

Report on Mining Threat in Baja California Sur, Mexico November 2014

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This report serves as an update of the current status of mining in Baja California Sur to stakeholders, donors and investors in order to evaluate how imminent of a threat copper mining represents.

LORETO/SAN BASILIO THREAT

The Baja California peninsula is a strongly mineralized province hosting many large mining projects, including El Arco (600M tons @ 0.6% Cu and 0.2 g/t Au), El Boleo (160M tons @ 2% CuEq), Los Planes (65M tons @ 0.83 g/t Au) and Concordia (61M tons @ 1.07 g/t Au). Because of this, there has been an ongoing effort by corrupt ejido members and exgovernment officials to acquire and aggregate lands for new mining concessions south of and bordering San Basilio. A company called **Grupo Mexico** initiated these efforts in 2010 when they paid corrupt ejido members nine million pesos in an attempt to acquire the rights to concessions on potential mining land by 2014. This funding, coupled with a corrupt and self-serving Department of Mines, has lead to foreign mining companies taking an interest in Baja: Australians bought a concession and have been testing the site; Korean representatives have been doing site visits on ejido property to see what is available for them to buy. These efforts by the ejido, largely thwarted so far, have even attempted to take back lands already sold to outside parties.

Background

Since March 2010, the **Ejido La Purisima** has been attempting to assign to themselves land that others previously purchased legally from various ejido members in 2008. They have been working on taking around 18,000 hectares from ejido members and other private owners.

While ejido leadership friendly to the opposing group (and put in place by them in 2010) assigned these lands to their cronies in an Assembly of ejido members in March 2012, there are ample reasons why this was not a legal assignment, and why this act could be overturned, thus restoring all rights to the legal owners with no further challenges. This group has attacked private owners by intervening in their titling processes, and those landowners have been battling them in the *Tribunal Unitario Agrario* (Agrarian, or Land, Tribunal). While the landowners' position is solid and legally defendable, the opposing group has used tactics to stall and prolong the legal actions against them, and is presumably waiting for the next scheduled ejido elections in March of 2016, in the hopes that they can regain control within the ejido.



During the last 4 years, we have never been sure of the objectives of this group, although we have had strong suspicions that their purpose is to either attempt to extort private land owners into paying them to go away, or to acquire lands for resale as mining lands.

Recently discoveries indicate that it is true that the opposing group is motivated to acquire and aggregate the lands in question, in conjunction with other lands being battled in the area, in order to sell them to a large mining concern. An ally has been informed directly of this by a confidential source who is the current on the board of Ejido La Purisima. This source reports that **Grupo Mexico** attorneys have softly approached the board through an intermediary, and offered to deal directly with the ejido La Purisima, since the group has not been successful in aggregating the lands the company desires. Still, they have not followed up in a timely manner, which perhaps can be attributed to the jockeying that is going on between the opposing group within the ejido and the Agrarian Prosecutor delegate of Baja Sur, who has been involved in the discussions as well.

We now know that **Grupo Mexico** entered into an agreement in 2010 with a company formed by Miriam Aide Orozco, the former attorney for the ejido during the past administration, and a group of Ejido members including Luis Cano, an architect and businessman from Los Cabos who is closely aligned with the past Governor of the State, to aggregate nearly 15,000 hectares (about 42,500 acres) of land for the purpose of establishing a large copper mining operation. They allegedly paid \$9,000,000 pesos to this opposing group to have this aggregation completed by January, 2014. This area adjoins the total area targeted for a large mining operation, which extends over 40,000 hectares.

This new information informs us of why the past administration of the ejido (who even while they are no longer in power) has continued to place obstacles in the way in the process of titling lands purchased in 2008.

Azure Minerals Ltd.

Azure Minerals Limited is an Australian mineral exploration company focused on developing mining projects in the richly mineralized Sierra Madre Occidental mining province in northern Mexico. In 2013, Azure successfully bid for the Loreto Copper Project, which covers 9,571 hectares on the east of the Baja California peninsula, 6 kilometers north of the town of Loreto (population: 15,000). Azure acquired this project for US\$137,000 plus a 1% net smelter royalty. Azure was to start field exploration in February of 2013, which would involve mapping and sampling.

According to Azure¹, their first reconnaissance exploration program at Loreto identified two areas with potential to host significant copper mineralization. They declared preliminary surface sampling very successful, and identified several targets for sediment-hosted and structurally controlled copper deposits. Stage 2 exploration commenced in April 2013, which was comprised of more detailed surface mapping and sampling. Stage 2 was recently completed, but the results have yet to be published.

Azure writes, "The El Sauce block is shaping up to be a promising high grade copper, gold and silver prospect, whilst the Microondas block has potential for sediment-hosted, low to moderate

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¹ http://www.azureminerals.com.au/azs/projects/loreto/



grade, bulk tonnage copper mineralization. Further work is currently being undertaken to define the first round of drill targets."²

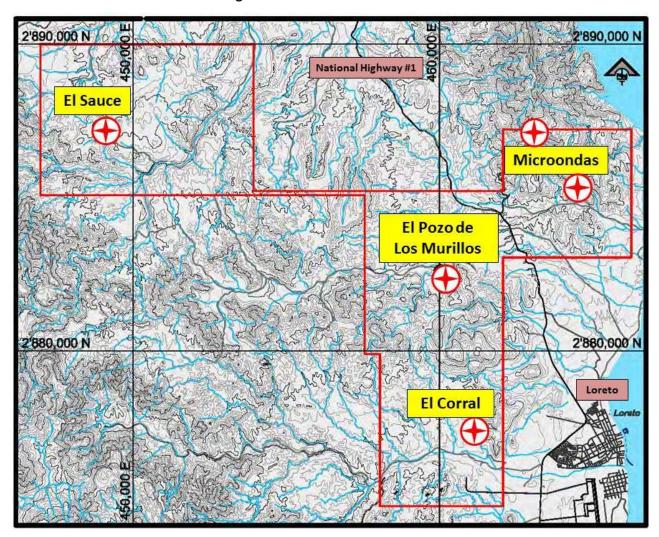


Figure 2. Loreto Project plan

Azure is seeking a major company for joint venture partnership for the Loreto Project. In their 2014 Annual report, they write that they have received several expressions of interest from large mining companies about the Loreto Project, several site visits have taken place, and discussions with these third parties are continuing.

Insider knowledge indicates that Azure has no real intention of opening a mine, but instead will flip the land for a profit and sell it to a large mining company (Grupo Mexico).

² http://www.azureminerals.com.au/azs/projects/loreto/



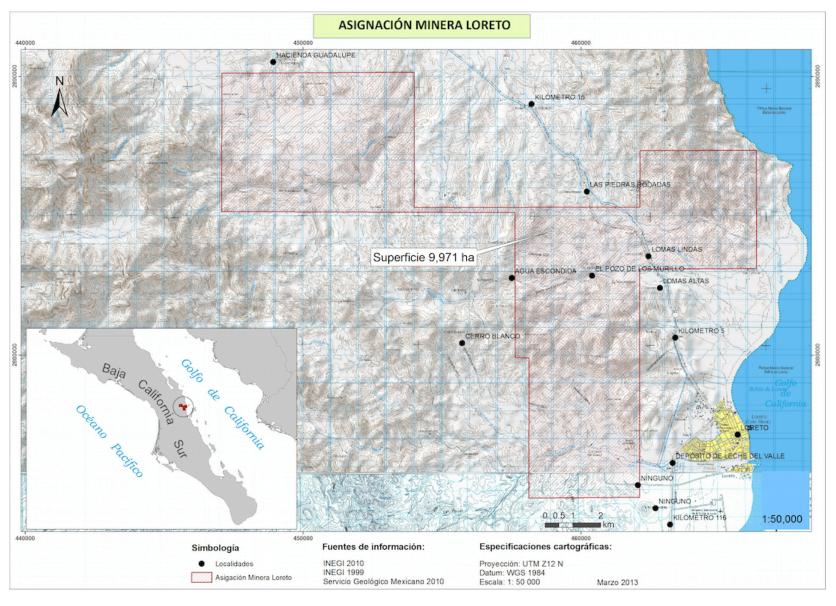


Figure 3. Map of mineral concessions in relation to municipality of Loreto.



Grupo Mexico

There is extensive and direct evidence that Grupo Mexico³ is the business group that motivated several ejido members and former leaders to attempt to take some of the ejido lands they purchased for themselves in order to sell back to a large copper mining company. Grupo Mexico has been attempting to acquire the rights to mine an estimated 40 square miles (around 10,000 hectares, or 25,600 acres). They are currently working through the Agrarian Prosecutor (PA) in their negotiations with the ejido rather than working with other stakeholders. It will be imperative to be involved in these conversations in order to prevent copper mining companies from acquiring the rights to lands that would in any way impact the environmental integrity of San Basilio and the Loreto Area.

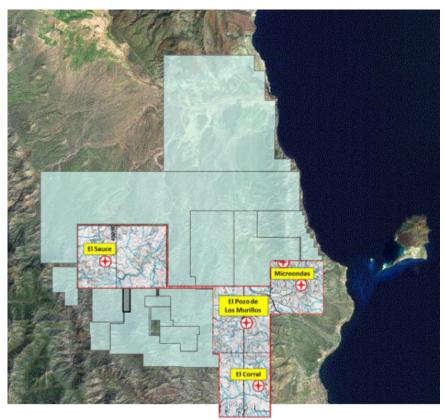


Figure 5. Overlay: Detailed map of existing concessions in the Loreto area (light green) and the concessions that Azure Minerals purchased in 2013 (El Sauce, Microondas, El Pozo de Los Murillos, and El Corral).

The maps above (Figures 2 & 3)

that show concessions by Azure and by the Canadian firm Loreto Copper are most likely not the entire story. A more accurate and comprehensive map (Figure 6) shows concessions covering much of the San Juan Londo Valley, particularly the southern to the central area. The lands being sought after by Grupo Mexico are even larger, and border the concessions to the north. It is believed that the two foreign companies' strategy is to sell out to the larger Grupo Mexico in the end, rather than open mining operations.

Important to note:

- There is a potential plan to build a port in San Bruno (due east of the area subject to litigation with Yuan Yee in Figure 6). This port would be big enough to support large boats that would ship minerals, tailings, and construction materials.
- The El Sauce concession is on land that has been owned by Jorge Cunningham and family for over a century. They are taking their own action and bringing the issue to court.

³ http://www.gmexico.com.mx/



Loreto's Plan of Ecological Priorities (POE)

The Municipality of Loreto passed and singed into law a new land use ordinance (Plan of Ecological Priorities, or POE) earlier in 2014, which more or less restricts any future mining activity in the area by including the prevention of open pit mining in the planning document.⁴ It is the first modern POE authorized in Baja California Sur. Looking ahead, it would be wise to use the POE to legally thwart any activity that is against the law (i.e. mining concessions) to resolve the issue permanently.





Figure 6. Map showing details of impacted areas.

⁴ http://www.icfdn.org/initiatives/seaofcortezfund/profile-cemda.pdf



Figure 6 is a map that shows details of the complicated lands and concessions that are mentioned in this report. It is an important visual tool to be able to reference this effort to mount a large mining operation in Loreto.

- 1. There are two foreign companies who have new mining concessions close to the town of Loreto, and extending well North and West from the airport, Azure Minerals and Loreto Copper. These areas are shown as purple, and labeled as "Concesiones existentes Region de Loreto" or "Existing Concessions in the Loreto Region"
- 2. Azure Minerals⁵ holds two concessions in the Loreto area. These concessions border the concession of Loreto Copper and those proposed by Grupo Mexico and their planned acquisitions, as shown on this map.
- 3. Loreto Copper⁶ holds a concession that borders the Azure minerals concession on the North, and which extend northward almost to San Bruno.
- 4. The thick blue line outlining the area labeled "*Area Amenazada*" or "Threatened Area" shows concessions that Grupo Mexico aims to acquire. The details and location of this area was received from a confidential source.
- 5. Since 2011, we have known that land in the San Juan Valley is being aggregated in a hostile manner by the ex-Mayor of Loreto, Yuan Yee. This has been the subject of an ongoing legal battle between various ranchers and Yee. These lands are contained within, and an important part of, the larger area being targeted. These lands are labeled as "Sujeto a litigio con Yuan Yee" or "Subject to Litigation by Yuan Yee" on this map.
- 6. Additionally, it is important to note that some of the concession area is held on land that is owned by Jorge Cunningham and family. The Cunningham family are now embroiled in a new attempt by another ejido, Ejido San Javier, to lay claim to a large area that has been in the Cunningham family for over a century, and which lies within the concession area. The same surveyor involved, Salvador Sarabia, is managing this effort on the part of Ejido San Javier. This land is contained within the light blue line on the map, labeled as "Sujeto a Litigio con Ejido San Javier" or "Subject to Litigation with the Ejido San Javier".
- 7. The remaining red, brown, green, violet, turquoise, and gold colored land areas are those lands that were "assigned" by the opposing ejido group to themselves.

New Legal and Political Initiatives

Various landowners have been active in legal battles with the opposing group(s). After analyzing this new information in depth, some have implemented several important new legal and political initiatives to strengthen their efforts. The specifics of these initiatives were omitted from this report due to their confidentiality and on-going nature.

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⁵ http://www.azureminerals.com.au/azs/projects/loreto/

⁶ http://www.loretocopper.com/



TODOS SANTOS THREAT

The mining threat near Todos Santos (Figure 7) is an open pit metallic mining project called Los Cardones. The EIA for the project predicts that Los Cardones will occupy 543 hectares and will include two massive open pits from which 173 million tons of material will be extracted.

135 million tons of extracted material will be placed in material banks of waste rock and 38 million tons of the contaminated processes material will fill a massive tailings pond. The project will require the construction of a desalination plan on the Pacific coast near Las Playitas that will extract 7500 cubic meters of water per day. The mining project will only be operational for 10 years, after which the mining company will move on, leaving the area with no further investment and with powerful environmental liabilities.

In February 2012, Vista Gold Corp (the US mining company that owns the area where Los Cardones is located) signed an agreement with the Mexican company Invecture Gold. Invecture made a non-refundable payment of US\$2 million in exchange for the right to obtain a 62.5% interest in the project. The commitment was conditional upon the change of the land use permit, the environmental authorization of the project, the management and operation of the project, and an additional payment of US\$20 million by Invecture.⁷



Figure 7. Location of Los Cardones project (60 km from La Paz).

Staff scientists at Environmental Law Alliance Worldwide⁸ have worked closely with Mexican partner organizations Defensa Ambiental del Noroeste (DAN)⁹ and El Centro Mexicano de Derecho Ambiental (CEMDA)¹⁰ to review the ElA for the proposed gold mine.¹¹ The Los Cardones ElA that led to the initial approval of the project by SEMARANT was found to be superficial, confusing, and lacking in-depth analysis:

- It failed to properly analyze the effect the mining project will have on local communities in terms of health, security, housing, public services, and human development
- The study gave incorrect information regarding the long-term impacts of arsenic contamination while minimizing the truly noxious composition of the tailings pond.¹²
- It does not adequately analyze the potential damages the desalination plant will produce on the nearby Las Playitas aquifer, and the danger the residues from the plant pose to regional fishing, whale migration and coastal turtle hatcheries, including species that are on the endangered species list.¹³

⁷ http://www.bnamericas.com/project-profile/en/san-miguel-san-miguel1

⁸ http://elaw.org

http://www.dan.org.mx/index.php?lang=E

¹⁰ http://www.cemda.org.mx/

¹¹ http://www.elaw.org/node/6059

¹² http://www.icfdn.org/enewsletter/spring2014/BCS_english.pdf

¹³ http://www.icfdn.org/reports/csrm/ExecSummaryEnglish.pdf



 A recent study done by the Center for Social Responsibility in Mining (CSRM) reported that the Los Cardones mining project has a very low potential to bring economic, social, or environmental benefits to Baja California Sur.¹⁴

On October 24th, 2013, Los Cardones announced that it was withdrawing its Environmental Impact Statement. El Centro Mexicano de Derecho Ambiental (CMDA) noted that this was the third time that the same project has been presented under different names and owners: first as Paredones Amarillos, then as Concordia, and finally as Los Cardones.¹⁵

The president of Medio Ambiente y Sociedad (MAS) notes that, "they intend to submit it to Peña Nieto's administration in order to restart the approval process... and [they] are not interested in following the law or avoiding damage to the natural resources of southern Baja Californians." ¹⁶

In August 2014, SEMARANT gave the project approval, reversing past denials of the plan.¹⁷ This approval came with many conditions, including obtaining permit approvals from several other agencies.

While SEMARANT has given initial approval for the Los Cardones mine, it could still withdraw its authorization. Right now, Earthworks, ¹⁸ a non-profit organization that works with communities and grassroots groups to reform government policies, improve corporate practices, and influence investment decisions, is working with an organization in BCS called Nipajara, that is working to stop Los Cardones mine from developing in the area. This proposed mine site is partly located in a UNESCO reserve and threatens the fragile watershed of this region. Nipajara asked Earthworks for assistance in bringing international support to this continuing case.

An article published in October 28th, 2014, titled "Zapal Development announces the suspension of the Los Cardones mining project in BCS"¹⁹ revealed that the development company has suspended the mining effort. This suspension does not mean the cancellation of the project. In fact, the article notes that the company suspended the project to work on changing public opinion and social conditions in response to multiple protests and hundreds of citizens singing in opposition to the "predatory" project. This announcement coincided with the visit of Juan José Guerra Abud, the Federal Secretary of Environment and Natural Resources.

OTHER POTENTIAL THREATS

Odyssey Marine Exploration

In addition to the threats of terrestrial mining in BCS, Odyssey Marine Exploration $(OMEX)^{20}$ has a seabed-mining project in the Gulf of California called Oceanica that is currently in the process of getting funding and approval. Our assessment is that the potential of this seabed-mining project is not currently a threat:

¹⁴ http://www.icfdn.org/reports/csrm/ExecSummaryEnglish.pdf

http://www.meloncoyote.org/issue_v3_n2/page11.html

http://www.meloncoyote.org/issue_v3_n2/page11.html

http://nodirtygold.earthworksaction.org/voices/baja_california_sur#.VD2IHOc5gYk

¹⁸ http://www.earthworksaction.org/

¹⁹ http://www.bcsnoticias.mx/desarrollos-zapal-anuncia-la-suspension-del-proyecto-minero-los-cardones-en-bcs/

²⁰ http://www.odysseymarine.com/



- OMAX announced on June 4th that their EIA for Oceanica was "completed and ready to be filed shortly" but has still not filed, which is clearly a deliberate strategy because they know it will expose the project as environmentally and economically unviable (most mining projects die in this phase)²¹
- OMEX is in a "last ditch" effort to raise capital by selling unregistered securities in Oceanica (it is believed to be selling these in the UK) to pay for corporate cash burn before Oceanica could be officially shut down.²²
- In this area of BCS, the environmental permitting process is prohibitively difficult with extraordinary hurdles, including a direct conflict of interest with the large local fishing industry. Pro-mining environmentalists and fishing organizations in BCS are highly opposed to Oceanica despite the EIA not even being filed yet as Oceanica overlaps numerous commercial fishing concessions.²³
- Large strategic players in the mining industry have already evaluated and passed on offshore phosphate mining in Mexico in the same area because it was not proven to be viable.

Don Diego Project

An offshore mining project called "Don Diego" is planned to be developed over 50 years by **Exploraciones Oceánicas, S. de R.L. de C.V.** in a sedimentary deposit of phosphate sands in Mexico's EEZ off the coast of BCS. The concession area is close to the continental shelf in the bay between Punta Abreojos in the north and Puerto San Carlos in the south (Figure 8). The project proposes using marine dredges to dredge phosphate sand from the ocean floor and to use a desalination barge to prepare it from transport. If allowed, this project entails dredge operation 24 hours a day, 365 days a year, for 50 years.²⁴

A formal environmental permit has been officially filed with SEMARNAT. The non-technical summary of the EIA associated with this project notes:

- Their models predict the sediment plume from operations could drift 4km from the site.
- The seabed will be lowered 9-18 feet.
- "Few if any of the seabed organisms that are removed under the path of the drag head are likely to survive the dredging process."
- There exist important omissions in the report.

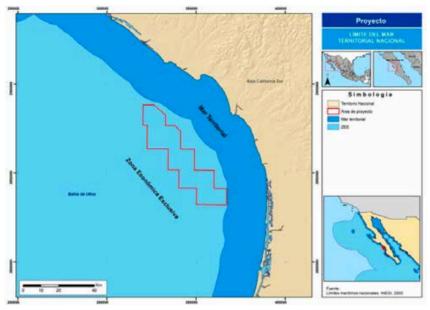


Figure 8. Location of Don Diego project in the Bahía de Ulloa, between Abreojos and San Lázaro..

The proposed site (Figure 8) is located in a biologically rich area long studied by

scientists. It is habitat for no less than five species of sea turtle, all listed as endangered on the

²⁴ http://www.theinertia.com/surf/scorpion-bay-threatened-by-deep-water-phosphate-mining/

²¹ http://www.omextruth.com/

http://www.omextruth.com/

²³ http://seekingalpha.com/article/1920761-due-diligence-on-odysseys-oceanica-project-uncovers-numerous-undisclosed-risks



IUCN red list of threatened species. The area is considered a hot spot for Red Crabs, the main food source for both the Olive Ridley and Loggerhead turtles. Blue Whales, Black Marlin, and Swordfish are also abundant in the area.

Senator Ricardo Barroso Agramont is publicly opposed²⁵ to the extraction of phosphorus off the coast of BCS, and is a potential ally in the fight to thwart this effort.

A public information meeting for this marine mining project will be held on Novermber 5th in the city of Constitucion, put on by José Carlos Cota Osuna, a delegate for SEMARNAT.

CONCLUSION

Overall, mining has not demonstrated that it can make a better social contribution towards the development of BCS, nor has it in any of the six mining states in Mexico (Chihuahua, Coahuila de Zaragoza, Durango, San Luis de Potosi, Sonora, and Zacatecas). Additionally, if metallic mining exploration and extraction continue, it could set a precedent for BCS to become a mining state.

We now know that a large area of land is being aggregated for the purpose of mining in the Loreto Area. We believe that this is the work of **Grupo Mexico**, although we cannot be sure who else may be involved as of yet.

We consider that it is likely that both **Azure Minerals** and **Loreto Copper** have the intention of selling their proven concessions to a larger mine operating company, and that all of this collective activity by several companies, groups, and individuals represents an effort to quietly aggregate land for the purpose of large scale mining exploitation on the part of **Grupo Mexico**.

The ex-Governor of BCS, Narcisso Agundez (a PRD Party Member) and his associates are behind attempts to take lands from the Ejido La Purisima, and other private ranchers and landowners in the hopes of aggregating these lands into the larger proposed mining area.

We do not yet have information directly from the company themselves. Apparently, the opposition within the ejido had promised to have delivered these lands to Grupo Mexico by January 2014, and have failed, in large part because of the legal battle with various landowners and others.

Some stakeholders have mobilized their political sources who have agreed to immediately help in approaching Federal Agencies for information as well as advocating for their interests in this matter. A company of the size and influence of Grupo Mexico, which has the largest known copper reserves in the world and is Mexican owned and operated, has deep resources and political contacts and will a tough force to combat.

It appears that time remains of the essence as an active effort to initiate mining activity is underway on a large ejido tract in the Loreto Area, and as the Los Cardones mine continues to be pushed. Unfortunately, significant effort will be necessary to negate the illegally-revised 2012 ejido agreements that granted ejido members the concessions detailed (Figure 6) overturned.

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²⁵http://sil.gobernacion.gob.mx/Archivos/Documentos/2014/07/asun_3125346_20140716_1405526575.pdf



We are very sure that the scope of the information contained in this report is unknown in Loreto, and unknown by many of the general and expatriate population of Baja California Sur as well as the NGOs that would take an interest in these kinds of issues and would have an interest in restricting these activities. The ensuing months will determine how and by whom any broader effort is undertaken.

Going forward, we need to work with conservation allies to disseminate inside information and support efforts to halt the well-financed mining plan near Loreto, which has largely slipped under the radar while other potential mining projects, like Los Cardones, have been subject to more scrutiny in the public eye.