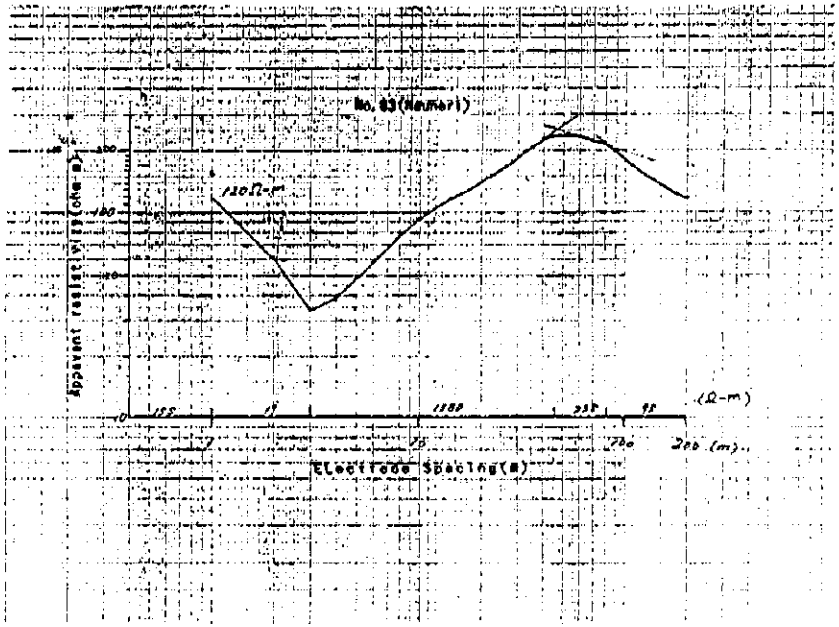
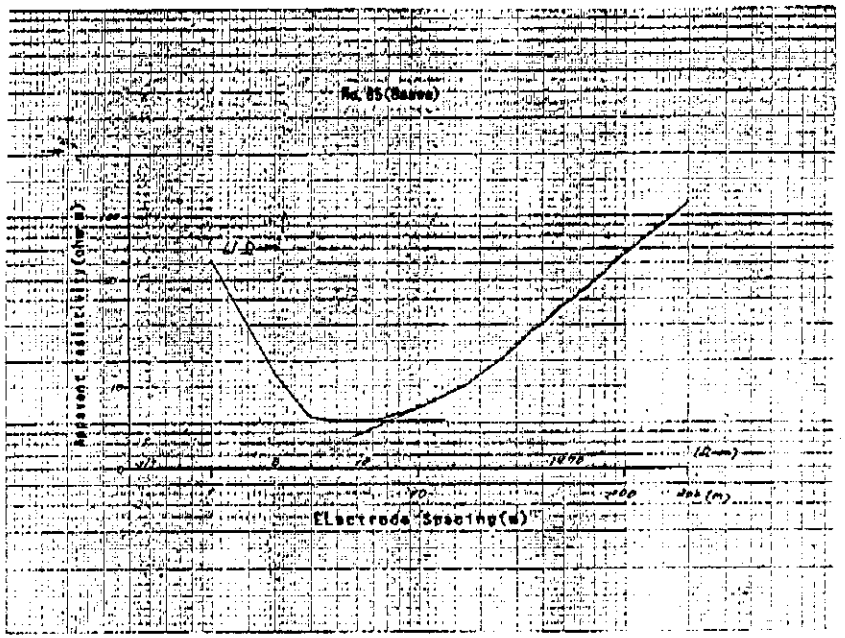
No. 51(Asaiya)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

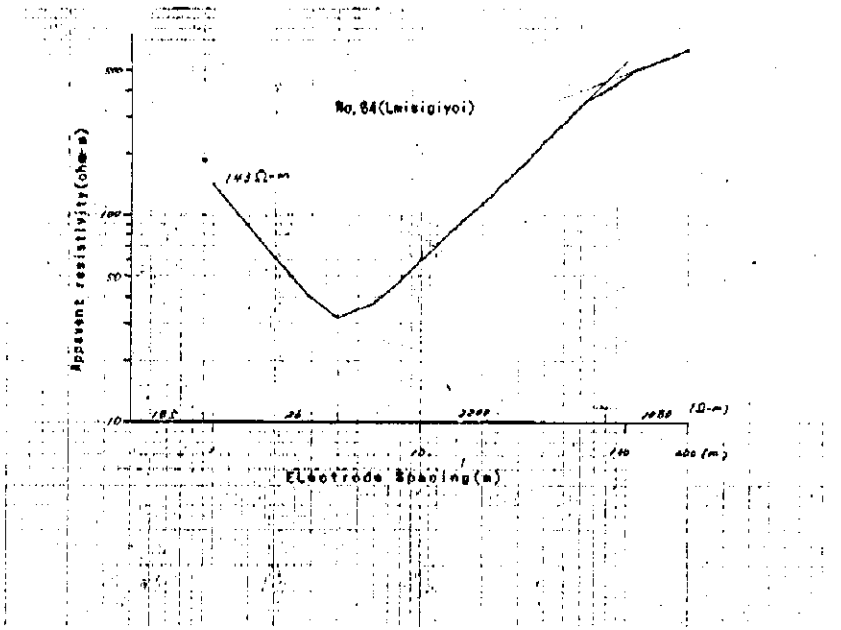

No. 52(Kaina TOWN)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

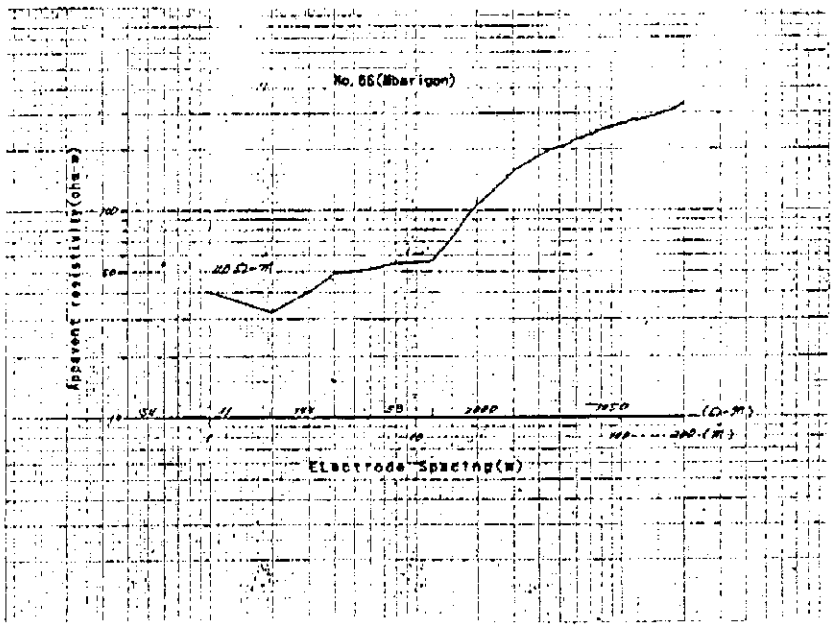

No. 59(Ranbo-2)
Apparent resistivity(ohm-m)
Electrode Spacing(m)


No. 60(Tankawan)
Apparent resistivity(ohm-m)
Electrode Spacing(m)


No. 63 (Nemeri)
Apparent resistivity (ohm-m)
Electrode Spacing(m)


No. 65 (Sawe)
Apparent resistivity (ohm-m)
Electrode Spacing(m)


No. 64 (Lmisigiyoi)
Apparent resistivity (ohm-m)
Electrode Spacing(m)

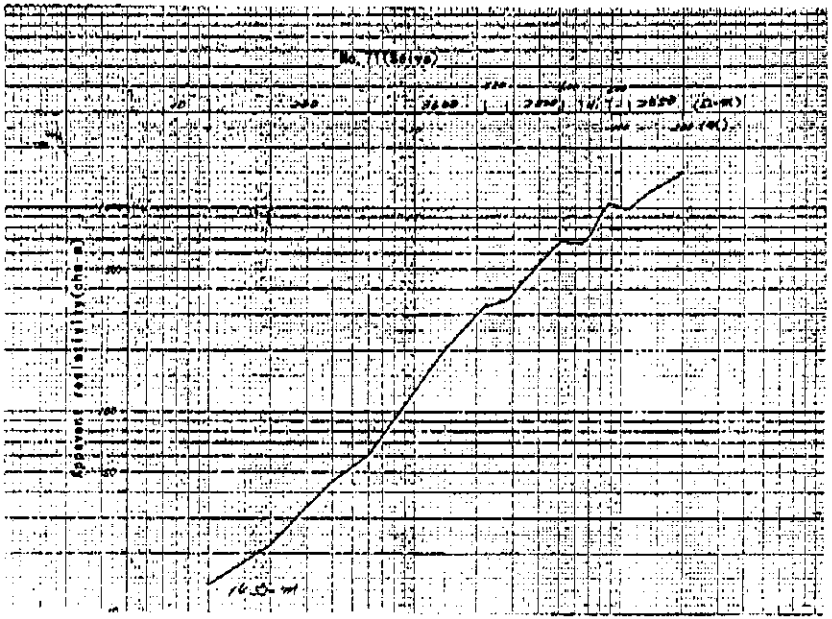

No. 66 (Mbarigon)
Apparent resistivity (ohm-m)
Electrode Spacing(m)

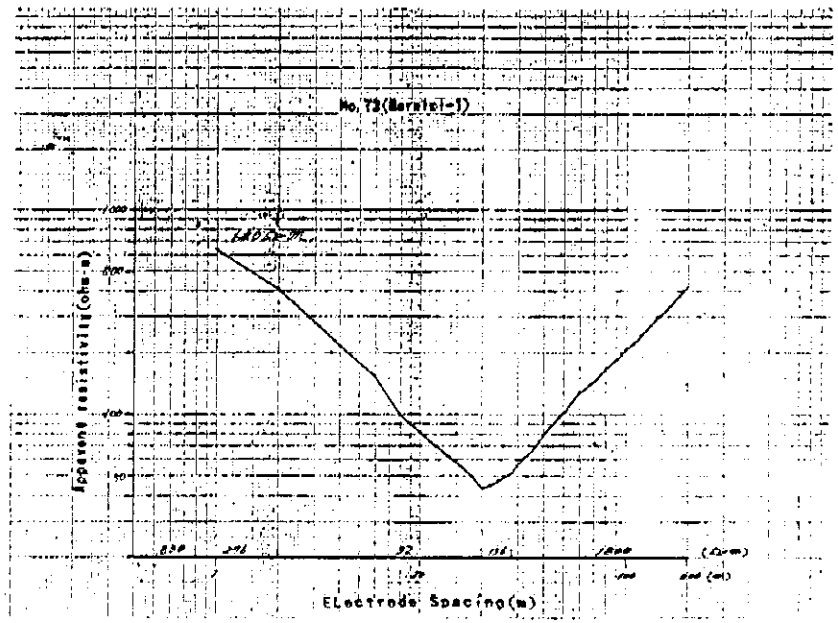
No. 69(Birata Dirobi)
Apparent resistivity(Ohm-m)
Electrode Spacing(m)

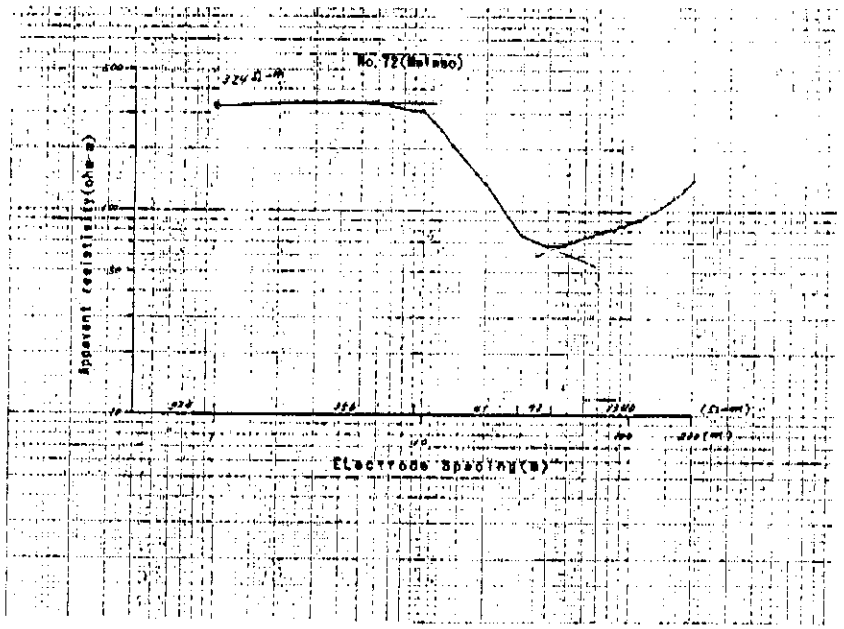

No. 70(Mabiamuny)
Apparent resistivity(Ohm-m)
Electrode Spacing(m)

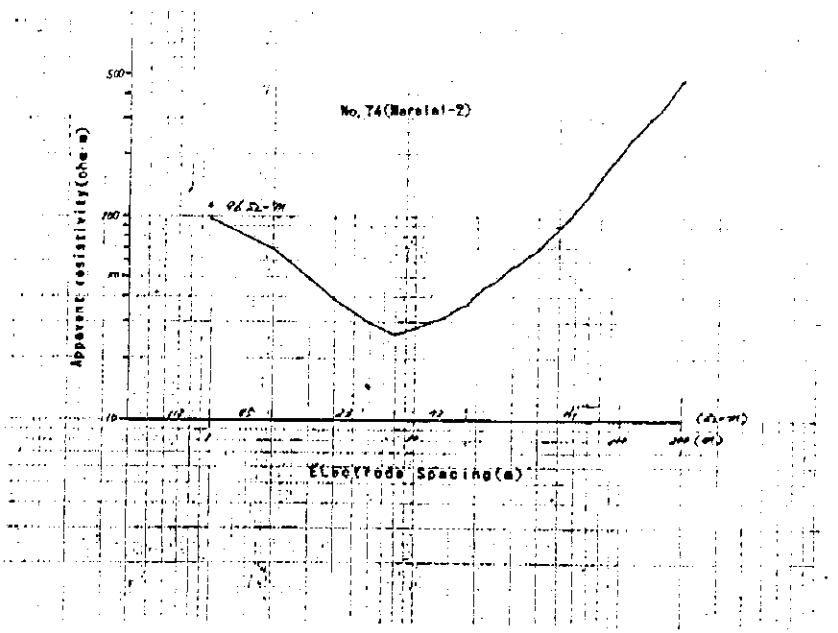

No. 67(C. Partuk-1)
Apparent resistivity(Ohm-m)
Electrode Spacing(m)

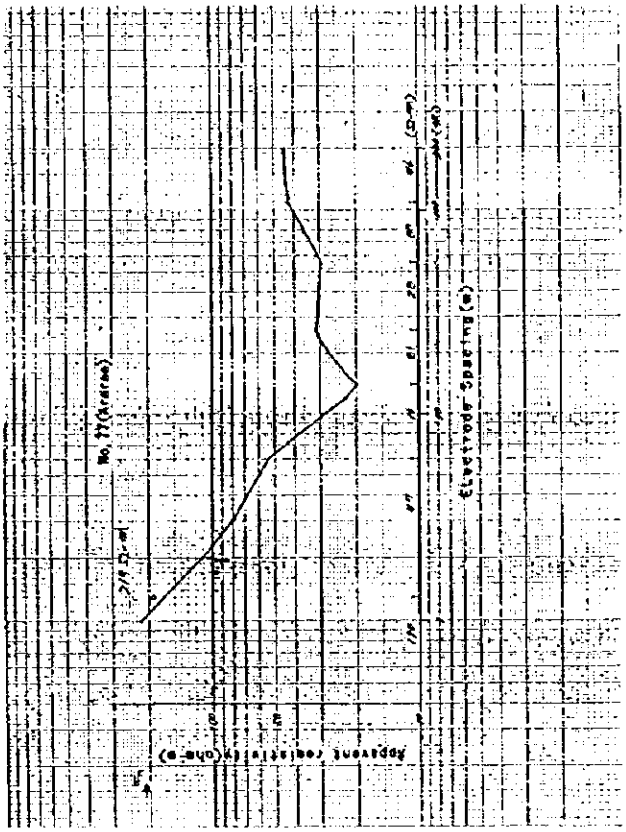

No. 68(L. partuk-2)
Apparent resistivity(Ohm-m)
Electrode Spacing(m)

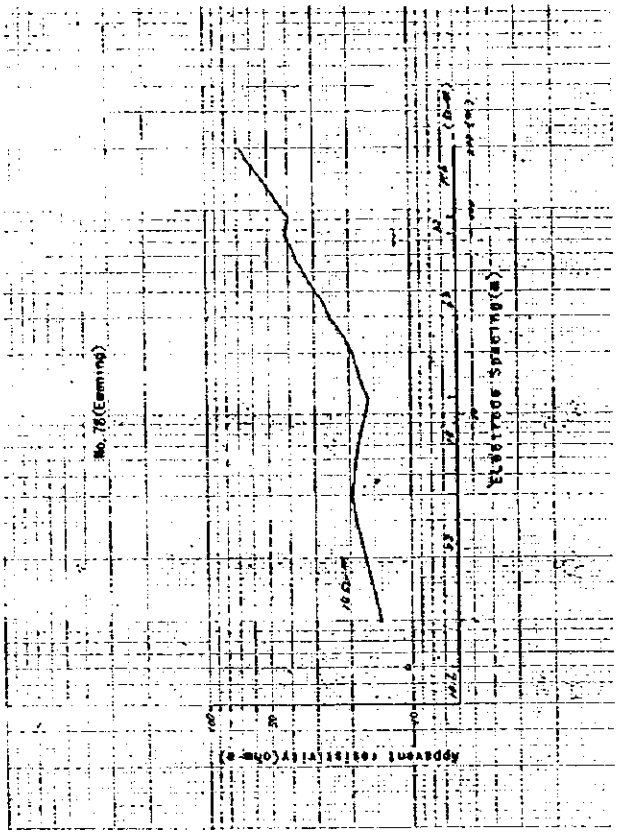


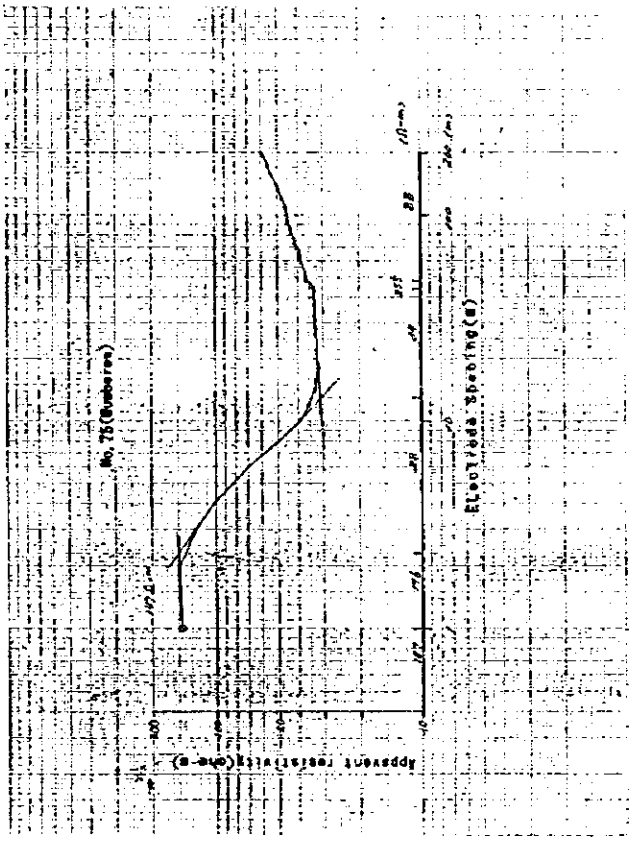

No, T3(Nerelel-1)
Apparent resistivity(ohm-m)
ELectrode Spacing(m)

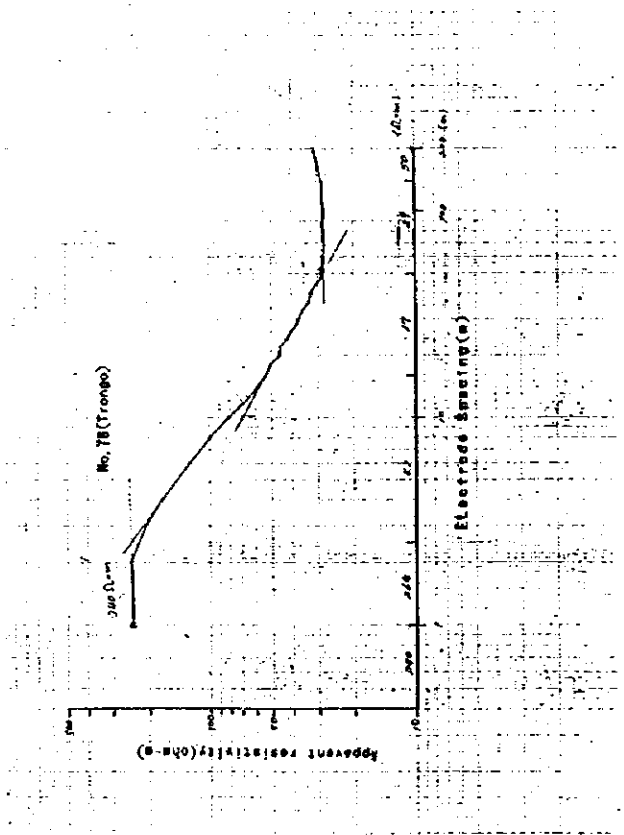

No. T2(Nelmso)
Apparent resistivity(ohm-m)
ELectrode Spacing(m)

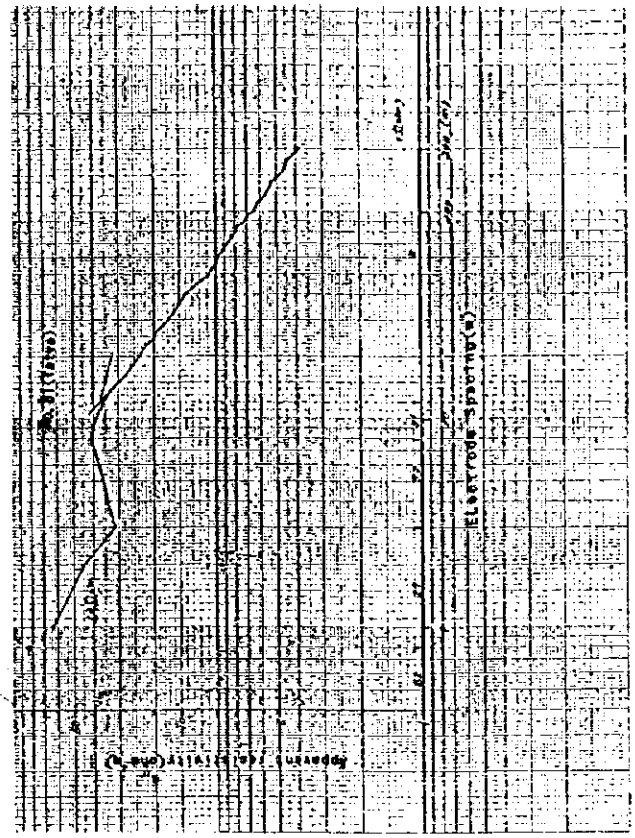

No, T4(Nerelel-2)
Apparent resistivity(ohm-m)
ELectrode Spacing(m)

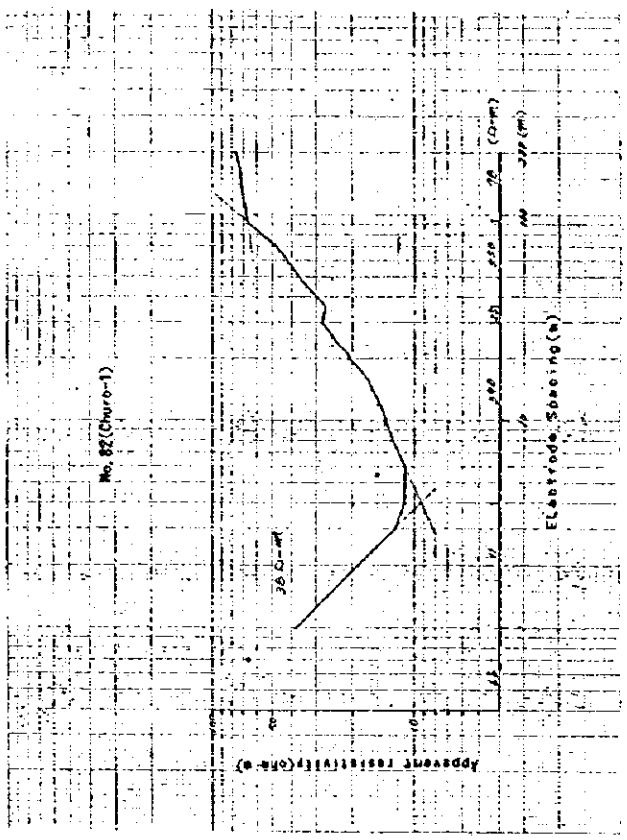

No. 77(Ararao)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

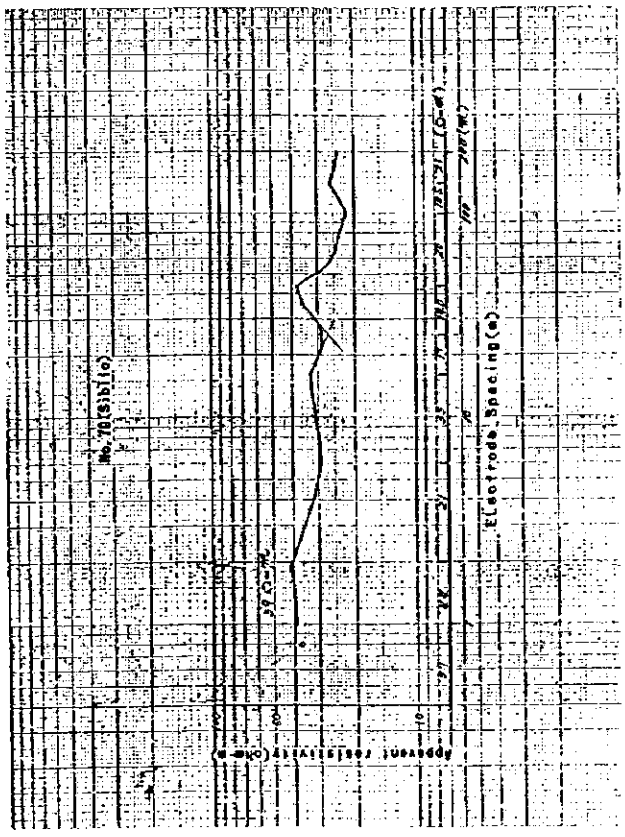

No. 78(Eemingo)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

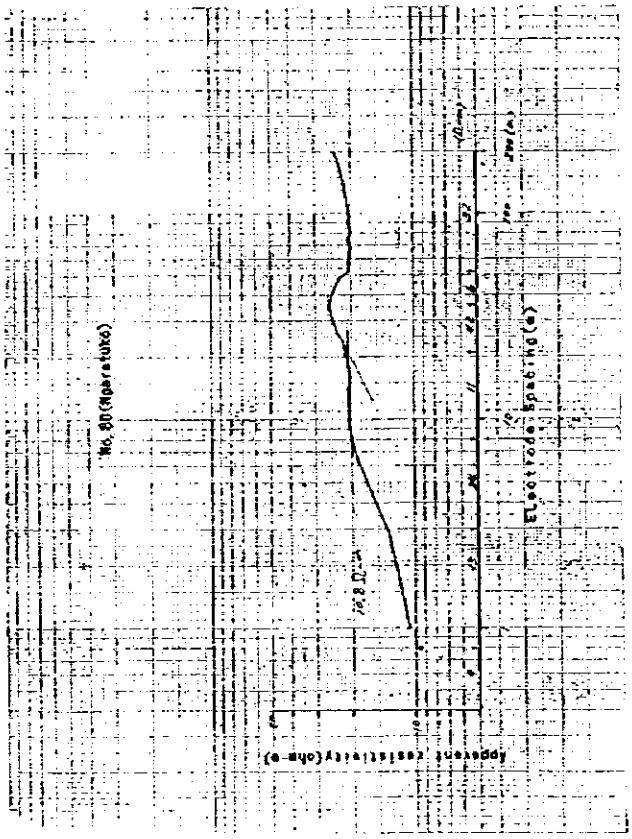

No. 75(Buderee)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

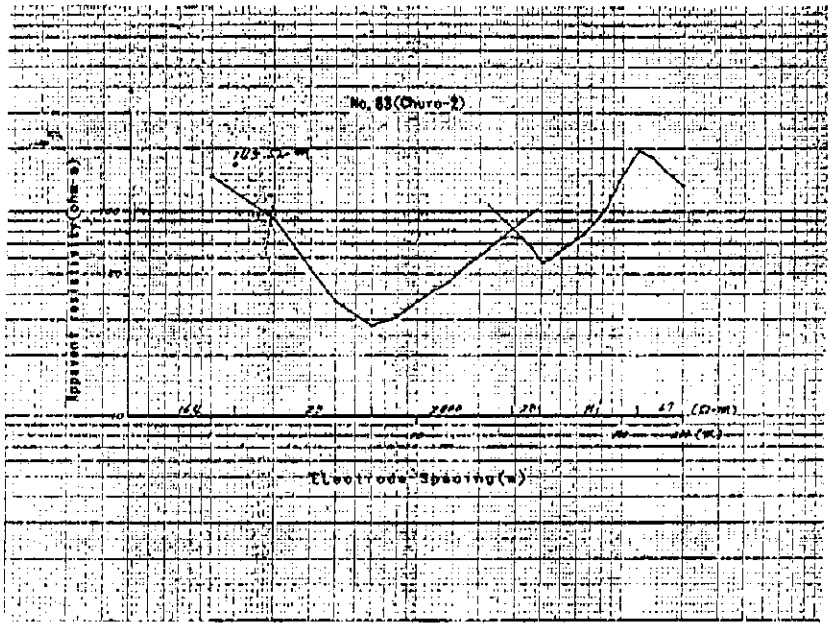

No. 78(Tronge)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

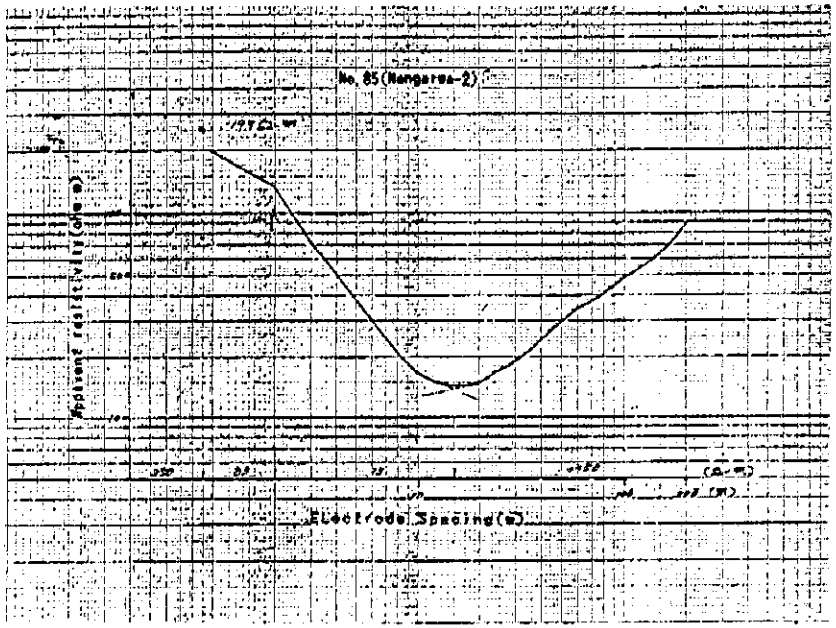


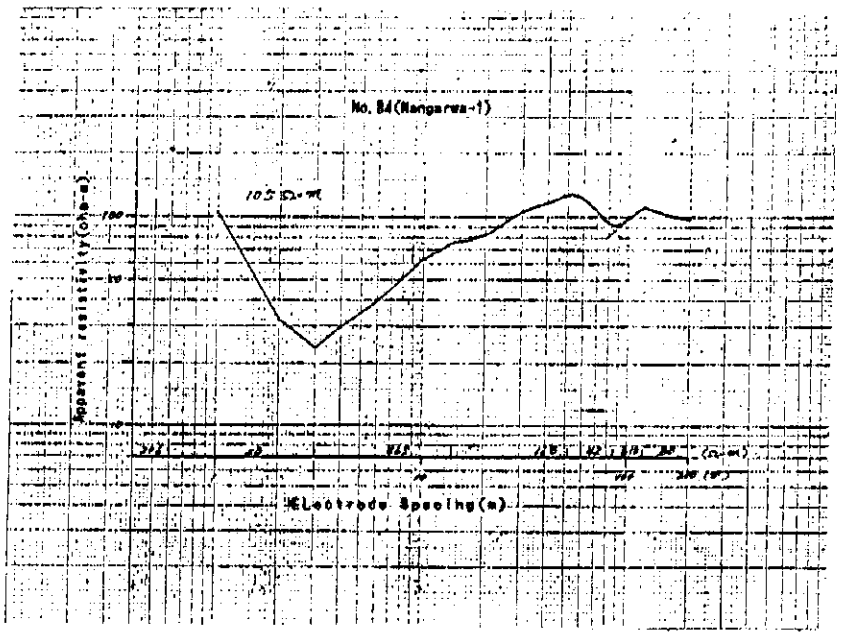

No. 82(Churo-1)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

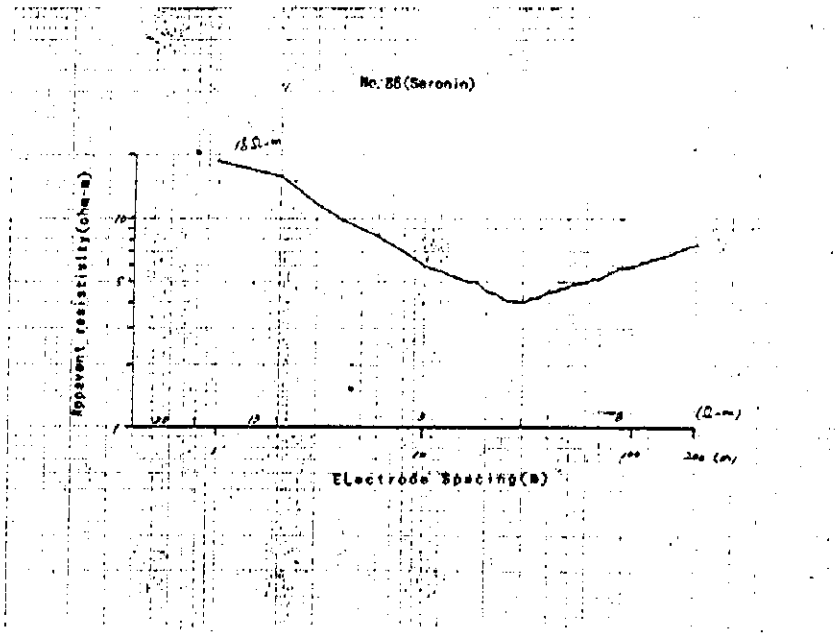


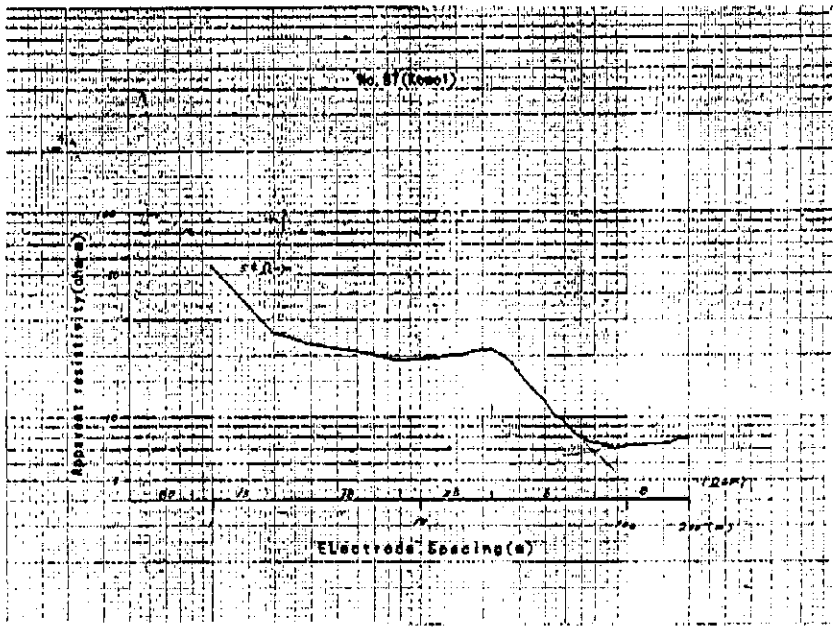

No. 80(Nanatsuka)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

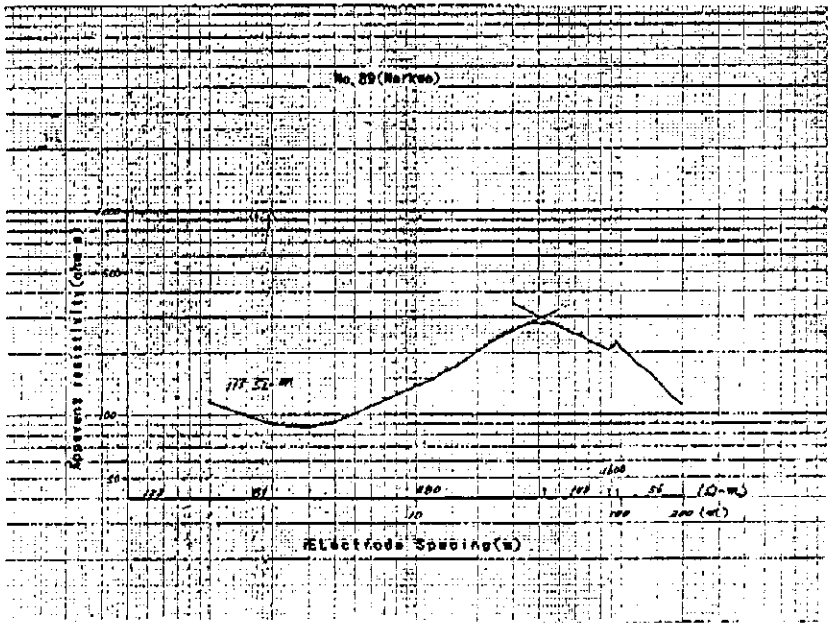

No. 83(Churo-2)
Apparent resistivity (ohm-m)
Electrode Spacing(m)

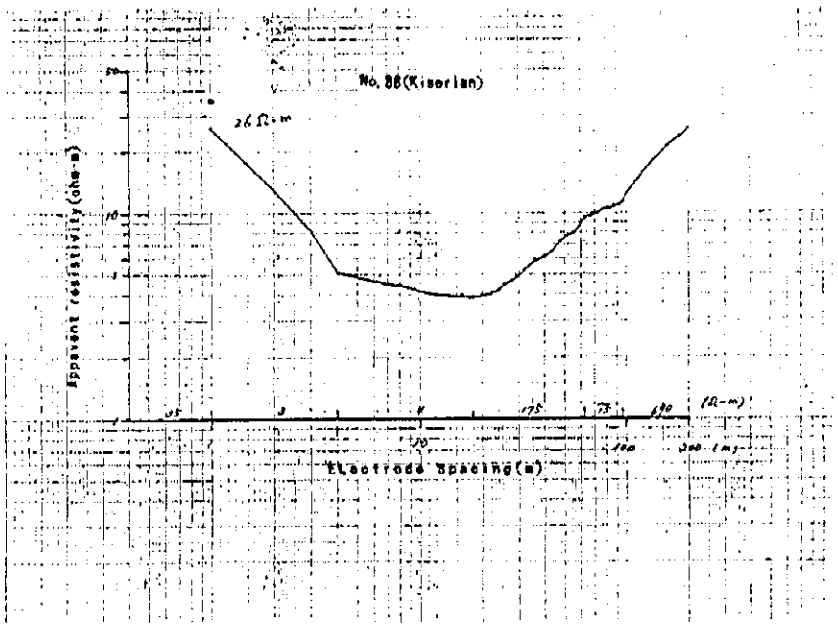

No. 85(Rangarwa-2)
Apparent resistivity (ohm-m)
Electrode Spacing(m)

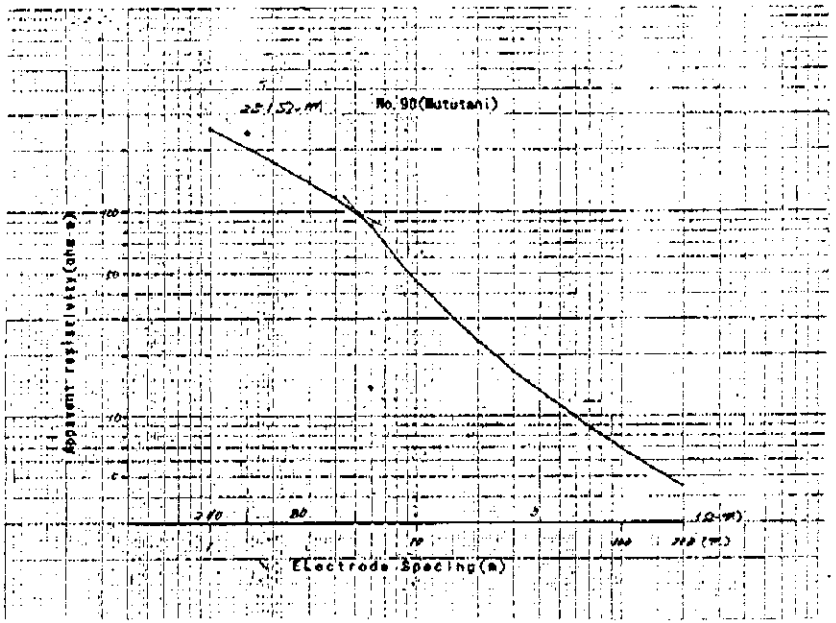

No. 84(Rangarwa-1)
Apparent resistivity (ohm-m)
Electrode Spacing(m)


No. 86(Seronin)
Apparent resistivity (ohm-m)
Electrode Spacing(m)


No. 87 (Kosoi)
Apparent resistivity (ohm-m)
Electrode Spacing (m)


No. 89 (Narikoo)
Apparent resistivity (ohm-m)
Electrode Spacing (m)


No. 88 (Kiseriun)
Apparent resistivity (ohm-m)
Electrode Spacing (m)

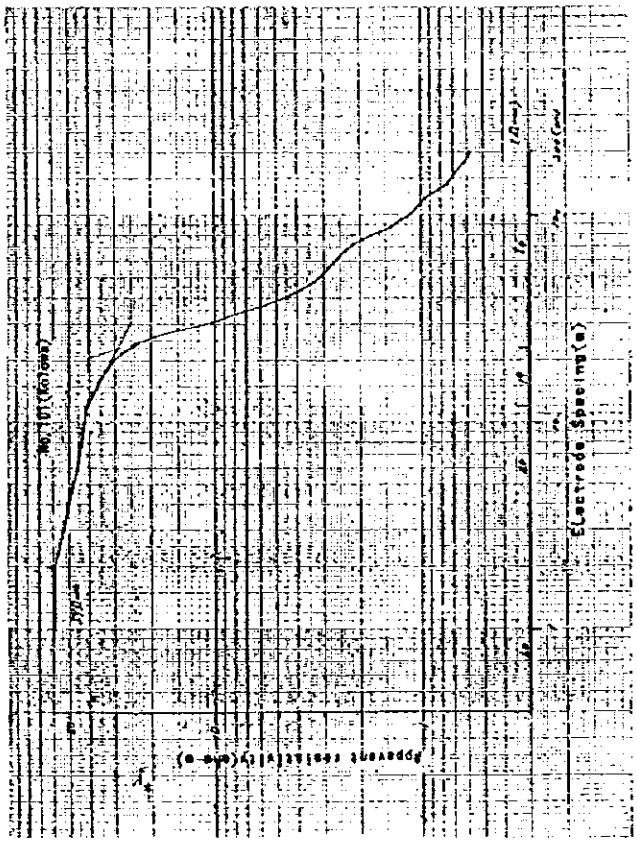

No. 90 (Mututani)
Apparent resistivity (ohm-m)
Electrode Spacing (m)

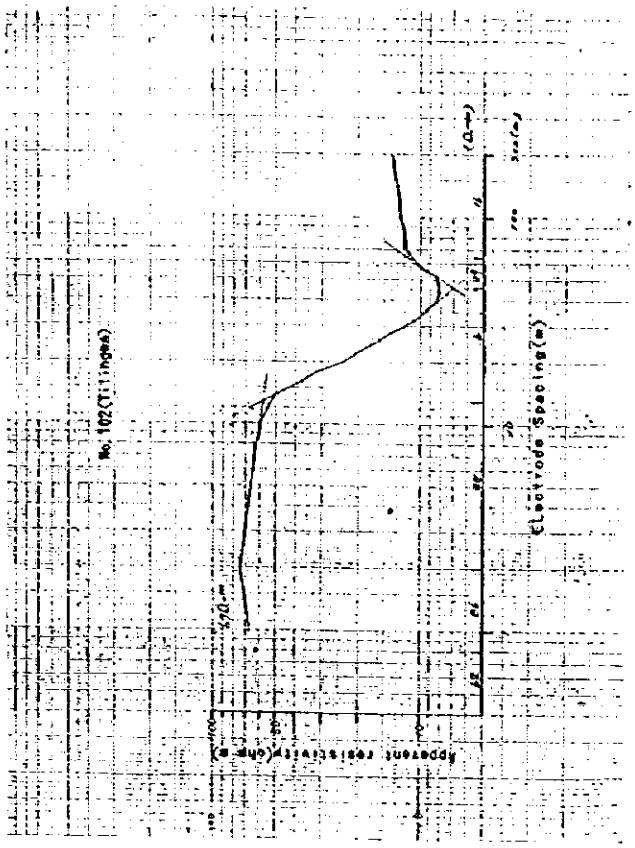
No. 97(Karuyama)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

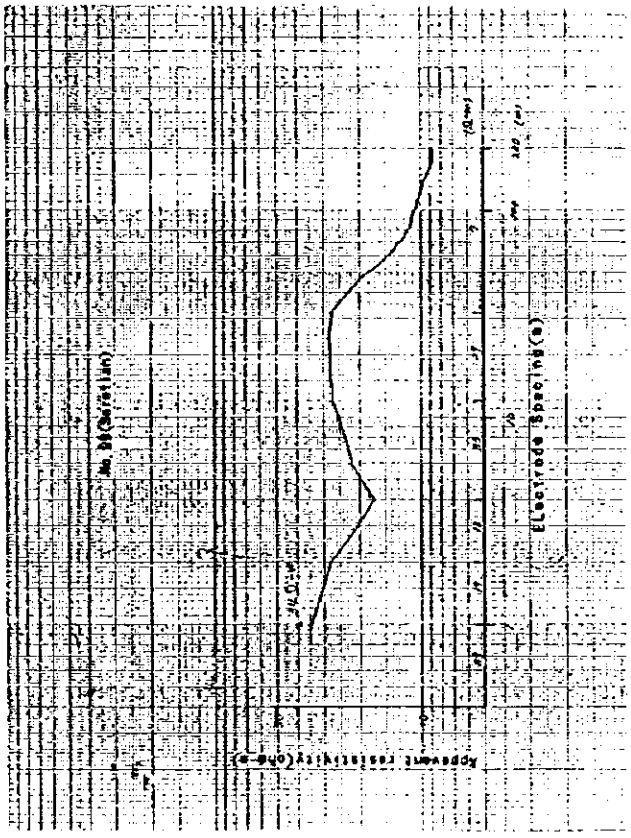

No. 98(Chiplia1)
Apparent resistivity(ohm-m)
Electrode Spacing(m)

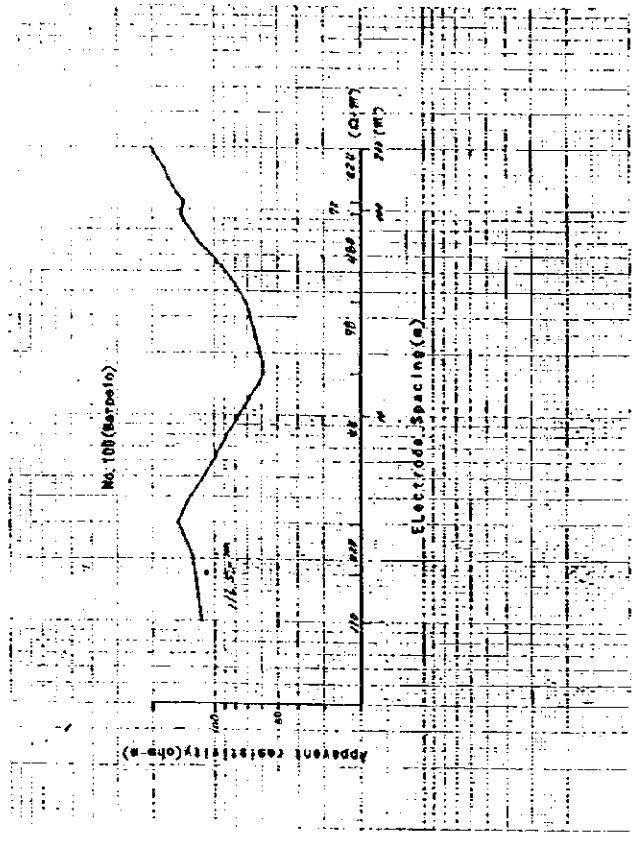

No. 95(Kobimata)
Apparent resistivity(ohm-m)
Electrode Spacing(m)


No. 96(Oiro)
Apparent resistivity(ohm-m)
Electrode Spacing(m)



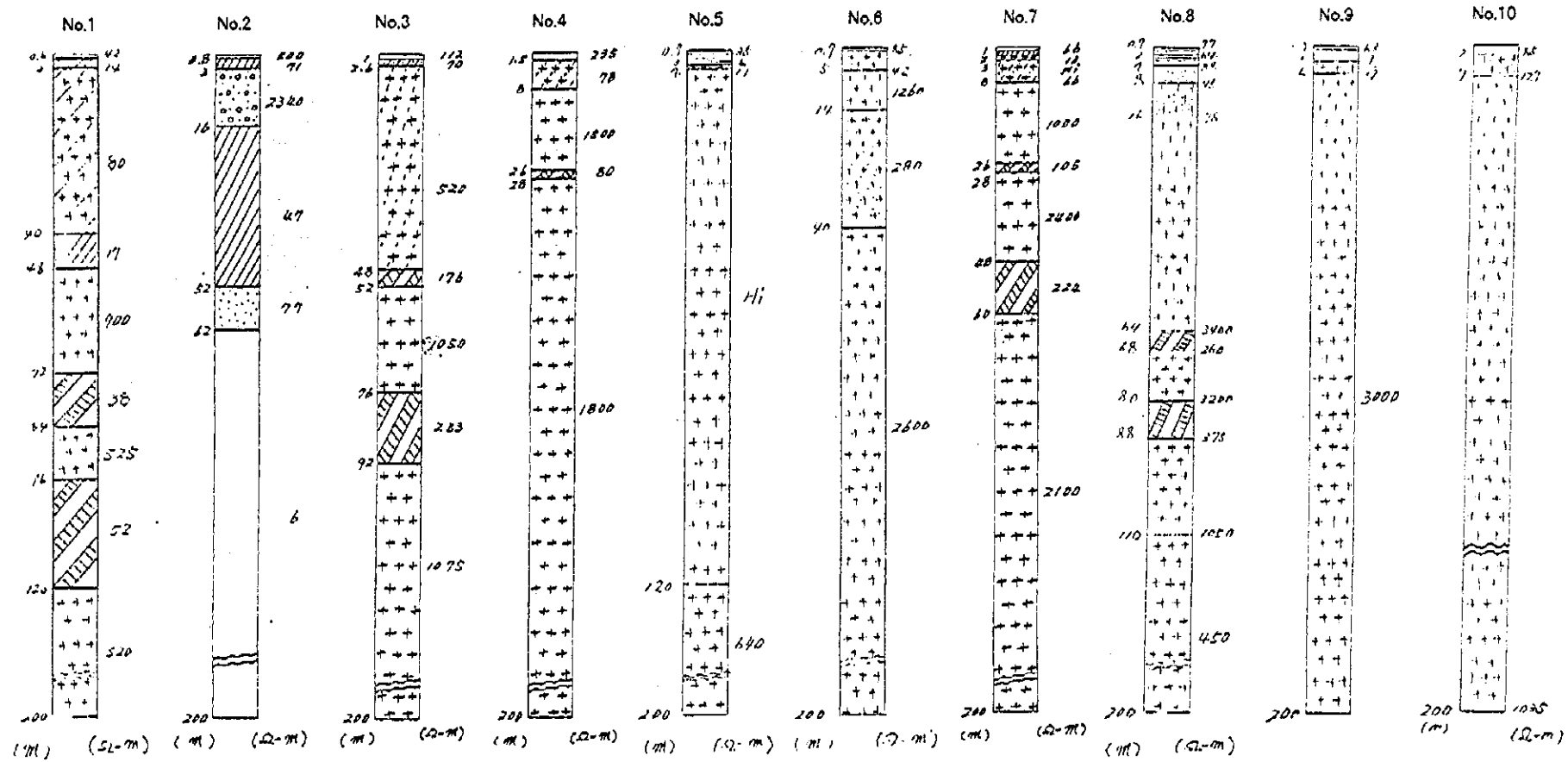


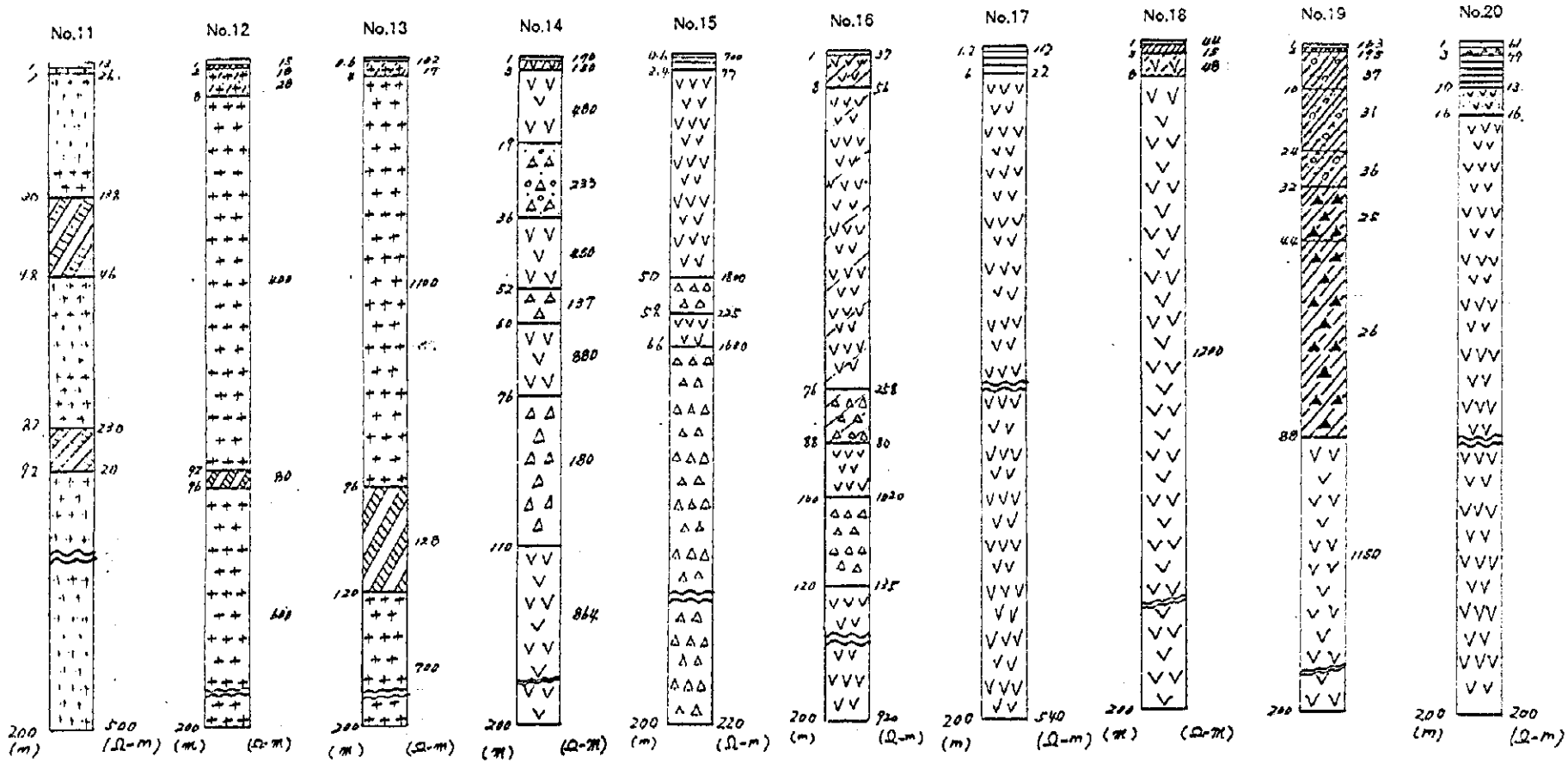


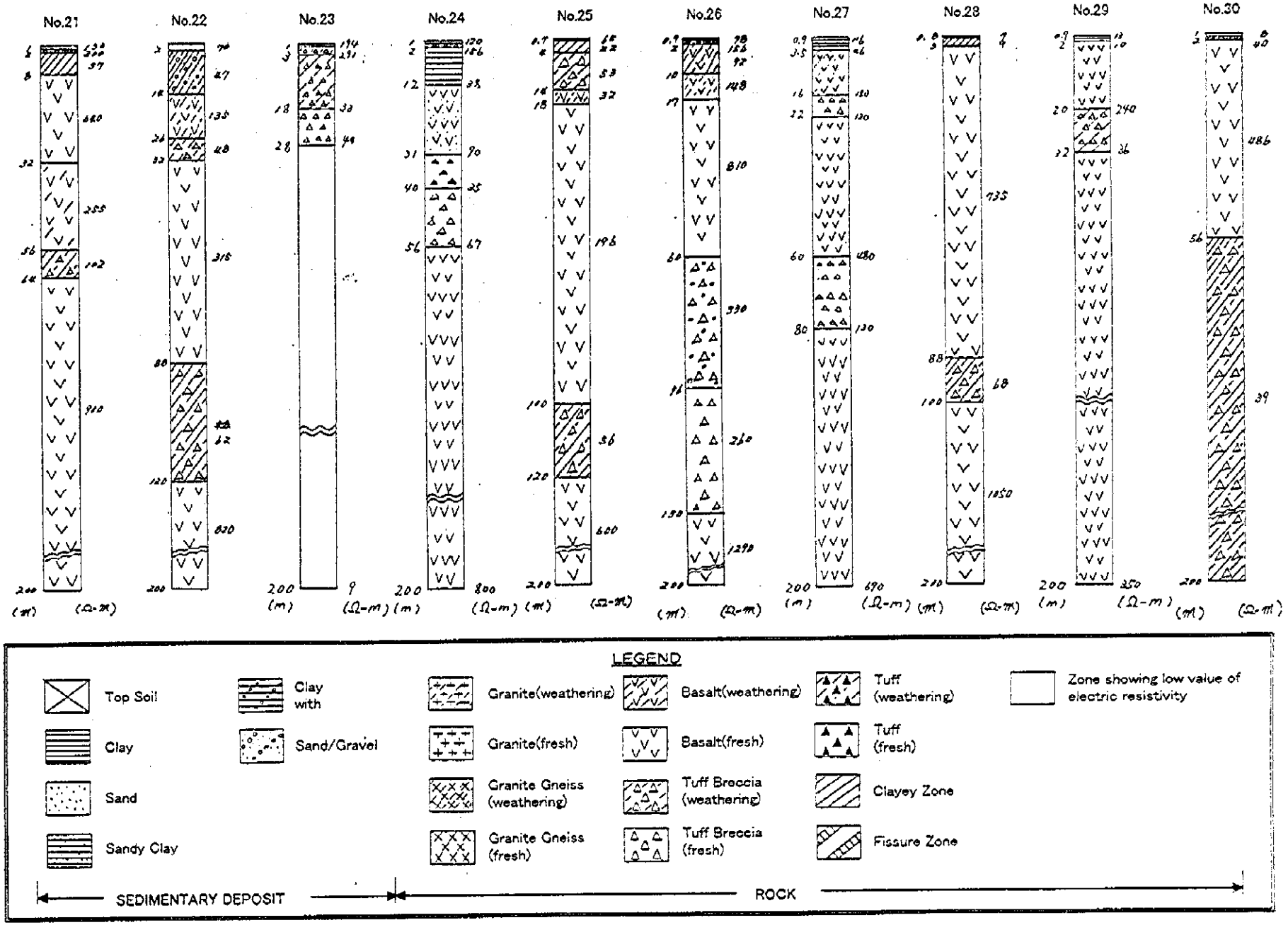


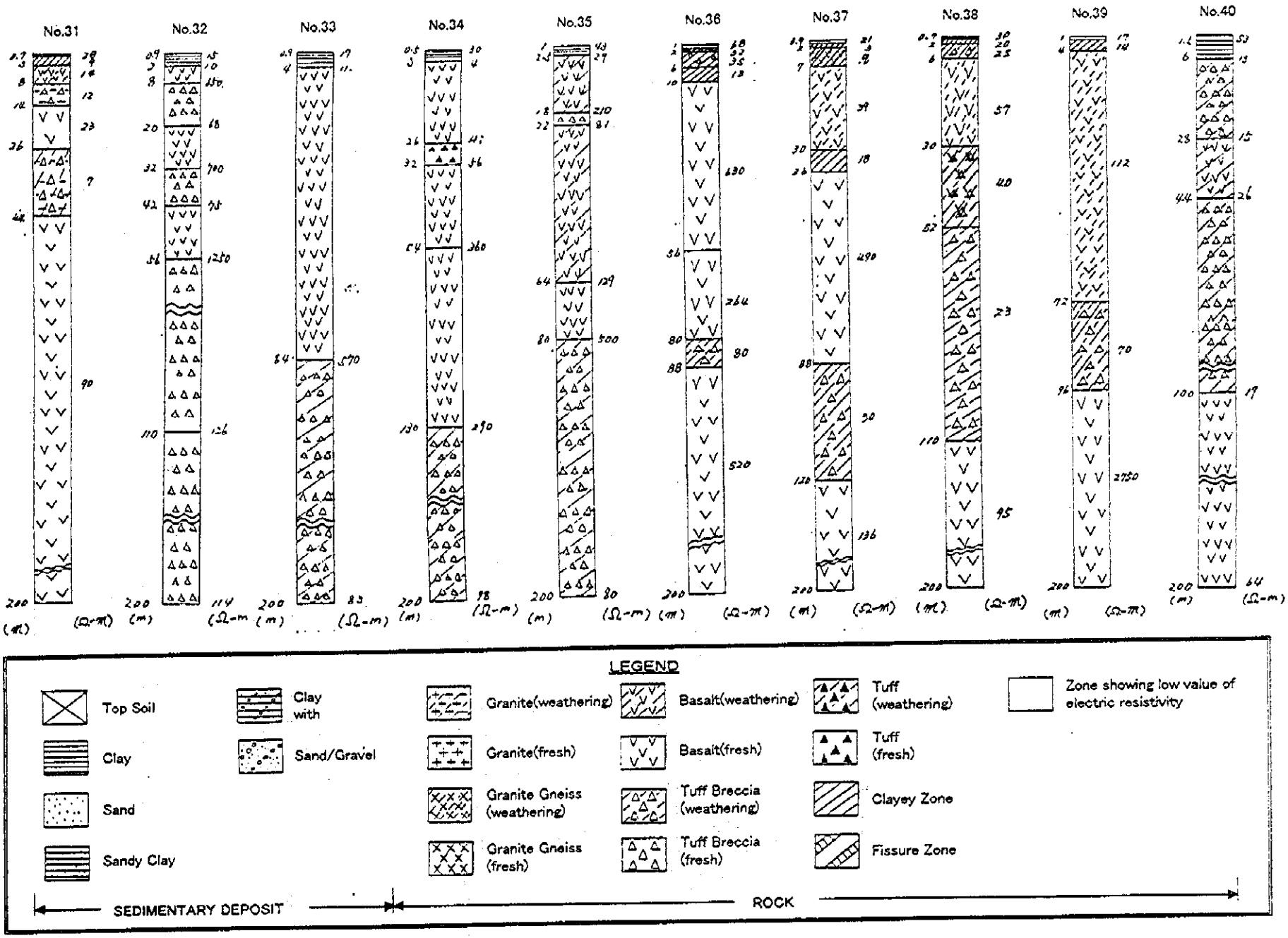
*ATTACHMENT- 8*

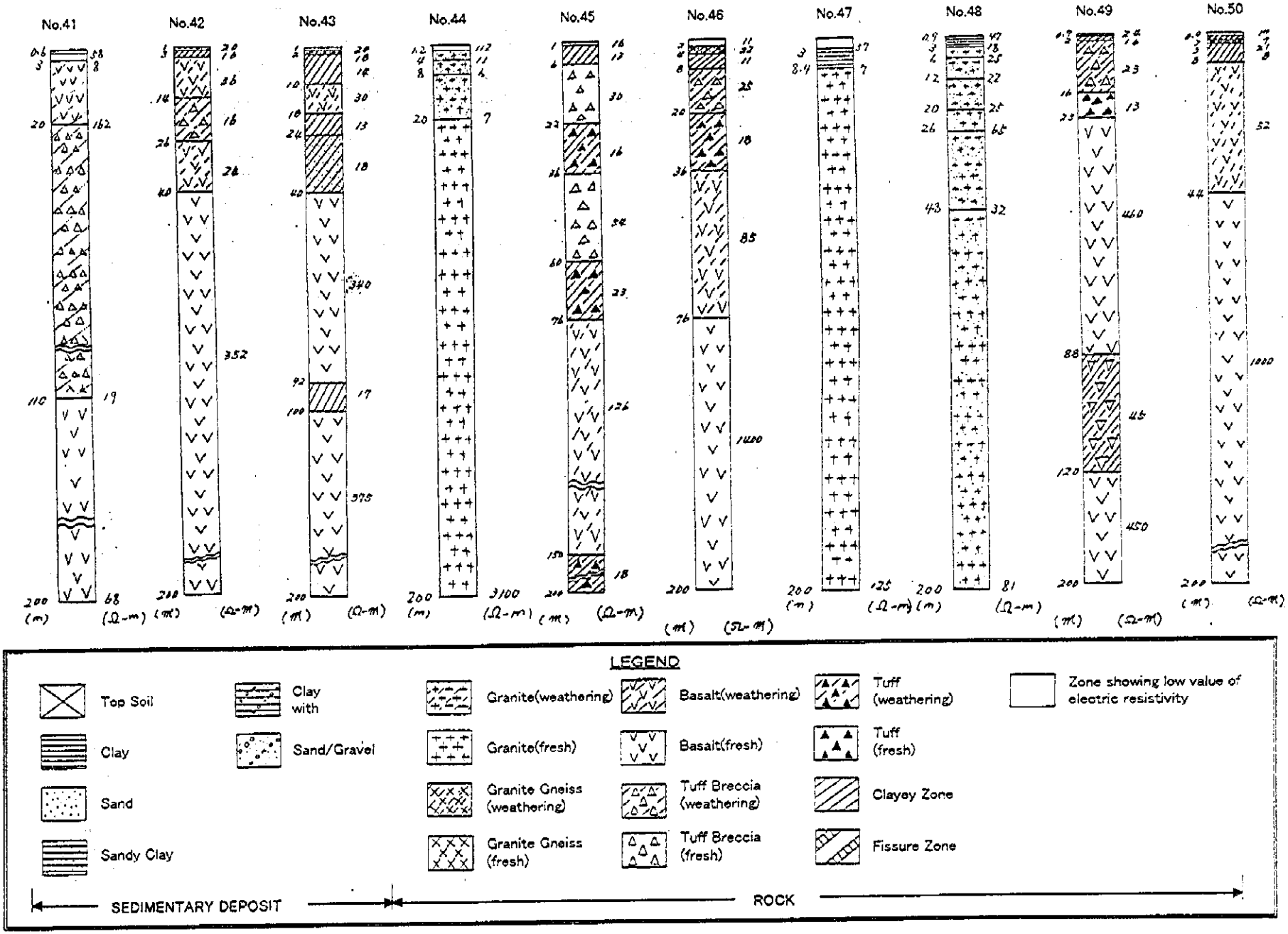
# The Rough Sections of the Strata

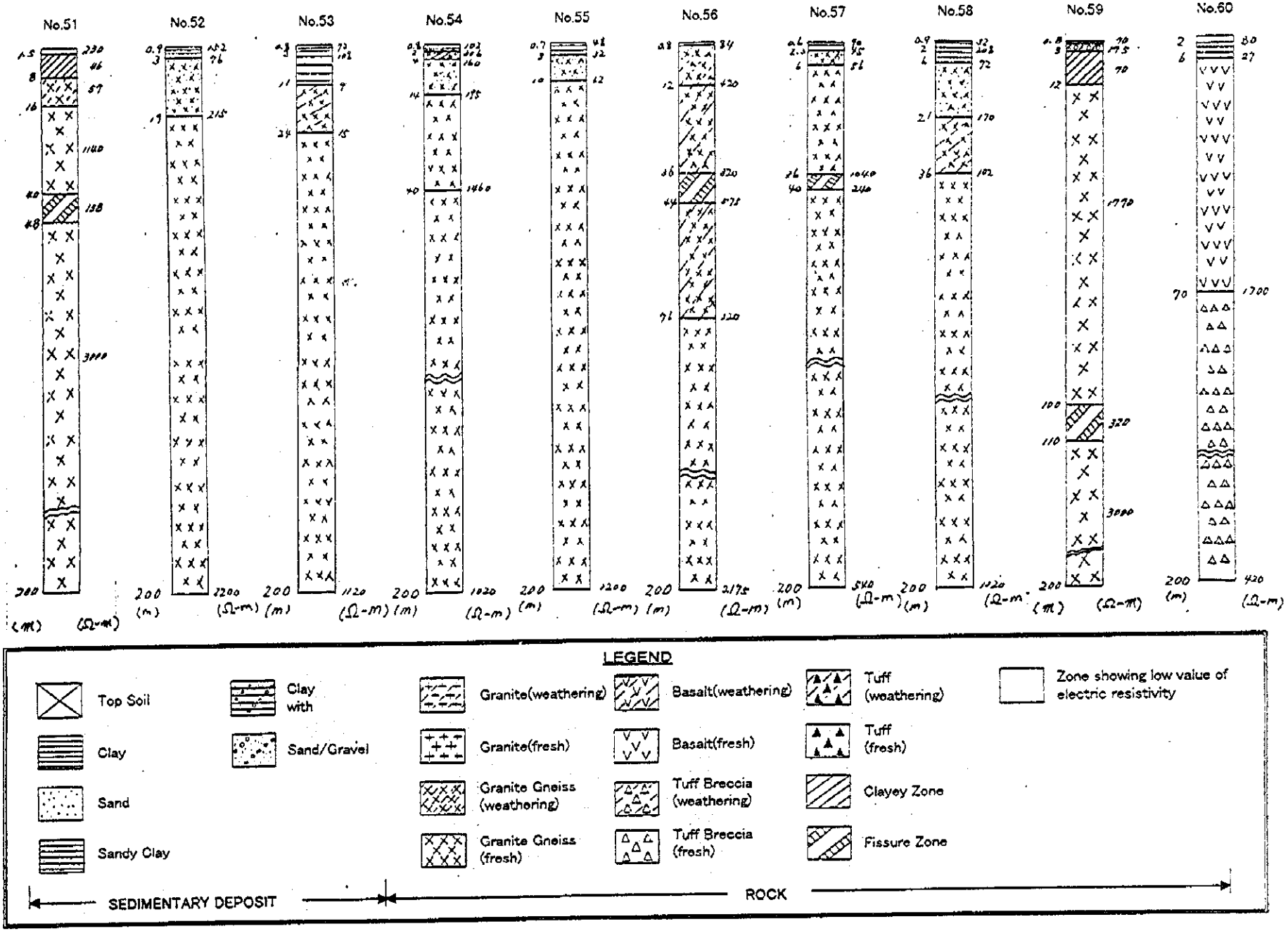

No.1
No.2
No.3
No.4
No.5
No.6
No.7
No.8
No.9
No.10
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK

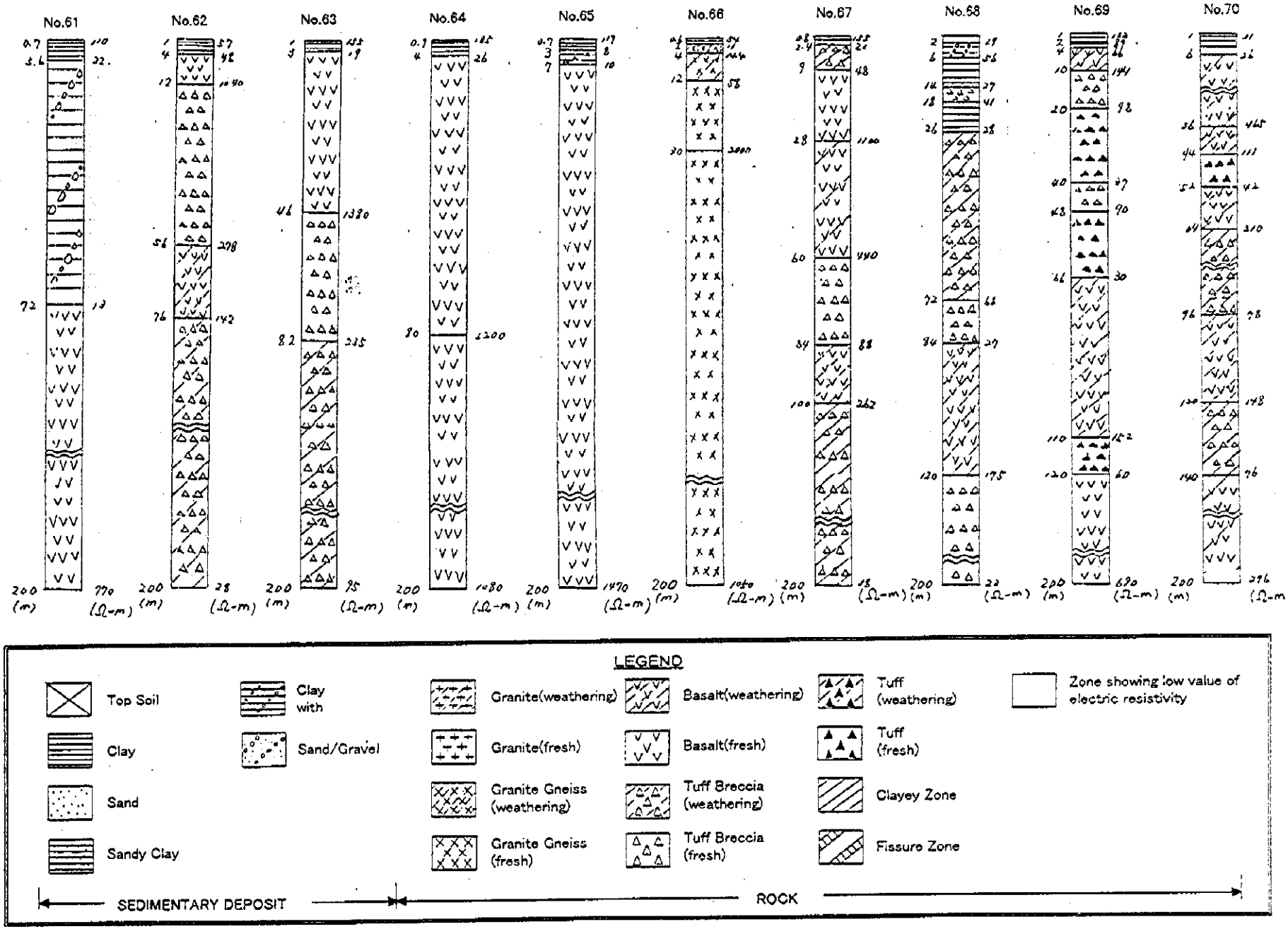

No.11
No.12
No.13
No.14
No.15
No.16
No.17
No.18
No.19
No.20
(m)
(Ω-m)
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK

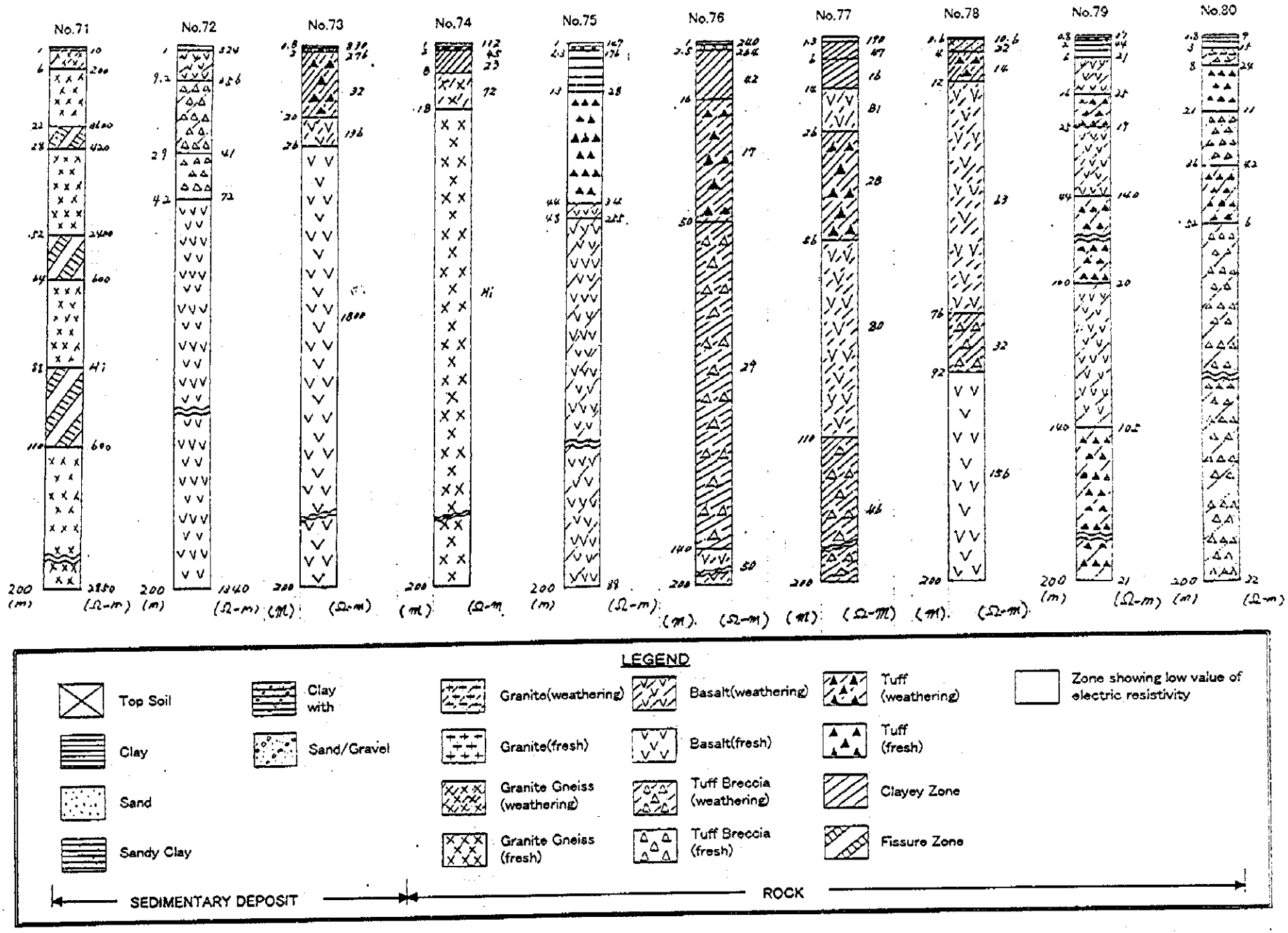

No.21
No.22
No.23
No.24
No.25
No.26
No.27
No.28
No.29
No.30
(m)
(Ω-m)
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK

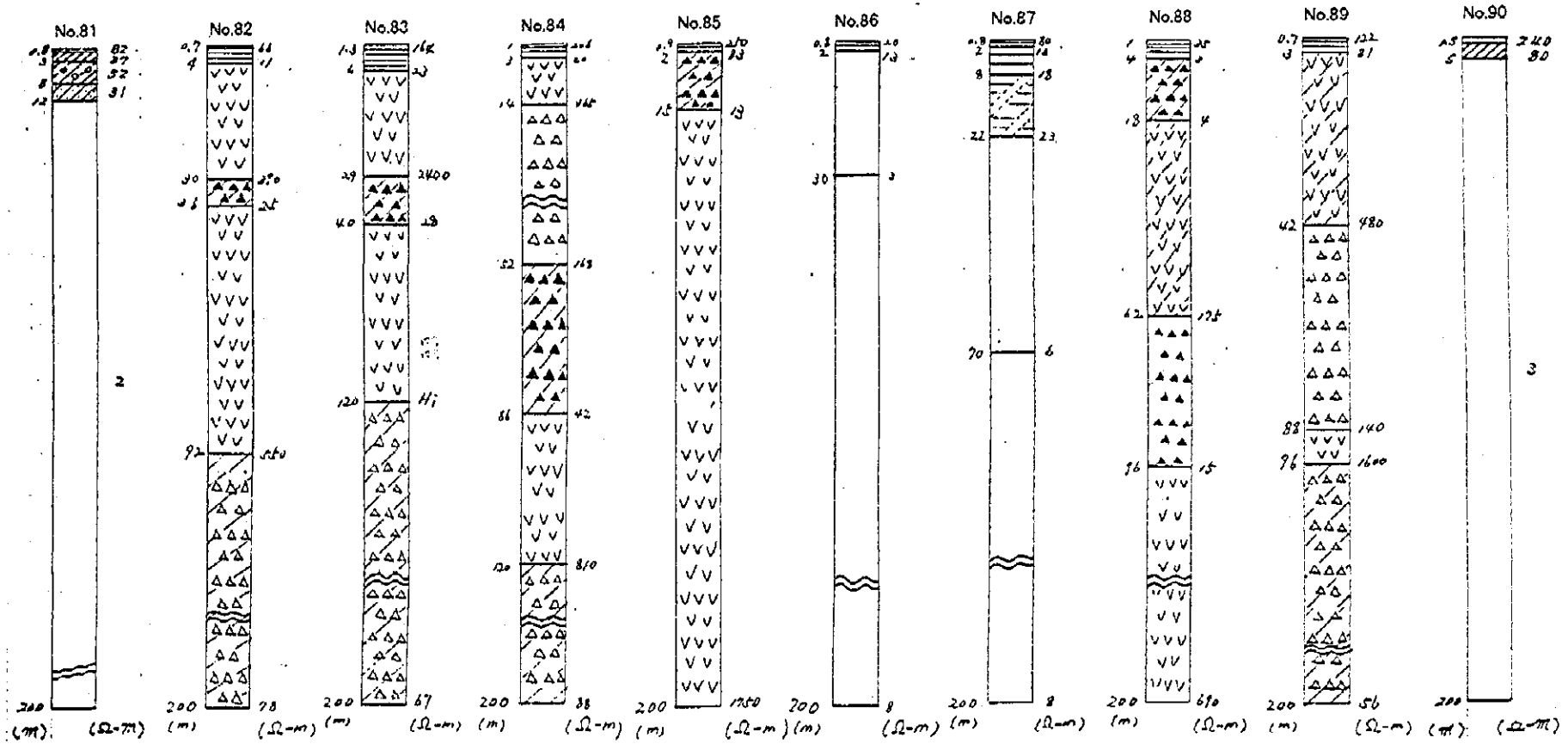

No.31
No.32
No.33
No.34
No.35
No.36
No.37
No.38
No.39
No.40
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK

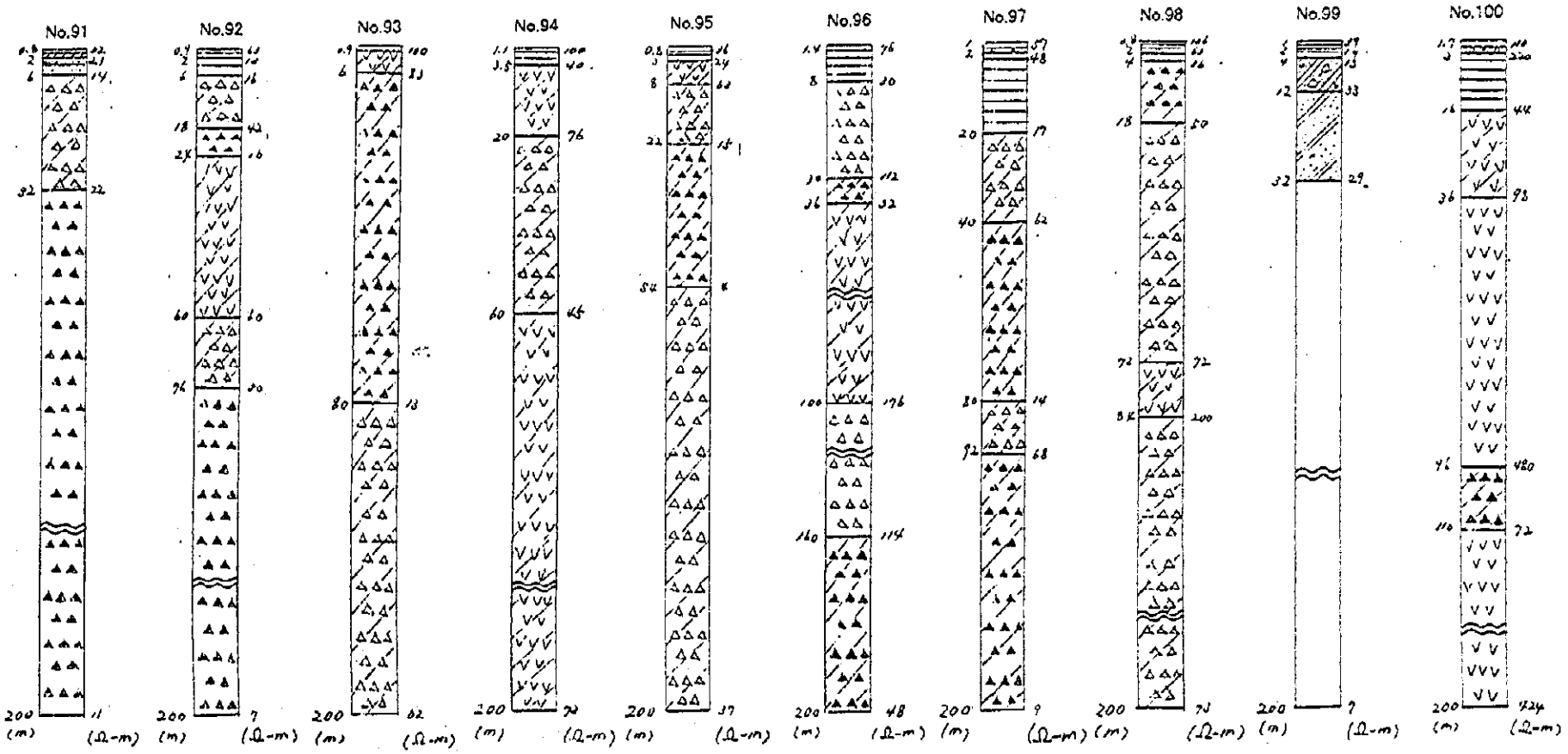

No.41
No.42
No.43
No.44
No.45
No.46
No.47
No.48
No.49
No.50
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK

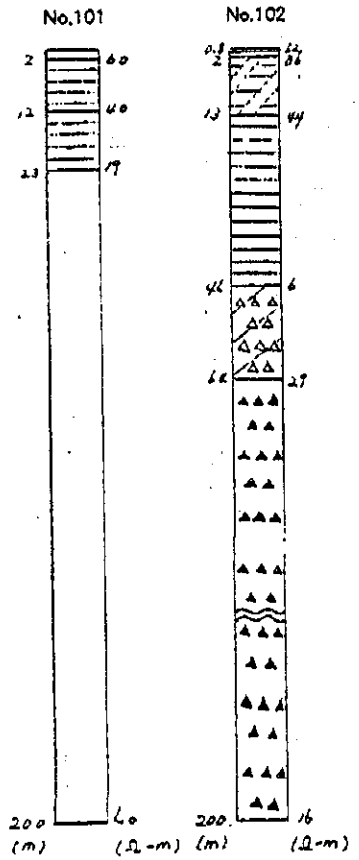

No.51
No.52
No.53
No.54
No.55
No.56
No.57
No.58
No.59
No.60
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK


No.61
No.62
No.63
No.64
No.65
No.66
No.67
No.68
No.69
No.70
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK


No.71
No.72
No.73
No.74
No.75
No.76
No.77
No.78
No.79
No.80
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK


No.81
No.82
No.83
No.84
No.85
No.86
No.87
No.88
No.89
No.90
(m)
(Ω-m)
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK


No.91
No.92
No.93
No.94
No.95
No.96
No.97
No.98
No.99
No.100
200 (m)
(Ω-m)
LEGEND
Top Soil
Clay
Sand
Sandy Clay
Clay with Sand/Gravel
Granite(weathering)
Granite(fresh)
Granite Gneiss (weathering)
Granite Gneiss (fresh)
Basalt(weathering)
Basalt(fresh)
Tuff Breccia (weathering)
Tuff Breccia (fresh)
Tuff (weathering)
Tuff (fresh)
Clayey Zone
Fissure Zone
Zone showing low value of electric resistivity
SEDIMENTARY DEPOSIT
ROCK




LEGEND

- Top Soil
- Clay
- Sand
- Sandy Clay
- Clay with Sand/Gravel
- Granite(weathering)
- Granite(fresh)
- Granite Gneiss (weathering)
- Granite Gneiss (fresh)
- Basalt(weathering)
- Basalt(fresh)
- Tuff Breccia (weathering)
- Tuff Breccia (fresh)
- Tuff (weathering)
- Tuff (fresh)
- Clayey Zone
- Fissure Zone
- Zone showing low value of electric resistivity

SEDIMENTARY DEPOSIT ← → ROCK

*ATTACHMENT- 9*

Interview Survey Report

on

Present Water Supply Conditions

# INTERVIEW SURVEY REPORT

ON

# PRESENT WATER SUPPLY CONDITIONS

IN

LAIKIPIA AND THE SURROUNDING AREAS OF SAMBURU ,

KOIBATEK AND BARINGO DISTRICTS

IN

THE REPUBRIC OF KENYA

AUGUST 1998

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CHAPTER FOUR

## 4.0 COMMUNITY AWARENESS AND ORGANISATION



APPENDIX

# EXECUTIVE SUMMARY

A questionnaire on the present water supply conditions was administered to respondents at proposed borehole sites. The objective of the survey was to understand public awareness related to water supply conditions in those areas as well as the ability and willingness to operate and maintain the water facility once developed and in place. The issues addressed thus ranged from socio-economic conditions, water availability and use, to community awareness and organization.

## Socio-Economic Characteristics

Interviewees were of various occupations, though it emerged that interviewing administrators i.e. chiefs, was more productive since they had knowledge of crucial issues like population numbers in the areas that they serve. In most areas population was below 10,000 persons per sub-location or community. It was observed that densities were especially low in the nomadic areas of Samburu and Baringo districts. Major occupations in the surveyed areas are pastoralism and small scale farming. In Samburu and parts of Baringo it is solely pastoralism that is practiced because the land is not suitable for agriculture. Average family size for all areas tended to be 10 persons to a family, but it was noted that most men have more than one wife and thus large numbers of children. The major source of incomes is from selling of livestock and to a smaller extent agricultural products and small time business-commercial activity. The people hardly engage in active salaried employment except for a few who live near large scale horticultural and wheat farms. Estimated income per household per month for the surveyed areas was found to be below 10,000 Kenya shillings. The farmers especially in Laikipia district find it difficult to peg their income on a monthly basis since their earnings from agricultural products are annual.

Most of the areas do not have electricity, piped water supply or telephones thus infrastructure is poorly developed, though public services like government offices, (chief's) schools, and commercial centers are found within most localities. Police and postal services are found within most nearby towns. School attendance of children for primary and secondary levels is quite low for Samburu, and Baringo districts, being at below 50%. Children are used to work as herdsboys. Financial limitations also hamper further education to secondary school level.

## Water Availability and Use

It was observed that the major source of water for most communities is rivers. Though many of rivers are seasonal and thus dry up therefore people depend on hand dug wells. Cases of piped water supply are very few and only apply to those communities within distance of major towns like Nyahururu and those with existing water projects. In many areas of Laikipia where people are settled, most use roof catchment water for drinking. There are a few boreholes in existence but some are not operational and few have been earmarked for rehabilitation. Rock catchment and dams/ponds are common in Samburu district and these water is used for all purposes i.e. domestic use and livestock feeding.

There are very few water projects in existence in all the areas visited. Most projects noted were not related to direct provision of water but rater to building of storage tanks for roof catchment

water. These programme is conducted by women groups and funded by the ASAL programme. Distances taken to particular water points are especially long in most areas. Some people walk more than 8 kilometres to get water. Those charged with these responsibility are adult women who sometimes use donkeys or bicycles to fetch water, which is normally carried in 20 litre plastic jerricans. For those close to water points this job on average is done twice a day. Most domestic work i.e washing clothes is usually done at the water point, including the feeding of livestock.

Water shortage is frequent, and this is so especially during the dry season each year. It was observed that especially in Samburu and Baringo most rivers are dry at this time. Therefore the response of people has been to go further distances in search of water or otherwise use alternative but unacceptable sources of water. There was one case observed where water use was limited or decreased to just one water point (Njogu-ini self help project – Laikipia District).

Many respondents stated that they were not very happy with the quality of the drinking water but most people did not treat it in any way. Because of the rains presently, some communities stated that their water supply was sufficient for all needs, both domestic and livestock, but note that this is only a temporary condition.

**Health and Sanitation**

Refuse, according to respondents is normally thrown out into the garden, very few homesteads have pits or burn. But it was observed that normally people do not generate a lot of waste. In Samburu and Baringo most people do not have any form of sanitary facilities.

There are very few latrines and these are to be found at small centres/shops or progressive homes. In Laikipia the most common toilet is the pit latrine which is in virtually every home whereas the cistern flush toilets are found in town centres like Nyahururu and Nanyuki. Otherwise, those without any form of toilet normally use the bush to relieve themselves. Most of the people in all the areas cannot be said to have knowledge of water related diseases and many areas have reported cases of typhoid, dysentery and other forms of serious diarrhoea, besides cases of malaria and colds some of which have resulted in death of the victims.

**Community Awareness and Organization**

Many areas are not aware of, nor have information about "community management of water supplies project" as a policy of the government. The administrators interviewed conceded that they are in the process of dissemination of the information. In Laikipia district, many water committees are in existence for many of the areas visited unlike Samburu, Baringo and Koibatek. In some places, people or traditional committees tend to oversee watering places, this is so in Samburu but again not very common.

Many communities indicated that development of other sources of water e.g. boreholes, and the supply of equipment for water supply e.g. pipes, storage tanks, water pumps – were their major requirements to facilitate adequate water supply in the respective areas and communities. To this end people within the communities are willing to provide labour for construction, operation and maintenance of the water facility while others are willing to even share a small part of the project cost.

Most communities also indicated that they are willing to pay a water tariff towards the maintenance and operation of the water facility, but their contribution would be limited to about 100 Kenya shillings a month.

To realize the goal of providing water to the communities in the project area, there is need to put in place effective and well organized water committees. These can be done through the district water office who will be expected together with Ministry of Culture and Social Services, to monitor their progress and ensure sustainability of the groundwater development project among communities.

CHAPTER ONE

# 1.0 SOCIO – ECONOMIC CHARACTERISTICS OF SURVEY AREAS

## 1-1 Introduction

Information was gathered regarding various aspects of the general livelihood of the people in the study areas and this focused on areas like main occupations, levels of income, population numbers, availability of infrastructure and public services, school attendance, and also major sources of income.

The interviewees from whom this information was gathered were of various occupations.

18% of the respondents were administrators i.e. chief and assistant chiefs, and they possess valuable information regarding issues like population numbers, and existing projects in the area, if any. School teachers also constituted eighteen percent of the respondents. Very few water committee members or representatives were interviewed, of the 81 respondents they constituted only 6.2%, thus only five representatives were interviewed. The majority, 51% of the respondents were involved in various other occupations, like farming, pastoralism and to a smaller extent business. They also varied in age, the youngest being nineteen years of age and the oldest being sixty two years of age. Eighty six percent of the respondents were males and only 13.6% of them were females, but this was also occasioned by the fact that tradition in the areas surveyed does not permit women interaction with strangers and the males are perceived to have more knowledge about things and issues than most women. Many of the respondents have resided in these areas for a long time, but these periods varied from 1 (one) year of residence to sixty (60) years in residence. Teachers and business people are the ones who tended to have shorter periods of residence in the areas.

## 1-2 Main Occupations in Study Areas

The main occupations for adult men and women were found to be pastoralism and cultivation or farming besides the normal domestic chores for the women. In all areas surveyed forty eight percent of the people are engaged in both pastoralism and cultivation and 25% in pastoralism. Only 11% of the adult males are engaged in cultivation only. 34% of the women in all the areas are engaged in cultivation and domestic work and 33% are engaged in purely domestic work. It is noted though that many areas do not differentiate work done on basis of sex, except for the domestic chores like cooking and looking after children. The Samburu women for example are responsible for the putting up of houses as part of the domestic responsibilities.

Table 1: ADULT MEN OCCUPATION BY DISTRICT (%)

| | SAMBURU | BARINGO | KOIBATEK | LAIKIPIA |
|---|---|---|---|---|
| Patoralism | 37.5 | 20.0 | | 23.8 |
| Cultivation/Crop Farming | | | 66.7 | 16.7 |
| Pastoralism/Cultivation | 37.5 | 55.0 | 33.3 | 50.0 |
| Pastoralism/Cultivation/Business | | 5.0 | | |
| Pastoralism/Cultivation/Employm | 25.0 | 20.0 | | 9.5 |

It is evident that many people are engaged in pastoralism and crop farming. It was observed that large areas of Samburu and Baringo are not suitable for crop farming due to the hostile terrain, danger of damage to crops from elephants, and the lifestyle of the people i.e. nomadism, which does not favour growing of crops or permanent settlement in one area.

## 1-3 House Holds and Population

The fact that people keep moving also affected the distribution of households in any one particular area and made it difficult for respondents to quantify the number of households in one area. Thus the number of households given ranged from forty to one thousand in any one particular area. 19% of the respondents consistently put the number at three hundred households in their areas and 12% put it at 200 households. Thus approximate populations for many areas ranged from one hundred persons to twenty thousand persons. Sixteen percent reported population of two thousand people and seven percent reported populations of one thousand, two thousand five hundred and three thousand people respectively. Three percent reported population of ten thousand and only one percent reported twenty thousand people. Fifty percent of the people have an average family size of about ten members. It is noted though that the figures could be higher if they were to be pegged to an individual since polygamy is widely practiced in many areas of Samburu, Baringo and Koibatek and a few places in Laikipia. 30% of the people state that most homes have about five children aged below ten years. Twenty five percent state that they have about six children aged below ten years, while 17% puts it at four children.

## 1-4 Income

Many respondents found it difficult to estimate monthly incomes for the people in the area, since sources, needs and means of people are different. Others like farmers could only manage to estimate an annual income based on the harvests and sale of produce. 43% of the people in all the areas put their income at 2,500 to 5,000 Kenya Shillings per month. 38% put it at less than Kenya Shillings 2,500.00 per month. 15% put it at the 5,000 to 10,000 range, while only 4% put it at more than Kenya Shillings 10,000 per month.

Table 2: ESTIMATED MONTHLY INCOME BY DISTRICT (%)

| | Less KShs.2,500.00 | KShs 2,500-5,000 | KShs 5,000-10,000 | KShs. 10,000-20,000 |
|---|---|---|---|---|
| SAMBURU | 37.5 | 37.5 | 12.5 | 12.5 |
| BARINGO | 50.0 | 35.0 | 15.0 | |
| KOIBATEK | 33.3 | 66.7 | | |
| LAIKIPIA | 33.3 | 47.6 | 17.7 | 2.4 |

The major sources of income are selling of livestock and agricultural produce. Thirty five percent of the people said they got their income from selling livestock only. 35% got the income from combined sale of agricultural produce and livestock.

Table 3: MAJOR SOURCES OF HOUSEHOLD INCOME

| SOURCE | PERCENT | FREQUENCY |
|---|---|---|
| Agricultural Produce | 7.4 | 6 |
| Livestock | 34.6 | 2.8 |
| Other Products (Fish, Handicraft etc) | 1.2 | 1 |
| Commercial Activities | 1.2 | 1 |
| Salary/Part time/Wage | 1.2 | 1 |
| Agricultural Produce & Livestock | 34.6 | 28 |
| Livestock/Commercial activity (shops) | 14.8 | 12 |
| Produce/Commercial activity/Salary | 4.9 | 4 |
| Total | 100.0 | 81 |

These are the major sources of income in all the areas. Livestock auctions are held weekly in Samburu and Baringo districts where a lot of other commercial activity simultaneously takes place, including barter trade.

## 1-5 Infrastructure

It was observed that generally infrastructure is poorly developed in most areas, for example many roads are impassable making many areas inaccessible, the terrain is also rough, especially so in Samburu and Baringo. There are very few all weather roads. Other aspects of infrastructure also include electricity, telephone and water supply. 60% of all the areas surveyed do not have electricity, water supply, or telephone, and all these facilities are available in only 5% of the areas. In Baringo district 85% of the areas surveyed have none of these facilities, 56% of areas surveyed in Samburu also lack the facilities, at least 17% of all the districts have some form of water supply.

## 1-6 Public Service

Some of the Public Services available to the people are Government administrative offices, commercial centres, schools, hospitals and postal and police services. Most government offices which are closer to the people are manned by chiefs and their assistants and 69% of these offices are located within the areas surveyed. 93% of schools are also within the surveyed areas, 58% of the hospitals are located in the nearest towns from the sites. 70% of the areas have a commercial center or market, but in 80% of the areas there are no postal services so they have to seek this service in the nearest towns. The police are far in many areas with only 40% of the areas having any form of police service most of whom are attached to the local administrative office, they are administration policemen also known locally as APs.

## 1-7 Education

Education as gauged by school attendance at primary and secondary school level is low especially in Samburu and Baringo. 30% of all the study areas reported a primary school attendance rate of more that 75% while 54% of the areas report a secondary school attendance record of 0-25%.

Table 4: **PRIMARY SCHOOL ATTENDANCE BY DISTRICT (%)**

| | 0-25% | 25-50% | 50-75% | More than 75% |
|---|---|---|---|---|
| SAMBURU | 12.5 | 31.3 | 43.8 | 12.5 |
| BARINGO | 40.0 | 25.0 | 30.0 | 5.0 |
| KOIBATEK | | | | 100.0 |
| LAIKIPIA | 4.8 | 19.0 | 23.8 | 52.4 |

In comparison to secondary school attendance rates, primary school attendance is higher.

Table 5: **PRIMARY SCHOOL ATTENDANCE BY DISTRICT (%)**

| | 0-25% | 25-50% | 50-75% | More than 75% |
|---|---|---|---|---|
| SAMBURU | 68.8 | 25.0 | 6.3 | |
| BARINGO | 80.0 | 20.0 | | |
| KOIBATEK | | 33.3 | 33.3 | 33.3 |
| LAIKIPIA | 40.5 | 38.1 | 19.0 | 2.4 |

Many reasons are given for the low school attendance especially at secondary level. Many people cite financial constraints i.e. school fees as hindering advancement of pupils but is was also observed that many of the children are used as herdsboys, tending to the livestock. Also their nomadic nature cannot allow children proper settled education in one place.

CHAPTER TWO

# 2.0 WATER AVAILABILITY AND USES

## 2.1 Sources and Uses

The residents of these areas use many water sources some of which are equipped and many of which are non-equipped. 18% of the areas have piped water supply which is distributed through both individual connections and communal water points. This piped water is normally used for drinking and washing, very few people feed it to livestock, and this also applies to the water from kiosks/communal water points which is most commonly used for drinking and washing.

27% of the areas use boreholes with single water points, 10% of these boreholes are equipped by motorized pump, 10% by windmills and 7% are equipped with hand pumps. Water that is drawn from these boreholes is used for washing drinking and feeding livestock. 94% of the communities used non-equipped sources. These sources include hand dug wells, rivers, dams springs, and ponds. 50% of these sources consists of rivers/lakes/ponds, 20% include hand dug wells. Only 2% are springs. Major uses of water from here are again drinking, washing and livestock.

Other types of water sources include roof catchment, rock catchment, subsurface dams, sand dams, and others like earth pans. 60% of the people use the roof catchment water for drinking and washing purposes, though a small percentage feed it also to livestock.

## 2-2 Water Projects

There exist several water projects some of which have individual connections and other which don't.

The projects which serve people and institutions with individual connections are:

| | | | |
|---|---|---|---|
| 1. | Kisima Water Project | - | Samburu |
| 2. | Wamba Water Supply | - | Samburu |
| 3. | Marigat Water Supply | - | Baringo |
| 4. | Kimanju Water Project | - | Laikipia |
| 5. | Ntalian Water Project | - | Laikipia |
| 6. | Rugutu Water Project | - | Laikipia |
| 7. | Ol Arabel Water Project | - | Laikipia |
| 8. | Emening Water Supply | - | Koibatek |
| 9. | Nanyuki Municipal Water Supply | – | Laikipia |

10. Karaba Lariak Water Project - Laikipia
11. National Pipeline Water Supply – Laikipia
12. Nyahururu Water Supply - Laikipia

12% of these projects are government owned, 4% are owned by churches and missions, whereas 1% of them are owned by the community. The sources of water for these projects are mainly rivers/lakes/dams. 2% of them get their water from springs. They serve populations that range from 12 to 2000 persons. Most of the water tariff is based on flat rates, but there is tariff also based on metering, especially so for water distributed by the Municipal Councils or government. 2% of these projects give water free of charge. Information on consumption in months or years though could not be obtained. Many respondents could not give information on levels of water tariffs. Information obtained from other sources indicate that the tariffs could be as low as KShs.10.00 per month as high as KShs.160.00 per month.

There are other water projects that serve people by other means other than individual connections. These projects are:

1. Wamba Town Borehole - Samburu
2. AIC Water Supply - Samburu
3. Kadingding Dam - Baringo
4. Twala Borehole - Laikipia
5. Kurikuri Borehole - Laikipia
6. Aljijo Borehole - Laikipia
7. Olking'ei Borehole - Laikipia
8. Ngenia Water Project - Laikipia
9. Munyaka Borehole - Laikipia
10. Wamura Borehole - Laikipia
11. Lukusero Shallow Wells - Laikipia
12. East Laikipia Water Project - Laikipia
13. Ruai/Kugeria Water Project - Laikipia
14. Segera Borehole - Laikipia
15. Njogu-ini Borehole - Laikipia
16. Mutirithia Water Project - Laikipia
17. Ngobit Water Supply - Laikipia
18. Kinamba Catholic Mission Water Supply - Laikipia
19. Karaba Water Project - Laikipia
20. Kisima Catholic Church Borehole- Samburu

Although 75% of the respondents could not give infomation on ownership of these projects it turns out that 21% of them are owned by the community while the government, church and private individuals/organization own 1% each. They have as many as 6 water points and serve population that range from 2 families to 800 families, thus they serve a population as large as 10,000 persons. Methods of charging include metering, flat rates, and consumption. Others give their water free of charge. Although no information is available on consumption, the average family pays about KShs.10-KShs.360 a month in water tariffs. There are different charges for domestic use and livestock. Most projects charge about KShs.2.00 for one cow and 50 Cents for each sheep or goat per month. So consumption depends on the head of cattle or goats one individual owns.

## 2-3 Distance to Water Points

Many people walk long distances to reach particular water points, although presently because of the el-nino effects, thus much rain, there is comparatively plenty of available. On average it takes one fetching water 1-2 hours one way to get to a water point.

Table 6: AVERAGE DISTANCE TO A WATER POINT

| DISTANCE | PERCENT | FREQUENCY |
|---|---|---|
| 0 - 0.5 Km (less than 30minutes | 6.2 | 5 |
| 0.5 – 2 Km (30 min – 1 hour) | 22.2 | 18 |
| 2 – 4 Km (1-2 hours) | 40.7 | 33 |
| 4 Km (More than 2 hours) | 30.9 | 25 |

Maximum distances are rather long, it is reported that some people walk about 8 kilometres to get to water whereas some take half-day (about 6-8 hours) to get to particular water points. Eighty three percent (83%) of the respondents indicated that maximum distances taken involve walking more than 4 kilometres to get to water points.

## 2-4 Responsibility for Fetching Water

Information concerning the responsibility for fetching water showed that a big proportion of this activity is conducted by women. On the overall, within the four districts, adult women alone accounted for 45.7%, whereas adult women assisted by young girls accounted for 27.2%. Women are involved in all water fetching responsibilities, whereas only 2.5% of the respondents reported the involvement of men and women in fetching women. Where men and boys are involved in fetching water, they normally use bicycles or donkeys to carry the water on their backs, though in a few places especially in Laikipia, they also use bicycles and donkeys. It was noted that in all the districts, the responsibility for fetching water was mainly for the woman only. This demonstrated by percentages as follows; Samburu 56.3%,

Baringo 40% and Laikipa 47.%. It was noted that men are mostly involved in fetching water when there are severe shortages, otherwise in normal times is mainly left to women.

## 2-5 Water Uses:

Water uses for domestic and livestock purposes within the project area varies depending on the specific type of use. For washing clothes most people, 53.1% go to the river or communal water points. Rivers and communal water points are also popular for bathing especially in Samburu, Baringo and pastoral areas of Laikipia districts. In the highly settled areas of Laikipia and Koibatek districts, most people bathe in the houses. This can be attributed to the fact that these areas are more developed in terms of settlement patterns compared to the rest. Spring are few in all the districts and where they occur, they are mainly used for drinking water and livestock watering. Livestock are mainly taken to rivers to drink. 80.2% of the surveyed communities use rivers to feed their livestock with water. No communities reported that they provided water for their livestock within the homes except for the calves and young goats and sheep. The prevalence of using rivers, lakes and ponds for livestock significantly contributed to the movement of cattle over long distances in search of water. There are few communal water points in the project area. This can be explained by the small number developed water sources e.g. boreholes in the whole of the project area.

## 2-6 Water Shortages

Water shortages within the project area mainly occur during the dry season. 80.2% of the communities experience water shortages each year during the dry season. 12.3% of the communities reported shortages throughout the year, while 7.4% experience water shortage only during severe droughts. Some parts of Samburu, Baringo and Laikipia such as Wamba (Samburu) Nginyang and Kolowa (Baringo) and Mukogodo (Laikipia) water shortages are experienced almost throughout the year. The upper parts of Samburu (Poro), Koibatek, (Mumberes) and Laikipia (Kinamba) have higher annual rainfall amounts and are affected by water shortages mainly during the dry season.

People within the project area have few options when there are water shortages. According to the field survey results, over 90% of the people go to other water sources that may be nearest to them regardless of the quality of the water. In Samburu, 12.5% of the people try to decrease water uses because alternative water sources are not available. In Laikipia, about 9% of the people also decrease water, use in the case of shortages as they are in the permanent settlements and cannot move to water sources in times of drought. Many communities who are pastoralist in the project areas such as in Samburu and Baringo move to the nearest water points in times of shortages. This causes overcrowding in such areas and leads to environmental degradation.

## 2-7 Drinking Water Quality:

Based on the local people assessment, the quality of the water that they use for drinking purposes is not good. Over 69% of the respondents reported that the water that they use for drinking is not clear and it would require some form of treatment such as filtration, precipitation or boiling to improve its quality. Another 12.3% were of the opinion that even though the water they used for drinking was clear, it still required boiling to improve its quality. 18.5% of all the respondents reported that the water they used for drinking was clear and it did not require boiling before drinking.

This was emphasized by the fact that only 38% of the people reported that they boiled water before drinking while only about 4% filtered their water before drinking. The highest percentage of people who boil their water before drinking is in Laikipia and Baringo, where 45% of the respondents reported that people boil their water before drinking. In Samburu, 81% of the people do not boil their water before drinking.

## 2-8 Present Water Supply Conditions:

Presently, water is available within the project area. This can be attributed to the fact that the study as conducted in a relatively wet season (August). There is sufficient water at present but this only last up-to the end of the wet season. Most of the rivers, in the area are seasonal and dry up as soon as the wet season is over. Over 60% of the people reported the lack of sufficient water for both domestic and livestock purposes. Even during the wet season, availability of good quality drinking water is a problem especially in areas where there are no roof catchment practices such as Samburu and much of Baringo.

CHAPTER THREE

# 3.0 HEALTH AND SANITATION

## 3-1 Disposal of Refuse:

Availability of sanitary facilities is an important aspect of the health status of a community. Within the project area, the disposal of household refuse by the communities is by throwing it into the garden or bushes which is practiced by about 52% of the people. About 14% of the people have rubbish pits where they dispose of their refuse. Another 14% throw their refuse into rubbish pits and later burn, while 12% reported that they throw some of their refuse into the garden, rubbish pits and also burn when necessary.

## 3-2 Availability of Sanitary Facilities:

Sanitary facilities for use by the people in the project area are not diversified. On the overall, about 60% of the people have pits latrines, while about 40% do not have sanitary facilities. Most of the people in Samburu (68.8%) and Baringo (60%) districts do not have sanitary facilities, in Laikipia, 76.2% of those interviewed said that they have pits latrines. As a result of lack of sanitary facilities such as toilets, most of the communities in the project area defecate in the bush. 100% of all the surveyed communities in Samburu district defecate in the bush, while 95.0% of the communities in Baringo also defecate in the bush. In Laikipia, 31% of the surveyed communities (mainly in Mukogodo division) defecate in the bush. It was noted that pastoralist communities in the project area do not construct latrines mainly due to the fact that they keep moving from place to place in search of pasture (Nomadism). However, those who have settled in specific places especially near urban centers have constructed pit latrines. In Koibatek, one out of the three communities interviewed i.e. 33% defecate in the bush.

## 3-3 Knowledge and Incidence of Water Related Diseases:

Peoples knowledge of water related diseases in the four districts (project area) was found to be low. About 57% of those surveyed in the four districts indicated that most people do not have knowledge of water related diseases, while 44% indicated that most people know of water related diseases 56%, 60%, 100% and 50% in Samburu, Baringo, Koibatek and Laikipia respectively do not have knowledge on water related diseases. Laikipia has the highest number of people with knowledge on water related diseases who comprise 50% of all those surveyed in the district.

## 3-4 Diseases That People Suffer From:

Malaria and diarrhea are the two most common diseases that affect people in the project area. 42% of the surveyed communities said that malaria and diarrhea are the most common diseases they suffer from. However, when considering each

diseases separately, about 25% of the people indicated that malaria was the main disease in their area, with about 10% saying the same for serious diarrhoea. About 20% of the people indicated that they were affected by malaria , serious diarrhea and other diseases such as eye ailments.

On numbers of malaria and diarrhoea reported in the last one year it was found that these were difficult to estimate among the local people. For the number of deaths that can be associated to serious diarrhoea, about 24% of the surveyed communities estimated between 2 – 10 people had died in the last one year. 65% of the surveyed communities were not able to estimate the number of deaths attributable to these diseases.

Other diseases that affect people in the project area include colds and pneumonia, which accounted for 43% of reported cases and typhoid and amoebae related infections which accounted for 17% of the reported cases. Colds and pneumonia are prevalent in Laikipia, where they represent about 55% of other diseases, while typhoid and amoeba is common in Baringo, representing 25.0 of all other diseases reported. Kalazar and other eye related ailments were also reported in Baringo where they represented 15.0% of other diseases that affect people (other than malaria and diarrhoea).

CHAPTER FOUR

# 4.0 COMMUNITY AWARENESS AND ORGANISATION

## 4-1 Knowledge of Water Development Policy:

Awareness among communities of policies relating to their overall development is important. This is because such awareness would make communities more responsive and willing to play a role in development activities, in the process contributing to the sustainability of development projects in the future. Among the communities in the project area, there is an awareness level of government policy on water development. 70% of those surveyed indicated that they are aware of policy on water development. However, this varied significantly across districts, 80% in Baringo and 79% in Laikipia indicated that they were aware of government policy, while only 37% of the people in Samburu are aware of government policy on water development. In 68% of the communities visited, there existed water committees 49% of which are assisted by the government, 2.5% assisted by NGOs or churches and 16% based on traditional customs of the people. It was noted that existence of such committees in some areas was because of past or present existence of another water project near the proposed sites. Otherwise in areas where there had been no past or present water, there were no water committees in existence. Laikipia recorded the highest number of water committees assisted by the government which represented 75% of all the water committees in the project areas. In Samburu 25% of the surveyed communities had water committees based on traditional customs.

## 4-2 Requirements for Water Supply:

The people in the project areas expressed at least some form requirement for the development of water supply in their community. About 51% require both the development of a water source and the provision of equipment for water supply. From the filed observations, it was noted that most of the people would like the water supply to be extended through individual connections or to various convenient water points which would be close to the consumers. This would reduce distances to water sources and overcrowding at water points. Approximately 30% of the people in the project area would also require the development of water, provision of equipment building of an organization (water committees) and providing necessary management training to the water committees to make them more effective.

At the districts level, 44% in Samburu, 25% in Baringo, 67% in Koibatek and 64% in Laikipia expressed that they would require the development of a water source and provision of equipment.

Table 7: **COMMUNITY REQUIREMENTS FOR WATER SUPPLY IN THE PROJECT AREA:**

| Requirement | Percent | Frequency |
|---|---|---|
| Water source and equipment | 50.6 | 41 |
| Water source, equipment and training | 14.8 | 12 |
| Water source, equipment and organization | 14.8 | 12 |
| Water source, equipment and awareness | 9.9 | 8 |
| Water source only | 4.9 | 4 |
| Water source and financial assistance | 3.7 | 3 |
| Provision of equipment only | 1.2 | 1 |
| | 100 | 81 |

Development of water source, provision of equipment and awareness creation was required by 20% and 12.5% of the people in Baringo and Samburu respectively; while 45% in Baringo,. 37% in Samburu, 33% in Koibatek and 19% in Laikipia required development of water source, provision of equipment, building of organization and training for water supply in their communities.

It is therefore evident that development of water source, provision of equipment establishment of water committees and provision of management training are important requirements for water supply in the project area.

## 4-3 Community Role in Implementation:

Community participation by the local stakeholders is essential in any development undertaking. Participation can be assessed by the role that the community are willing and are capable to undertake at specific periods of project implementation, operation and management.

From the field study, it was found that there is a high level of willingness by the local communities to participate in the development of the groundwater resource in their areas. 56% of the people in the project areas are willing to share a part of the project cost and provide labour force for construction, operation and maintenance of the project. 31% of the people were willing to provide labour force for construction, operation and maintenance only. The rest of 13% would be willing either pay registration fees and water tariff in addition to providing labour and management.

Table 8: **ROLE THAT COMMUNITIES WOULD ACCEPT IN IMPLEMENTATION:**

| Role | Percent | Frequency |
|---|---|---|
| Share project and provide labour | 55.6 | 45 |
| Provide labour, management and operation | 30.9 | 25 |
| Share cost, registration fee and labour | 7.4 | 6 |
| Pay registration fee and water tariff | 2.5 | 2 |
| Pay water tariff and provide labour | 3.7 | 3 |
| | 100 | 81 |

Considering the role that community would be willing to play in implementation at the district level, 50% in Samburu, 70% in Baringo, 100% in Koibatek and 47.6% in Laikipia would be willing to share a part of the project cost and provide labour force for construction, operation and maintenance of the project. 40.5% in Laikipia, 20.0% in Baringo and 25% in Samburu would like to be involved only in the provision of labour force for construction, operation and maintenance of the project.

## 4-4 Capability to pay water tariffs:

To sustain the water project, there would be a need to pay water tariffs by the communities. Most of the people (73%) in the project would be capable to pay less that Kshs.150 per month. They specifically expressed the ability to pay between Ksh.50 to Ksh.100 per month as a water tariff. It was observed that this is the amount of money that is normally paid by those communities with existing water projects in the project area. 18.5% of the people would be willing to pay Kshs. 5 – 10 per day (Kshs. 150 – 300 per month) as water tariff. Only about 7% of the people would afford to pay between Kshs. 10 – 20 per day as water tariff. 1.2% of the people were not willing to pay water tariff for the water project.

In Samburu, about 19% of the communities would be willing to pay between Kshs. 10 to Kshs 20 (Kshs. 300 – 600 per month) as water tariff, while the Baringo 10% of the communities would be willing to pay as much.

## 4-5 Conclusions and Recommendations:

Based on the result of the field survey, it is evident that the communities in the project areas mainly rely on rivers for all their daily water needs. The quality of the water that is available to them is low which can be a direct cause to the incidence of diarrhoea diseases. The lack of sanitation facilities in Samburu, most parts of Baringo and in some parts of Laikipia (Mukogodo division) could also cause contamination to the available water sources for community use.

Peoples knowledge of government policy still needs improvement to ensure sustainability of water projects. The study team noted several water projects that have stalled due to lack of community involvement in their operations. Though about 68% of the communities reported the existence of water committees in their

area, it is important to note that most of the committees have been set up to manage some specific projects that already exist or are expected near future. It is therefore necessary to set up water committees for water projects before they are implemented to ensure full involvement of the people, at all stages of projects development.

Most communities expressed the need to develop water sources, equip them and put in place a management committee to oversee its operations. This is strengthened by the fact that the majority of the people are willing to share in the project cost, and provide labour for construction, management and operation. Over 98% of the people are also willing to pay a monthly fee (water tariff) to ensure that they get sufficient water for their needs. In view of these, the following activities are recommended.

1. A one week training of trainers workshop involving district level officers from the water office, chiefs and community development assistants (CDAs) be conducted. Its aim would be to mobilize the local people to form water committees.

2. The district level officers together with the (CDAs) and chief mobilize communities to form and officially register water committees for each proposed area.

3. The water committee members be offered training on water management to ensure sustainability of the projects.

4. Decisions on the level of involvement (especially and amounts involved) and the monthly water tariffs should be decided upon by the communities themselves through facilitation by the district water office, consultants and the Community Development Assistants.

5. All these activities should preferably be implemented alongside the drilling activity. If possible it could be completed before the drilling starts.

6. Overall supervision of these activities would best be done by the consultancy firm together with the JICA study team/Nippon Koei.

# APPENDIX

## INTERVIEW SCHEDULE – SAMBURU DISTRICT

| DATE | SITES | | REMARKS |
|---|---|---|---|
| | SUB-LOCATION | VILLAGE/COMMUNITY | |
| 31-7-98 | SIAMBU | SIAMBU | DONE |
| | PARTUK | PARTUK VILLAGE | DONE |
| | LONKEWAN | LONKEWAN | DONE |
| | AMAYA | AMAYA | DONE |
| | TINGA | NKOPELIANI | DONE |
| 1-8-98 | GARMA | NKURDAI | DONE |
| | ILKILORITI | LEKEMANJA | DONE |
| | NAUNERI | NONDOTO | DONE |
| | NENKEREPUS | NENKEREPUS | DONE |
| 2-8-98 | SESIA | NGUTUKOLMUGET | DONE |
| | DIKIR | DIKIR | DONE |
| | ILPUS | ILPUS | DONE |
| 3-8-98 | WAMBA | WAMBA TOWN | DONE |
| | MATAKWANII | WAMBA TOWN | DONE |
| | MATAKWANII | MATAKWANII | NO RESIDENTS |
| | KOITING | LENGUSAKA | DONE |
| | NGONGOTIAN | NGONGOTIAN | NOT ACCESSIBLE |
| 4-8-98 | ILMISIGOYI | ILMISIGOYI | NO RESIDENTS |
| | OPIROI | OPIROI | CANCELLED DUE TO INSECURITY IN THE AREA |
| | MABATI | MABATA | CANCELLED - INSECURITY |
| | MBUKOI | MBUKOI | CANCELLED – INSECURITY |
| | NKEJEMUNY | NKEJEMUNY | DONE |

## INTERVIEW SCHEDULE – BARINGO DISTRICT

| DATE | SITES | | REMARKS |
|---|---|---|---|
| | SUB-LOCATION | VILLAGE/COMMUNITY | |
| 5-8-98 | KISERIAN | KISERIAN CENTRE | DONE |
| | ARABEL | BARATALUK | DONE |
| | LUGUS | LELERAI | DONE |
| 6-8-98 | LORUK | LORUK | DONE |
| | SIBILO | SIBILO | DONE |
| | YATOI | MARIGAT | DONE |
| | TILINGWO | TILONGWO | DONE |
| | BARPELO | BARPELO | DONE |
| 7-8-98 | NGINYANG EAST | ORO | DONE |
| | KOSITEI | KATUKUMWOK | DONE |
| | LORUK | NGARATUKO | DONE |
| | NGINYANG EAST | NGINYANG | DONE |
| 8-8-98 | CHEBINYING | NYIMBEI | DONE |
| | CHECINYING | CHEBINYING | DONE |
| | TANGULBEI | SERONI | DONE |
| | KAPTUYA | NANG'ARWA | DONE |
| | ORUS | KOKWAPANG'A | DONE |
| | CHURO | CHURO | DONE |
| 9-8-98 | KASIELA | KASIELA | DONE |
| | KASIELA | SINONI | DONE |
| NOT DONE | KOLOA | KOLOA | LACK OF TIME |
| | AKORET | AKORET | INACCESSIBLE |
| | AMAYA | AMAYA | ALREADY DONE IN SAMBURU DISTRICT |

## INTERVIEW SCHEDULE – KOIBATEK DISTRICT

| DATE | SITES | | REMARKS |
|---|---|---|---|
| | SUB-LOCATION | VILLAGE/COMMUNITY | |
| 10-8-98 | EQUATOR | MUMBERES | DONE |
| 10-8-98 | EMENING | EMENING | DONE |
| 10-8-98 | TORONGO | TORONGO | DONE |

## INTERVIEW SCHEDULE – LAIKIPIA DISTRICT

| DATE | SITES | | REMARKS |
|---|---|---|---|
| | SUB-LOCATION | VILLAGE/COMMUNITY | |
| 12-8-98 | TURA | TURA/KIMANJO | DONE |
| | EWASO | EWASO | DONE |
| | TURA | TURA | DONE |
| | ILPOLEI | ILPOLEI/TWALA | DONE |
| | OLOI BORSOIT | OLOI BORSOIT | DONE |
| 13-8-98 | KURIKURI | KURIKURI | DONE |
| | TURANA | SOITONDO | DONE |
| | ALJIJO | ILGWESI | DONE |
| | KING'EI | NKWERINITO | DONE |
| | NAIBOR | NAIBOR | DONE |
| | UMANDE | NGENIA (SECONDARY SCHOOL) | DONE |
| | UMANDE | MWIRERI | DONE |
| 14-8-98 | MUHONIA | WITHARE | DONE |
| | NGOBIT | WAMURA | DONE |
| | WIYUMIRIRIE | IMENNTI (I) | DONE |
| | WIYUMIRIRIE | IMENTI (II) | DONE |
| | MUHONIA | SEGERA | DONE |
| | WITHARE | MWITURIA (PRIMARY SCHOOL) | DONE |
| | MUHONIA | NGOBIT CENTRE | DONE |
| | KARAI | WAICHKEHERI | DONE |
| | TIGITHI | NGARING'IRO | DONE |
| | MATANYA | THOME | DONE |

| | SUB-LOCATION | VILLAGE/COMMUNITY | |
|---|---|---|---|
| 15-8-98 | NGARE NDARE | NGARE NDARE (ANADUNGURU) | DONE |
| | NGARE NDARE | LUKUSERO | DONE |
| | ETHI | WIYUMIRIRIE | DONE |
| | NTURUKUMA | NTURUKUMA | DONE |
| | RUGUTU | MUTIRITHIA | DONE |
| | MARURA | SWEET WATER | DONE |
| | MATANYA | TIGITHI (SECONDARY SCHOOL) | DONE |
| 16-8-98 | THIGIO | SERIA/OL'NGARUA (SECONDARY SCHOOL) | DONE |
| | THIGIO | KIAMBOGO | DONE |
| | MITHIGA | TANDARE (PRIMARY SCHOOL) | DONE |
| | MITHIGA | MITETA | DONE |
| | MITHIGA | KAMOGI | DONE |
| | KINAMBA | KINAMBA TOWN | DONE |
| | MWENJE | NDINDIKA | DONE |
| | KINAMBA | NAIGERI | DONE |
| 17-8-98 | CHERETA | CHERETA | DONE |
| | MUHOTETU/MUTANGA | MUTANGA CENTRE | DONE |
| | MERWA | GATUNDIA | DONE |
| | MERWA | CHUNGUTI | DONE |

ENUMER NAME OF ENUMERATOR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| Kamau | 1 | 40 | 49.4 | 49.4 | 49.4 |
| Ondiege | 2 | 41 | 50.6 | 50.6 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

DIST NAME OF DISTRICT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| samburu | 1 | 16 | 19.8 | 19.8 | 19.8 |
| baringo | 2 | 20 | 24.7 | 24.7 | 44.4 |
| Koibatek | 3 | 3 | 3.7 | 3.7 | 48.1 |
| Laikipia | 4 | 42 | 51.9 | 51.9 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

DIVIS NAME OF DIVISION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| kirisia | 1 | 4 | 4.9 | 4.9 | 4.9 |
| lorroki | 2 | 7 | 8.6 | 8.6 | 13.6 |
| wamba | 3 | 5 | 6.2 | 6.2 | 19.8 |
| kipsaraman | 4 | 3 | 3.7 | 3.7 | 23.5 |
| tangulbei | 5 | 4 | 4.9 | 4.9 | 28.4 |
| mukutan | 6 | 1 | 1.2 | 1.2 | 29.6 |
| muchongoi | 7 | 4 | 4.9 | 4.9 | 34.6 |
| nginyang | 8 | 3 | 3.7 | 3.7 | 38.3 |
| kolowa | 9 | 2 | 2.5 | 2.5 | 40.7 |
| marigat | 10 | 3 | 3.7 | 3.7 | 44.4 |
| mumberes | 13 | 1 | 1.2 | 1.2 | 45.7 |
| torongo | 14 | 1 | 1.2 | 1.2 | 46.9 |
| mukogodo | 15 | 10 | 12.3 | 12.3 | 59.3 |
| rumuruti | 16 | 3 | 3.7 | 3.7 | 63.0 |
| ngarua | 17 | 9 | 11.1 | 11.1 | 74.1 |
| lamuria | 18 | 12 | 14.8 | 14.8 | 88.9 |
| central | 19 | 7 | 8.6 | 8.6 | 97.5 |
| nkarone | 20 | 1 | 1.2 | 1.2 | 98.8 |
| | 59 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

LOCATION NAME OF LOCATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| poro | 3 | 1 | 1.2 | 1.2 | 1.2 |
| loosuk | 4 | 1 | 1.2 | 1.2 | 2.5 |
| kisima | 7 | 3 | 3.7 | 3.7 | 6.2 |
| wamba | 8 | 3 | 3.7 | 3.7 | 9.9 |
| londungokwe | 10 | 1 | 1.2 | 1.2 | 11.1 |
| loyamorok | 12 | 2 | 2.5 | 2.5 | 13.6 |
| churo | 14 | 1 | 1.2 | 1.2 | 14.8 |
| kolowa | 16 | 1 | 1.2 | 1.2 | 16.0 |
| marigat | 19 | 1 | 1.2 | 1.2 | 17.3 |
| mukutan | 21 | 1 | 1.2 | 1.2 | 18.5 |
| emenining | 24 | 1 | 1.2 | 1.2 | 19.8 |
| nanyuki | 25 | 2 | 2.5 | 2.5 | 22.2 |
| tigithi | 26 | 2 | 2.5 | 2.5 | 24.7 |
| segera | 27 | 2 | 2.5 | 2.5 | 27.2 |
| ngobit | 28 | 1 | 1.2 | 1.2 | 28.4 |
| sirrima | 29 | 9 | 11.1 | 11.1 | 39.5 |
| daiga | 30 | 3 | 3.7 | 3.7 | 43.2 |
| mukogodo | 31 | 1 | 1.2 | 1.2 | 44.4 |
| ilngwesi | 32 | 3 | 3.7 | 3.7 | 48.1 |
| ildigiri | 33 | 2 | 2.5 | 2.5 | 50.6 |
| marmanet | 34 | 2 | 2.5 | 2.5 | 53.1 |
| gituamba | 41 | 2 | 2.5 | 2.5 | 55.6 |
| muhotetu | 42 | 2 | 2.5 | 2.5 | 58.0 |
| kinamba | 43 | 6 | 7.4 | 7.4 | 65.4 |
| amaya | 44 | 2 | 2.5 | 2.5 | 67.9 |
| kirimon | 45 | 1 | 1.2 | 1.2 | 69.1 |
| baawa | 46 | 1 | 1.2 | 1.2 | 70.4 |
| lodokojek | 47 | 1 | 1.2 | 1.2 | 71.6 |
| arabel | 48 | 1 | 1.2 | 1.2 | 72.8 |
| nkarone | 49 | 1 | 1.2 | 1.2 | 74.1 |
| sibilo | 50 | 3 | 3.7 | 3.7 | 77.8 |
| loiwat | 51 | 1 | 1.2 | 1.2 | 79.0 |
| kositei | 52 | 3 | 3.7 | 3.7 | 82.7 |
| chebinyiny | 53 | 4 | 4.9 | 4.9 | 87.7 |
| sirata oirobi | 54 | 3 | 3.7 | 3.7 | 91.4 |
| ilpolei | 55 | 2 | 2.5 | 2.5 | 93.8 |
| mununyot | 57 | 1 | 1.2 | 1.2 | 95.1 |
| makurian | 59 | 1 | 1.2 | 1.2 | 96.3 |
| kiserian | 61 | 1 | 1.2 | 1.2 | 97.5 |
| mumberes | 63 | 1 | 1.2 | 1.2 | 98.8 |
| torongo | 64 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

SUBLOC NAME OF SUBLOCATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| siambu | 1 | 1 | 1.2 | 1.2 | 1.2 |
| partuk | 2 | 1 | 1.2 | 1.2 | 2.5 |
| lonkewan | 3 | 1 | 1.2 | 1.2 | 3.7 |
| amaya | 4 | 1 | 1.2 | 1.2 | 4.9 |
| tinga | 5 | 1 | 1.2 | 1.2 | 6.2 |
| garma | 6 | 1 | 1.2 | 1.2 | 7.4 |
| ilkiroriti | 7 | 2 | 2.5 | 2.5 | 9.9 |
| nauneri | 8 | 1 | 1.2 | 1.2 | 11.1 |
| nenkerepus | 9 | 1 | 1.2 | 1.2 | 12.3 |
| sesia | 10 | 1 | 1.2 | 1.2 | 13.6 |
| dikir | 11 | 1 | 1.2 | 1.2 | 14.8 |
| wamba | 13 | 1 | 1.2 | 1.2 | 16.0 |
| matakwanii | 14 | 1 | 1.2 | 1.2 | 17.3 |
| koiting | 15 | 1 | 1.2 | 1.2 | 18.5 |
| kiserian | 18 | 1 | 1.2 | 1.2 | 19.8 |
| arabel | 19 | 1 | 1.2 | 1.2 | 21.0 |
| lugus | 20 | 1 | 1.2 | 1.2 | 22.2 |
| loruk | 21 | 2 | 2.5 | 2.5 | 24.7 |
| sibilo | 22 | 1 | 1.2 | 1.2 | 25.9 |
| Yatoi | 24 | 1 | 1.2 | 1.2 | 27.2 |
| tilingwo | 25 | 1 | 1.2 | 1.2 | 28.4 |
| barpelo | 26 | 1 | 1.2 | 1.2 | 29.6 |
| ngiyang east | 27 | 2 | 2.5 | 2.5 | 32.1 |
| chebinyiny | 28 | 2 | 2.5 | 2.5 | 34.6 |
| tangulbei | 29 | 1 | 1.2 | 1.2 | 35.8 |
| kaptuya | 30 | 1 | 1.2 | 1.2 | 37.0 |
| orus | 31 | 1 | 1.2 | 1.2 | 38.3 |
| churo | 32 | 1 | 1.2 | 1.2 | 39.5 |
| kasiela | 33 | 2 | 2.5 | 2.5 | 42.0 |
| equator | 35 | 1 | 1.2 | 1.2 | 43.2 |
| emening | 36 | 1 | 1.2 | 1.2 | 44.4 |
| torongo | 37 | 1 | 1.2 | 1.2 | 45.7 |
| tura | 38 | 2 | 2.5 | 2.5 | 48.1 |
| ewaso | 39 | 1 | 1.2 | 1.2 | 49.4 |
| ilpolei | 40 | 1 | 1.2 | 1.2 | 50.6 |
| oloi borsoit | 41 | 1 | 1.2 | 1.2 | 51.9 |
| kurikuri | 42 | 1 | 1.2 | 1.2 | 53.1 |
| turana | 43 | 1 | 1.2 | 1.2 | 54.3 |
| aljijo | 44 | 1 | 1.2 | 1.2 | 55.6 |
| king'ei | 45 | 1 | 1.2 | 1.2 | 56.8 |
| naibor | 46 | 1 | 1.2 | 1.2 | 58.0 |
| umande | 47 | 2 | 2.5 | 2.5 | 60.5 |
| muhonia | 48 | 3 | 3.7 | 3.7 | 64.2 |
| ngobit | 49 | 1 | 1.2 | 1.2 | 65.4 |
| wiyumiririe | 50 | 2 | 2.5 | 2.5 | 67.9 |
| withare | 51 | 2 | 2.5 | 2.5 | 70.4 |

| | | | | | |
|---|---|---|---|---|---|
| karai | 52 | 1 | 1.2 | 1.2 | 71.6 |
| tigithi | 53 | 1 | 1.2 | 1.2 | 72.8 |
| matanya | 54 | 2 | 2.5 | 2.5 | 75.3 |
| ngare ndare | 55 | 2 | 2.5 | 2.5 | 77.8 |
| ethi | 56 | 1 | 1.2 | 1.2 | 79.0 |
| nturukuma | 57 | 1 | 1.2 | 1.2 | 80.2 |
| rugutu | 58 | 1 | 1.2 | 1.2 | 81.5 |
| marura | 59 | 1 | 1.2 | 1.2 | 82.7 |
| thigio | 60 | 2 | 2.5 | 2.5 | 85.2 |
| mithiga | 61 | 3 | 3.7 | 3.7 | 88.9 |
| kinamba | 62 | 2 | 2.5 | 2.5 | 91.4 |
| muhotetu/mutanga | 64 | 1 | 1.2 | 1.2 | 92.6 |
| merwa | 65 | 2 | 2.5 | 2.5 | 95.1 |
| kositei | 66 | 1 | 1.2 | 1.2 | 96.3 |
| nkejemuny | 67 | 1 | 1.2 | 1.2 | 97.5 |
| mwenje | 68 | 1 | 1.2 | 1.2 | 98.8 |
| chereta | 69 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

VILLAGE NAME OF VILLAGE\AREA\COMMUNITY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| siambu | 1 | 1 | 1.2 | 1.2 | 1.2 |
| partuk | 2 | 1 | 1.2 | 1.2 | 2.5 |
| lonkewan | 3 | 2 | 2.5 | 2.5 | 4.9 |
| amaya | 4 | 1 | 1.2 | 1.2 | 6.2 |
| nkopeliani | 5 | 1 | 1.2 | 1.2 | 7.4 |
| lekemanja | 7 | 1 | 1.2 | 1.2 | 8.6 |
| nondoto | 8 | 1 | 1.2 | 1.2 | 9.9 |
| nenkerepus | 9 | 1 | 1.2 | 1.2 | 11.1 |
| ngutukolmuget | 10 | 1 | 1.2 | 1.2 | 12.3 |
| dikir | 11 | 1 | 1.2 | 1.2 | 13.6 |
| wamba | 13 | 2 | 2.5 | 2.5 | 16.0 |
| lengusaka | 15 | 1 | 1.2 | 1.2 | 17.3 |
| kiserian centre | 18 | 1 | 1.2 | 1.2 | 18.5 |
| bartaluk | 19 | 1 | 1.2 | 1.2 | 19.8 |
| lelerai | 20 | 1 | 1.2 | 1.2 | 21.0 |
| loruk | 21 | 1 | 1.2 | 1.2 | 22.2 |
| sibilo | 22 | 1 | 1.2 | 1.2 | 23.5 |
| marigat | 23 | 1 | 1.2 | 1.2 | 24.7 |
| tilingwo | 24 | 1 | 1.2 | 1.2 | 25.9 |
| barpelo | 25 | 1 | 1.2 | 1.2 | 27.2 |
| oro | 26 | 1 | 1.2 | 1.2 | 28.4 |
| katukumwok | 27 | 1 | 1.2 | 1.2 | 29.6 |
| ngaratuko | 28 | 1 | 1.2 | 1.2 | 30.9 |
| nginyang | 29 | 1 | 1.2 | 1.2 | 32.1 |
| nyimbei | 30 | 1 | 1.2 | 1.2 | 33.3 |
| chebinyiny | 31 | 1 | 1.2 | 1.2 | 34.6 |
| seroni | 32 | 1 | 1.2 | 1.2 | 35.8 |

| | | | | | |
|---|---|---|---|---|---|
| nang'arwa | 33 | 1 | 1.2 | 1.2 | 37.0 |
| kokwapang'a | 34 | 1 | 1.2 | 1.2 | 38.3 |
| churo | 35 | 1 | 1.2 | 1.2 | 39.5 |
| kasiela | 36 | 1 | 1.2 | 1.2 | 40.7 |
| sinoni | 37 | 1 | 1.2 | 1.2 | 42.0 |
| mumberes | 39 | 1 | 1.2 | 1.2 | 43.2 |
| emening | 40 | 1 | 1.2 | 1.2 | 44.4 |
| torongo centre | 41 | 1 | 1.2 | 1.2 | 45.7 |
| ewaso | 43 | 1 | 1.2 | 1.2 | 46.9 |
| tura | 44 | 2 | 2.5 | 2.5 | 49.4 |
| ilpolei twala | 45 | 1 | 1.2 | 1.2 | 50.6 |
| oloi borsoit | 46 | 1 | 1.2 | 1.2 | 51.9 |
| kurikuri | 47 | 1 | 1.2 | 1.2 | 53.1 |
| soitoundo | 48 | 1 | 1.2 | 1.2 | 54.3 |
| ilgwesi | 49 | 1 | 1.2 | 1.2 | 55.6 |
| nkwerinito | 50 | 1 | 1.2 | 1.2 | 56.8 |
| naibor | 51 | 1 | 1.2 | 1.2 | 58.0 |
| ngenia secondary sch | 52 | 1 | 1.2 | 1.2 | 59.3 |
| mwireri | 53 | 2 | 2.5 | 2.5 | 61.7 |
| withare | 54 | 2 | 2.5 | 2.5 | 64.2 |
| wamura | 55 | 1 | 1.2 | 1.2 | 65.4 |
| imenti 1 | 56 | 1 | 1.2 | 1.2 | 66.7 |
| imenti 2 | 57 | 1 | 1.2 | 1.2 | 67.9 |
| segera | 58 | 1 | 1.2 | 1.2 | 69.1 |
| mwituria primary sch | 59 | 1 | 1.2 | 1.2 | 70.4 |
| ngobit centre | 60 | 1 | 1.2 | 1.2 | 71.6 |
| waichakeheri | 61 | 1 | 1.2 | 1.2 | 72.8 |
| ngare ngiro (lamuria | 62 | 1 | 1.2 | 1.2 | 74.1 |
| thome | 63 | 1 | 1.2 | 1.2 | 75.3 |
| ngare ndare | 64 | 1 | 1.2 | 1.2 | 76.5 |
| nturukuma | 66 | 1 | 1.2 | 1.2 | 77.8 |
| kinamba | 72 | 1 | 1.2 | 1.2 | 79.0 |
| chereta | 73 | 1 | 1.2 | 1.2 | 80.2 |
| muhotetu/mutanga | 74 | 1 | 1.2 | 1.2 | 81.5 |
| kisima town | 76 | 1 | 1.2 | 1.2 | 82.7 |
| nkejemuny | 77 | 1 | 1.2 | 1.2 | 84.0 |
| lukusero | 78 | 1 | 1.2 | 1.2 | 85.2 |
| wiyumiririe | 79 | 1 | 1.2 | 1.2 | 86.4 |
| mutirithia | 80 | 1 | 1.2 | 1.2 | 87.7 |
| sweetwaters | 81 | 1 | 1.2 | 1.2 | 88.9 |
| tigithi school | 82 | 1 | 1.2 | 1.2 | 90.1 |
| kiambogo | 84 | 1 | 1.2 | 1.2 | 91.4 |
| ndindika | 85 | 2 | 2.5 | 2.5 | 93.8 |
| muteta | 86 | 1 | 1.2 | 1.2 | 95.1 |
| kamugi | 87 | 1 | 1.2 | 1.2 | 96.3 |
| naigera | 88 | 1 | 1.2 | 1.2 | 97.5 |
| chunguti | 89 | 1 | 1.2 | 1.2 | 98.8 |
| gatundia | 90 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

GEOBSER GENERAL OBSERVATION BY ENUMERATOR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| A small township | 1 | 27 | 33.3 | 33.3 | 33.3 |
| A village | 2 | 25 | 30.9 | 30.9 | 64.2 |
| Population center no | 3 | 29 | 35.8 | 35.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q1INTOCC INTERVIEWEE'S OCCUPATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| Administrator (Chief | 1 | 15 | 18.5 | 18.5 | 18.5 |
| School teacher | 2 | 15 | 18.5 | 18.5 | 37.0 |
| clergyman | 3 | 4 | 4.9 | 4.9 | 42.0 |
| Water Committee Repr | 6 | 5 | 6.2 | 6.2 | 48.1 |
| Other (farmer, pasto | 7 | 42 | 51.9 | 51.9 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q1AGE INTERVIEWEE'S AGE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 19 | 1 | 1.2 | 1.2 | 1.2 |
| | 20 | 3 | 3.7 | 3.7 | 4.9 |
| | 21 | 2 | 2.5 | 2.5 | 7.4 |
| | 22 | 2 | 2.5 | 2.5 | 9.9 |
| | 25 | 6 | 7.4 | 7.4 | 17.3 |
| | 27 | 1 | 1.2 | 1.2 | 18.5 |
| | 28 | 2 | 2.5 | 2.5 | 21.0 |
| | 29 | 2 | 2.5 | 2.5 | 23.5 |
| | 30 | 5 | 6.2 | 6.2 | 29.6 |
| | 31 | 4 | 4.9 | 4.9 | 34.6 |
| | 32 | 4 | 4.9 | 4.9 | 39.5 |
| | 33 | 2 | 2.5 | 2.5 | 42.0 |
| | 34 | 3 | 3.7 | 3.7 | 45.7 |
| | 35 | 3 | 3.7 | 3.7 | 49.4 |

| | | | | |
|---|---|---|---|---|
| 36 | 2 | 2.5 | 2.5 | 51.9 |
| 37 | 5 | 6.2 | 6.2 | 58.0 |
| 38 | 3 | 3.7 | 3.7 | 61.7 |
| 39 | 2 | 2.5 | 2.5 | 64.2 |
| 40 | 4 | 4.9 | 4.9 | 69.1 |
| 42 | 4 | 4.9 | 4.9 | 74.1 |
| 43 | 3 | 3.7 | 3.7 | 77.8 |
| 45 | 1 | 1.2 | 1.2 | 79.0 |
| 46 | 2 | 2.5 | 2.5 | 81.5 |
| 47 | 1 | 1.2 | 1.2 | 82.7 |
| 48 | 2 | 2.5 | 2.5 | 85.2 |
| 49 | 2 | 2.5 | 2.5 | 87.7 |
| 50 | 3 | 3.7 | 3.7 | 91.4 |
| 52 | 2 | 2.5 | 2.5 | 93.8 |
| 53 | 1 | 1.2 | 1.2 | 95.1 |
| 56 | 2 | 2.5 | 2.5 | 97.5 |
| 60 | 1 | 1.2 | 1.2 | 98.8 |
| 62 | 1 | 1.2 | 1.2 | 100.0 |
| Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q1SEX INTERVIEWEE'S SEX

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| Male | 1 | 70 | 86.4 | 86.4 | 86.4 |
| Female | 2 | 11 | 13.6 | 13.6 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q1RESI INTERVIEWEE'S PERIOD OF RESIDENCE IN THE AREA

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 1 | 1.2 | 1.2 | 1.2 |
| | 2 | 3 | 3.7 | 3.7 | 4.9 |
| | 3 | 2 | 2.5 | 2.5 | 7.4 |
| | 4 | 2 | 2.5 | 2.5 | 9.9 |
| | 5 | 3 | 3.7 | 3.7 | 13.6 |
| | 6 | 4 | 4.9 | 4.9 | 18.5 |
| | 7 | 1 | 1.2 | 1.2 | 19.8 |
| | 8 | 5 | 6.2 | 6.2 | 25.9 |
| | 10 | 5 | 6.2 | 6.2 | 32.1 |
| | 11 | 2 | 2.5 | 2.5 | 34.6 |

| | | | | |
|---|---|---|---|---|
| 12 | 1 | 1.2 | 1.2 | 35.8 |
| 13 | 1 | 1.2 | 1.2 | 37.0 |
| 14 | 1 | 1.2 | 1.2 | 38.3 |
| 15 | 1 | 1.2 | 1.2 | 39.5 |
| 18 | 2 | 2.5 | 2.5 | 42.0 |
| 19 | 1 | 1.2 | 1.2 | 43.2 |
| 20 | 5 | 6.2 | 6.2 | 49.4 |
| 22 | 2 | 2.5 | 2.5 | 51.9 |
| 24 | 2 | 2.5 | 2.5 | 54.3 |
| 25 | 5 | 6.2 | 6.2 | 60.5 |
| 26 | 1 | 1.2 | 1.2 | 61.7 |
| 27 | 2 | 2.5 | 2.5 | 64.2 |
| 28 | 2 | 2.5 | 2.5 | 66.7 |
| 29 | 1 | 1.2 | 1.2 | 67.9 |
| 30 | 7 | 8.6 | 8.6 | 76.5 |
| 32 | 1 | 1.2 | 1.2 | 77.8 |
| 33 | 1 | 1.2 | 1.2 | 79.0 |
| 34 | 2 | 2.5 | 2.5 | 81.5 |
| 35 | 1 | 1.2 | 1.2 | 82.7 |
| 36 | 1 | 1.2 | 1.2 | 84.0 |
| 37 | 2 | 2.5 | 2.5 | 86.4 |
| 38 | 1 | 1.2 | 1.2 | 87.7 |
| 40 | 1 | 1.2 | 1.2 | 88.9 |
| 42 | 1 | 1.2 | 1.2 | 90.1 |
| 43 | 1 | 1.2 | 1.2 | 91.4 |
| 45 | 1 | 1.2 | 1.2 | 92.6 |
| 46 | 1 | 1.2 | 1.2 | 93.8 |
| 48 | 1 | 1.2 | 1.2 | 95.1 |
| 50 | 1 | 1.2 | 1.2 | 96.3 |
| 52 | 1 | 1.2 | 1.2 | 97.5 |
| 56 | 1 | 1.2 | 1.2 | 98.8 |
| 60 | 1 | 1.2 | 1.2 | 100.0 |
| Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2MENOCC ADULT MEN'S OCCUPATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| Pastoralist | 1 | 20 | 24.7 | 24.7 | 24.7 |
| cultivator/crop farm | 2 | 9 | 11.1 | 11.1 | 35.8 |
| pastoralist/cultivat | 6 | 39 | 48.1 | 48.1 | 84.0 |
| pastoralist/cult/emp | 7 | 1 | 1.2 | 1.2 | 85.2 |
| past./cult./emp./bus | 8 | 12 | 14.8 | 14.8 | 100.0 |
| Total | | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2WOCC ADULT WOMEN'S OCCUPATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| cultivator/crop farm | 2 | 4 | 4.9 | 4.9 | 4.9 |
| Other | 5 | 27 | 33.3 | 33.3 | 38.3 |
| pastoralist/cultivat | 6 | 3 | 3.7 | 3.7 | 42.0 |
| pastoralist/cult/emp | 7 | 3 | 3.7 | 3.7 | 45.7 |
| past./cult./emp./bus | 8 | 2 | 2.5 | 2.5 | 48.1 |
| pastoralist/domestic | 9 | 5 | 6.2 | 6.2 | 54.3 |
| cultivator/domestic | 10 | 28 | 34.6 | 34.6 | 88.9 |
| cultivator/pastorali | 11 | 9 | 11.1 | 11.1 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2NHHS APPROXIMATE NUMBER OF HOUSEHOLDS IN THE SUBLOCATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 40 | 1 | 1.2 | 1.2 | 1.2 |
| | 48 | 1 | 1.2 | 1.2 | 2.5 |
| | 55 | 1 | 1.2 | 1.2 | 3.7 |
| | 68 | 1 | 1.2 | 1.2 | 4.9 |
| | 100 | 6 | 7.4 | 7.4 | 12.3 |
| | 150 | 6 | 7.4 | 7.4 | 19.8 |
| | 200 | 10 | 12.3 | 12.3 | 32.1 |
| | 230 | 1 | 1.2 | 1.2 | 33.3 |
| | 250 | 3 | 3.7 | 3.7 | 37.0 |
| | 300 | 15 | 18.5 | 18.5 | 55.6 |
| | 350 | 2 | 2.5 | 2.5 | 58.0 |
| | 364 | 1 | 1.2 | 1.2 | 59.3 |
| | 400 | 6 | 7.4 | 7.4 | 66.7 |
| | 500 | 8 | 9.9 | 9.9 | 76.5 |
| | 600 | 4 | 4.9 | 4.9 | 81.5 |
| | 800 | 4 | 4.9 | 4.9 | 86.4 |
| | 1000 | 5 | 6.2 | 6.2 | 92.6 |
| | 1500 | 1 | 1.2 | 1.2 | 93.8 |
| | 2000 | 5 | 6.2 | 6.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2POPN APPROXIMATE POPULATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 100 | 2 | 2.5 | 2.5 | 2.5 |
| | 400 | 1 | 1.2 | 1.2 | 3.7 |
| | 500 | 1 | 1.2 | 1.2 | 4.9 |
| | 600 | 1 | 1.2 | 1.2 | 6.2 |
| | 670 | 1 | 1.2 | 1.2 | 7.4 |
| | 800 | 2 | 2.5 | 2.5 | 9.9 |
| | 1000 | 6 | 7.4 | 7.4 | 17.3 |
| | 1057 | 1 | 1.2 | 1.2 | 18.5 |
| | 1500 | 8 | 9.9 | 9.9 | 28.4 |
| | 1550 | 1 | 1.2 | 1.2 | 29.6 |
| | 1600 | 1 | 1.2 | 1.2 | 30.9 |
| | 2000 | 13 | 16.0 | 16.0 | 46.9 |
| | 2036 | 1 | 1.2 | 1.2 | 48.1 |
| | 2400 | 3 | 3.7 | 3.7 | 51.9 |
| | 2500 | 6 | 7.4 | 7.4 | 59.3 |
| | 2700 | 1 | 1.2 | 1.2 | 60.5 |
| | 3000 | 6 | 7.4 | 7.4 | 67.9 |
| | 4000 | 6 | 7.4 | 7.4 | 75.3 |
| | 5000 | 7 | 8.6 | 8.6 | 84.0 |
| | 6000 | 3 | 3.7 | 3.7 | 87.7 |
| | 7000 | 2 | 2.5 | 2.5 | 90.1 |
| | 8000 | 3 | 3.7 | 3.7 | 93.8 |
| | 8500 | 1 | 1.2 | 1.2 | 95.1 |
| | 10000 | 3 | 3.7 | 3.7 | 98.8 |
| | 20000 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q2FAMILY AVERAGE FAMILY SIZE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 3 | 1 | 1.2 | 1.2 | 1.2 |
| | 4 | 1 | 1.2 | 1.2 | 2.5 |
| | 5 | 5 | 6.2 | 6.2 | 8.6 |
| | 6 | 6 | 7.4 | 7.4 | 16.0 |
| | 7 | 2 | 2.5 | 2.5 | 18.5 |
| | 8 | 20 | 24.7 | 24.7 | 43.2 |
| | 9 | 6 | 7.4 | 7.4 | 50.6 |
| | 10 | 38 | 46.9 | 46.9 | 97.5 |
| | 12 | 2 | 2.5 | 2.5 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q2NCF AVERAGE NUMBER OF CHILDREN BELOW 10 YEARS OF AGE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 2 | 2.5 | 2.5 | 2.5 |
| | 2 | 6 | 7.4 | 7.4 | 9.9 |
| | 3 | 10 | 12.3 | 12.3 | 22.2 |
| | 4 | 14 | 17.3 | 17.3 | 39.5 |
| | 5 | 25 | 30.9 | 30.9 | 70.4 |
| | 6 | 20 | 24.7 | 24.7 | 95.1 |
| | 7 | 2 | 2.5 | 2.5 | 97.5 |
| | 9 | 1 | 1.2 | 1.2 | 98.8 |
| | 10 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2HHINC ESTIMATED MONTHLY INCOME FOR AVERAGE FAM

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| Less than 2,500 kshs | 1 | 31 | 38.3 | 38.3 | 38.3 |
| 2,500 to 5,000 kshs | 2 | 35 | 43.2 | 43.2 | 81.5 |
| 5,000 to 10,000 Kshs | 3 | 12 | 14.8 | 14.8 | 96.3 |
| 10,000 to 20,000 Ksh | 4 | 3 | 3.7 | 3.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2MINSOU MAJOR SOURCES OF HOUSEHOLD INCOME

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| selling agricultural | 1 | 6 | 7.4 | 7.4 | 7.4 |
| selling livestock | 2 | 28 | 34.6 | 34.6 | 42.0 |
| selling other products | 4 | 1 | 1.2 | 1.2 | 43.2 |
| commercial activities | 5 | 1 | 1.2 | 1.2 | 44.4 |
| salary, part-time/te | 7 | 1 | 1.2 | 1.2 | 45.7 |
| agric. prod/livestock | 8 | 28 | 34.6 | 34.6 | 80.2 |
| selling livestock/comm. | 9 | 12 | 14.8 | 14.8 | 95.1 |
| agric/comm/salary | 10 | 4 | 4.9 | 4.9 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q2INFRA AVAILABILITY OF INFRASTRUCTURE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| electricity | 1 | 4 | 4.9 | 4.9 | 4.9 |
| water supply | 2 | 14 | 17.3 | 17.3 | 22.2 |
| telephone | 3 | 3 | 3.7 | 3.7 | 25.9 |
| none of above | 4 | 49 | 60.5 | 60.5 | 86.4 |
| all available | 5 | 4 | 4.9 | 4.9 | 91.4 |
| water and telephone | 7 | 6 | 7.4 | 7.4 | 98.8 |
| electricity and telephone | 8 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2GOVOFF AVAILABILITY OF GOVERNMENT ADMINISTRATIVE OFFICE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| within this area | 1 | 56 | 69.1 | 69.1 | 69.1 |
| nearest town | 2 | 25 | 30.9 | 30.9 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2SCHO AVAILABILITY OF SCHOOL

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| within this area | 1 | 75 | 92.6 | 92.6 | 92.6 |
| nearest town | 2 | 6 | 7.4 | 7.4 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2HOSP AVAILABILITY OF HOSPITAL / CLINIC

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| within this area | 1 | 34 | 42.0 | 42.0 | 42.0 |
| nearest town | 2 | 47 | 58.0 | 58.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2COMM AVAILABILITY OF COMMERCIAL CENTER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| within this area | 1 | 57 | 70.4 | 70.4 | 70.4 |
| nearest town | 2 | 24 | 29.6 | 29.6 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2POL AVAILABILITY OF POLICE STATION/POST

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| within this area | 1 | 32 | 39.5 | 39.5 | 39.5 |
| nearest town | 2 | 49 | 60.5 | 60.5 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2POST AVAILABILITY OF POSTAL SERVICES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| within this area | 1 | 16 | 19.8 | 19.8 | 19.8 |
| nearest town | 2 | 65 | 80.2 | 80.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q2SCHATP PRIMARY SCHOOL ATTENDANCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| 0-25% | 1 | 12 | 14.8 | 14.8 | 14.8 |
| 25-50% | 2 | 18 | 22.2 | 22.2 | 37.0 |
| 50-75% | 3 | 23 | 28.4 | 28.4 | 65.4 |
| more than 75% | 4 | 28 | 34.6 | 34.6 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q2SECON SECONDARY SCHOOL ATTENDANCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| 0-25% | 1 | 44 | 54.3 | 54.3 | 54.3 |
| 25-50% | 2 | 25 | 30.9 | 30.9 | 85.2 |
| 50-75% | 3 | 10 | 12.3 | 12.3 | 97.5 |
| more than 75% | 4 | 2 | 2.5 | 2.5 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3PWS PIPED WATER SUPPLY FOR DAILY CONSUMPTION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 18 | 22.2 | 22.2 | 22.2 |
| no | 2 | 63 | 77.8 | 77.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3DITR PIPED WATER DISTRIBUTED BY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| individual connections | 1 | 8 | 9.9 | 9.9 | 9.9 |
| kiosk/communal point | 2 | 6 | 7.4 | 7.4 | 17.3 |
| both | 3 | 4 | 4.9 | 4.9 | 22.2 |
| No information/NA | 99 | 63 | 77.8 | 77.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WSIC WATER USES FOR INDIVIDUAL PIPED WATER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 3 | 3.7 | 3.7 | 3.7 |
| drinking and washing | 2 | 7 | 8.6 | 8.6 | 12.3 |
| drinking only | 3 | 1 | 1.2 | 1.2 | 13.6 |
| not yet operational | 5 | 1 | 1.2 | 1.2 | 14.8 |
| No information N/A | 99 | 69 | 85.2 | 85.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WSKC USES FOR KIOSK /COMMUNAL WATER POINTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 3 | 3.7 | 3.7 | 3.7 |
| drinking and washing | 2 | 4 | 4.9 | 4.9 | 8.6 |
| drinking only | 3 | 3 | 3.7 | 3.7 | 12.3 |
| No information N/A | 99 | 71 | 87.7 | 87.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3BSWP COMMUNITY USING BOREHOLE WITH SINGLE WATER POINT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 22 | 27.2 | 27.2 | 27.2 |
| no | 2 | 59 | 72.8 | 72.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3BEB BOREHOLE EQUIPPED BY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| motorized pump | 1 | 8 | 9.9 | 9.9 | 9.9 |
| windmill | 2 | 8 | 9.9 | 9.9 | 19.8 |
| handpump | 3 | 6 | 7.4 | 7.4 | 27.2 |
| No information N/A | 99 | 59 | 72.8 | 72.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3BMP USES OF WATER FROM MOTORIZED PUMP

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 2 | 2.5 | 2.5 | 2.5 |
| drinking and washing | 2 | 6 | 7.4 | 7.4 | 9.9 |
| No information N/A | 99 | 73 | 90.1 | 90.1 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3BWL USES OF WATER FROM WINDMILL BOREHOLE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 6 | 7.4 | 7.4 | 7.4 |
| drinking and washing | 2 | 1 | 1.2 | 1.2 | 8.6 |
| No information N/A | 99 | 74 | 91.4 | 91.4 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3BHP USES OF WATER FROM HANDPUMP BOREHOLE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livetsock | 1 | 2 | 2.5 | 2.5 | 2.5 |
| drinking and washing | 2 | 5 | 6.2 | 6.2 | 8.6 |
| No information N/A | 99 | 74 | 91.4 | 91.4 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3NEWS COMMUNITY USING NON EQUIPPED SOURCES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 76 | 93.8 | 93.8 | 93.8 |
| no | 2 | 5 | 6.2 | 6.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3TONES TYPE OF NON-EQUIPPED SOURCES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| hand dug well | 1 | 6 | 7.4 | 7.4 | 7.4 |
| river/lake/pond | 2 | 41 | 50.6 | 50.6 | 58.0 |
| spring | 3 | 2 | 2.5 | 2.5 | 60.5 |
| handdug well and river | 4 | 16 | 19.8 | 19.8 | 80.2 |
| handdugwell and spring | 5 | 4 | 4.9 | 4.9 | 85.2 |
| well, spring and river | 6 | 4 | 4.9 | 4.9 | 90.1 |
| river/spring | 7 | 5 | 6.2 | 6.2 | 96.3 |
| No Information N/A | 99 | 3 | 3.7 | 3.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3HDW USES OF WATER FROM HAND DUG WELL

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 24 | 29.6 | 29.6 | 29.6 |
| drinking and washing | 2 | 2 | 2.5 | 2.5 | 32.1 |
| No information N/A | 99 | 55 | 67.9 | 67.9 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3RLP USES OF WATER FROM RIVER/LAKE/POND

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 59 | 72.8 | 72.8 | 72.8 |
| drinking and washing | 2 | 1 | 1.2 | 1.2 | 74.1 |
| drinking only | 3 | 1 | 1.2 | 1.2 | 75.3 |
| livestock only | 4 | 8 | 9.9 | 9.9 | 85.2 |
| No information N/A | 99 | 12 | 14.8 | 14.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3SPRING USES OF WATER FROM SPRING

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 13 | 16.0 | 16.0 | 16.0 |
| drinking and washing | 2 | 2 | 2.5 | 2.5 | 18.5 |
| drinking only | 3 | 1 | 1.2 | 1.2 | 19.8 |
| No information N/A | 99 | 65 | 80.2 | 80.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3OTWAS COMMUNITY USING OTHER WATER SOURCES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 75 | 92.6 | 92.6 | 92.6 |
| no | 2 | 6 | 7.4 | 7.4 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3TOSOW TYPES OF OTHER WATER SOURCES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| roof catchment | 1 | 42 | 51.9 | 51.9 | 51.9 |
| rock catchment | 2 | 7 | 8.6 | 8.6 | 60.5 |
| subsurface dam/sand | 3 | 9 | 11.1 | 11.1 | 71.6 |
| other eg earth/water | 4 | 3 | 3.7 | 3.7 | 75.3 |
| roof catchment/rockc | 5 | 7 | 8.6 | 8.6 | 84.0 |
| roof,rock and subsur | 6 | 2 | 2.5 | 2.5 | 86.4 |
| roof catchment/subsu | 7 | 4 | 4.9 | 4.9 | 91.4 |
| rock cathment/subsur | 8 | 1 | 1.2 | 1.2 | 92.6 |
| No information N/A | 99 | 6 | 7.4 | 7.4 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3RCAT USES OF ROOF CATCHMENT WATER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 15 | 18.5 | 18.5 | 18.5 |
| drinking and washing | 2 | 27 | 33.3 | 33.3 | 51.9 |
| drinking only | 3 | 11 | 13.6 | 13.6 | 65.4 |
| livestock only | 4 | 1 | 1.2 | 1.2 | 66.7 |
| No information N/A | 99 | 27 | 33.3 | 33.3 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3ROCK USES OF WATER FROM ROCK CATCHMENTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 12 | 14.8 | 14.8 | 14.8 |
| drinking only | 3 | 2 | 2.5 | 2.5 | 17.3 |
| livestock only | 4 | 1 | 1.2 | 1.2 | 18.5 |
| No information N/A | 99 | 66 | 81.5 | 81.5 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3SSDA USES OF WATER FROM SUBSURFACE DAM / SAND

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livestock | 1 | 16 | 19.8 | 19.8 | 19.8 |
| No information N/A | 99 | 65 | 80.2 | 80.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3OTSOC USES OF WATER FROM OTHER SOURCES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| drinking, washing and livetsock | 1 | 3 | 3.7 | 3.7 | 3.7 |
| drinking and washing | 2 | 1 | 1.2 | 1.2 | 4.9 |
| No information N/A | 99 | 77 | 95.1 | 95.1 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3NWP NAME OF WATER PROJECTS (INDIVIDUAL CONNECTIONS)

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| Kisima water project | 1 | 1 | 1.2 | 1.2 | 1.2 |
| Wamba water supply | 2 | 2 | 2.5 | 2.5 | 3.7 |
| Marigat water supply | 3 | 1 | 1.2 | 1.2 | 4.9 |
| Kimanju water projec | 5 | 1 | 1.2 | 1.2 | 6.2 |
| Ntalian water projec | 6 | 1 | 1.2 | 1.2 | 7.4 |
| Rugutu water project | 7 | 1 | 1.2 | 1.2 | 8.6 |
| Ol Arabel water proj | 8 | 1 | 1.2 | 1.2 | 9.9 |
| Emening water supply | 9 | 1 | 1.2 | 1.2 | 11.1 |
| Nanyuki municipal wa | 10 | 2 | 2.5 | 2.5 | 13.6 |
| Karaba/lariak water | 11 | 1 | 1.2 | 1.2 | 14.8 |
| National pipeline wa | 12 | 1 | 1.2 | 1.2 | 16.0 |
| Nyahururu water supp | 13 | 1 | 1.2 | 1.2 | 17.3 |
| No Information N/A | 99 | 67 | 82.7 | 82.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3OWN WATER PROJECT OWNED BY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| government | 1 | 10 | 12.3 | 12.3 | 12.3 |
| community | 2 | 1 | 1.2 | 1.2 | 13.6 |
| church/mission | 3 | 3 | 3.7 | 3.7 | 17.3 |
| No Information N/A | 99 | 67 | 82.7 | 82.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3WSOU WATER SOURCE FOR WATER PROJECTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| borehole | 1 | 1 | 1.2 | 1.2 | 1.2 |
| spring | 2 | 2 | 2.5 | 2.5 | 3.7 |
| river/lake/pond | 3 | 10 | 12.3 | 12.3 | 16.0 |
| other | 4 | 1 | 1.2 | 1.2 | 17.3 |
| No Information N/A | 99 | 67 | 82.7 | 82.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3CONNS NUMBER OF INDIVIDUAL CONNECTIONS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 1 | 1.2 | 1.2 | 1.2 |
| | 3 | 1 | 1.2 | 1.2 | 2.5 |
| | 5 | 1 | 1.2 | 1.2 | 3.7 |
| | 7 | 1 | 1.2 | 1.2 | 4.9 |
| | 10 | 1 | 1.2 | 1.2 | 6.2 |
| | 11 | 1 | 1.2 | 1.2 | 7.4 |
| | 12 | 1 | 1.2 | 1.2 | 8.6 |
| | 20 | 2 | 2.5 | 2.5 | 11.1 |
| no information N/a | 99 | 68 | 84.0 | 84.0 | 95.1 |
| | 100 | 1 | 1.2 | 1.2 | 96.3 |
| | 120 | 2 | 2.5 | 2.5 | 98.8 |
| | 200 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3PERS NUMBER OF PERSONS SERVED

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 12 | 1 | 1.2 | 1.2 | 1.2 |
| | 50 | 1 | 1.2 | 1.2 | 2.5 |
| No information N/A | 99 | 72 | 88.9 | 88.9 | 91.4 |
| | 100 | 1 | 1.2 | 1.2 | 92.6 |
| | 120 | 2 | 2.5 | 2.5 | 95.1 |
| | 300 | 2 | 2.5 | 2.5 | 97.5 |
| | 400 | 1 | 1.2 | 1.2 | 98.8 |
| | 2000 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WTC WATER TARIFF BASED ON

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| metering | 1 | 4 | 4.9 | 4.9 | 4.9 |
| flat rate | 2 | 7 | 8.6 | 8.6 | 13.6 |
| none/free of charge | 5 | 2 | 2.5 | 2.5 | 16.0 |
| No information N/A | 99 | 68 | 84.0 | 84.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WCPM WATER CONSUMPTION PER MONTH

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| No information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WCPNS WATER CONSUMPTION PER SPECIFIC NUMBER OF MONTHS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| No information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WCONY WATER CONSUMPTION PER YEAR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| No information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WTPM AMOUNT OF WATER TARIFF PER MONTH

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 10 | 1 | 1.2 | 1.2 | 1.2 |
| No information N/A | 99 | 76 | 93.8 | 93.8 | 95.1 |
| | 100 | 1 | 1.2 | 1.2 | 96.3 |
| | 160 | 3 | 3.7 | 3.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

A3WTPMS WATER TARIFF IN SPECIFIC NUMBER OF MONTH

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| No information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3WTPY WATER TARIFF PER YEAR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| No information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3NOP NAME OF WATER PROJECT OTHER THAN INDIVIDUAL CONNECTIONS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| wamba town borehole | 1 | 1 | 1.2 | 1.2 | 1.2 |
| AIC water supply kol | 2 | 1 | 1.2 | 1.2 | 2.5 |
| Kadingding dam | 3 | 1 | 1.2 | 1.2 | 3.7 |
| Twala borehole | 4 | 2 | 2.5 | 2.5 | 6.2 |
| Kurikuri borehole | 5 | 1 | 1.2 | 1.2 | 7.4 |
| Aljijo borehole | 6 | 1 | 1.2 | 1.2 | 8.6 |
| Ol King'ei borehole | 7 | 1 | 1.2 | 1.2 | 9.9 |
| Ngenia water project | 8 | 1 | 1.2 | 1.2 | 11.1 |
| Munyaka borehole | 9 | 1 | 1.2 | 1.2 | 12.3 |
| Wamura borehole | 10 | 1 | 1.2 | 1.2 | 13.6 |
| Lukusero shallow wel | 11 | 1 | 1.2 | 1.2 | 14.8 |
| East laikipia water | 12 | 1 | 1.2 | 1.2 | 16.0 |
| Ruai/kugeria water p | 13 | 1 | 1.2 | 1.2 | 17.3 |
| Segera borehole | 14 | 1 | 1.2 | 1.2 | 18.5 |
| Njoguini borehole | 15 | 1 | 1.2 | 1.2 | 19.8 |
| Mutirithia water pro | 16 | 1 | 1.2 | 1.2 | 21.0 |
| Ngobit water project | 17 | 1 | 1.2 | 1.2 | 22.2 |
| kinamba Catholic mission | 18 | 1 | 1.2 | 1.2 | 23.5 |
| Karaba water project | 19 | 1 | 1.2 | 1.2 | 24.7 |
| No information N/A | 99 | 61 | 75.3 | 75.3 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

***KISIMA TOWN CATHOLIC MISSION BOREHOLE SERVES THE PUBLIC IN KISIMA AREA

Q3OWNER OWNERSHIP OF THE PROJECT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| government | 1 | 1 | 1.2 | 1.2 | 1.2 |
| community | 2 | 17 | 21.0 | 21.0 | 22.2 |
| church/mission | 3 | 1 | 1.2 | 1.2 | 23.5 |
| private | 4 | 1 | 1.2 | 1.2 | 24.7 |
| No Information N/A | 99 | 61 | 75.3 | 75.3 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3NUP NUMBER OF WATER POINTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 11 | 13.6 | 13.6 | 13.6 |
| | 2 | 4 | 4.9 | 4.9 | 18.5 |
| | 4 | 1 | 1.2 | 1.2 | 19.8 |
| | 5 | 1 | 1.2 | 1.2 | 21.0 |
| | 6 | 1 | 1.2 | 1.2 | 22.2 |
| No information N/A | 99 | 63 | 77.8 | 77.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3NOF NUMBER OF FAMILIES RELYING ON WATER POINT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 2 | 1 | 1.2 | 1.2 | 1.2 |
| | 5 | 1 | 1.2 | 1.2 | 2.5 |
| | 6 | 1 | 1.2 | 1.2 | 3.7 |
| | 20 | 2 | 2.5 | 2.5 | 6.2 |
| | 50 | 3 | 3.7 | 3.7 | 9.9 |
| No information N/A | 99 | 63 | 77.8 | 77.8 | 87.7 |
| | 100 | 1 | 1.2 | 1.2 | 88.9 |
| | 150 | 2 | 2.5 | 2.5 | 91.4 |
| | 200 | 5 | 6.2 | 6.2 | 97.5 |
| | 600 | 1 | 1.2 | 1.2 | 98.8 |
| | 800 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3NOPER NUMBER OF PERSONS SERVED BY WATER POINTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 2 | 1 | 1.2 | 1.2 | 1.2 |
| | 5 | 1 | 1.2 | 1.2 | 2.5 |
| | 40 | 1 | 1.2 | 1.2 | 3.7 |
| | 50 | 1 | 1.2 | 1.2 | 4.9 |
| No information N/A | 99 | 64 | 79.0 | 79.0 | 84.0 |
| | 150 | 1 | 1.2 | 1.2 | 85.2 |
| | 200 | 1 | 1.2 | 1.2 | 86.4 |
| | 250 | 1 | 1.2 | 1.2 | 87.7 |
| | 800 | 1 | 1.2 | 1.2 | 88.9 |
| | 1000 | 3 | 3.7 | 3.7 | 92.6 |
| | 1500 | 2 | 2.5 | 2.5 | 95.1 |
| | 2400 | 1 | 1.2 | 1.2 | 96.3 |
| | 4000 | 1 | 1.2 | 1.2 | 97.5 |
| | 6000 | 1 | 1.2 | 1.2 | 98.8 |
| | 10000 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3WCH METHOD OF CHARGING USED

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| metering | 1 | 2 | 2.5 | 2.5 | 2.5 |
| flat rate | 2 | 6 | 7.4 | 7.5 | 10.0 |
| other | 4 | 1 | 1.2 | 1.3 | 11.3 |
| none/free of charge | 5 | 7 | 8.6 | 8.8 | 20.0 |
| No information N/A | 99 | 64 | 79.0 | 80.0 | 100.0 |
| | . | 1 | 1.2 | Missing | |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 80 Missing cases 1

Q3WACH WATER CONSUMPTION BY AVERAGE FAMILY PER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| no information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3WACHS WATER CONSUMPTION BY AVERAGE FAMILY IN SPECIFIC MONTHS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| no information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WACY WATER CONSUMPTION BY AVERAGE FAMILY PER YEAR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| no information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WAPM AMOUNT OF WATER TARIFF PAID BY AVERAGE FAMILY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 1 | 1.2 | 1.2 | 1.2 |
| | 10 | 2 | 2.5 | 2.5 | 3.7 |
| | 20 | 1 | 1.2 | 1.2 | 4.9 |
| no information N/A | 99 | 76 | 93.8 | 93.8 | 98.8 |
| | 360 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WAPMS AMOUNT OF WATER TARIFF IN SPECIFIC NUMBER OF MONTHS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| no information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WAPY AMOUNT OF WATER TARIFF PER YEAR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| no information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3AVWP AVERAGE DISTANCE TO WATER POINT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| 0-0.5 km (less than 30 Mins) | 1 | 5 | 6.2 | 6.2 | 6.2 |
| .5 -2km (30min - 1 hr) | 2 | 18 | 22.2 | 22.2 | 28.4 |
| 2-4 km (1-2 hours) | 3 | 33 | 40.7 | 40.7 | 69.1 |
| 4 km (more than 2 hrs) | 4 | 25 | 30.9 | 30.9 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3MAXWP MAXIMUM DISTANCE TO WATER POINT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| 0-0.5 km (less than 30 mins) | 1 | 1 | 1.2 | 1.2 | 1.2 |
| .5 -2km (30min - 1 hr) | 2 | 4 | 4.9 | 4.9 | 6.2 |
| 2-4 km (1-2 hours) | 3 | 9 | 11.1 | 11.1 | 17.3 |
| 4 km (more than 2 hours) | 4 | 67 | 82.7 | 82.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3TPFW NUMBER OF TIMES THAT PEOPLE GO TO FETCH WATER IN A DAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| once | 1 | 17 | 21.0 | 21.0 | 21.0 |
| twice | 2 | 43 | 53.1 | 53.1 | 74.1 |
| three times | 3 | 17 | 21.0 | 21.0 | 95.1 |
| four times | 4 | 4 | 4.9 | 4.9 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3TOC WHAT IS USED TO FETCH WATER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| container(20 litres) | 1 | 80 | 98.8 | 98.8 | 98.8 |
| other | 2 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3AWT APPROXIMATE AMOUNT TAKEN (LITRES)

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 20 | 80 | 98.8 | 98.8 | 98.8 |
| | 40 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3NOC NUMBER OF CONTAINERS TAKEN AT ONCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 45 | 55.6 | 55.6 | 55.6 |
| | 2 | 27 | 33.3 | 33.3 | 88.9 |
| | 3 | 5 | 6.2 | 6.2 | 95.1 |
| | 4 | 3 | 3.7 | 3.7 | 98.8 |
| | 5 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3RFW RESPONSIBILITY FOR FETCHING WATER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| adult women | 2 | 37 | 45.7 | 45.7 | 45.7 |
| girls | 4 | 1 | 1.2 | 1.2 | 46.9 |
| women and girl | 5 | 22 | 27.2 | 27.2 | 74.1 |
| women, boys and girls | 6 | 18 | 22.2 | 22.2 | 96.3 |
| all | 7 | 1 | 1.2 | 1.2 | 97.5 |
| adult men and women | 8 | 2 | 2.5 | 2.5 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WPWC WHERE PEOPLE WASH CLOTHES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| house | 1 | 14 | 17.3 | 17.3 | 17.3 |
| communal water point | 2 | 2 | 2.5 | 2.5 | 19.8 |
| spring | 3 | 1 | 1.2 | 1.2 | 21.0 |
| river/lake/pond | 4 | 43 | 53.1 | 53.1 | 74.1 |
| house and river/lake | 5 | 10 | 12.3 | 12.3 | 86.4 |
| spring/river | 6 | 4 | 4.9 | 4.9 | 91.4 |
| spring/house | 7 | 1 | 1.2 | 1.2 | 92.6 |
| water point/river | 8 | 3 | 3.7 | 3.7 | 96.3 |
| communal point /river | 9 | 2 | 2.5 | 2.5 | 98.8 |
| communal point/ spring | 10 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3WPTB WHERE PEOPLE TAKE A BATH

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| house | 1 | 25 | 30.9 | 30.9 | 30.9 |
| communal water point | 2 | 1 | 1.2 | 1.2 | 32.1 |
| spring | 3 | 1 | 1.2 | 1.2 | 33.3 |
| river/lake/pond | 4 | 37 | 45.7 | 45.7 | 79.0 |
| house and river/lake | 5 | 11 | 13.6 | 13.6 | 92.6 |
| spring/river | 6 | 2 | 2.5 | 2.5 | 95.1 |
| water point/river | 8 | 1 | 1.2 | 1.2 | 96.3 |
| communal point /rive | 9 | 2 | 2.5 | 2.5 | 98.8 |
| communal point/ spri | 10 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3WPWL WHERE LIVESTOCK ARE WATERED

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| communal water point | 2 | 2 | 2.5 | 2.5 | 2.5 |
| spring | 3 | 2 | 2.5 | 2.5 | 4.9 |
| river/lake/pond | 4 | 65 | 80.2 | 80.2 | 85.2 |
| house and river/lake | 5 | 3 | 3.7 | 3.7 | 88.9 |
| communal water point | 6 | 3 | 3.7 | 3.7 | 92.6 |
| water point/river | 8 | 1 | 1.2 | 1.2 | 93.8 |
| communal point/river | 9 | 4 | 4.9 | 4.9 | 98.8 |
| communal point/sprin | 10 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3FOWS FREQUENCY OF WATER SHORTAGES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| occurs during severe drought | 1 | 6 | 7.4 | 7.4 | 7.4 |
| occurs only in dry season | 2 | 65 | 80.2 | 80.2 | 87.7 |
| occurs throughout year | 3 | 10 | 12.3 | 12.3 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WPD WHAT PEOPLE DO IN TIMES OF SHORTAGES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| decrease water use/n | 1 | 7 | 8.6 | 8.6 | 8.6 |
| get acceptable quality | 2 | 1 | 1.2 | 1.2 | 9.9 |
| get any available water | 3 | 73 | 90.1 | 90.1 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WQD WATER QUALITY FOR DRINKING

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| water clear/no boiling | 1 | 15 | 18.5 | 18.5 | 18.5 |
| water clear but needs boil | 2 | 10 | 12.3 | 12.3 | 30.9 |
| water not clear | 3 | 56 | 69.1 | 69.1 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3WDBD WHAT PEOPLE DO BEFORE DRINKING WATER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| boiling | 1 | 31 | 38.3 | 38.3 | 38.3 |
| filtration | 2 | 3 | 3.7 | 3.7 | 42.0 |
| none of these | 4 | 47 | 58.0 | 58.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3SWD SUFFICIENCY OF DRINKING WATER

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 32 | 39.5 | 39.5 | 39.5 |
| no | 2 | 49 | 60.5 | 60.5 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q3SWH SUFFICIENCY OF WATER FOR WASHING HANDS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 30 | 37.0 | 37.0 | 37.0 |
| no | 2 | 51 | 63.0 | 63.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3SWB SUFFICIENCY OF WATER FOR BATHING

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 30 | 37.0 | 37.0 | 37.0 |
| no | 2 | 51 | 63.0 | 63.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3SWC SUFFICIENCY OF WATER FOR WASHING CLOTHES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 29 | 35.8 | 35.8 | 35.8 |
| no | 2 | 52 | 64.2 | 64.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q3SWL SUFFICIENCY OF WATER FOR LIVESTOCK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 32 | 39.5 | 39.5 | 39.5 |
| no | 2 | 49 | 60.5 | 60.5 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q4RDIS HOW REFUSE IS DISPOSED OFF

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| thrown in garden | 1 | 42 | 51.9 | 51.9 | 51.9 |
| rubbish pit | 2 | 11 | 13.6 | 13.6 | 65.4 |
| burning | 3 | 7 | 8.6 | 8.6 | 74.1 |
| garden/pit/burning | 5 | 10 | 12.3 | 12.3 | 86.4 |
| pit/burning | 6 | 11 | 13.6 | 13.6 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q4SANF SANITARY FACILITIES THAT PEOPLE HAVE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| none | 1 | 32 | 39.5 | 39.5 | 39.5 |
| pit latrine | 2 | 48 | 59.3 | 59.3 | 98.8 |
| cistern flush WC | 3 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q4WPD WHERE PEOPLE DEFECATE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| neighbours shared la | 1 | 2 | 2.5 | 2.5 | 2.5 |
| bush | 2 | 49 | 60.5 | 60.5 | 63.0 |
| N/A | 99 | 30 | 37.0 | 37.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q4KWRD PEOPLES KNOWLEDGE OF WATER RELATED DISEASES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| most people do not have | 1 | 45 | 55.6 | 55.6 | 55.6 |
| most people have | 2 | 36 | 44.4 | 44.4 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q4DPHS DISEASES THAT PEOPLE HAVE SUFFERED IN LAST 1 YEAR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| malaria | 2 | 20 | 24.7 | 24.7 | 24.7 |
| serious diarrhoea | 3 | 8 | 9.9 | 9.9 | 34.6 |
| malaria and diarrhoe | 5 | 34 | 42.0 | 42.0 | 76.5 |
| malaria,diarrhoea,others | 6 | 16 | 19.8 | 19.8 | 96.3 |
| No information N/A | 99 | 3 | 3.7 | 3.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q4NOEVM NUMBER OF MALARIA EVENTS REPORTED

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 2 | 3 | 3.7 | 3.7 | 3.7 |
| No information N/A | 99 | 77 | 95.1 | 95.1 | 98.8 |
| | 200 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q4NOEVD NUMBER OF EVENTS DUE TO SERIOUS DIARRHOEA

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| No information N/A | 99 | 81 | 100.0 | 100.0 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q4NODM NUMBER OF DEATHS AS A RESULT OF MALARIA

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 1 | 1.2 | 1.2 | 1.2 |
| | 7 | 1 | 1.2 | 1.2 | 2.5 |
| | 10 | 1 | 1.2 | 1.2 | 3.7 |
| No information N/A | 99 | 78 | 96.3 | 96.3 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q4NODD NUMBER OF DEATHS DUE TO DIARRHOEA

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 2 | 1 | 1.2 | 1.2 | 1.2 |
| | 3 | 4 | 4.9 | 4.9 | 6.2 |
| | 4 | 1 | 1.2 | 1.2 | 7.4 |
| | 5 | 3 | 3.7 | 3.7 | 11.1 |
| | 6 | 3 | 3.7 | 3.7 | 14.8 |
| | 7 | 1 | 1.2 | 1.2 | 16.0 |
| | 10 | 6 | 7.4 | 7.4 | 23.5 |
| | 16 | 1 | 1.2 | 1.2 | 24.7 |
| | 20 | 1 | 1.2 | 1.2 | 25.9 |
| | 27 | 1 | 1.2 | 1.2 | 27.2 |
| | 30 | 3 | 3.7 | 3.7 | 30.9 |
| | 32 | 1 | 1.2 | 1.2 | 32.1 |
| No information N/A | 99 | 52 | 64.2 | 64.2 | 96.3 |
| | 100 | 2 | 2.5 | 2.5 | 98.8 |
| | 200 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q4OTDI OTHER DISEASES THAT AFFECT PEOPLE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| colds and pneumonia | 1 | 35 | 43.2 | 43.2 | 43.2 |
| typhoid and amoeba | 2 | 14 | 17.3 | 17.3 | 60.5 |
| kalazar and other eye inf. | 3 | 3 | 3.7 | 3.7 | 64.2 |
| bleuresis (milk related) | 4 | 2 | 2.5 | 2.5 | 66.7 |
| No information N/A | 99 | 27 | 33.3 | 33.3 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q5CPAWS COMMUNITY'S GOVERNMENT POLICY AWARENESS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes | 1 | 57 | 70.4 | 70.4 | 70.4 |
| no | 2 | 24 | 29.6 | 29.6 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q5COWS EXISTENCE OF CO-OPERATIVE OR ORGANIZED WATER COMMITTEE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| yes, committee assisted by government | 1 | 40 | 49.4 | 49.4 | 49.4 |
| yes, committee assisted NGOs | 2 | 2 | 2.5 | 2.5 | 51.9 |
| yes, committee based on tradional customs | 3 | 13 | 16.0 | 16.0 | 67.9 |
| no water committee | 4 | 26 | 32.1 | 32.1 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q5RWSC COMMUNITY REQUIREMENTS FOR WATER SUPPLY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| development of water source | 1 | 4 | 4.9 | 4.9 | 4.9 |
| provision of equipment | 2 | 1 | 1.2 | 1.2 | 6.2 |
| water source and equipment | 7 | 41 | 50.6 | 50.6 | 56.8 |
| water source, equipment | 8 | 8 | 9.9 | 9.9 | 66.7 |
| water source, finance | 10 | 3 | 3.7 | 3.7 | 70.4 |
| water source, equipment | 13 | 12 | 14.8 | 14.8 | 85.2 |
| source,equipment and training | 14 | 12 | 14.8 | 14.8 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0

Q5RPWA ROLE THAT COMMUNITY WOULD ACCEPT IN IMPLEMENTATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| labour, management | 4 | 25 | 30.9 | 30.9 | 30.9 |
| share cost, reg. fee | 6 | 6 | 7.4 | 7.4 | 38.3 |
| share cost, labour | 7 | 45 | 55.6 | 55.6 | 93.8 |
| reg. fee and water tariff | 8 | 2 | 2.5 | 2.5 | 96.3 |
| water tariff, labour | 9 | 3 | 3.7 | 3.7 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Q5WTPW WATER TARIFF THAT THE COMMUNITY IS WILLING TO PAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| not willing/not capable | 1 | 1 | 1.2 | 1.2 | 1.2 |
| less than Kshs 5 per day | 2 | 59 | 72.8 | 72.8 | 74.1 |
| Kshs 5-10 per day(Ks | 3 | 15 | 18.5 | 18.5 | 92.6 |
| Kshs 10-20 per day ( | 4 | 5 | 6.2 | 6.2 | 98.8 |
| <Kshs 20 per day (<K | 5 | 1 | 1.2 | 1.2 | 100.0 |
| | Total | 81 | 100.0 | 100.0 | |

Valid cases 81 Missing cases 0