

**Peel Exploration Limited**

ASX code: PEX  
ACN: 119 343 734

Level 1, 79 Hay St  
Subiaco, WA 6008

Ph: (08) 9382 3955  
Fax: (08) 9388 1025  
E: [info@peelex.com.au](mailto:info@peelex.com.au)  
Web: [www.peelex.com.au](http://www.peelex.com.au)

Contact:

Rob Tyson  
Executive Director  
[rtyson@peelex.com.au](mailto:rtyson@peelex.com.au)

**About Peel Exploration Limited:**

- The Company has eight 100%-owned tenements covering approximately 546 km<sup>2</sup> predominantly in the New England Fold Belt region of northern New South Wales.
- These projects comprise the Attunga, Dungowan, Barry, Waverley, Armidale, Mt Tennyson East and Yerranderie tenements and are host to numerous historic mines and workings.
- The Attunga project is host to the Attunga Tungsten Deposit, Attunga Copper Mine and Kensington prospects.
- Peel's core asset – the Attunga Tungsten Deposit – is a high grade tungsten deposit located near excellent infrastructure.
- The Company is conducting exploration in a logical and systematic manner with a focus on maximising the return for each dollar spent.

**Highlights for June quarter 2009**

- **New shallow, high-grade tungsten intercepts at Attunga Tungsten Deposit including 25m at 0.57% WO<sub>3</sub> & 0.06% Mo from 19m (AP1-026) and 2m at 0.59% WO<sub>3</sub> & 0.03% Mo from 58m (AP1-027).**
- **Copper-gold discovery at Attunga Copper Mine with 75m at 1.02 g/t Au, 0.87% Cu, 0.09% Mo, 0.06% Bi, 22 g/t Ag, and 0.3 g/t Re (ACM-004).**
- **New broad, low grade gold mineralisation intercepted at Kensington.**
- **TEM and IP geophysical surveys completed at Attunga Copper Mine and Kensington respectively.**
- **In-house conceptual study on Attunga Tungsten Deposit largely completed.**
- **Attunga regional geological mapping and surface geochemistry programme commenced.**
- **Exploration licence granted over historic Yerranderie silver field tailings.**

**Plans for September quarter 2009**

- **Infill drilling and feasibility study planning for Attunga Tungsten Deposit.**
- **Ongoing regional geological mapping and surface geochemistry programme at Attunga.**
- **Heritage and environmental studies at Yerranderie.**

## Exploration

**Attunga Project: Gold, Tungsten, Molybdenum, Copper; NE NSW (PEX 100%).**

**Tenements:** EL6883 (Mt Patterson), EL6884 (Attunga).

**Targets:** Intrusive-Related Gold System style gold-tungsten mineralisation; skarn style tungsten-molybdenum mineralisation and skarn-style precious/base metals mineralisation.

During the quarter activity undertaken at the Attunga Project included:

- Literature review and site visit at Attunga Copper Mine prospect;
- Transient EM survey at Attunga Copper Mine prospect and IP survey at Kensington;
- RC drilling at the Attunga Copper Mine (5 holes for 830m), Attunga Tungsten Deposit (3 holes for 721m) and Kensington (1 hole for 180m);
- Regional geological mapping and surface geochemistry programme;
- In-house conceptual study into Attunga Tungsten Deposit; and
- GIS data capture and desktop studies.

### **Attunga Tungsten Deposit**

The Attunga Tungsten Deposit was discovered in the late 1960s and has undergone minimal modern exploration. In April 2008, Peel announced the completion of an independent inferred resource estimate for the Attunga Tungsten Deposit with results including 1.29 Mt grading 0.61% WO<sub>3</sub> and 0.05% Mo for 9,400t contained WO<sub>3</sub> equivalent using 0.2% WO<sub>3</sub> equivalent cutoff.

#### RC drilling

During the quarter, Peel completed an RC drilling programme at the Attunga Tungsten Deposit comprising three holes for 721m. These holes were designed to test for northern and down-dip extensions to the current mineralisation.

Results include high grade tungsten intercepts:

- **27m at 0.54% WO<sub>3</sub> and 0.06% Mo from 19m including 2m at 3.38% WO<sub>3</sub> and 0.27% Mo 0.06% from 22m** in RC drillhole AP1-026; and
- **2m at 0.59% WO<sub>3</sub> and 0.03% Mo from 58m** in RC drillhole AP1-027.

The true width of the mineralisation encountered in AP1-026 is estimated to be about 25-30% of the downhole width, and is unknown for AP1-027. A summary of assay results for the Attunga Tungsten Deposit are contained in Table 1. Tungsten and molybdenum analyses were completed using fusion XRF methodology by ALS Chemex.

Peel is encouraged by the mineralisation encountered; particularly the shallow nature as defined in AP1-026, and believes that good potential exists to delineate additional mineralisation at the Attunga Tungsten Deposit.

#### Other work

Peel has largely completed an in-house Conceptual Study into development options for the Attunga Tungsten Deposit with interim results indicating that a small, low capital expenditure operation could potentially yield positive returns. Peel has submitted the study to independent engineers for review.

## **Attunga Copper Mine Prospect**

The Attunga Copper Mine, discovered in 1902 and worked over various periods up until World War 2, had been held under an historic prospecting licence by another company. In February 2009 the licence expired and the area subsequently reverted back to Peel's tenure.

Total recorded production was about 1,600t ore grading ~6% copper, ~8 g/t gold and ~150 g/t silver. Other significant metals present include bismuth, molybdenum and tungsten. Workings comprised pits, shafts and levels and extended to about 80m below surface with sulphide mineralisation including chalcopyrite and chalcocite reported to occur in the deeper levels.

Mineralisation at the Attunga Copper Mine occurs in a garnet skarn similar to that at the Attunga Tungsten Deposit indicating that the deposits are genetically-related.

### RC drilling

During May 2009, Peel reported the discovery of important polymetallic (copper-gold dominant) mineralisation at the Attunga Copper Mine. Results from RC drillhole ACM-004 are:

- **75m at 1.02 g/t Au, 0.87% Cu, 0.09% Mo, 0.06% Bi, and 22 g/t Ag from 136m including 27m at 1.60 g/t Au, 1.66% Cu, 0.18% Mo, 0.1% Bi, and 39 g/t Ag from 136m.**

Mineralisation at the Attunga Copper Mine is interpreted to be sub-vertical and the true width of the above intervals is construed to be approximately 25% of the downhole intercepts. Mineralisation occurs in garnet-rich calc-silicate skarn with sulphide minerals including chalcopyrite, bornite and molybdenite.

Results for the other drillholes in the Attunga Copper Mine yielded encouraging mineralisation in three holes. Two drillholes did not reach target depths, experiencing difficult drilling conditions in alteration clays. A summary of assay results for the Attunga Copper Mine prospect are contained in Table 1.

Peel is buoyed by the discovery and notes that the drilling completed marks the first systematic drilling that the Attunga Copper Mine area has received. Importantly, the polymetallic mineralisation encountered in ACM-004 remains open along strike and up and down dip. The discovery supports the Company's belief that the Attunga skarn deposits are part of a larger metalliferous system, possibly including a porphyry source.

### EM survey

During the quarter and in preparation for the RC drilling programme, Peel completed a TEM (transient electro-magnetics) ground geophysical survey in the Attunga Copper Mine area. Results delineated a moderate, shallow conductor centred approximately 200m north of the historic Attunga Copper Mine workings.

The anomalous TEM conductor was considered most likely to be due to a steeply easterly dipping conductor and the sharpness of the response indicated a source from less than 100m depth. Results also suggest that there are significant EM negative effects, probably from an IP response running further north of the anomalous conductor.

Peel drilled several holes targeting the EM and negative EM anomaly which intersected alteration clays and did not reach planned target depths. No satisfactory explanation of the anomaly was returned from the drilling and the anomaly remains ineffectively tested.

### **Kensington Gold-Tungsten Prospect**

The Kensington Gold-Tungsten Prospect located about 5km north-northwest of the Attunga Tungsten Deposit, represents a high-priority target within the Attunga Project area. Gold and tungsten mineralisation at Kensington is fault-related, and occurs as sheeted and stockwork veining. Drilling completed by Peel and previous tenement holders has identified widespread, low grade gold and tungsten mineralisation open in several directions.

#### RC drilling

During the quarter, Peel completed one RC drillhole at Kensington to test a shallow, chargeable anomaly defined from a recent IP survey (see below). Ken-10 (180m) intercepted wide zones of low grade gold mineralisation within a package of sediments that included carbonaceous shale, effectively explaining the chargeable anomaly. A summary of assay results for KEN-10 are contained in Table 1.

#### IP survey

During the quarter, Peel completed an IP ground geophysical survey at Kensington in preparation for the RC drilling programme. The survey identified multiple chargeable anomalies, and one of these was drill-tested (see above).

### **Dungowan Project: Copper, Zinc, Gold, Silver; NE NSW (PEX 100%).**

**Tenement:** EL6613.

**Targets:** Polymetallic VHMS mineralisation; syngenetic exhalative gold mineralisation; and epigenetic structurally-controlled gold mineralisation.

No fieldwork was undertaken during the quarter.

### **Barry Project: Copper, Zinc, Gold, Silver; NE NSW (PEX 100%).**

**Tenement:** EL6614.

**Targets:** Polymetallic VHMS mineralisation, intrusive-related precious/base metals mineralisation; and ultramafic-hosted nickel and PGEs.

No fieldwork was completed during the quarter.

### **Waverley Project: Silver, Lead, Zinc, Gold; NE NSW (PEX 100%).**

**Tenement:** EL6719.

**Targets:** Intrusive-related precious-base metals mineralisation.

No fieldwork was completed during the quarter.

### **Armidale Project: Silver, Gold, Antimony, Tungsten; NE NSW (PEX 100%).**

**Tenement:** EL6722.

**Targets:** Intrusive-related precious metals mineralisation.

No fieldwork was completed during the quarter.

**Mt Tennyson East: Molybdenum, Tungsten; Central NSW (PEX 100%).**

**Tenement:** EL7272.

**Targets:** Granite-hosted molybdenum and tin mineralisation.

During the quarter, historic literature reviews, desktop studies and access negotiations commenced.

**Yerranderie: Silver, Lead, Gold; Central NSW (PEX 100%).**

**Tenement:** EL7356.

**Targets:** Silver-lead-gold mineralisation in surface waste and tailings dumps.

During the quarter, Peel was granted an exploration licence over part of the historic Yerranderie silver field area. Literature searches indicate that substantial amounts of silver-lead-gold mineralisation remain present in surface waste and tailings dumps at Yerranderie. Peel plans to investigate the potential to retreat and remediate the Yerranderie environs.

During the quarter, Peel completed an initial site visit to Yerranderie including grab sampling from waste and tailings dumps for early warning metallurgical testwork.

**For further information, please contact:**

**Rob Tyson**

**Executive Director – Peel Exploration**

**Mob: 0420 234 020**

*The information in this report that relates to Exploration Results is based on information compiled by Mr Robert Tyson who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Tyson has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Tyson, consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.*

**Table 1: Summary of assay results**

Hole No.	Northing GDA	Easting GDA	Azimuth (mag)	Dip	Depth (m)	From (m)	To (m)	Interval (m)	Au (ppm)	Cu (%)	Mo (ppm)	Bi (ppm)	Ag (ppm)	Re (ppm)	WO <sub>3</sub> (%)	Comment
<b>Attunga Copper Mine</b>																
ACM-001	6578701	302768	238	-60	74	-	-	-	-	-	-	-	-	N.A.	-	Alteration clay intersected; hole abandoned
ACM-002	6578630	302767	58	-60	78	74	78**	4	0.29	-	-	-	-	N.A.	-	Mineralisation open at depth
ACM-003	6578782	302668	236	-60	90	-	-	-	-	-	-	-	-	N.A.	-	Alteration clay intersected; hole abandoned
ACM-004*	6578505	302876	238	-70	222	136	211	75	1.02	0.87	900	599	21.9	0.30	-	Southern end of Attunga Copper Mine
incl						136	163	27	1.6	1.66	1805	991	39.2	0.63	-	
ACM-005	6578654	302661	58	-52	150	20	24	4	0.68	0.36	-	-	-	N.A.	-	
ACM-006	6578544	302756	58	-70	216	84	96	12	-	0.24	-	-	5.4	N.A.	-	Northern end of Attunga Copper Mine
<b>Attunga Tungsten Deposit</b>																
AP1-026	6577842	302518	58	-80	211	19	46	27	-	-	642	-	-	-	0.54	Northern end of Attunga Tungsten Deposit
incl						22	24	2	-	-	2705	-	-	-	3.38	
and						62	63	1	-	-	480	-	-	-	0.54	
and						64	65	1	-	-	317	-	-	-	0.14	
and						139	142	3	-	-	650	-	-	-	-	
and						187	189	2	-	-	-	-	-	-	0.07	
AP1-027	6577881	302505	58	-90	229	54	57	3	0.09	-	-	980	26.2	N.A.	-	Northern end of Attunga Tungsten Deposit
and						58	60	2	-	0.1	310	-	-	N.A.	0.59	
and						207	210	3	-	-	-	-	-	N.A.	0.1	
AP1-028	6577938	302526	238	-75	281	170	172	2	-	-	505	-	-	N.A.	-	Northern end of Attunga Tungsten Deposit
and						273	274	1	-	-	-	-	-	N.A.	0.1	
<b>Kensington</b>																
KEN-10	6582551	300739	40	-60	180	1	4	3	0.25	-	-	-	-	N.A.	-	Chargeable anomaly at Kensington
and						30	58	28	0.17	-	-	-	-	N.A.	-	
and						65	106	41	0.31	-	-	-	-	N.A.	-	
and						116	161	45	0.16	-	-	-	-	N.A.	-	
and						168	180**	12	0.19	-	-	-	-	N.A.	-	

Notes:

1. Samples were from split RC drill cuttings.
2. Samples were analysed at ALS Chemex utilising methods: Au-AA25 for Au; ME-ICP41/61 for multi-element; Ag-OG46 for >100 ppm Ag; Cu-OG46 for >1% Cu; MS-62 for Re; and ME-XRF10 for W >500ppm.
3. WO<sub>3</sub> % was calculated using a 1.261 conversion factor.
4. \* Previously reported.
5. \*\* End of hole.

ACM-004 Cross Section (looking South)

