

ASX: AZS 16 May 2016

# NEW HIGH GRADE SILVER ZONE IDENTIFIED NEAR PALO SECO

Azure Minerals Limited (ASX: AZS) ("Azure" or "the Company") is pleased to advise that high grade silver assays and strongly anomalous gold and base metal values have been returned from reconnaissance sampling at Palo Seco Sur, a previously untested zone located 750m south of the historical Palo Seco Mine (see Figure 1), part of the Company's Alacrán Project.

### **HIGHLIGHTS:**

 First sampling at Palo Seco Sur returns high grade silver and anomalous gold assays, including:

Sample No.	Ag (g/t)	Au (g/t)
ALR-2917	1,119	1.107
ALR-2919	782	0.449
ALR-2915	628	0.729
ALR-2923	356	0.074
ALR-2922	300	1.267
ALR-2916	245	0.581
ALR-2924	215	0.463

- Mineralisation is hosted in a structurally-controlled breccia zone that appears to extend north-south for at least 1,500m
- Previous exploration drilling returned <u>18.0m @ 31g/t Ag & 1.82% Zn</u> near Palo Seco Mine (ASX: 16/09/2015)
- Channel sampling of outcropping breccia returned <u>12m @ 118g/t Ag</u> near Palo Seco Mine (ASX: 19/01/2015)

**Azure's Managing Director, Tony Rovira**, welcomed these results, stating, "Palo Seco was the first area that we tested when we started exploring Alacrán due to the presence of several historical mine workings. We've returned because of the potential size of the mineralised system and its obvious prospectivity for hosting significant precious and base metal mineralisation.

"The latest sampling results are very positive and I'm hopeful that future drilling may add Palo Seco to our list of mineral discoveries, joining the Mesa de Plata silver deposit and the gold-silver mineralisation at Loma Bonita."

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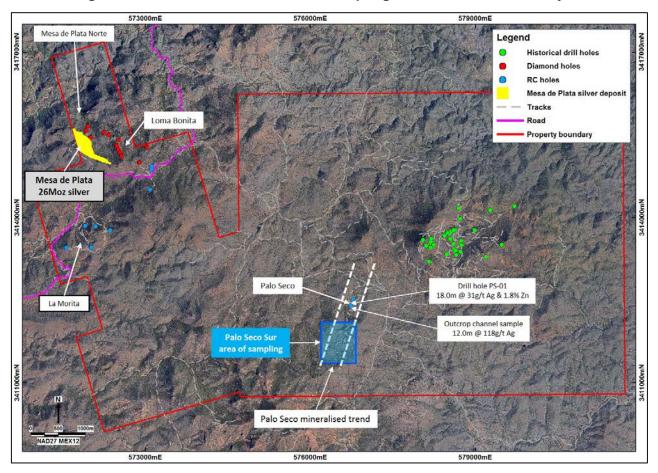
ABN: 46 106 346 918 ASX:AZS

In this newly identified area, several historical mine workings exploited a north-south linear structure containing silicified and brecciated volcanic rocks. Sampling (see Figure 2) returned assays ranging from high grade to strongly anomalous silver, gold, zinc and lead, confirming that the Palo Seco trend, may extend along strike for at least 1,500m and is prospective for precious and base metal mineralisation.

Table 1: Assay results from sampling of old mine workings at Palo Seco Sur

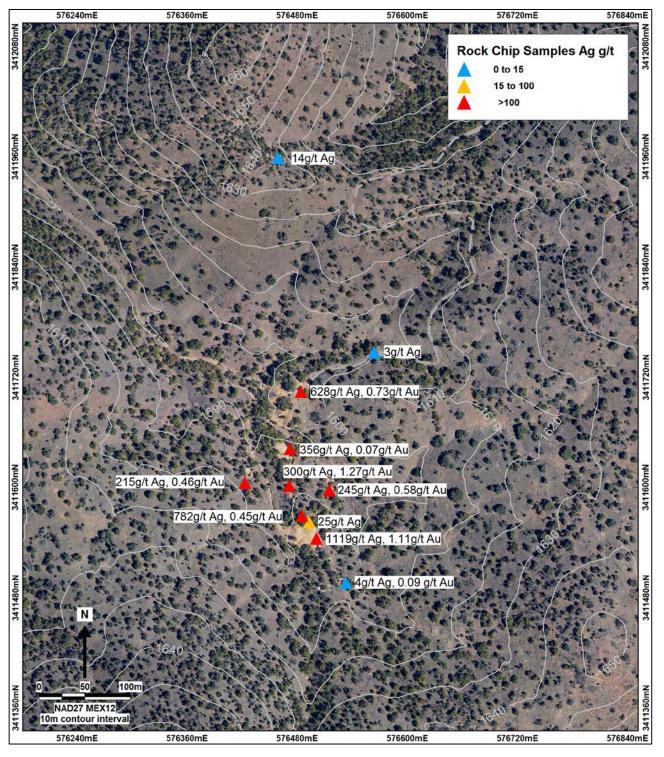
LOCATION	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE LENGTH	Ag (g/t)	Au (g/t)	Zn (ppm / %)	Pb (ppm / %)
Palo Seco Sur	Chip channel	ALR-2914	0.60	3.3	0.013	92	166
Palo Seco Sur	Dump grab	ALR-2915	0.00	628.0	0.729	1.8%	6490
Palo Seco Sur	Dump grab	ALR-2916	0.00	245.0	0.581	1.6%	5341
Palo Seco Sur	Chip channel	ALR-2917	0.60	1,119.0	1.107	1109	7113
Palo Seco Sur	Chip channel	ALR-2918	0.40	25.3	0.010	523	350
Palo Seco Sur	Chip channel	ALR-2919	1.00	782.0	0.449	333	7901
Palo Seco Sur	Chip channel	ALR-2920	0.30	3.5	0.090	56	509
Palo Seco Sur	Dump grab	ALR-2921	0.00	5.2	<0.005	199	15
Palo Seco Sur	Chip channel	ALR-2922	0.60	300.0	1.267	446	950
Palo Seco Sur	Chip channel	ALR-2923	0.40	356.0	0.074	93	2886
Palo Seco Sur	Chip channel	ALR-2924	0.50	215.0	0.463	5076	1.5%
Palo Seco Sur	Chip channel	ALR-2925	0.50	14.5	0.019	7	62
Highlighted results are considered anomalous to high grade: >200g't Ag, >0.4g/t Au, >0.5% Zn, >0.5% Pb							

Figure 1: Location of Palo Seco Sur sampling area within Alacrán Project



Azure is currently undertaking a detailed (100m x 50m spacing) soil sampling program over an area of 2.5km north-south by 1.0km east-west to cover the Palo Seco mineralised trend. If warranted, follow-up exploration, including drilling, will be undertaken.

Figure 2: Aerial Photograph showing Silver and Gold Results at Palo Seco Sur



Azure acquired the rights to the project in December 2014 through its fully owned Mexican subsidiary Minera Piedra Azul S.A. de C.V.

Azure has signed an Agreement with Teck to acquire 100% of the property, subject to an underlying back-in right retained by Teck and a 2% NSR retained by Grupo Mexico. Teck Resources Limited is Canada's largest diversified resource company. Grupo Mexico is Mexico's largest and one of the world's largest copper producers.

-ENDS-

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Information in this report that relates to Exploration Results is based on information compiled by Mr Tony Rovira, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Rovira is a full-time employee and Managing Director of Azure Minerals Limited. Mr Rovira has sufficient experience which is relevant to the styles of mineralisation and types 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 Rovira consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this report that relates to previously reported Exploration Results has been crossed-referenced in this report to the date that it was reported to ASX. Azure Minerals Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcement.

# JORC Code, 2012 Edition – Table 1

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report. 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.	<ol> <li>Targets were sampled by:</li> <li>Grab samples of rock material with visible mineralisation or alteration.</li> <li>Continuous chip sampling along a marked channel over a defined length perpendicular across the strike of the observed mineralised zone.</li> <li>Sample locations were determined by hand-held GPS.</li> <li>Samples preparation was undertaken at Acme Laboratories (a Bureau Veritas Group company) in Hermosillo, Sonora,, Mexico. Samples were weighed, assigned a unique bar code and logged into the Acme tracking system. Samples were dried and each sample was fine crushed to &gt;70% passing a 2 mm screen. A 250g split was pulverised using a ring and puck system to &gt;85% passing 75 micron screen.</li> <li>Envelopes containing the 250g sample pulps were sent via courier to the Acme laboratory in Vancouver, Canada for analysis.</li> <li>The analytical techniques for all elements (other than gold) initially involved a four-acid digest followed by multi-element ICP-MS analysis. This technique is considered a total digest for all relevant minerals.</li> <li>Following the four-acid digest, the analytical method used was MA300 (by ICP-MS for silver and base metals).</li> <li>Fire Assay method FA430 was used for gold.</li> <li>Over-limit assays were re-analysed by MA370 (by ICP-ES for base metals grading &gt;1%) and FA530 (by fire assay with gravimetric finish for silver grading &gt;200ppm).</li> </ol>
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).	No drilling was undertaken
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples.  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.	No samples were collected from drilling.
Logging	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.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  The total length and percentage of the relevant intersections logged.	No samples were collected from drilling.
Sub-sampling techniques and sample preparation	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.	No samples were collected from drilling.  The sample preparation followed industry best practice.  Samples were prepared at the Acme laboratories in Hermosillo, Sonora, Mexico. Samples were weighed, assigned a unique bar code and logged into the Acme tracking system. The sample was dried and the entire sample was fine crushed to >70% passing a 2 mm screen. A 250g split was pulverised using a ring and puck system to >85% passing 75 micron screen. Envelopes

	Quality control procedures adopted for all sub-sampling	containing the 250g pulps were sent via courier to the Acme				
	quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	laboratory in Vancouver.				
	Measures taken to ensure that the sampling is representative of the in situ material collected, including	No standard and blank check samples were submitted.				
	for instance results for field duplicate/second-half sampling.	Pulp duplicate samples are randomly selected and submitted for analysis.				
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered appropriate to the grain size of the material being sampled.				
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  For geophysical tools, spectrometers, handheld XRF	The analytical techniques for all elements (other than gold) initially involved a four-acid digest followed by multi-element ICP-MS analysis. This technique is considered a total digest for all relevant minerals.				
	instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Following the four-acid digest, the analytical method used was MA300 (by ICP-MS for silver and base metals).				
	Nature of quality control procedures adopted (eg	Fire Assay method FA430 was used for gold.				
	standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Over-limit assays were re-analysed by MA370 (by ICP-ES for base metals grading >1%) and FA530 (by fire assay with gravimetric finish for silver grading >200ppm).				
		Azure implemented industry standard QAQC protocols to monitor levels of accuracy and precision.				
		Internal laboratory control procedures comprised duplicate sampling of randomly selected assay pulps, as well as internal laboratory standards and blanks.				
		Azure routinely inserted Certified Reference Standards, replicate samples, duplicate samples, and blank samples at alternate sample intervals to provide assay quality checks. Review of the standards, duplicates and blanks are within acceptable limits.				
		No geophysical or portable analysis tools were used to determine assay values.				
Verification of	The verification of significant intersections by either	Senior technical personnel from the Company (Project				
sampling and assaying	independent or alternative company personnel.	Geologists and Exploration Manager) inspected the samples.				
ussaying	The use of twinned holes.	No drilling was undertaken.				
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  Discuss any adjustment to assay data.	Primary data was collected by employees of the Company at the project site. All measurements and observations were recorded onto hard copy templates and later transcribed into the Company's digital database.				
		Digital data storage, verification and validation are managed by an independent data management company.				
		No adjustments or calibrations have been made to any assay data.				
Location of data	Accuracy and quality of surveys used to locate drill holes	Sample locations were determined by hand-held GPS.				
points	(collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	The grid system used is NAD27 Mexico UTM Zone 12 for easting, northing and RL.				
	Specification of the grid system used.					
	Quality and adequacy of topographic control.					
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Samples were collected on the basis of visual recognition of alteration or mineralisation. Sample spacing was not relevant as				
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity	this was a reconnaissance exploration program.				
	appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Data spacing and distribution is insufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation procedures.				
	Whether sample compositing has been applied.	No composite samples were collected of calculated.				
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Geological controls and orientations of the mineralised zone are unknown at this time and it is not possible to determination potential sampling bias.				
structure	, , , , , , , , , , , , , , , , , , , ,	1 0				

	have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Assay samples were placed in poly sample bags, each with a uniquely numbered ticket stub from a sample ticket book. Sample bags were marked with the same sample number and sealed with a plastic cable tie. Samples were placed in woven polypropylene "rice bags" and a numbered tamper-proof plastic cable tie was used to close each bag. The rice bags were delivered by company personnel directly to the Acme laboratory for sample preparation. The numbers on the seals were recorded for each shipment. Acme audited the arriving samples and reported any discrepancies back to the Company. No such discrepancies occurred.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All digital data is subject to audit by the independent data manager.

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

Criteria	JORC Code explanation	Commentary				
Mineral tenement and land tenure status  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		The Alacrán Project comprises 22 mineral concessions 100% owned by Minera Teck SA de CV, a subsidiary of Teck Resources Limited.				00%
	park and environmental settings.	CLAIM	FILE	TITTLE	HECTARES	
		Hidalgo	1794	166374	99.00	
		Hidalgo 2	1796	166369	99.00	
		Hidalgo 3	1797	166368	99.00	
		Hidalgo 4	1798	166366	99.00	
		Hidalgo 5	1799	166370	99.00	
		Hidalgo 6	1800	166371	99.00	
		Hidalgo 7	1801	166373	99.00	
	The security of the tenure held at the time of reporting	Hidalgo 8	1802	166372	99.00	
	along with any known impediments to obtaining a licence	Hidalgo 9	1803	166375	99.00	
	to operate in the area.	Kino 2	1886	166313	100.00	
		Kino 3	1887	166312	100.00	
		Kino 4	1888	166314	100.00	
		Kino 8	1892	166315	100.00	
		Kino 9	1893	166316	100.00	
		Kino 10	1894	166317	100.00	
		Kino 11	1895	166318	100.00	
		Kino 15	1899	166365	100.00	
		Kino 16	1800	166367	100.00	
		San Simón	1894	166376	100.00	
		San Simón 2	1895	166377	100.00	
		El Alacrán	E.4.1.3/1182	201817	3,442.36	
		TOTAL SURFACE			5,433.36	
		A 2% Net Smelter Royalty is held by Grupo Mexico.  The tenements are secure and are in good standing. There are no known impediments to obtaining a licence to operate in the area.				
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The project area has a history of industrial-scale commercial mining and small-scale artisanal mining dating back to the early 20 <sup>th</sup> century, which ended shortly after the start of the Mexican Revolution in 1910. After the Revolution ended in the 1920's, the property was explored intermittently.				e early xican
		The Anaconda Copper Min some exploration, including late 1960's. Data relating to yet to be reviewed.	g drilling, o	n the pr	operty prior	to the
		Between 1969 and the early 1980's, the Consejo de Recursos Minerales (Mexican Geological Survey) carried out occasional exploration programs, including drilling 6 holes in 1970 and undertaking geophysical surveys over the Palo Seco and La Morita prospects in 1981.				
		Grupo Mexico acquired the project after the CRM completed their drilling. Grupo Mexico drilled an additional 26 holes on the project in two phases. The first phase was done in 1991 (24 holes) and the second phase was done in 1997 and 1998 (two holes).				
		Minera Teck S.A. de C.V., Resources Limited acquired limited surface exploration.	d the proper			
		Azure Minerals acquired the rights to the project in December 2014 through its fully owned Mexican subsidiary company Minera Piedra Azul SA de CV.				
Geology	Deposit type, geological setting and style of mineralisation.	Various styles of mineralisa	ation occur	on the p	property.	

		Epithermal zones, veins, breccias and stockworks host silver, lead, zinc, copper and gold in volcaniclastic rocks (Mesa de Plata, Loma Bonita, San Simon and Palo Seco).  Secondary copper oxide and chalcocite mineralisation occur in volcanic rocks (La Morita and Cerro Alacrán).  Primary copper mineralization is hosted in porphyry rocks.
Drill hole information	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:  • 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.  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.	Refer to tables in the report and notes attached thereto which provide all relevant details.
Data aggregation methods	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.  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.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	No weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) or cut-off grades were applied.  No metal equivalency values or factors have been used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').	Geological controls and orientations of the mineralised zone are unknown at this time.
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.	Refer to Figures in attached report
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.	The Company believes that the ASX announcement is a balanced report with all material results reported.
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.	This announcement refers to previous exploration results including geophysics, geochemistry and geology.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale stepout drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Further work to better understand the mineralisation systems in the project area will be determined upon a full analysis and interpretation of results.