

PROJECT EVALUATION SUMMARY (PES) - PART I

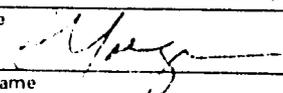
1. PROJECT TITLE CARE OPG - RURAL WATER HEALTH SERVICES 527-0177	2. PROJECT NUMBER 527-0177	3. MISSION/AID/W OFFICE USAID/Peru
	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <input type="checkbox"/> REGULAR EVALUATION <input checked="" type="checkbox"/> SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING		7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY <u>78</u>	B. Final Obligation Expected FY <u>80</u>	C. Final Input Delivery FY <u>80</u>	A. Total \$ _____	B. U.S. \$ <u>450,000</u>	From (month/yr.) <u>8/77</u>	To (month/yr.) <u>2/79</u>
					Date of Evaluation Review <u>2/79 - 4/79</u>	

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., alrgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT	
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify) _____	A. <input type="checkbox"/> Continue Project Without Change	
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	<input type="checkbox"/> Other (Specify) _____	B. <input type="checkbox"/> Change Project Design and/or	
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C		<input type="checkbox"/> Change Implementation Plan	
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P		C. <input type="checkbox"/> Discontinue Project	

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles) Enrique Schroth, USAID Engineering Office H. Robert Kramer, Evaluation Officer Thomas Hanley, CARE Assistant Director	12. Mission/AID/W Office Director Approval	
	Signature 	
	Typed Name Leonard Yaeger	
	Date April 24, 1979	

1

PROJECT EVALUATION SUMMARY (PES)
CARE OPG #527-0177 RURAL POTABLE WATER AND HEALTH

13. Summary. The project, signed on August 26, 1977, is designed to provide adequate and reliable supplies of potable water to a least 20 communities, and sewerage systems to 4 villages in the geographic jurisdiction of ORDENOR-CENTRO, primarily in the Departments of Ancash and La Libertad. CARE has been responsible for overall project administration, including community organization, while ORDENOR-CENTRO has been responsible for engineering design, logistical and technical support. The Ministry of Health is responsible for the implementation of health education and vaccination campaigns.

Despite some initial problems related to the procurement and delivery of inputs (see No. 16), the implementation of project activities has proceeded well. The most impressive achievement of the project to date has been the underestimation in the costs of the provision of these services, which will permit CARE to expand the number of sub-projects during the course of the next year. The substantially reduced cost per beneficiary over what was originally anticipated (see No. 23) augers well for the future replication of similar projects in other regions. In summary, the community organization and the signing of contracts with each village to assure its participation, has been carried out efficiently. The participation of ORDENOR-CENTRO in the preparation of feasibility studies and engineering designs has generally been adequate. The procurement and transport of material, and construction of the potable water systems have either been or will soon be inaugurated in 12 of 19 communities. The health component, which includes training in the use of water and a program of vaccination, has suffered some delays (see No. 16) and is still in the design stage.

The project is now estimated to be more than 70% completed, and the prospects for completion in the near future are good. The availability of funds programmed has been more than adequate to meet the project costs USAID has approved CARE's request to extend the project to a minimum of ten additional sites.

14. Evaluation Methodology. CARE/Peru has been regularly delivering their quarterly Planning, Implementation and Evaluation Reports, which have enabled USAID to adequately monitor project implementation and measure progress achieved in meeting planned targets. Field trips have been made frequently by personnel in the USAID Engineering Office. The purpose of this evaluation is twofold: first, it has permitted the Mission to gain additional information necessary to consider a reprogramming of funds. In addition, it has

afforded us an opportunity to assess the feasibility of providing potable water and sewerage systems in remote rural villages in a larger scale contemplated in a future loan with the Ministry of Health.

A field visit was made to the Huaylas and Conchucos Valleys by USAID Evaluation Officer, Engineering Officer, and Deputy Controller, accompanied by the CARE Assistant Director and Project Manager. Six villages were visited in the course of 5 days. Also meetings were held with representatives of ORDENOR-CENTRO and the local office of the Ministry of Health; both of these agencies are fulfilling important roles in the implementation of project activities.

16. Inputs

a. Materials. CARE's estimate of up to six months procurement and delivery of essential materials, primarily plastic tubing, accessories and cement, was overly conservative. Selection and organization of participating communities was essentially completed by the fourth month of project activities, yet delays in the delivery of commodities cause postponement in the initiation of infrastructure construction. All imported material (e.g. 530,000 ft. of tubing) is now in country, and the quantity already received will be adequate to extend the project to more than 10 new sites. Material procured locally has been performed in a timely manner and according to project needs.

b. ORDENOR-CENTRO. An agreement was signed 10/3/77 between CARE and ORDENOR-CENTRO specifying the latter's responsibilities and counterpart contribution. Under the terms of this agreement, ORDENOR was to provide for technical guidance in project implementation/administration engineering design of each sub-project, supervisory personnel, transport and warehousing of material and a cash contribution of S/.6.5 million over a two year period. CARE is now negotiating with ORDENOR, an agreement for the development of studies and construction of additional sub-projects. Infrastructure development at the project sites has been repeatedly delayed by the irregular service of material transport provided, the lack of funds for vehicle gas and maintenance. While ORDENOR-CENTRO has assigned two engineering supervisors to the project, both the amount and quality of technical assistance has been declining. Follow-up, and the constant supervision of community workers, has been deficient, especially in the more marginal villages. As a result, there are several defective installations of infrastructure, e.g. Hualacor, Quercos and Huantar, and some projects are poorly finished.

Both USAID and CARE have expressed their concern to ORDENOR that the shortfall of counterpart funds would seriously compromise the success of some of the sub-projects. Beyond receiving assurances that funds would be

made available, CARE is considering the purchase of its own truck to facilitate the transport of materials, which has constituted the major cause for delay in the termination of infrastructure.

c. Ministry of Health. Included in the agreement signed with ORDENOR-CENTRO was an understanding with the Ministry of Health Regional Office to provide MOH assistance in the design and implementation of health education and vaccination campaigns, in addition to evaluations of each project construction site for water source sanitation. Preliminary health surveys with baseline data on morbidity and mortality and their causes in participating communities were supposed to have been done at the initiation of project activities once communities were selected. The importance of this research cannot be understated; the need to determine the health effects derived from the type of potable water systems employed in this project is extremely important in measuring future health benefits accrued to each community. CARE has carried out ten community health surveys to date and these will provide the information required to evaluate the health consequences of the project.

The MOH input has been the most problematic. The activities originally programmed have not been carried out for two reasons. First, the MOH office has decided that it prefers a more complete provision of medical services to each community, a laudable goal, but one which falls outside the purview of this project. Second, considering its preference for this more ambitious program, the MOH has not been able to find even the more limited funds required to fulfill their activities as originally designed in this project.

At a meeting in Huaraz with Dr. Carlos Cornejo, head of the Health Region, we were told that health activities had been initiated and that representatives from nine communities were in Huaraz receiving instructions in the use of water. The representatives of two additional communities were receiving instruction in their communities. We could not verify either assertion. We were also informed that the MOH would organize the potable water administration committees in each community. These committees would receive the project works once they are finished and be responsible for the maintenance of the systems in coordination with ORDENOR. Since the maintenance of these systems is of paramount importance once the project ends, we can only hope that this activity is implemented both adequately and without delay.

In an attempt to resolve this bottleneck, especially the inavailability of MOH funds, CARE is requesting that ORDENOR assume the costs of the health activities. Since it is highly improbable that this will actually occur, we will be forced to use AID project funds to at least partially defray the costs of health activities. USAID has already approved a request from CARE to use \$6,000 of project funds to purchase

medicine for the MOH to use in campaigns for the eradication of parasite.

d. Communities. The communities participating in the project are expected to actively contribute in defraying a portion of project costs by providing labor and local materials. Community participation has been adequate, although in projects of this nature, certain types of political problems can be expected to arise. For example, rural village communities are not always quite the ideal of unity and homogeneity that we sometimes believe, or hope, that they be. Some families will participate more actively than others in carrying out such activities as ditch-digging, land clearing, etc., and intra-community recriminations tend to ensue over the distribution of benefits. In one community, the woman who owns the land in which the water source is located refuses to permit the construction of a water reservoir. To assist in resolving these problems as they arise, ORDENOR must provide constant supervision of activities in each site.

Even in projects such as this, where immediate and highly tangible benefits can be perceived by the community which actively solicited its participation, participation is not spontaneous and necessarily based on the perception of benefits to be gained by potable water. Without the assurance that Title II food will be offered immediately in exchange for their work, the community participants will not "donate" their labor. In all projects, food for work has been provided by either CARITAS or ONAA, and without food as an incentive, work does not progress. This factor will have to be considered in any other future project of this type.

Another variable affecting community participation are local climatic conditions. The drought, for example, has forced men to leave the villages at certain periods to go elsewhere, principally the coasts, where they can search for additional income. The lack of manpower has led to a certain amount of delay in construction, although women tend to be substituting in carrying out even the most physically intensive chores to insure that Title II is available.

e. USAID Funding. In its two project agreements, USAID has fully obligated \$450,000 to CARE to implement project activities. To date, only approximately \$185,000 has been liquidated by CARE, due primarily to the lower than estimated costs in construction and provision of materials. The remaining funds are now being programmed, and with the extension of project activities to other sites, the use of some funds to defray costs of health activities and perhaps a portion of ORDENOR counterpart, all funds will be spent by the end of the project.

17. Outputs

a. Construction. The following is a list of communities participating in the project, the type of project and estimated completion date, as of February 15, 1979.

<u>Community Name</u>	<u>Type of Project</u>	<u>Estimate Completion Date</u>	<u>% of Work Performed</u>
1. Callejón de Huaylas:			
Raquia	Water	2/28/79	80%
Cuyac	"	-	100%
Huallcor	"	2/28/79	95%
Santa Cruz	"	3/31/79	50%
Shancayan	"	-	100%
Los Olivos	"	2/28/79	95%
Toma	"	-	100%
Utupampa	"	-	100%
Huaripampa	"	3/30/79	95%
Purhuay	"	-	100%
Mareniyoc	"	-	100%
Toma	Sewage	5/30/79	30%
Pueblo Libre	"	5/39/79	40%
2. Callejón de Conchucos:			
Quercos	Water	4/30/79	50%
Ampliación Huantar	"	5/15/79	95%
Llumpa	"	5/15/79	98%
Santa Clara	"	5/31/79	60%
Huantar	Sewage	5/31/79	70%
San Luis	"	5/31/79	85%
3. Chimbote Area:			
Pallasca	Sewage	6/15/79	85%
Huailalay	Water	-	100%
Raipa	"	5/15/79	70%
Cobamires	"	5/15/79	75%
Pillipampa	"	6/30/79	70%

The causes for delay have already been discussed above.

CARE expects to complete the projects under construction by the end of June, 1979. We have requested that CARE formulate new targets, including the new communities to be selected for potable water and sewerage, and deliver a PIE report for AID approval by April 15, 1979.

18. Purpose

The primary purpose of this project is to improve the overall sanitation and health well-being of participating rural poor communities through supervised community self-help construction of potable water and sewerage systems, and the implementation of complementary vaccination and health education campaigns. The project is also expected to develop and test for their differential health effects alternative design/models for future self-help improved health programs in small rural communities.

We intuitively believe the hypothesis that, if potable water and sewerage facilities are provided to poor isolated communities in the sierra, the health status of community members will be improved. Yet, to test the validity of the hypothesis, research must be carried out both in the experimental communities and in control villages who have not received benefits. The community health surveys will provide us with adequate baseline data. Both experimental and control communities will be included in anti-parasite vaccination campaigns, which will begin this month, which will permit us to measure the effect of our variable--the introduction of water and sewerage systems. Other previously unforeseen variables may have some effect on health status and these will also be tested. For example, a water-use study will be done to determine what aspects of water supply affect health and hygiene. Some research must be done on the effect of quantity and temperature of water on personal hygiene and the use of water outside the village and its effect on parasite problems.

A few important changes in the original project design have already been made during the course of project implementation to assure that the project have an optimal salutary effect on the health status of community residents. For example, instead of outdoor community potable water installations originally contemplated, the project has provided indoor installations to all homes in the villages. We expect that this modification will lead to a more rational use of water and mitigate intra-community social problems that might have resulted with community hook-ups. Since the installation of faucets alone may have some deleterious health effects if the water is permitted to leak and build up under each faucet, recommendations have been made on the disposal of used water.

Originally only four sewerage systems were programmed. However, since the combination of sewerage and potable water should have the most beneficial effect on health and hygiene, where possible, the attempt has been made to install both facilities. In the reprogramming of activities, more emphasis will be placed on the provision of sewerage systems.

23. Special Comments

A determination regarding the replicability of a project of this type on a larger scale must await a final evaluation of project activities. However, there are indications that permit us to make some preliminary judgements. The most important factor that would justify a favorable determination of replicability is the cost per beneficiary incurred in the provision of potable water and sewerage services.

Based on the best cost estimates available during the period of project design, \$450,000 was committed to provide potable water to 20 villages and sewerage systems to four communities with populations under 2,000, although it was estimated that most communities would be considerably smaller, thus possibly increasing the costs of providing these services. However, the funds made available for the project will actually permit extension of these services to an estimated total of 40 communities. Based on an average of 905 beneficiaries per village in the first nine projects completed, the total number of beneficiaries could reach approximately 36,000 rural inhabitants, at a cost of \$12.50 of USAID financing for each recipient. When the counterpart contributions are added, the cost per beneficiary may double, as the attached tables indicate. When the costs of shipment of materials from the US are added, the cost of providing the services also increases to a lesser extent. When the contributions of ONAA (primarily Title II food) and the community (the opportunity cost of labor is not nearly as high as indicated in the table which relied on minimum wage scales for the area), are discounted, these costs per beneficiary are lower than those appearing in the tables which include ONAA and community contributions. It should also be noted that, in addition to the provision of basic sanitary services, included in these costs are funds for vaccination campaigns, eradication of parasites, health education and research costs.

In this project, costs were maintained at a minimum and activities were effectively implemented since USAID has been collaborating with an efficient NGO. We cannot infer at this point that the same costs could be maintained in a similar project with the Ministry of Health, although there have been some indications that the costs of providing similar services in MOH projects are somewhat higher. Yet one factor that cannot be underestimated is the high social benefits gained by the recipient communities.

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO: **AMP. Y MEJ. AGUA POTABLE CAYAC** N°: **1201**

UBICACION: LUGAR: **CAYAC**
 DISTRITO: **TICAPAMPA**
 PROVINCIAS: **RECUAY**
 DEPARTAMENTO: **ANCASH**

TIEMPO DE EJECUCION: FOTOS
 Inicio: **15.07.78** Fin: **15.12.78** SI: NO:

PARTES SIMILITADAS:

1)-APTACION	02	2)-L. ADUCCION	1,950 m.
3)-RESERVOIRIO	-	3)-L. DISTRIBUCION	1,260 m.
5)-CONDUCCION	82 nuevas en PIENAS		-

PRINCIPALES APORTES	120.02	120.03	TOTAL
1)-CARE	2,800.35	-	2,800.35
2)-ORDENOR CENTRO	-	-	1,735.88
3)-ONAA (Food Title II)	-	-	2,405.76
4)-COMUNIDAD (Labor)	-	-	5,225.30
COSTO PROYECTO			12,157.29

BENEFICIARIOS	COSTO COMPARATIVO
FAMILIAS: 260	FAMILIA: 46.76
HAB: 1,300	: 9.35

APORTE CARE 120.02	S/	2,800.35
1)-CEMENTO	9/C	135.71
2)-FIERRO		64.404
3)-TUBOS		1,868.16
4)-ACCESORIOS P V C		429.06
5)-MADERA		65.81
6)-EXPLOSIVOS		126.15
7)-TUBOS Y ACCESORIOS Fºº		-
8)-OTROS MATERIALES		111.052

APORTE COMUNIDAD	S/	5,225.30
1)-AGREGADOS		48.54
2)-MANO DE OBRA CALIFICADA		121.36
3)-MANO DE OBRA NO CALIFICADA		4,861.23
4)-TRANSPORTES		194.17
5)-		
6)-OTROS APORTES		

APORTE ORDENOR CENTRO	S/	1,725.88
1)-ESTUDIOS Y DISEÑO		169.90
2)-DIRECCION TECNICA		485.45
3)-MANO DE OBRA CALIFICADA		728.15
4)-SUPERVISION		169.90
5)-TRANSPORTES		172.48
6)-EQUIPO Y HERRAMIENTAS		
7)-OTROS APORTES		

8-

S. S. S.

PCN: []

AGUA POTABLE

NUMERO DEL PROYECTO: **AGUA POTABLE DE HUALLCOR** N°: **1202**

UBICACION: LUGAR: **HUALLCOR**
CANTON: **INDEPENDENCIA**
PROVINCIA: **HUARAZ**
DEPARTAMENTO: **ANCASH**

TIEMPO DE EJECUCION: FOTOS
INICIO: **01.07.78** TERMINO: **15.03.79** SI: NO:

PARTES SUPLEMENTARIAS:
1) CAPTACION: **01**
2) RESERVORIO: **30 m³.**
3) DOMICILIO: **109**
7) Filtros: **02**
2) - L. ADUCCION: **800 m.**
4) - L. DISTRIBUCION: **1,700 m.**
5) - PILETAS: **-**
8) Sedimentador: **01**

PRINCIPALES APORTES:
1) CARE: **120.02** **120.03** **TOTAL:**
5,105.493 **243.37** **5,348.863**
2) ORDENOR-CENTRO: **2,157.54**
3) CNA A: **1,031.28**
4) COMUNIDAD: **15,476.58**
COSTO PROYECTO: **24,014.26**

BENEFICIARIOS: COSTO COMPARATIVO
FAMILIAS: **110** - POR FAMILIA: **218.31**
HABITANTES: **650** - POR HABITANTE: **36.95**

APORTE CARE 120 02 \$/ **5,105.493**
1) - CEMENTO: **803 SA** **979.38**
2) - FIERRO: **939.209**
3) - TUBOS: **1,514.37**
4) - ACCESORIOS P V C: **876.41**
5) - MADERA: **500.94**
6) - EXPLORIVOS: **-**
7) - TUBOS Y ACCESORIOS FOG: **17.26**
8) - OTROS MATERIALES: **857.964**

APORTE COMUNIDAD \$/ **15,476.58**
1) - ABREBADOS: **585.52**
2) - M. O DE OBRA CALIFICADA: **97.09**
3) - MANO DE OBRA NO CALIFICADA: **14,308.53**
4) - TRANSPORTES: **485.44**
5) - **-**
6) - OTROS APORTES: **-**

APORTE ORDENOR-CENTRO \$/ **2,167.54**
1) - ESTUDIOS Y DISEÑO: **213.59**
2) - DIRECCION TECNICA: **970.87**
3) - MANO DE OBRA CALIFICADA: **728.15**
4) - SUPERVISION: **145.63**
5) - TRANSPORTES: **109.30**
6) - EQUIPO Y HERRAMIENTAS: **-**
7) - OTROS APORTES: **-**

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO

N°

AMP. Y REG. AGUA POTABLE SHANCAYAN

1203

UBICACION

LUGAR :

SHANCAYAN

DISTRITO :

RESTAURACION

PROVINCIA :

HUARAZ

DEPARTAMENTO :

ANCASH

TIEMPO DE EJECUCION

FOTOS

INICIO 01.07.78

TERMINO

30.01.79

SI.

NO.

PARTES SIGNIFICATIVAS

1)-CAPTACION

2)-L. EDUCCION

3)-RESERVORIO

20 m³

4)-L. DISTRIBUCION

1,365 m.

5)-COMUNICACION

Nuevas 3/4

6)-PISTAS

PRINCIPALES APORTES

1)-CARE

120.02

120.03

TOTAL:

2,486.306

87.60

2,573.906

2)-ORDENOR-CENTRO

833.40

3)-O.L.A.A

1,031.28

4)-COMUNIDAD

3,029.95

COSTO PROYECTO

7,468.536

BENEFICIARIOS

COSTO COMPARATIVO

FAMILIAS

95

- POR FAMILIA

78.62

HABITANTES

450

- POR HABITANTE

16.59

APORTE CARE 120.02

\$/ 2,486.306

1)-CEMENTO

210 3/4

215.92

2)-FIERRO

380.986

3)-TUBOS

1,236.602

4)-ACCESORIOS P V C

311.94

5)-MADERA

117.895

6)-EX. LOSIVOS

-

7)-TUBOS Y ACCESORIOS F 2 6°

70.55

8)-OTROS MATERIALES

152.413

APORTE COMUNIDAD

\$/ 3,029.95

1)-AGREGADOS

48.54

2)-MANO DE OBRA CALIFICADA

97.08

3)-MANO DE OBRA NO CALIFICADA

2,811.51

4)-TRANSPORTES

72.82

5)-

-

6)-OTROS APORTES

-

APORTE ORDENOR-CENTRO

\$/ 833.40

1)-ESTUDIOS Y DISEÑO

72.82

2)-DIRECCION TECNICA

97.08

3)-MANO DE OBRA CALIFICADA

663.50

4)-SUPERVISION

-

5)-TRANSPORTES

-

6)-EQUIPO Y HERRAMIENTAS

-

7)-OTROS APORTES

-

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO

N°

AGUA POTABLE DE TOMA

1204

UBICACION

LUGAR :

TOMA

DISTRITO :

TINCO

PROVINCIA :

CARRUAZ

DEPARTAMENTO :

ANCASH

TIEMPO DE EJECUCION

FOTOS

INICIO 07.78

TERMINO

11.78

SI

X

NO

PARTES SIGNIFICATIVAS

1)-CAPTACION

02

2)-L. ADICION

300 m.

3)-RESERVORIO

30 m³.

4)-L. DISTRIBUCION

2,500 m.

5)-COMUNICACION

93

5)-PILETAS

PRINCIPALES APORTES

1)-CARE

120.02

120.03

TOTAL:

4,504.71

\$ 4,504.71

2,077.62

13,776.59

30,358.92

BENEFICIARIOS

COSTO COMPARATIVO

FAMILIAS

100

COSTO POR FAMILIA

203.60

PERSONAS

480

42.41

APORTE CARE 120.02

S/

4,504.71

1)-CEMENTO

S/

204.41

2)-FIERRO

585.37

3)-TUBOS

2,616.73

4)-ACCESORIOS P V C

645.33

5)-MADERA

140.01

6)-EXPLOSIVOS

-

7)-TUBOS Y ACCESORIOS Fººº

28.12

8)-OTROS MATERIALES

284.74

APORTE COMUNIDAD

S/

13,776.59

1)-AGREGADOS

388.35

2)-MANO DE OBRA CALIFICADA

121.35

3)-MANO DE OBRA NO CALIFICADA

13,024.27

4)-TRANSPORTES

242.72

5)-

6)-OTROS APORTES

APORTE ORDENOR-CENTRO

S/

2,077.62

1)-ESTUDIOS Y DISEÑO

208.74

2)-DIRECCION TECNICA

766.70

3)-MANO DE OBRA CALIFICADA

373.78

4)-SUPERVISION

145.63

5)-TRANSPORTES

82.77

6)-EQUIPO Y HERRAMIENTAS

7)-OTROS APORTES

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO

N°

AGUA POTABLE UTUPAMPA

1205

UBICACION

LUGAR :

UTUPAMPA

DISTRITO :

MANCOS

PROVINCIA :

YUNGAY

DEPARTAMENTO

ANCASH

TIEMPO DE EJECUCION

FOTOS

INICIO **Set. 78**

TERMINO

Feb. 79

SI

X

NO

PARTES SIGNIFICATIVAS

1)-CAPTACION

02

2)-L. ADICION

70 m.

3)-RESERVORIO

15 m³.

4)-L. DISTRIBUCION

2,500

5)-COMUNICARIA

66

6)-PILETAS

01

PRINCIPALES APORTES

1)-CARE

120-02

3,319.25

120.03

118.79

TOTAL:

3,438.04

2)-ORDENOR-CENTRO

878.24

3)-CANA A

727.67

4)-COMUNIDAD

4,983.36

COSTO PROYECTO

10,027.31

BENEFICIARIOS

COSTO COMPARATIVO

FAMILIAS

82

COSTO POR FAMILIA

122.28

HABITANTES

420

COSTO POR HABITANTE

29.37

APORTE CARE 120.02

S/ 3,319.25

1)-CEMENTO

270 S/C

435.41

2)-FIERRO

505.45

3)-TUBOS

1,411.76

4)-ACCESORIOS P V C

655.98

5)-MADERA

117.90

6)-EXPLOSIVOS

-

7)-TUBOS Y ACCESORIOS 90°

44.47

8)-OTROS MATERIALES

148.28

APORTE COMUNIDAD

S/ 4,983.36

1)-AGREGADOS

72.82

2)-MANO DE OBRA CALIFICADA

97.09

3)-MANO DE OBRA NO CALIFICADA

4,546.46

4)-TRANSPORTES

266.99

5)-

-

6)-OTROS APORTES

-

APORTE ORDENOR-CENTRO

S/ 878.24

1)-ESTUDIOS Y DISEÑO

97.09

2)-DIRECCION TECNICA

121.36

3)-MANO DE OBRA CALIFICADA

659.79

4)-SUPERVISION

-

5)-TRANSPORTES

97.09

6)-EQUIPO Y HERRAMIENTAS

7)-OTROS APORTES

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO N°
AGUA POTABLE DE HUARIPAMPA **1206**

UBICACION LUGAR : **HUARIPAMPA**
 DISTRITO : **SANTA CRUZ**
 PROVINCIA : **HUAYLAS**
 DEPARTAMENTO : **ANCASH**

TIEMPO DE EJECUCION FOTOS
 INICIO **30.06.78** TERMINO **15.03.79** SI **X**
 NO.

PARTES SIGNIFICATIVAS

1)-CAPTACION	<input type="text"/> 01	2)-L. ADUCCION	<input type="text"/> 1.800
3)-RESERVOIR	<input type="text"/> 20 m3.	4)-L. DISTRIBUCION	<input type="text"/> 2.020
5)-COMUNICACION	<input type="text"/> 105	6)-MANTEN.	<input type="text"/> -

PRINCIPALES APORTES

1)-CARE	<input type="text"/> 120.02	<input type="text"/> 120.03	TOTAL:
2)-ORDENOR-CENTRO	<input type="text"/> 3,785.035	<input type="text"/> 131.09	<input type="text"/> 3,916.44
3)-CMAA			<input type="text"/> 1,881.17
4)-COMUNIDAD			<input type="text"/> 2,289.32
COSTO PROYECTO			<input type="text"/> 9,778.54
			<input type="text"/> 17,965.57

BENEFICIARIOS COSTO COMPARATIVO
 FAMILIAS **119** POR FAMILIA **162.41**
 HABITANTES **800** **22.33**

APORTE CARE 120.02

S/ **3,785.354**

1)-CEMENTO	<input type="text"/> 212 <input type="text"/> 90	<input type="text"/> 202.53
2)-FIERRO		<input type="text"/> 392.19
3)-TUBOS		<input type="text"/> 2,147.488
4)-ACCESORIOS P V C		<input type="text"/> 746.245
5)-MADERA		<input type="text"/> 117.895
6)-EXPLOSIVOS		<input type="text"/> 8.512
7)-TUBOS Y ACCESORIOS Fº5º		<input type="text"/> 23.12
8)-OTROS MATERIALES		<input type="text"/> 142.374

APORTE COMUNIDAD

S/ **9,778.64**

1)-AGREGADOS	<input type="text"/> 242.72
2)-MANO DE OBRA CALIFICADA	<input type="text"/> 121.36
3)-MANO DE OBRA NO CALIFICADA	<input type="text"/> 8,977.67
4)-TRANSPORTES	<input type="text"/> 4436.89
5)-	<input type="text"/>
6)-OTROS APORTES	<input type="text"/>

APORTE ORDENOR-CENTRO

S/ **1,881.17**

1)-ESTUDIOS Y DISEÑO	<input type="text"/> 189.32
2)-DIRECCION TECNICA	<input type="text"/> 489.44
3)-MANO DE OBRA CALIFICADA	<input type="text"/> 728.15
4)-SUPERVISION	<input type="text"/> 242.72
5)-TRANSPORTES	<input type="text"/> 235.54
6)-EQUIPO Y HERRAMIENTAS	<input type="text"/>
7)-OTROS APORTES	<input type="text"/>

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO

N°

AGUA POTABLE LOS OLIVOS

1210

UBICACION

LUGAR :

LOS OLIVOS

DISTRITO :

INDEPENDENCIA

PROVINCIA :

HUARAZ

DEPARTAMENTO :

ANCASH

TIEMPO DE EJECUCION

FOTOS

INICIO **Set. 78.**

TERMINO

Feb. 78

SI.

X

NO.

PARTES SIGNIFICATIVAS

1)-CAPTACION

01 U.

2)-L. ADUCCION

400 ml

3)-RESERVORIO

15 ml.

4)-L. DISTRIBUCION

1,300 ml

5)-DOMICILIARIA

82

6)-PILETAS

-

PRINCIPALES APORTE

120.02

120.03

TOTAL

1)-CARE

3,515.60

220.18

3,735.78

2)-OPDENGR-CENTRO

1,266.12

3)-ONAA

-

4)-COMUNIDAD

4,741.02

COSTO PROYECTO

9,742.92

BENEFICIARIOS

COSTO COMPARATIVO

FAMILIAS

92

- POR FAMILIA

105.90

HASTA

465

20.95

APORTE CARE 120.02

S/ 3,515.60

1)-CEMENTO

110 S/C

135.19

2)-FIERRO

224.45

3)-TUBOS

2,534.18

4)-ACCESORIOS P V C

480.71

5)-MADERA

-

6)-EXPLOSIVOS

27.88

7)-TUBOS Y ACCESORIOS Fººº

-

8)-OTROS MATERIALES

113.19

APORTE COMUNIDAD

S/ 4,741.02

1)-AGREGADOS

48.54

2)-MANO DE OBRA CALIFICADA

97.09

3)-MANO DE OBRA NO CALIFICADA

4,522.57

4)-TRANSPORTES

72.82

5)-

6)-OTROS APORTES

APORTE ORDENOR-CENTRO

S/ 1,266.12

1)-ESTUDIOS Y DISEÑO

121.36

2)-DIRECCION TECNICA

97.09

3)-MANO DE OBRA CALIFICADA

1,047.67

4)-SUPERVISION

5)-TRANSPORTES

6)-EQUIPO Y HERRAMIENTAS

7)-OTROS APORTES

14-

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO

N°

UBICACION

LUGAR :

DISTRITO :

PROVINCIA :

DEPARTAMENTO

TIEMPO DE EJECUCION

FOTOS

INICIO

TERMINO

SI

NO

PARTES SIGNIFICATIVAS

1)-CAPTACION

7) Sedimentador 01

CAPACIDAD

3)-RESERVORIO

4)-DISTRIBUCION

3)-COMUNITARIA

6) PILETAS

8) Filtro

PRINCIPALES APORTES

TOTAL:

1)-CARE

2)-ORDENOR-CENTRO

3)-C.N.A.A

4)-COMUNIDAD

COSTO PROYECTO

BENEFICIARIOS

COSTO COMPARATIVO

FAMILIAS

POR FAMILIA

HABITANTES

POR HABITANTE

APORTE CARE 120.02

S/

1)-CEMENTO

2)-FIERRO

3)-TUBOS

4)-ACCESORIOS P V C

5)-MADERA

6)-EXPLOSIVOS

7)-TUBOS Y ACCESORIOS Fºº

8)-OTROS MATERIALES

APORTE COMUNIDAD

S/

1)-AGREGADOS

2)-MANO DE OBRA CALIFICADA

3)-MANO DE OBRA NO CALIFICADA

4)-TRANSPORTES

5)-

6)-OTROS APORTES

APORTE ORDENOR-CENTRO

S/

1)-ESTUDIOS Y DISEÑO

2)-DIRECCION TECNICA

3)-MANO DE OBRA CALIFICADA

4)-SUPERVISION

5)-TRANSPORTES

6)-EQUIPO Y HERRAMIENTAS

7)-OTROS APORTES

SCR

PCN:

AGUA POTABLE

NOMBRE DEL PROYECTO N°
AGUA POTABLE DE MARENIYOC **1215**

UBICACION LUGAR : **MARENIYOC-MATAQUITA**
 DISTRITO : **JANGAAS-**
 PROVINCIA : **HUARAZ**
 DEPARTAMENTO : **ANCASH**

TIEMPO DE EJECUCION FOTOS
 INICIO **15.11.78** TERMINO **30.01.79** SI **X**
 NO

PARTES SIGNIFICATIVAS

1)-CAPTACION	<input type="text"/> 01	2)-L. ADUCCION	<input type="text"/> 1,440 m.
3)-RESERVUORIO	<input type="text"/> 20 m³.	4)-L. DISTRIBUCION	<input type="text"/> 3,400 m.
5)-COMUNICARIA	<input type="text"/> 129	6)-PILETAS	<input type="text"/>

PRINCIPALES APORTES

1)-CARE	<input type="text"/> 120.02	<input type="text"/> 120.03	TOTAL
2)-ORDENOR-CENTRO	<input type="text"/> 3,647.023	<input type="text"/>	<input type="text"/> 3,647.023
3)-GHA A	<input type="text"/>	<input type="text"/>	<input type="text"/> 1,391.51
4)-COMUNIDAD	<input type="text"/>	<input type="text"/>	<input type="text"/> 1,455.35
COSTO PROYECTO	<input type="text"/>	<input type="text"/>	<input type="text"/> 6,311.64
	<input type="text"/>	<input type="text"/>	<input type="text"/> 12,805.52

SENTENCIARIOS

COSTO COMPARATIVO

FAMILIAS	<input type="text"/> 140	- POR FAMILIA	<input type="text"/> 91.47
4°	<input type="text"/> 730		<input type="text"/> 17.54

APORTE CARE 120.02 \$/ **3,647.023**

- 1)-CEMENTO **176** **245.31**
- 2)-FIERRO **96.59**
- 3)-TUBOS **2,064.892**
- 4)-ACCESORIOS P V C **993.125**
- 5)-MADERA **60.29**
- 6)-EX. LOSIVOS **24.202**
- 7)-TUBOS Y ACCESORIOS Fººº **28.12**
- 8)-OTROS MATERIALES **134.474**

APORTE COMUNIDAD \$/ **6,311.64**

- 1)-AGREGADOS **121.36**
- 2)-MANO DE OBRA CALIFICADA **-**
- 3)-MANO DE OBRA NO CALIFICADA **5,996.11**
- 4)-TRANSPORTES **194.17**
- 5)- **-**
- 6)-OTROS APORTES **-**

APORTE ORDENOR-CENTRO \$/ **1,391.51**

- 1)-ESTUDIOS Y DISEÑO **135.92**
- 2)-DIRECCION TECNICA **436.89**
- 3)-MANO DE OBRA CALIFICADA **466.02**
- 4)-SUPERVISION **169.90**
- 5)-TRANSPORTES **182.78**
- 6)-EQUIPO Y HERRAMIENTAS
- 7)-OTROS APORTES

16-