliminary assessment of the quality of the +45µ -250µ size band using three different sample preparation approaches, with the following results in ppm):

Sample	Prep	Al2O3	Fe2O3	TiO2	CaO	MgO	Cu	Cr	Mn	Ni
90 B1	Cut	164	60	243	204	69	0.37	1.60	0.52	0.08
90 B1	CHL	171	53	187	213	71	0.47	1.03	0.39	0.05
90 B1	A-I	419	182	Over	195	80	4.71	4.44	2.15	0.42
101 B3	Cut	65	31	34	351	82	0.34	0.09	0.09	0.05
101 B3	A-I	241	44	57	274	68	1.91	0.38	0.20	0.21
EQ005B	Cut	100	17	2	98	49	0.05	0.13	0.10	0.05
EQ005B	A-I	209	26	32	95	45	0.96	0.50	0.18	0.31

Maydena Sands had three head samples analysed by its own contract laboratory, prior to forwarding the rest to TAM. These results feature in Appendix 1 and can best be compared with the A-I group above. There is reasonable correlation between Fe2O3, TiO2, Cr, CaO and MgO, but Al2O3 reporting in the head samples is significantly lower.

Particle Size Distribution: (% retained) using sieve shakers:

Sample	+425µ	+300µ	+250µ	+212µ	+150µ	+106µ	+75µ	+45µ	+25µ	PAN
90 B1	23.2	7.2	4.0	3.6	9.2	9.0	9.8	15.8	15.2	2.0
101 B3	24.6	4.6	3.2	2.8	6.8	8.4	9.8	21.2	16.0	1.4
EQ005B	26.4	5.0	2.8	3.8	11.0	11.6	9.0	14.8	13.0	0.8

TAM concluded in part that:

"Samples 101B3 and 90B1 appear suitable for processing into a commercial grade product if suitable blending ratios are present in the deposit. The particle size distribution on the above samples has a larger +250µ fraction than TAM is familiar with processing. One factor in judging commercial viability is the size which would result from grinding that oversize fraction."

Reservations exist about sample 90B1, mainly due to the elevated values for TiO2, Cr and possibly Al203. See also Para. 4.7.6 below.

Overall, however, the material remains of interest to TAM.

4.3 Silica Sand

In line with the development and growth of the photovoltaic (PV) and solar cell industries overseas, there is increasing interest in high purity silica sands. These can be used for the production of solar cell glass substrates and, particularly, also solar cell cover glass where maximum light transmissivity is required to optimise cell performance and efficiency.

As flagged in the Annual Report for 2007 (Krummei 2007), two small bulk samples of silica sand in the +100 – 600 micron size band weighing about 5kg each were submitted to BurnieLabs, Heybridge, towards year-end 2007 for processing. Details are provided in the testwork flowsheet in Appendix 2.

Magnetic clean-up of most of these samples using WHIMS at 20,000 gauss approx. was undertaken at Eriez, Melbourne.

The aggressive attrition wash of the samples (30mins agitation at 450rpm) resulted in an unexpectedly large volumes of the -100µ fraction (silica flour), creating two sets of three samples each as follows:

Sample No	Size Band	Description
91B3-500,101B3-500	+100-500µ	Silica sand
91B3-100,101B3-100	+38-100µ	Silica flour
91B3-35,101B3-35	-38µ	Fines

Four of these head samples and four of the non-mag (NM) fractions were submitted for analysis by ALS-Chemex.

Sample 101B3 yielded excellent results for both the silica sand and silica flour non-magnetic end products.

The results for the +100-500µ non-mag fraction of sample 91B3 (ie.91B3-500NM) are also satisfactory, achieving reductions in FE2O3 and Cr2O3 from 160 to 10ppm and 920 to 10ppm respectively. (See Appendix 2).

Sample 91B3-100 remains to be mag-processed analysed and sized.

As indicated by previous testwork elsewhere and underscored by the results of sample 91B3-38NM, impurities in the silica flour tend to migrate to, and concentrate in, the -38µ fine fractions.

Sizing data for the relevant non-mag size bands is provided in Appendix 3.

In summary:

Sample No.	D_m	D_{50}	D_{90}	Comment
91B3 – 38NM	11µ	25µ	47µ	End Product
91B3 – 500NM	94µ	217µ	584µ	End Product
101B3 – 100NM	42µ	71µ	117µ	End Product
101B3 – 500NM	102µ	209µ	511µ	End Product

4.4 Silica Rock Sampling

4.4.1 Midway Prospect

Relatively low levels of impurities were encountered last year in several silica rock float samples along reconnaissance traverse line WQ across an area located between the western extremity of the Eastern Quarry area and the Western Quarry.

Pursuant to these results and the growing demand for high quality silica rock feed for the manufacture of high purity silicon for electronic and PV application, silica rock float sampling was undertaken along five short traverse lines over an area measuring some 250X400m. (Fig 3). This has been designated as the Midway Prospect.

Samples WQR028 and WQR029 on Line 1 (Fig 4) show high levels of impurities especially, alumina, iron, chromium and titanium. These results mirror those of samples WQR020 and WQR021 collected last year. (Krummei 2007).

Impurities in the remaining 16 samples are at a much lower level generally, though several single sample spikes for several elements, not necessarily co-incident, are evident, eg. WQR031, WQR033.

The average of these 16 samples together with samples WQR022-025 incl. from the same area is:

	Al2O3	CaO	Cr2O3	Fe2O3	MgO	TiO2	V2O5	Na2O	K2O	P2O5
Average	%	%	ppm	%	%	%	%	%	%	%
20 samples	0.048	0.045	3	0.016	0.007	0.010	<0.001	0.003	0.007	0.027

By subtraction, these results imply an average SiO2 content in the order of 99.8%. Silica-specific analyses would need to be undertaken on these samples to verify this calculated average. If confirmed, the material, as represented by surface rock float, would be suitable for the production of “standard” or metallurgical silicon at least. Subject to any indications of interest from the marketplace, drilling would be required to prove the quality and extent of the available resource.

4.4.2 Western Quarry

There was also preliminary indication of interest in the silica rock at this quarry from DIER for road surfacing purposes. This would be a low-value use of the material. A small composite sample from the Western Quarry was submitted to DIER for mechanical tests and results are awaited.

4.4.3 Eastern Quarry

Following discussions with TEMCO sample designated EQ053R of about 20 kg of silica rock in the +5-70mm size range was submitted for analysis and indicative furnace performance tests. The aim would be to source silica rock in the medium to longer term for the production of silico-manganese - a low value use for a high quality material. Results are expected in February, 2009.

4.5 Beneficiation

EMS was commissioned to investigate the capital cost and construction of a small, mobile, 1-2tph nominal capacity pilot plant for the beneficiation of silica sand raw material to silica flour product using, as far as possible, reconditioned plant.

The pilot plant would be designed as a modular system, with modules dimensioned and fitted with container blocks for ease of transport and on-site assembly. The plant would have a site-assembled footprint equivalent to 2.5 X standard 6m containers.

Preliminary cost estimate: $550,000 + GST, plus establishment/site costs. Final pricing would be available on completion of full engineering design and agreement to final specifications.

An additional benefit of such a plant would be its usefulness in testing material and data supply from different parts of the silica deposit prior to full scale extraction and processing from any selected area.

4.6 Mine Planning

As an alternative to trucking raw material sand from the proposed quarry site to the proposed processing site, consideration was given to raw material transport for processing by slurry pipe line. This method offered medium to long term environmental benefits by lowering traffic volumes on the Styx Road as well as reducing carbon dioxide emissions due to fuel combustion.

Coffey Mining was invited to provide a proposal to investigate this approach along with an indicative Capex estimate. The shortest, most likely slurry transport distance is approximately 900m, with a vertical drop of some 85m from quarry site to processing plant area. Dry solids delivery of not less than 30tph of -20mm material was envisaged.

The indicative costs for this transport alternative, including slurry pipe line, Capex, test work, final design installation was estimated at $2 million approximately, plus GST.

A reduction in capital expenditure of about $500,000 could be achieved if a mudpress, incorporated in the expenditure estimates, is excluded and replaced (at some capital cost) by fines/slimes settling dams.

A decision on this proposal was deferred due to the relatively high cost estimate.

Hobart based engineering consultants GHD and SEMF were approached to provide a Scope-of-Work-Outline for a sand quarry and processing plant layout plan. Both submissions remain under consideration.

Two issues were identified in the course of the year which need further consideration and incorporation in the planning process:

- Road traffic movement control issues at the exit point from the proposed processing plant site onto the Gordon River Road.
- The possible presence of the threatened hydrobiid snail Phrantela pupiformis in creeks draining the sand deposit and in drainage through the proposed process plant area. (See Section 4.7 below).

4.7 Marketing

Marketing activities continued throughout the year. These extended from silica flour through silica sand to silica rock, the latter two particularly aimed at the growing solar/photovoltaic sector.

At the start of this calendar year, there was strong demand in SE Asia for high purity silica flour from Tasmania, but the rate of increase in demand for TFT-LCD screens slowed during the year under the current worsening global economic conditions. In the last quarter of the year, demand for the Tasmanian material was severely curtailed, with significant negative impact on current supply from Tasmania.

On the other hand, increasing demand for high purity silica sand for solar glass panels has been noted but cost pressures and competition in this niche from Taiwan and China would make the Tasmanian material, despite its quality, uncompetitive in the East & SE Asian markets.

4.7.1 Osthandel Chemie GmbH (OHC) – Germany

Contacts with this sales/marketing organisation continued throughout the year.

Of specific interest was the recently formed joint venture between Schott and Wacker structured to produce PV cells. The approach was unsuccessful, as neither the joint venture nor Wacker have plans to produce silicon for this purpose which they prefer to buy in from other sources.

Stoezle Lausitz GmbH, a producer of high quality glassware and a German subsidiary of a large Austrian company, was contacted by OHC to gauge interest in high purity silica flour. It emerged that the company is under some economic stress and the matter was not pursued further.

4.7.2 Itochu – Japan and Australia

Ongoing contact throughout the year was maintained with this company through periodic information and update meetings.

The Metals, Mineral Resources and Coal Division of this large diversified company recently entered the solar power generation business through an investment in NorSun AS, a Norwegian company that produces silicon wafers for solar cells.

In view of this development, the company has been introduced to the silica rock potential of Maydena Sands' tenements and a response on this matter is awaited. The company continues to show interest in our silica flour product.

4.7.3 Iwatani – Japan & Australia

This company was updated with the latest test results for silica flour end product, silica sand for PV applications, as well as the hard rock silica potential of Maydena Sands' tenements.

4.7.4 Fortune River Group – China and Australia

This Group, which has mining interests in China, sought involvement with the Maydena Sands project. Efforts to sign a confidentiality agreement faltered, leading to no further developments.

4.7.5 Heemskirk Consolidated Limited

This Melbourne-based company with international reach and a silica sand operation in Canada was approached to gauge interest in a possible participation in Maydena Sands' silica flour activities.

After some deliberation, that company declined the invitation, ostensibly due to the current difficult global economic circumstances.

4.7.6 Tasmanian Advanced Minerals (TAM)

This company was contacted on indications that it was seeking to improve its resource position for silica flour in Tasmania.

Company representatives visited the quarry site. Contact is being maintained, subsequent to acceptable preliminary test results on two of three raw material samples provided from our tenements. (See also Section 4.1 above).

4.7.7 NU Energy

Discussions are in train with this Tasmanian-based company with a focus on the use of Maydena Sands' silica raw material resources for the PV industry.

Access to confidential reports and data was provided, followed by site visits by NU Energy personnel. Only slow progress is being achieved due to the current difficult global financial and economic circumstances.

4.7.8 TEMCO

Subject to positive assessments of the chemical and physical characteristics, environmental benefits of using high silica furnace feed as well as transport economics, this Tasmanian-based subsidiary of BHPB offers a potential market for silica rock from Maydena Sands' tenements. Results awaited. (See also Section 4.3.3 above).

4.7.9 Latrobe Magnesium

This company has plans to produce magnesium metal from fly-ash sourced from the Latrobe Valley Power Stations, Victoria, using the Pidgeon Process. This involves the use of ferrosilicon as a reductant and possibly provides a take-off opportunity in the longer term for Maydena Sands' silica rock.

This company was contacted to promote our silica rock, but its production plans are still in the very early stages.

4.7.10 DIER

See Section 4.3.2 above.

Take-off possibility here in the longer term for road metal and non-slip road surfacing. Production could generate some coarse sand by-product with a market in the construction industry in the Hobart area.

4.7.11 Stratum Resources

This company promoted Maydena Sands and its potential silica products at the 19th IM Congress in Athens and at the Asian Glass Conference, Sabah.

4.8 Environmental

The work approval process for this year's surface rock float sampling at the Midway Prospect drew attention to previously noted occurrences of the endangered hydrobiid snail, Phrantela pupiformis in one of the tributary flows along the southern base of Pine Hill with its upper reaches extending into the southern half of the Eastern Quarry deposit.

Two creeks flow off the northern slopes of the sand deposit across the proposed processing site.

As this issue will affect project planning, Freshwater Systems, a Hobart-based aquatic environmental consulting service, was engaged to survey the main creeks and gullies in the Eastern Quarry area. This was to confirm the previously noted occurrences of this threatened snail species in the area, with particular emphasis to check out creeks flowing northwards off the sand deposit.

In summary, creeks and gullies draining the southern slopes of the sand deposit were shown to contain populations of this snail. In contrast, no signs of this snail were found in the northward flowing drainage. Survey details are attached in Appendix 5.

4.9 Rehabilitation

This year's field activities had nil environmental impact. All plastic airphoto survey markers were removed and marker sites cleaned up. Marker tape at the starting points for the Midway Prospect sample lines was removed.

4.10 Community Relations

Occasional informal information and progress update discussions with members of the Maydena Development Association were held during the year.

5. CONCLUSIONS AND RECOMMENDATIONS

- Photogrammetry, based on year 2000 and 2008 aerial photography, produced a useful base map for planning the proposed processing site layout, though reliability of topo-detail for the eastern half of the area is less than expected due to a very thick vegetation cover. Ground check traverses may be necessary. Planning will be made easier by the apparent absence of the threatened hydrobiid snail in this area.

- Two of three raw material sand samples tested by TAM gave generally satisfactory results for the silica flour size band. The next step in the assessment process would be to feed one or two truckloads of sand through TAM's Wynyard production plant.

- Two test samples of coarser silica sand from the Eastern Quarry area gave good results suitable for solar cell glass in the PV industry. This aspect requires promotion.

- As at the Western Quarry, the silica rock at the Midway Prospect may be suitable for the production of metallurgical silicon, as well as road base or road surfacing material. These results refocus attention on the silica rock sequences of the tenement. Further investigations and testing would be required if interest in these applications is firmed up.

- First pass cost estimates for a small pilot plant and a hydraulic sand transport system from mine to processing site were unexpectedly high. No further action recommended in the short term.

- Marketing and promotional activities in Europe, E and SE Asia as well as Australia attracted attention to the Company and its potential to generate a range of low purity silica products. Product enquiries and farm-in discussions with several parties were encouraging. These activities should continue even in the current global economic downturn.

- A creek survey to check on the occurrence of the threatened hydrobiid snail Phrantela pupiformis around the silica sand deposit was successful in outlining areas where this snail is most likely to be absent due to unfavourable habitat. However, the situation needs to be monitored during the project planning stages.

6. PROPOSED FUTURE ACTIVITIES

Notwithstanding the current deteriorating global economic outlook, the following activities should be undertaken in the coming year:

- Re-assay pulps of silica rock samples WQR003-WQR0045 for SiO2.

- Finalise discussions with CODES personnel regarding research topics and activities in geophysics and/or mineralogy for two honours students.

- Continue with efforts to identify alternative flat land sites for the location of process plant, quarry infrastructure, quarry waste, dams, etc.

- Continue to follow up on opportunities opening up for silica rock with TEMCO and DIER, with further rock sampling as necessary.

- Continue ongoing beneficiation investigations at laboratory and possibly pilot plant scale to provide quality material for testing by potential customers.

- Continue to review process plant design and sand and silica rock extraction concepts with capex and opex reviews and updates as appropriate.
- Continue with product development and promotion and identify sales opportunities as well as developing new market contacts and relationships.
- Ongoing contact with state and local regulatory authorities, as well as local civic associations, on project related matters and activities.
- Rehabilitation of several short drill access tracks and drill pads not likely to be used in the near future.

7. REFERENCES

Krummei, G.K. 2001	Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to 04.09.2001
Krummei, G.K. 2002	Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to 04.09.2002
Krummei, G.K. 2003	(a) Exploration Licence No. 17/98, Maydena, Tasmania. Relinquishment Report
Krummei, G.K. 2003	(b) Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to 04.09.2003
Krummei, G.K. 2004	Retention Licence No. 2/2003, Maydena, Tasmania. Annual Report to 09.01.2005
Krummei, G.K. 2005	Retention Licence No. 2/2003, Maydena, Tasmania. Annual Report to 09.01.2006
Krummei, G.K. 2006	Retention Licence No. 2/2003, Maydena, Tasmania. Annual Report to 09.01.2007
Krummei, G.K. 2007	Retention Licence No. 2/2003, Maydena, Tasmania. Annual Report to 09.01.2008

8. BIBLIOGRAPHY

Bear, I.J.	1975	Technical Note on the identification and Removal of Stain from Zircon Concentrates: AusIMM Proc.No.256 pp 29-31
Calver, C.R.	1990	Limestone Resources of the Maydena-Florentine Valley Area: Tas. Dept. of Mines Report 1990/06
Calver, C.R.	1992	Maydena DDH 1 – Appraisal of the Limestone Resource at Risbys Basin: Tas. Dept. of Mines Report 1992/03
Calver, C.R. & Forsyth, S.M.	1999	Maydena, Tasmania; Digital Geological Atlas, 1:25,000 Series: Tasmanian Geological Survey
Eberhard, R	1994	Inventory and Management of the Junee River Karst System, Tasmania; Forestry Tasmania Report
Forster, M.C.	1992	E.L. 14/88 Maydena, Annual Report – Year 4
Forster, M.C.	1993	E.L. 14/88 Maydena, Annual Report – Year 5
Forster, M.C.	1994	Maydena – Tasmania, Pine Hill High Grade Silica, June 1994
Houshold, L	1992	Risbys Basin Karst Area – Preliminary Investigation of Geomorphic Features and Cave Fauna. Dept. of Parks, Wildlife & Heritage Report.
Hughes, T.D.	1957	Limestones in Tasmania; Geol. Surv. Tas. Bull. 10
Hughes, T.D. & Everard, G.B.	1953	Limestone Deposits of the Maydena Area; Geol. Surv. Tas. Unpubl. Rept.
Jones, P.A.	1989	Exploration Licence No. 14/88, Maydena, Tasmania. Progress Report on Exploration Activity. 5th August 1988 to 5th July 1989.
Krummei, G.K.	1999	Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to End September 1999.
Krummei, G.K.	2000	Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to 04.09.2000.
Krummei, G.K.	2001	Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to 04.09.2001.
Krummei, G.K.	2002	Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to 04.09.2002.

Krummei, G.K.	2003	Exploration Licence No. 17/98, Maydena, Tasmania. Annual Report to 04.09.2003.
McGowan, A	1992	Risbys Basin Karst Area – Survey of Cultural Values and Impact of Proposed Access Tracks and Drill Sites. Tas. Dept. Parks, Wildlife and Environment Report.
Osterloh, S	2002	Origin of the Maydena Silica Flour and Bedrock Silicification, Tasmania. B.Sc (Hons.) Thesis; CODES; School of Earth Sciences, University of Tasmania
Patterson, W	1990	Exploration Licence 14/88 – Maydena. Annual Report on Exploration Activity. 6th July 1989 to 4th August 1990.
Wrigley, P.K.	1992	Surface Exploration of the Limestone Resource at Roberts Hill, Maydena. Tas. Dept. of Mines Report 1992/32.
Wrigley, P.K.	1993	Evaluation of the Limestone Resource at Roberts Hill, Maydena. Tas. Dept. of Mines Report 1993/03.

APPENDIX 1

ASSAY RESULTS

HEAD SAMPLES – TAM TESTS

BR08083863 - Finalized
CLIENT : "MCDSON - Maydena Sands Pty Ltd"
# of SAMPLES : 4
DATE RECEIVED : 2008-06-27 DATE FINALIZED : 2008-07-14
PROJECT : " "
CERTIFICATE COMMENTS : ""
PO NUMBER : "224196"

SAMPLE DESCRIPTION	ME-ICP64 Al2O3 %	ME-ICP64 CaO %	ME-ICP64 Cr2O3 ppm	ME-ICP64 Fe2O3 %	ME-ICP64 MgO %	ME-ICP64 MnO %	ME-ICP64 TiO2 %	ME-ICP64 V2O5 %	ME-ICP64 Na2O %	ME-ICP64 K2O %	ME-ICP64 P2O5 %
90B1-HEAD	0.017	0.017	<1	0.019	0.005	<0.001	0.082	<0.001	0.003	0.001	0.003
101B3-HEAD	0.006	0.025	<1	0.006	0.005	<0.001	0.007	<0.001	0.003	<0.001	0.005
EQ005B-HEAD	0.011	0.011	1	0.004	0.005	<0.001	0.007	<0.001	0.003	<0.001	0.001

2

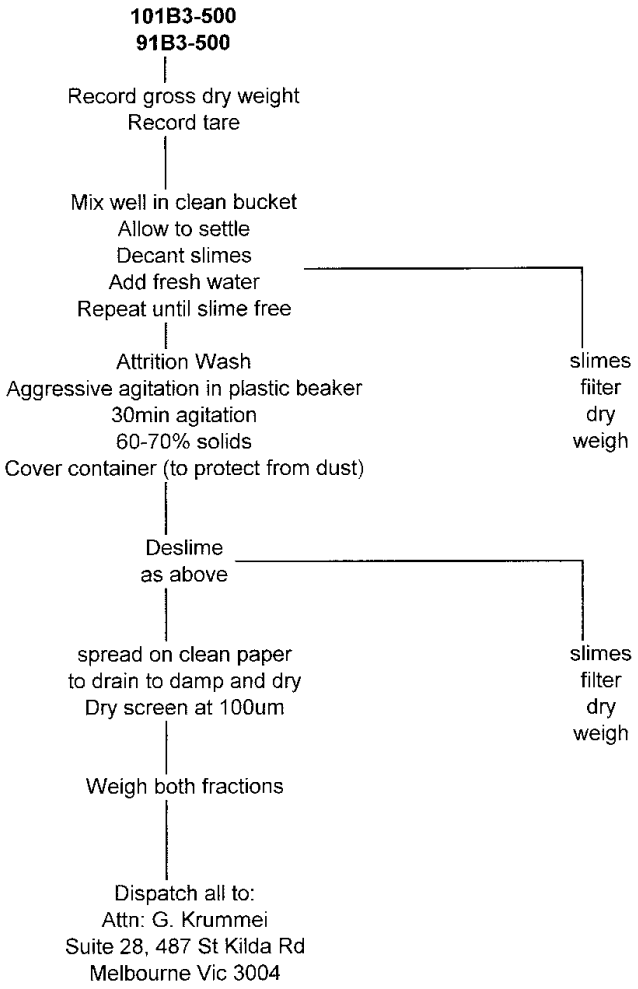
APPENDIX 2

ASSAY RESULTS

PV GLASS SAND

Bunnik RESEARCH LABORATORY
TESTWORK FLOWSHEET

CLIENT	MAYDENA SANDS	PROJECT	T0202
STATUS	SILICA SANDS ATTRITIONING	DATE	17-Jan-08



Bemmle RESEARCH LABORATORY
LAB GENERAL TEST DATA

SAMPLE	silica sands
TEST TYPE	deslime/attrition

PROJECT	T0202
TEST NO	
DATE	8/02/2008
PERFORMED BY	BE

SAMPLE	pre - deslime	post - deslime	+100um (screen)	-100um (screen)	TOTAL	START
91B3-500	128.5	69.6	2284.5	1930.9	4414	4485
101B-500	228.3	218.6	2117	2155.8	4720	4825

5

BR08040948 - Finalized
CLIENT : "MCDSON - Maydena Sands Pty Ltd"
# of SAMPLES : 18
DATE RECEIVED : 2008-04-07 DATE FINALIZED : 2008-04-25
PROJECT : " "
CERTIFICATE COMMENTS : "ME-MS61:REE's may not be totally soluble in this method. "
PO NUMBER : "SSF 224195"

SAMPLE DESCRIPTION	ME-ICP64 Al2O3 %	ME-ICP64 CaO %	ME-ICP64 Cr2O3 ppm	ME-ICP64 Fe2O3 %	ME-ICP64 MgO %	ME-ICP64 MnO %	ME-ICP64 TiO2 %	ME-ICP64 V2O5 %	ME-ICP64 Na2O %	ME-ICP64 K2O %	ME-ICP64 P2O5 %
101B3-500	0.009	0.025	<1	0.001	0.020	0.001	0.007	0.011	0.001	<0.001	0.004
101B3-100	0.019	0.039	<1	0.001	0.020	0.001	0.008	0.009	0.001	<0.001	0.008
101B3-500NM	0.008	0.018	<1	<0.001	0.018	0.001	0.003	0.009	0.003	<0.001	0.003
101B3-100NM	0.011	0.043	<1	<0.001	0.022	0.001	0.005	0.011	0.001	<0.001	0.009
91B3-500	0.025	0.017	1	0.016	0.018	0.001	0.092	0.011	0.003	0.001	0.003
91B3-100	0.040	0.032	3	0.036	0.022	0.001	0.172	0.009	0.005	0.004	0.005
91B3-500NM	0.015	0.011	<1	0.001	0.017	0.001	0.010	0.009	0.003	<0.001	0.002
EXTRA 91B3-38N	0.043	0.034	3	0.021	0.023	0.001	0.103	0.009	0.007	0.004	0.006

APPENDIX 3

SIZING DATA

PV GLASS SAND

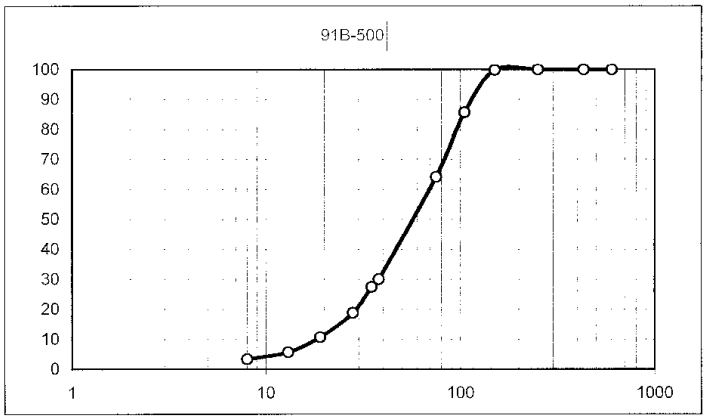
Bunk RESEARCH LABORATORY

SIZING AND SIZE ANALYSIS REPORT SHEET

PROJECT	T0202
TEST NO	SIZING
DATE	25/02/2008
TECHNICIAN	KLG

SIZING

91B-500	SIZE	WEIGHTS		
	um	gm	(%)	(%)PASS
sizing of <150um fraction	600	0.00	0.00	100.0
	430	0.00	0.00	100.0
	250	0.00	0.00	100.0
	150	0.07	0.14	99.9
P80	105	7.08	14.16	85.7
97	75	10.76	21.52	64.2
	38	17.04	34.08	30.1
	35	1.30	2.60	27.5
	28	4.33	8.66	18.8
	19	4.06	8.12	10.7
	13	2.51	5.02	5.7
	8	1.17	2.34	3.4
	SUB	1.68	3.36	0.0
	TOTAL	50.00	100.00	

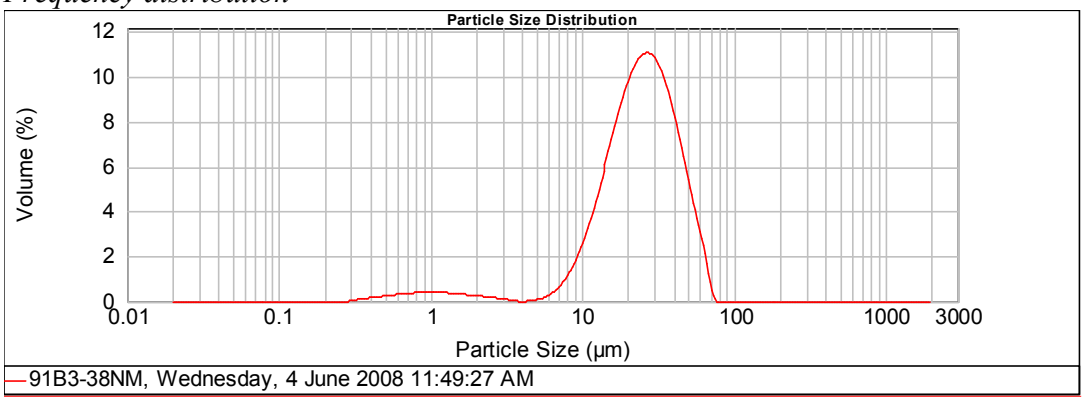


SIZING

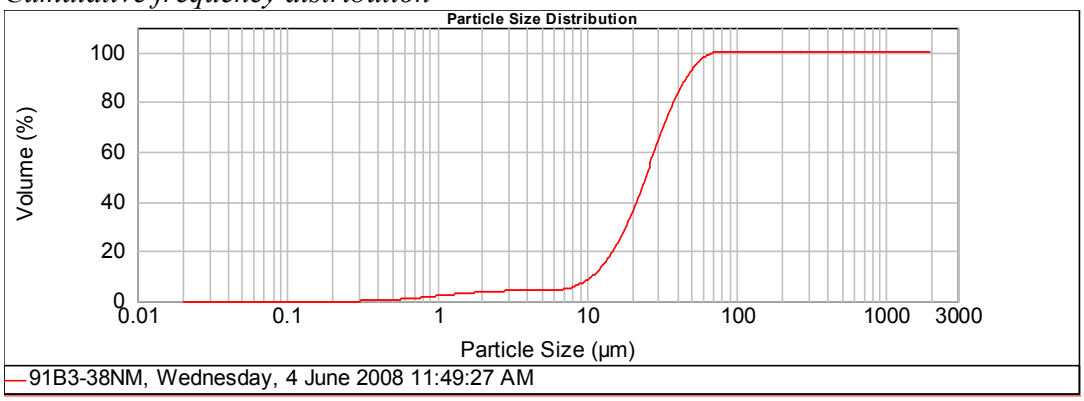
101B3-500	SIZE	WEIGHTS		
	um	gm	(%)	(%)PASS
sizing of <150um fraction	600	0.00	0.00	100.0
	430	0.00	0.00	100.0
	250	0.00	0.00	100.0
	150	0.06	0.12	99.9
P80	105	9.76	19.52	80.4
	75	12.90	25.80	54.6
	38	18.98	37.96	16.6
	35	0.82	1.64	15.0
	28	3.08	6.16	8.8
	19	2.58	5.16	3.6
	13	0.84	1.68	2.0
	8	0.07	0.14	1.8
	SUB	0.91	1.82	0.0
	TOTAL	50.00	100.00	

"91B3-38NM " "Run 1 (average of 3 analyses)"
Wednesday, 4 June 2008
Ultrasonication: minimal effect

Frequency distribution



Cumulative frequency distribution

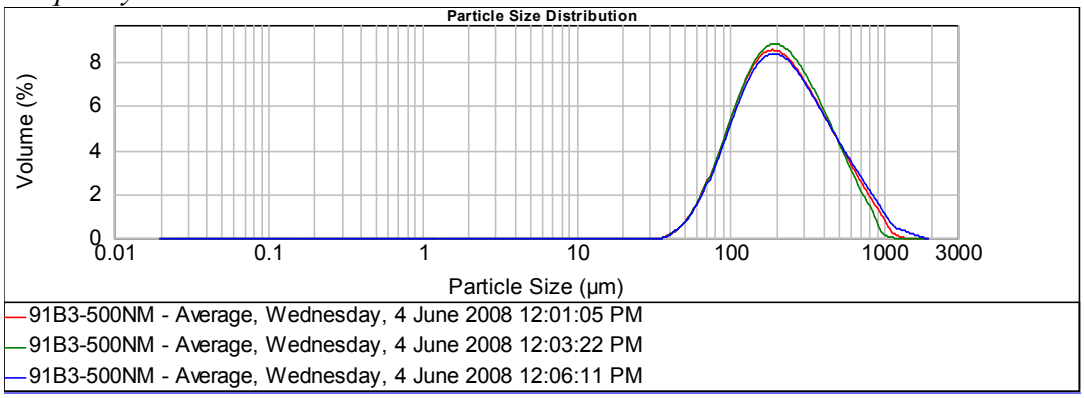


Result table

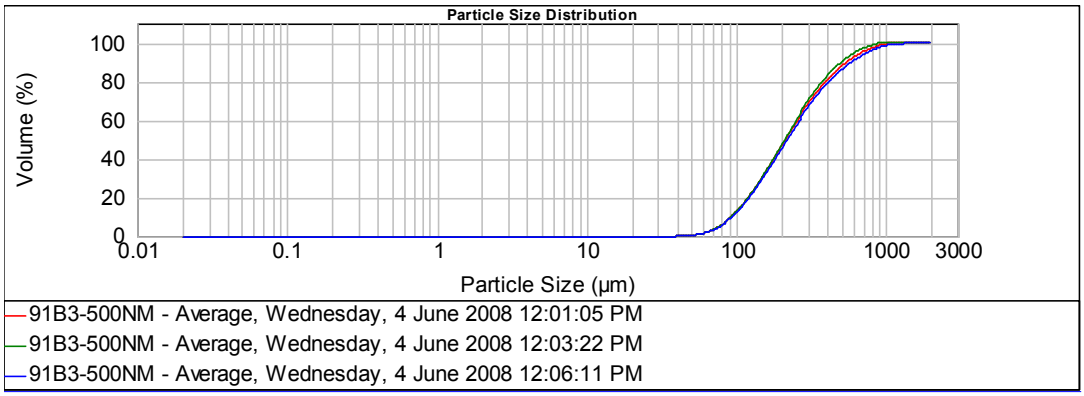
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.35	11.482	4.04	120.226	0.00	1258.925	0.00
0.011	0.00	0.120	0.00	1.259	0.33	13.183	5.41	138.038	0.00	1445.440	0.00
0.013	0.00	0.138	0.00	1.445	0.30	15.136	6.80	158.489	0.00	1659.587	0.00
0.015	0.00	0.158	0.00	1.660	0.26	17.378	8.13	181.970	0.00	1905.461	0.00
0.017	0.00	0.182	0.00	1.905	0.22	19.953	9.19	208.930	0.00	2187.762	0.00
0.020	0.00	0.209	0.00	2.188	0.18	22.909	9.84	239.883	0.00	2511.886	0.00
0.023	0.00	0.240	0.00	2.512	0.14	26.303	9.95	275.423	0.00	2884.032	0.00
0.026	0.00	0.275	0.01	2.884	0.10	30.200	9.47	316.228	0.00	3311.311	0.00
0.030	0.00	0.316	0.08	3.311	0.02	34.674	8.42	363.078	0.00	3801.894	0.00
0.035	0.00	0.363	0.13	3.802	0.00	39.811	6.93	416.869	0.00	4365.158	0.00
0.040	0.00	0.417	0.18	4.365	0.02	45.709	5.22	478.630	0.00	5011.872	0.00
0.046	0.00	0.479	0.23	5.012	0.11	52.481	3.51	549.541	0.00	5754.399	0.00
0.052	0.00	0.550	0.27	5.754	0.29	60.256	1.92	630.957	0.00	6606.934	0.00
0.060	0.00	0.631	0.31	6.607	0.61	69.183	0.13	724.436	0.00	7585.776	0.00
0.069	0.00	0.724	0.34	7.586	1.13	79.433	0.00	831.764	0.00	8709.636	0.00
0.079	0.00	0.832	0.36	8.710	1.86	91.201	0.00	954.993	0.00	10000.000	0.00
0.091	0.00	0.955	0.36	10.000	2.85	104.713	0.00	1096.478	0.00		
0.105		1.096		11.482		120.226		1258.925			

"91B3-500NM" "Runs 1-3 (each run the average of 3 analyses)"
Wednesday, 4 June 2008
Ultrasonication: minor variation with 0, 1 & 2 minutes' ultrasonication, and also between analyses

Frequency distribution



Cumulative frequency distribution

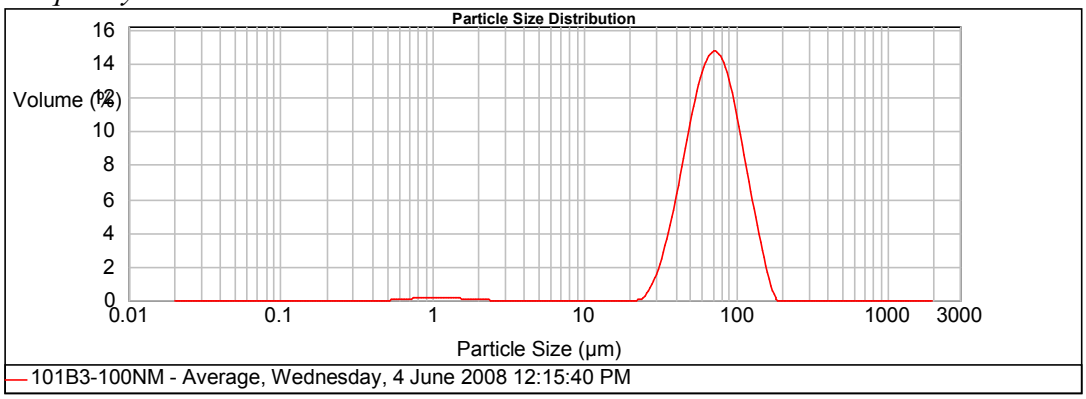


Result table (run 3)

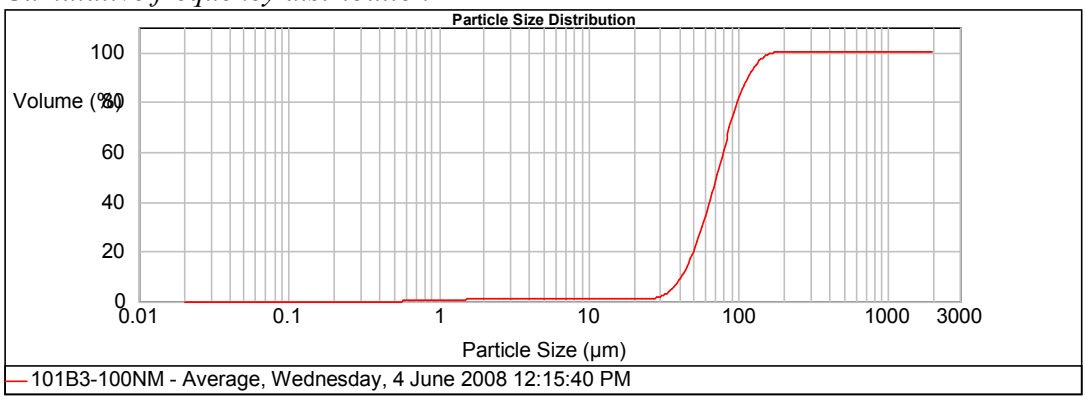
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.00	11.482	0.00	120.226	6.43	1258.925	0.31
0.011	0.00	0.120	0.00	1.259	0.00	13.183	0.00	138.038	7.10	1445.440	0.16
0.013	0.00	0.138	0.00	1.445	0.00	15.136	0.00	158.489	7.48	1659.587	0.02
0.015	0.00	0.158	0.00	1.660	0.00	17.378	0.00	181.970	7.58	1905.461	0.00
0.017	0.00	0.182	0.00	1.905	0.00	19.953	0.00	208.930	7.42	2187.762	0.00
0.020	0.00	0.209	0.00	2.188	0.00	22.909	0.00	239.883	7.04	2511.886	0.00
0.023	0.00	0.240	0.00	2.512	0.00	26.303	0.00	275.423	6.51	2884.032	0.00
0.026	0.00	0.275	0.00	2.884	0.00	30.200	0.00	316.228	5.89	3311.311	0.00
0.030	0.00	0.316	0.00	3.311	0.00	34.674	0.01	363.078	5.23	3801.894	0.00
0.035	0.00	0.363	0.00	3.802	0.00	39.811	0.21	416.869	4.57	4365.158	0.00
0.040	0.00	0.417	0.00	4.365	0.00	45.709	0.49	478.630	3.92	5011.872	0.00
0.046	0.00	0.479	0.00	5.012	0.00	52.481	0.96	549.541	3.30	5754.399	0.00
0.052	0.00	0.550	0.00	5.754	0.00	60.256	1.62	630.957	2.70	6606.934	0.00
0.060	0.00	0.631	0.00	6.607	0.00	69.183	2.47	724.436	2.12	7585.776	0.00
0.069	0.00	0.724	0.00	7.586	0.00	79.433	3.47	831.764	1.54	8709.636	0.00
0.079	0.00	0.832	0.00	8.710	0.00	91.201	4.52	954.993	0.94	10000.000	
0.091	0.00	0.955	0.00	10.000	0.00	104.713	5.55	1096.478	0.45		
0.105	0.00	1.096	0.00	11.482	0.00	120.226		1258.925			

"101B3-100NM" "Run 1 (average of 3 analyses)"
Wednesday, 4 June 2008
Ultrasonication: minimal effect

Frequency distribution



Cumulative frequency distribution

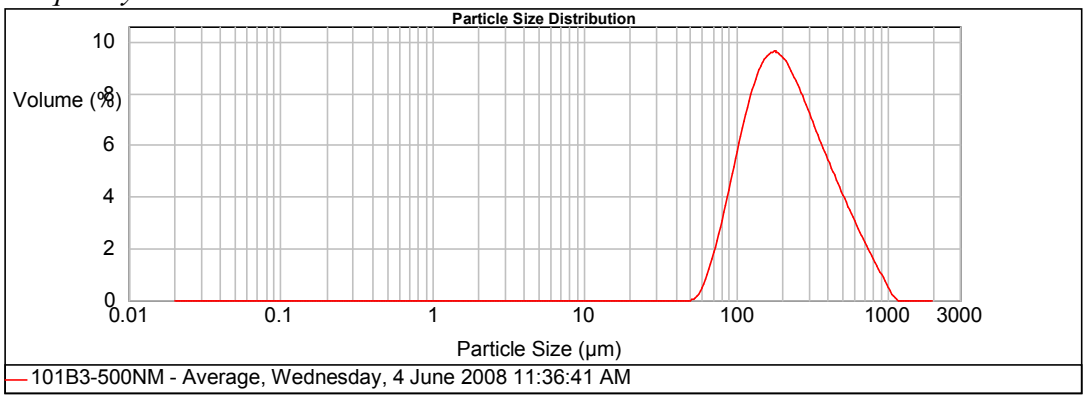


Result table

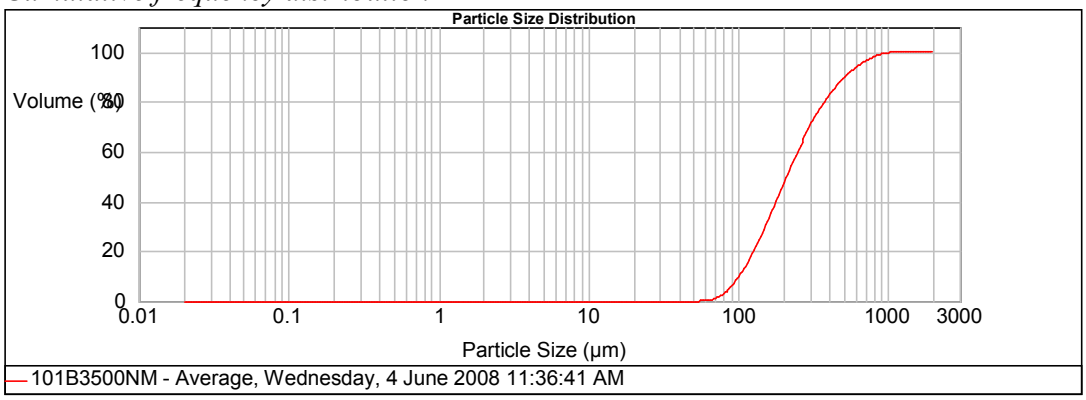
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.10	11.482	0.00	120.226	5.18	1258.925	0.00
0.011	0.00	0.120	0.00	1.259	0.10	13.183	0.00	138.038	2.74	1445.440	0.00
0.013	0.00	0.138	0.00	1.445	0.09	15.136	0.00	158.489	0.67	1659.587	0.00
0.015	0.00	0.158	0.00	1.660	0.08	17.378	0.00	181.970	0.00	1905.461	0.00
0.017	0.00	0.182	0.00	1.905	0.06	19.953	0.00	208.930	0.00	2187.762	0.00
0.020	0.00	0.209	0.00	2.188	0.00	22.909	0.11	239.883	0.00	2511.886	0.00
0.023	0.00	0.240	0.00	2.512	0.00	26.303	0.82	275.423	0.00	2884.032	0.00
0.026	0.00	0.275	0.00	2.884	0.00	30.200	2.09	316.228	0.00	3311.311	0.00
0.030	0.00	0.316	0.00	3.311	0.00	34.674	3.99	363.078	0.00	3801.894	0.00
0.035	0.00	0.363	0.00	3.802	0.00	39.811	6.40	416.869	0.00	4365.158	0.00
0.040	0.00	0.417	0.00	4.365	0.00	45.709	8.98	478.630	0.00	5011.872	0.00
0.046	0.00	0.479	0.00	5.012	0.00	52.481	11.29	549.541	0.00	5754.399	0.00
0.052	0.00	0.550	0.05	5.754	0.00	60.256	12.84	630.957	0.00	6606.934	0.00
0.060	0.00	0.631	0.08	6.607	0.00	69.183	13.26	724.436	0.00	7585.776	0.00
0.069	0.00	0.724	0.09	7.586	0.00	79.433	12.41	831.764	0.00	8709.636	0.00
0.079	0.00	0.832	0.10	8.710	0.00	91.201	10.49	954.993	0.00	10000.000	0.00
0.091	0.00	0.955	0.10	10.000	0.00	104.713	7.87	1096.478	0.00		
0.105		1.096		11.482		120.226		1258.925			

"101B3-500NM" "Run 1 (average of 3 analyses)"
Wednesday, 4 June 2008
Ultrasonication: minimal effect

Frequency distribution



Cumulative frequency distribution



Result table

Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.00	11.482	0.00	120.226	7.40	1258.925	0.00
0.011	0.00	0.120	0.00	1.259	0.00	13.183	0.00	138.038	8.25	1445.440	0.00
0.013	0.00	0.138	0.00	1.445	0.00	15.136	0.00	158.489	8.64	1659.587	0.00
0.015	0.00	0.158	0.00	1.660	0.00	17.378	0.00	181.970	8.60	1905.461	0.00
0.017	0.00	0.182	0.00	1.905	0.00	19.953	0.00	208.930	8.20	2187.762	0.00
0.020	0.00	0.209	0.00	2.188	0.00	22.909	0.00	239.883	7.55	2511.886	0.00
0.023	0.00	0.240	0.00	2.512	0.00	26.303	0.00	275.423	6.78	2884.032	0.00
0.026	0.00	0.275	0.00	2.884	0.00	30.200	0.00	316.228	5.96	3311.311	0.00
0.030	0.00	0.316	0.00	3.311	0.00	34.674	0.00	363.078	5.16	3801.894	0.00
0.035	0.00	0.363	0.00	3.802	0.00	39.811	0.00	416.869	4.39	4365.158	0.00
0.040	0.00	0.417	0.00	4.365	0.00	45.709	0.00	478.630	3.66	5011.872	0.00
0.046	0.00	0.479	0.00	5.012	0.00	52.481	0.16	549.541	2.94	5754.399	0.00
0.052	0.00	0.550	0.00	5.754	0.00	60.256	0.88	630.957	2.26	6606.934	0.00
0.060	0.00	0.631	0.00	6.607	0.00	69.183	1.95	724.436	1.59	7585.776	0.00
0.069	0.00	0.724	0.00	7.586	0.00	79.433	3.29	831.764	0.98	8709.636	0.00
0.079	0.00	0.832	0.00	8.710	0.00	91.201	4.76	954.993	0.39	10000.000	
0.091	0.00	0.955	0.00	10.000	0.00	104.713	6.20	1096.478	0.00		
0.105		1.096		11.482		120.226		1258.925			

APPENDIX 4

ASSAYS RESULTS

ROCK SAMPLES

MIDWAY PROSPECT

ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

Australian Laboratory Services Pty Ltd

32 Shand Street
Stafford
Brisbane QLD 4053
Phone: +61 (7) 3243 7222 Fax: +61 (7) 3243 7218 www.alschemex.com

Finalized Date: 14-JUL-2008
Account: MCDSON

CERTIFICATE OF ANALYSIS BR08087251

Sample Description	Method / Analyte / Units / LOR	ME-ICP64 Al2O3 % 0.001	ME-ICP64 CaO % 0.001	ME-ICP64 Cr2O3 ppm 1	ME-ICP64 Fe2O3 % 0.001	ME-ICP64 MgO % 0.001	ME-ICP64 TiO2 % 0.001	ME-ICP64 V2O5 % 0.001	ME-ICP64 Na2O % 0.001	ME-ICP64 K2O % 0.001	ME-ICP64 P2O5 % 0.001	ME-ICP64 Cu ppm 1	ME-ICP64 Co ppm 1	ME-ICP64 Pb ppm 1	ME-ICP64 Zn ppm 2	ME-ICP64 As ppm 5
WQR 028		4.70	0.087	45	3.22	1.170	0.475	0.008	0.073	0.316	0.071	21	5	4	38	<5
WQR 029		0.814	0.038	28	1.365	0.085	0.183	0.004	0.007	0.169	0.044	8	1	1	7	<5
WQR 030		0.028	0.029	3	0.010	0.005	0.005	<0.001	0.003	0.001	0.015	<1	1	<1	<2	<5
WQR 031		0.043	0.028	3	0.041	0.003	0.015	<0.001	0.003	0.004	0.014	<1	1	<1	<2	<5
WQR 032		0.049	0.029	3	0.006	0.003	0.008	<0.001	0.003	0.006	0.018	<1	1	1	<2	<5
WQR 033		0.062	0.197	3	0.019	0.003	0.005	<0.001	0.001	0.001	0.192	<1	<1	1	<2	<5
WQR 034		0.066	0.028	3	0.007	0.010	0.042	<0.001	0.004	0.006	0.006	<1	1	<1	<2	<5
WQR 035		0.023	0.031	1	0.004	0.007	0.013	<0.001	0.001	0.001	0.008	<1	1	<1	<2	<5
WQR 036		0.025	0.034	<1	0.024	0.005	0.005	<0.001	0.003	0.004	0.015	<1	1	1	<2	<5
WQR 037		0.282	0.013	15	0.014	0.028	0.033	0.001	0.005	0.101	0.006	<1	1	2	<2	<5
WQR 038		0.025	0.013	<1	0.006	0.003	0.005	<0.001	0.003	0.001	0.005	<1	1	1	<2	<5
WQR 039		0.015	0.024	1	0.004	0.005	0.017	<0.001	0.003	0.001	0.010	<1	1	<1	<2	<5
WQR 040		0.026	0.014	4	0.003	0.003	0.003	<0.001	0.003	0.001	0.006	<1	<1	<1	<2	<5
WQR 041		0.017	0.052	7	0.066	0.007	0.003	<0.001	0.003	<0.001	0.039	<1	1	<1	<2	<5
WQR 042		0.025	0.025	4	0.010	0.005	0.005	0.001	0.003	0.001	0.010	<1	1	1	<2	<5
WQR 043		0.064	0.018	<1	0.007	0.005	0.013	<0.001	0.004	0.004	0.008	<1	1	<1	<2	<5
WQR 044		0.023	0.024	4	0.047	0.007	0.003	0.001	0.003	0.002	0.008	<1	1	1	<2	<5
WQR 045		0.019	0.021	<1	0.003	0.008	0.003	<0.001	0.001	0.001	0.006	<1	1	<1	<2	<5

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QC CERTIFICATE OF ANALYSIS BR08087251

Sample Description	Method / Analyte / Units / LOR	ME-ICP64 Al2O3 % 0.001	ME-ICP64 CaO % 0.001	ME-ICP64 Cr2O3 ppm 1	ME-ICP64 Fe2O3 % 0.001	ME-ICP64 MgO % 0.001	ME-ICP64 TiO2 % 0.001	ME-ICP64 V2O5 % 0.001	ME-ICP64 Na2O % 0.001	ME-ICP64 K2O % 0.001	ME-ICP64 P2O5 % 0.001	ME-ICP64 Cu ppm 1	ME-ICP64 Co ppm 1	ME-ICP64 Pb ppm 1	ME-ICP64 Zn ppm 2	ME-ICP64 As ppm 5
STANDARDS																
BCS267		0.794	1.645	127	0.779	0.040	0.162	0.002	0.050	0.117	0.023	48	11	12	11	<5
Target Range - Lower Bound		0.789	1.625		0.734	0.054	0.157		0.055	0.121						
Upper Bound		0.911	1.875		0.847	0.065	0.183		0.066	0.142						
BSC313-1		0.038	0.014	1	0.016	0.002	0.015	<0.001	0.005	0.006	0.002	<1	1	<1	<2	<5
Target Range - Lower Bound		0.033	0.005	<1	0.010	<0.001	0.015		0.002	0.003						
Upper Bound		0.040	0.007	2	0.014	0.002	0.019		0.004	0.006						
BLANKS																
BLANK		<0.002	<0.001	1	0.006	<0.002	0.002	<0.001	<0.001	<0.001	0.001	<1	<1	<1	<2	<5
Target Range - Lower Bound		<0.001	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<1	<1	<1	<2	<5
Upper Bound		0.002	0.002	2	0.002	0.002	0.002	0.002	0.002	0.002	0.002	2	2	2	4	10
DUPLICATES																
WQR 033		0.062	0.197	3	0.019	0.003	0.005	<0.001	0.001	0.001	0.192	<1	<1	1	<2	<5
DUP		0.060	0.193	1	0.019	0.003	0.003	<0.001	0.001	0.001	0.196	<1	1	1	<2	<5
Target Range - Lower Bound		0.058	0.187	<1	0.017	0.002	0.003	<0.001	<0.001	<0.001	0.186	<1	<1	<1	<2	<5
Upper Bound		0.064	0.203	3	0.021	0.004	0.005	0.002	0.002	0.002	0.202	2	2	2	4	10

APPENDIX 5

REPORT – HYDROBIID SNAIL SURVEY

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Hydrobiid snail Survey for Maydena Sands Pty Ltd

On 1 and 30 July 2008 a survey of a number of streams in an area west of Maydena was carried out to determine if populations of the hydrobiid snail *Phrantela pupiformis*, listed as rare under the Tasmanian Threatened Species Protection Act (1995), were present. These streams drain the area that may be affected by a proposed silica flour mine and associated processing plant near sand deposit adjacent to Pine Hill, approximately 3 km west of Maydena.

The location of study sites is shown in Figure 1, and details of locations are shown in Table 1. All sites were subjected to a standard 60 minute search, typically over a distance of 100 – 200 m. Longer reaches (sites 4 and 5) were searched systematically over their entire length. Stream rocks, moss, immersed leaves and organic debris were systematically examined in all habitats, including soaks at the point where they entered the stream.

Three tributaries of Carpenters Creek, which are within the potentially affected area, had been previously surveyed in January 2001 and found to have *P. pupiformis* present (Davies and Cook unpub. data). These streams were searched again for hydrobiid snails and the presence of *P. pupiformis* was confirmed.

Site 1 had *P. pupiformis* only. This site had recently been clear felled and burnt.

Site 2 had *P. pupiformis* only.

Site 3 had *P. pupiformis* and *Nanocochlea sp*. (an unlisted species) present.

A tributary of Kallista Creek, which drains the northern side of the proposed site, was surveyed. A reach (Site 4) was surveyed from the point that the creek crosses the Gordon River Road, which is actually about 300 metres east of the position shown on the 1:25000 Maydena map (the map being incorrect). The reach was surveyed up to where the creek forked. No hydrobiid snails were found.

The east fork had no surface water for 100 m upstream from the fork junction and was not further surveyed. The west fork was surveyed from the fork junction to a point 80m upstream (Site 5). No hydrobiid snails were found.

An upper area of the west fork of the tributary of Kallista Creek was also surveyed (Site 6). This was a marshy section within which the creek was quite spread out. No hydrobiid snails were found.

A section of the east fork of the same tributary of Kallista Creek was surveyed near the old quarry site (Site 7) and, as for the downstream reach, had no surface water.

On 21 October a further site (Site 8) was surveyed on a small tributary of Carpenters Creek, absent from the 1:25000 map, at 350 m elevation under the south western flanks of Pine Hill (in a reach adjacent to the access road). This was also found to have *P. pupiformis* present.

Table 1. Survey site details

Site	Stream		Easting GDA	Northing GDA	Notes	*P. pupiformis* present?
1	Tributary 1 of Carpenters Ck		465517	5264096		Yes
2	Tributary 2 of Carpenters Ck		465908	5263799		Yes
3	Tributary 3 of Carpenters Ck		465715	5263561		Yes
4	Tributary of Kallista Ck	Survey reach start at Gordon River Road	466463	5264999	Tasmap wrong by 300 m west	No
		Survey reach finish at fork junction	466551	5264945		
5	"	Survey reach start at fork junction	466598	5264866		No
		Survey reach finish upstream	466598	5264866		
6	"	Upper west fork site	466264	5264274	Marshy area	No
7	"	Upper east fork site	466659	5263965	Near old quarry, dry	No
8	Tributary 4 of Carpenters Ck	Unmapped small stream	465689	5263932	Sampled in October 2008	Yes

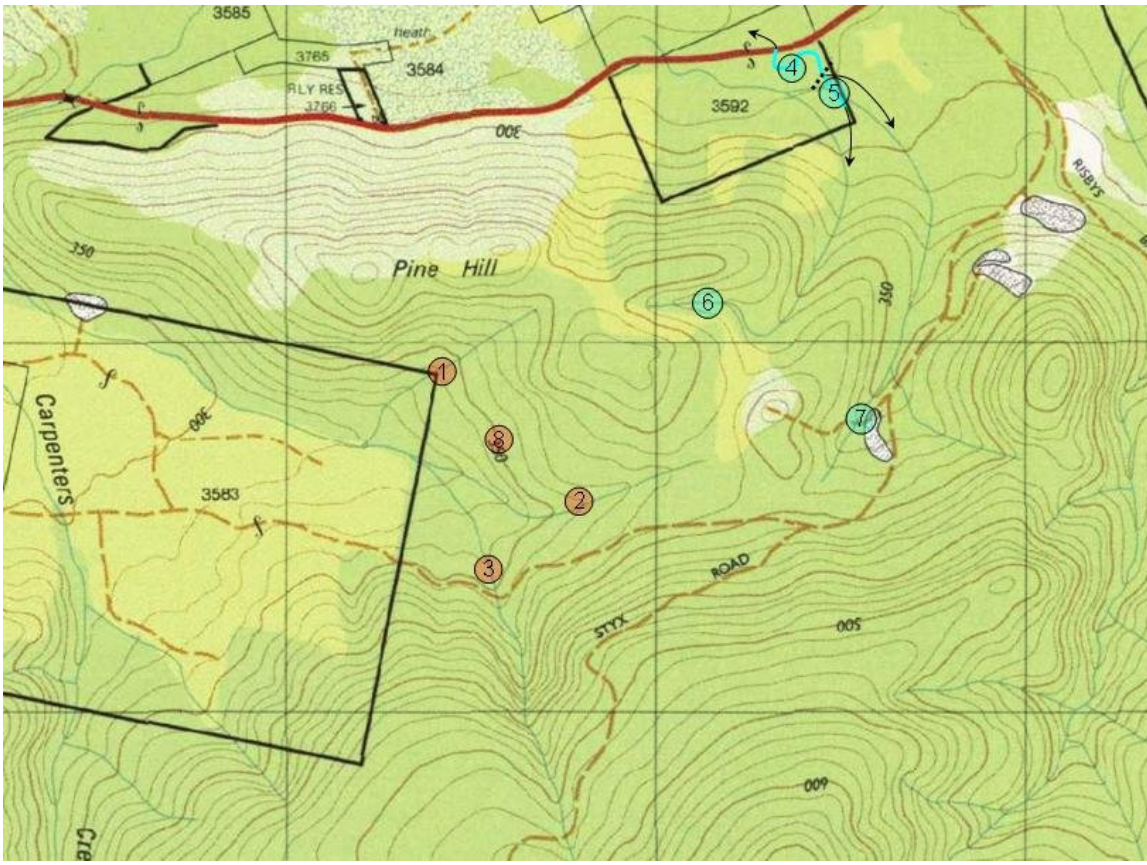
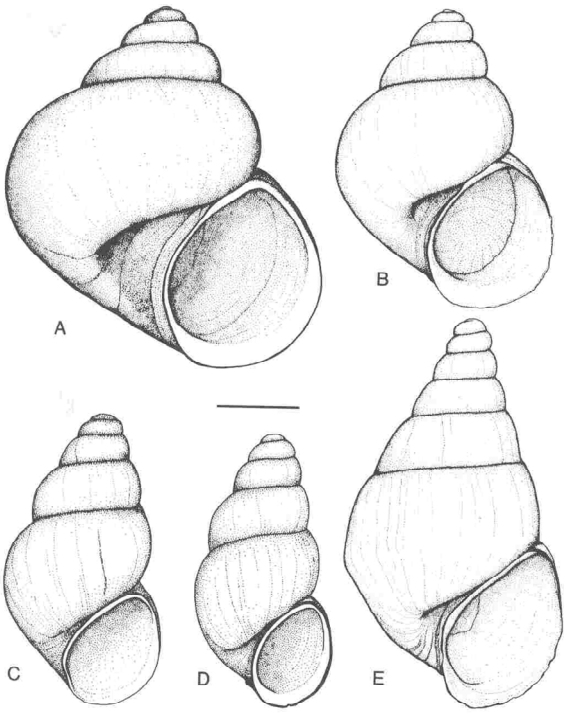
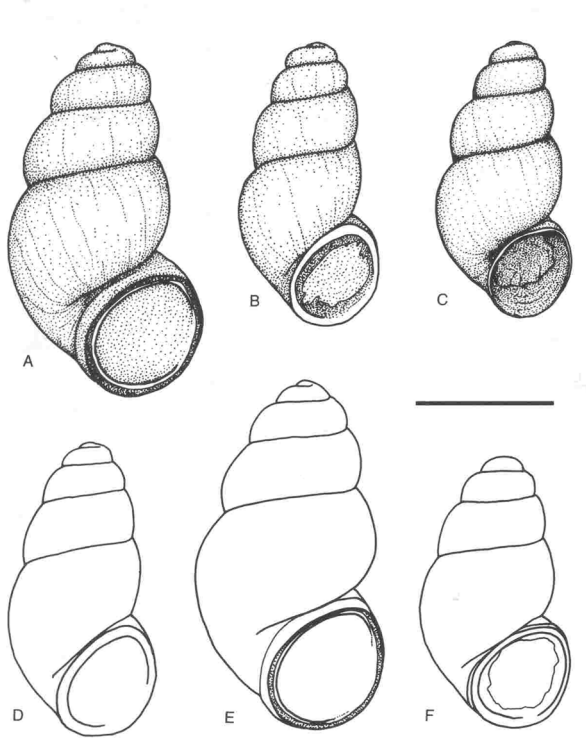


Figure 1. Map showing surveyed sites and reaches. Orange indicates locations where *Phrantela pupiformis* was found. Light blue indicates locations surveyed where hydrobiid snails were absent. Note that the tributary of Kallista Creek is incorrectly mapped in the 1:25000 TasMap series. Its approximate true course is shown in the vicinity of sites 4 and 5. The eastern fork between sites 5 and just upstream of site 7 was dry at the time of survey.

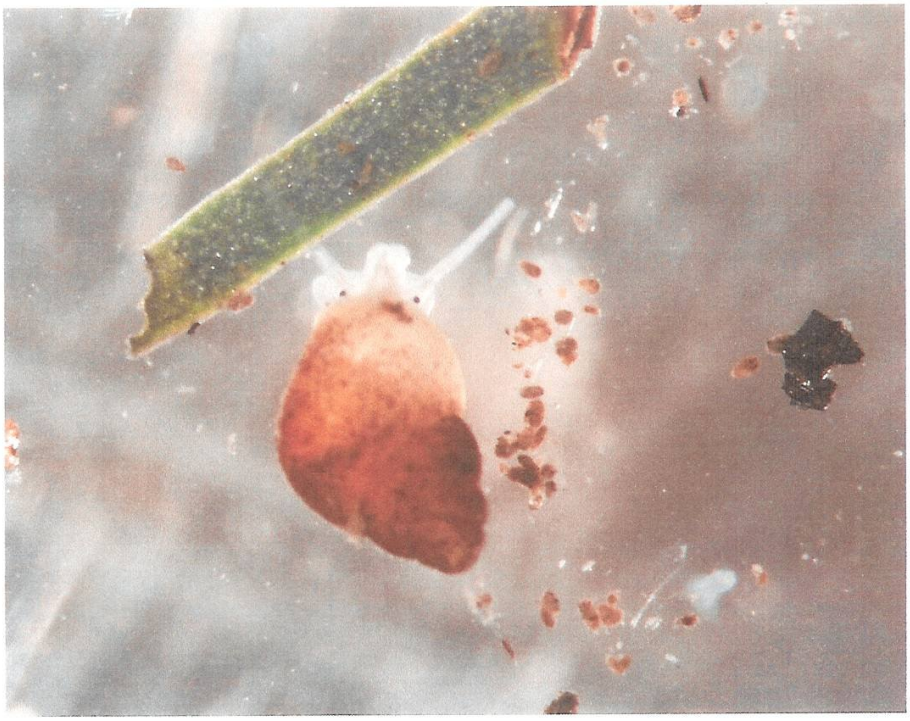


Phrantela species



Nanocochlea species

Figure 2. Shell shapes of Phrantela (P. pupiformis shown as D in the left hand panel) and Nanocochlea snails from Tasmania.
Line scale bars = 1 mm.



Phrantela pupiformis (3 – 3.5 mm)

Phrantela sp. (3 – 3.2 mm)

ILLUSTRATIONS