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# MARKET ANNOUNCEMENT

## Maiden JORC Resource - Khnaiguiyah Zinc-Copper Project

Alara Resources Limited (ASX: **AUQ**), together with its joint venture partner, United Arabian Mining Company (**Manajem**), are pleased to provide a maiden JORC Resource Statement for the Khnaiguiyah Zinc-Copper Project (the **Project**) located in Saudi Arabia, of:

- **26.4 Mt at 3.9% Zinc and 0.12% Copper (4.3% Zinc Equivalent); and**
- **7.0 Mt at 0.8% Copper.**

Further drilling subsequent to the cut-off date for completion of this Resource Statement is expected to significantly add additional mineralisation to the Project prior to the completion of the Khnaiguiyah DFS.

Commenting on the Resource Statement, Managing Director, Shanker Madan said: "We now have a confirmed JORC Resource base that should underpin a 1.0 – 1.5 Mtpa throughput Zinc and Copper mine for at least 10 years. I would like to thank our Project team and joint venture partner Manajem for all their hard work in achieving this significant milestone. I am also highly excited by the prospect for significant additional mineralisation, identified by drilling subsequent to the cut-off date for this Resource Statement".

### SUMMARY

To date, four Mineralised Zones KZ1 to KZ4 (**the Zones**) have been discovered and drilled in the Project. These Zones are located within one to two kilometres from a central area and approximately three kilometres from each other (refer *Figure 1*).

This Resource Statement is currently confined to Zones 2, 3 and 4 of the Project.

The mineralisation in Zones 2 and 3 (KZ2 and KZ3) is distributed as three distinct 'Domains':

- "Domain 1" - has Zinc but no Copper;
- "Domain 2" - has Zinc and Copper; and
- "Domain 3" - has Copper but no Zinc.

Table 1 below summarises the JORC Resource for Domains 1 and 2 containing Zinc and Zinc and Copper.

**Table 1 - Khnaiguiyah JORC Resource Summary: Domain 1 (Zinc) and Domain 2 (Zinc/Copper)**

JORC Resource (at 1.5% Zinc cut-off grade)	Zone	Tonnes (Mt)	Zinc (%)	Copper (%)	Zinc Equivalent (%) <sup>+</sup>
Measured and Indicated Resource	2 & 3	20.09	4.24	0.15	4.69
Inferred Resource	2 & 3	1.95	2.97	0.07	3.18
Inferred Resource	4	4.32	2.90	0.03	2.99
<b>Total Resource<sup>+</sup></b>	<b>2, 3 &amp; 4</b>	<b>26.36</b>	<b>3.93</b>	<b>0.12</b>	<b>4.30</b>

<sup>+</sup> Zinc equivalent has been calculated as: Zinc grade + (3 x Copper grade)

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Table 2 below summarises the JORC Resource for Domain 3 containing just Copper and no Zinc.

**Table 2 - Khnaiguiyah JORC Resource Summary: Domain 3 (Copper)**

<b>JORC Resource</b> (at 0.2% Copper cut-off grade)	<b>Zone</b>	<b>Tonnes (Mt)</b>	<b>Copper (%)</b>
Measured and Indicated Resource	2 & 3	4.93	0.77
Inferred Resource	2 & 3	2.03	0.92
<b>Total Copper Resource</b>	<b>2 &amp; 3</b>	<b>6.96</b>	<b>0.81</b>

The Company notes that the majority of the total JORC Resource is in the Measured and Indicated categories.

The Company also notes that these Resource estimates are notably higher than the non-JORC Code compliant historical resource estimates produced by BRGM<sup>1</sup> in 1993, referred to in the Company's market announcement dated 5 October 2010: "[Project Acquisition - Khnaiguiyah Zinc Copper Project in Saudi Arabia](#)".

#### **ADDITIONAL MINERALISATION POTENTIAL IN ZONES 1 AND ZONE 2**

The Company notes that the cut-off date for compiling drilling data for the above JORC Resource Statement was in November 2011 (based on drilling completed in September 2011). Since September 2011, 10,000 metres of additional drilling in Zones 1 and 2 have been completed:

**Zone 1**  
(refer *Figures 1 and 5*)

Recent drilling has extended mineralisation for 600m in Zone 1. It is generally +100m wide and on average 10m thick and still open to the south. Drilling in this Zone has been completed on a 50m by 50m grid. Mineralisation in Zone 1 is generally shallow and may be amenable to mining at a lower strip ratio than in Zones 2 and 3.

**Zone 2**  
(refer *Figures 1 and 2*)

The mineralisation in Zone 2 has been extended since September 2011 by a further 400m to the northeast.

**It is anticipated that this additional mineralisation in Zones 1 and 2 will significantly add to the total mineralisation of the Project prior to the completion of the Khnaiguiyah DFS.**

#### **DEFINITIVE FEASIBILITY STUDY**

This maiden JORC Resource Statement has been produced as part of the Definitive Feasibility Study (**DFS**) being undertaken on the Project by Khnaiguiyah Mining Company (**KMC**), the joint venture company holding the Project, in which Alara is a 50% shareholder.

With the current Resource Statement now completed, work is underway by SRK Consulting on mine optimisation and scheduling studies to produce a JORC Reserve Statement for the Project.

The DFS is expected to be completed in the second quarter of 2012.

<sup>1</sup> Bureau de Recherches Géologiques et Minières ("Office of Geological and Mining Research")

**DETAILED RESOURCE INFORMATION**

The information in Table 3 and Table 4 outlines in further detail the Resource Statement in respect of the various mineralised Zones (together with related 'Domains' within each Zone) at various cut-off grades for each respective Domain (within Zones 2 and 3) and Zone 4.

**Table 3 (by SRK Consulting)**  
**Khnaiguiyah Zinc-Copper Project Resource Statement for Zones 2 and 3 (KZ2 and KZ3)**

Domain	Cut-off Zn (%)	Cut-off Cu (%)	Measured Resource			Indicated Resource			Measured and Indicated Resource			Inferred Resource		
			Tonnes (Mt)	Zn (%)	Cu (%)	Tonnes (Mt)	Zn (%)	Cu (%)	Tonnes (Mt)	Zn (%)	Cu (%)	Tonnes (Mt)	Zn (%)	Cu (%)
Domain 1: Zinc Only	1.50	-	6.49	3.33	-	6.89	3.17	-	13.38	3.25	-	1.60	2.64	-
	1.75	-	5.69	3.56	-	5.91	3.43	-	11.60	3.50	-	1.29	2.87	-
	2.00	-	4.96	3.82	-	5.05	3.70	-	10.01	3.76	-	1.08	3.07	-
	2.25	-	4.30	4.07	-	4.30	3.97	-	8.60	4.02	-	0.87	3.30	-
	2.50	-	3.72	4.34	-	3.66	4.25	-	7.38	4.29	-	0.52	3.94	-
Domain 2: Zinc and Copper	1.50	-	5.14	6.48	0.45	1.57	5.31	0.44	6.71	6.21	0.45	0.36	4.45	0.36
	1.75	-	4.97	6.65	0.45	1.48	5.54	0.44	6.45	6.40	0.45	0.33	4.67	0.36
	2.00	-	4.79	6.83	0.45	1.39	5.77	0.46	6.18	6.59	0.45	0.31	4.90	0.36
	2.25	-	4.61	7.01	0.45	1.31	6.01	0.46	5.92	6.79	0.45	0.28	5.13	0.36
	2.50	-	4.43	7.20	0.45	1.23	6.24	0.47	5.66	6.99	0.45	0.26	5.37	0.36
Total of Domains: 1+2	1.50		11.63	4.72	0.20	8.46	3.57	0.08	20.09	4.24	0.15	1.95	2.97	0.07
	1.75		10.66	5.00	0.21	7.39	3.85	0.09	18.05	4.53	0.16	1.62	3.24	0.07
	2.00		9.75	5.30	0.22	6.44	4.14	0.10	16.19	4.84	0.17	1.39	3.48	0.08
	2.25		8.91	5.60	0.23	5.61	4.44	0.11	14.52	5.15	0.18	1.15	3.75	0.09
	2.50		8.15	5.90	0.24	4.89	4.75	0.12	13.04	5.47	0.20	0.78	4.42	0.12
Domain 3: Copper	-	0.20	1.93	-	0.78	3.00	-	0.77	4.93	-	0.77	2.03	-	0.92

**Table 4 (by Alara)**  
**Khnaiguiyah Zinc-Copper Project Resource Statement for Zone 4 (KZ4)**

Cut - Off Zn (%)	Inferred Resource		
	Tonnes (Mt)	Zn (%)	Cu (%)
0.50	8.45	1.94	0.02
0.75	7.49	2.11	0.03
1.00	5.77	2.48	0.02
1.25	4.88	2.73	0.02
1.50	4.32	2.90	0.03
1.75	3.92	3.03	0.03
2.00	3.40	3.21	0.04
2.25	2.85	3.42	0.04
2.50	2.35	3.64	0.06

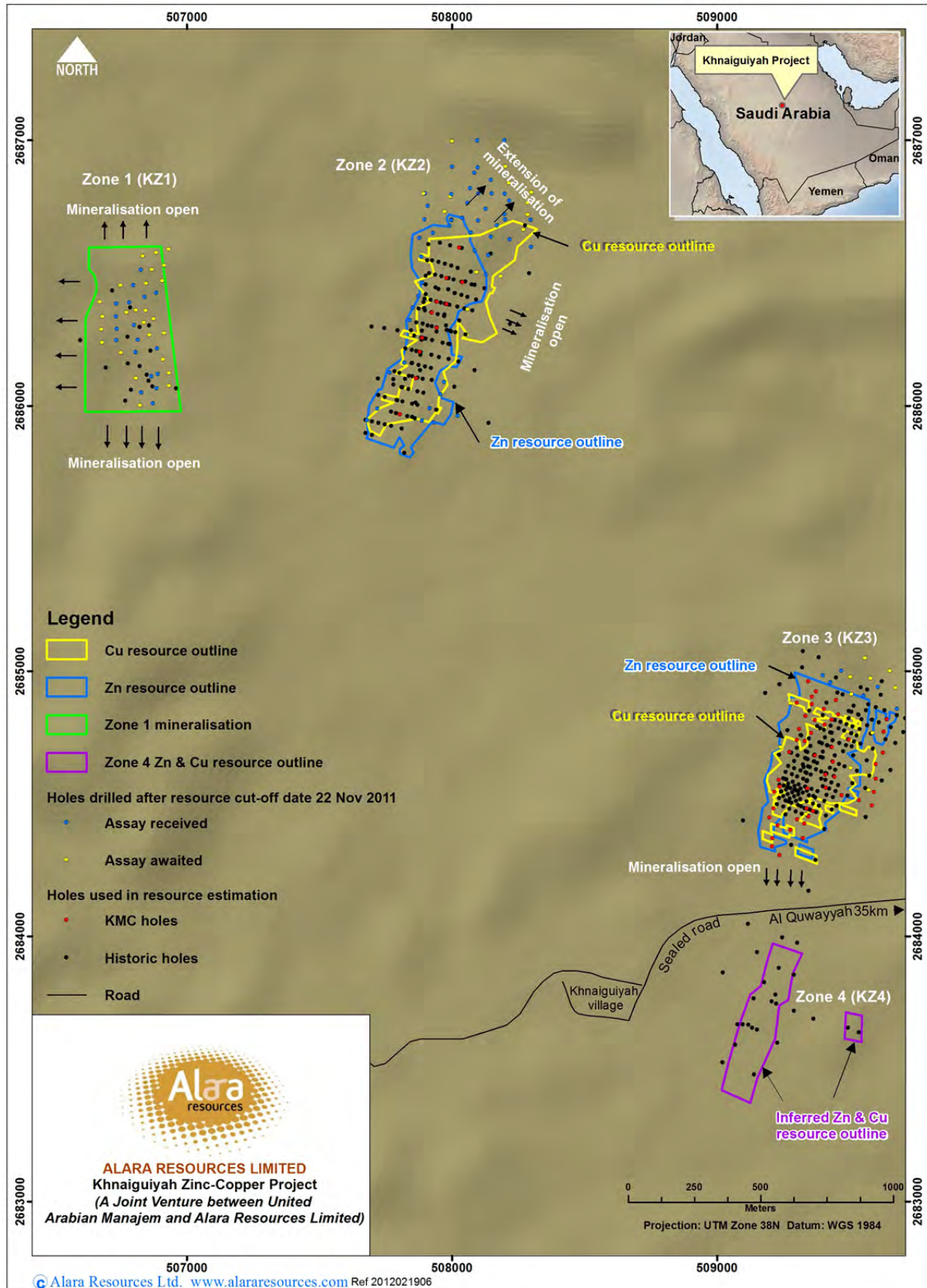


Figure 1  
 Location of Mineralised Zones 1 to 4 (KZ1 to KZ 4), Resource Outlines and Drill Hole Locations



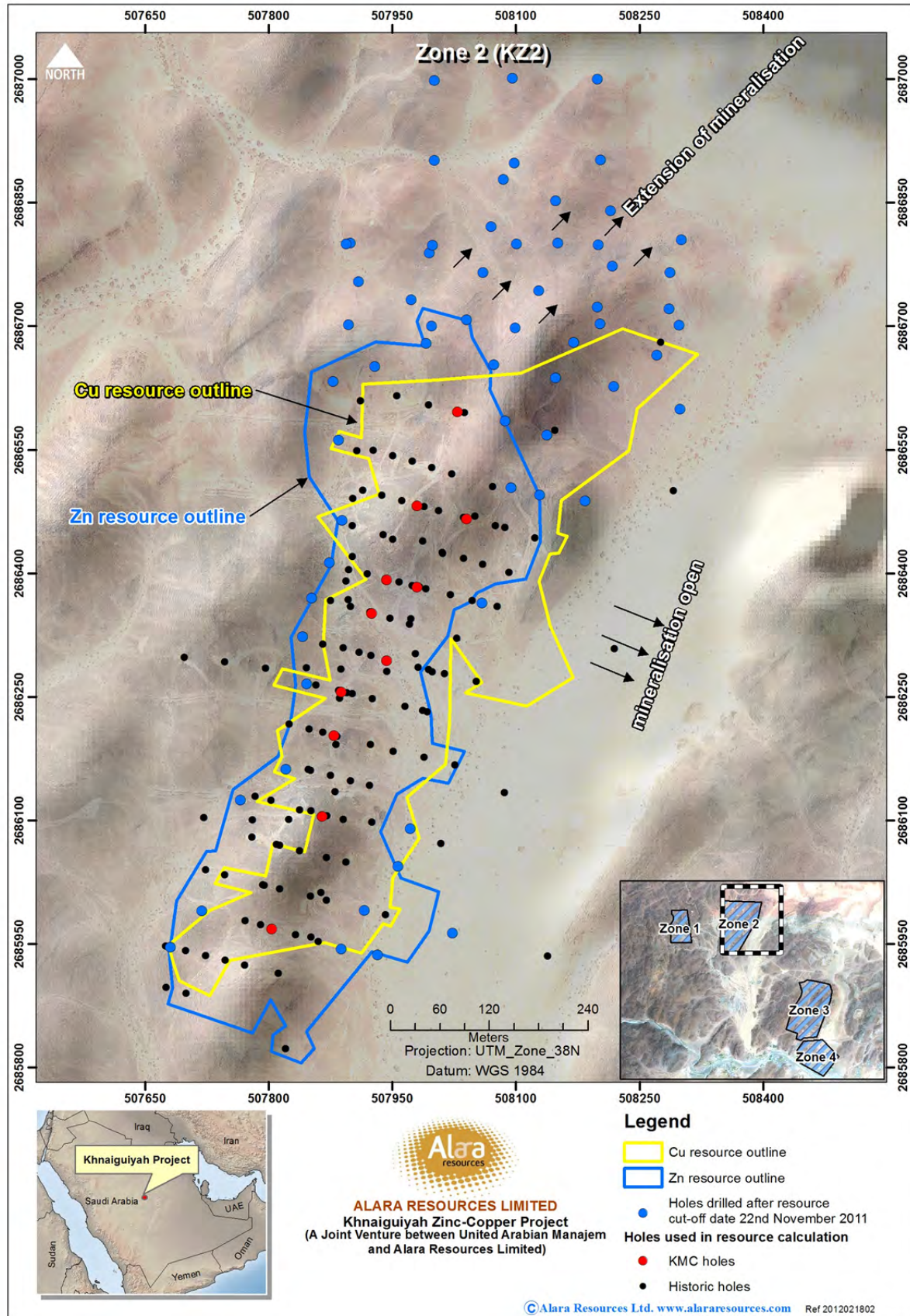


Figure 2  
Zone 2 (KZ2) Resource Outlines and Drill Hole Locations



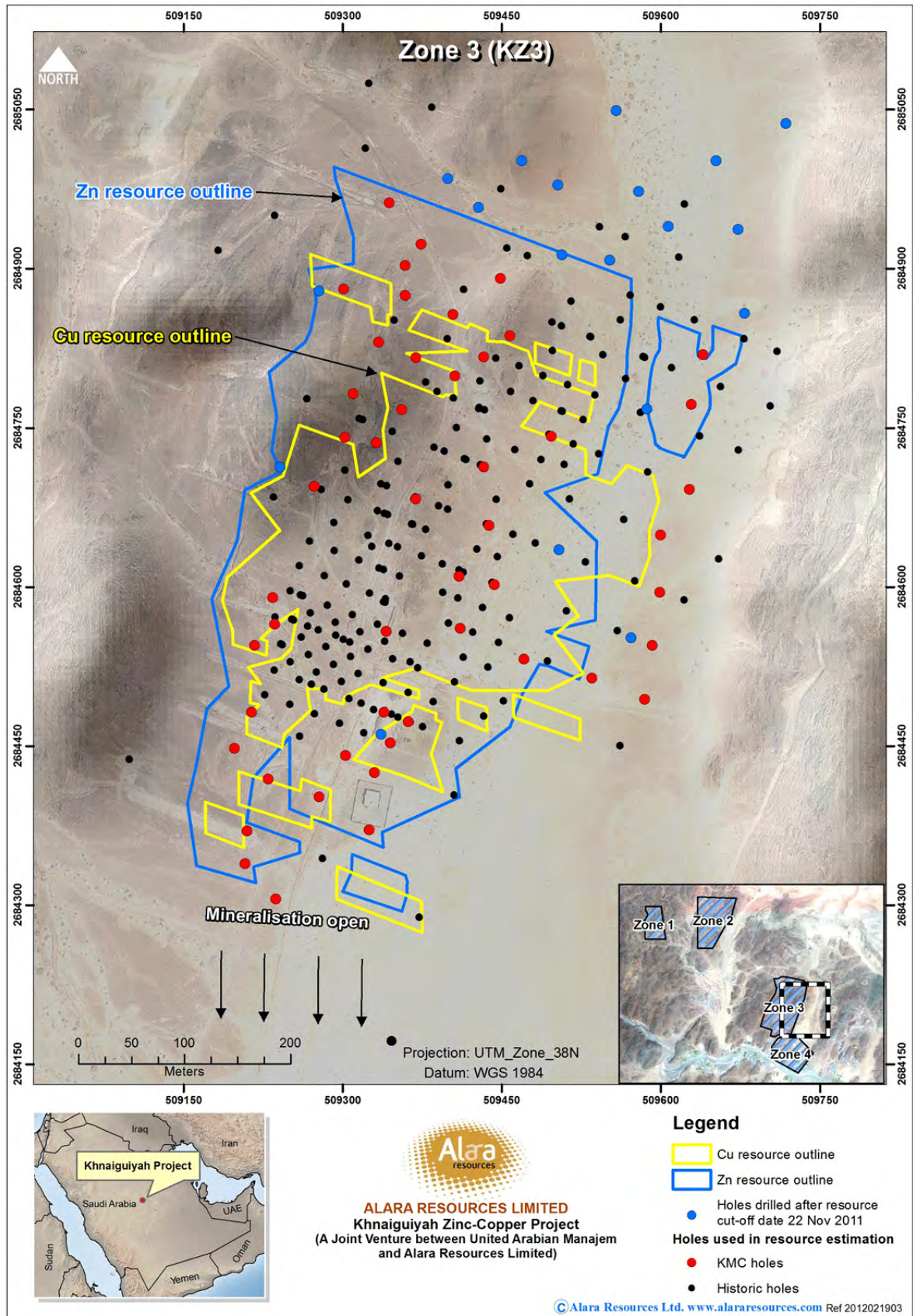


Figure 3  
Zone 3 (KZ3) Resource Outlines and Drill Hole Locations



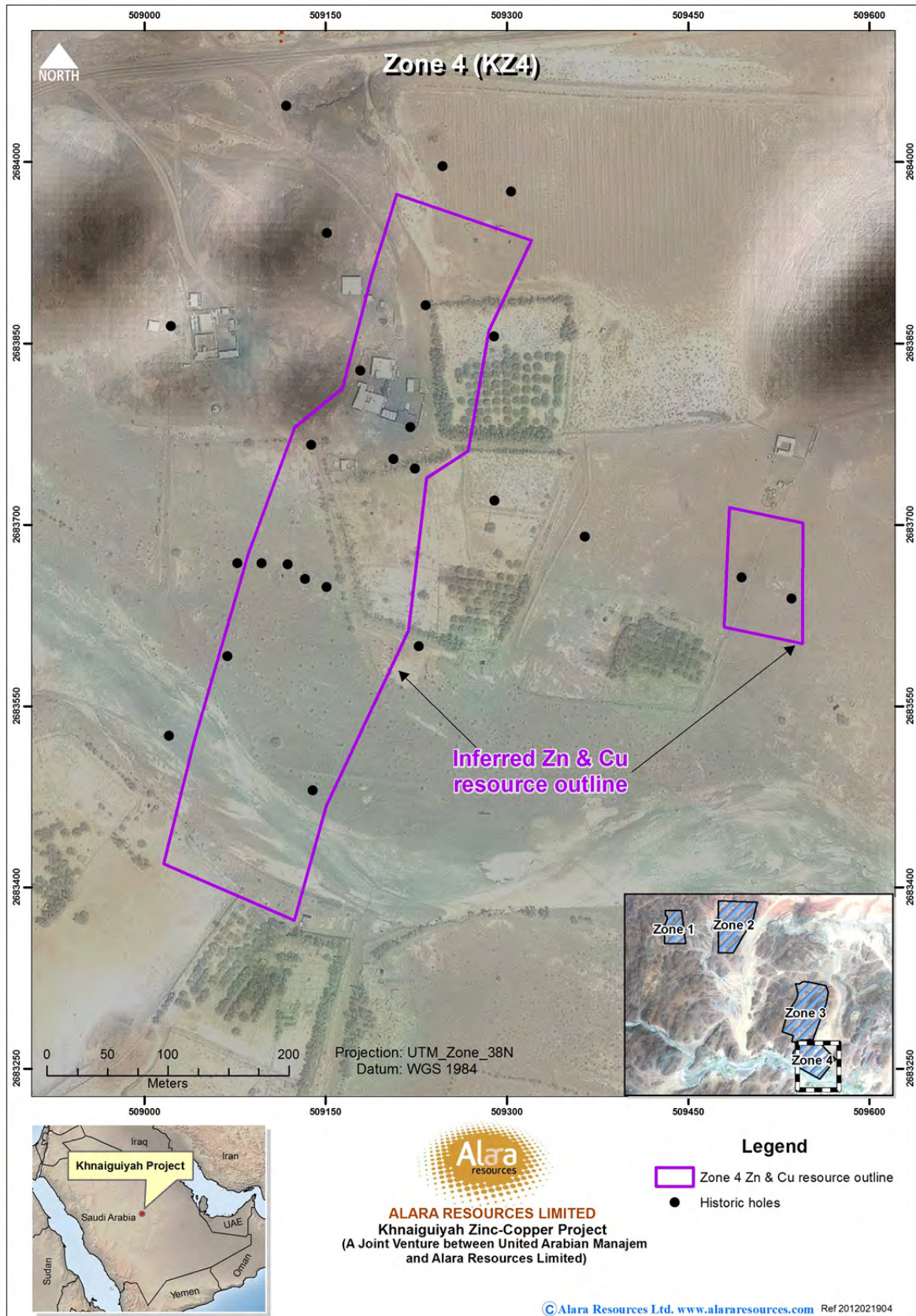


Figure 4  
 Zone 4 (KZ4) Mineralisation Outline and Drill Hole Locations



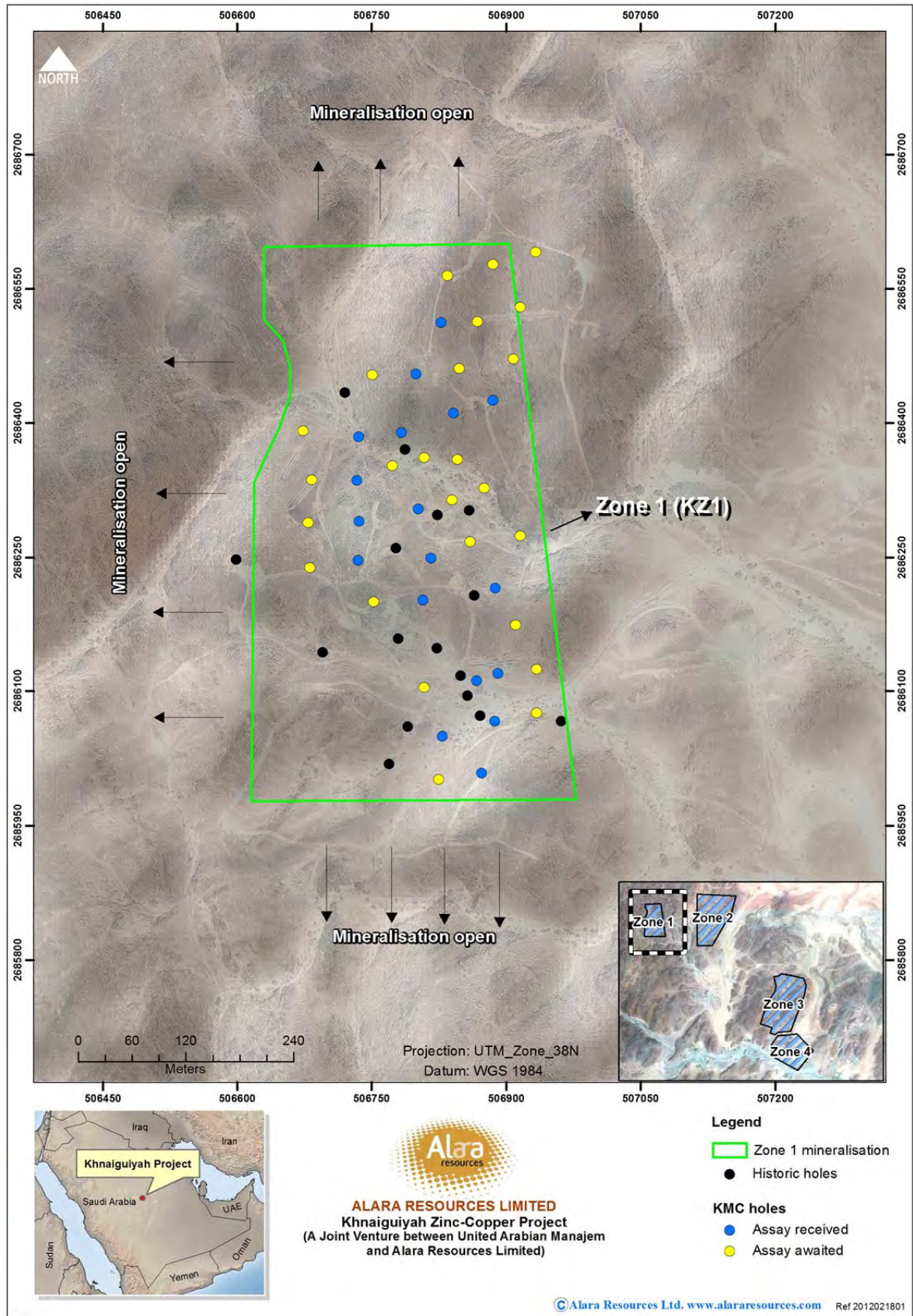


Figure 5  
Zone 1(KZ 1) Drill Hole Locations and Mineralisation Potential



## RESOURCE ESTIMATE METHODOLOGY

This maiden JORC Resource Statement has been prepared by the Perth office of SRK Consulting (**SRK**) and by Mr Ravindra Sharma, a Chartered Professional Member of The Australasian Institute of Mining and Metallurgy currently engaged as a consultant to the Company. SRK has completed the JORC Resource Statement for Zones 2 and 3, the main areas of mineralisation where most of the historic and recent drilling has been concentrated (refer *Figures 2 and 3 and Tables 1, 2 and 3*). Mr Sharma has completed the JORC Resource Statement for Zone 4.

### Zones 2 and 3

The Mineral Resource was estimated within constraining wireframe surfaces based on geological limits of the mineralised units. The grades and tonnes have been rounded to reflect the degree of uncertainty related to the estimate.

The database utilised for the Geological Model and Mineral Resource Estimate is composed of 453 drill holes from 3 drilling campaigns conducted by BRGM, Maaden and KMC. The cut-off date for compilation of data was 22 November 2011. Data were reviewed and verified prior to it being incorporated into the Mineral Resource Estimate.

A total of 353 out of 453 holes were verified with regard to collar positions, down hole surveys, geology and assay (including QAQC) data. Records detailing the source of information as well as the verification process for all data tables (collar, survey, geology and assay) were documented for each individual drill hole. BRGM drill holes were verified against hard copy logs from BRGM's prefeasibility report. Maaden drill holes were verified against hard copies logs and sections of composite data. An additional 169 Maaden drill core duplicates from 8 holes were analysed as independent checks. These core duplicates were logged, photographed and sampled by an independent third party at a core storage facility in Jeddah. An industry standard QAQC program formed part of the Maaden check sample program.

Industry standard QAQC procedures were implemented and followed for all the assaying and data compilation for drilling carried out by KMC in 2011. All sample batches went through quality assessment prior to inclusion in the database but no significant issues were identified in 2011 assay results.

KMC resurveyed all available BRGM and Maaden collars and found no discrepancies with recorded historical data. All 2011 KMC drill holes were down hole surveyed. The Maaden and BRGM down-hole survey data for all verified holes were checked for artificial deviations. Verification was done visually and statistically in form of dip change per meter and bearing change per meter histograms.

KMC drilled 9 twin holes to verify BRGM and Maaden drill data. A further 41 holes in Zone 2 and 40 holes in Zone 3 were correlated and compared with nearby historical holes of Maaden and BRGM.

Verified as well as non-verified holes were utilised for the construction of geological wireframes. Interpretations were done in section and strings were digitised. This interpretation was based on a combined geology and grade code in order to simplify the lithological data. Wireframes for Zinc and Copper were created in Datamine and validated against Leapfrog wireframes. After the comparison, the Leapfrog wireframes were refined in Datamine prior to input into the Resource Estimation.

Three separate domains were identified and coded in the model based on the observed Zinc and Copper distribution. Domain 1 contains Zinc mineralisation, Domain 2 contains both Zinc and Copper mineralisation and Domain 3 contains only Copper mineralisation.

Drill-hole samples were flagged by domains and composited into 2.5m composites. The spatial continuity of the Zinc grades, as measured by the variogram, is reasonably good, but most of the ranges are relatively short (less than 100m). A block model of 30m x 30m x 5m blocks was estimated first by Ordinary Kriging. In order to account for the possible mining selectivity, a non-linear geostatistical technique, Uniform Conditioning, was then applied, based on selective mining units of 10m x 10m x 5m. Constant densities of 3.08 (Domain 1) and 3.24 (Domain 2) were used for converting volumes into tonnages. The boundaries between Domains 1 and 2 were considered as hard for the estimation, as only data from inside a domain were used to estimate blocks belonging to that domain.

## Zone 4

The Zone 4 database consists of 26 holes from BRGM drilling. Drill-hole samples were composited into 1.5m composites. Inverse distance square method was used to estimate blocks of 20m x 40m x 5m. Constant densities of 3.12 have been used. KMC has not carried out any drilling for Zone 4 at this stage; data sources and verifications are from BRGM reports and accordingly, the Zone 4 Resource has been classified as Inferred at this stage.

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### FURTHER INFORMATION:

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### NOTE

#### JORC Code Competent Person Statements

*The information in this announcement that relates to Mineral Resources within Mineralised Zones 2 and 3 of the Khnaiguiyah Project is based on information compiled by Mr Daniel Guibal, an employee of SRK Consulting (Australasia) Pty Ltd, who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Guibal has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity they are undertaking to qualify as Competent Persons in terms of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 edition). Mr Guibal consent to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.*

*The information in this announcement that relates to Exploration Results pertaining to the Khnaiguiyah Project and Mineral Resources within Mineralised Zone 4 of the Khnaiguiyah Project is based on information compiled by Mr Ravindra Sharma, who is a Chartered Professional Member of The Australasian Institute of Mining and Metallurgy. Mr Sharma is a principal consultant to Alara Resources Limited. Mr Sharma has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity they are undertaking to qualify as Competent Persons in terms of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 edition). Mr Sharma consent to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.*