MAYDENA SANDS PTY LTD

ACN 111 938 428 ABN 65 111 938 428

EXPLORATION LICENCE NO. 17/2002

MAYDENA, TASMANIA

ANNUAL REPORT

TO

10 January 2010

GERHARD K. KRUMMEI

NOVEMBER 2009

Suite 28, 487 St.Kilda Road, Melbourne Vic 3004 Australia
Telephone and Facsimile: 61 3 9820 2595

ABSTRACT

A limited, shallow depth resistivity imaging survey over a segment of the northern part of the prospect yielded a good data set with line to line correlation and consistent with the lithologies expected.

Check drilling, however, failed to intersect significant depths of near surface silica sand, thereby diminishing severely the resource potential of the prospect.

No further work is proposed. The tenement is earmarked for relinquishment.

Keywords:

EL17/2002, Hedgehog Ridge Prospect
Resistivity imaging, drilling.

C O N T E N T S

ABSTRACT

1. INTRODUCTION
2. TENURE
3. LOCATION AND INFRASTRUCTURE
4. OBJECTIVES AND TARGETS
5. PREVIOUS EXPLORATION
6. CURRENT ACTIVITIES
   - 6.1 Work Done
   - 6.2 Statistical Summary
   - 6.3 Drill Hole Co-Ordinates
7. RESULTS
   - 7.1 Hedgehog Ridge Prospect
   - 7.1.1 Geophysics
   - 7.1.2 Drilling
8. ENVIRONMENTAL & REHABILITATION ACTIVITIES
9. CONCLUSIONS
10. RECOMMENDATIONS
11. PROPOSED FUTURE ACTIVITIES
12. REFERENCES

APPENDICES

Appendix 1 Resistivity Imaging Survey Results

Appendix 2 Resistivity Imaging Survey – Drilling and Interpretation Results

Appendix 3 Drill Hole Logs

Appendix 4 Drill Hole Assay Data

Appendix 5 Sizing Data – Drill Hole HRD003

ILLUSTRATIONS

Figure 1	Location Map	1:100,000
Figure 2	Grid Location	1: 25,000
Figure 3	Grid Geology	1: 5,000

1. INTRODUCTION

This report details activities by Maydena Sands Pty Ltd in EL.17/2002 in the seventh year of tenure to 10.01.2010.

Interest in the ground covered by this exploration licence arose as a result of J J McDonald & Sons Mining Pty Ltd activities at the Pine Hill silica sand deposit located within RL 2/2003 some 5 km to the south east.

In early 2005, this tenement was transferred into a new entity, Maydena Sands Pty. Ltd., which continued to focus under the same management on the exploration, assessment and development of the silica sand, silica flour and hard rock silica resources indicated within it.

Regional mapping by MRT geologists suggested that the geological formations potentially prospective for additional resources of silica sand and flour extend into this area in a north westerly direction from the Pine Hill deposit.

An added attraction is the availability of basic access to the main zone of interest.

2. TENURE

On the 30th of April 2002 an application was lodged by J. J. McDonald & Sons Mining Pty Ltd for an exploration licence of 13 sq km covering ground potentially prospective for silica sand/flour and silica rock associated with lower Cambrian sequences 7-10 km WSW of Maydena.

The area originally applied for was contiguous to the east with RL 2/2003 (formerly part of EL 17/1998) where a limited resource of potentially economic, good quality silica flour and silica sands has been delineated.

Ministerial consent to the grant of this exploration licence was obtained on 28/01/03 effective for *5* years to 10th January 2008.

In November 2004, application for a reduction of the original 13 sq km tenement area by 9 sq km to an interim size of 4 sq.km surrounding the Hedgehog Ridge silica sand and flour prospect (viz. Fig 2) was approved by the Director of Mines on 26.05.2005. Exploration activities and outcomes during tenure of the larger area are summarized in a Partial Relinquishment Report by Krummei (2004) (a).

On the same date, title to the reduced Exploration Licence area was transferred to Maydena Sands Proprietary Limited, a Company formed to hold and operate the exploration and mining interests of the Directors and Shareholders of J. J. McDonald & Sons Mining Pty Ltd in the Maydena district.

A reduction of the Exploration Licence area to the current size of 2sq.km was approved on 27/04/07.

The reduced tenement now comprises:

- State Forest – Multiple use forest land
- MDC Informal Reserve Area
- Aurora/Hydro/Transend land

3. LOCATION AND INFRASTRUCTURE

Reduced EL 17/2002 lies to the west of Pine Hill with its eastern boundary approximately 7 km west of Maydena and about 95 km by sealed road west of Hobart (Fig.1).

The sealed Gordon River Road traverses the tenement diagonally from south east to north west providing excellent basic access to the area. However, thick vegetation, topography and drainage impede access within the immediate area of interest north of the Gordon River Road.

Other basic facilities, including housing and a small labour pool, are available in the small township of Maydena (pop. ca. 400) and surrounding district.

A single strand power line follows the Gordon River Road through the tenement.

A 700 m long, east-west oriented, fair weather gravel airstrip is located about 1 km eastwards off the eastern boundary of the tenement.

A narrow gauge railway line from New Norfolk to Maydena has been progressively upgraded as far as the entrance to the Mt Field National Park. Plans for the remaining 15km section to Maydena are uncertain at this stage, though some basic clearing of the railway easement was undertaken recently.

4. OBJECTIVES AND TARGETS

The overall objective of the exploration activities during tenure of this exploration licence is to add commercially viable resources of high purity silica sand and flour to those already outlined by J. J. McDonald & Sons Mining Pty Ltd (now vested in Maydena Sands Pty Ltd) at the Eastern Quarry, Pine Hill, in RL 2/2003, 5 km to the east. High quality silica rock remains a subsidiary target.

Following general reconnaissance, the main target remained the western end of a 4x1 km belt of steeply dipping, lower Cambrian sediments with carbonate sequences, which extend in a north westerly direction from Pine Hill.

5. PREVIOUS EXPLORATION

Although the area was part of BHP's EL 13/65 and EL 8/79 and later also fell within Amoco's EL 14/84, neither company undertook any work related to industrial minerals in this segment of their tenements (Ellis, in Jones, 1989).

Pioneer Silicon Industries Pty. Ltd. (PSI) embraced the area within its EL 14/88 but little, if any, work was carried out in this segment west of Pine Hill.

On taking over PSI's tenement in 1992, the Northwest Bay Co Pty Ltd successfully outlined a small resource of about 355,000 tonnes of good quality, open cuttable dolomite on the southern slopes of Kallista Hill situated approximately 2 km west of Pine Hill (Forster, 1993). Due to the demise of the operator, no production ensued and mineral title to the ground was ultimately relinquished.

In the early 1990s, Mineral Resources Tasmania (MRT) completed three shallow diamond drill holes as part of its reconnaissance of the Tertiary/Quaternary sequences of the surrounding area (for locations see Calver and Forsyth, 1999):

Hole Styx 2	:	0 - 31m	:	Quaternary sediments
Hole Styx 3	:	0 – 32	:	Quaternary sediments
		32 – 35	:	Cambrian sandstone
Hole Styx 6	:	0 – 21	:	Quaternary sediments
		21- 22	:	Ordovician

1:25,000 scale mapping of the Maydena Sheet was completed by MRT geologists Calver & Forsyth in 1999, providing a basic, up-to-date geological framework for this district.

In 2003, during its first year of tenure, J.J. McDonald & Sons Mining Pty Ltd focused its activities on both the dolomite and silica rock/flour prospectivity of the larger tenement area. Reconnaissance identified the Loading Spur silica rock/gravel prospect and the Hedgehog Ridge silica flour prospect for further follow-up. A market study and departure of a potential client did not encourage further pursuit of a viable dolomite resource at this time.

Attention during the second year of tenure was concentrated on the two silica prospects outlined. Only a low tonnage potential for silica rock/gravel was indicated at the Loading Bay Spur Prospect and deemed of no further immediate interest. In contrast, encouraging low levels of impurities, especially iron, were indicated by assays of several surface samples of silica flour and gravel at the Hedgehog Ridge Prospect.

The third year's activities were focused on the Hedgehog Ridge Prospect. They comprised line cutting and gridding to provide access for further assessment of the silica flour occurrences there, followed by grid mapping and limited surface sampling.

The fourth year's activities concentrated on the northern part of the deposit and were aimed at a preliminary assessment of the quality and yield of the material to hand.

During the fifth year of tenure, the main activities encompassed beneficiation test work on a small bulk sample from the southern part of the deposit. Field work was curtailed pending clarification and resolution of land access issues.

The sixth year's planned field activities were delayed due to the need to deal with regulatory matters related to the proposed drilling programme. However, air photography of the prospect area was completed. Discussions were held with geophysical contractors with a view to undertaking depth soundings of the sand and a raw material sample was submitted to TAM for preliminary testing assessment. Marketing of the silica flour end product from the prospect continued.

In the current, and seventh, year of tenure a small resistivity imaging survey was completed in the north western part of the prospect, followed by a limited drilling programme to test the main geophysical features.

6. CURRENT ACTIVITIES

6.1 Work done:

Hedgehog Ridge Prospect

- Resistivity Imaging Survey along three short lines.
- Drilling programme of four shallow RC holes.
- Drill sample analyses and sizing determination.
- Cleaned up, restored drill sites.
- Completed statutory quarterly and annual reporting.

6.2 Statistical Summary:

No. of geophysical lines	:	3
Total length surveyed	:	3 x 200m = 600m.
No. of shallow RC drill holes	:	4
Total length drilled	:	31m
No. of drill samples analysed	:	8
No. of determinations	:	88
Expenditure prior to current year	:	$67,116.00
Expenditure for 9 months to 30.09.09	:	$46,528.00
Cumulative Expenditure to 30.09.09	:	$113,644.00
Estimated expenditure for 12 months to 10.01.10	:	$49,000.00

6.3 Drill Hole Co-ordinates:

Table 1

Drill Hole	Approx Co-ordinates		Approx R.L.
HRD001	5265894mN	461307mE	335m
HRD001/A	5265891mN	461313mE	335m
HRD002	5265925mN	461350mE	330m
HRD003	5265312mN	461858mE	322m

Note: Co-ordinate Datum : AGD 1966

7. RESULTS

7.1 Hedgehog Ridge Prospect:

7.1.1 Geophysics

Prior to implementing a drilling programme at the prospect, it was deemed prudent to undertake a geophysical survey to gauge the possible lateral and depth extent of any sand in the drill target area. The focus of this activity was the north western segment of the prospect along 200m sections of previously cut grid lines 4500E, 4750E and 5000E (Fig.3), in an area where silica sand is exposed in several road cuttings.

As technical and logistical considerations eliminated ground probing radar, resistivity depth probing was adopted as the most suitable approach.

Details of the equipment used and methodology are provided by the contractor in Appendix 1.

The target sand was expected to be near-surface at shallow depths, so the electrode separation used was 2.5m giving a depth penetration in the order of 30 metres and spatial resolution of some 5 meters.

The survey yielded good quality data which identified several distinct resistivity features with good line to line correlation.

In summary, the central and eastern parts of each line show an area of high resistivity at relatively shallow depth extending from line to line in a north westerly direction for at least 500m. This direction corresponds to the regional strike of the underlying geological formations. On this basis, this resistivity anomaly is interpreted to represent near-surface bedrock.

This resistivity high is overlain on each line to varying extent by a lower resistivity layer up to about 10-15m thick. Because of its geometry and character, this layer was selected to be drill tested for sand.

A small pocket of elevated resistivity at surface towards the south western extremity of each survey line coincides with exposures of silica sand in road cuttings. This correlation is particularly evident on geophysical Line 1 (4500E) (Appendix 1).

The low resistivity layer at the north eastern end of each survey line from approx. +20m to +100m coincides with damp or moist alluvial soils in rainforest fringing the headwater basin of the Kallista River in this area.

7.1.2 Drilling

The overall objective of the drilling programme was to test for the possible presence of a near-surface, raw material silica sand/flour resource in excess of one million tonnes at the prospect. In this context, at least 10m of raw material silica sand would have to be intersected near-surface in order to meet the targeted resource tonneage.

The primary target showing significant exposure of silica material in several road cuttings was an area measuring some 500m x 200m extending from just north of grid line 4500E to 5000E and situated to the north east of the Gordon River Road. (Fig.3).

The southward continuation of this zone to just beyond grid line 5500E was assigned a lower priority.

The results of the resistivity soundings suggested that the lateral extent and depth of the sand under investigation could well be less than envisaged from extrapolation of available geological data and thus, in effect, signalling a significant reduction of the potential for the target volume of high quality silica sand at the prospect

In view of traffic control issues, environmental considerations and the possibility of providing yet another focus for environmental activism in the district, it was decided to adopt a two-stage, simpler, less intrusive approach to the drilling programme than originally envisaged.

For Stage 1, this involved the design, assembly and use of a much smaller, lighter, rubber-track-mounted, portable rig than currently available, with a nominal depth capacity of about 20m using a 3.5 inch downhole hammer. The light footprint and narrow width of the unit allowed the use of established grid lines for drill site access.

Thus, the use of this portable rig for the rapid assessment first phase of the programme, as opposed to a heavier, truck-mounted unit, ensured a more eco-friendly approach as it dispensed with the need for vegetation clearance, major access and drill pad construction using heavy equipment and traffic control measures required for a more detailed, Stage 2 Investigation, if implemented.

There was no visual impact, except for a 150cm compressor positioned off-road and no impact on traffic movement along the Gordon River Road.

After due consideration, the main resistivity features on geophysical Line 2 (part of grid line 4750E) were selected for investigation by Stage 1 drilling. These were the resistivity low zone at around -80m the resistivity high at about -40m and the thin layer of low resistivity overlying it (viz . Appendix 1, Line 2, Iteration 3).

The former area at -80m was investigated by hole HRD001 which intersected 0.8m dark organic soil, followed by 9m orange yellow clays to 10m. Sample return was, on the whole, poor and a hole blockage occurred at 4m. As there were no indications of silica sand or flour, the hole was stopped at 10m.

Hole HRD001/A was a redrill of hole HRD001. This yielded better sample return of mainly clays to 4m where a pebbly/bouldery horizon could not be penetrated. A1m intercept from 2m of mixed sand and clay assayed high in Al2O3, Cr2O3, Fe2O3, TiO2 and P2O5. (Appendix 4).

Hole HRD002 encountered 1.8m of fine whitish sand from 0.2m containing high Al2O3 at 0.089% and TiO2 at 0.118%. Fe2O3 levels at 0.11% were more encouraging (Appendix 4). The remainder of the hole returned largely clays before bedrock at 10m.

An interpretation section along Line 2 features in the geophysical consultant's report in Appendix 2.

Hole HRD003 on line 5500E on the edge of a steep slope (Fig.3), and outside the main target area, gave the best results in terms of sand intercepts. 6m of fine white sand from 0-6m averaged a high 0.083% Al2O3, 0.025% Fe2O3 and 0.058% TiO2. (Appendix 4). Cr2O3 and P2O5 averaged an acceptable 1ppm and 0.001% respectively. Penetration difficulties were encountered at 6m and the hole was discontinued.

Detailed drill hole logs are provided in Appendix 3.

Despite some reproducibility problems, particle size analyses for two samples from this drill hole using a Mastersizer 2000 yielded average D50 estimates of around 45 micron and 75 microns, consistent with fine sand. (Appendix 5).

The most disappointing outcome of the drilling programme is the absence of any significant intersections of silica sand in the holes along Line 2 despite a 3-4m exposure of

silica sand in an old road cutting near-by. This points to a lack of continuity of any major near-surface sand occurrences between Line 1 and 3 on the basis of the geophysical responses noted and downgrades the potential of the target area to host the quantity of raw material sand anticipated from geological extrapolations.

The high levels of alumina, titania and iron oxide further downgrade the prospect as a source of silica flour supply for the electronics display industry.

Hole HRD003 confirmed the existence of a small patch of silica sand at the southern end of the prospect. But its location close to the Gordon River Road could preclude its extraction and the high levels of alumina, titania and iron, and possibly its fineness would make it unattractive for use in the electronics display panel industry.

8. ENVIRONMENTAL & REHABILITATION ACTIVITIES

The geophysical survey caused no environmental damage. There was only negligible environmental impact as a result of the drilling activities as there was no need for access or drill pad construction due to the specially designed and constructed equipment used. Drill sites were cleaned up, rehabilitated where necessary, holes capped and all waste removed.

9. CONCLUSIONS

9.1 Absence of significant intercepts of near-surface silica sand or flour in holes 1,1A and 2 significantly diminishes the resource potential at the Hedgehog Ridge Prospect north of the Gordon River Road.

9.2 Any remaining resource potential at the prospect would seem to be confined mainly to narrow zones or small pockets of silica sand and flour located close to the road. Extraction of these resources would most likely be technically and environmentally contentious.

9.3 Under these circumstances, further expenditure at the prospect is deemed to be unwarranted at the present time.

10. RECOMMENDATIONS

10.1 Discontinue further activities and relinquish the tenement.

10.2 Remove all remaining grid pegs and line marker tape.

11. REFERENCES

Calver, C R & Forsyth S M	1999	Maydena, Tasmania; Digital Geological Atlas, 1:25,000 Series; Tasmanian Geological Survey
Ellis, P D in Jones, P A	1989	Exploration Licence No. 14/88, Maydena, Tasmania. Progress Report on Exploration Activity 5th August 1988 to 5th July 1989
Forster, M C	1992	EL 14/88, Maydena, Annual Report – Year 4.
Forster, M C	1993	EL 14/88, Maydena, Annual Report – Year 5.
Krummei, G K	2003	Exploration Licence No.17/2002, Maydena, Tasmania. Annual Report to 10 January, 2004.
Krummei, G K	2004	(a) Exploration Licence No.17/2002, Maydena, Tasmania. Partial Relinquishment Report
Krummei, G K	2004	(b) Exploration Licence No.17/2002, Maydena, Tasmania. Annual Report to 10 January, 2005
Krummei, G K	2005	Exploration Licence No.17/2002, Maydena, Tasmania. Annual Report to 10 January, 2006.
Krummei, G K	2006	Exploration Licence No.17/2002, Maydena, Tasmania. Partial Relinquishment Report
Krummei, G K	2006	Exploration Licence No.17/2002, Maydena, Tasmania. Annual Report to 10 January, 2007.
Krummei, G K	2007	Exploration Licence No.17/2002, Maydena, Tasmania. Annual Report to 10 January, 2008.
Krummei, G K	2008	Exploration Licence No.17/2002, Maydena, Tasmania. Annual Report to 10 January, 2009.
McBain, M	2003	Market Survey – Dolomite in Tasmania AusITech Services Report

APPENDIX 1

RESISTIVITY IMAGING SURVEY RESULTS

Resistivity imaging survey results

Hedgehog Ridge Prospect
Exploration Licence 17/2002

Maydena Sands Pty Ltd

Maydena
Tasmania

by Papp Geophysical Services
January 2009

Dr Éva Papp Papp Geophysical Services POBox 694 Queanbeyan NSW 2620	Phone: 02-6238 2114 or 02-6238 2121 Fax: 02-6238 2114 Mobile: 0402 132581 Email: sales@papp-geophysics.com.au Web: www.papp-geophysics.com.au

Resistivity imaging survey results
Hedgehog Ridge Prospect
Exploration Licence 17/2002

Maydena Sands Pty Ltd

Maydena
Tasmania

by Papp Geophysical Services

The purpose of this report

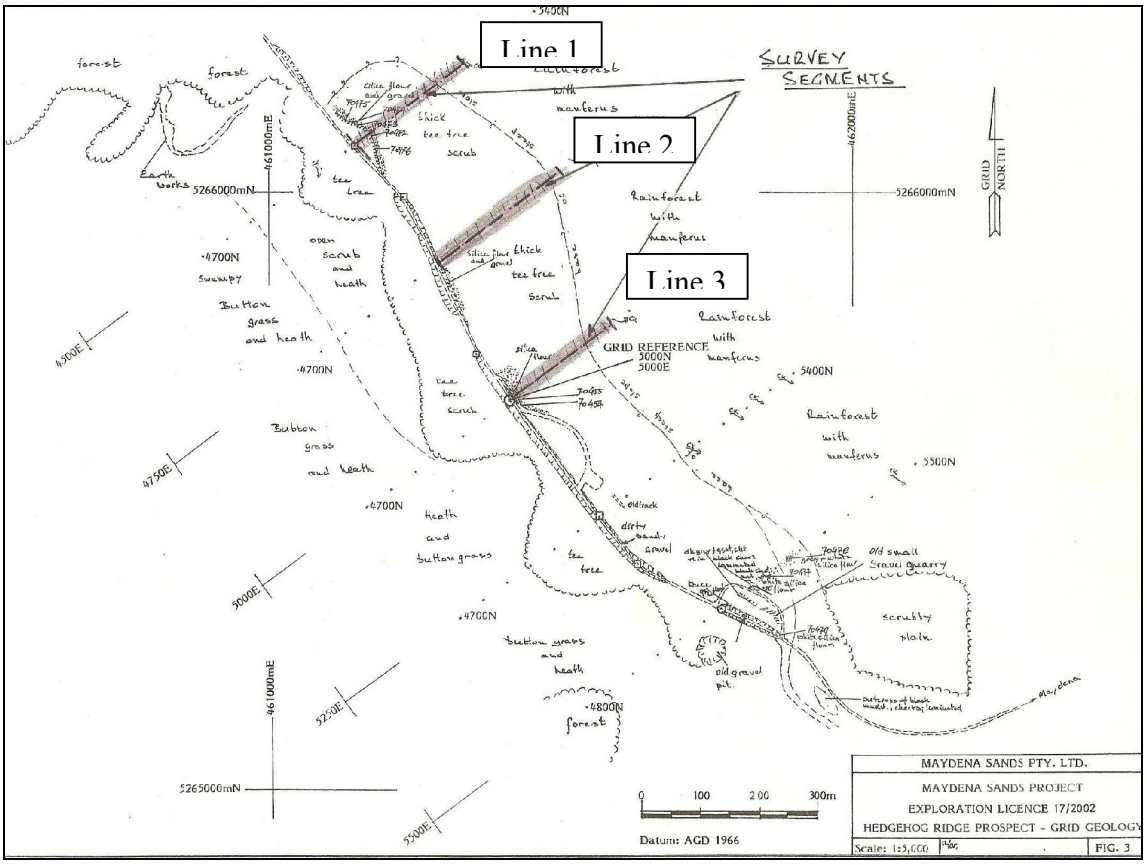
The purpose of this report is the description of the results of a ground based geophysical survey carried out between the 18-24 January 2009.

The location of the survey is the Hedgehog Ridge Prospect, Exploration Licence 17/2002, Tasmania. The survey consisted of three 200m-long resistivity imaging survey lines, using 2.5 m electrode take-out and achieving 30 metres depth penetration. The aim of the survey is the mapping of the thickness of the sand and the delineation of the top of the underlying basement bedrock.

The phases of the survey were; planning, survey design, mobilisation, field familiarisation, geophysical data collection, demobilisation, office-based computer processing, data interpretation and report writing. The survey did not include geological mapping or data integration with other data types.

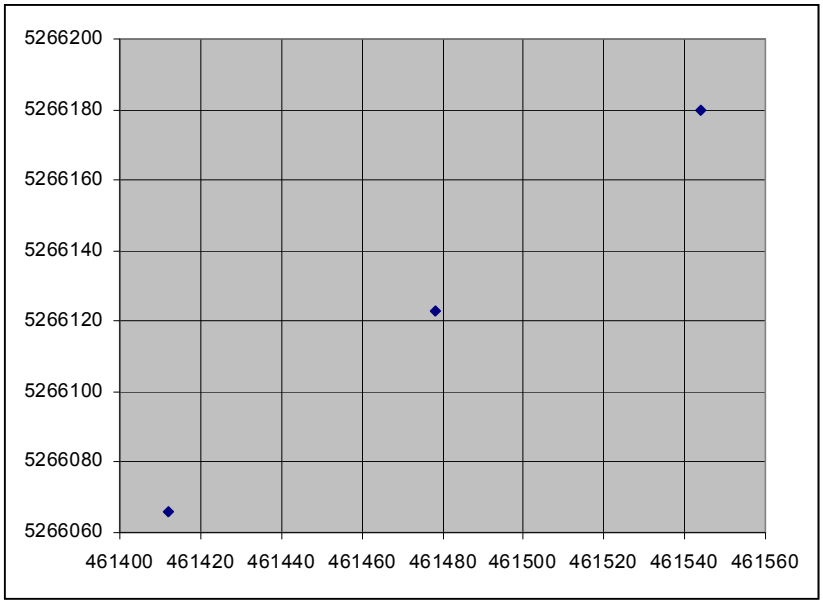
Location of the SURVEY

The map of the survey area is shown below, obtained from a scanned company prospect plan. The three lines are numbered – for the purpose of the resistivity survey - as marked on the map below.



The position of one of the survey lines (Line 2) has been determined during the field visit, on the 21 January 2009, using a Garmin Foretrex 101 hand-held GPS, WGS 84 datum and SUTM projection Zone 55 . The horizontal accuracy of measurements is approximately 10m. The data is contained in the following table and plotted below:

Eastings	Northings	
0461412	5266066	Beginning of Line 2 (-100m)
0461478	5266123	Middle of Line 2 (0m)
0461544	5266180	End of Line 2 (+100m)



A description of the resistivity imaging technique Used

Instrumentation

ABEM Terrameter LUND Imaging System was used for data collection with a SAS 2000 booster.
http://www.abem.se/products/sas4000/sas4000.php

Data collection

The SAS300 instrument provides the DC current (drawn from batteries), according to a pre-set level. The Hedgehog Ridge measurements used 20-50mA current.

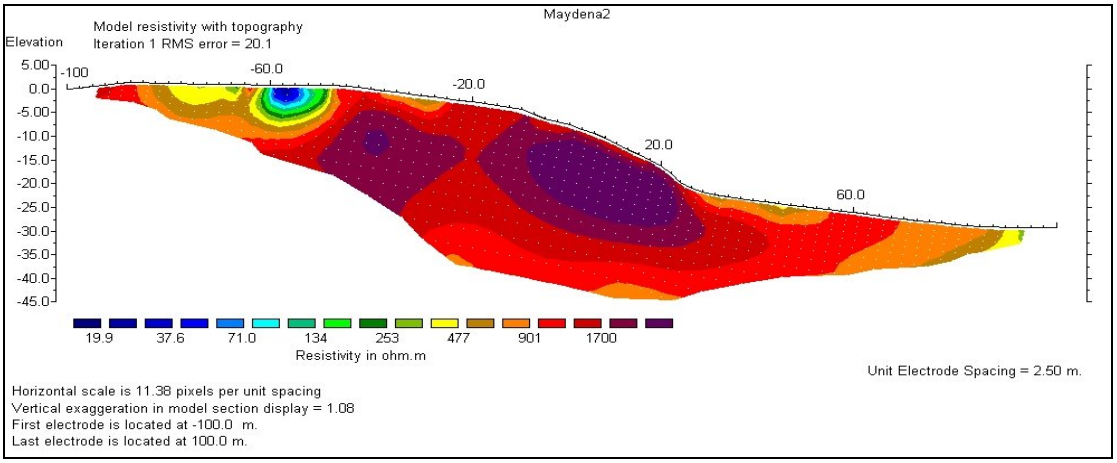
The LUND instrument – basically a sophisticated switch box – switches between pairs of electrodes driven by pre-written programs called protocol files, according to specific array types used for the particular measurement. For the Hedgehog Ridge survey Wenner arrays had been used; for Lines 1 and 2 "Wenner long" and "Wenner short" arrays together, while for Line 3 "Wenner long" only.

The instrument has a built-in quality control and feedback system, which provides the operator with warning in case of insufficient ground coupling of any of the electrodes, or for various instrument malfunctions.

Data quality assessment

During data collection the instrument provides warning if the data is insufficient quality compared to the standards of collection parameters.

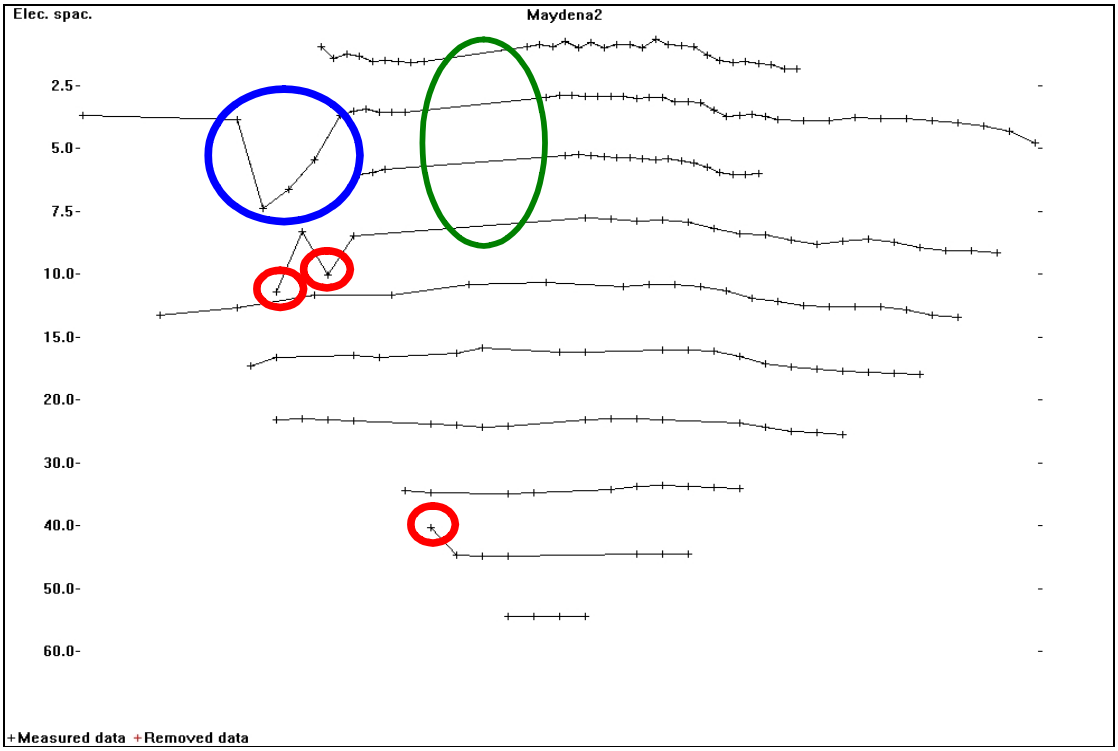
Once the data has been collected, it is imaged as a vertical section and a preliminary inversion is carried out. The model resistivity for Line 2 - after the first iteration - is shown below. The colour scheme used is logarithmic. A strong low anomaly is apparent, centred at approximately the -55m surface mark.



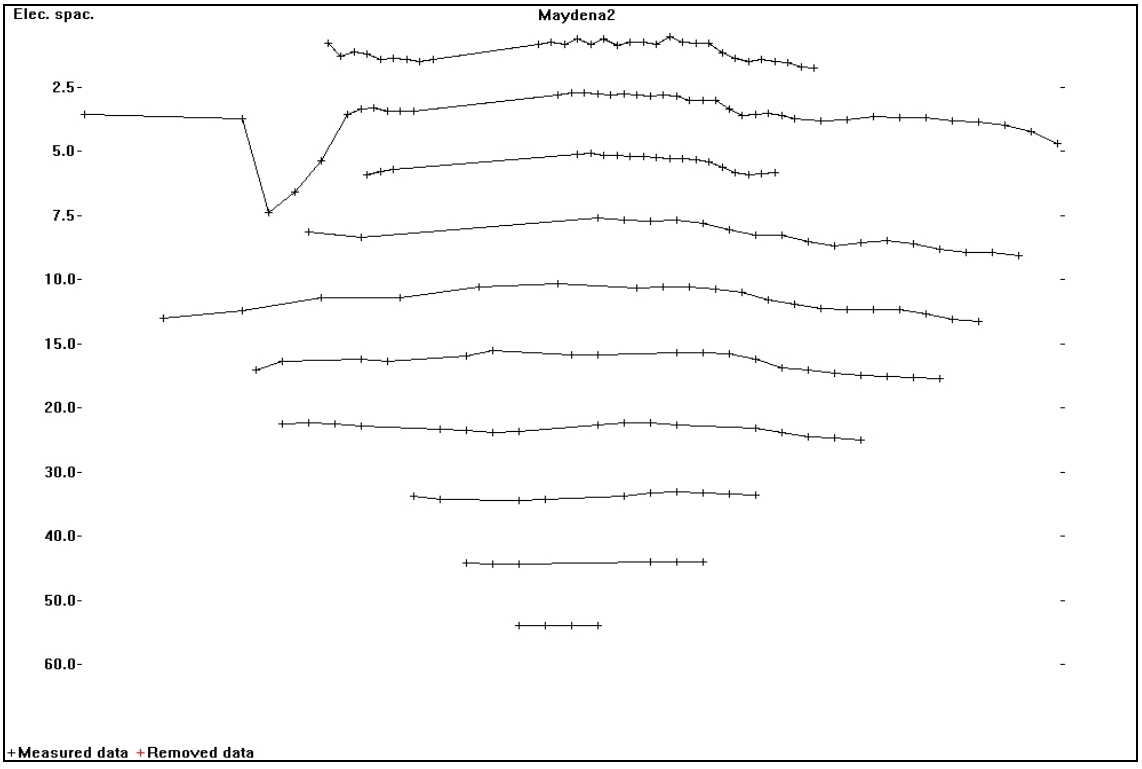
The raw data is shown below as a line graph below. Examination reveals three data points circled with red below. Two points have anomalously low values and one has an anomalously high value. These data points need to be removed from further processing, as they are likely to be anomalies introduced by insufficient coupling of survey pegs or noise.

Another few data points, circled blue, also show strong negative values, however, the values of those data points are consistent with their neighbours and so they are left in the data matrix.

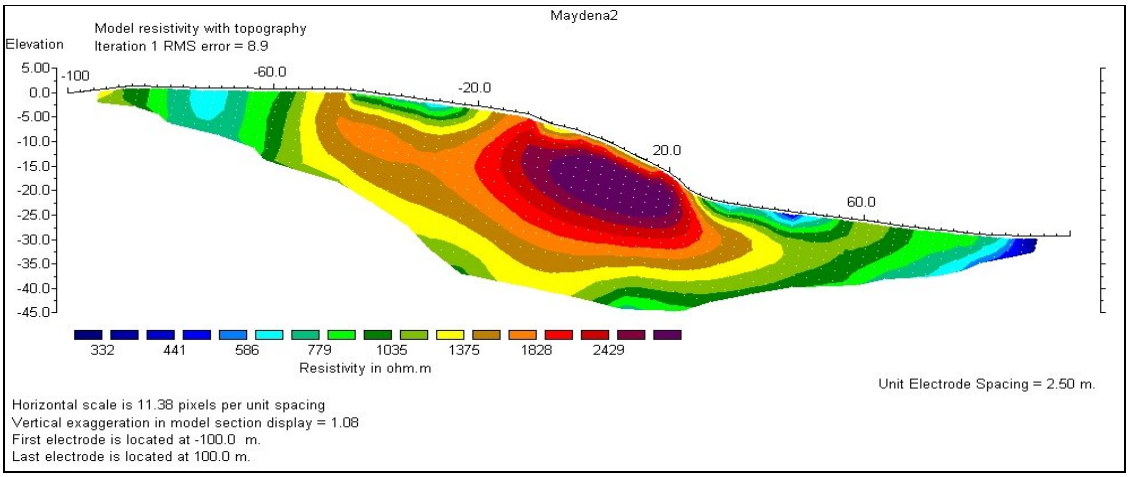
The area of the data matrix circled green has very few data points. This is due to the field warnings received during measurement, when some of the electrodes had insufficient coupling. The decision of operator was to exclude those electrodes from the measurement hence some of the data values have been lost.



The final data matrix for Line 2, after noisy data have been eliminated, is shown below. This data matrix is then used for further processing and inversion. For the Hedgehog Survey, Line 2 was the noisiest of the three lines.



Once the data has been cleaned, the inversion is repeated. The model resistivity for Line 2 is shown below, after the first iteration. In comparison with the model resistivity of the noisy data, it is apparent how the main geological anomaly emerges once false anomalies are removed.



Inversion

The inversion is an iterative process. The program creates a resistivity model, computes an apparent resistivity section for the model, than compares the measured and computed data. The RMS error is computed between the two, than a new, refined model is calculated to reduce the RMS error. There is no absolute "good" result, a series of solutions presented from which the geologist will have to select the most likely acceptable one. The model with the smallest RMS error is not necessarily the best solution.

The model resistivity sections

The calculated model resistivities displayed as vertical sections, showing the ground surface on top, distance marked in metres. All three survey lines are 200 metres long.
The -100 m end of each line is found on the left of each section, corresponding to the south-western end of the survey lines. The middle of each line is at 0 metres (where the computer and instruments were set up) and the right side of each image is at +100 metres, corresponding to the north-eastern end of the survey lines.

The depth of the penetration of the survey is approximately 30 metres, shown on the vertical axis of the figure on the left. There is a vertical exaggeration of approximately 1:1.08. Topography is included in the calculations and displayed on the sections.

Red colour marks high resistivity values. The more red-coloured, the more resistive and the more blue-coloured the more conductive are the earth materials. The numerical value of the calculated model resistivities is shown on the colour code, below the image, in ohm-metres.

Interpretation

The interpretation of resistivity sections will have to consider the fact that the only property the system presents the interpreter with is apparent resistivity. The numerical values of apparent resistivities of the various anomalies give some guide to the range of materials, however care should be taken as typical resistivity values overlap for many materials (see table below). The geometries of anomalies are a very useful guide for interpretation. In all cases, the more ancillary information available the better the interpretation will be.

Advantages of the technique

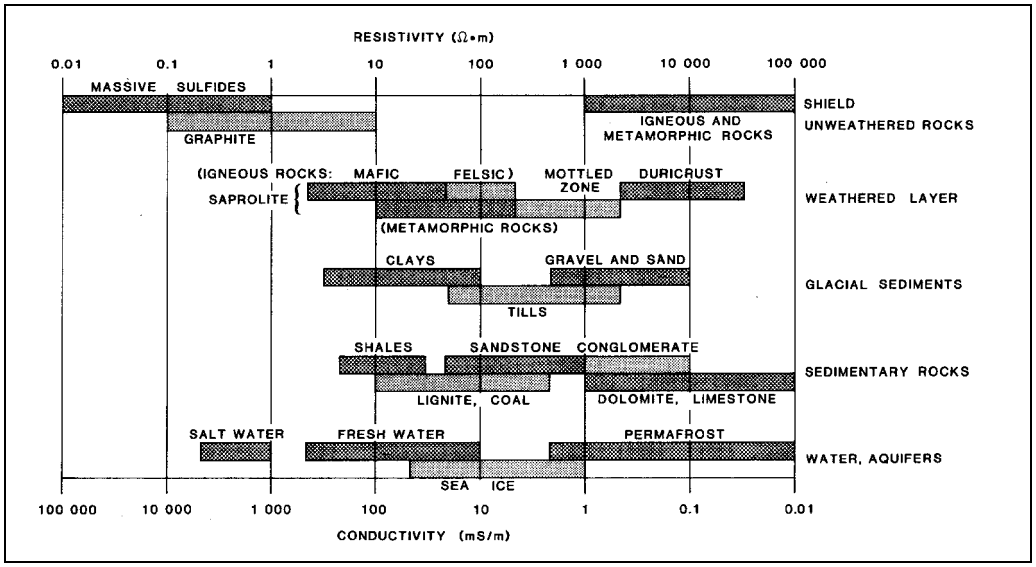
A major advantage of the method is that it produces continuous images of the variation in properties in the subsurface. Electrical imaging can serve as an excellent basis for planning detailed investigations via for example a drilling and sampling program with optimised sampling locations. The detail investigation results can then in turn be used as a base for a refined interpretation of the electrical imaging data, leading to a comprehensive and reliable model of the underground

Limitations

As the inversion is an iterative process, the computation itself does not provide a definite solution, rather a range of solutions. The geologist has to make a decision on which inversion solution is the most acceptable. Usually some other body of information, such as soil sampling, drilling or another type of geophysics is required to make that decision.

Another limitation is the limited resolution of the survey. The electrode distance is the most important parameter, defining the depth penetration as well as the spatial resolution of the results. For the Hedgehog Survey the electrode distance is 2.5 metres, giving a 30 metres depth penetration (not taking into account topography) and a generally about 5 metres spatial resolution.

The third important limitation is the fact that the resistivities of rock materials are not unique, but are covering overlapping ranges. Hence interpretation is only possible if additional information is available on the types of sub-surface materials possibly encountered during the survey. The table below shows typical conductivities/resistivities of rock materials.

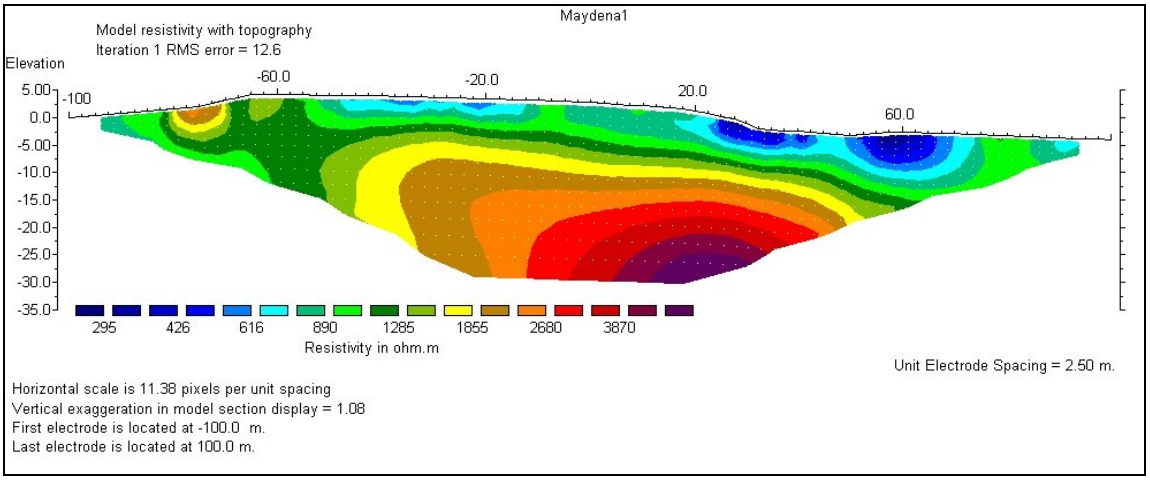


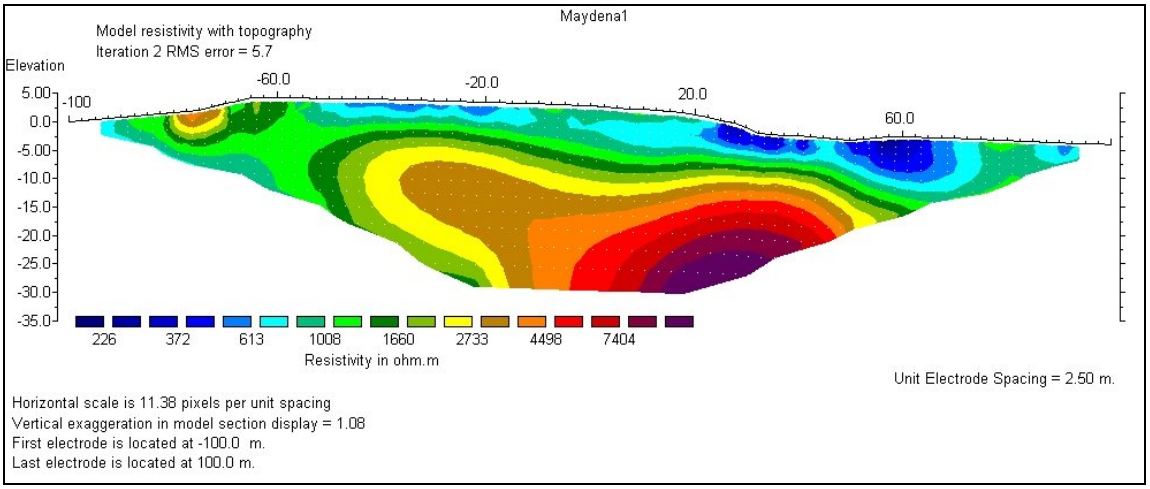
Typical conductivities of rock materials. From Palacky (1987).

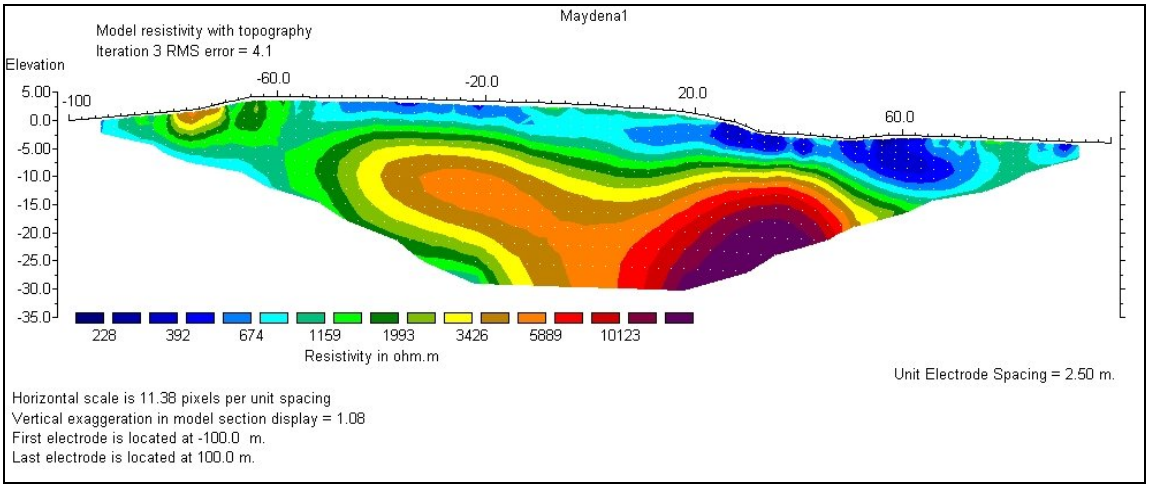
Hedgehog Ridge Resistivity survey results

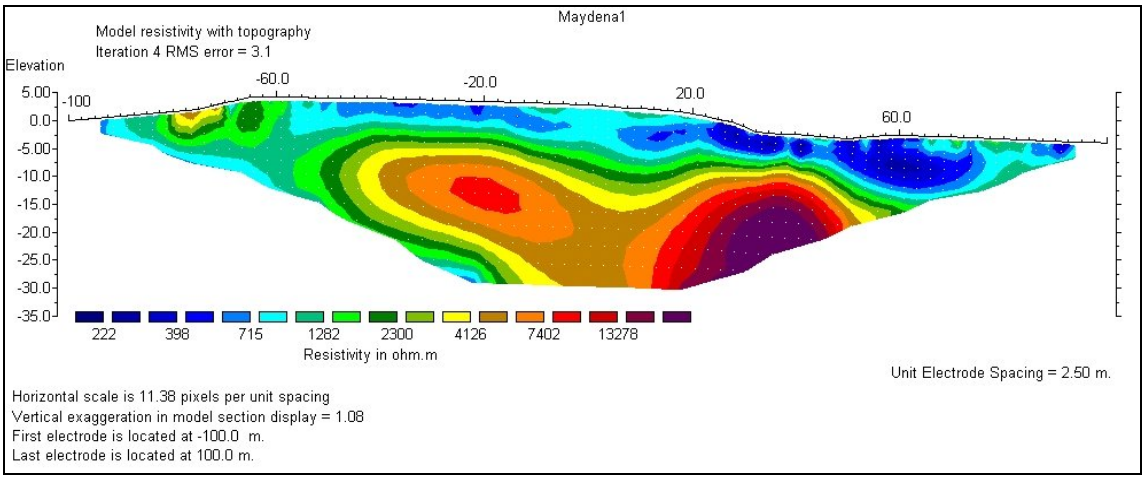
For this survey, given the fact that there is no other information available for Papp Geophysics apart from the field survey results, a range of iterative solutions are presented for each survey line. Maydena Sand personnel will have the option of choosing the most appropriate solution according to ancillary data available for confidential company use.

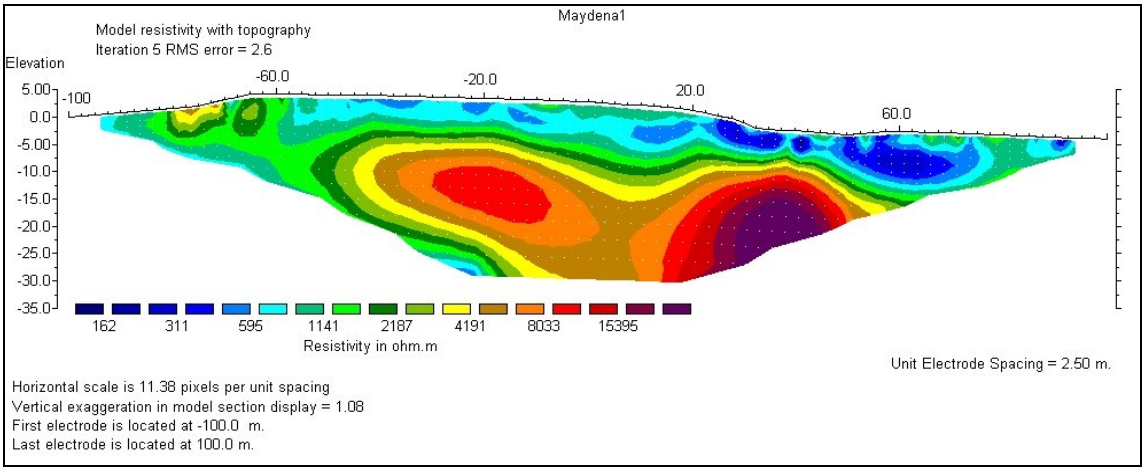
Line 1



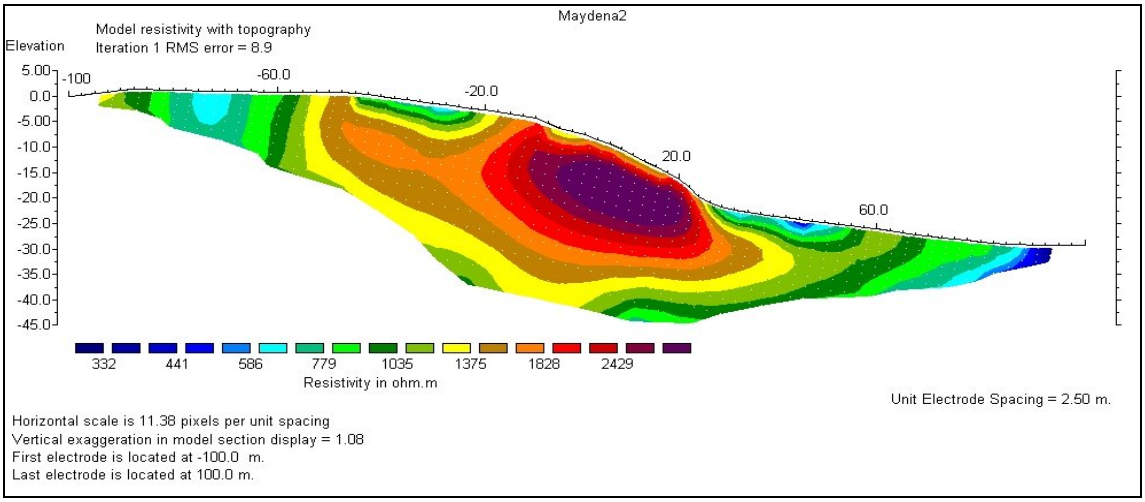


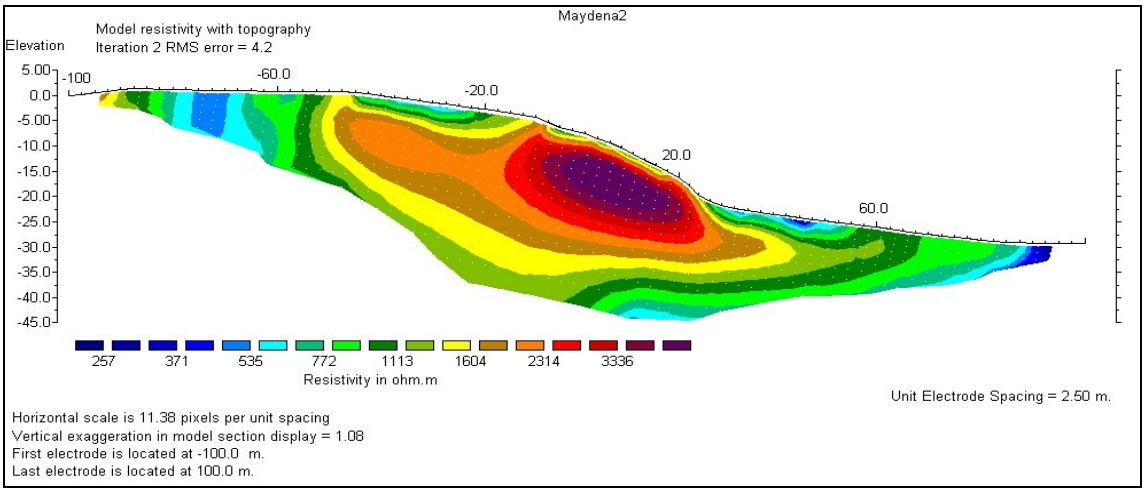


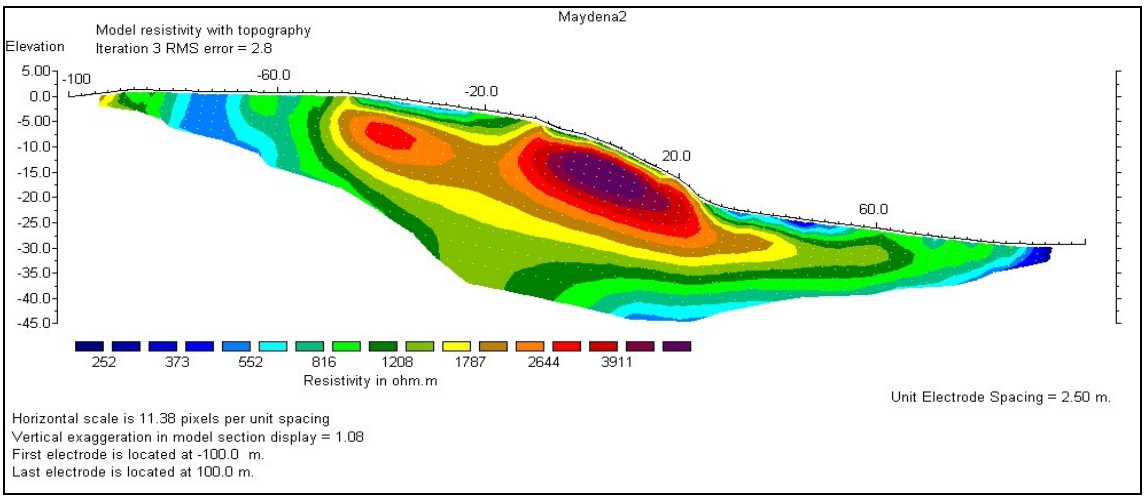


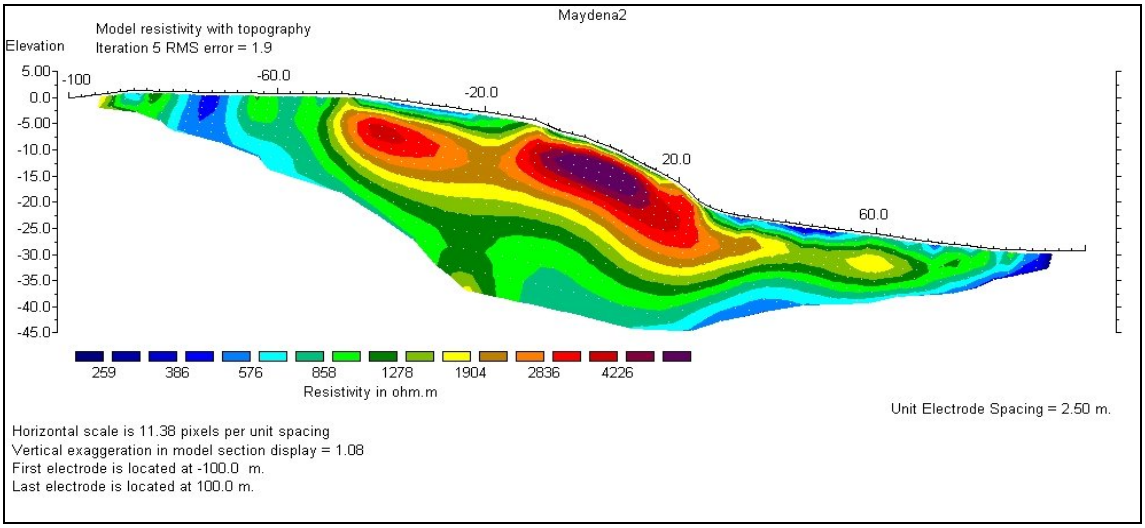


Line 2

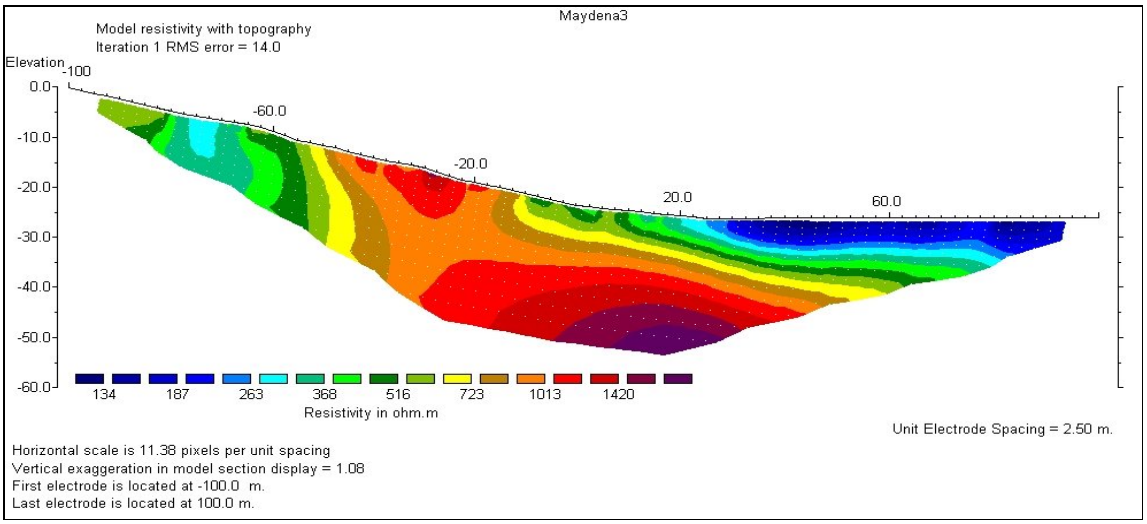


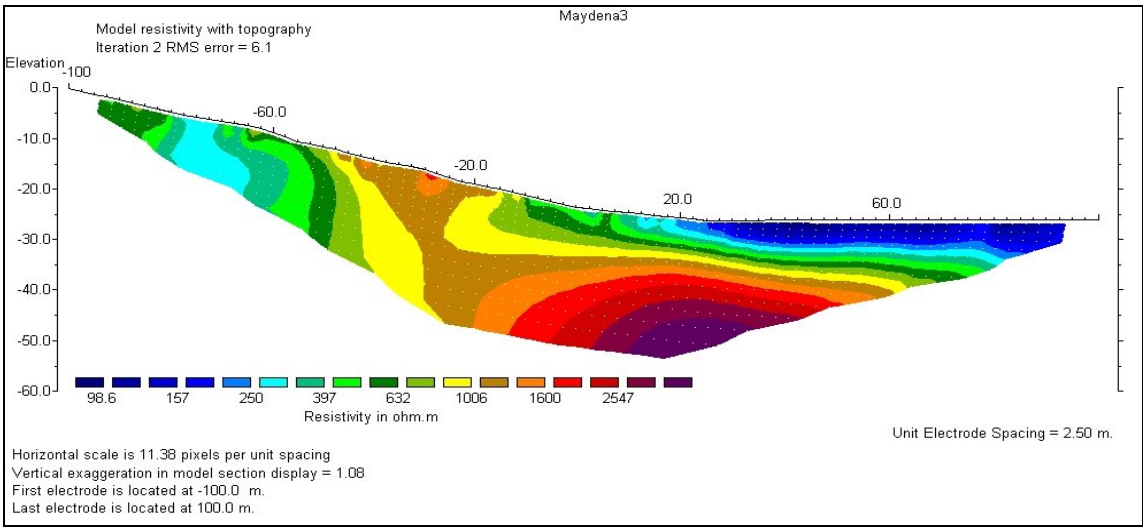


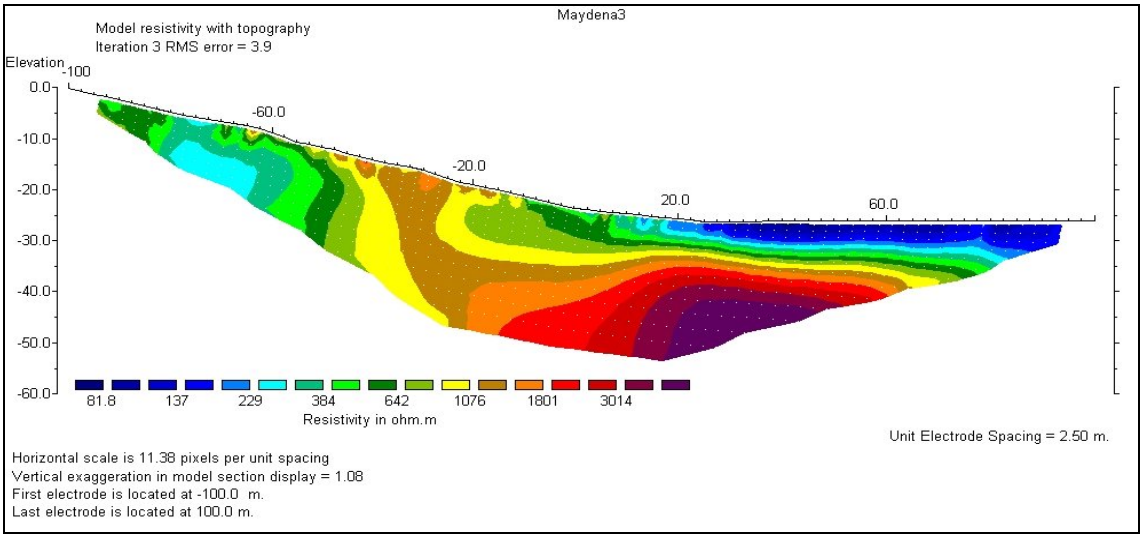


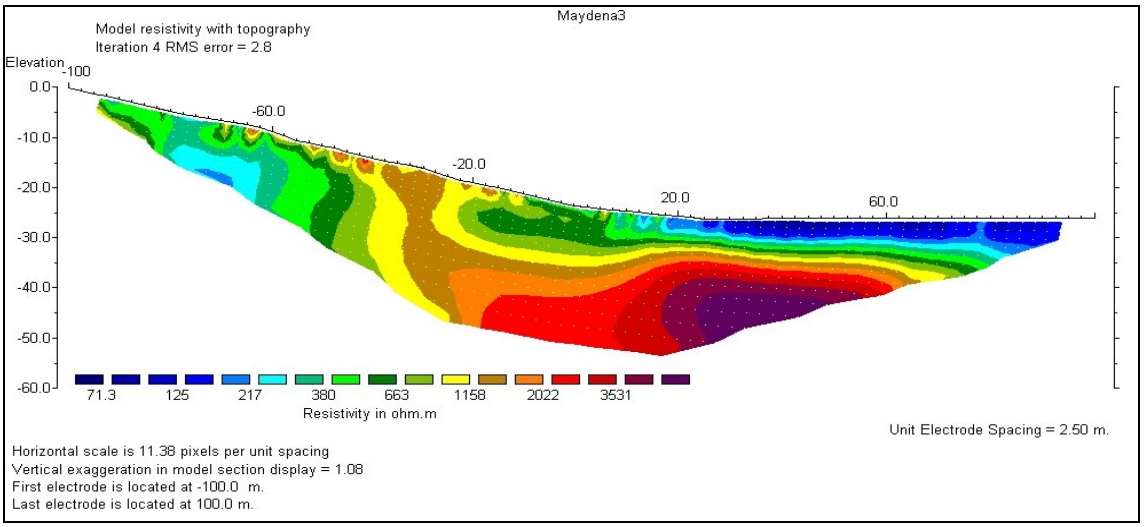


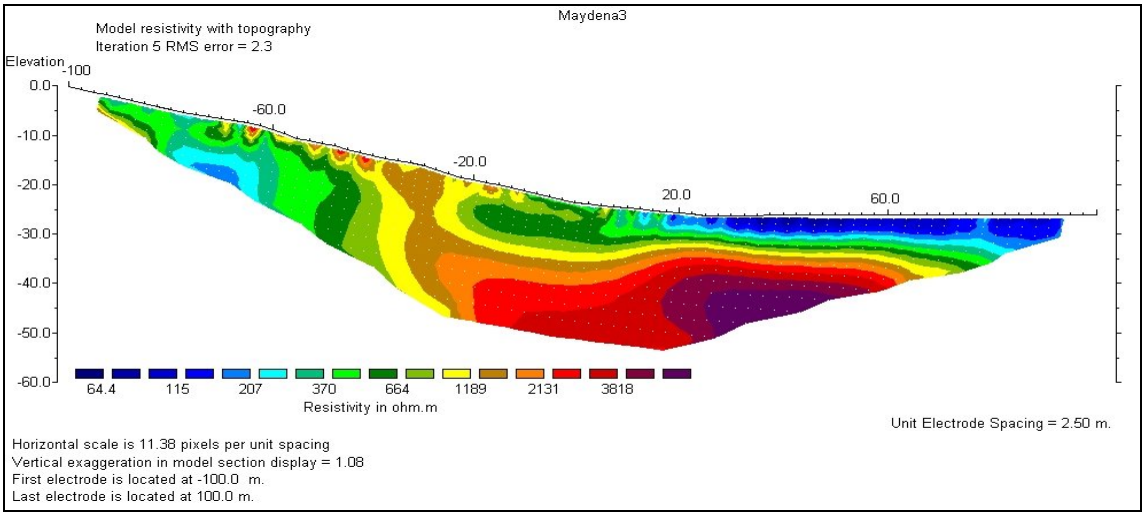
Line 3

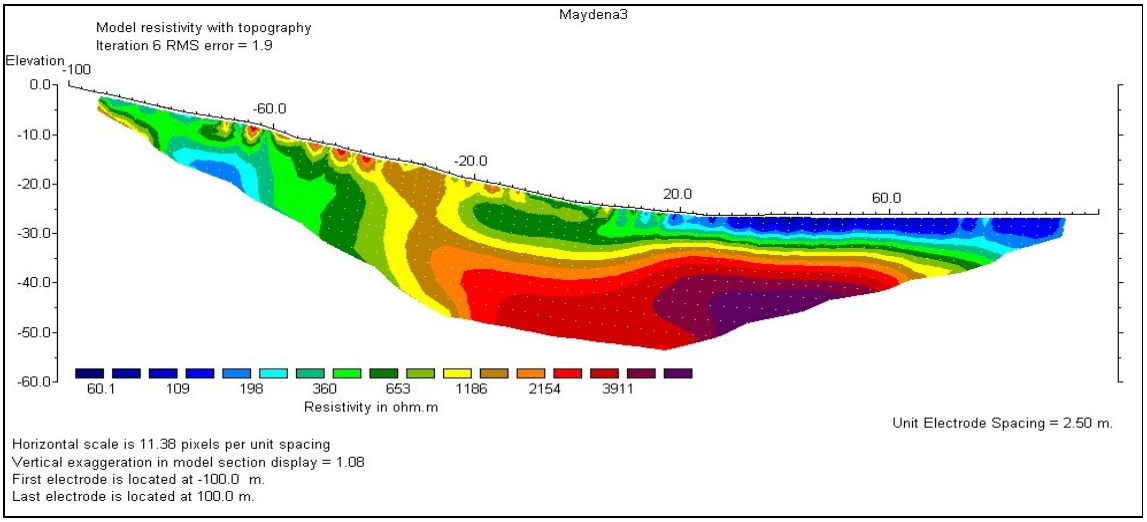


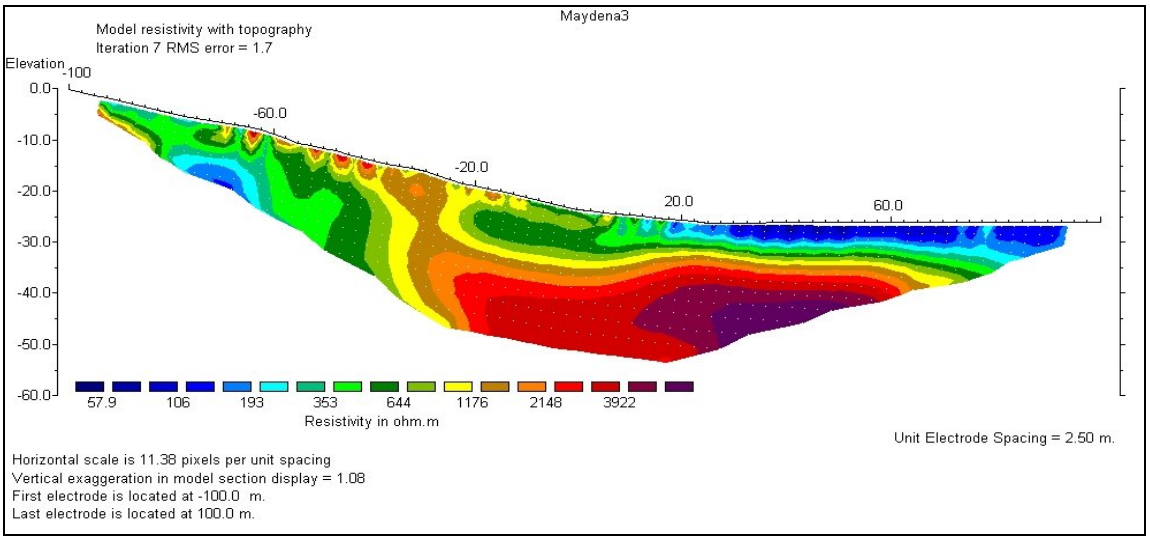


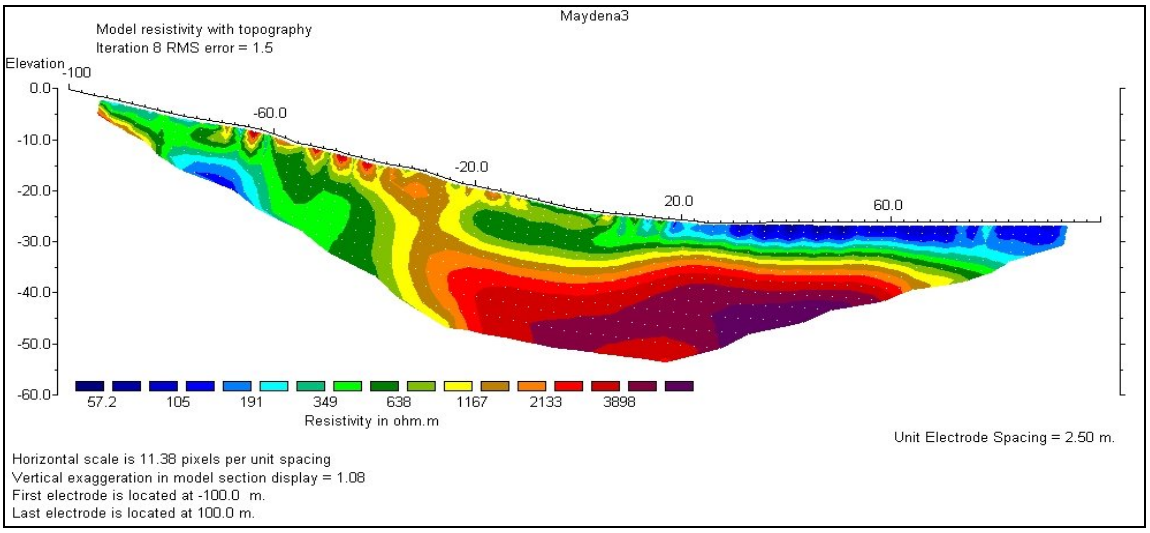












Recommendations

The survey resulted in good quality data and coherent model resistivity sections. The anomalies cover the resistivity ranges expected. The geometrical properties of anomalies are also consistent with geological expectations. The three sections yielded anomalies, which can be combined into a consistent 3D solution. Our recommendation is to consider all available ancillary data by company personnel and assign rock types to the anomalies present on the resistivity sections. The range of obtained model resistivities consistent with sand and gravel and also with various bedrock types known to be present at the site.

APPENDIX 2

RESISTIVITY IMAGING SURVEY

DRILLING AND INTERPRETATION RESULTS

Resistivity imaging survey
Drilling and interpretation results

Hedgehog Ridge Prospect
Exploration Licence 17/2002

Maydena Sands Pty Ltd

Maydena
Tasmania

by Papp Consulting
September 2009

Dr Éva Papp
Papp Consulting
37 Stephen Street
Ainslie ACT 2602

Phone: 02-6166 1523
Fax: 02-6166 1523
Mobile: 0402 132581
Email: sales@papp-geophysics.com.au
Web: www.papp-geophysics.com.au

Resistivity imaging survey
Drilling and interpretation results
Hedgehog Ridge Prospect
Exploration Licence 17/2002

Maydena Sands Pty Ltd

Maydena
Tasmania

by Papp Consulting

The purpose of this report

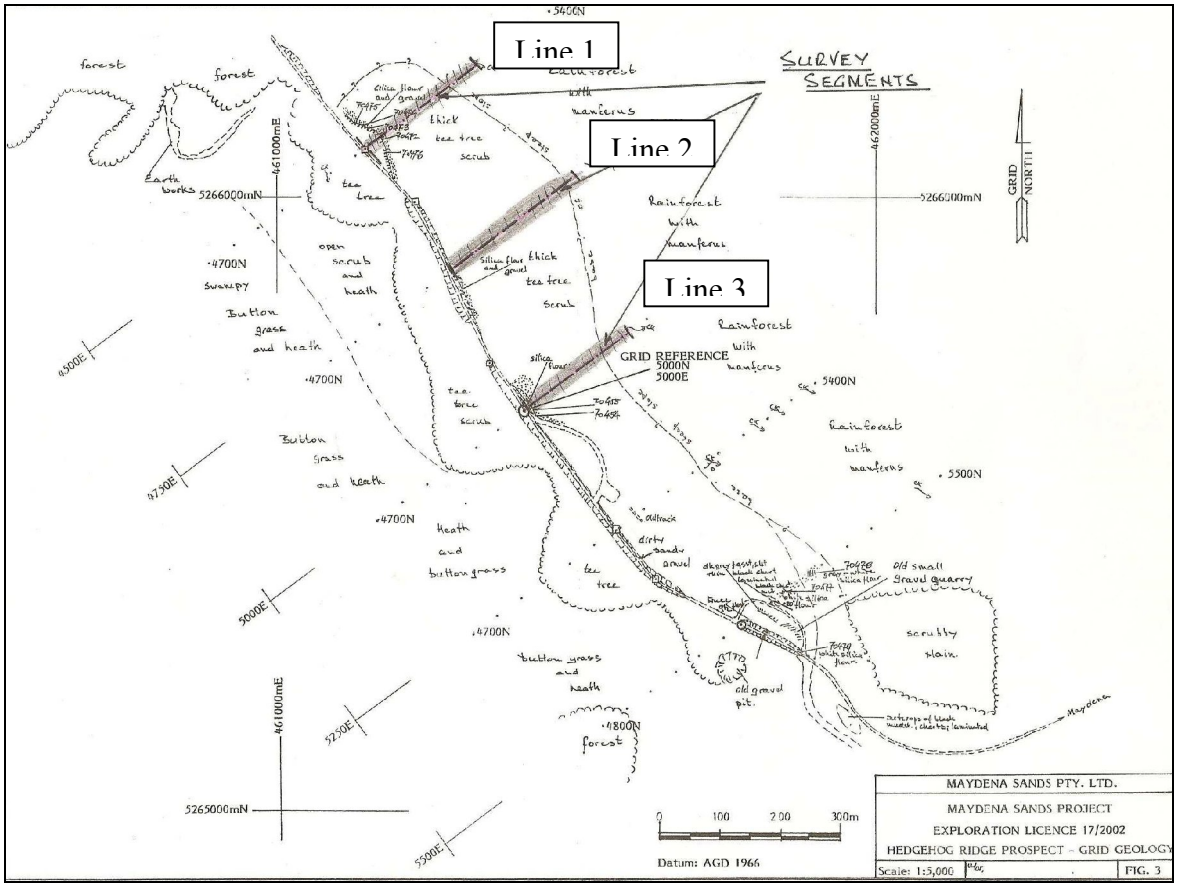
The purpose of this report is the description of the interpretation results for a ground based geophysical survey carried out between the 18-24 January 2009.

The location of the survey was the Hedgehog Ridge Prospect, Exploration Licence 17/2002, Tasmania. The survey consisted of three 200m-long resistivity imaging survey lines, using 2.5 m electrode take-out and achieving 30 metres depth penetration. The aim of the survey was the mapping of the thickness of the sand and the delineation of the top of the underlying basement bedrock.

After the completion of the geophysical survey drilling took place and three drill logs have been received. The geophysical data has been interpreted in the light of the drilling results.

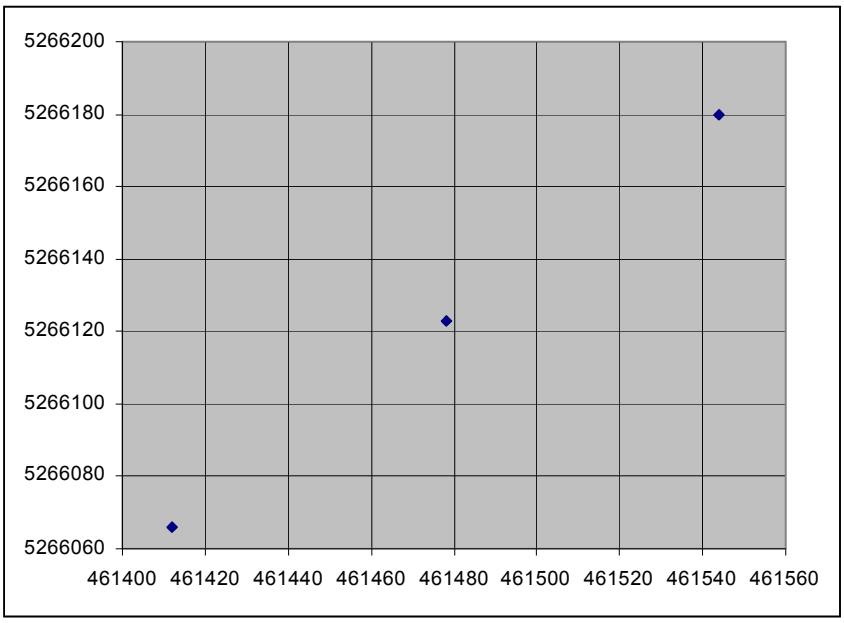
Location of the SURVEY

The map of the survey area is shown below, obtained from a scanned company prospect plan. The three lines are numbered – for the purpose of the resistivity survey - as marked on the map below.

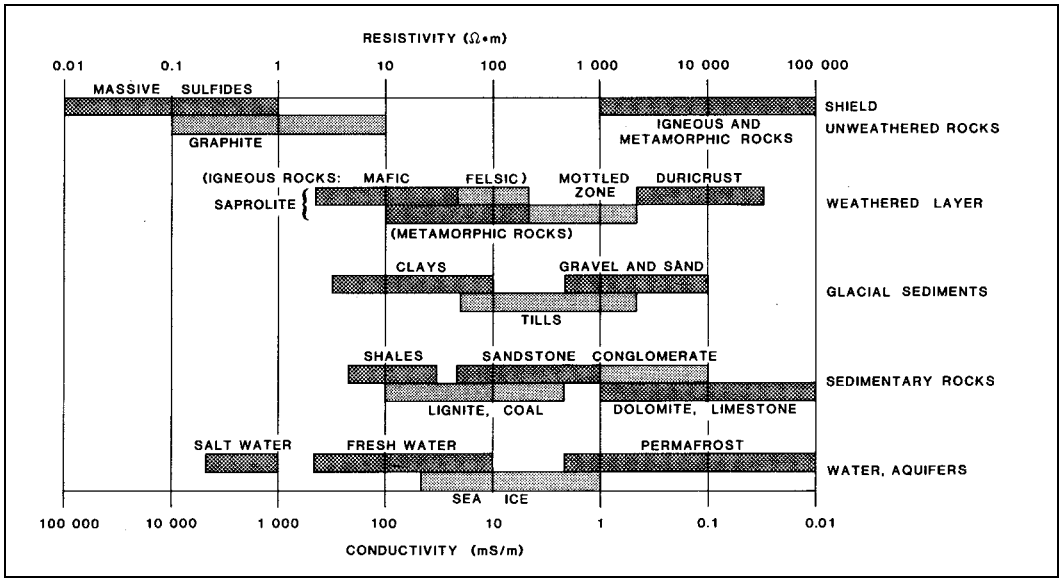


The position of one of the survey lines (Line 2) has been determined during the field visit, on the 21 January 2009, using a Garmin Foretrex 101 hand-held GPS, WGS 84 datum and SUTM projection Zone 55. The horizontal accuracy of measurements is approximately 10m. The data is contained in the following table and plotted below:

Eastings	Northings	
0461412	5266066	Beginning of Line 2 (-100m)
0461478	5266123	Middle of Line 2 (0m)
0461544	5266180	End of Line 2 (+100m)



Typical conductivities of rock materials

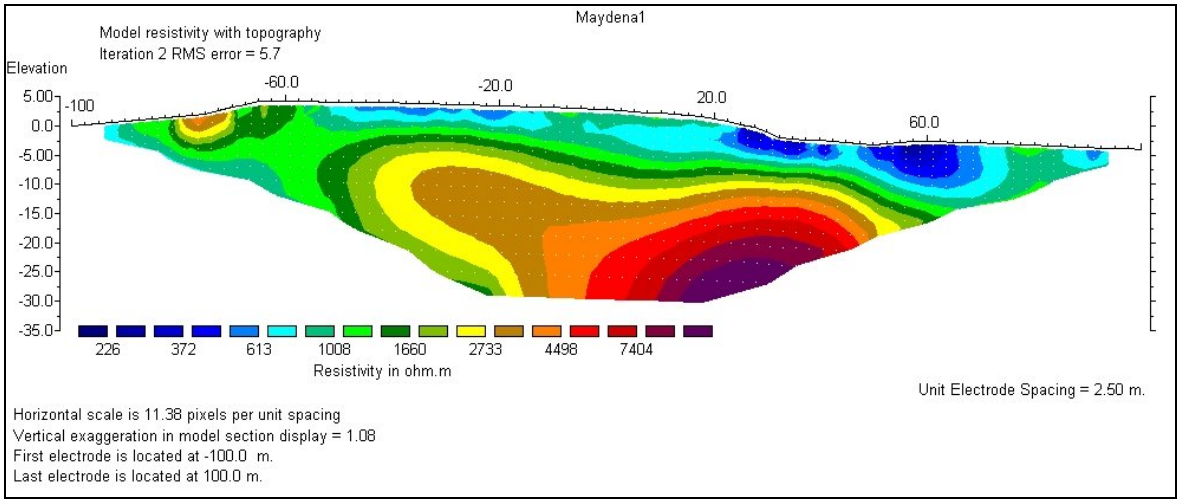


Typical conductivities of rock materials. From Palacky (1987).

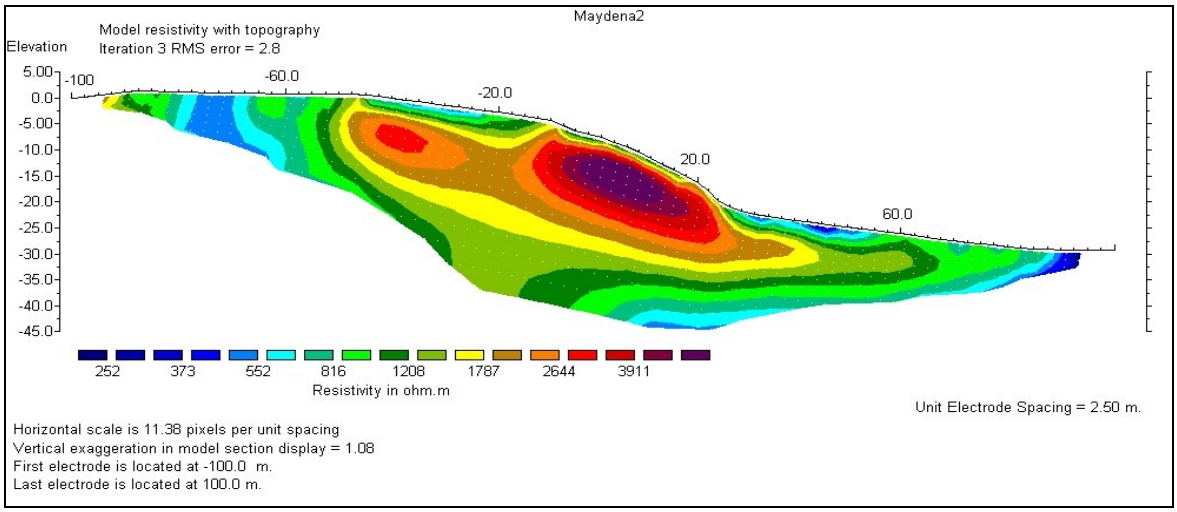
Hedgehog Ridge Resistivity survey results

Given the fact that there was no other information available for Papp Geophysics apart from the field survey results, a range of iterative solutions have been presented for each survey line in the initial report. After receiving the drilling information, Iteration 3 was chosen for Line 2. Based on the information obtained for Line 2, Iteration 2 was chosen for both Line 1 and Line 3.

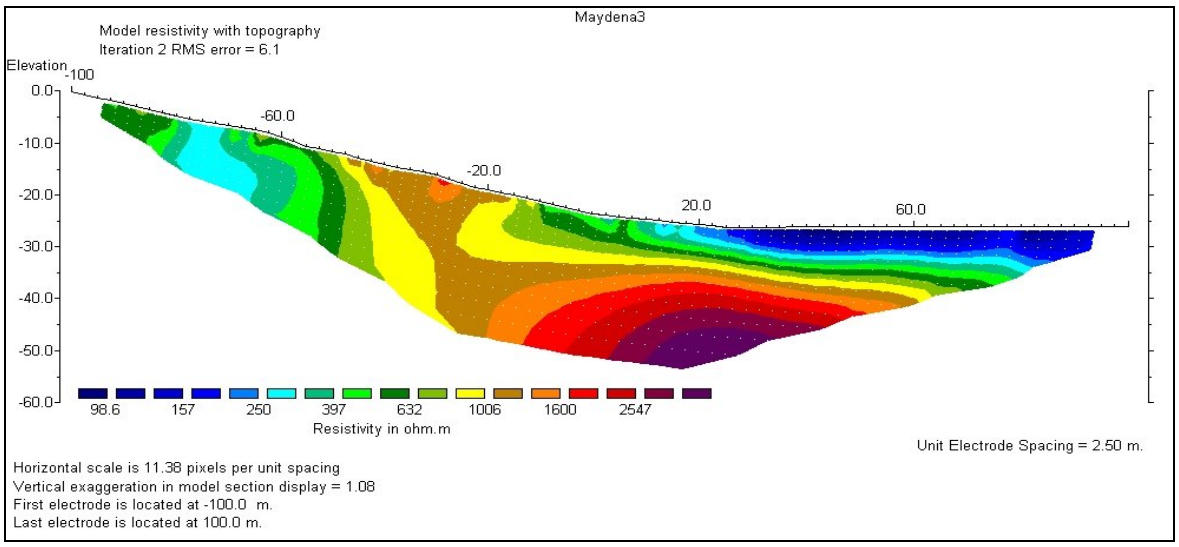
Line 1



Line 2



Line 3



Drill logs

Hole 1

0-0.8m	Dark organic soil
0.8-10m	Clays: orange, yellow, cream EOH

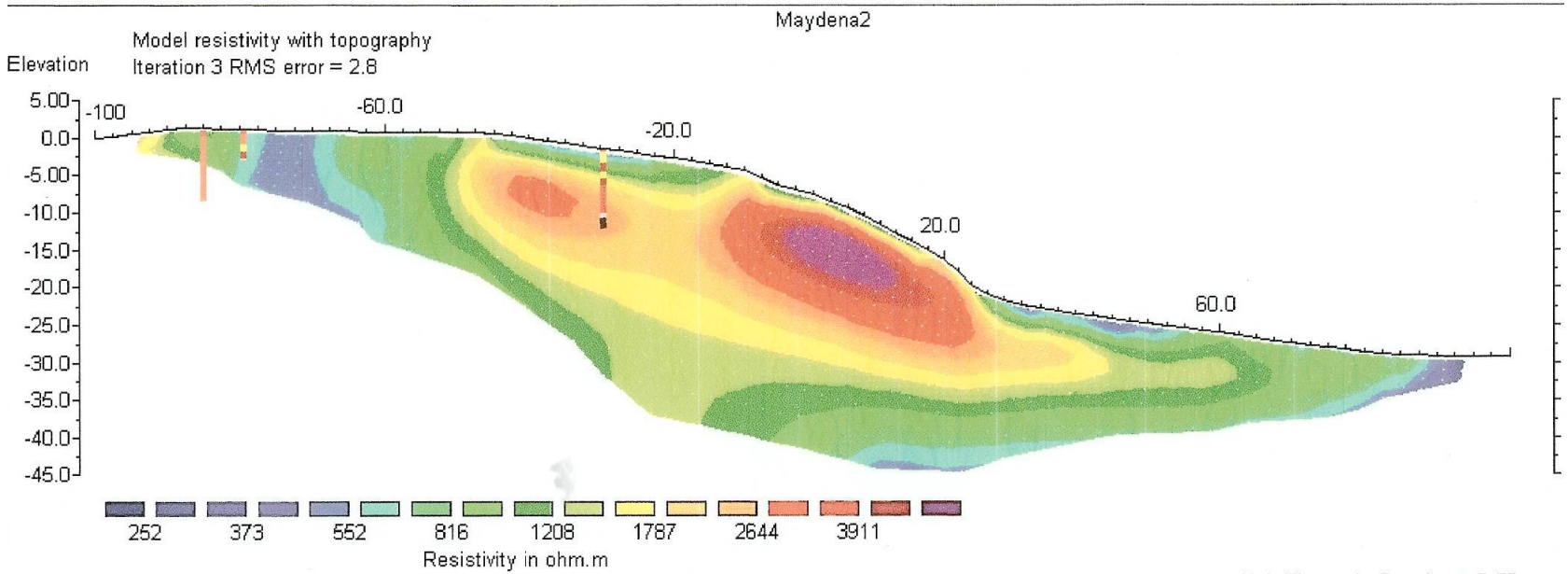
Hole 2

0-0.5m	Black organic soil
0.5-2m	Orange clay
2-3m	Pale orange-yellow and white-grey very fine sand and clay
3-4m	Clay, grey-brown
4m	Pebbly horizon EOH

Hole 3

0-0.2m	Black organic soil
0.2-2m	Fine white sand
2-3m	Dark brown clay
3m	Yellow clay
3-4m	Brown and buff very fine sandy clay with sparse quartz segments
4-5m	Dark brown clay
5-8m	Dark brown clay, with sparse fragments of white, leached silica rock
8-9m	Light grey clay, sandy; then dark brown sandy clay
9-11m	Dark grey clay
11m	Dark chocolate mud, then bedrock(?)

5 LINE 2 RESISTIVITY SECTION WITH DRILL LOGS



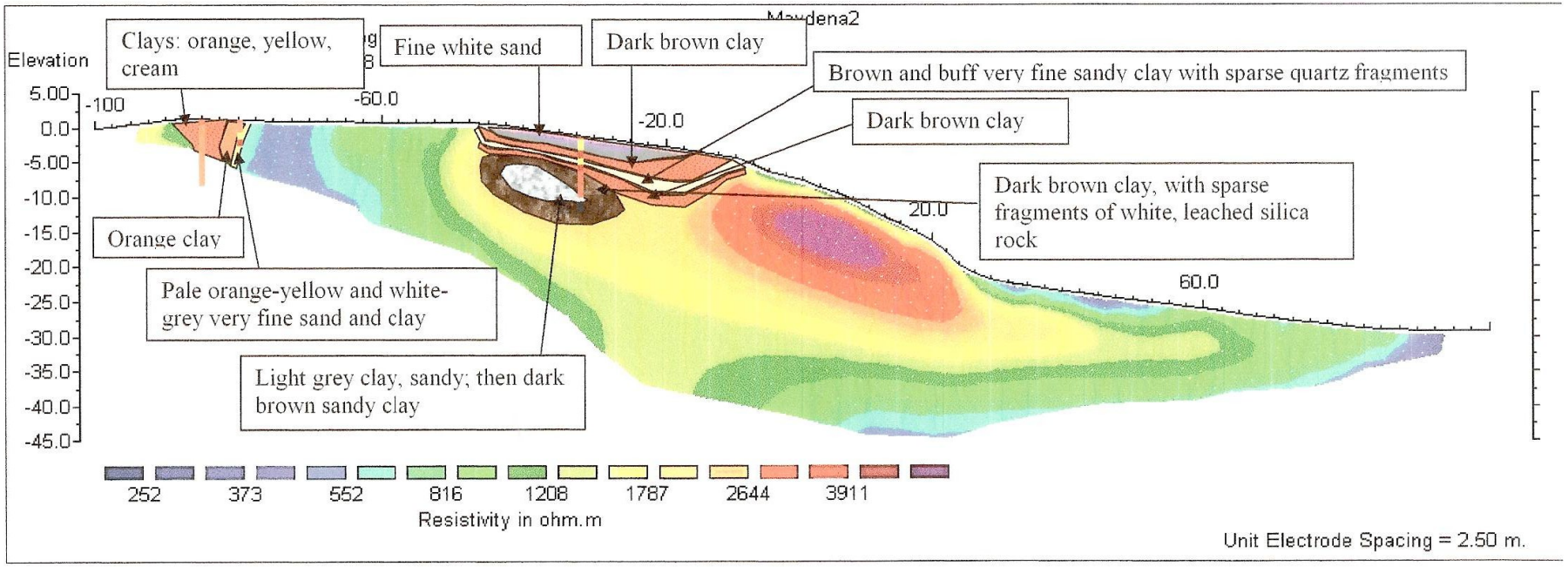
Dr Eva Papp
Papp Consulting
37 Stephen Street
Ainslie ACT 2602

Ph/fax (02) 6238 2114
Mobile 0402 132581
Email eva@papp-geophysics.com.au
Web www.papp-geophysics.com.au

Interpretation results

The survey resulted in good quality data and coherent model resistivity sections. The anomalies covered the resistivity ranges expected: the range of obtained model resistivities was consistent with sand and gravel and also with various bedrock types known to be present at the site. The geometrical properties of anomalies are also consistent with geological expectations.

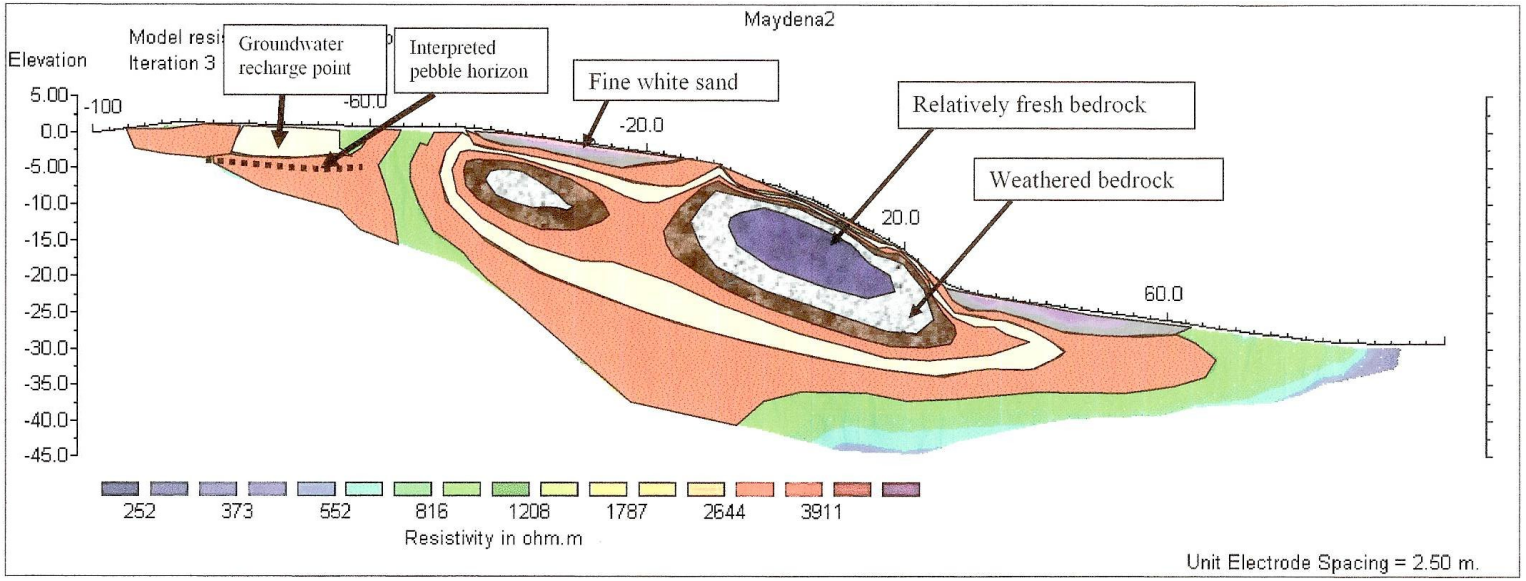
6.1 *Line 2 resistivity section and interpreted geological units confirmed by drill logs*



Dr Eva Papp
Papp Consulting
37 Stephen Street
Ainslie ACT 2602

Ph/fax (02) 6238 2114
Mobile 0402 132581
Email eva@papp-geophysics.com.au
Web www.papp-geophysics.com.au

6.2 *Line 2 resistivity section and interpreted geological units*



Dr Eva Papp
Papp Consulting
37 Stephen Street
Ainslie ACT 2602

Ph/fax (02) 6238 2114
Mobile 0402 132581
Email eva@papp-geophysics.com.au
Web www.papp-geophysics.com.au

APPENDIX 3

DRILL HOLE LOGS

DRILL HOLE LOG

AREA: Hedgehog Ridge Prospect, Kallista, Maydena

MAP SHEET: 4626 Maydena

DRILLER: Wessel Drilling Pty. Ltd.

DRILL HOLE: **HRD 001**

METHOD: Percussion - Down-hole hammer (95mm bit)

AMG CO-ORDS: 5265894mN
(APPROX.) 461307mE

DATE: 17.06.2009

ANGLE: Vertical

LOGGED BY: G.K.

FINAL DEPTH: 10m

FROM m	TO	DESCRIPTION	SAMPLE NUMBER
0	0.8	Dark organic soil	
0.8	10	Clays ; orange, yellow, cream	
		Hole blockage @ 4m.	
		Poor sample return throughout	
		E.O.H. 10m	
		Hole stopped due to abundance of clay	

DRILL HOLE LOG

AREA: Hedgehog Ridge Prospect, Kallista, Maydena
MAP SHEET: 4626 Maydena

DRILLER: Wessel Drilling Pty. Ltd.
DRILL HOLE: HRD 001/A

METHOD: Percussion - Down-hole hammer (95mm bit)
AMG CO-ORDS: 5262891mN (APPROX) 461313mE

DATE: 17.06.2002
ANGLE: Vertical

LOGGED BY: GK
FINAL DEPTH: 4m

FROM	TO	DESCRIPTION	SAMPLE NUMBER
	m		
0	0.5	Black organic soil	
0.5	2	Orange clay	
2	3	Pale orange-yellow and white-grey very fine sand and clay	70640
3	4	Clay, grey brown	
@ 4m		Pebbly horizon; could not penetrate	
		E.O.H. 4m	

DRILL HOLE LOG

AREA: Hedgehog Ridge Prospect, Kallista, Maydena.

MAP SHEET: 4626 Maydena

DRILLER: Wessel Drilling Pty. Ltd.

DRILL HOLE: HRD 002

METHOD: Percussion - Down-hole hammer(95mm bit)

AMG CO-ORDS (APPROX) 5265925mN 461350mE

DATE: 17.06.2009

ANGLE: Vertical

LOGGED BY: GK

FINAL DEPTH: 11m

FROM m	TO	DESCRIPTION	SAMPLE NUMBER
0	0.2	Black, organic soil	
0.2	1	Fine white sand	
1	2	Fine white sand	70641
2	3	Dk brown clay;or-yellow @ 3m	
3	4	Brown & buff v.f.sandy clay with with sparse quartz fragments	70642 (not assayed)
4	5	Dk brown clay	
5	8	Dk brown clay, with sparse fragments of white, leached silica rock	
8	9	Light grey clay, sandy; then dark brown sandy clay	
9	11	Dark grey clay	
@11m		Dark chocolate mud, then ?bedrock	70643 (not assayed)

E.O.H. 11m

0 - 5m : Drag bit used
5 - 11m: Downhole hammer used.

DRILL HOLE LOG

AREA: Hedgehog Ridge Prospect, Kallista, Maydena

MAP SHEET: 4626 Maydena

DRILLER: Wessel Drilling Pty. Ltd.

DRILL HOLE: HRD 003

METHOD: Percussion - Down-hole hammer(95mm bit)

APPROXIMATE AMG CO-ORDS: (APPROX.) 5265312mN 461858mE

DATE: 18.06.2009

ANGLE: Vertical

LOGGED BY: GK

FINAL DEPTH: 6m

FROM m	TO	DESCRIPTION	SAMPLE NUMBER
0	1	Fine white sand	70644
1	2	" " "	70645
2	3	" " "	70646
3	4	" " "	70647
4	5	" " "	70648
5	6	" " " ; somewhat pebbly	70649

E.O.H 6m
No sample return.
Bit, rods stuck down hole.

APPENDIX 4

DRILL HOLE ASSAY DATA

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

CERTIFICATE OF ANALYSIS BR09053829

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 MnO % 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	
70640	HR001A 2-3m	1.900	0.001	95	0.243	0.070	<0.001	0.067	0.004	0.004	0.046	0.049	yellow fine sand + clay
70641	HR002 3-4m	0.089	0.043	1	0.011	0.022	<0.001	0.118	<0.001	0.004	0.005	0.001	fine white sand
70644	HR003 0-1m	0.057	0.032	1	0.039	0.013	<0.001	0.052	<0.001	0.005	0.004	0.001	fine white sand
70645	" 1-2m	0.060	0.031	1	0.021	0.015	<0.001	0.080	<0.001	0.005	0.006	<0.001	" " "
70646	" 2-3m	0.085	0.028	1	0.017	0.013	<0.001	0.083	<0.001	0.005	0.008	<0.001	" " "
70647	" 3-4m	0.072	0.034	1	0.029	0.015	<0.001	0.053	<0.001	0.005	0.005	0.001	" " "
70648	" 4-5m	0.093	0.031	1	0.019	0.013	<0.001	0.040	<0.001	0.007	0.005	0.001	" " "
70649	" 5-6m	0.132	0.045	1	0.023	0.022	<0.001	0.038	<0.001	0.007	0.008	0.002	" " "; pebb'y

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

QC CERTIFICATE OF ANALYSIS BR09053829

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 MnO % 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
STANDARDS												
BCS267		0.818	1.695	142	0.788	0.040	0.159	0.167	0.002	0.054	0.128	0.024
Target Range - Lower Bound		0.789	1.625		0.734	0.054	0.138	0.157		0.055	0.121	
Upper Bound		0.911	1.875		0.847	0.065	0.161	0.183		0.066	0.142	
BSC313-1		0.040	0.007	3	0.013	0.002	<0.001	0.015	<0.001	0.004	0.006	<0.001
Target Range - Lower Bound		0.033	0.005	<1	0.010	<0.001	<0.001	0.015		0.002	0.003	
Upper Bound		0.040	0.007	2	0.014	0.002	0.002	0.019		0.004	0.006	
BLANKS												
BLANK		<0.002	<0.001	<1	<0.001	<0.002	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001
BLANK		<0.002	<0.001	<1	<0.001	<0.002	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001
BLANK		<0.002	<0.001	<1	<0.001	<0.002	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001
BLANK		<0.002	<0.001	<1	<0.001	<0.002	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001
Target Range - Lower Bound		<0.001	<0.001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Upper Bound		0.002	0.002	2	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
DUPLICATES												
70651		0.045	0.006	<1	0.010	0.002	<0.001	0.015	<0.001	0.004	0.005	0.001
DUP		0.045	0.006	<1	0.010	0.002	<0.001	0.015	<0.001	0.003	0.006	<0.001
Target Range - Lower Bound		0.042	0.005	<1	0.009	<0.001	<0.001	0.013	<0.001	0.002	0.004	<0.001
Upper Bound		0.048	0.007	2	0.011	0.003	0.002	0.017	0.002	0.005	0.007	0.002

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: 3-AUG-2009
Account: MCDSON

CERTIFICATE BR09053829

Project:

P.O. No.: 224197

This report is for 10 Silica Sand samples submitted to our lab in Brisbane, QLD, Australia on 25-JUN-2009.

The following have access to data associated with this certificate:

GERHARD KRUMMEI		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
LEV-01	Waste Disposal Levy
PUL-42	Pulverize Agate Mill
SPL-21	Split sample - riffle splitter

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP64	Method for Silica Sample Sand	ICP-AES

To: **MAYDENA SANDS PTY LTD**
ATTN: GERHARD KRUMMEI
SUITE 28/487 ST KILDA ROAD
MELBOURNE VIC 3004

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

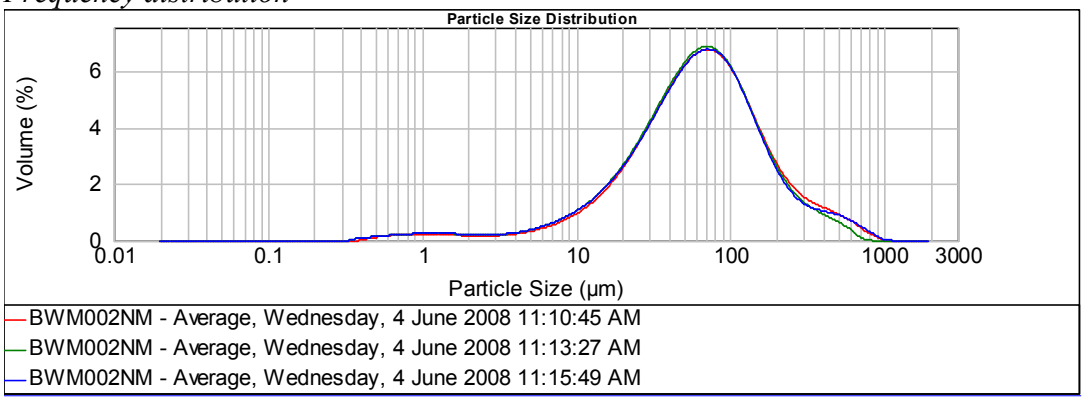
Signature: _____
Shaun Kenny, Brisbane Laboratory Manager

APPENDIX 5

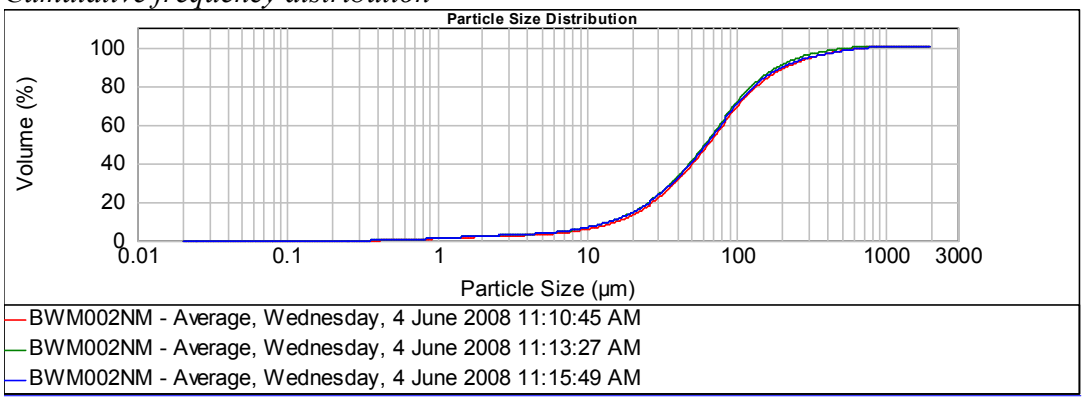
SIZING DATA – DRILL HOLE HRD003

"BWM002NM" "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

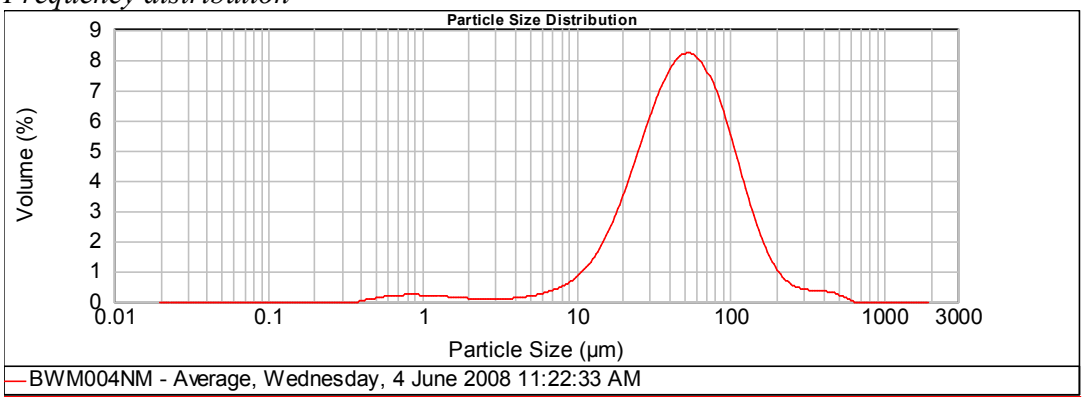


Result table

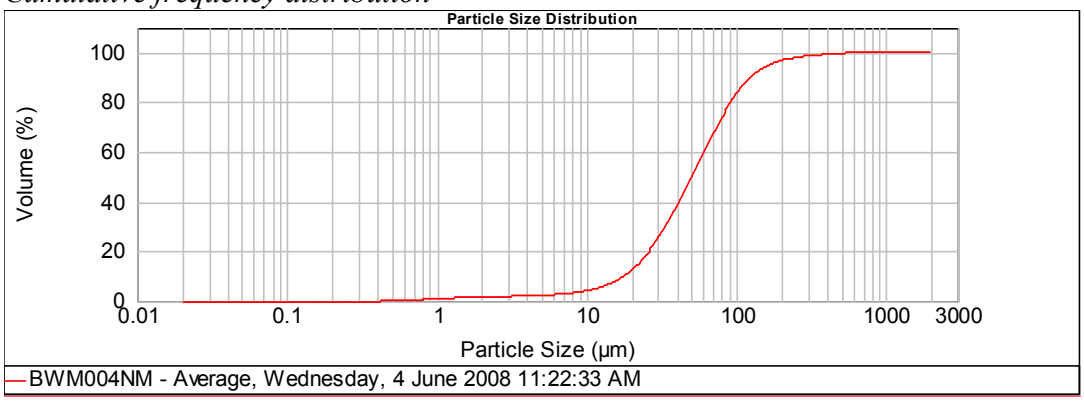
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.23	11.482	1.24	120.226	4.40	1258.925	0.00
0.011	0.00	0.120	0.00	1.259	0.23	13.183	1.49	138.038	3.68	1445.440	0.00
0.013	0.00	0.138	0.00	1.445	0.22	15.136	1.79	158.489	2.99	1659.587	0.00
0.015	0.00	0.158	0.00	1.660	0.21	17.378	2.13	181.970	2.36	1905.461	0.00
0.017	0.00	0.182	0.00	1.905	0.20	19.953	2.52	208.930	1.85	2187.762	0.00
0.020	0.00	0.209	0.00	2.188	0.19	22.909	2.96	239.883	1.46	2511.886	0.00
0.023	0.00	0.240	0.00	2.512	0.19	26.303	3.44	275.423	1.20	2884.032	0.00
0.026	0.00	0.275	0.00	2.884	0.19	30.200	3.96	316.228	1.04	3311.311	0.00
0.030	0.00	0.316	0.00	3.311	0.22	34.674	4.48	363.078	0.95	3801.894	0.00
0.035	0.00	0.363	0.00	3.802	0.25	39.811	4.99	416.869	0.89	4365.158	0.00
0.040	0.00	0.417	0.08	4.365	0.31	45.709	5.44	478.630	0.81	5011.872	0.00
0.046	0.00	0.479	0.10	5.012	0.37	52.481	5.81	549.541	0.68	5754.399	0.00
0.052	0.00	0.550	0.13	5.754	0.46	60.256	6.05	630.957	0.51	6606.934	0.00
0.060	0.00	0.631	0.15	6.607	0.57	69.183	6.10	724.436	0.33	7585.776	0.00
0.069	0.00	0.724	0.18	7.586	0.69	79.433	5.95	831.764	0.14	8709.636	0.00
0.079	0.00	0.832	0.20	8.710	0.84	91.201	5.60	954.993	0.02	10000.000	
0.091	0.00	0.955	0.22	10.000	1.03	104.713	5.06	1096.478	0.00		
0.105	0.00	1.096	0.23	11.482		120.226		1258.925			

"BWM004NM" "Run 1 (average of 3 analyses)"
Wednesday, 4 June 2008
Ultrasonication: minimal effect

Frequency distribution



Cumulative frequency distribution

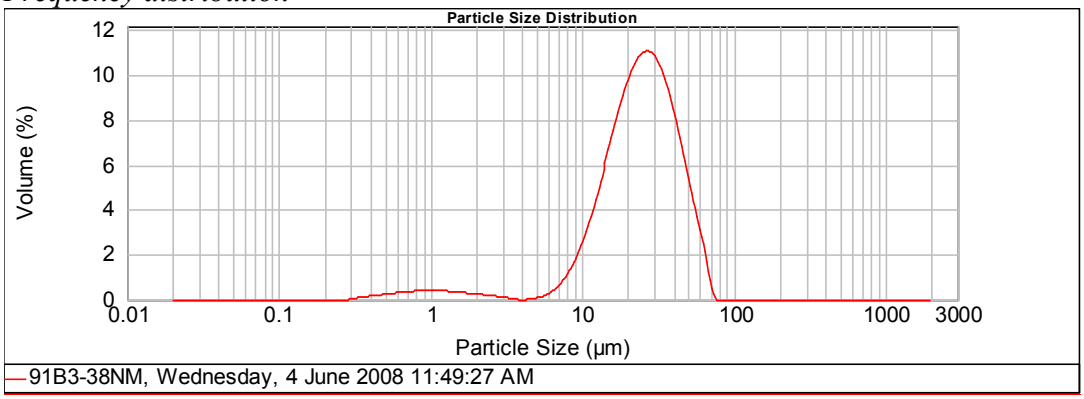


Result table

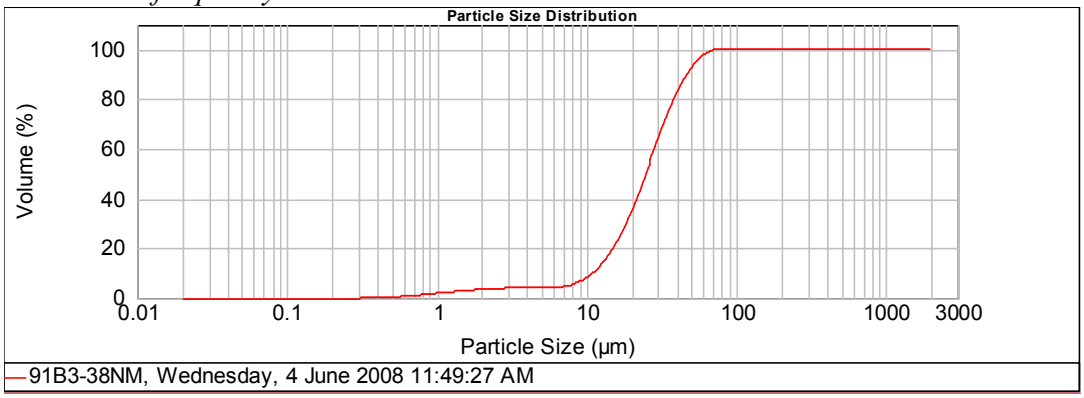
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.18	11.482	1.15	120.226	3.19	1258.925	0.00
0.011	0.00	0.120	0.00	1.259	0.16	13.183	1.57	138.038	2.31	1445.440	0.00
0.013	0.00	0.138	0.00	1.445	0.14	15.136	2.09	158.489	1.59	1659.587	0.00
0.015	0.00	0.158	0.00	1.660	0.12	17.378	2.73	181.970	1.05	1905.461	0.00
0.017	0.00	0.182	0.00	1.905	0.10	19.953	3.47	208.930	0.69	2187.762	0.00
0.020	0.00	0.209	0.00	2.188	0.08	22.909	4.28	239.883	0.48	2511.886	0.00
0.023	0.00	0.240	0.00	2.512	0.07	26.303	5.11	275.423	0.38	2884.032	0.00
0.026	0.00	0.275	0.00	2.884	0.07	30.200	5.89	316.228	0.34	3311.311	0.00
0.030	0.00	0.316	0.00	3.311	0.09	34.674	6.58	363.078	0.32	3801.894	0.00
0.035	0.00	0.363	0.00	3.802	0.11	39.811	7.09	416.869	0.29	4365.158	0.00
0.040	0.00	0.417	0.07	4.365	0.15	45.709	7.39	478.630	0.19	5011.872	0.00
0.046	0.00	0.479	0.11	5.012	0.19	52.481	7.44	549.541	0.07	5754.399	0.00
0.052	0.00	0.550	0.16	5.754	0.26	60.256	7.21	630.957	0.00	6606.934	0.00
0.060	0.00	0.631	0.19	6.607	0.34	69.183	6.73	724.436	0.00	7585.776	0.00
0.069	0.00	0.724	0.20	7.586	0.46	79.433	6.01	831.764	0.00	8709.636	0.00
0.079	0.00	0.832	0.20	8.710	0.62	91.201	5.13	954.993	0.00	10000.000	
0.091	0.00	0.955	0.20	10.000	0.84	104.713	4.15	1096.478	0.00		
0.105		1.096		11.482		120.226		1258.925			

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

Frequency distribution



Cumulative frequency distribution

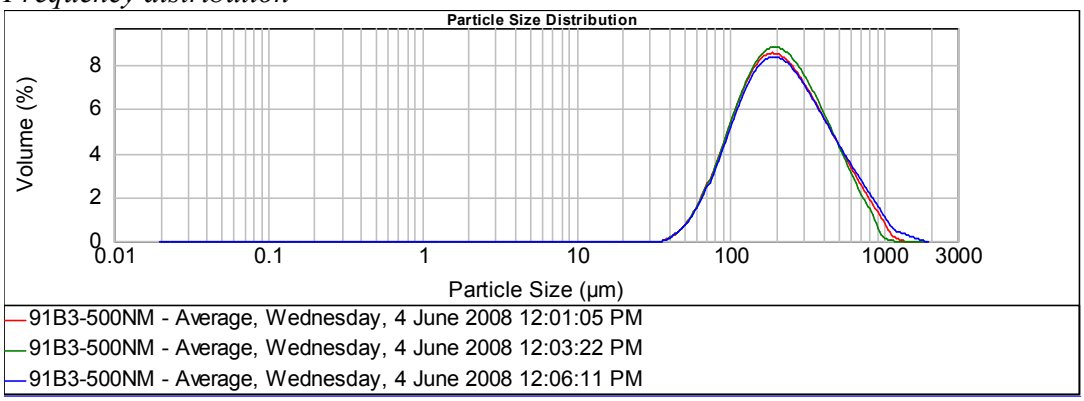


Result table

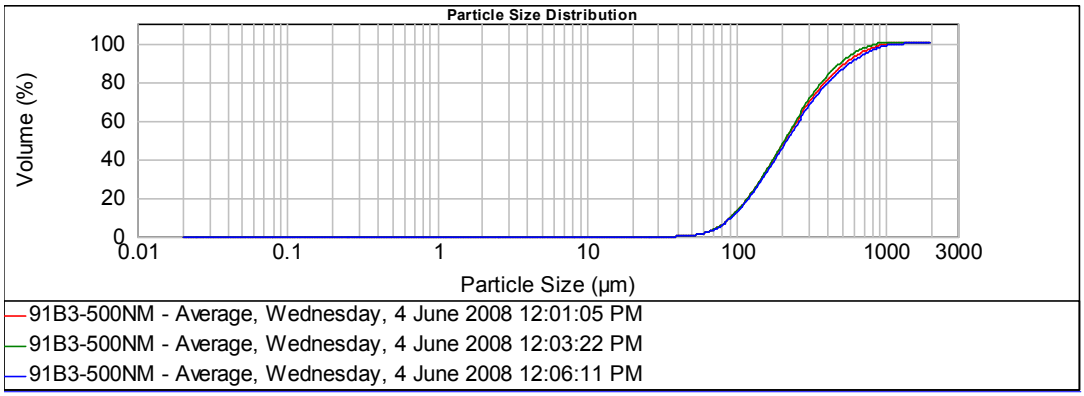
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.35	11.482	4.04	120.226	0.00	1258.925	0.00
0.011	0.00	0.120	0.00	1.259	0.33	13.183	5.41	138.038	0.00	1445.440	0.00
0.013	0.00	0.138	0.00	1.445	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	
0.091	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

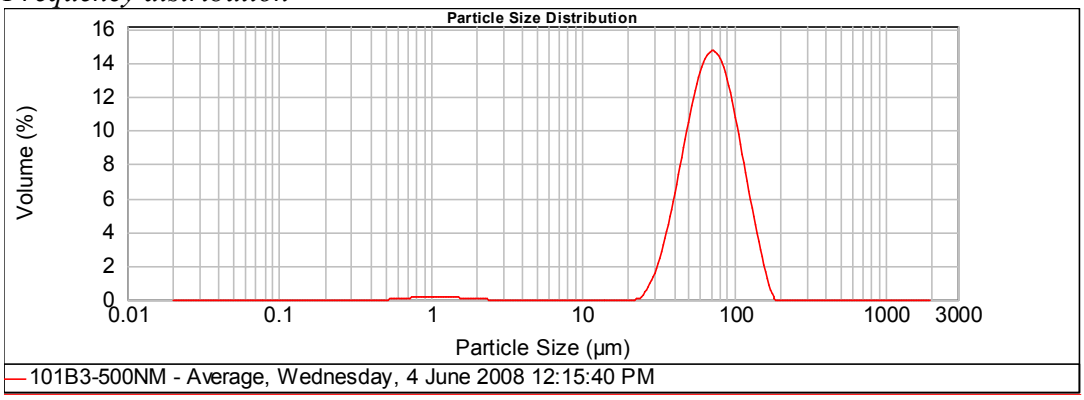


Result table (run 3)

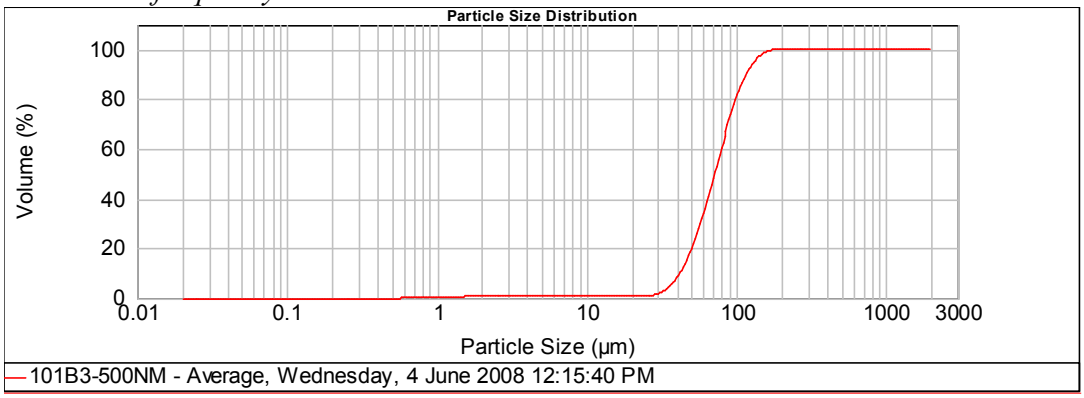
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.00	11.482	0.00	120.226	6.43	1258.925	0.31
0.011	0.00	0.120	0.00	1.259	0.00	13.183	0.00	138.038	7.10	1445.440	0.16
0.013	0.00	0.138	0.00	1.445	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

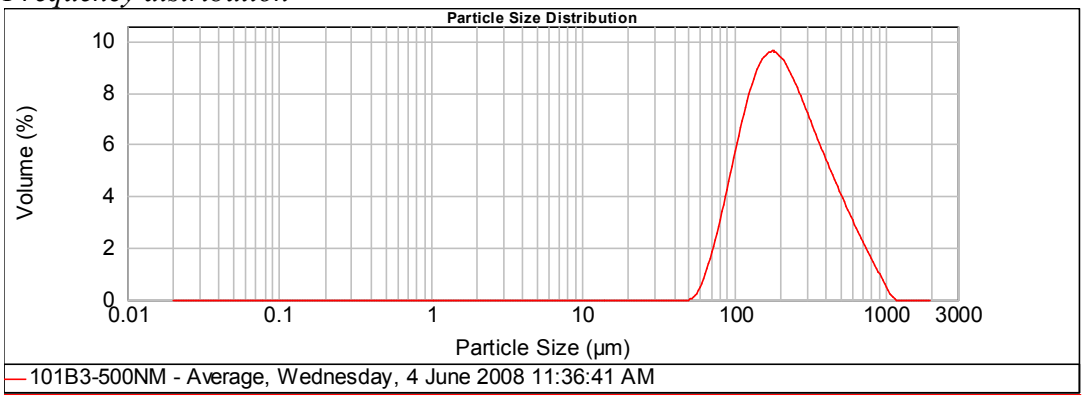


Result table

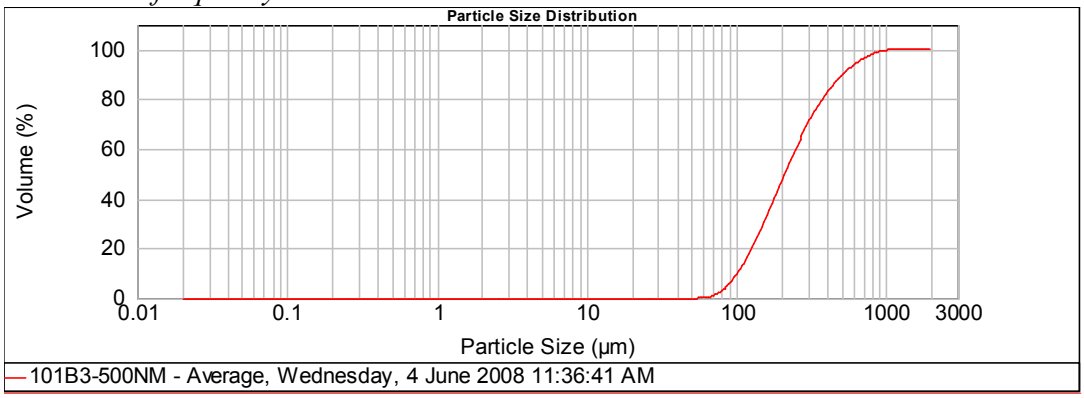
Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.010	0.00	0.105	0.00	1.096	0.10	11.482	0.00	120.226	5.18	1258.925	0.00
0.011	0.00	0.120	0.00	1.259	0.10	13.183	0.00	138.038	2.74	1445.440	0.00
0.013	0.00	0.138	0.00	1.445	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	
0.091	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			

ILLUSTRATIONS