# Activities Report for the quarter ended 31 December 2011

## Admiralty Resources NL (ASX: ADY)

*Issued capital* 606,518,966 shares (as of 31 December 2011) 606,518,966 shares (current)

Top 20 shareholders : 56.89% (as of 31 December 2011) Top 20 shareholders : 58.30% (current)

Directors' holdings: 13.27% (as of 31 December 2011) Directors' holdings: 13.27% (current)

#### Board

Chairman Professor Ross Harper

Managing Director Stephen C. Prior

Non-executive Directors Michael Perry Dr. Shaoqing Li

**Company Secretary** Patrick Rossi

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# Highlights

#### Chile

The multi-target exploration strategy progressed through the following activities:

#### • Harper South – Mariposa iron target

5 holes and a total of 1,604 metres were drilled as part of the diamond drilling campaign that commenced in mid November and which is part of the detailed mine engineering study to produce 1 million tonnes of finished product out of the Mariposa target;

#### Harper South – All 6 targets

Completed a series of high resolution ground magnetic surveys focusing on six identified targets. The Mariposa and La Chulula surveys returned very positive results. Reports for remaining four targets are pending; and

#### Pampa Tololo Project

Completed high resolution ground magnetic survey with the 3-D inversion revealing 3 potential iron targets: Simpson, Cochrane and O'Brien.

#### Australia

#### **Bulman Project**

An airborne electro-magnetic survey was completed and the interpretation results are currently being reviewed by independent geological consultants, Geos Mining.

#### **Corporate**

- Admiralty remained debt free and had \$3,211,000 cash on hand at the end of the quarter (previous quarter: \$4,399,000); and
- Exploration expenditure increased over 110% to \$627,000 in the current quarter (previous quarter: \$293,000).



### **Harper South**

All targets

High resolution ground magnetic survey



3D view of the identified targets

# Mariposa Diamond drilling campaign iron target



3D view of topography, magnetic susceptibility (0.7 (SI)) and current diamond drilling campaign.



Location of the planned drill holes. Blue dots show completed holes as at 31 December 2011.

During the quarter, Quantec Geoscience Chile Ltda. ("Quantec"), on behalf of AMC, completed a series of high resolution ground magnetic surveys over the most prospective areas of Harper South.

The surveys focused on six primary targets identified: Mariposa, La Chulula, Soberana, Negrita, Mal Pelo and La Vaca.

Results have been received for the Mariposa and La Chulula survey with all others results expected to be received imminently.

The survey results and their 3-D inversion delineate high intensity magnetic anomalies of significant size. Its interpretation has confirmed the presence of three targets susceptible to contain significant iron mineralization, with Mariposa and La Chulula being confirmed as the two primary iron targets within Harper South.

La Chulula. The interpretation of the La Chulula iron target was particularly promising as it exhibited a north/south vertical body, with dimensions of 250m x 750m, located near the surface, with depths up to 700m.

**Mariposa.** The Mariposa iron target displayed dimensions of 250m x 300m, located at a depth of less than 100m below the surface.

The diamond drilling ("DD") campaign commenced on 19 November 2011 and it is expected to be completed in February 2012. It consists of approximately 3,000m subdivided within 10 drill holes, with a depth distribution between 255m to 350m and a diameter of 2.5 inches (HQ diameter).

The DD campaign has been designed by Redco Mining Engineers ("Redco") and it is based on the review of all the previous exploration work done at Mariposa, the results of the high resolution ground magnetic survey and the topography survey, carried out in September and October 2011.

The criteria to define the drill hole zone locations were to obtain drill holes that enabled Redco Mining Engineers:

- to check the magnetic susceptibility continuity of the Mariposa deposit;
- to cross the magnetic susceptibility of the ore body;
- to cross the mined out areas in the 1960s perpendicularly; and
- to drill along mined out area projections to confirm the extension of the ore body.

The DD campaign is being conducted by Superex S.A., using a Boart Longyear LY 44 drill rig manned by 16 staff in two shifts, and being monitored by Admiralty's external geological consultants, Goldberg Resources, and Redco. The execution of the DD campaign has progressed well with a total of 5 holes and 1,604 meters drilled to 31 December 2011.



The sample cores extracted to date show disseminated magnetite and highly fractured thin veins, caused by the presence of faults, which confirms the geological model established by SRK Consulting Chile S.A. in the past: the ore body is composed by subvertical bodies, quite close to each other, and separated by areas with low Fe grade in which the iron is mainly located in veins with Fe grade no lower than 15% intercepted by areas in which the veins show intense Fe mineralization between 40-45%, reaching up to 50-60%.

Sample cores from AD-04, at 145-173m depth, showing an estimated Fe grade of 45-50 for a length of 29m.

Mariposa iron target Mine engineering plan AMC continue Project. Redco

AMC continued to progress the detailed mining study for the Mariposa Project. Redco are preparing a robust engineering report which will support the financial requirements to develop the project to a minimum of 1 million tonnes of finished product per annum at a 63% Fe grade.

The key outcomes of the mine engineering plan are:

- to provide a resource statement and upgrade the current mineral resources of 168m in Mariposa<sup>1</sup>, where applicable;
- to define the mining process: how the ore will be processed to obtain the final product, supplementing the information provided by the DD campaign with laboratory work;
- to construct a resource model that can have reliable estimation of grades and its distribution across the ore body and which can confirm the continuity of the geological ore body;
- to draw the best mining geometry and architecture after conducting geotechnical studies to estimate the rock mass strength, based on the DD campaign core samples;
- to obtain a full set of mineralogical information that observes the minerals involved in the ore body such as magnetite or hematite and identify the association of minerals contained in the ore body that could affect the processing and the metallurgical recovery; and
- to define the type of grinding that needs to take place during processing in order to liberate the main mineral of interest, according to the main parameters of the grain size.

<sup>1</sup> The mineral resource statement was prepared by SRK Consulting Chile S.A., it was released to the ASX via an announcement on 4 September 2009.

The following activities have completed during the quarter to assist in the preparation of the mine plan:

- Completion of a detailed surface topography of the project;
- Commissioned mineralogical and metallurgical testing on the recently drilled samples in addition to testing on the historical samples as part of the due diligence programme; and
- Completed construction of a sample room and office camp at Mariposa Project.

Mariposa iron target Supporting work to the mine engineering plan

La Chulula iron target Exploratory drilling (Subsequent to the end of the year)



Division of the Mariposa and La Chulula iron targets.

Due to the promising high-resolution ground magnetic survey results, AMC has also prioritised further exploration at La Chulula.

To take advantage of the drill rig currently working at Mariposa, a new hole of up to 600m depth at La Chulula has been added to the existing DD programme. This has now been scheduled to be drilled so metallurgical testing can be performed on the sample cores and provide greater understanding of this iron target which has not previously been subject to drilling.

AMC will commission a reverse circulation drilling programme for which AMC is currently gathering quotes. The programme is expected to commence during the first quarter of 2012.

It is anticipated the drilling programme at La Chulula iron target will be followed by a similar drilling programmes at the remaining targets in Harper South throughout 2012 and 2013, subject to the remaining surveys also returning positive results.



Depth slices of magnetic susceptibility at La Chulula from 500 to 100 metres deep. Source: High resolution ground magnetic survey – Harper South by Quantec Geoscience Chile.

### Pampa Tololo

AMC completed a ground magnetic survey over the Pampa Tololo concessions, which cover 3,455 hectares and are located north of Vallenar, Chile. The results and 3-D inversion of the survey revealed 3 distinct iron targets, named Simpson, Cochrane and O'Brien, in honour of three Chilean naval heroes, and defined as follows:

- **Simpson**. This is the most important target in relation to size/susceptibility. An oblate spheroid shape of 800m in diameter, located at a depth of 200-250m and exhibiting magnetic susceptibility of about 0.5 S.I. units.
- **Cochrane.** A more complex shape, elongating north/south up to 1000m, with a depth extension of 200-250m approximately.
- **O'Brien.** Showing an oblate sphere shape, with dimensions of 500 x 400 m, buried at depths between 200m and 300m.
- **Tolita**. The smallest of the targets, with an extension of 350 x 250 m and depths of up to 100m, likely to be buried at a depth of less than 200m.



In line with the Company's decision to prioritise exploration at the Pampa Tololo concessions, AMC will conduct a reverse circulation drilling programme at Simpson. AMC is currently gathering quotes for the programme and it is expected to commence in the first quarter of 2012.

It is anticipated this will be followed by similar drilling programmes at the Cochrane and O'Brien targets throughout 2012 and 2013.

3D view of the identified targets

# Royalty stream from SCM Vallenar Iron Company ("VIC")

During the quarter, VIC, under the control of Australis Mining Ltd ("Australis"), progressed their operations towards expected initial production of 800,000 tonnes in 2013 and continue to solicit finance arrangements to develop the Harper North project.

Pursuant to its agreement with Australis, Admiralty is entitled to receive a further US\$2,000,000 relating to the up-front consideration, with the next instalment of US\$1,000,000 due in mid March 2012.

# Bulman Resources Pty Ltd ("Bulman"), Northern Territory

• Electromagnetic survey. Fugro Airborne Surveys Pty Ltd ("Fugro"), on behalf of Bulman, completed an airborne electromagnetic survey over exploration licence 23814 with their TEMPEST<sup>™</sup> Electro Magnetic ("EM") system. TEMPEST<sup>™</sup> is a time-domain electromagnetic system operated from a fixed wing aircraft. The system has acquired high resolution EM data that seeks to detect the presence of buried stratiform lead-zinc-silver deposits.

The survey results have been modelled by Fugro and are being interpreted by Bulman's independent geological consultants, Geos Mining.

Application for two new exploration licences. Bulman has submitted an application for two new explorations licences for the project, following the recommendation of Geos Mining to increase the project exploration area.

The two explorations licences in question are EL25929, located within an exploration licence currently held by the Company (EL23814) and EL25930, which contain the area in which the current mineral leases (MLN726, MLN727) held by Bulman are located, and surround exploration licence EL25931, also held by the Company.

The new licences cover an area of  $428.17 \text{ km}^2$  and Bulman will engage with Northern Land Council and local community to ensure that the project has the support of the community and local government authorities.



Bulman Project: current and prospective exploration licences.

## Corporate

• Mr Stephen Prior travelled to New York in mid December and met with representatives from US Exchanges, Deutsche Bank Depository Receipt Services, Burnham Securities and several institutional investors. Mr Prior was invited by LP Funding, a merchant bank specialised in foreign issuers interested to enter the US capital markets.

Mr Prior's presentation addressed the significant interest received from potential investors in the US on the Chilean iron ore project owned by Admiralty following the release of the results of the high resolution magnetic surveys, the current diamond drilling campaign and the prefeasibility study being carried out in the Mariposa iron target.

- Admiralty held its Annual General Meeting on 27 October 2011. Resolutions for the re-election of Professor Ross Harper as a Director, the election of Dr Shaoqing Li as a Director and the ratification of 72,000,000 shares issued in March 2011 were passed on a show of hands.
- Sino Investment & Holding Pty Ltd and its related parties increased their shareholding by 1.04% and continue being a substantial holder, owning 12.91% of the issued capital (as of 31 December 2011).
- Mr Stephen Prior, Managing Director, and Mr Michael S. Perry, Non-executive Director, increased their holdings in ADY shares, bringing the securities held by Directors from 13.14% to 13.27% (as of 31 December 2011).

## **Outline for next quarter**

- Exploration budget: \$1,000,000. 1.
- 2. Tasks to complete:
  - Receipt and assessment of the results for the remaining high resolution magnetic surveys in Harper South;
  - Finalise mine plan for Mariposa, including reserve statement;
  - C Enter into contracts to execute reverse circulation drilling programme at La Chulula and Simpson; and
  - Receipt and assessment of the results of the airborne electro-magnetic survey in Bulman. C

Yours sincerely,

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Stephen C. Prior Managing Director 30 January 2012

#### About Admiralty

Admiralty Resources NL ("Admiralty") is an Australian ASX listed company (ASX listing code: ADY) with mining interests in Chile and Australia as follows:

- 100% shareholder in Admiralty Minerals Chile Pty Ltd Agencia en Chile, the owner of the mineral exploration and exploitation concessions covering over 6,000 hectares within Chilean iron belt in the Atacama Region;
- 100% shareholder in Bulman Resources Pty Ltd, holder of the Bulman project, a lead and zinc deposit located in the Northern Territory of Australia;
- 50% interest in the Pyke Hill Project, a high grade nickel and cobalt deposit near Leonora in Western Australia.

#### **COMPETENT PERSON STATEMENT**

The information in this report that relates to Exploration Results and Mineral Resources of Mariposa iron deposit is based on information compiled by Mr. George G. Even, who is a Member of the Australasian Institute of Mining & Metallurgy. Mr. Ernesto Jaramillo, Principal Resource Geologist with SRK Consulting (Chile) S.A., performed the resource estimation which was reviewed by Mr. Even as a competent person.

Mr. Even is a full-time employee of SRK Consulting (Chile) S.A. Mr. Even, a Qualified Person for JORC compliant statements, reviewed the technical information presented in this document. Mr. Even has sufficient experience that is relevant to the style of mineralisation and type of mineral deposit under consideration and to the activity which was undertaken to qualify as a Competent Person as defined in the 2004 Edition of the 'Australian Code for Reporting of Exploration Results and Mineral Resources'. Mr. Even consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Ernesto Jaramillo Principal Resource Geologist, SRK Consulting, Chile

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George G. Even, MAIG, MAusIMM Principal Geologist, SRK Consulting Chile