

Gran Tierra's **FOUR PRIORITIES** to ensure that our operations don't cause any impact on groundwater and aquifers:

- 1 PROVEN TECHNOLOGY
- 2 CONTANT MONITORING
- 3 REGULAR TESTING
- (4) CONFIRMED RESULTS

### **CONFIRMED RESULTS**

All results have confirmed that our drilling activities have not impacted local groundwater or surface water quality in Colombia and Ecuador.



For more information on our comprehensive water protection strategies, we encourage you to visit the Gran Tierra Energy website at:

www.grantierra.com

# PROTECTING NATURE'S WATER SOURCES IN SOUTH AMERICA

Gran Tierra Energy is committed to water protection in the regions where it operates.



## HOW DO WE PROTECT THE WATER?

Independent monitoring and testing confirms that Gran Tierra has fully safeguarded groundwater quality throughout its history of drilling operations in Colombia and Ecuador.

Drilling Well

We have collected and tested 1,331 water samples throughout our water monitoring programs in 2024.

Water Monitoring Well

Fresh Water

1,000 ft

2.000 ft

4.000 ft

6.000 ft

8,000 ft

10,000 ft

#### PROVEN TECHNOLOGY

Cement

Conductor Casing

Surface Casing

Intermediate

Production

Casing

(not to scale)

- In order to isolate drilling operations from the environment a casing program is implemented.
- Layers of steel piping are installed, each of which provides protection for different depths:
  - A) **Conductor casing** holds back loose sediments, isolates and protects the shallow groundwater.
- B) **Surface casing** provides complete isolation and safeguards aguifers.
- C) **Intermediate casing** eliminates well pressure and secures the structure.
- D) Production casing adds an additional layer of protection that runs straight into the producing reservoir and is sealed for the entire depth of the well to prevent oil and gas from escaping.
- Each layer of pipe is cemented into place. The cement seals the casing in the wellbore, preventing any potential interaction with groundwater formations.
- Our casing designs are made to guarantee the integrity of the well and are regularly pressure tested throughout drilling operations.

#### CONSTANT MONITORING & REGULAR TESTING

- Gran Tierra continuously monitors groundwater quality where we operate.
- In 2024, GTE has tested 1,331 surface and groundwater samples at 645 testing points; 110 of which are located in Middle Magdalena Valley and 428 are located in Putumayo. In Ecuador, 107 surface and groundwater points are regularly tested.
- All external monitoring is done by IDEAM certified third party companies who follow standard procedures for monitoring and groundwater testing.

#### RESPONSIBLE PLANNING

- Wells and facilities are planned and located far away from watercourses and water wells.
- Well pads and surface equipment include multiple layers of containment in order to prevent contamination in the event of a spill.

