

#### ASX Announcement

#### 1 October 2013

### Platinum Group Elements in Nickel-rich Samples at Symons Hill, Fraser Range

#### lighlights

- Detectable platinum and palladium results were returned from 18 drill samples from SHG02 Target at Symons Hill
- Further samples to be analysed for precious metals in order to determine the significance of these initial results.

Matsa Resources Limited ("Matsa" or "the Company" ASX:MAT) advises that Platinum Group Element (PGE) and gold assay results from selected intervals in 11 aircore drill holes, have been received. These results relate to 18 selected composite samples chosen mostly within the recently announced nickel-rich zones from soil geochemical target SHG02 (Figure 1).

Background information relating to drilling, assay methods and the data used to compile this report, is appended as required by the JORC 2012 code (Appendix 1).

**CORPORATE SUMMARY Executive Chairman** Paul Poli Director Frank Sibbel **Director & Company Secretary** Andrew Chapman Shares on Issue 144.15 million **Unlisted Options** 12.55 million @ \$0.31 - \$0.45 **Top 20 shareholders** Hold 48% Share Price on 1 October 2013 31 cents **Market Capitalisation** \$44.68 million

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Figure 1: Symons Hill Project - Location of Aircore Drillholes

#### Key Assay Results

OF particular interest are 5 samples listed below, which have elevated Pt and Pd values and are coincident with anomalous Ni values in Target SHG02. (Figure 2)

)	Drillhole	Intercept
	SHAC067	4m of 0.44% Ni, 0.017%Cu, 0.006% Co, <b>34ppb Pt &amp; 31ppb Pd from 20m</b>
		and 3m of 0.15% Ni, 0.005%Cu, 0.028% Co, 16ppb Pt & 4ppb Pd from 44m
	SHAC068	4m of 0.39% Ni, 0.013%Cu, 0.042% Co, <b>15ppb Pt &amp; 18ppb Pd from 16m</b>
)	SHAC066	4m of 0.15% Ni, 0.015%Cu, 0.010% Co, <b>12ppb Pt &amp; 9ppb Pd from 36m</b>
/	SHAC040	4m of 0.68% Ni, 0.004%Cu, 0.084% Co, <b>15ppb Pt &amp; 6ppb Pd from 20m</b>

Elevated PGE values in nickel rich rocks can indicate the presence of associated Ni sulphides( please see last paragraph this announcement). In the case of target SHG02, this could imply a sulphide source for the anomalous Ni. PGE assays are underway on remaining samples containing >0.1% Ni to determine that significance of these initial results.

Mr Poli, Executive Chairman said, "We are encouraged by these elevated PGE values because we believe that they further support our exploration target for a Nova Style Ni Cu deposit. Our exploration at Symons Hill continues to tick the right boxes."

#### **Assay Method**

A total of 18, 4m composite samples were selected from 11 aircore holes drilled across SHG02. Of these, 14 were selected from nickel-rich intervals. The objective was to test for the presence of detectable Pt and Pd as a possible indicator for the presence of associated nickel sulphides. 4 samples outside of nickel-rich zones were also selected to determine background values of these precious metals. Assays were carried out on prepared sample pulps which were retained after first pass base metals suite assays. Determinations were carried out for Au-Pt-Pd, using lead fusion fire assay and analysis by inductively coupled plasma atomic emission spectroscopy (ICP-AES). Detection limits were 1ppb, 5ppb and 1ppb respectively for Au, Pt and Pd. The precious metals assay results are summarised in Appendix 2.

#### PGE in Target SHG02

Anomalous platinum and palladium values up to 34ppb and 31ppb, respectively, were returned in 4 holes along two traverses spaced 800m apart in SHG02 (Figure 2). These elevated PGE values are located within nickel rich zones in SHG02. Results suggest background values close to the detection limit for Pt (<5ppb) and around 4ppb for Pd.

No significant gold assays were returned.



Figure 2: Target SHG02 Aircore Drilling Summary

Elevated Pt and Pd values, >12ppb and >9ppb, respectively, in aircore holes were observed to correspond closely with elevated nickel rich zones over the same interval in saprolite and weathered gabbro (Figure 2).

Matsa is encouraged that these elevated PGE values may be an indicator of sulphide Ni mineralisation, Further assays are required to provide a clearer picture of precious metals in the weathering profile.

As a result of these encouraging PGE values, a more complete suite of pulp samples will be assayed for precious metals to further understand its association with nickel anomalism in SHG02. The scope will also be extended to include sighter assays for PGE on samples from SHG01, SHG04 and SHG06.

The location of elevated PGE values within nickel-rich zones in aircore holes at SHG02 target are shown in cross sections (Figures 3 and 4).



Figure 3: Target SHG02, Summary Aircore Drill Section 6463800mN (Vertical Exaggeration 5:1)



Figure 4: Target SHG02, Summary Aircore Drill Section 6464600mN (Vertical Exaggeration 4:1)

#### Significance of elevated Cu and PGE's in exploration for Ni Sulphide deposit

This section is provided in support of Matsa's view that elevated Cu and PGE's accompanying anomalous Ni values can be an indicator of associated nickel sulphide mineralisation. There are a number of supporting references in geological literature of which these notes are an excellent example. The text below was extracted verbatim from:

Eckstrand, O.R., and Hulbert, L.J., 2007, Magmatic nickel-copper-platinum group element deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 205-222.

"A broad group of deposits containing nickel, copper, and platinum group elements (PGE) occur as sulphide concentrations associated with a variety of mafic and ultramafic magmatic rocks (Eckstrand et al., 2004; Naldrett, 2004).

The magmas originate in the upper mantle and contain small amounts of nickel, copper, PGE, and variable but minor amounts of S. The magmas ascend through the crust and cool as they encounter cooler crustal rocks. If the original S content of the magma is sufficient, or if S is added from crustal wall rocks, a separate sulphide liquid forms as droplets dispersed throughout the magma. Because the partition coefficients of nickel, copper, and PGE as well as iron favour sulphide liquid over silicate liquid, these elements preferentially transfer into the sulphide droplets from the surrounding magma. The sulphide droplets tend to sink toward the base of the magma because of their greater density, and form sulphide concentrations. On further cooling, the sulphide liquid crystallizes to form the ore deposits that contain these metals."

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#### Exploration results

The information in this report that relates to Exploration results, is based on information compiled by David Fielding, who is a Fellow of the Australasian Institute of Mining and Metallurgy. David Fielding is a full time employee of Matsa Resources Limited. David Fielding has sufficient experience which is relevant to the style of mineralisation and the type of ore deposit under consideration and the activity 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'. David Fielding consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# **Appendix 1:** Matsa Resources Limited Symons Hill Project JORC 2012 Table 1

#### **Section 1 Sampling Techniques and Data**

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

Criteria	JORC 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>	<ul> <li>Soil Samples comprise approximately 300g of -1.5mm bulk soils collected between a depth of 10 and 30cm. Assay techniques such as Mobile Metal Ion (MMI) partial digest require that stainless steel shovel for digging and plastic trowel to scoop out soil is used to minimize sample contamination.</li> <li>Input from geochemical consultants eg ioGlobal Ltd has been sought from time to time to ensure that the size of sample is sufficient to ensure representivity of the soil mass being sampled. The target elements being sought are not present in coarse aggregates, coarse gold is not being targeted consequently 300g is sufficient for a representative sample</li> <li>From a sampling perspective the target is basement mineralization. Sampling procedures for total digest are focused on the clay fraction which captures and amplifies the geochemical response above basement mineralization. Sample procedures for MMI likewise target the amplified geochemical response associated with mobile ions of the target element.</li> </ul>		
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).	<ul> <li>Aircore Drilling carried out by Challenge Drilling. Vacuum Bit achieving accurate face sampling. Bit diameter 75-80mm.</li> </ul>		
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>	Recovery was not measured.		
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</li> </ul>	<ul> <li>Visual logging carried out on washed cuttings. All washed cuttings were retained in boxes. Selected fresh bottom of hole samples selected for petrography. Logging recorded as qualitative description</li> </ul>		

Criteria JORC Code explanation		Commentary		
	<ul> <li>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>	of colour and lithological type.		
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>Samples of 1-4m were composited for assay. The subsampling technique was carried out by hand spearing drill residues over specified intervals to achieve a final sample weight of around 3 kg. The opportunity exists to go back to individual splits as a check on composite assay values.</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>Soil and rock samples collected for gold and base metal exploration are assayed using an aqua regia digest and are regarded to be a total digest enabling total values for target elements to be measured. Analysis by inductively coupled plasma mass spectrometry (ICP-MS) technique is seen as the most cost effective technique for low level detection of gold and base metals. Inductively coupled plasma atomic emission spectrometry (ICP-AES) was also used to detect other elements such as Ca, Fe, K, etc. Precious metal (Au-Pd-Pt) determination is by 30g lead fire assay fusion and the resulting bead is digested in a three-stage acid process and measured using ICP-AES.</li> <li>For surface sampling no QA QC samples have been inserted and reliance is placed on laboratory procedures. Samples submitted for base metal analysis are "validated" in the field by a prior assay using the Olympus Handhled XRF unit.</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>	<ul> <li>Not carried out because laboratory QA QC procedures are regarded as sufficient for surface samples and first pass aircore samples.</li> <li>Data entry carried out by field personnel thus minimizing transcription or other errors. Trial plots in field and rigorous database procedures ensure that field and assay data are merged accurately.</li> </ul>		
Location of data points	<ul> <li>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.</li> </ul>	<ul> <li>Drill collars are surveyed by modern hand held GPS units with an accuracy of 5m which is sufficient accuracy for the purpose of compiling and interpreting results.</li> </ul>		

Criteria	JORC Code explanation	Commentary		
	<ul><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul>	<ul> <li>Topographic control 2-5m accuracy using published maps or Shuttle Radar data is sufficient to evaluate topographic effects on assay distribution.</li> </ul>		
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>Sample spacing is established using the largest spacing possible for a likely target footprint to minimize cost. Issues such as transported overburden which can blanket geochemistry response lead to a reduction in sample spacing.</li> <li>Aircore drillholes spacings were selected to achieve a first pass test of soil geochemical anomalies and to enable bedrock types to be characterized as a guide to a geologically driven exploration programme for Ni Sulphides.</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 is 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>	<ul> <li>Soil samples are collected on a staggered grid in order to minimize orientation bias.</li> <li>Vertical Aircore drillholes were oriented along EW lines which is at a high angle to the geological strike.</li> </ul>		
Sample security	The measures taken to ensure sample security.	<ul> <li>Not regarded as an issue for soil samples and first pass aircore samples beyond clear mark up and secure packaging to ensure safe arrival and accurate handling by personnel at assay facility. Aircore residues retained in strong green plastic bags pending further sampling. Assay Pulps retained until final results have been evaluated.</li> </ul>		
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>Orientation surface sampling overseen by geochemical consultants to ensure best practice. First pass assays with hand held xrf machine to gain impression of mineralization.</li> </ul>		

#### **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary		
<i>Mineral tenement and land tenure status</i>	<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>EL69/3070 which is owned 100% by Matsa Resources Ltd.</li> <li>Located on Vacant Crown Land</li> <li>The License intersects the buffer zones of the Fraser Range and Southern Hills PEC's Exploration to be managed in accordance with a Conservation Management Plan.</li> <li>The project is located within Native Title Claim by the Ngadju people.</li> <li>A heritage agreement has been signed and exploration is carried out within the terms of that agreement.</li> <li>At the time of writing the licence is granted for a 5 year period</li> </ul>		

Criteria JORC Code explanation		Commentary			
		expiring on 6 <sup>th</sup> March 2018			
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Prior work carried out by GSWA in the form of wide spaced helicopter based soil sampling and acquisition of 400m line spacing magnetic and radiometric data.</li> <li>No previous exploration data has been reported.</li> </ul>			
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The target is Nova style Ni Cu mineralization hosted in high grade mafic granulites of the Fraser Complex</li> </ul>			
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>	Co ordinates and other attributes of aircore drillholes are included in Appendix 2. Each drilling programme will be attached in this way as information becomes available.			
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>	<ul> <li>Aggregation of downhole assay values for Ni Cu and Co were shown for intercepts containing &gt;0.1% Ni. Intercepts were calculated by averaging length weighted intercept values for the three elements (usually 4m lengths). Raw un - aggregated Cu, Ni and Co values have been included in Appendix 3.</li> </ul>			
Relationship between mineralisatio n 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>	All intercepts reported are measured in down hole metres.			
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Suitable summary plans have been included in the body of the report.</li> <li>A plan and two sections have been included to illustrate the results at SHG02</li> </ul>			
Balanced	<ul> <li>Where comprehensive reporting of all Exploration Results is not</li> </ul>	Not required at this stage			

Criteria	JORC Code explanation	Commentary		
reporting	practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.			
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Airborne VTEM (combined magnetic and electromagnetic) carried out in December 2012 by Geotech Airborne Pty Limited. A total of 6 priority targets and 15 second order targets identified and reported on by Southern Geoscience Consultants Ltd</li> <li>Prior to December 2012, Comprehensive geochemical survey carried out by Matsa Resources comprising 614 samples mostly at 400m centres on a staggered grid identified targets SH01 to SH05. Infill at 200m x 200m completed over targets SH01 to SH05 in May 2013 for a total of 638 samples.</li> <li>Ground EM carried out in May 2013 by Bushgum Holdings Pty Ltd, under supervision by Newexco consultants, consisting of both moving-loop (MLEM) and fixed-loop (FLEM) surveys. Data acquisition was achieved using a SMARTem24 8-channel geophysical receiver manufactured by ElectroMagnetic Imaging Technology (EMIT), Bartington 3-component magnetic field sensor (up to 1Hz frequency response) and a Zonge ZT-30 Loop Driver transmitter to power the loop with up to 30A. The MLEM and FLEM surveys are both 400m wide. In the MLEM, the survey lines are spaced 400m apart with receiving stations every 100m inside the loop along an E-W direction. In the FLEM, the receiving stations are 50m apart across 1 km traverse in an E-W direction.</li> </ul>		
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>	<ul> <li>Further aircore drilling followed with RC and diamond drilling at Geochemical anomaly SHG02. Aircore drilling at other areas recommended by geophysical consultant.</li> <li>Geological mapping to commence in areas of bedrock exposure in the south of the tenement.</li> <li>Induced polarization (IP) geophysical surveys over geochemical targets SHG01 and SHG02.</li> <li>Additional samples for precious metals assaying will be selected from the first pass aircore drill programme.</li> </ul>		

### Appendix 2: Symons Hill Aircore Drilling Pt, Pd and Au Assays and summary statistics

Target	SHG02		
Elements	Sample Count	Maximum Value	Anomalous (75 <sup>th</sup> Percentile)
Au_ppb	18	4	2
Pd_ppb	18	31	12
Pt ppb	18	34	9

Hole_ID	mFrom	mTo	Au_ppb	Pt_ppb	Pd_ppb
SHAC037	36	40	2	<5	1
SHAC038	28	32	1	<5	11
SHAC038	44	45	4	7	15
SHAC039	12	16	1	<5	6
SHAC039	32	36	1	<5	4
SHAC040	20	24	2	15	6
SHAC040	32	33	2	6	3
SHAC041	32	35	1	<5	2
SHAC064	24	27	2	8	9
SHAC065	44	48	3	7	8
SHAC065	48	52	4	6	6
SHAC066	36	40	2	12	9
SHAC066	40	43	1	11	6
SHAC067	20	24	1	34	31
SHAC067	44	47	<1	16	4
SHAC068	16	20	2	15	18
SHAC068	28	32	2	5	5
SHAC069	44	47	2	<5	2