

## **SILVER + GOLD + LEAD + ZINC MINERALISATION CONTINUES IN NORTHERN ZONE OF THE CUITABOCA PROJECT, MEXICO**

6 August, 2015. Further sampling by Santana Minerals Limited (“Santana”) in the northern zone of the Cuitaboca Project, Sinaloa, Mexico continues to identify silver + gold + lead + zinc.

### **Highlights - rock-chip samples:**

- 0.6m @ **676g/t Ag + 8.7% Pb + 2.0% Zn + 1.2% Cu** (CT-0361)
- 0.4m @ **524g/t Ag + 7.6% Pb + 1.9% Zn** (CT-0362)
- 0.6m @ **1.8g/t Au + 122g/t Ag + 1.1% Pb + 5.5% Zn** (CT-0346)
- 1.0m @ **1.1g/t Au + 104g/t Ag + 7.8% Pb + 0.2% Zn** (CT-0347)
- 0.6m @ **227g/t Ag + 2.6% Pb** (CT-0359)

### **Discussion:**

Santana undertook a further work program in the northern zone of the Cuitaboca Project aimed at gaining a better understanding of the geologic systems in that zone. This followed encouraging results of the work completed in the last quarter (previously reported).

Mapping, interpretative work and rock chip sample assays are again positive and will assist with interpretation and planning towards a drill program.

A table of rock-chip assays and a sample location plan follow.

**Table: Rock-chip sample location and results**

Sample No.	East	North	Width m.	Au g/t	Ag g/t	Cu %	Pb %	Zn %
CT-0345	796445	2906135	0.60	0.01	1	-	0.01	0.01
CT-0346	796537	2907320	0.60	1.82	122	0.39	1.08	5.56
CT-0347	796548	2907329	1.00	1.17	104	0.59	7.78	0.24
CT-0348	796548	2907334	0.80	0.28	7	0.17	0.05	0.04
CT-0349	796714	2906916	0.70	0.44	4	0.32	0.05	0.02
CT-0350	796715	2906897	1.00	0.1	7	0.76	0.04	0.02
CT-0351	796868	2906629	0.65	0.21	7	0.15	0.18	0.25
CT-0352	796770	2906883	0.70	0.26	2	0.05	-	0.02
CT-0353	796773	2906852	0.60	0.19	23	0.10	0.25	0.26
CT-0354	798042	2906417	0.60	0.01	21	-	0.02	0.04
CT-0355	797813	2906436	0.60	0.06	103	0.02	0.74	1.25
CT-0357	797813	2906436	0.60	0.01	48	0.01	0.02	0.05
CT-0358	797826	2906435	0.60	0.33	73	0.03	1.41	1.20
CT-0359	798658	2906220	0.60	0.01	227	0.02	2.68	0.36
CT-0360	796519	2907380	1.1	0.11	4	0.04	0.10	0.57
CT-0361	796491	2907473	0.6	0.1	676	1.20	8.70	2.02
CT-0362	796489	2907480	0.4	0.07	524	0.43	7.61	1.99
CT-0363	796340	2907763	0.3	0.19	80	0.09	1.16	2.13
CT-0364	796256	2907897	0.5	0.27	11	0.15	0.06	0.32
CT-0365	795742	2906499	1.4	0.02	4	0.26	0.16	0.10
CT-0366	795742	2906503	1.4	0.01	5	0.13	0.08	0.03
CT-0367	796001	2906454	0.6	0.05	11	0.12	0.16	0.10
CT-0368	796428	2907234	0.9	0.01	1	0.01	0.02	0.07
CT-0369	798893	2906178	0.6	0.04	15	0.02	0.06	0.43
CT-0370	798893	2906179	0.9	0.01	3	0.01	0.06	0.18



**Figure: Rock-chip Sample Location Plan**

#### **About Cuitaboca Project:**

The Cuitaboca Project is in an area covered by the 5,100Ha mining concessions and consists of a series of veins with sulphide mineralisation carrying high grade silver and low grade polymetallic minerals. There are now at least nine well defined vein systems that outcrop and have observable thicknesses of between 0.5m to 4m wide. The area is dominated by andesite flows and tuffs of the lower volcanic group with minor rhyolites of the upper volcanic group at higher elevations.

The main vein structures are La Lupita – El Pinal, La Piedrita and Blanca Esthela prospects in the north of the Cuitaboca Project, Los Sapos, Chapotal, La Plata, Colateral and Jesus Maria in the central zone and the Mojardina and Santa Eduwiges veins further south.

Santana has a contractual right to earn to an 80% interest in the Cuitaboca Project through a combination of work commitments and payments following which it enters into a joint venture on an 80:20 contribution basis.

For further information, please contact:

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**About Santana**

Santana is a precious metals explorer focused on Mexico where it owns 100% of the Namiquipa (silver/lead/zinc) project in Chihuahua and is earning into ownership of the Cuitaboca Ag-Au polymetallic project in Sinaloa.

Additional information about Santana and its projects is available on the website: [www.santanaminerals.com](http://www.santanaminerals.com)

**Competent Person/Qualified Person.**

The information in this report that relates to exploration targets, exploration results, mineral resources or ore reserve is based on information compiled by Mr Richard Keevers, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Keevers is a non-executive director of Santana. Mr Keevers 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 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Keevers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## JORC Code, 2012 Edition – Table 1 CUITABOCA EXPLORATION PROGRAM REPORT:

### A. Rock Chip Sampling – Northern Zone Veins

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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>	<p><u>ROCK CHIP SAMPLING</u></p> <ul style="list-style-type: none"> <li>Channel and grab rock chip samples were collected of argentite-galena-sphalerite bearing quartz veins, and zones of silicification, within Tertiary volcanics under the supervision of a qualified geologist.</li> <li>Sample locations were surveyed with a handheld GPS then permanently marked with an aluminum tag.</li> <li>Representative rock chip samples of 2-3Kg weight were taken across the strike of the outcrop over 1 metre intervals except where noted.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<u>NO DRILLING IN THIS PROGRAM.</u>
Drill sample recovery	<ul style="list-style-type: none"> <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>	<u>NO DRILLING IN THIS PROGRAM.</u>
Logging	<ul style="list-style-type: none"> <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> </ul>	

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<u>NO DRILLING IN THIS PROGRAM.</u>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <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>	<u>NO DRILLING IN THIS PROGRAM.</u>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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>	<u>ROCK CHIP SAMPLING</u> <ul style="list-style-type: none"> <li>Samples are stored in a secure location and transported to the ALS laboratory in Hermosillo for sample preparation of fine crush, riffle split and pulverizing of 1kg to 85% &lt; 75µm.</li> <li>Pulps are analyzed by ALS Vancouver (Canada) using method code ME-ICP61a, a 33 element determination using a four acid digestion, Au-AA26.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <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>	<u>ROCK CHIP SAMPLING</u> <ul style="list-style-type: none"> <li>Laboratory CSV files are merged with GPS Location data files using unique sample numbers as the key.</li> <li>No adjustments made to assay data</li> </ul>
Location of data points	<ul style="list-style-type: none"> <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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<u>ROCK CHIP SAMPLING</u> <ul style="list-style-type: none"> <li>Samples are located using handheld GPS receivers.</li> <li>UTM projection WGS84 Zone 12N.</li> <li>The topographic control, using handheld GPS, was adequate for the survey.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient</li> </ul>	<u>ROCK CHIP SAMPLING</u> <ul style="list-style-type: none"> <li>Reconnaissance sampling of available outcrop.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</p> <ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Results will not be used for resource estimation.</li> <li>No compositing has been applied.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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>	<p><b>ROCK CHIP SAMPLING</b></p> <ul style="list-style-type: none"> <li>Representative rock chip samples of 2-3Kg weight are taken across the strike of the outcrop over 1metre intervals except where noted.</li> <li>No bias is believed to be introduced by the sampling method.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were delivered to ALS Minerals laboratory in Hermosillo by Santana geologist and were not left unattended at any time.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews of the data management system have been carried out.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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 license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Santana Minerals, through subsidiaries and contractual rights, holds an option to acquire 80% of the Cuitaboca Project which consists of 100% of the mining concessions: El Chapotal (126ha), San Rafael (528ha), Nuestra Senora del Carmen (79.46ha), San Pedro (29ha), Jesus Maria (13.6ha), San Rafael II (540ha), Cuitaboca (2,402ha) and Las Sapos (1,386ha). The commercial terms consist of multiple option payments which form part of a total purchase price of US\$3.5M. The seller retains a 2.5% Net Smelter Royalty.</li> <li>The laws of Mexico relating to exploration and mining have various requirements. As the exploration advances specific filings and environmental or other studies may be required. There are ongoing requirements under Mexican mining laws that will be required at each stage of advancement. Those filings and studies are maintained and updated as required by Santana's environmental and permit advisors specifically engaged for such purposes.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The first report of mining in the Cuitaboca area was between 1760 and 1810 with small scale mine workings. In 1883 American and English investors took control of the Cuitaboca mining operations which continued for nearly a century. Between 1974 and 1975 Servicios Industriales Penoles undertook systematic exploration using surface and underground geological mapping and the collection of 180 samples. In 2006 Canadian-based First Majestic acquired the property after a merger with First Silver</li> </ul>

Criteria	JORC Code explanation	Commentary
		Reserve and initiated >300m of underground development at Colateral Mine which delineated a quartz-galena-sphalerite vein that reported elevated Ag-Pb-Zn. First Majestic withdrew from the project in late 2008 and retained no interest.
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>Within the Cuitaboca project area there have been 9 discrete polymetallic low sulphidation epithermal Ag-Au veins recognised that have undergone historical manual mining. Other low sulphidation epithermal polymetallic Ag-Au vein deposits host most ore within ore shoots at the coincidence of ore controls defined as: competent host rocks, dilatant structures, higher Au-Ag grade mineralisation styles and efficient mechanisms of Au-Ag deposition.</p> <p>Host rocks identified as interlayered Cretaceous age andesitic lavas, volcanics and volcanoclastic rocks and lesser rhyolites of the Sierra Madre Occidental Volcanics, have been placed in a stratigraphic succession as an aid to the delineation of the andesite flows, and locally welded tuffs, recognised as the most favourable rocks to host through going fissure vein mineralisation. In the Colateral adit the transition from incompetent lapilli tuff to competent andesite host rocks corresponds to a 110% increase in Ag and 250% increase in Au grades. An exploration target occurs where competent andesite is interpreted to underlie incompetent tuff.</p> <p>Mineralised veins lie within nine NW-SE (120°TN) trending structures interpreted as listric style normal faults formed in association with regional extension within the Sierra Madre. NW trending vein dips vary from steep to moderate and may locally display a relationship to rock competency as moderate dipping structures refract to steeper dips in the more competent andesites. Steeper dips mostly host better veins within listric fault environments. Using a structural model derived from Palmarejo, no dilatant flexures were identified as changes in the strike of veins from NW towards the WNW-EW, where steep dipping veins should host core shoots. Interpretation of the regional digital terrain model suggests NNE trending transfer structures might segment the listric faults and contribute towards the localisation of mineralisation.</p> <p>The historically mined Cuitaboca polymetallic Ag-Pb-Zn (<math>\pm</math> Au) bearing epithermal quartz veins comprise dominantly banded and brecciated quartz with galena, mostly yellow sphalerite, argentite, tetrahedrite, pyrite, chalcocopyrite and gangue of carbonate (calcite and rhodochrosite), barite and fluorite. The adjacent wall rocks display K-feldspar and retrograde chlorite-illite/smectite alteration</p>
Drill hole Information	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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</li> </ul>	<p><u>NO DRILLING IN THIS PROGRAM</u></p>



Criteria	JORC Code explanation	Commentary
	<i>Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Equivalent grades were not used in any tables or summations of the data.</li> <li>No results have been reported with aggregated intercepts as this program did not include drilling.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <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>	<u>NO DRILLING I N THIS PROGRAM</u>
Diagrams	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The location and results received for rock-chip samples are displayed in the attached maps and/or Tables.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Results for all samples collected in this program are displayed on the attached maps and/or Tables.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No metallurgical or bulk density tests were conducted at the project.</li> </ul>
Further work	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Further work is dependent on management review of the existing data.</li> </ul>