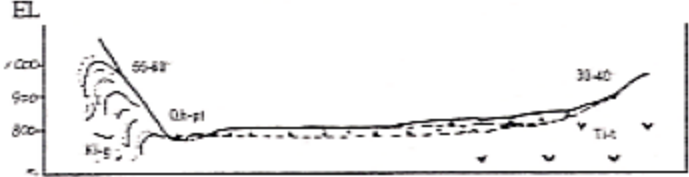

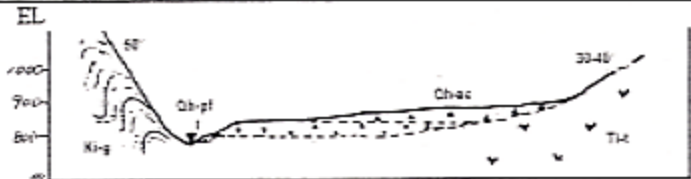
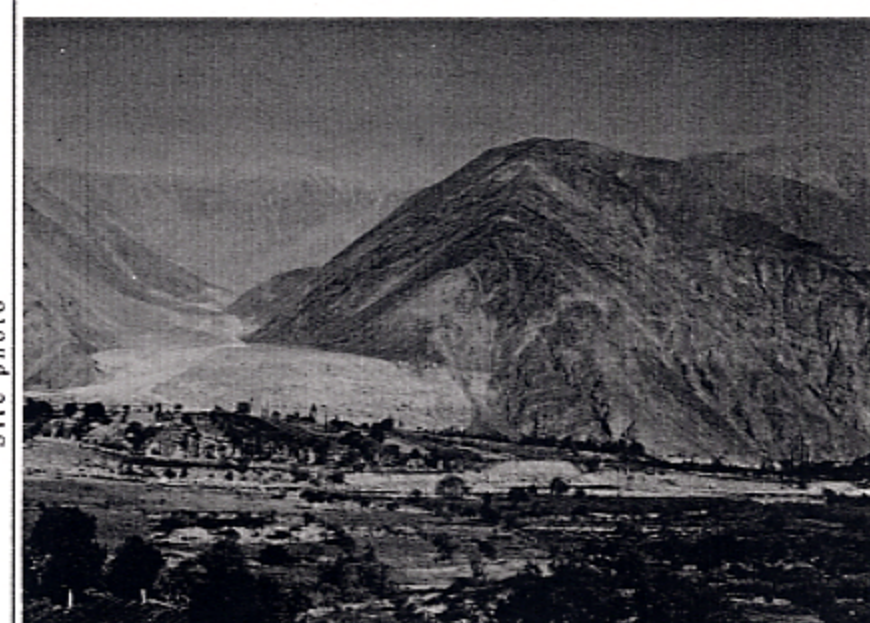


Table S.2.4.1.3 General Characteristics of Proposed Dam and Intake Site (2/18)

Site	Zuñiga I	Department : Lima	Province : Cañete	District : Zuñiga	River : Cañete					
Topography	Riverbed width	Approximately 20 meters				Dam site	Hard bedrocks in the left bank and soft de sediments in the right bank.			
	Characters	Steep rocky slope in the left bank and gentle slope of terrace, fluvial and alluvial deposits in the right margin.								
Schematic section	EL					Reservoir	Wide valley with extended terrace and alluvial deposits.			
		Qh-pf: Present fluvial deposit Ti-t: Tantarà Formation Ki-g: Goyllarisquiza Group								
Geology	Geology of Basement	Left bank		River bed		Right bank		Issues	Grasping of thickness and properties of the soft subsurface deposit in the right slope.	
		I. Cretaceous		I. Cretaceous		I. Tertiary				
		Goyllarisquiza Group		Goyllarisquiza Group		Tantarà Formation				
		Quartzose sandstone alternating with layers of shale		Quartzose sandstone alternating with layers of shale		Andesitic lava (partially basaltic)				
	Condition of Base-ment	Fault	No mayor fault is present.		No mayor fault is present.		No mayor fault is present.		Site photo	
		Fracture	Fractures in parallel with bedding. Strongly folded.		No present		Many irregular fraciures			
		Alteration	No present		No present		Crystallization of calcite and epidote along the fractures.			
		Weathering	Slight rusty-weathering along the fracture.		No detected		Superficial weathering			
	Overlying Sediment	Little amount of colluvial fragments on the steep slope.		Present fluvial deposit		Talus deposit composing of andesitic fragments.				
	Landslide and/or Failure	No present		No present		No present				
	Remarks									

Negative No. I-21

Table S.2.4.1.3 General Characteristics of Proposed Dam and Intake Site (3/18)

Site		Zuñiga II	Department : Lima	Province : Cañete	District : Zuñiga	River : Cañete			
Topography	Riverbed width	Approximately 20 meters					Dam site	Alluvial cones located immediately upstream from the proposed intake dam may damage the structure and reduce the storage capacity.	
	Characters	Wide valley deposited by soft deposits. Steep rocky slope in the left bank and alluvial terrace 2-3 meters high from riverbed in the right bank. Alluvial cone is located in the left upper stream from the proposed dam site.							
Schematic section	EL						Reservoir	The river valley shows wide between both steep slopes.	
		Qh-pf: Present fluvial deposit Qh-ac: Alluvial cone Ti-t: Tantarà Formation Ki-g: Goyllarisquiza Group							
Geology	Geology of Basement	Left bank		River bed		Right bank	Issues		
		Lower Cretaceous		Lower Cretaceous		Lower Tertiary			
		Goyllarisquiza Group		Goyllarisquiza Group		Tantarà Formation			
		Quartzose sandstone alternating with layers of shale		Quartzose sandstone alternating with layers of shale		Andesitic lava (partially basaltic)			
	Condition of Basement	Fault	No mayor fault is present.		No mayor fault is present.		No mayor fault is present.	Site photo	
		Fracture	Fractures in parallel with beddings. Sometimes open crack dips to 20- 40°. Strongly folded.		No present		Fragmental structure		
		Alteration	No present		No present		Crystallization of calcite and epidote along the fracture.		
		Weathering	Slight rusty-weathering along the fracture.		No present		Superficial weathering		
	Overlying Sediment	Little amount of colluvial fragments on the steep slope.		Present fluvial deposit		Talus deposit composing of andesitic fragments.			
	Landslide and/or Failure	No present		No present		No present			
	Remarks	Three tributaries are located nearly upstream from the proposed intake structure; two in the right bank and one in the left, which transport large amount of materials by debris flows.							

Negative No. 1-20