ICON RESOURCES LTD

ANNUAL REPORT
Period ending 9 February 2010

HENTY ROAD – EL47/2004

FEBRUARY 2010

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1 ABSTRACT

Henty Road EL47/2004 is held by South Eastern Resources Pty Ltd (SER), a wholly owned subsidiary of Icon Resources Ltd.

The 23 sq km licence straddles the Henty Road, south of Zeehan in Western Tasmania. The main focus of exploration on the lease has been on the Grieves Siding prospect where zinc mineralisation occurs within the Ordovician Gordon Limestone, mostly as a complex of zinc 'oxides' and in near-surface peat-hosted sphalerite.

Review of the Metallurgical testwork of bulk peat samples, collected in 2007 and 2008, was continued in an effort to find a cost-effective process for zinc extraction. The testwork was conducted by Rogers Chemical Engineering and consultant Robert Groenward.

The various tests returned some encouraging results with respect to the percentage of zinc extracted, but in general the usage of re-agents and additives was too high to be economical.

2 INTRODUCTION

This report details the work completed on EL47/2004 for the period ending 9th February 2010.

The main focus of work has been the Grieves prospect of carbonate-hosted zinc mineralisation and overlying peat-hosted zinc. The mineralisation lies under swampy button grass plains adjacent to Henty Road, about 12 km south of Zeehan.

3 TENEMENT STATUS

Henty Road (EL47/2004) covers 23 sq km on either side of Henty Road, south of Zeehan in Western Tasmania (Figure 1).

Henty Road was granted to South Eastern Resources Limited (SER) on 10 February 2005 for a period of five years and extension of the licence for a further two year term has been sought.

In January 2006 Icon Resources Ltd, (Icon), in a related-party transaction, purchased two-thirds of South Eastern Resources and the remaining (unrelated) one-third after Icon listed on the ASX in June 2006.

4 TOPOGRAPHY AND ACCESS

The Henty Road, linking Zeehan and Strahan transects the license, providing ideal access. East of the road the license falls within the Dundas Regional Reserve and west of the road is within State Forest.

In the area of the zinc prospects the Henty Road traverses the Badger River valley. For several hundred metres either side of the road there are low-lying swampy button grass plains overlying weathered limestone. The plains are flanked west and east by escarpments of sandstone quartzite 70-90m high.

5 GEOLOGY

5.1 Regional Geology

The regional geology of western Tasmania was dominated by rifting during the Late Precambrian to Early Cambrian. This was followed in the Early to Mid Cambrian by arc-continent collision, subduction and ultramafic allochthon emplacement. The Dundas Trough developed containing siliciclastics and volcanic derived sediments. To the east and interfingering with the sediments the Mount Read Volcanics were being formed. The base of the Ordovician sequence is typically localized conglomerates ands grades up to sandstones and carbonates. The Mid Ordovician carbonates of the Gordon Group are part of a widespread sedimentary basin with variable rates of subsidence. These are the host rocks for prospects within the license (Figure 2).

5.2 Local Geology

The rocks in the licence are a conformable Ordovician to Devonian sedimentary sequence overlying Cambrian basement. Cambrian basement rocks occur in the southern part of the license and are mainly interbedded siltstone and sandstone with some magnetic mafic igneous rocks.

The basal unit of the Ordovician sequence is the pink, silicified and coarse grained Owen Conglomerate. Within the lease it is overlain by siliceous fine grained Moina Sandstone. To the east of the lease the Moina was faulted-out, or deposited only to the west as a result of syn-depositional faulting.

Overlying the Moina Sandstone is Ordovician Gordon Limestone, assumed to be at least 700m thick within the licence. The dark grey limestone contains various facies including a basal bioclastic argillite and oolite which has been pervasively dolomitized and sideritized.

The Lord Siltstone, a fine grained argillaceaous unti, forms a marker throughout the Gordon Limestone. An Upper Dolomite unit is recognized in the Zeehan area.

There are occasional outcrops of limestone visible in road cuttings and the limestone has been strongly weathered to a depth of several hundred metres. The top 20m is highly weathered to form an undulating surface that has been infilled by organic material (peat) and “slumped” blocks of limestone. The peat is overlain by up to 8m (usually <2m) of hard Moina Sandstone gravel that has shed off the escarpment from the southeast and a surface veneer of swampy peat.

The Gordon Limestone is conformably overlain by Silurian Crotty Quartzite that dips steeply northeast.

The Owen Conglomerate, Moina Sandstone and Crotty Quartzite form 70-90m high escarpments either side of the low-lying weathered limestone.

The sediments are folded around axes trending NW and cut by a series of NW-trending faults (Figure 3).

6 PREVIOUS EXPLORATION

Previous exploration has been summarised in a previous annual report (Lewis, 2006).

7 MINERAL OCCURENCES

This summary was partly compiled from Russell and Tear, 1996.

Previous explorers have interpreted zinc-lead mineralisation within the Gordon Limestone to be pre-Devonian in age and unrelated to the Tabberabberan Orogeny (ie, in contrast to most of the Zeehan silver-lead field). The Gordon Limestone was deposited at the end of a period of major tectonic activity that produced the Mount Read Volcanics. Hydrothermal systems may have continued to emit metals into the Gordon Limestone via basement and syn-sedimentary faults.

Five zones within the Gordon Limestone have been recognised as targets for zinc-lead mineralisation.

- Stratabound at the lower limestone-sandstone contact. This zone is characterised by carbonaceous and/or ferruginous clays less than 50m thick above the contact with the Moina Sandstone. It can be overlain by a massive siderite zone less than 25m thick.

- Stratabound at the upper limestone-quartzite contact. This zone is typically within the Upper Dolomite Unit.

- Stratabound within a brecciated (possibly syn-sedimentary) and/or sideritized unit in the middle of the limestone.

- Structurally controlled discordant mineralisation. This can occur throughout the limestone sequence and may be the late-stage filling of brittle fractures.

- Surficial peat hosted: eg, at the Grieves prospect, the peat layer beneath the sandstone gravel contains significant values of zinc in zones directly overlying the limestone-hosted oxide mineralized zone. Recent work has shown the metals occur within the clays as fine colloform sphalerite and galena, apparently actively depositing within the organic carbon and "growing" in-situ (Purvis, 2006).

7.1 Grieves

Mineralisation at Grieves consists of two zones:

- Near surface peat-hosted sphalerite overlying the Gordon Limestone, at the base of the escarpment formed by Moina Sandstone.
- Sphalerite and minor galena partially oxidised to zinc oxides, carbonates and silicates to a depth of 100 to 200m. The best grades to date are from the lower limestone/sandstone contact. The peat resource occurs above this zone.

A JORC-compliant Inferred Resource was calculated by Tracie Burrows in December 2005 for the peat-hosted zinc of 409, 000t @ 3.9% Zn (Burrows, 2005). The resource is made up of three blocks as detailed below:

Table 1: Surficial Zinc Inferred Mineral Resource (Burrows 2005)

Block	**Tonnes**	**Zn (%)**
North	164 000	3.2
Central	65 000	1.1
South	180 000	5.6
Total	**409 000**	**3.9**

The above assumed a density of 1.9t/m^3 (i.e. the density of dry clay). This tonnage decreases to 337,000t using a value of1.4t/m^3, (i.e. the average wet or in-situ value of the Zinifex pits).

7.2 Other Prospects

Other prospects within the lease are summarised in the table below.

Table 2: Prospects within EL47/2004

Prospect	Description	Intercepts (% Zn)
South Grieves	Middle zone of Gordon Limestone; <20m vertical depth	ZWG1 11.8m @ 6 ZWG22 0.8m @17.5 ZWG26 1.9m @ 7.3 ZWG26 1m @ 6.9
Myrtle	Middle zone of Gordon Limestone, associated with a dolomitization	ZM1008 3m @ 6.7 ZM1008 6m @ 4.3 ZWM18 7.1m @ 2.4 ZM185 0.6m@ 14.9
Baura	Upper dolomite unit	ZG402 2.5m @ 3
Firewood Siding	Upper dolomite unit	ZF37 10m @ 0.38
Rose Valley	Silicified carbonate breccia	defined by 14 wacker samples, with max of 242ppm Zn

8 WORK COMPLETED

Work within the period involved desktop studies including :

- Further review of previously completed 3D Induced Polarisation geophysical data and geological interpretation, in preparation for field investigation of a number of defined targets.
- Review of metallurgical process testwork completed to date on near-surface “zinc-in-peat” mineralisation
- Ongoing negotiations with a number of groups to further evaluate the potential for significant “Irish-style” zinc lead-deposits within the EL and adjacent EL8 / 2005

9 PROPOSED WORK

A number of defined targets are still to be investigated:

- Petrophysical characterisation of mineralised and host rock lithologies to be incorporated in the remodelling of geophysical data to resolve untested targets.

10 ENVIRONMENTAL

No ground disturbing activities were completed within the reporting period.

11 EXPENDITURE STATEMENT

Total expenditure on EL647/2004 for the year period 1st January until 31st December 2009 is $19 487.

	$
Geophysics	9 165
Consultants:Metallurgy	4 622
Tenement Administration	2 112
Employee/Office Costs	1 716
Subtotal	17 715
10% Admin	1 772
Total	**$19 487**

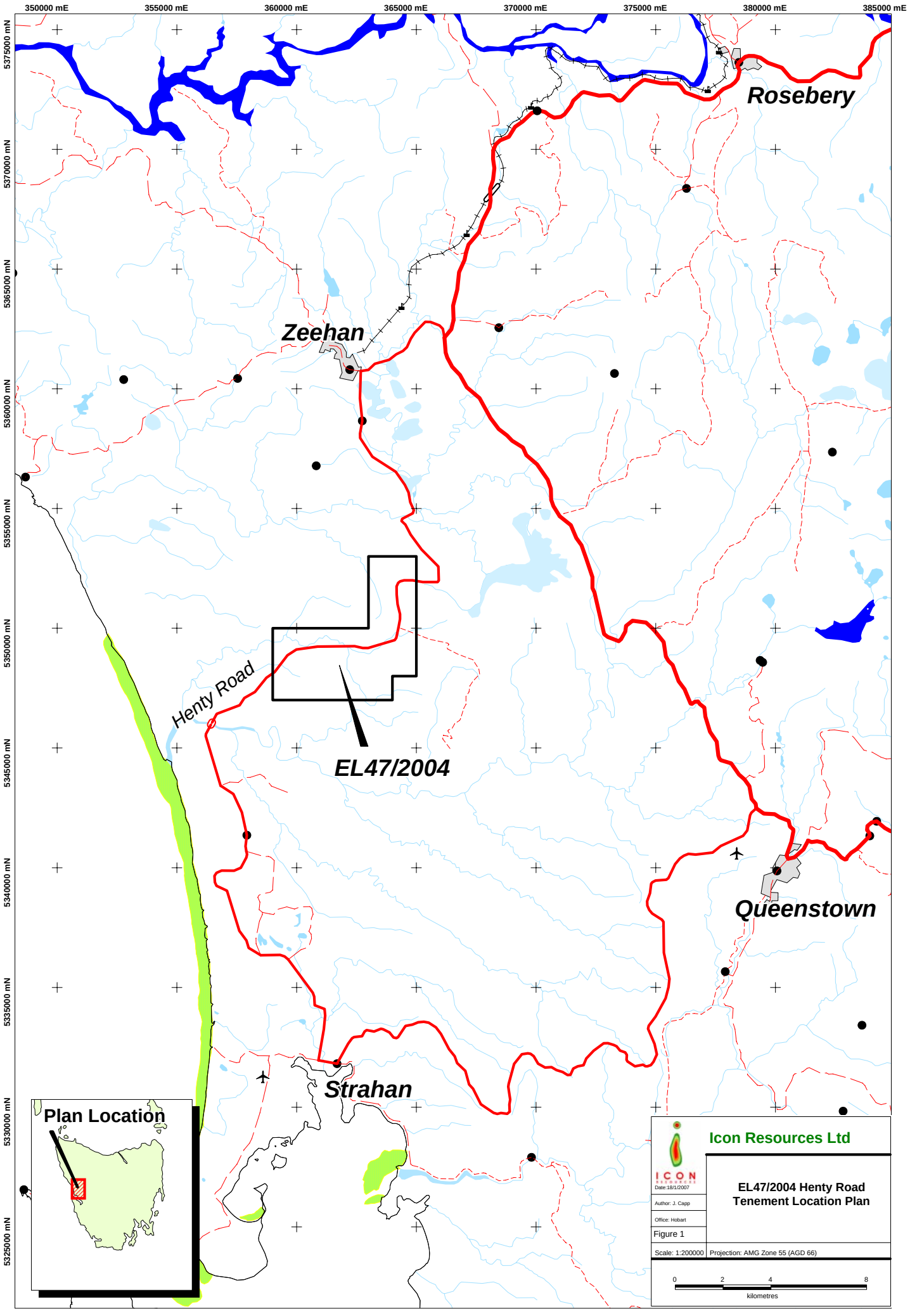
12 REFERENCES

Burrows, T. 2006. Estimate of Work Required to Upgrade Resources: Grieves Prospect. Report by AMC Consultants for Icon Resources Ltd.

Lewis, R. 2006. South Eastern Resources Pty Ltd, EL47/2004 Henty Road First Annual Report 2005-2006.

Purvis, J.G. 2006. Sampling and Metallurgical Testing of Surficial Zinc Clays, Grieves, EL47/2004, Western Tasmania, J.G. Purvis & Associates Pty Ltd.

Russell, S.A.J., Tear, S.J. 1996. Annual Report P.E. November 1996 - EL 34/88 - Zeehan No. 2.


350000 mE
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5365000 mN
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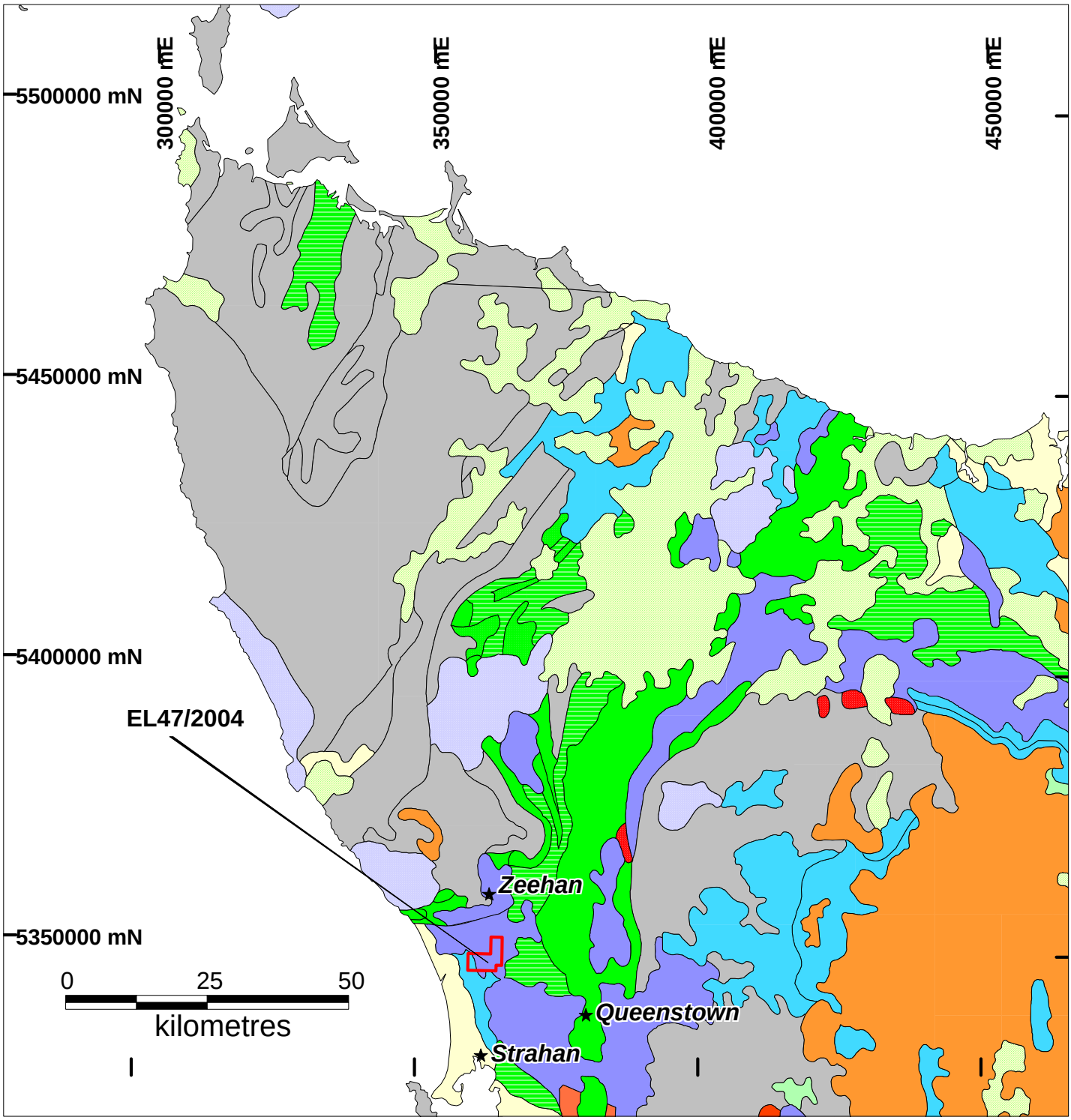
5330000 mN
5325000 mN
Rosebery
Zeehan
Henty Road
EL47/2004
Queenstown
Strahan
Plan Location
Icon Resources Ltd
EL47/2004 Henty Road
Tenement Location Plan
Date:18/1/2007
Author: J. Capp
Office: Hobart
Figure 1
Scale: 1:200000
Projection: AMG Zone 55 (AGD 66)
0
2
4
8
kilometres



Tasmanian Geology

- Cambrian Sediments
- Middle Cambrian mafic volcanics
- Ordovician-Devonian sediments
- Middle Cambrian felsic volcanics
- Cambrian granite
- Cambrian serpentinites
- Cambrian unknown
- Proterozoic rocks
- Cainozoic cover
- Cainozoic mafic volcanics
- Cainozoic sediments
- Devonian granite
- Jurassic dolerite
- Cretaceous intrusive
- Ordovician sediments
- Permian sediments
- Triassic sediments
- water

Icon Resources Ltd

EL47/2004 Henty Road
Regional Geology

Date:

Author: J. Capp

Office: Hobart

Figure 2

Projection: AMG Zone 55 (AGD 66)

358000 mE
359000 mE
360000 mE
361000 mE
362000 mE
363000 mE
364000 mE
365000 mE
366000 mE
367000 mE

5353000 mN
5352000 mN
5351000 mN
5350000 mN
5349000 mN
5348000 mN
5347000 mN

Lithostratigraphy

- Undifferentiated Sediments
- Bell Shale
- Florence Quartzite
- Austral Creek Siltstone
- Keel Quartzite
- Amber Slate
- Crotty Quartzite
- Unidentified Unit (Crotty Quartzite)

Age

- Permian
- Devonian
- Silurian

Gordon Limestone

- Upper Dolomite
- Limestone
- Siltstone Unit
- Middle Dolomite Unit
- Argillaceous Unit
- Dolomitic Unit
- Siderite Unit
- Moina Sandstone

Ordovician

- Owen Conglomerate
- Sediments
- Mafic Units
- Magnetic Units

Cambro-Ordovician

Cambrian

Undifferentiated

- Gordon LImestone Contact
- Lithological Contact
- Major Fault
- Fault
- Anchor EL Boundary

Myrtle
Professor Range
Firewood Siding
Grieves Siding
Grieves South
Rose Valley
Baura

Icon Resources Ltd

ICON RESOURCES
Date:18/1/2007

EL47/2004 Henty Road
Local Geology & Prospects

Author: J. Capp
Office: Hobart
Figure 3
Scale: 1:25000
Projection: AMG Zone 55 (AGD 66)

0 250 500 1000
metres

APPENDIX 1

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Progress Report on Grieves Siding Testwork for October – November 2007

1. **Laboratory Processing.**
   Testwork during the processing period was frustrating due to the variances in recovered zinc. A range of acid levels were tried together with various quantities of sodium hydroxide in order to see if consistent results could be obtained. Also the trials were conducted over a range of time periods to see if there was some benefit from allowing long reaction times. The ore was checked in both static and agitated environments again to check for variations. The temperature of the process solution was altered using the exothermic reaction of the higher strength acid together with varying pulp densities.

   In summary it appeared that the zinc was dissolved and reformed into other complexes during this process. It is pretty well confirmed from the testwork that the offending complexes are silica based and that the zinc form bonds to or with this silica during the various reagent level tests. Also it became evident that the consequential pH changes had some bearing on this erratic behaviour.

   In researching “The Extractive Metallurgy of Zinc”, R. J. Sinclair describes the problem. Although he is looking at a concentrate the same problems appear in the testwork on the ore. The pH of the ore in the ground ranges from 2.4 to 5.5 depending upon its location. This covers the range that extends from the high stability point of orthosilicic acid to its point of least stability. That is, it covers the range where orthosilicic acid is breaking down and precipitating silica from solution. It is reasonable therefore to run tests to see if by controlling the pH to promote the movement of silica into solution it could be removed from complicating the zinc recovery process and reduce acid consumption.

2. **Acid costs.**
   Based on the results to date the acid cost appears to be the greatest impediment to a viable operation. Considerable effort has been undertaken to source other suppliers in Korea and India. We are currently awaiting a response.
   Also to give some incentive to acid suppliers we have added the planned requirements of Proto Resources and Alichem Limited which takes the annual requirement to a level approaching 250,000 tonnes, a sizeable contract for any supplier.
   The target price for the acid is in the $50.00 per tonne range for 98% sulphuric acid. Apparently the demand from South America for a fertiliser base is causing the price increase. This however seems in conflict with information received stating that Korean suppliers were looking to subsidise the freight cost in order to get rid of the excess.

3. **Summary and Recommendations.**
   The work during the reporting period was slowed down due to the sudden illness of Dr Neil Allen's wife who was diagnosed with an aggressive cancer. Neil was obviously traumatised by this discovery and so I thought it only reasonable to allow him some time to deal with the situation.
   Neil has stoically soldiered on with work when he was not at the hospital and it appears that the comprehensive work done over the past two months has shown some light on the reasons for the high acid consumption.
   The costs of the works for the period are well below the budgeted $24,000 for October to $16,000 and it is recommended that testwork be extended to the end of the current year in order to reach some finality to the process options.
   This extension would result in an estimated additional cost of around $32,000.
   We believe that there is a reasonable prospect of success in achieving economic recovery of the zinc. The pH control tests will be critical in this process together with achieving an acid price in the $50 – 70 per tonne range.

   Frank Rogers
   23rd November 2007

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APPENDIX 2

Test 86 summary

Overall plan

This test sought to recover the zinc by initially moving it into solution with sulphuric acid, and then precipitating it as zinc hydroxide. The latter involved a two-stage precipitation, with the first precipitation aimed at removing most of the silicon.

stage 1	50g of combined dry sample in 500 ml of 5% H_2SO_4 (25 ml of 98% acid, - or 45 g of 98% acid) digested over 10 days. Then solution filtered off.
stage 2	Solution partially neutralised to pH 3.3 using 10% NaOH. Resulting precipitate filtered off. Precipitate intended for tailings.
stage 3	Remaining solution neutralised to pH 6.6 using 10% NaOH. Resulting precipitate intended to contain most of the zinc.
stage 4	Remaining solution neutralised to pH 11 with 10% NaOH. This was a check to confirm that most zinc had been removed in previous precipitate.

Overall results

While the digestion appeared to go well (estimated over 90% Zn recovery to solution), a significant percentage of the zinc (about 50%) appeared to "get lost" somehow with stage 2. Stage 3 balanced out well based on remaining zinc. Stage 4 confirmed that nearly all the stage 2 zinc had been removed at stage 3.

However, acid usage was very high, at 90% of dry ore weight. The amount of NaOH needed to precipitate the zinc was also very high, at about half the dry ore weight.

Later tests (tests 87, 89 and 90) did indicate that a lower acid concentration could be used, but indicated that it would probably not be less than about 60% of dry ore weight. This approach to the zinc recovery was abandoned in further tests.

Test procedure details

Acid digestion

50g of pulverised combined dry sample (@ an estimated 7% Zn) was stirred into 500 ml of 5% H_2SO_4 (i.e. 25 ml of 98% acid, - or 45 g of 98% acid).

A hotplate-magnetic-stirrer was used to maintain the temperature at approximately 30^0C. The hotplate-stirrer was operated only during the day, and was turned off during the evenings (I did not trust the hotplate-stirrer, - with good reason as it later turned out).

Temperatures during the night were not monitored, but would have been generally below 15^0C.

For two hours prior to sampling (during the afternoons) the hotplate-stirrer was turned off to allow the sediment to settle.

After 6 days the sample was removed from the hotplate-stirrer, and stirring was only occasional by hand-held stirring rod. Analysis was continued for a further 4 days.

Zinc recovery to solution appeared to be about 90% after 6 days, - rising, eventually, to above 95% after 10 days.

The Zinc acid solution from the above digestion (after 10 days) was recovered by filtration. This amounted to 275 ml of solution which analysed at 1.2% Zn, implying a weight of 3.3g of Zn in solution. Considering that some Zn has been lost in assays over the 10 days of the above digestion, I think the head assay, assumed from a previous analysis on the pulverised sample, was a bit lower than the sample used here.

The 275 ml of solution was neutralised in 3 steps.

First stage neutralisation

The 275 ml of solution (@ 1.2% Zn) was neutralised to pH 3.3 using 10% NaOH. The neutralisation was done by pipette, while stirring (magnetic stirrer), using 2 ml alkali intervals and then, after pH 2 using 1 ml alkaili intervals.

At the completion of the first neutralisation, the solution contained a light brown precipitate. Total volume after the neutralisation was 419 ml. After filtration 260 ml of light brown solution was obtained. The other 159 ml remained as precipitate, plus solution trapped in the precipitate.

The resulting solution analysed at 0.37% Zn
The washed precipitate weighed 2.25g @ 0.71% Zn (0.016g Zn)

Unfortunately the water from washing the precipitate was not analysed.
But if we assume that there was about 415 ml of solution (including that lost in the washing), the solution analysis implies a total of 1.5g of Zn in the solution.

There is something very wrong here. This is only half the amount of Zn there should be.
What has happened to the rest?

Second stage neutralisation

250 ml of the above solution (@ 0.37% Zn) was then used for the second stage neutralisation to pH 6.6. This produced a light blue/green precipitate, which was filtered off, leaving 190 ml of very clear colourless solution.

The resulting solution analysed at 0.014% Zn. (0.027g Zn for the 190 ml)
The washed precipitate weighed 2.85g @ 35.1% Zn (1.0g Zn)
The wash water from the precipitate (160 ml) gave 92 ppm (0.015g Zn)

The weight of the wet precipitate was 55g, which dried out to 2.85g, so the volumes are pretty well accounted for (allowing perhaps 5 ml being soaked up by the filter paper).
The total Zn implied by the analyses is 1.04g. The start solution analysis implies 0.93g was available to begin with. This discrepancy is within analysis error (+/- 5%) for the precipitate and start solution.

Things balance for this stage anyway.

3rd stage neutralisation

180 ml of the solution (@ 0.014% Zn) from the previous neutralisation was then taken up to a pH of just above 11 with further NaOH. This produced a further precipitate, which was filtered off and analysed.

The resulting solution analysed at 0.0001% Zn. (negligible Zn)
The washed precipitate weighed 1.6g @ 1.6% Zn (0.026g Zn)
Precipitate wash water (1000 ml), Zn below detectable

This stage balances very well with the previous.

Sediment analysis

The sediment remaining after the acid digestion was dried and weighed, giving 42.1g. There has been a weight loss of about 7.9 g, which matches reasonably well, given weight errors in scraping the precipitate from the filter papers, with the total precipitate weight (6.7 g).

The 42.1 g of dried sediment was then placed into 100 ml of aqua regia for analysis, but a very delayed and very sudden and violent reaction (after I concluded nothing much was going to happen) spread the sample all over a safety tray in the fume cupboard. No sensible analysis was then possible on this sediment.

The unfortunate thing here is that it looks like about half a tonne of NaOH would be required for every tonne of ore. This would be too expensive.

Samples sent to Hobart
22nd January 2008

Test 95

1. ***Stage 1 solution*** after attempt to place silicon into solution at pH 2. This is the solution decanted at the completion of stage 1.
2. ***Stage 1 wash solution***. After the initial decanting the slurry was brought back to 4 litres volume and again lowered to pH 2 with H_2SO_4 (4.5 g acid needed). This is the decanted solution after stirring and allowing to settle overnight.
3. ***Stage 2 slurry***. This is the complete slurry from the zinc digestion stage, - 19 days after adding the acid. Solution Zn assay on 21st Jan, after heating from 11^0C to 34^0C over 2.5 hours, was 0.46% Zn.
4. ***Stage 2 solution sample*** after 9 days digestion at ambient temperature. This represents the highest recovery of Zn to solution, and is the small solution sample in the test tube. It assayed at 0.54% Zn on 12th Jan.

Test 96 slurry

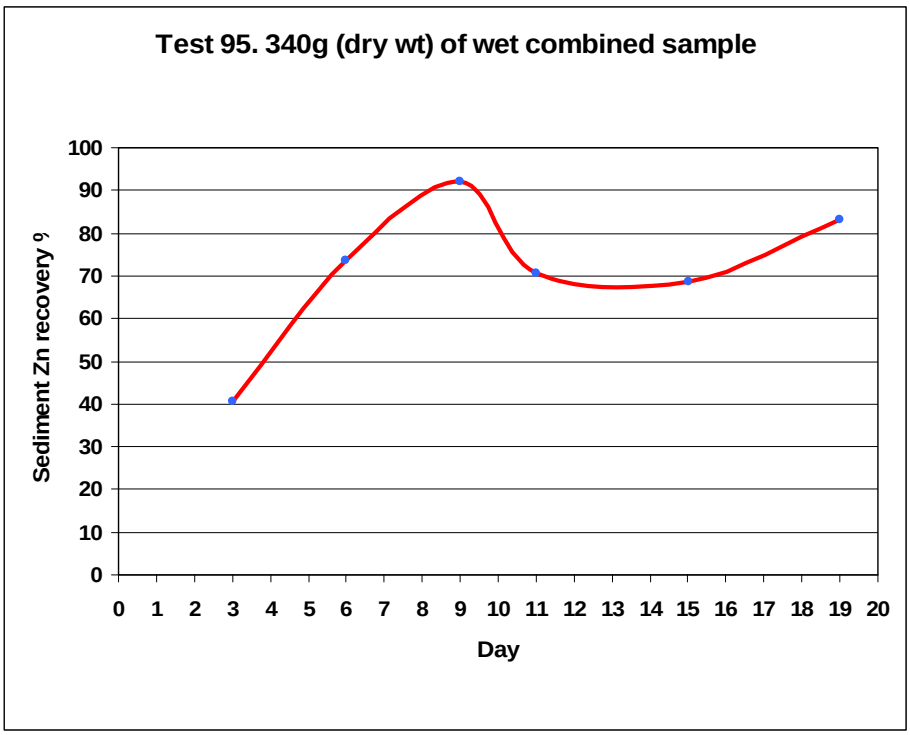
This slurry was prepared on 3rd December.
500 g wet combined sample ground in 500 ml water in small rod mill, them screened at 2 mm and originally made up to 4 litres of slurry. The volume has since been reduced by evaporation.
No acid was added. The sample was intended for a repeat of the “failed” Hobart higher temperature digestion, but this was not carried out.

Also, taped to the container, are the larger (>2mm) particles.

Further comments on Test 95

The day 6 and day 9 assays on the test 95 solution coincided with some of the hottest weather we had so far this summer. The lower two assays that followed coincided with very much cooler weather. There was therefore the suspicion that the digestion was temperature dependent, possibly due to a reversible reaction involving some remaining silicon. It had been intended to follow this up by heating and cooling the slurry and seeing if the assays followed the temperature variations.
The requirement to send the slurry to Hobart ended this idea, but some brief heating was tried today (21st January).

The slurry temperature at 9.30 am was 11^0C. At 12 midday the hotplate had increased it to 34^0C, after which the sample was allowed about an hour to settle and then sampled. The zinc assay did increase over the previous two assays, as shown in the graph.



However, I think the results of this quick test are just suggestive.

Record of test work
(January 2008)

(Tuesday 1st January to)

Test 95

500g of wet combined sample was ground in 500 ml of water. The resulting slurry was screened at 2mm and then made up to 4 litres of slurry. 10% sulphuric acid was then added to bring the pH down to 2. The dry weight of the 500g used in the test was approximately 340g, with a density of 2.1 g/cm^3 (a solids volume of 162 cm^3).

The sample was continuously stirred during the day by a rotating stainless steel paddle. The pH was monitored by periodically removing a small sample in a beaker. After measuring, the test sample was returned to the bucket.

A total of 44.1g of 98% H_2SO_4 had been added to the slurry to bring the pH down to 2 at the end of November 2007. The resulting solution was analysed for Zn, giving 600 ppm for 3838 ml of solution. This amounts to a removal of 10% to 11% of the available Zn from the ore.

This test had been ceased at this stage, in preparation for the major test designed by Bob.

When again looked at on 1st January, and after adding water to bring the slurry volume back to 4 litres (evaporation over the past month had lowered the volume), the pH had risen to 2.7. Note: the pH meter was calibrated with 0.01N HCl.

A further 9g of 98% acid was required to bring the pH back down to 2, giving a total acid usage so far of 53.1g (15.6% of dry ore weight).

The slurry was then let stand overnight before commencing to draw off the solution (hopefully containing most of the soluble silicon). This amounted to 3.2 litres of solution. The slurry was then made up again to 4 litres with water, and 25 ml of 10% acid was needed to bring the pH back to 2.02 to avoid any remaining soluble silicon from coming out of solution. After several hours stirring, this was allowed to settle overnight before again decanting the solution (approx 3.2 litres). Note that the second 25 ml addition of 10% acid has not been included in the total acid usage.

Up till this point there was no obvious smell of H_2S.

Both decanted solutions were retained for later analysis.
Initial 3.2 litres of solution gave 900 ppm Zn (indicating 2.9g Zn in the 3.2 litres)
(and 3.67g in the 4.1 litres of total solution)
Wash solution of 3.2 litres gave 230 ppm Zn (indicating 0.74g Zn in the 3.2 litres)
(and 0.93g in the 4.1 litres of total solution)

Therefore the total Zn extracted by the silicon removal is about 3.8g out of an estimated total Zn of about 25.8g, based on the test 94(b) Zn balance. This indicates approximately a 15% loss of Zn to the silicon removal.

500 ml of 10% (90g of 98%) H_2SO_4 was then added to the slurry, and stirred for about 4 hours before allowing to settle overnight. At this stage the acid useage was

Removal of silicon	53g	
Zn Digestion	90g	
Total	143g	(42% of dry ore weight)

A strong smell of H_2S was then evident.

After 3 days digestion, with constant stirring during the day and sample settling overnight, at an average of about 20^0C; -

Zn recovery (@ 0.21%) - approximately 40% of Zn remaining in sediment.
- approximately 34% of total sample Zn.

After 6 days digestion (volume reduced to 3838 ml, - due to evaporation)

Zn recovery (@ 0.42%) - approximately 73% of Zn remaining in sediment.
- approximately 62% of total sample Zn.

After 9 days digestion (volume reduced to 3638 ml, due to evaporation)

Zn recovery (@ 0.55% Zn) - approximately 91% of Zn remaining in sediment.
- approximately 78% of total sample Zn.