



FUNDACION INGENIEROS EN ACCION

Resolución Administrativa Departamental No296/2011 Aprobación de Nombre No533/09
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TRIP TO SURIQUI ISLAND FOR WATER SAMPLES TAKING

| | |
|-----------------|-------------------------------|
| COMUNITY | Suqui Island |
| TEAM | Guy Engineering |
| PROJECT MANAGER | Luz Hurtado |
| DATES OF TRAVEL | From 04-04-2017 to 04-05-2017 |
| DATE OF REPORT | La Paz, 11 of April 2017 |

I. BACKGROUND.

Following the request of the main communities from Suriqui Island, Guy Engineering team came to Bolivia to realize the first assessment trip to the seven communities from the island. It was performed in July of 2016.

After that the team was working on the design to develop an alternative of solution for the existing lack of water in 6 of the 7 communities from Suriqui Island.

During the design process it was seen that was necessary to analyze the quality of the water in some important point from Suriqui Island and from the Titicaca lake aswell.

II. OBJETIVES FOR THE TRIP.

1. GENERAL OBJETIVE.

Take water samples from 4 different points to analyze them.

2. SPECIFIC OBJETIVES.

- Take water samples from Titicaca Lake, one on either side of the island.
- Take water sample from one of the springs.
- Take water sample from Supicachi well.
- Take GPS point from some specific points in the water system line.
- Draw the existing water system line in Cuyambaya.
- Verify the condition of the wells in Suriqui and Supicachi

III. ACHIEVED RESULTS.

1. WATER SAMPES.

It was taken water samples in the following points:

| No. | LOCATION | LATITUDE | LONGITUDE | DATE |
|-----|-------------------------|---------------|---------------|------------|
| 1 | Lake (Cuyambaya side) | S 16°18'39.2" | W 68°46'20.2" | 04/04/2017 |
| 2 | Lake (near Supicachi) | S 16°17'29.5" | W 68°46'30.3" | 04/04/2017 |
| 3 | Well from Supicachi | S 16°17'35.6" | W 68°46'24.0" | 04/04/2017 |
| 4 | Storage tank of Suriqui | S 16°18'29.4" | W 68°45'47.8" | 04/04/2017 |



The water samples were taken April 4th 6-8 pm (Bolivian time) and they were left in LCA laboratory from La Paz April 5th early in the morning. The results are going to be ready on April 27th.



There is any laboratory which could analyze Antimony or Selenium.

2. GPS POINTS.

| No. | LOCATION | LATITUDE | LONGITUDE | ALTITUDE |
|-----|--|---------------|---------------|----------|
| 1 | End Point 4 | S 16°18'20.8" | W 68°45'17.3" | 3826 |
| 2 | Last inhabited house near to End Point 4 | S 16°18'24.7" | W 68°45'08.7" | 3825 |
| 3 | End Point 3 | S 16°18'03.8" | W 68°45'14.0" | 3830 |
| 4 | Last inhabited house near to End Point 3 | S 16°18'01.5" | W 68°45'10.5" | 3825 |
| 5 | Pipe split 8 | S 16°18'18.8" | W 68°45'30.3" | 3054 |



3. WATER DISTRIBUTION LINES IN CUYAMBAYA.

The main authority for this year is Raimundo Suxo, the General Secretary, he was who shows to us where the distribution line is distributed, the following image indicates it:



The following coordinates the main places for the distribution line:

| No. | PLACE | LATITUDE | LONGITUDE |
|-----|-------------------------|----------------|-----------------|
| 1 | Storage tank | 16°18'15.8" S | W 68°46'13.5" W |
| 2 | School* | 16°18'19.10" S | 68°46'15.29" W |
| 3 | General Secretary house | 16°18'24.66" S | 68°46'14.73" W |

4. CONDITIONS OF THE WELLS.

SUPICACHI WELL.

The entire project which includes the well in Supicachi was ended when we visited the community but as it is missing the opening the well was closed and just the company had the keys and they are in La Paz.

SURIQUI WELL.

As they told as before the well was built by the NGO Compassion in 2005, they said is a well of 36 meters of depth. The community did not have any maintenance because it spent a lot of electricity. The well used a submersible pump, we can saw the characteristics of the pump because they do not have any information about it, even in the Municipality.

The well house has an area of 3meters x 3meters is made with bricks.

The power supply in Suriqui is really week because it always is lost just because of lightning bolts or even rain. We could confirm this in our stay in the island because it was rainy an there was no electricity. The usual voltage is 220 Amps. Exists just 3 electric transformer for the 4 communities in Suriqui.

The pipe between the well to the storage tank is 2" PVC SCH40.

IV. DETAILS OF THE COMMUNITY.

The following indicates the names of the new authorities and the approximate money that they get from the Puerto Perez Municipality every year:

| No . | COMMUNITY | NAME OF THE AUTHORITY | POSITION | AMOUNT OF MONEY PER YEAR |
|---------|-----------------|--------------------------|-------------------|-----------------------------|
| 1 | Yumani | William Casas Quispe | General Secretary | 260.000 Bs/year |
| 2 | Rosani | Ernesto Corani Esteban | General Secretary | |
| 3 | Aijadero | Franklin Salas Esteban | General Secretary | |
| 4 | Yavirjani | Francisco Baptista | General Secretary | |
| 5 | Coyambaya | Raimundo Suxo | General Secretary | 40.000 Bs/year |
| 6 | Supicachi | - | | 33.000 Bs/year |
| 7 | Paco Chachacoma | - | | 35.000 Bs/year |