

Magazine we are neighbors

# ENVIRONMENTAL MONITORING Study to care



## MARA

AGUA RICA - ALUMBRERA  
CATAMARCA | ARGENTINA



Institutional Magazine  
We are neighbors

Free distribution  
Edition N ° 3  
Year 2021

## QR code

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Watch the videos

# Editorial

## The dialog as a human right

Informing and being informed is a fundamental human right. And as we always say, one of the basic premises of MARA is, through the recognition of our neighbors and communities as relevant actors in the development of the project, to maintain a constant and reciprocal dialog, which allows us a fluid exchange of ideas.

Thus, the MARA team reports on the project and its progress, and at the same time actively listens to the opinions, ideas and concerns of the community. This two-way dialog generates that MARA knows and receives, first-hand, the ideas and contributions of our neighbors, to evaluate and incorporate them into a future planning co-creation framework.

The residents of several communities saw their ideas, contributions and concerns materialized, and were able to verify the importance of their participation as a specific contribution factor to the project.

This constant dialog allowed us to correct several mistakes and to be able to seek to report in a clear and understandable way as a continuous improvement.

For more information, we invite you to visit us at [www.proyectomara.com.ar](http://www.proyectomara.com.ar) and to interact with us on our social networks.



## MARA's environmental baseline is evaluated by several areas of the government.

The evaluation and authorization process of each step of a mining project in Catamarca is complex and requires the analysis and study of several areas of government.

Although the Mining Ministry is the enforcement authority on this matter, each environmental impact report submitted by a company must pass through the magnifying glass of many Catamarca professionals who are part of other ministries, such as the Ministry of Energy, Water and Environment, and the Ministry of Culture and Tourism. In the case of the former, the technicians of the Water and Environment Secretariats are directly involved in the issue, and in the case of the Ministry of Culture and Tourism, the Anthropology Department and the Archeology Department.

In the case of MARA, these agencies formed a technical committee called the "Inter-institutional Governmental Team" ("EIG" - by its Spanish acronym) engaged in the evaluation process of

the permits requested by MARA in each of its stages.

The first meetings of this team were held in order to begin to define the current environmental baseline of the project. In these meetings, SEIMCAT professionals, the company from Catamarca, in charge of preparing the environmental baseline of the Agua Rica project, made presentations on the progress of their work and were consulted by the technicians of each government area.

This study is being carried out by a group of local professionals of various professions and specializations, such as biologists, archaeologists, etc.

As MARA progresses, this Inter-Institutional Governmental Evaluation Team ("EIG"), which will be expanded, will take an active part in the evaluation of every detail of the information submitted by the company.

# MARA's direct contact with the community



Our team strengthened the dialog and community interaction through the continuity of our direct interaction talks, both virtual and face-to-face, and meetings with neighbors from Andagalá, the region and the province. Among all the direct dialog actions, we have interacted with more than 350 neighbors and answered more than 200 questions related to the project, which is today taking its first steps.

## Virtual chats

We coordinated 3 free participation virtual talks during July, where the MARA team commented to the participants on the current status of the project, the managed and obtained permits, the progress in the tasks carried out in the project and answered one by one the 127 questions posed by the participants in real time.

The talks included the voices of community leaders, journalists, suppliers, teachers, students and activists of environmental movements.

**Links / QR:** To relive the dialogues with the community, we invite you to access the recordings of the talks

Scan me



**Informative talk Project MARA 8 / 7/21**

Scan me



**Informative talk Project MARA 21 / 7/21**

# Dialogue between neighbors



MARA's community relations team toured the towns and posts along Provincial Route 47 for the purpose of providing information about the project and listening to their neighbors, dialoging directly with the representatives and members of the communities of El Tesoro , El Ingenio, Minas Capillitas and other posts in the area. We also directly dialog with neighbors and community representatives of Choya, including the



Neighborhood Center commission and the Irrigation Consortium with whom we diagram joint actions and plan works to collaborate with the agricultural production of the area.

The residents of the communities near the Agua Rica deposit heard first-hand news of the MARA project and its next steps, at the same time that they were able to ask questions, raise matters and criticize them in a direct, open and transparent way.



# VIRTUAL COMMUNITY

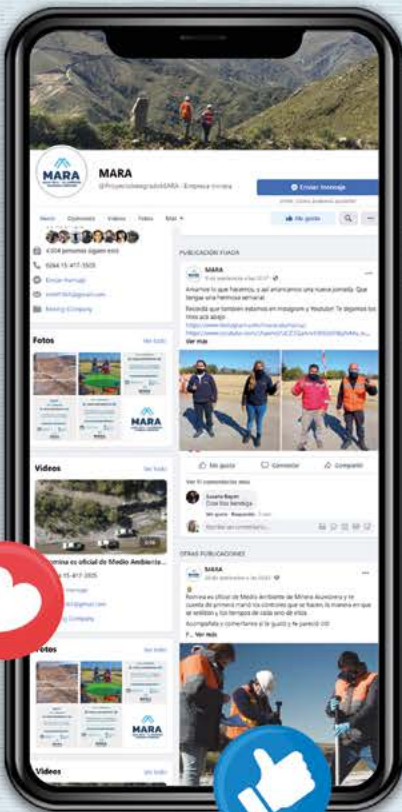


 Proyecto-mara

 @ProyectoMara

 Maracatamarca

 @ProyectoIntegradoMARA





# The school on *La Isla* already has drinking water

We are proud to have been able to join forces so that the school on La Isla has water.

This work, of vital importance for the community of the area, is a further advance in the search for the access to water democratization and was carried out by Andalgali hands, through the company G&C Andalgala Perforaciones, the first 100% local driller driven and developed by MARA, specifically Yamana Gold- Agua Rica Project. To complete the supply work, the driller's technicians carried out rigorous studies, through which they detected excellent water quality at a depth of 115 meters.

From there, it was intubated, a submersible pump that works with solar energy was placed and supplementary works were carried out, such as cisterns and an elevated tank.

Now the entire interior part of the school has running water, and they have an important reserve of the liquid element in light of any contingency.

"We always brought water in cans, to cook for the kids and to have them for daily consumption," said Lorena, the director of the establishment.

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*"For us this is a total change, since now we are not only going to make our daily life more comfortable, but we will also be able to fulfill our other dreams, such as the school garden," said the teacher.*

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# The mining family of Andalgalá



At MARA site in Andalgalá there was a real party. Organized by AOMA, a union that represents mining workers, the Andalgalá mining family celebrated Children's Day with a colorful event that brought together miners' children and grandchildren.

The event, carried out under strict bio-security protocols and after obtaining the corresponding authorizations, brought together the mining families of La Perla del Oeste in our large outdoor site, who shared a day of celebration, which included among other varieties live animations, mini volleyball and soccer championships,

white squares, 6 inflatables, ice cream tents, sweets and sweet tables, popcorns, hot dogs, sweet table, gifts for all children etc.

It was organized by AOMA, and it was joined by members of our team who drew up, together, a strict bio-security protocol that included antigen testing of all suppliers present at the event (sound, catering, animation etc.), the delivery of protective masks and permanent awareness talks on their use and social distancing, the installation of various sanitation posts at the site, among other related issues.





# celebrated Children's Day

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Environmental monitoring:

# Study and to know

Environmental monitoring is part of the constant controls carried out by the companies that make up the MARA Integrated Project, which are required by the State and which are submitted to the enforcement authority.

In line with the Mining Ministry's strict requirements, the reports abide by the established guidelines, indicating targets, scope, methodology and schedules.

Monitoring is a fundamental tool to obtain information in relation to the different species inhabiting the area from the hand of experts in different biology branches

## Biodiversity Monitoring

During the exploration stage in which the Agua Rica deposit is located, biological monitoring is carried out to reveal the terrestrial and aquatic flora and fauna components for their qualitative and quantitative characterization and the description of the environmental status

of the ecosystems within the mining concession area. All these studies and reports are part of the characterization of the mining site that will be taken as a reference in the future to ensure that the area's habitat is not affected. Moreover, during the formulation stage of the Alumbrera project, baseline studies were carried out on biological aspects that deeply studied the characteristics of the region.

## Operation, Mine Closure and Post Closure

Once the production stage of Alumbrera began, updates of the biological diversity studies were presented and environmental monitoring began in an uninterrupted manner, increasingly expanding the studied areas.

Years of surveys and studies were compiled in the Bajo de la Alumbrera Vertebrate Guide, an unpublished publication in the NOA that contains information on the 93 most representative vertebrate species in the project

area and includes their description, distribution and conservation status.

Biodiversity monitoring continues during the closure and post-closure stages of a mining project since the results obtained are essential to control the state of conservation of the flora and fauna, ensuring that the ecosystem around the mine is not affected, regarding a number of species and conservation condition.

## Strategic role of Catamarca companies

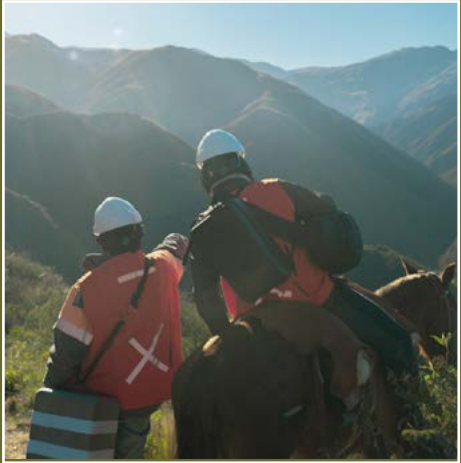
Biodiversity monitoring is carried out together with companies that have specialized personnel in each biology branch and that belong to institutions with a long history such as universities, institutes and research organizations.

As an example, the recent biological monitoring in the Agua Rica project was carried out by the

Catamarca companies Servicios Integrales Mineros Catamarca



# to care.



MARA is part of WIM Argentina

# WOMEN AND THEIR ROLE IN MINING

**“To have a more and better mining, it is necessary to have more women working and taking part in the decision-making process in the sector”.**

La mujer ocupa un espacio fundamental en la Women occupy a fundamental role in the mining industry, and her presence in the MARA team is a demonstration thereof.

Currently, many of the management positions in key areas are led by women from Andalusia and Catamarca, such as Administration, Environment, Community Relations, Human Resources, Legal, etc. That is why, since the proposal came to us, we have joined the international IWIM NGO (Women in Mining), which is a benchmark in the promotion of women as one of the main development forces in the mining of the new era, and we are an active part of it.

IWiM, an international volunteer-led organization committed to advancing women in the mining sector, represents the global voice of women in mining and supports its members regarding gender diversity and inclusion within the mining industry. Promoting equity and equality

WIM Argentina WIM Argentina is the representation of International Women in Mining in the country and a reference in the promotion of women as one of the main development forces in mining in the new decade.

The organization brings together and supports women miners, works to connect, through different strategies and collaborative actions, the Argentine and global mining industry under a singular and categorical theme: to have a more and better mining, it is necessary to have more women working and being part of the decision making process in the sector.



JORNADAS TÉCNICAS GEOMINERAS  
XIX JORNADAS DE GEOLOGÍA DE  
CATAMARCA

CHARLA VIRTUAL

**WIM Argentina: futuro y desafíos  
hacia una minería más inclusiva**

Silvia Rodríguez  
Presidenta WIM Argentina

Gabriela Uriburu  
Minera Agua Rica  
Comisión Directiva WIM

10 de Junio  
17:00 HS

Transmisión en vivo  
**YouTube**  
/Primeras Jornadas Técnicas Geomineras

WIM

**We are proud to be part of WIM Argentina.**



# Our People The **MARA** Family



# TRAINED AND CERTIFIED

## Machinery operation course

Scan me



20 citizens of Andalgalá received their certificates after completing an intensive and practical course on heavy machinery operation.

Each of the students in the course, jointly carried out by MARA and the Mining Ministry, completed 20 hours of effective operation of a backhoe loader, under the permanent guidance of an instructor who taught them the trade.

As it was a personalized and practical course, the students learned how to handle the equipment by carrying out actions in favor of the community of different districts of Andalgalá, opening roads, digging dams, cleaning land, etc.

Also, while learning, they performed other actions in local institutions, such as the José Chaín Herrera Hospital, where they cleaned the land surrounding the hospital.

It is worth mentioning that completing the practical course enabled several of the trainees to get jobs and enter the construction or mining world

After the pandemic, which paralyzed all training actions, MARA, the Ministry of Mining and the AOMA union are outlining the continuity of this type of practical training.



# UNCa students joined MARA

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Victoria



Carolina



Martín



Braian

As part of the strong commitment of the MARA Project to the development of Catamarca professionals, we incorporated into our family advanced Geology students at the National University of Catamarca in key areas such as exploration and the environment. Victoria Ortiz and Martin Garelli joined the Agua Rica team as exploration geology assistants, carrying out core geotechnical logging tasks, key information to define the stability and quality of the rock mass.

In the case of Alumbra, the future geologists Carolina Córdoba and Braian Ballhrost joined the Environment area. They are currently part of the training program that includes processes for monitoring environmental variables, database management, drilling control and compliance with the standards of our Environmental

and Quality Management Systems.

## In her own words

### Victoria Ortiz:

*“I visited Agua Rica in 2018 and 2019 and I was delighted with the great challenge it represents, I participated in the company’s events, the talks given by its professionals and the productive exhibitions. Since March I have been working as exploration geology assistant in geotechnical logging tasks”.*

### Martin Ariel Garelli: “

*As an Andalusian son of a miner, I am proud of how my father carried out his work. UNCa students always have great support from the company to carry out trips and events, coordinate guided visits to the camp and attend talks given by*

*their professionals”.*

### Carolina Córdoba:

*“Today I have the opportunity to professionally grow and apply on site what I learned at university. The work team encourages me to overcome myself with greater challenges and I live this great experience with great enthusiasm”.*

**Braian Ballhrost:** *“I greatly appreciate this opportunity to be part of the Alumbra Environment work team where they constantly support and train me to develop in my profession. Working on environmental control tasks for the project is a dream as a belicho (an inhabitant of Belén) and enriches my learning as a thesis student for the geology degree at UNCa”.*



# MARA workers for Agua Rica and direct contractors

# 295

Total employees

**250**   
Andalgalenses



**285**   
Catamarqueños



Today, in the exploration stage,  
**250 families from Andalgalá**  
directly depend on **MARA**

Data updated as of September 30, 2021. Source: HR Department of the company

# 295

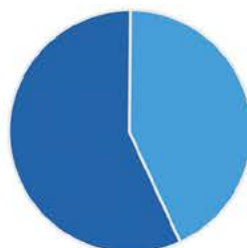
Agua Rica Workers

# 336

Alumbrera Workers

## HUMAN RESOURCES

Month of September 2021



Alumbrera Employees

Agua Rica Employees

# 631

Direct jobs and indirect