



13 April 2016

ASX ANNOUNCEMENT

ASX: ASN

Company Announcements Office

Australian Securities Exchange Limited

Single Layer Graphene produced from Ajana Graphite flake

Highlights:

- **Pristine sheets of graphene produced, particularly single layers**
- **Graphene is shown to be uniform and defect free**
- **Ajana Graphite is of very high quality resembling a highly ordered pyrolytic graphite (HOPG) profile**

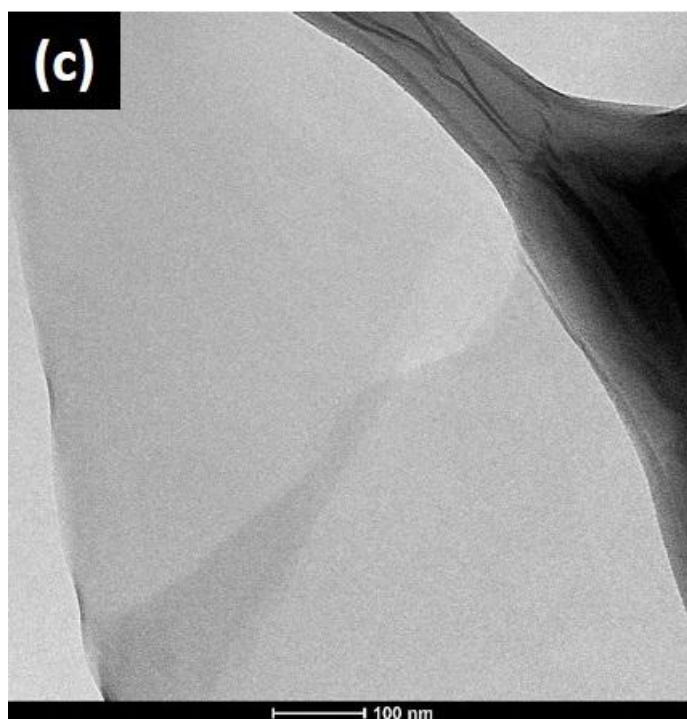


Photo 1: HRTEM image showing the pristine sheets of graphene.

Anson Resources Limited (ASX: ASN) is pleased to announce that single layered graphene has been produced from graphite flakes from the Company's Ajana Graphite Project, located in Western Australia. The research work was carried out by Flinders University of South Australia under the direction of Professor Amanda Ellis.

The graphene was produced by exfoliating the Ajana graphite sample with a high energy surfactant system. Both single and multilayered graphene can be seen in the scanning electron microscope image, see Photo 2. The graphene sheets range in size from 1 to 10 microns and the “wrinkles” seen in Photo 3 prove that these are single layered graphene sheets.

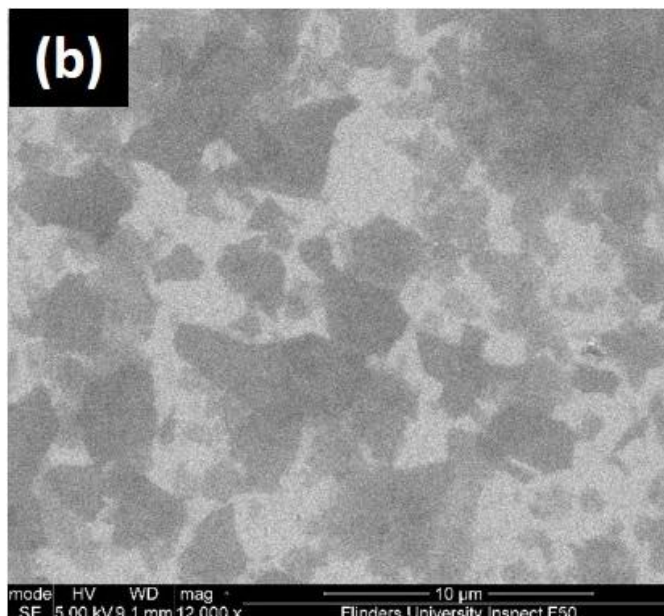


Photo 2: Scanning electron microscope image showing the graphene layers (12000* magnification).

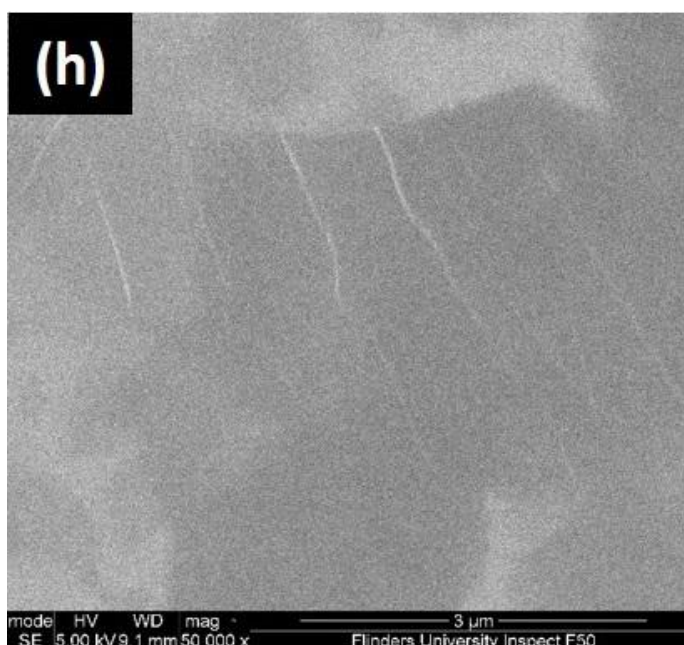


Photo 3: The “wrinkles” in the graphene sheets (50000* magnification).

The high resolution transmission electron microscope (HRTEM) was used to show the pristine nature of the single layered graphene sheets, see Photo 1. The photo shows the graphene layer to be uniform and defect free.



Bruce Richardson
Managing Director

The information in this release that relates to graphene and graphene production is based on information compiled and reviewed by Professor Amanda Ellis,. Professor Amanda Ellis is a full time professor at Flinders University in the Flinders Centre for Nanoscale Science and Technology and has sufficient experience in this field of work to be classified as a “Competent Person”. Professor Amanda Ellis consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

The information in this announcement that relates to exploration results and geology is based on information compiled and/or reviewed by Mr Greg Knox, a member in good standing of the Australasian Institute of Mining and Metallurgy. Mr Knox is a geologist who has sufficient experience which is relevant to the style of mineralisation under consideration and to the activity being undertaken 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 and consents to the inclusion in this report of the matters based on information in the form and context in which they appear.

About the Ajana Graphite Project

Located in Western Australia, a proven and established mining province with a stable political environment, the Ajana graphite project is adjacent to the North West Coast Highway and 130km north of Geraldton.

The prospective ground on the 97km² of tenement E66/89 contains extensive areas of graphite schist mineralization within a Proterozoic gneissic geology. The Ajana area is dominated by the Proterozoic gneiss with conformable lenses of meta-sediment, pelitic gneiss, meta-quartzite, mafic gneiss and graphitic schist known as the Northampton Metamorphic Complex. This gneissic geological environment, typically hosts high grade graphite deposits in Western Australia and graphite deposits worldwide, see Figure 1.

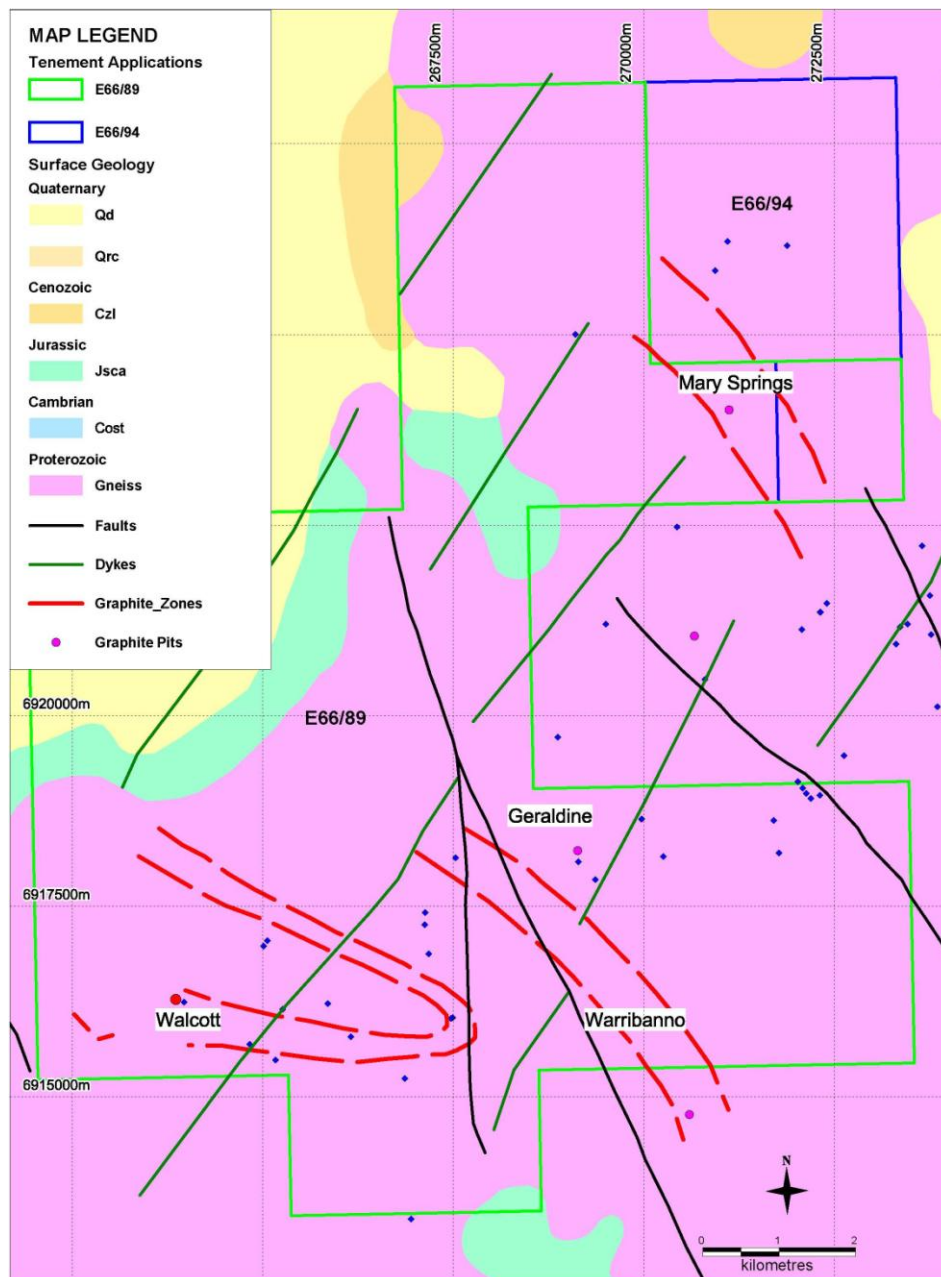


Figure 1: Plan showing the geology of the Ajana Project region

JORC CODE 2012 “TABLE 1” REPORT

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> Rock chip samples were collected as a first pass assessment of the project to host graphite mineralisation. The samples were collected as grab samples from in-situ outcropping rock, so as to be representative of the observed mineralised zone. Multiple rock fragments at each location were collected so that the sample submitted for research was representative of the sample site The grab sampling is a standard approach during the initial reconnaissance program.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Not applicable, no drilling carried out.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i> 	<ul style="list-style-type: none"> Not applicable, no drilling carried out.

JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<i>Logging</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Notes relating to each sample were recorded in a field note book and later transcribed to a digital format.
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled 	<ul style="list-style-type: none"> Not applicable, no drilling carried out. The sample preparation of the rock chip samples follows industry best practice, involving oven drying, crushing and pulverising , and floatation carried out by IMO, Perth

JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> Not applicable, no analysis was carried out.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.</i> 	The results of the sampling are considered acceptable.
Location of data points	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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. Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> Samples were located during collection by handheld GPS (Garmin) with a typical accuracy of +/- 5m. The grid system used is Australian Geodetic MGA Zone 50 (GDA94). The level of topographic control offered by the handheld GPS is considered sufficient for the work undertaken.

JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	There was no predetermined grid spacing.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Sampling was carried out over small areas of outcrop. <p>Not applicable, no drilling carried out.</p>
<i>Sample security</i>	The measures taken to ensure sample security.	All samples were collected by the field geologist.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews of the data has been conducted at this stage.

JORC CODE 2012 “TABLE 1” REPORT

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> The project comprises granted tenement E66/89.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Past exploration in the region was mainly carried out for lead and zinc mineralisation.
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Graphite is being targeted with carbonaceous bands within the pelites which has undergone metamorphism.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> 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 style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	<ul style="list-style-type: none"> Not Applicable, no drilling has been carried out.
	<ul style="list-style-type: none"> 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. 	

JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No averaging or cut-off grades have been applied to assay results.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’).</i> 	<ul style="list-style-type: none"> Exploration is at an early stage and information is insufficient at this stage.
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Plans are attached.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All the results are reported herein.

JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The exploration reported herein is still at an early stage.
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Further work is required which includes mapping and other exploration programs.