## Report on Preliminary Geological Reconnaissance of the Scorpio\_370 and 8 Hermanos area, Municipality of Ures, Sonora.

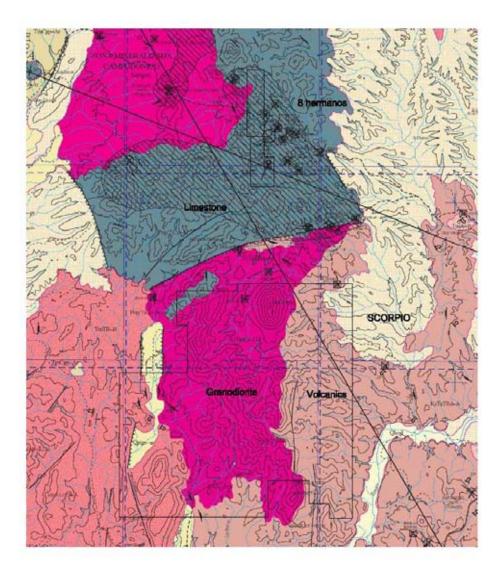
## Cesar M. Lemas Mar.1, 2018.

Mexus Gold US controls approximately 2800 hectareas of mining concession surface in several claims, located just about 15 kilometers W –SW of the town of Ures.

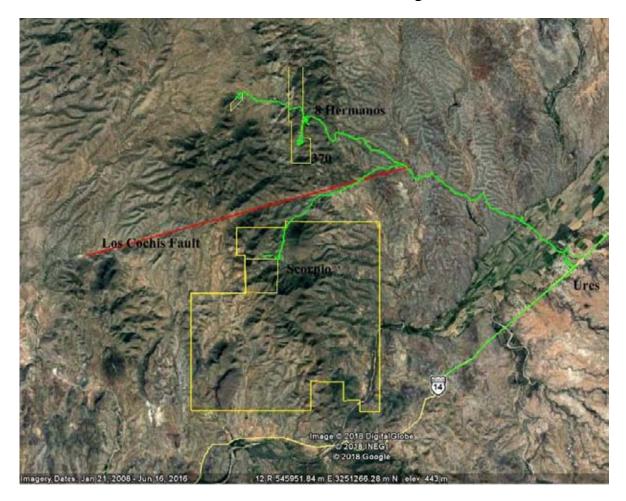


The area contains a package of Jurassic-Cretaceous meta sedimentary rocks such as quartztite and limestones underlain and intruded by a granitic pluton with numerous later laramide dikes as diorites and diorite porphyry.

Later regional tectonics has developed block faulting, folding and some reverse thrusting of some of the sedimentary sequence over later volcanic flows and tuffs.



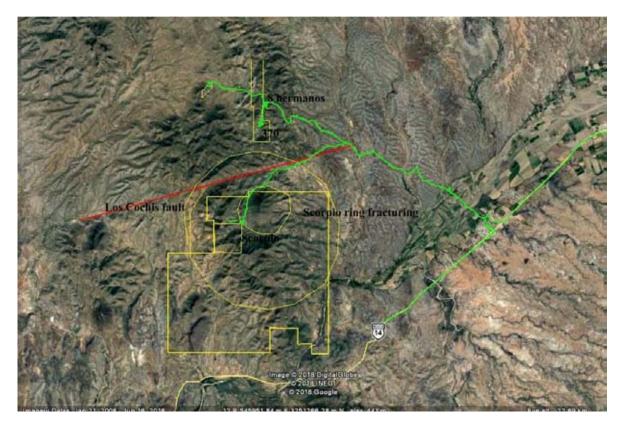
A 6.6 kilometer diameter circular topographic feature in the area, is suggesting a ring type fracturing system with an inner 2.0 kilometer ring fracture surrounding the Cerro Cosme. This regional ring fracturing system has been the conduits for later porphyry intrusions in the area and becomes a major exploration target. The Scorpio porphyry copper showing is located on the western side of the inner ring fracturing system. Ring fracturing can be caused by granitic domes and later cooling and collapsing due to shrinking. A caldera is a similar feature with ignimbrite breccias on the fracturing. More research is to be done as it could be the roots of an eroded Resurgent Caldera.



**The Scorpio** prospects, show some carbonate and siltstone sediments in contact with a granitic and diorite porphyry intrusive. Sediments are regionally trending roughly N-S and dipping to the East about 25-35°.

Medium temperature hornfels type mineralization is noted as mantoes following stratigraphy. Malachite, chrisocolla are secondary from chalcopyrite mineralization. 6 samples were taken from this area to be analyzed for multielement geochemistry. Au and Ag are present in the area, which turns the flags on for a Porphyry Gold-Copper type system.

Further work in this area is to follow the contacts of a monzonite quartz porphyry intrusive recognized at the ring fracturing zone and sample along, as well as geologic and structural mapping with sampling, to locate the best drill locations to test continuity and mineralization at depth.



**The 370** mine area was briefly traversed around and it contains a sequence of quartzites and limestone beds roughly N-S and dipping about 30° to the East.

Quartzites are the most cliff- boulder forming rocks in the area, whereas the limestones are eroded to flat lower topography.

A diorite quartz porphyry dike or mantoe was recognized in contact with the limestones on the footwall and quartzites on the hangingwall. Hornfels type alteration show a lower temperature type system with low silica content and high iron oxide fillings. Some occasions, epidote is present possibly a constituent of the granitic intrusion. Gold and silver mineralization is

contained in this alteration halo which includes some porphyry and some cooked limestone.

Samples assayed at Cesar Lab in Cabore Fire Assay 20 grs portions							
370 Area							
Sample	rock type	Au	Ag	date			
1	D. porphyry	9	41	01/27/18			
2	D. porphyry 2	3	11	01/27/18			
3	tact Ls-Porph	0	15	01/27/18			
4	oyo shear zo	47	33	01/27/18			
5	byo shear zor	1	21	01/27/18			
6	r red oxide h	10	8	01/27/18			
7	370 cap fault	0.5	39	02/14/18			
8	370 cap fault 2	0	15	02/14/18			
9	70 hornfels re	2	10	02/14/18			
10	370 corner red	3	33	02/14/18			
11	70 footwall p	0	60	02/24/18			
12	ornfels sout	n					
13	rnfels North	pit					

The following table contains samples from 370 area assayed at Caborca lab.

The 370 area is a hornfels type mineralization system created by diorite porphyry intrusive, apparently controlled by stratigraphic fracturing planes, parallel to bedding and also by quartzite bedding planes.

Preferred limestone bedding which are best reactive rocks appear to be of varying widths and very constant attitude, N-S and 35 dip to the East.

The alteration zone at the contact of the diorite porphyry and the carbonate rocks are creating an irregular mineralized zone with attractive gold and silver values. Widths may vary from 3 to 5 meters but depths are still unkown.

A contact area is observed for several meters but is concealed under alluvium.

Continued work in this area includes trenching along contact zone, continued geologic mapping and sampling to determine best areas for drilling to test continuity at depth.

There is approximately 2000 to 3000 tons available for testing at the main outcrop, as fractured alteration zone ready to be mined and leached.

**The 370** will be initially mined as a contact hornfels type deposit with repetitive parallel zones to stratigraphy with a high possibility of a major high sulphide porphyry Au-Cu-Ag type orebody at depth.

**The 8 Brothers Area** has been just visited but more work is being done. Several grab samples have been analyzed and they show mineralization as high sulphide porphyry related type, also in contact with favorable reactive rocks such as limestone and dolomite.

Sample	rock type		Ag	date
1	galena grab sample	4	699	01/05/2018
2	massive pyrite	1	50	01/05/2018
3	selected galena	0	2240	01/05/2018
4	massive pyrite2		437	01/19/2018
5	silica-pyrite	1	59	01/19/2018
6	pyrite-galena	1	660	01/26/2018
7	massive pyrite-silica	0	4927	01/26/2018
8	silica-pyrite	1	60	01/26/2018
9	sil-galena	0	600	01/26/2018
10	sulphides	17	53	02/03/2018
11	grab sulphides	9	3441	02/03/2018
12	oxydized	1	113	02/03/2018
13	porphyry	0	25	02/03/2018
14	oxydized2	1	15	02/03/2018
15	porphyry-pit		30	02/15/2018
16	porphyry-pit 2	0.5	45	02/15/2018

Samples assayed at Cesar Lab in Caborca Fire Assay 20 grs portions 8 brothers Area

The 8 brothers area is a local pipe-mantoe type orebody controlled by faulting and fracturing cutting across stratigraphy and possibly parallel. More geologic mapping and sampling will be directed in this area, but 370 and 8 hermanos are located stratigraphically on the same level. About 2000 tons of sulphide ore has been stockpiled and is ready to be processed initially by vat leaching and later by flotation. Apparently 50 % of the gold content is in free form and can be extracted by simple processing.

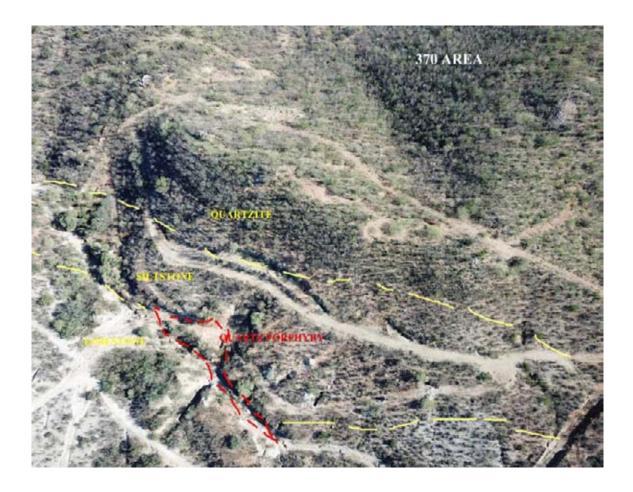
**Quartzite Breccias**, is another form of mineralization that has been observed in the whole area. Massive Quartzite beds predominate in the area and are the major cliff forming rocks. Generally they are trending N-S and gently dipping to the East. Some brecciated, crackled areas are noted and need to be mapped and sampled thoroughly. Some attractive gold values are contained in these brecciated zones possibly related to the same porphyry type plutons.

Extensive geologic mapping is to be directed in the area to locate these breccias zones. Some trenching and road cutting will be done in the process.

	Fire	Assay 2	20 grs portions
rock type	Au	Ag	date
dump lab quartzite	3	18	01/05/2018
qzite breccia gate	2	13	01/05/2018
quartzite road	1	16	01/05/2018
quartzite breccia	1	8	01/19/2018
Ls pit skarn	0	26	01/19/2018
qtzite on road	3	126	01/19/2018
qtzite on road2	0	14	02/16/2018
	dump lab quartzite qzite breccia gate quartzite road quartzite breccia Ls pit skarn qtzite on road	dump lab quartzite3qzite breccia gate2quartzite road1quartzite breccia1Ls pit skarn0qtzite on road3	dump lab quartzite318qzite breccia gate213quartzite road116quartzite breccia18Ls pit skarn026qtzite on road3126

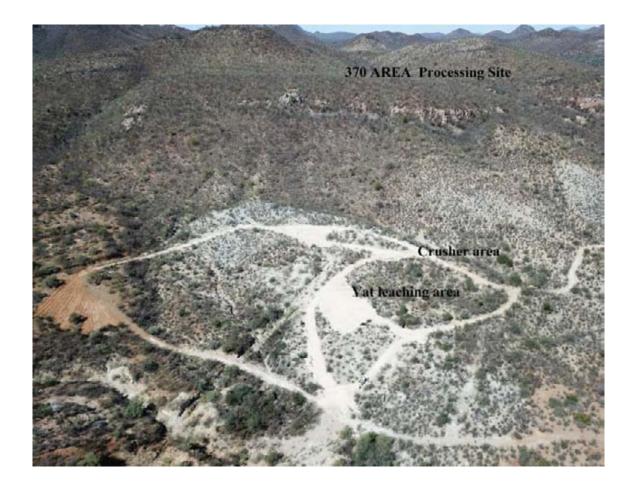
Samples assayed at Cesar Lab in











## **Conclusions.-**

Preliminary reconnaissance of the area shows a series of porphyry dikes and sills intruded inroughly N-S, East dipping Jurassic-Cretaceous sediments such as Siltstones, Limestones and Quartzites, and producing attractive alteration halos containing high gold and silver values. Apparently the porphyry plutons vary in composition as well as the mineralization being injected from low to high sulphide content. Also mineralization is variable depending on the host rock from high copper low gold in limestone-dolomites to high gold-silver in Siltstones.

The extent of these sills or dikes is still unknown and will have to be explored in the process, which will determine the extent of the mineralized zones. Geologic mapping, sampling will continue with the purpose of locating attractive alteration-mineralization halos which may point to a major productive porphyry intrusive.

Pilot size processing and testing of the mineralized zones will also be directed to determine the correct processing method for the different type of ores in the area.

There is a large potential for porphyry ore bodies in the area due to the extent of the regional ring fracturing system in the area, besides the local sill and dike system such as is the 370 and the 8 hermanos.

The copper Scorpio prospects lie at the inner ring fracturing system and is also produced by a monzonite quartz porphyry intrusion.

The 370, 8 hermanos and Copper Scorpio areas, although they are distant to each other, they are related to the same geologic system and are very attractive mineralized zones with economic Au and Ag values as well as some base metal potential.