



## FURTHER REGIONAL TARGETS IDENTIFIED AT BARLEE

### ASX RELEASE

21-Sep-10

### High Grade RC Drilling Results

During the year the company embarked on a major regional exploration program over its 300 square kilometre exploration tenements at Barlee to identify mineralised zones similar to those found at the Halleys East and Phil deposits which produced an initial base inferred resource for Beacon Minerals.

We are pleased to announce remaining drilling results from the second major regional exploration program that commenced in June 2010 at the Barlee Gold Project. All drilling has now been completed and all results have now been received. Results are from the remaining 23 of the 66 RC and 375 of the 461 RAB-Aircore drilling program.

The company is **highly encouraged** by these initial results as it supports its belief that further zones of potentially economic mineralisation remain to be discovered at the Barlee Project. Review of data is currently underway with a further program planned for November.

Encouraging RC assay results have been received from the infill resource drilling at the Halleys East Deposit and from initial RC drilling at other prospects including Eastside 2 and Halleys NE:

- 7m @ 13.6 g/t Au
- 5m @ 9.4 g/t Au
- 1m @ 13.8 g/t Au
- 1m @ 15.2 g/t Au
- 3m @ 2.7 g/t Au
- 2m @ 2.1 g/t Au
- 1m @ 6.5 g/t Au

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Drilling on Halleys East has shown further shallow high grade mineralization extending to the South East.

The company is in a strong cash position and has the ability to continue an aggressive exploration program to follow up on the success of the recently completed regional drilling program.

### RAB – Aircore Drilling

Results from the RAB – Aircore program has outlined six new mineralised targets. This is considered particularly encouraging as areas such as Lost Bolt South, Kink and the Fenceline prospects are new discoveries generated from the company's regional soil sampling programs. Notable results include;

**Russell North**

- 20m @ 1.1 g/t Au ( inc. 12m @ 1.68 g/t Au )
- 27m @ 0.7 g/t Au EOH ( inc. 8m @ 1.76 g/t Au )
- 11m @ 0.6 g/t Au EOH ( inc. 4m @ 1.2 g/t Au )

**Lost Bolt**

- 12m @ 0.7 g/t Au ( inc. 4m @ 1.8 g/t Au )

**Lost Bolt South**

- 4m @ 0.9 g/t Au

**Fenceline 2**

- 4m @ 1.1 g/t Au

**Fenceline 5**

- 4m @ 0.9 g/t Au

Should you have any questions in relation to the above matters, please contact the undersigned on telephone (08) 9476 9200.

For and on behalf of  
BEACON MINERALS LIMITED



**Darryl Harris**  
**Managing Director**

**Attachment 1 – RC Drilling Results**  
**Attachment 2 – RAB-Aircore Drilling Results**  
**Attachment 3 – Overview Map: RC Drilling**  
**Attachment 4 – Overview Map – RAB – Aircore Drilling**

*In accordance with Listing Rules 5.6 of the Australian Securities Exchange, the Exploration Results contained in this report have been compiled by Mr. Lyle Thorne, a consultant to the company. Mr. Thorne is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and has the relevant experience with the mineralisation reported on 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. Thorne consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. All drilling results are reported as downhole widths.*

*The information in this report, as it relates to Resource Estimates, is based on information compiled and/or reviewed by Byron Dumpleton who is a Member of the AusIMM. He 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". Byron Dumpleton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## Attachment 1 – RC Drilling Results

All results have now been received from the RC drilling program.

Further drilling at Halleys East was completed to gain adequate drill density within the currently defined mineralised zone. A total of six RC holes (BRC257-262) were drilled. The drilling has better defined the shallow, high grade mineralisation at the Halleys East Deposit with significant intersections of **7m @ 13.6 g/t Au (from 31m)**, **5m @ 9.4 g/t Au (from 15m; inc 2m @ 20.7 g/t Au)**, **1m @ 13.8 g/t** (from 28m), **5m @ 1.7 g/t** (from 20m) and **5m @ 1.4 g/t** (from 20m) being received (down hole widths quoted).

These are in addition to the three holes reported to the ASX on the 27 July 2010 (BRC243-245), which aimed at extending the mineralisation further east. Drill hole BRC245, drilled 20m further east of the current mineralised zone returned two significant intersections including **2m @ 8.5 g/t Au (from 32m)** and **3m @ 11.7 g/t Au (inc. 1m @ 27 g/t Au)** from 55m down hole.

A total of seven RC holes (BRC250-256) were completed at Halleys NE over 300m of strike to initially test the southern part of the large +0.1 g/t Au Aircore anomaly identified from previous drilling by the company. The drilling intersected anomalous gold mineralisation in several holes with a peak results of **1m @ 6.5 g/t Au** received in BRC254, associated with quartz-pyrite veining in sheared granitoid. At +0.1 g/t, the results returned from the RC drilling support the results received in the initial aircore drilling.

At Eastside 2, a result of **2m @ 2.1 g/t Au** and **1m @ 1.4 g/t Au** was returned from RC drilling aimed at initially testing the **28m @ 1.1 g/t Au** returned from Aircore drill hole BRB1308. The Eastside 2 anomaly is open along strike and further drilling is planned to extend this zone.

A single RC hole drilled at Phil South aimed at extending the mineralised zone at depth intersected **1m @ 15.2 g/t Au** from 124m.

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**RC Assays**

Hole ID	East	North	Depth (m)	Area	Az/Dip	From	To	Intercept	g/t Gold
BRC230	703108	6739307	40	Phil East	320/-60	1	2	1m	@ 0.8
BRC230						21	22	1m	@ 1.3
BRC230						27	28	1m	@ 0.7
BRC231	702999	6739244	180	Phil South	320/-60	124	125	<b>1m</b>	<b>@ 15.2</b>
BRC231						137	138	1m	@ 1.3
BRC246	702288	6736861	120	Prince Trend	320/-60	63	64	1m	@ 0.5
BRC249	702346	6736914	130	Prince Trend	320/-60	83	84	1m	@ 0.5
BRC250	704270	6738100	120	Halleys NE	270/-60	38	39	1m	@ 0.7
BRC254	704370	6738200	100	Halleys NE	270/-60	41	42	<b>1m</b>	<b>@ 6.5</b>
BRC255	704420	6738250	100	Halleys NE	270/-60	41	42	1m	@ 0.5
BRC257	703178	6737553	60	Halleys East	320/-60	20	25	5m	@ 1.7
BRC257						45	46	1m	@ 0.6
BRC258	703191	6737538	80	Halleys East	320/-60	15	20	<b>5m</b>	<b>@ 9.4</b>
BRC258						16	18	<b>inc 2m</b>	<b>@ 20.7</b>
BRC258						23	24	1m	@ 1.2
BRC258						26	27	1m	@ 1.2
BRC259	703204	6737522	100	Halleys East	320/-60	18	19	1m	@ 0.6
BRC259						22	25	3m	@ 1.2
BRC259						31	32	1m	@ 1.2
BRC259						46	49	3m	@ 2.7
BRC260	703217	6737507	120	Halleys East	320/-60	19	24	5m	@ 1.4
BRC260						46	49	3m	@ 0.6
BRC260						51	54	3m	@ 0.5
BRC260						62	65	3m	@ 3.3
BRC260						115	116	1m	@ 0.5
BRC261	703229	6737492	132	Halleys East	320/-60	20	21	1m	@ 1.9
BRC261						23	28	5m	@ 0.9
BRC261						53	55	2m	@ 1.0
BRC262	703165	6737486	100	Halleys East	320/-60	15	16	1m	@ 0.7
BRC262						21	24	3m	@ 1.5
BRC262						28	29	<b>1m</b>	<b>@ 13.8</b>
BRC262						31	38	<b>7m</b>	<b>@ 13.6</b>
BRC262						41	42	1m	@ 0.7
BRC262						44	45	1m	@ 0.7
BRC262						50	51	1m	@ 7.6
BRC262						54	55	1m	@ 0.5
BRC262						62	65	3m	@ 2.9
BRC264	704420	6737500	60	Eastside	270/-60	45	46	1m	@ 0.5
BRC265	704440	6737500	80	Eastside	270/-60	44	46	2m	@ 2.1
BRC265						55	56	1m	@ 1.4

Results calculated at + 0.5 g/t Au, with a maximum of 2 metres internal dilution.

Repeat assays averaged.

Samples collected as single metre samples from cone splitter via cyclone mounted on drill rig.

Duplicate blanks and certified standard samples inserted routinely.

Assays sent to KalAssay Laboratories in Kalgoorlie. Gold determination via Fire Assay-ICP / OES (ppm)

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## Attachment 2 – RAB-Aircore Drilling Results

All results from the recently completed RAB – Aircore regional drilling program have now been received.

The company is highly encouraged by these results as several new areas of anomalous gold mineralisation have been identified, and follow-up drilling is currently being planned.

At Russell North, located approximately midway between Halleys East and Phil South, several broadly mineralised intersections of anomalous gold (down hole widths quoted) were received including **20m @ 1.1 g/t Au (including 12m @ 1.68 g/t Au)** from 4m down hole, **27m @ 0.7 g/t Au EOH (inc. 8m @ 0.7 g/t Au)** from 4m and **11m @ 0.6 g/t Au EOH (inc. 4m @ 1.2 g/t Au)** from 28m. Anomalous gold mineralisation (@ +0.1 g/t Au) has now been defined over 150m and is open at depth and to the north along strike.

Infill AC drilling to further define the 20m @ 1.0 g/t Au returned in BRB1285 (reported to the ASX 27<sup>th</sup> July 2010) obtained results of **16m @ 0.5 g/t Au** and **8m @ 0.2 g/t Au** from two 25m spaced vertical infill holes. RC drilling is planned to test this area in upcoming programs.

Several encouraging intersections were also returned from regional targets up to 10km from Halleys East.

At the Lost Bolt and Lost Bolt South prospect areas, located 8km south of Halleys East, several anomalous gold intersections were received with peak results including **12m @ 0.7 g/t Au (inc. 4m @ 1.8 g/t Au)** from Lost Bolt and **4m @ 0.9 g/t Au, 12m @ 0.1 g/t Au, 3m @ 0.4 g/t Au EOH** returned from drilling at Lost Bolt South. Both of these areas are open in several directions and further drilling is planned.

Anomalous gold intersections were returned from the Fenceline 2 & 5 prospect areas located ~5km west of Halleys East. A result of **4m @ 1.1 g/t Au** from 8m was received from Fenceline 2 whilst **4m @ 0.9 g/t Au** from 8m was returned from the Fenceline 2 prospect. These anomalies are open at depth and along strike with further drilling planned.

Wide spaced vertical RAB drilling of the Kink geochemical and geophysical target returned anomalous gold mineralisation including 3m @ 0.1 g/t EOH. The kink area is a structurally complex zone which is considered prospective for mineralisation, and further work is planned.

A full review of all data is currently being completed and further drilling programs are being finalised.

**RAB – Aircore Assays**

Hole	East	North	Depth (m)	Area	Az/Dip	From	To	Intercept	g/t Gold
BRB1335	703600	6737100	24	Southside	0/-90	20	24	4m	@ 0.1 (EOH)
BRB1342	703075	6740200	24	Old Camp	0/-90	0	8	8m	@ 0.2
BRB1343	703025	6740200	41	Old Camp	0/-90	0	4	4m	@ 0.3
BRB1344	702975	6740200	36	Old Camp	0/-90	24	32	8m	@ 0.3
BRB1349	703050	6740050	10	Old Camp	0/-90	0	4	4m	@ 0.1
BRB1350	703075	6740050	12	Old Camp	0/-90	0	4	4m	@ 0.1
BRB1351	703100	6740050	22	Old Camp	0/-90	0	4	4m	@ 0.1
BRB1351						12	16	4m	@ 0.4
BRB1365	703000	6739650	31	Old Camp	0/-90	12	16	4m	@ 0.4
BRB1366	703025	6739650	25	Old Camp	0/-90	12	16	4m	@ 0.2
BRB1369	702825	6739300	19	Old Camp	0/-90	12	16	4m	@ 0.1
BRB1384	702625	6739100	26	Old Camp	0/-90	12	20	8m	@ 0.1
BRB1386	702525	6739100	25	Old Camp	0/-90	12	16	4m	@ 0.2
BRB1391	703075	6738950	48	1233 Prospect	0/-90	4	8	4m	@ 0.1
BRB1391						24	28	4m	@ 0.3
BRB1396	703075	6738900	27	1233 Prospect	0/-90	0	4	4m	@ 0.3
BRB1407	702750	6736000	32	Southside	0/-90	4	8	4m	@ 0.2
BRB1408	702800	6736000	40	Southside	0/-90	32	36	4m	@ 0.1
BRB1409	702850	6736000	56	Southside	0/-90	20	28	8m	@ 0.2
BRB1414	702875	6735900	40	Southside	0/-90	32	40	8m	@ 0.2 (EOH)
BRB1415	702825	6735900	28	Southside	0/-90	20	28	8m	@ 0.3 (EOH)
BRB1423	702225	6735925	28	Southside	0/-90	16	20	4m	@ 0.1
BRB1440	701800	6730100	42	Lost Bolt South	0/-90	0	4	4m	@ 0.1
BRB1449	702000	6729900	40	Lost Bolt South	0/-90	36	40	4m	@ 0.2
BRB1451	701950	6729900	48	Lost Bolt South	0/-90	32	36	4m	@ 0.1
BRB1452	701925	6729900	48	Lost Bolt South	0/-90	0	4	4m	@ 0.1
BRB1452						24	28	4m	@ 0.9
BRB1453	701900	6729900	52	Lost Bolt South	0/-90	28	32	4m	@ 0.1
BRB1454	701875	6729900	44	Lost Bolt South	0/-90	40	44	4m	@ 0.2 (EOH)
BRB1455	701850	6729900	69	Lost Bolt South	0/-90	4	8	4m	@ 0.2
BRB1458	702150	6729700	42	Lost Bolt South	0/-90	28	32	4m	@ 0.1
BRB1460	702050	6729700	58	Lost Bolt South	0/-90	24	36	12m	@ 0.2
BRB1461	702000	6729700	54	Lost Bolt South	0/-90	44	48	4m	@ 0.1
BRB1469	702100	6230000	30	Lost Bolt South	0/-90	28	30	2m	@ 0.1
BRB1472	701950	6230000	37	Lost Bolt South	0/-90	24	36	12m	@ 0.1
BRB1473	701900	6730000	47	Lost Bolt South	0/-90	44	47	3m	@ 0.4 (EOH)
BRB1479	701670	6730940	58	Lost Bolt	270/-60	16	20	4m	@ 1.0
BRB1479						32	36	4m	@ 0.1
BRB1483	670670	6731030	47	Lost Bolt	270/-60	40	44	4m	@ 0.2
BRB1485	701540	6731215	52	Lost Bolt	0/-90	28	32	4m	@ 0.2
BRB1486	701570	6731222	43	Lost Bolt	270/-60	16	28	12m	@ 0.7
						24	28	Inc. 4m	@ 1.8
BRB1486						32	43	11m	@ 0.1 (EOH)
BRB1487	701600	6731231	52	Lost Bolt	270/-60	44	48	4m	@ 0.4
BRB1488	704025	6737750	42	Eastside 2	0/-90	16	24	8m	@ 0.2
BRB1489	704075	6737750	51	Eastside 2	0/-90	24	40	16m	@ 0.5
BRB1493	705175	6738500	47	Halleys NE	0/-90	40	47	7m	@ 0.2 (EOH)
BRB1495	705100	6738410	49	Halleys NE	0/-90	40	49	9m	@ 0.4 (EOH)
BRB1496	705050	6738410	51	Halleys NE	0/-90	48	51	3m	@ 0.1 (EOH)
BRB1498	705250	6738410	60	Halleys NE	0/-90	28	36	8m	@ 0.1
BRB1499	705300	6738410	54	Halleys NE	0/-90	28	40	12m	@ 0.1
BRB1500	705050	6738240	48	Halleys NE	0/-90	36	40	4m	@ 0.3
BRB1501	705000	6738240	48	Halleys NE	0/-90	36	48	12m	@ 0.3 (EOH)
BRB1502	704950	6738240	51	Halleys NE	0/-90	16	20	4m	@ 0.1
BRB1548	698675	6737100	23	Fenceline 2	0/-90	0	4	4m	@ 0.1
BRB1548						8	12	4m	@ 1.1

BRB1557	698550	6739300	19	Fenceline 5	0/-90	8	12	4m	@ 0.9
BRB1643	708800	6744900	31	Kink	0/-90	28	31	3m	@ 0.1 (EOH)
BRB1685	708200	6745470	40	Kink	0/-90	12	16	4m	@ 0.1
BRB1686	703110	6738200	35	Russell North	0/-90	0	20	20m	@ 0.3
BRB1687	703130	6738200	30	Russell North	270/-60	4	24	20m	@ 0.3
BRB1688	703150	6738200	31	Russell North	270/-60	<b>4</b>	<b>31</b>	<b>27m</b>	<b>@ 0.7 (EOH)</b>
BRB1688						<b>16</b>	<b>24</b>	<b>inc 8m</b>	<b>@ 1.7</b>
BRB1689	703170	6738200	41	Russell North	270/-60	4	12	8m	@ 0.2
BRB1689						24	41	17m	@ 0.3 (EOH)
BRB1691	703090	6738200	18	Russell North	270/-60	0	8	8m	@ 0.4
BRB1692	703150	6738250	28	Russell North	270/-60	<b>4</b>	<b>24</b>	<b>20m</b>	<b>@ 1.1</b>
BRB1692						<b>12</b>	<b>24</b>	<b>inc 12m</b>	<b>@ 1.7</b>
BRB1693	703170	6738250	39	Russell North	270/-60	<b>28</b>	<b>39</b>	<b>11m</b>	<b>@ 0.6 (EOH)</b>
BRB1693						<b>32</b>	<b>36</b>	<b>inc 4m</b>	<b>@ 1.2</b>
BRB1695	703170	6738300	35	Russell North	270/-60	8	12	4m	@ 0.2
BRB1695						20	35	15m	@ 0.3 (EOH)
BRB1696	703190	6738300	32	Russell North	270/-60	20	24	4m	@ 0.2

Results calculated at + 0.1 g/t Au, with a maximum of 1 sample of internal dilution.

Repeat assays averaged.

Samples collected as composite samples to a maximum of 4 metres.

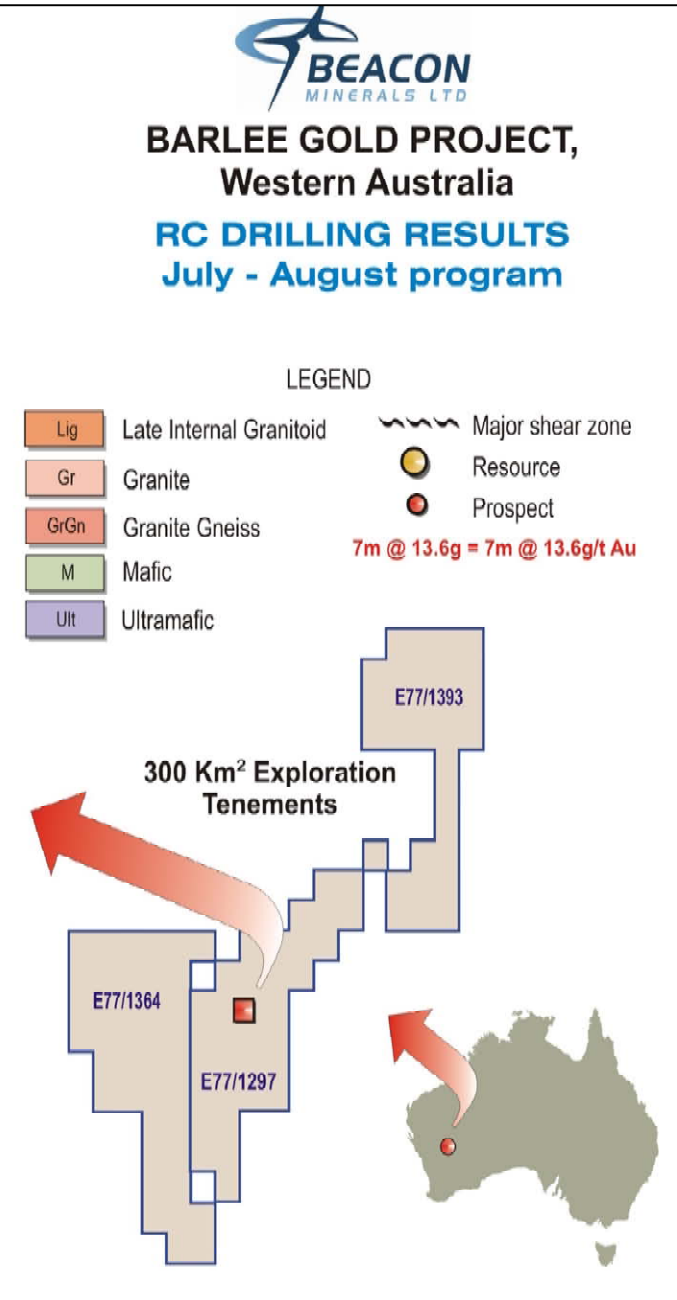
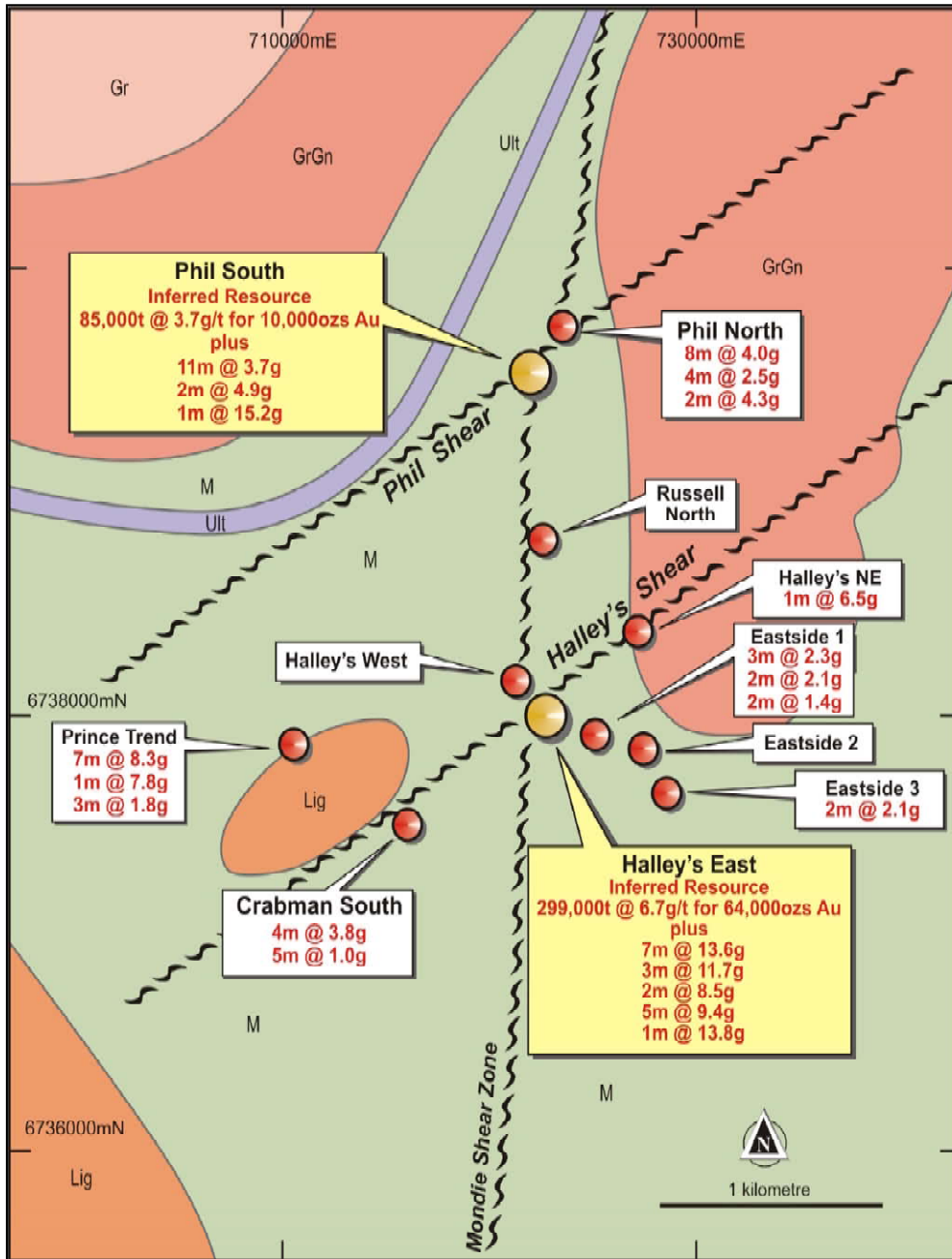
Duplicate samples inserted routinely.

Assays sent to KalAssay Laboratories in Kalgoorlie. Gold determination via Fire Assay-ICP / OES (ppm)

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Attachment 3 – Overview Map: RC Drilling

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