# Peak Resources Limited ACN 72 112 546 700

# ASX RELEASE

30th April 2007



#### **Peak Resources Limited**

Level 2 61 Kishorn Road Mount Pleasant Western Australia 6153

PO Box 1271 Canning Bridge Western Australia 6153

#### Stock Exchange

Australian Stock Exchange Symbol: **PEK** 

#### **Issued Capital**

43.95 Million Shares

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#### Gold Projects:

Peak Hill West Peak Hill East Doolgunna (Peak Hill) Menzies

## Nickel Projects:

Yellowdine Lake Ballard

#### **Uranium Projects:**

Cosmo Lake Darlot Cogla Downs Gabyon

# Base Metal Project:

Ashburton

# MARCH QUARTER ACTIVITIES REPORT

# **Highlights**

- Field Exploration commences at Doolgunna (Peak Hill East)
- High Grade intercepts returned from Diamond drilling at Menzies, incl:
  - 3m @ 41.99 g/t Au (Jenny Venn)
  - 8m @ 3.57 g/t Au (CSR)
- Sampling of an RC drill hole at Doolgunna returns 10 metres @
  - 0.6 g/t Au, 0.54% Cu & >1.0% Zn
- Uranium Mineral "Carnotite" identified at Lake Darlot
- Options Rights Issue undertaken

#### Corporate

Rights Issue

During the period the Company embarked upon a rights issue of options to shareholders on a 1 for 2 basis. The rights issue closed after the end of the quarter, with the options issue being strongly supported by shareholders with a take up of over 82%. The shortfall under the issue is being placed by the directors.

## **Exploration**

The March quarter represented the first full quarter of activity for PEK following listing of the Company on the ASX. It has been a period of significant advancement with drilling programmes being undertaken at the Menzies Gold Project, field reconnaissance being conducted on the Goldfields Uranium and Ashburton Base Metals Projects and detailed planning and data reviews being undertaken for the first phase of field work at Peak Hill Project (including the Doolgunna

Gold Prospect).

Additionally, during the period the Company completed an airborne geophysical survey at Peak Hill East, infilling acquired high density data coverage within the Project area.

## **Peak Hill**

Field activity within the Peak Hill Project(s) commenced in April

The field season at PEK's namesake project Peak Hill commenced in Early April following detailed planning conducted over the March Ouarter.

Planned activities for the June quarter include 10,000 metres of RAB & Aircore drilling, and a 5,000 point surface geochemical sampling project.

PEAK RESOURCES
PROJECT LOCATION MAP



# Field Activities Commence at Doolgunna & Peak Hill

#### Peak Hill East Project

(Peak Resources 100%)

Field work has commenced at Doolgunna with early encouragement from re-sampling of an isolated RC hole completed by Rio Tinto in 2001. The re-sampling of the single hole provided a highly anomalous intercept, indicating the continuation of the mineralised corridor as identified by Sandfire Resources into Peak's tenements.

#### Doolgunna Prospect

Doolgunna is located approximately 150km north of Meekatharra in Western Australia. The prospect represents an extensive land holding in an underexplored highly prospective region that is currently providing significant gold exploration results from neighbouring explorers. It is anticipated that the Doolgunna Prospect will form the primary focus of the Company's activities for the remainder of the 2007 calendar year.

PEK has commenced a 4,500 point soil programme at Doolgunna to be followed by 8,000m of RAB and Aircore drilling.

Planning work was completed on an initial first pass 500 Hole RAB/Aircore programme at Doolgunna during the quarter following a geological interpretation of the airborne magnetic survey. Drilling is planned to be completed by the end of the June Quarter, subject to the granting of necessary environmental approvals and rig availability.

Proposed drilling is targeting strike extensions to the mineralised corridor that has been previously outlined by Sandfire Resources (SFR) to the southwest of PEK's Doolgunna tenements within an area that is structurally favourable to host large tonnage deposits.

During the quarter, PEK re-sampled an isolated RC hole previously drilled by Rio Tinto within an area that PEK believes to be highly prospective for gold and copper mineralisation. The hole was drilled by Rio Tinto in 2001 as part of a diamond exploration project within the area. The RC hole returned an highly encouraging anomalous composite sample of 10m (80-90 metres) @

- ♦ 0.6 g/t Au
- ♦ 0.54 % Cu
- + 1.0 % ZN\*

(\*Higher Detection limit of Analytical Method Reached)

Other holes completed by Rio Tinto within the area have been rehabilitated and the samples removed. PEK has approached Rio Tinto for access to the assay pulps generated from Aircore, RC & Diamond drilling in order for the samples to be reanalysed for gold.

An aeromagnetic survey was flown by PEK at Doolgunna during the quarter. The aeromagnetic survey had been designed to infill gaps from recently obtained highly detailed aeromagnetic surveys previously flown by Barrick Gold, Rio Tinto Exploration, Western Mining & Sipa Resources. The high density surveys allow PEK to focus its exploration programme more effectively within the mineralised corridor as identified by Sandfire Resources to the South-West.

Stitching of the recently flown magnetic data into previously acquired data is planned for the June Quarter.

# Three Rivers Prospect

A soil programme has been planned and is scheduled to commence at Three Rivers (E52/1663) upon completion of the soil programme currently underway at Doolgunna.

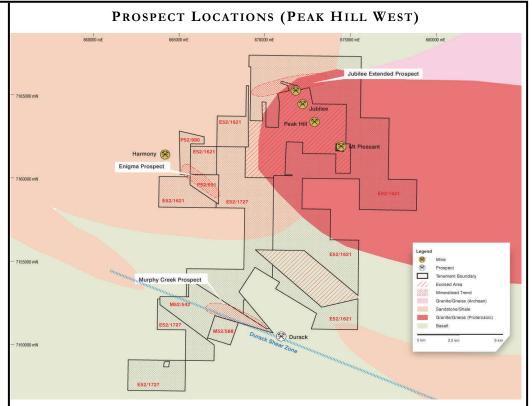
# **Peak Hill West Project**

(Peak Resources earning 70%)

Programme planning commences at Peak Hill West

A review of the Peak Hill West Project commenced during the quarter. Peak Hill West contains a number of priority gold targets, including the Jubilee Extended and Enigma Prospects, which are believed to be extensions/or parallel structures to the gold

Regional Exploration
Targets Identified at
Peak Hill West



mineralisation previously mined at the Jubilee and Harmony mines respectively. In addition, repetitions of lodes mined at the closed Mt Pleasant mine may exist beneath and in close proximity to the former open pit.

The Murphy Creek sub-area contains a number of significant drill intersections from earlier exploration along strike and to the west of the Durack gold resource. The 4 km corridor that straddles the tenements is interpreted to be an extension of the host lithology and structure for the Durack gold deposit (Gleneagle Gold).

The Project currently has over 4000 drill holes, meaning selective data compilations are required prior to the commencement of RC drilling. During the initial stages of the review, a number of untested regional targets were identified and will be tested with soil geochemistry and RAB drilling at the completion of the Doolgunna and Peak Hill East (Three Rivers) programmes during the coming quarter.

#### **Menzies Project**

(Peak Resources 100%)

Drilling Continues at Menzies during the quarter.

Diamond & RC drilling continued at Menzies during the quarter. Drilling was focussed on the high grade areas of Jenny Venn & CSR as previously identified by PEK.

Diamond drilling was completed to obtain a better understanding of the style and structural setting of the mineralisation intersected to date.

# Jenny Venn Prospect

Diamond Drilling Redefines Structural Controls on Mineralisation.

A structural reinterpretation of the Jenny Venn Prospect was completed by PEK following structural logging of diamond core and the return of assay data for the prospect.

Structural information gained from logging of the diamond core has confirmed that the initial drilling completed within the area was drilled down dip (or plunge) of the mineralised veins and therefore was not representative of the nature of the mineralisation. Diamond drilling at Jenny Venn has concluded that mineralisation is hosted by a stacked array of shallow dipping quartz veins dipping towards 025-040 degrees that are hosted within a fault zone interpreted to be striking WNW-ESE. This means that the initial interpretation that mineralisation was hosted by a laminated quartz vein striking towards the NNE was incorrect.

Diamond Drilling
Delivers High-Grade
and Geological
Reinterpretation of the
Mineralised System.

3m @ 41.99 g/t Au

Due to the late arrival of the diamond rig at Jenny Venn, the bulk of the RC drilling completed by PEK to the north and south of the fault zone has been ineffective and that further RC drilling will be required to the northwest and southeast along the fault zone to define the strike extents of the high-grade quartz-sulphide veins.

Further RC drilling is to be undertaken in the June Quarter to test the extensions of strike subject to the availability of rigs and field crew.

# **Granny Venn Prospect**

No work was conducted at Granny Venn during the quarter. It is anticipated that modelling of the mineralisation that

extends for over 200 metres underneath the current shallow pit will commence within the  $\mu$  June quarter.

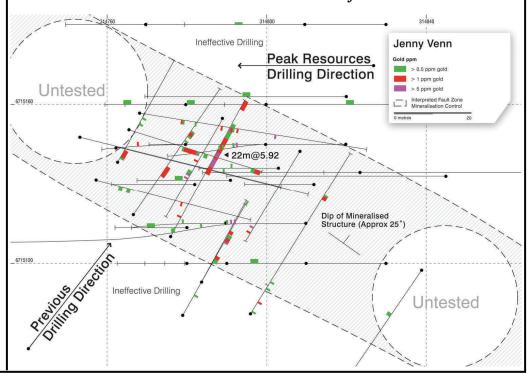
# DIAMOND & RC DRILLING JENNY VENN



# SIGNIFICANT RC RESULTS — JENNY VENN

Hole	North	East	Depth	Dip/Azi	From	То	Interval	Grade (Au ppm)	Comments
MN0025R	6715100	314810	60	-60/270	24	28	4	1.21	
MN0027R	6715140	314780	40	-60/270	32	40	8	6.16	
Including:						40	4	11.29	ЕОН
MN0028R	6715140	314800	80	-60/270	52	56	4	32.64	
MN0029R	6715140	314820	110	-60/270	108	110	2	2.06	

# STRUCTURAL SETTING SCHEMATIC — JENNY VENN



Diamond Drilling at CSR Returns 8m @ 3.57 g/t AU from 24m

#### CSR Zone Prospect

Diamond Drilling Confirms nature of mineralisation hosted at CSR.

A small RC programme and two diamond holes were completed during the quarter at CSR. Results from the programme confirmed the high grade "nuggetty" nature of the mineralisation and discounted the potential for significant strike extensions beyond that . Diamond drilling has confirmed the mineralisation at CSR is hosted by a shallow mineralised pod adjacent to the mafic/porphyry contact.

Further to the diamond drilling, high-grade composite samples reported in November last year have been re-split and have been assayed using a Screen Fire Assay Technique.

No further drilling is planned for CSR, with the drilling completed to date to be modelled and a JORC compliant resource estimate to be calculated. Best results from the recent drilling and re-sampling of RC drilling completed by PEK are tabled below:

#### SIGNIFICANT ASSAY RESULTS — CSR ZONE

Hole	North	East	Depth	Dip/Azi	From	То	Interval	Grade	Comments
MN0001R	12940	9860	48	-60/270	27	30	3	4.07*	
MN0005R	12960	9860	50	-60/270	20	22	2	4.64*	
					22	24			Samples De- stroyed by Lab
					24	26	2	3.05*	
MN0066D	12940	9865	40	-60/270	24	32	8	3.57	

# **Goldfields Uranium Project**

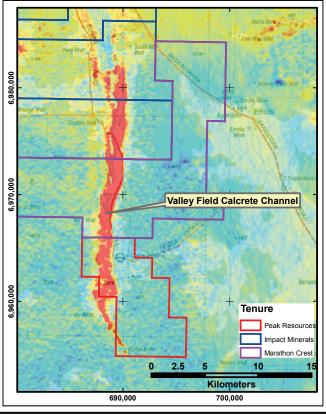
(Peak Resources 100%)

PEK commences appraisal of its Uranium Projects.

Cogla Downs and Lake Darlot were visited during the quarter and initial surface sampling traverses were completed. The site visits utilised the services of Mr Brenton Newell, Mr Newell is a qualified Geologist with over 20 years experience in a range commodities including uranium, diamonds, base & precious metals, having worked for a multitude of senior mining companies. More recently, Mr Newell has been actively consulting to Marathon Resources at its Arkaroola Uranium Project in South Australia.

Work undertaken at Cogla Downs & Lake Darlot included initial field checks and surface sampling using a portable spectrometer. PEK planned to commence a review of Cosmo during the quarter, this work was disrupted by heavy rain caused by the inland movement of cyclones during March.

# Cogla Downs Radiometric Anomaly



Drilling Planned for PEK's Lake Darlot & Cogla Downs Uranium Projects

"...uranium rich mineral carnotite was identified in a shallow calcrete pit (< 1 metre deep) located on the edge of Lake Darlot."

#### Cogla Downs Prospect

Cogla Downs comprises a raised section of valley filled deposited calcrete that is slightly masked by more recent deposition of sand and soil. The palaeo calcrete drainage system is estimated to be up to 2.5 km wide with a depositional thickness of up to 12 metres.

Uranium enrichment has been identified in three separate elongated zones at Cogla Downs. PEK holds (under application) a 5.5 kilometre section of drainage, that is the southern continuation of Impact Minerals (IPT) Cogla Down Prospect which forms part of the Yarrabubba Uranium Project.

PEK completed two surface geochemical traverses over Cogla Down during the quarter and now plans to commence drilling to obtain an understanding of the true grades and thicknesses of uranium enrichment at Cogla Down. Drilling is planned post grant of the exploration licence application.

#### Lake Darlot Prospect

Carnotite identified at Lake Darlot, +100ppm U308 returned from initial surface sampling,

The Lake Darlot Project comprises broad calcrete and sediments deposits up to 10 metres thick at the margins of Lake Darlot. The calcareous sediments have been identified as being enriched in Uranium by the precipitation of uranium from drainage inflows from nearby catchments that host "hot" granites (high uranium levels).

Regional radiometrics data has identified a broad zone of anomalous uranium in sediments that is approximately 7 km long x 2.4 km wide. PEK completed 12 surface samples in parts of the anomaly in December 2006 with a peak assay being returned during the quarter of 100 ppm  $U_3O_8$ .

PEK completed further reconnaissance to delineate background  $U_3O_8$  during the quarter with a more thorough sampling traverse. During the sampling programme, the uranium rich mineral carnotite was identified in a shallow calcrete pit (< 1 metre deep) located on the edge of Lake Darlot

PEK now plans to commence drill testing of the radiometric anomaly at Lake Darlot during the June quarter subject to the availability of appropriate drilling equipment and field crew.

Assay data is pending for both Cogla Downs and Lake Darlot.

#### Ashburton Base Metals Project

(Peak Resources 100%)

PEK engaged a Geophysical Contractor to complete a Gravity Survey at Mt Vernon during the June quarter. The gravity survey will be completed in conjunction with geochemical surface sampling programmes planned for Pingandy and Mt Vernon. The survey will target an area where >6% pb and anomalous Zn has been returned in rock chip sampling.

#### **Upcoming Exploration Programme**

Exploration programmes scheduled for the June Quarter, include:

# Peak Hill:

Worked planned for Peak Hill East for the current quarter includes the completion of surface sampling at the Doolgunna and Three Rivers prospects. Geochemical sampling is also planned for newly identified regional targets at the Peak Hill West Project.

Subject to timing of permitting, an extensive first pass RAB/Aircore drill programme will be undertaken at Doolgunna, with a smaller more regional programme to be drilled at Peak Hill West.

#### Goldfields Uranium Projects

Drilling programmes are currently scheduled for Lake Darlot and Cogla Downs, with water bore sampling and regional traverses to be completed at Gabyon. RAB drilling is planned to test identified anomalies at the Lake Darlot Prospect following up on work undertaken in the

March quarter. Subject to grant (anticipated within the coming weeks) an initial RAB programme has been planned for the Cogla Downs Prospect.

Work on the Cosmo Prospect is not scheduled to occur until the September quarter 2007 as the Company attends to permit clearances within the prospect area.

#### Menzies Project

A follow-up RC drilling programme has been planned to test the extension of the mineralised fault zone located at the Jenny Venn Prospect. In addition, PEK plans to commence resource calculations of identified mineralisation located underneath of the shallow Granny Venn Pit, as well as the mineralisation identified by recent RC & diamond drilling at the CSR Zone.

#### Ashburton

As noted a gravity survey is to be undertaken at the Mt Vernon prospect together with soil geochem survey to be completed at Mt Vernon and Pingandy. This represents the initial phase of work to be undertaken within the Ashburton. It is anticipated subject to the success of the gravity survey, that drilling may be undertaken within the September Quarter.

## **Working Capital**

At the end of the quarter the company had on hand \$2.75m in cash. These funds will be augmented during the June quarter by approximately \$210,000 raised under the options placement. Peak's forecast exploration costs for the June quarter are \$400,000.

The information in this report is based on information compiled by Mr. Kell Nielsen, a Member of the Australian Institute of Mining and Metallurgy. Mr. Nielsen is a full-time employee of Peak Resources Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Nielsen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.