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# JERVOIS COPPER PROJECT CONTINUES TO DELIVER – DRILLING CONFIRMS SIGNIFICANT DISCOVERY AT REWARD

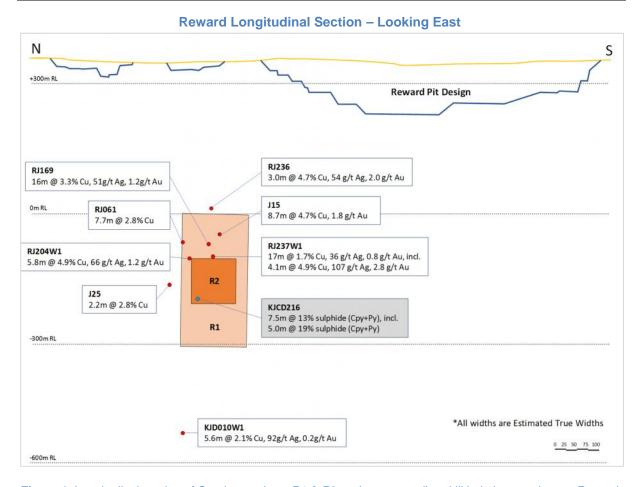
- Significant extension of mineralisation at Reward
- Conductor R1 intersected 95m below the previous deepest intercept
- Visible chalcopyrite plus pyrite mineralisation similar to Rockface
- Drilling success validates KGL's DHEM targeting methodology
- Core sent for priority assaying, with results expected in the coming weeks



Photograph 1. Massive sulphide zone circa 645.27- 646.67 m.

KGL Resources Limited (KGL:ASX) (KGL or the Company) announces that diamond drilling at the 100% owned Jervois Copper Project in the Northern Territory has discovered a significant extension of mineralisation at Reward.

Diamond drill hole KJD216 at Reward intersected 12 metres of mineralisation from 636m down-hole to 648m, including 1.4m of massive sulphides from 645m down-hole (refer Table 1 below). This intersected zone is 95 metres below the deepest previous intercept of Conductor R1 at the northern end of Reward (Figure 1).



**Figure 1.** Longitudinal section of Conductor plates R1 & R2 and corresponding drill hole intersections at Reward. Blue dot is the pierce point of hole KJD216. Red dots are pierce points of previously announced intersections including the deep hole KJD010W1. All widths are Estimated True Widths.

Based on field observations, the interval contains visible strong chalcopyrite plus pyrite mineralisation and matches the intensity and style of copper mineralisation encountered in the deeper parts of Rockface.

KJD216 was designed to intersect an off-hole EM response identified from previous Down Hole Electromagnetic (DHEM) surveys. KGL continues to be highly encouraged with drill result given the DHEM technology has been highly successfully locating new high grade

#### KGL Executive Chairman Mr Denis Wood said:

"The discovery of the extension at Reward is an impressive result considering it is a large step-out from some of the previous best copper intersections.

"We are aiming to increase and extend the already significant mineral resource at Reward, and this latest result is encouraging for us in seeking large scale continuity to the north and at depth.

"DHEM surveying has continued to deliver on its potential to identify zones of high grade mineralisation at Reward as it has done so successfully at Rockface. Follow-up DHEM surveys will commence shortly on holes recently drilled at Reward and Rockface to further refine known conductors and search for additional off-hole conductors."

### Reward – Discovery of deeper, Rockface-like mineralisation

The mineralisation (Table 1) occurs within a psammitic host unit, which has pervasive magnetite alteration. The mineralised zone is dominated by a central, 4.14m wide interval - from 641.1m - of pervasive, disseminated chalcopyrite-pyrite in magnetite-garnet-chlorite alteration with carbonate and quartz veining (Photographs 2 & 3).

Above this zone, in the hanging-wall of the main mineralised zone, is a quartz-tourmaline vein, bounded by hematite- and magnetite altered units (Photograph 4). The lower part of the mineralisation, above the footwall, is marked by a 0.9m wide interval of chalcopyrite dominated, massive sulphides from 645.27m where sulphides occur as a massive breccia matrix, surrounding fragments of rounded magnetite and quartz (Photographs 1 & 5).

The geology team interprets the style of mineralisation observed in this hole and associated with Conductors R1 & R2 as the same style encountered in the deeper parts of Rockface.

Table 1 - KJD216 Summary Geological Log of Mineralised Zones.

From (m)	To (m)	Interval (m)	ETW (m)	Minerals	Nature	*Est % Total Sulphide	Alteration
636.1	636.6	0.5	0.3	Chalcopyrite & Pyrite	Disseminated weak	10	Hematite, magnetite
636.6	639.92	3.3	2.1	Chalcopyrite, pyrite	Disseminated weak	trace	Tourmaline, quartz, garnet, carbonate
639.92	640.7	0.8	0.5	Chalcopyrite & Pyrite	Disseminated weak	7	Hematite, magnetite
640.7	641.13	0.4	0.3	Pyrite & Chalcopyrite	Massive	38	Magnetite
641.13	645.27	4.1	2.7	Chalcopyrite &Pyrite	Disseminated pervasive	15	Magnetite, garnet, chlorite, carbonate veining
645.27	646.67	1.4	0.9	Chalcopyrite, Pyrite & Molybdenite	Massive	40	Magnetite, silica
646.67	647.73	1.1	0.7	Chalcopyrite & Pyrite	Disseminated pervasive	10	Magnetite, silica

<sup>\*</sup>KJD216 Visual observations, Assays pending, ETW – Estimate of True Width



**Photograph 2.** Zone of pervasive disseminated sulphides (641.13 - 645.27 m). Mineralisation has been cut and remobilised by late carbonate veins.



**Photograph 3.** Zone of pervasive disseminated sulphides (641.13 - 645.27m). Late quartz veins have remobilised and concentrated sulphides in blebs within veins and vein-wallrock.



**Photograph 4.** Close-up of matrix-filling sulphides in hematite-altered magnetite breccia, part of a broader interval of disseminated sulphides (641.13 - 645.27m).



**Photograph 5.** Close-up of massive sulphide zone showing a breccia matrix of chalcopyrite and pyrite with fragments of rounded magnetite and quartz. Quartz shows inclusions of chalcopyrite and minor molybdenite. (circa 645.27-646.6m)

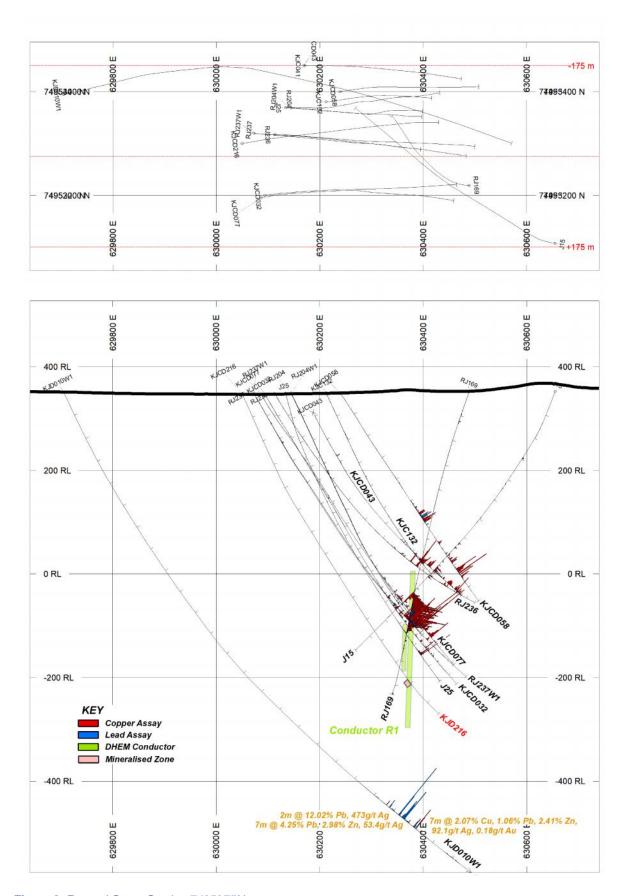


Figure 2. Reward Cross-Section 7495275N

 Table 2
 Summary of significant drill hole intercepts corresponding to Conductors R1 & R2 at Reward North

HoleID	Interval	С	ETW (m)	RL (m)	SG (t/m³)
J15	11m @ 4.73% Cu, 1.84g/t Au from 512	R1	8.7	-35.5	-
RJ236	3.7m @ 4.68% Cu, 54 g/t Ag, 1.96g/t Au from 433 m		3.0	15.6	3.29
RJ061	22.4m @ 2.84% Cu from 408 m		7.7	-43.3	-
RJ169	72m @ 3.27% Cu, 51 g/t Ag, 1.16g/t Au from 414m	R1	16	-40.6	3.33
RJ237	23.6m @1.82% Cu, 24 g/t Ag. 0.27g/t Au from 521.7 incl. 8.0m @ 3.86% Cu, 51 g/t Ag, 0.58 g/t Au	R1	16.1 5.5	-81.8	-
RJ237W1	25m @ 1.74%Cu, 36g/t Ag, 0.82g/t Au from 518m incl. 6.0m @ 4.88 Cu, 107 g/t Ag, 2.85 g/t Au	R1	17 4.1	-79.9	3.29
RJ204	8m @ 4.8% Cu, 62 g/t Ag, 0.35g/t Au from 502m	R1	5.0	-94	3.30
RJ204W1	9.05m @ 4.9%Cu, 66 g/t Ag, 1.22g/t Au from 509m	R1	5.8	-95.8	3.20
J25	3.64m @ 2.79% Cu from 570.4 m	-	2.2	-154	-
KJD216	11.6m of chalcopyrite mineralisation from 636.1m	R1 & R2	7.5	-200	
KJD010W1	7m @ 2.07% Cu, 92g/t Ag, 0.18g/t Au 1.1% Pb, 2.4% Zn from 1100m	-	5.6	-488.7	

<sup>\*</sup>RL start of mineralised interval

### For further information, contact:

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#### **About KGL Resources**

KGL Resources Limited is an Australian mineral exploration company focussed on increasing the high-grade resource at the Jervois Copper Project in the Northern Territory and developing it into a multi-metal mine.

#### **Competent Person Statement**

The Jervois Exploration data in this report is based on information compiled by Adriaan van Herk, a member of the Australian Institute of Geoscientists, Chief Geologist and a full-time employee of KGL Resources Limited.

Mr. van Herk has sufficient experience which is relevant to the style of the mineralisation and the type of deposit under consideration and to the activity to which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. van Herk has consented to the inclusion of this information in the form and context in which it appears in this report

The following drill holes were originally reported on the date indicated and using the JORC code specified in the table. Results reported under JORC 2004 have not been updated to comply with JORC 2012 on the basis that the information has not materially changed since it was last reported.

Hole	Date originally Reported	JORC Reported Under
J15	17/05/2011	2004
RJ236	02/10/2012	2004
RJ061	17/05/2011	2004
RJ169	20/10/2015	2012
RJ237	02/10/2012	2004
RJ237W1	02/10/2012	2004
RJ204	16/08/2012	2004
RJ204W1	16/08/2012	2004
J25	17/05/2011	2004
KJD010W1	15/01/2015	2012

# 1 JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Criteria	JONE Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Diamond drilling and reverse circulation (RC) drilling were used to obtain samples for geological logging and assaying.  RC drill holes are sampled at 1m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3kg.  Diamond core was quartered with a diamond saw and generally sampled at 1m intervals with shorter samples at geological contacts.  Field duplicate samples were taken to determine representivity of the primary sample.  RC samples are routinely scanned with a Niton XRF. Samples assaying greater than 0.1% Cu, Pb or Zn are submitted for analysis at a commercial laboratory.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	J RC drilling was conducted using a reverse circulation rig with a 5.25" face-sampling bit. Diamond drilling was either in NQ2 or HQ3 drill diameters. Metallurgical diamond drilling (JMET holes) were PQ
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Diamond core recoveries are determined by orientating core and measuring the recovered core between drill intervals provided by the drilling company. Any core loss is recorded as a percentage of the interval.  At the start of each RC drill program the bulk sample residue (drill cuttings) for 2-3 holes were weighed and compared to the theoretical weight of sample based on the interval length (1m) and the bit diameter. The ratio between the split and the bulk residue is calculated to ensure the split is representative applying Gy's sample theory (-1:15).  Drill rigs with high air pressure and CFM are utilised to ensure samples are dry and sample recovery is maximised.  Drill intervals with suspected sample loss are recorded on the drill log.  RC holes are twinned with diamond holes to determine if there is a sampling bias from loss of fines.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	All RC and diamond core samples are geologically logged with fields including lithology, alteration, mineralisation and structural fabric.      Representative samples of core were submitted for petrology and a logging atlas created to standardize geological logging.      Diamond core is orientated and logged for geotechnical information including recovery, RQD and structural fabric.      RC drilling is logged in 1m intervals.      Diamond core is logged in intervals based on the lithology, alteration and mineralisation.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>RC drill holes are sampled at 1m intervals and split using a cone splitter attached to the cyclone to generate a split of ~3kg.</li> <li>Diamond core was quartered with a diamond saw and generally sampled at 1m intervals with shorter samples at geological contacts.</li> <li>RC sample splits (~3kg) are pulverized to 85% passing 75 microns.</li> <li>Diamond core samples are crushed to 70% passing 2mm and then pulverized to 85% passing 75 microns.</li> <li>Sample preparation has been designed to ensure compliance with Gy's sample theory.</li> <li>RC duplicates are collected as an additional split from the cone splitter on the drill rig.</li> <li>Diamond core duplicates are a second interval of quarter core.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The QA/QC procedure includes standards, blanks, duplicates and laboratory checks. In ore zones Standards are added at a ratio of 1:10 and duplicates and blanks 1:20.</li> <li>Basemetal samples are assayed using a four acid (total) digest with an ICP AES finish. Gold samples are assayed by Aqua Regia with an ICP MS finish. Samples over 1ppm Au are re-assayed by Fire Assay with an AAS finish.</li> <li>An umpire laboratory is used to check ~1% of samples analysed.</li> <li>QA/QC data is assessed on a monthly basis to assess precision and accuracy of sample assays. Variances in the assay value of standards of greater than 10% (~3 standard deviations) triggers reanalysis of the sample batch.</li> <li>XRF analyses are only used to prescan samples. Samples with greater than 0.1% Cu, Pb or Zn are then submitted for analysis at a commercial laboratory.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Data is validated on entry into the Datashed database using the Logchief data acquisition software.      Further validation is conducted by a geologist when data is imported into Vulcan.      Validation of drill results at each resource was aided by twinning selected holes with variances investigated to determine the source of sampling or assaying error.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used.  Quality and adequacy of topographic control.	<ul> <li>Surface collar surveys were picked up using a Trimble DGPS.</li> <li>A selection of drill collars were periodically checked by a surveyor.</li> <li>Downhole surveys were taken during drilling with a Reflex MEMS gyro or a Reflex EZ gyro.</li> <li>All drilling is conducted on the GDA94 MGA Zone 53 grid. All downhole surveys were converted to GDA94 MGA Z53 grid.</li> <li>A DTM has been generated from a close spaced grid of sample points using a DGPS. Additional sample points have been added is areas with steep or rugged topography.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drilling for Inferred resources has been conducted at a spacing of 50m along strike and 80m within the plane of the mineralized zone. Closer spaced 50m by 40m drilling was used for Indicated resources.</li> <li>Shallow oxide RC drilling was conducted on 80m spaced traverses with holes 10m apart</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	Holes were drilled perpendicular to the strike of the mineralization at a default angle of -60 degrees but holes vary from -45 to -80.  The orientation of drill holes relative to the mineralised structures is not thought to have generated any significant sample bias.
Sample security	) The measures taken to ensure sample security.	Samples were stored in sealed polyweave bags on site and transported to the laboratory at regular intervals by KGL staff or a transport contractor.
Audits or reviews	) The results of any audits or reviews of sampling techniques and data.	The sampling techniques are regularly reviewed.

### Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Jervois project is within EL25429 and EL28082 100% owned by Jinka Minerals and operated by Kentor Minerals (NT), both wholly owned subsidiaries of KGL Resources.</li> <li>The Jervois project is covered by Mining Leases and two Exploration licences owned by KGL Resources subsidiary Jinka Minerals.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous exploration has primarily been conducted by Reward Minerals, MIM and Plenty River.
Geology	Deposit type, geological setting and style of mineralisation.	EL25429 and EL28082 lie on the Huckitta 1: 250 000 map sheet (SF 53-11). The tenement is located mainly within the Palaeo-Proterozoic Bonya Schist on the north-eastern boundary of the Arunta Orogenic Domain. The Arunta Orogenic Domain in the north western part of the tenement is overlain unconformably by Neo-Proterozoic sediments of the Georgina Basin.  The copper-lead-zinc mineralisation is interpreted to be stratabound in nature, probably relating to the discharge of base metal-rich fluids in association with volcanism or metamorphism or dewatering of the underlying rocks at a particular time in the geological history of the area.  The copper mineralisation is interpreted to be a later structurally controlled, mineralising event(s)

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	J Table 1 & 2 Figures 1 & 2
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	J Grades reported are uncut
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	∫ Refer Table 1 & 2
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	J Refer Figures 1 & 2
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	∫ Refer Table 1
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Refer Figures 1 & 2 Photograph 1-5
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	) Refer Figures 1 & 2