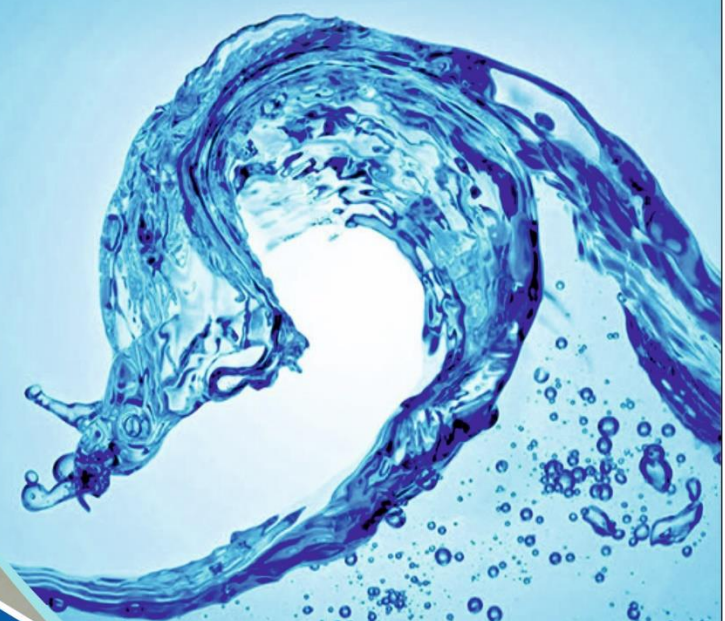


Water Quality Assessment Report Mingora City District Swat Khyber Pakhtunkhwa

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**WATER QUALITY ASSESMENT
REPORT
MINGORA CITY
DISTRICT SWAT
KHYBER PAKHTUNKHWA**

**Saiqa Imran
Lubna Naheed Bukhari
Sumer Gul**

PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES

March, 2018

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LIST OF ABBREVIATIONS

Abbreviation	Complete Name
Alk	Alkalinity
As	Arsenic
BDL	Below Detection Limit
Ca	Calcium
CFU	Colony Forming Unit
Cl	Chloride
CO ₃	Carbonate
Col.	Color
EC	Electrical Conductivity
<i>E. coli</i>	<i>Escherichia coli</i>
F	Fluoride
Fe	Iron
Hard	Hardness
HCO ₃	Bicarbonate
K	Potassium
Mg	Magnesium
mg/l	Milligram per liter
MPN	Most Probable Number
Na	Sodium
NEQS	National Environmental Quality Standards
N/F	Not Functional
NGVS	No Guideline Value Set
NO ₃	Nitrate
NTU	Nephelometric Turbidity Unit
O. less	Odor less
ppm	Parts per million
ppb	Parts per billion
PHED	Public Health Engineering Department

Abbreviation	Complete Name
SO ₄	Sulphate
SDG	Sustainable Development Goal
TDS	Total Dissolved Solids
TMA	Tehsil Municipal Administration
T. Col	Total Coliforms
TCU	True Color Unit
Turb	Turbidity
UN	United Nations
Unobj	Unobjectionable
UC	Union Council
µg/l	Microgram per liter
µS/cm	Micro Siemens per centimeter
WASH	Water Sanitation and Hygiene
WHO	World Health Organization

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PREFACE

Drinking water is one of the basic necessities of life and it is the responsibility of the state to provide water to the people at their door's step. The National Drinking Water Policy (2009) and Khyber Pakhtunkhwa Drinking Water Policy (2016) set a target of providing access to safe and sustainable drinking water supply to the entire population by 2025. Similarly, the Sustainable Development Goal (SDG) 6 also sets a target 6.1 "by 2030 achieve a universal and equitable access to safe and affordable drinking water for all".

However, monitoring of the drinking water sources is crucial to ensure safe water supply, because if you cannot measure a thing, you cannot manage it. Pakistan Council of Research in Water Resources (PCRWR) in 2016 monitored drinking water quality of 25 major cities of Pakistan. Only 31% were found safe whereas 69% samples were found unsafe for drinking purpose. Mingora City was part of the regular water quality monitoring program of PCRWR. PCRWR in collaboration of UNICEF conducted a detailed study of drinking water quality in Mingora City, District Swat. This report is an outcome of the study. It is hoped that it would provide a baseline towards achieving goals set in the national and provincial drinking water policies and SDG 6.

SUMMARY

Overall 502 water samples were collected from Mingora City, District Swat, covering water supply sources, consumer ends and household private water sources. Out of 502 collected water samples 279 (55%) were found contaminated whereas, 223 (45%) were found safe. When we consider the water supply schemes which were mainly based on groundwater sources, the sources were almost safe in terms of chemical and microbiological parameters except a few (10%), but the drinking water quality at consumer end was not good. A total of 53 water samples were collected from tube wells supplying drinking water to the community. Out of 53 sources only 5 (10%) sources were found contaminated with total Coliforms and 1(2%) was contaminated with *E.coli*. whereas remaining 90% tube well water was found safe. Those 10% tube wells may have received contamination from environment or by any sewage drain or line passing along the sources. Whereas at consumer end it was found that out of 274 samples 181(66%) were found contaminated with Total Coliforms whereas 109 (40%) were found contaminated with *E.coli*. The analytical findings showed that drinking water at sources was almost safe but the contaminations entered in the distribution system through damaged and unprotected pipe lines.

Moreover 18 water samples were collected from the distribution lines where proper taps were not installed but people attached some type of facets or pipes in between lines, where they found some leakage to collect water for drinking, nearby their homes. Out of 18 water samples 13 (72%) samples were found contaminated with Total Coliforms whereas, 7 (38%) were found contaminated with *E.coli*. In addition to those more than 50% storage tank were found contaminated with bacteria. It showed that the bacterial contamination of drinking water got started from the storage tanks (which were not protracted properly) and further added up by the leakages in damaged and unprotected distribution system.

A total of 129 water samples were also collected from private household sources, 38 from dug/open wells, 31 from hand pumps and 60 from private bores. Out of those 55 % water samples from open/dug wells, 36 % from hand pumps and 43% from bores were found contaminated with bacteria. The reason might be that the open wells were not protected from intrusion of contamination as sewage water was mixing with drinking water due to leakage in the lines and also percolated through nearby underground septic tanks and entered in to shallow groundwater sources. In few groundwater sources the high levels of hardness and TDS were also detected. Two samples were collected from springs both the sources were

found contaminated with total Coliforms and *E.Coli*. The contamination of the springs was due to poor sanitation, mixing of sewage water and open defecation. The water quality situation of Mingora City showed that problem was mainly in distribution system as the water supply lines were passing through open drains. The sewerage system is very poor and needs repair or replacement as per standard protocols of water supply and sanitation systems.

1. INTRODUCTION

1.1. Background

Access to safe drinking water is a basic human need and precondition for a healthy life. We cannot survive without water as it is intrinsically linked to the most immediate challenges of food security, health, climate change, economic growth, poverty alleviation etc. that we face today. Though, once a water-surplus country with huge water-resources of the Indus River System, Pakistan is now a water-deficit country.

According to WAPDA the per capita water availability in the country has gone down to 908 cubic meters in 2017 from 5,260 cubic meters in 1951, rapid increase in population being the major contributing factor behind the phenomenon (The Nation, 2017). At the water availability below 1,000 cubic meters, countries begin experiencing chronic water stress (Population Action International, 1993).

The KP Public Health Engineering Department admits that water scarcity and contamination are the major issues, not only in hospitals but also in schools, colleges, offices and houses, as water management is facing a major crisis in KP and FATA (IPS, 2015).

The quantum of water-borne ailments is increasing. According to Khyber College of Dentistry, in majority areas of the seven tribal districts of FATA, people suffer from teeth problems due to presence of toxin fluorine in their water, every 10th person develops yellowish teeth and the stains remain forever (IPS, 2015).

The Indus is one of Asia's mightiest rivers. From its source in the north western foothills of the Himalayas, it flows through the Indian state of Jammu and Kashmir and along the length of Pakistan to the Arabian Sea. The river and its six tributaries including Kabul River together make up the Indus Basin, which spans over four countries and supports 215 million people. Yet fast growing populations and increasing demands for hydropower and irrigation in each country means the Indus is coming under intense pressure (Fazilda, 2017).

One of the tributaries of Kabul River is River Swat. It emerges from the Mahudand Lake, which is fed by the melting glaciers, and other small rivers of Oshu, Kalam and Behrain. The River Swat at the end merges with the Kabul River.

Historically the human settlements were founded near the rivers. The purifying potential of nature has always been greater than the rate of pollution caused by human living, but with the

passage of time population increased and a variety of industries developed for the establishment of stylish modern life. The quality of water deteriorated due to discharges of municipal and industrial wastes into water bodies and dumping of solid waste along/into rivers/oceans led to serious threat to marine life.

Swat is one of the famous tourist resorts and population wise third largest districts in NWFP. Overall geographical area is comparatively large but only 18% is cultivated. Water table is at moderate depth in mountainous valleys, where tube well is the main source of water. Population is scattered in most of hilly area, where domestic water supply schemes are installed on springs having no regular employees for their maintenance. Water supply lines at places are damaged or punctured allowing intrusion of pollutants, which is the main cause of poor water quality condition. Similarly spring water is also distributed locally and is not managed by any scheme or system (Malik, et.al. 2010).

Due to availability of ground water at affordable depth and in adequate quantity, surface water consumption for domestic purposes is not normally in practice in south-western part of the district; however, in north-eastern Swat Valley surface water is commonly used.

A water quality monitoring study of PCRWR in rural areas of District Swat showed that 93% water sources were unsafe and only 7% of sources were found safe for drinking purpose (Tahir et.al, 2010). The water quality of Mingora City remained almost same from 2002 to 2005, about 60 % samples was found unsafe due to bacterial contamination but in year 2006, there was a decline in water quality; the unsafe percentage increased from 60% to 80%. Apparently there was no specific reason for this increased contamination. There could be effect of earthquake on the drinking water sources of this area. In 2015, there was some improvement in the water quality of the city, as only 44% samples were found unsafe due to bacterial contamination. It could be attributed to the improvement of sanitation practices and increase of awareness in the subsequent years. (Saiqa et.al, 2017).

This study was conducted with the collaboration of UNICEF. The main objective was to find out the water quality profile of Mingora City, District Swat. Keeping in view the SDG 6 Targets 6.1 and 6.2, the report on existing situation of drinking water quality in Mingora City would help the stakeholders, to plan for future.

2. METHODOLOGY

2.1 Project Area

The valley of Swat is situated in the north of Khyber Pakhtunkhwa province at 35° North Latitude and 72° and 30° East Longitude. The district is enclosed by the sky-high mountains. Chitral and Gilgit are situated in the North, Dir in the West, and Mardan in the South, while Indus separates it from Hazara in the east. The District Headquarter is Saidu Sharif, which is at a distance of 131 kilometers from Peshawar towards north east, but the main town in the district is Mingora. Total area of District Swat is 5337 Square Kilometers (sq. km) divided into two tehsils, namely Matta (683 sq. km) and Swat (4654 sq. km). The total forest cover in is 497,969 acres which consists of varieties of pine trees.

Topographically, Swat is a mountainous region, located among the foothills of the Hindukush mountain range. This range runs in the general direction of North and South and has a varied elevation within the Swat area, beginning from 600 meters above sea level in the South and rising rapidly up towards the North, to around 6,000 meters above sea level. The Swat region, containing the meandering Swat River, is also home to lush green valleys, snow-covered glaciers, forests, meadows and plains.

Swat lies in the temperate zone. The summer in lower Swat valley is short and moderate while it is cool and refreshing in the upper northern part. The hottest month is June with mean maximum and minimum temperature of 33°C and 16°C, respectively. The coldest month is January with mean maximum and minimum temperature of 11°C and -2°C, respectively. The winter season is long and extends from November to March; rain and snowfall occur during this season. The average annual precipitation in District Swat ranges from 1000 mm to 1200 mm. As there is currently no meteorological station in District Swat, data collected by nearest station in Dir is used.

Drinking water and sanitation facilities in Swat and in other KP districts are managed by two government units, the Public Health Engineering Department (PHED) and the Rural Government Development Department (LGRDD). The provision of drinking water and sanitation facilities are provided by these departments via various schemes, with each scheme serving a targeted number of beneficiaries within the population (Centre for Public Policy Research, 2010).

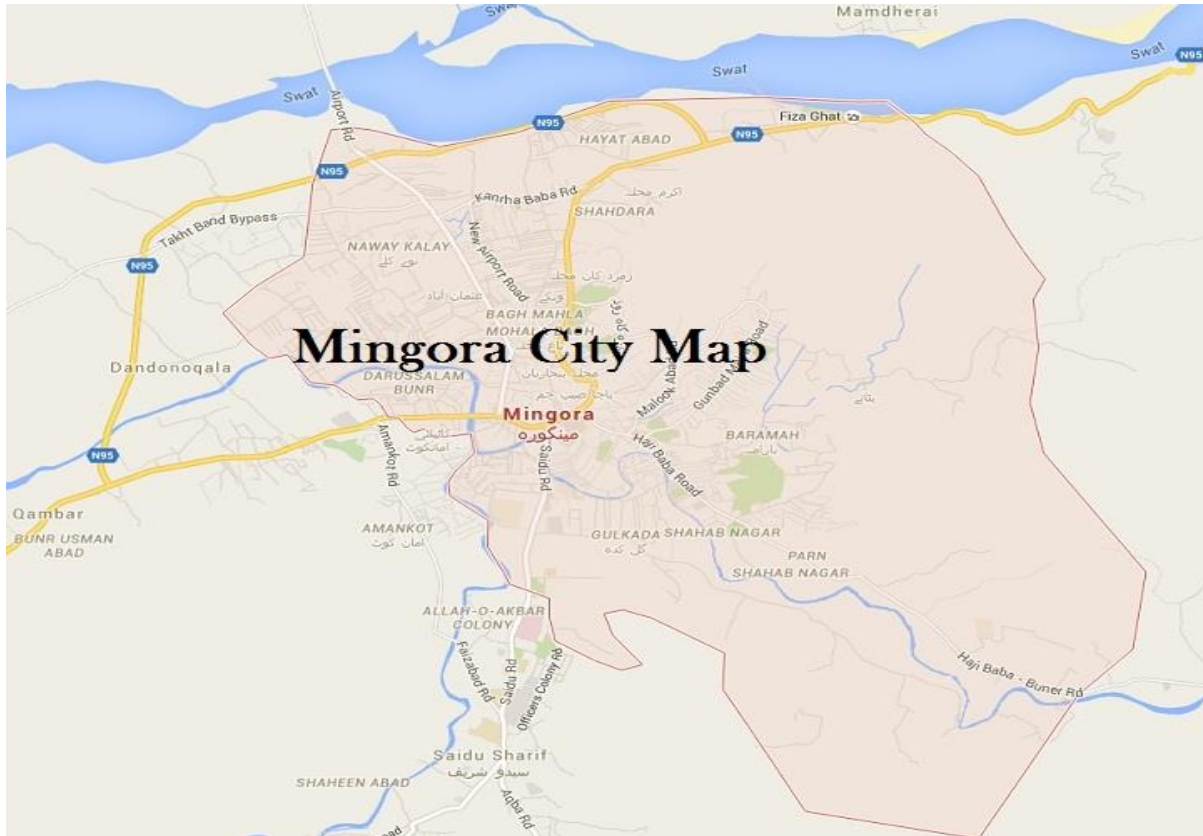


Figure 1: Project area of Mingora City

2.2 Sampling Design

During this study drinking water samples were collected from 500 selected sites of the Mingora City. Water samples were collected from tube wells, hand pumps, bores and open /dug wells.

There were 50 tube wells under the TMA Mingora, out of those 44 tube wells were functional and seven tube wells were nonfunctional. To get the representative samples it was decided to collect 10 samples from each water supply distribution system.

- First of all the information regarding tube well depth and population served was collected from the PHED and TMA staff operating each tube well.
- Then a map of water supply scheme and distribution line was drawn by hand on the paper and sampling points were selected according to the length of supply line.
- From each site one water sample was collected at the source point (tube well), 6 water samples at different distances from supply line (consumer end).
- Water samples (3-4) from private bores/hands pumps/dug wells (if present in the area) were also collected to check the shallow ground water quality.

2.3 Sample Collection and Preservation

Water samples for physicochemical analysis were collected in polystyrene bottles of 0.5 and 1.5 liter capacities. Before collecting the samples, the bottles were washed properly and rinsed thoroughly three times with sample water. For bacterial analysis, samples were collected in pre sterilized bottles of 200 ml volume, for analysis of trace elements and nitrate (nitrogen) nitric acid and boric acid respectively were used as preservatives in the sampling bottles before collection of water samples from the field. For other water quality parameters no preservative was used.

The sampling team comprised of a Research Officer, a Laboratory Assistant and a driver. Following procedure and precautionary measures were followed while collecting samples from the field.

- a. **Tap:** An un-rusted tap was selected while collecting water sample/s from consumer end. The selected tap was properly cleaned and allowed to flow for a few minutes before collecting the sample.
- b. **Tube Well:** The water sample from a selected tube well was collected after allowing it to flow for at least 10 minutes to get representative sample of the groundwater. The depth of groundwater level was also recorded and the location of the tube well was properly marked on the topographic survey sheet.
- c. **Distribution Network:** The water samples from the distribution network were collected from the source of supply (as closely as possible) to minimize the effects of pollution in the distribution system and from consumers end/s to evaluate the actual quality of water being used. All water sampling bottles were filled slowly to avoid turbulence and air bubbles after flushing the system for sufficient time.
- d. **Hand Pump/Dug Well:** A water sample from a hand pump or dug well was collected after purging it, one stroke for every foot of depth (a hand pump or dug well having 30 feet of depth, needs 30 strokes for its purging).
- e. **Spring:** Water sample was collected directly from the spring.



Figure 2: Water sample collection from different drinking water sources

2.3.1 Microbiological Samples Collection

The water samples for microbiological analysis were collected in clean, sterile plastic bottles (200 ml). The care was taken to ensure that no accidental contamination occurs during sampling. Samples were taken from those taps, which were not leaking between the spindle and gland to avoid outside contamination. The samples were kept cool and in the dark while transporting to designated laboratory of PCRWR. Where there a proper place was available, water samples were directly analyzed by field testing method, just after collection.

2.3.2 Types of Water Samples and Preservatives

Samples were collected for microbiological analysis, trace elements, nitrate (N) and general water quality parameters. Standard sampling methods of American Public Health Association (APHA) were adopted to collect the samples. The types of water samples and preservative used are given below:

Type A – All sites –in sterilized 200 ml sampling bottle;

Type B – All sites – with 2 ml/liter HNO₃ as preservative for trace elements;

Type C – All sites – with 1 ml/100 ml, 1 M Boric acid as preservative for Nitrate; and

Type D – All sites – no preservative for other water quality parameters.

2.3.3 Sample Labeling Strategy

The sampling bottles were labeled with sample type (A, B, C, D), date and sample ID with permanent ink marker and delivered to PCRWR Laboratory or to a designated drop of location for the laboratory within required holding time (6-8 hours). Sample ID for monitoring purpose was marked on the basis of actual visit sequence of various sites for monitoring purpose.

2.3.4 Sample Collection Profile

Sampling team filled questionnaire about the location, type, number of users, depth of source and anything unusual/notable around the site/source.

2.4 Analytical Methods

The water samples were analyzed for aesthetic, physico-chemical and bacteriological parameters by using American Public Health Association (APHA-2012) Standard Methods. The details of the parameters and methods used for their analysis are given in Table-1.

Table 1: Water quality parameters and methods used for analysis

Sr. No.	Parameters	Analysis Method
1	Alkalinity (as CaCO ₃)	2320, Standard Method (2012)
2	Arsenic (As)	AAS Vario 6, Analytik Jena AG (3111B APHA) 2012
3	Bicarbonate (HCO ₃)	2320, Standard method (2012)
4	Calcium (Ca)	3500-Ca-D, Standard Method (2012)
5	Carbonate (CO ₃)	2320, Standard Method (2012)
6	Chloride (Cl)	Titration (Silver Nitrate), Standard Method (2012)
7	Electrical Conductivity (EC)	E.C meter, Hach-44600-00, USA
9	Hardness (Hard.)	EDTA Titration, Standard Method (2012)
10	Magnesium (Mg)	2340-C, Standard Method (2012)
11	Nitrate (NO ₃ as N)	Cd. Reduction (Hach-8171) by Spectrophotometer
12	Nitrite (NO ₂)	
13	Odor	Sensory Test
14	pH	pH Meter, Hanna Instrument, Model 8519, Italy
15	Potassium (K)	Flame photometer PFP7, UK
16	Sodium (Na)	Flame photometer PFP7, UK
17	Sulfate (SO ₄)	SulfaVer4 (Hach-8051) by Spectrophotometer
18	TDS	2540C, Standard Method (2012)
19	Turbidity	Turbidity Meter, Lamotte, Model 2008, USA
20	Fluoride (F)	4500-FC.ion-Selective Electrode Method Standard (2012)
21	Iron (Fe)	Ferro Ver method (HACH Cat. 21057-69)
22	Bacteria (Coliform & <i>E. coli</i>)	3M Petrifilm Total Coliforms and <i>E.coli</i> determination.



Figure 3: Field and laboratory analysis of drinking water samples

2.5 Water Quality Standards

The Pakistan Environmental Protection Council approved the National Standards for Drinking Water Quality (NSDWQ) which had been developed in collaboration with WHO, UNICEF, Ministry of Health, Pakistan Council of Research in Water Resources and National University of Sciences and Technology through a countrywide consultative process. The National Standards for Drinking Water Quality are more in line with WHO Standards.

The National Drinking Water Quality Standards are notified by the Pak-EPA in the Gazette with S.R.O-1063(1)/2010 and are mandatory to follow for drinking water quality and also mentioned in provincial drinking water policies. National Drinking Water Standards for parameters analyzed are given in Table-2

Table 2: National Drinking Water Quality Standards for parameters analyzed

Sr. No.	Parameters	Units	Permissible Limit
1.	Alkalinity (as CaCO ₃)	mg/l	NGVS
2.	Arsenic (As)	µg/l	≤0.050
3.	Bicarbonate (HCO ₃)	mg/l	NGVS
4.	Calcium (Ca)	mg/l	NGVS
5.	Carbonate (CO ₃)	mg/l	NGVS
6.	Chloride (Cl)	mg/l	250
7.	Color	TCU	≤15
8.	Electrical Conductivity (EC)	(µS/cm)	NGVS
9.	Hardness (Hard.)	mg/l	<500
10.	Magnesium (Mg)	mg/l	NGVS
11.	Nitrate (NO ₃ as N)	mg/l	10
12.	Nitrite (NO ₂)	mg/l	3
13.	Odor	-	Unobjectionable
14.	pH	-	6.5-8.5
15.	Potassium (K)	mg/l	NGVS
16.	Sodium (Na)	mg/l	NGVS
17.	Sulfate (SO ₄)	mg/l	NGVS
18.	TDS	mg/l	<1000
19.	Turbidity	NTU	5
20.	Fluoride (F)	mg/l	1.5
21.	Iron (Fe)	mg/l	0.3
22.	Bacteria (Coliform)	MPN/100 liter	0
23.	Bacteria (<i>E.Coli</i>)	MPN/100 liter	0

3. RESULTS AND DISCUSSION

Over all 502 samples have been collected and analyzed by following the APHA Standard Protocols. The bacterial contamination in drinking water was appeared as major problem along with hardness in few sources of Mingora City as given in the following Table-3.

Table 3: Types of contaminants found in drinking water

Sr. No.	Parameters	Unsafe samples	
		No.	%age
1.	TDS	03	1
2.	Hardness	31	6
3.	pH	15	3
4.	Turbidity	15	3
5.	NO ₃	05	1
6.	Total Coliforms	275	55
7.	<i>E. coli</i>	136	27

The analytical findings revealed that 279 (56 %) samples were found unsafe for drinking purpose. Out of those 275 (55%) samples were found contaminated with Total Coliforms whereas 136 (27%) with *E.coli*. This high microbial contamination probably was due to poorly managed sanitation, open defecation and the leaking of water supply pipelines passing through open drains. High levels of hardness and TDS were also found in few samples.

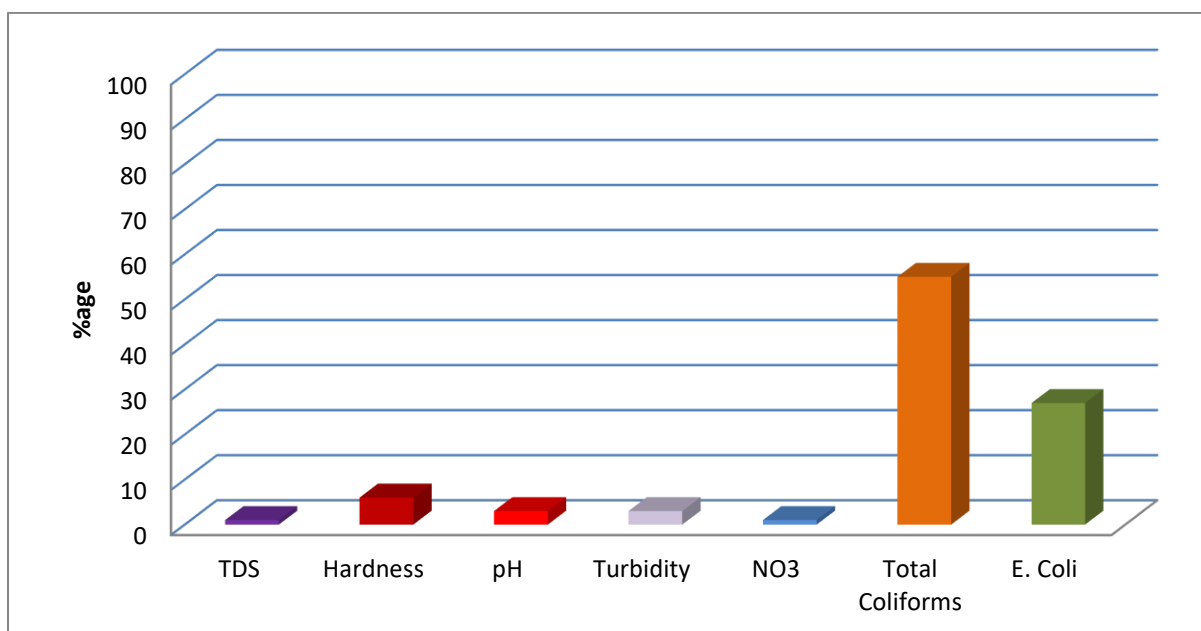


Figure 4: Levels of contaminants found in drinking water

The analytical findings showed that chemically, the drinking water parameters were within the permissible limits of National Standards for Drinking Water Quality (NSDWQ) 2010, except a few samples with high values of hardness, turbidity and nitrate (Table 3). These chemical contaminations in groundwater samples were due to the underground mineral geology, but it also indicated that the nitrates produced by use of fertilizers, improper sewage disposal and plant decay contaminated the groundwater owing to heavy rains in the area.

Water Quality of Different Sources

Six different types of water sources are being used in Mingora City the water quality status of those sources is as follows.

Table 4: Water quality status of different drinking water sources

Source	Community/ House Hold	Total	Number of samples beyond permissible Limits of NDWQS						Safe		Unsafe	
			TDS	Hardness	NO ₃	Turbid	Total Coliforms	<i>E.coli</i>	Safe	%age	Unsafe	%age
Bore	Community	2	0	0	0	0	2	0	0	0	2	100
	House Hold	58	0	4		1	25	5	33	57	25	43
Hand Pump	Community	14	0	2	0	0	5		9	64	5	36
	House Hold	17	0	1	0	0	5	2	12	70	5	30
Open Well	House Hold	38	1	3	0	0	21	4	17	45	21	55
Spring	Community	2	0	0	0	0	2	2		0	2	100
Storage Tank	Community	16	0	2	0	1	9	6	6	37	10	63
Tap	Community	10	0	0	0	0	7	0	3	30	7	70
	House Hold	274	2	18	5	10	181	109	90	33	184	67
Tube Well	Community	53	0	1	0	2	5	1	48	90	5	10
Supply Lines	Community	18	0	0	0	1	13	7	5	28	13	72
Total		502	3	31	5	15	275	136	223	45	279	55

a. Bore Holes

A total of 60 water samples were collected from bores, out of those only two bores were community based and were found contaminated with total Coliforms.

Out of 58 house hold bores 25 (43%) were found unsafe whereas, 33 (57%) were safe for drinking purpose. All unsafe water samples were found contaminated with Total Coliforms whereas, 5 (9%) with *E.coli* bacteria.

b. Dug/Open Wells

A total of 38 water samples have been collected from households. Out of 38 sources 21(55%) were found unsafe and were contaminated with Total Coliforms, *E.coli*

4(10%) and hardness was found beyond permissible limit in 10 % samples. High level of microbial contamination shows that open/dug wells were not protected properly, contamination from the environment was being added and presence of *E. Coli* indicates mixing of sewage water (faecal material) with groundwater in the wells.

c. Hand Pumps

A total of 31 water samples have been collected from hand pumps. 14 hand pumps were installed at community level out of those 5 (36%) were found contaminated with Total Coliforms, while 2 (14%) had hardness beyond permissible limit. Out of 31 hand pumps 17 were managed at household level, out of those 5 (30%) were found contaminated with Total Coliforms and 2 (12%) with *E.coli*. The presence of *E Coli* in the water of house hold hand pumps could be due to contamination percolating from nearby unprotected septic tanks.

d. Springs

Two water samples have been collected from springs and both the sources were found contaminated with total Coliforms and *E coli*. The spring water was being contaminated due to poor sanitation, open defecation, mixing of sewage water, and animal faeces.

e. Storage Tanks

A total of 16 water samples have been collected from storage tanks for water supply. Out of 16 sources 9 (56%) were found contaminated with total Coliforms and 6 (37%) with *E.coli*. On overall 10 (63%) storage tanks were found contaminated whereas, 6 (37%) were safe.

The bacterial contamination in the storage tanks indicates that those were not fully protected and contamination from environment, including human or animal faecal material was being added in the storage tanks, most probably during the rainfall.

f. Tube Wells

A total of 53 water samples have been collected from tube wells supplying drinking water to the community. Out of those 41 tube wells were under the control of Tehsil Municipal Administration (TMA) of Swat. 11 tube wells were under PHED (Union Councils, Kanju, Takhatband, Manlawar, and Dehri), one tube well (Kanju Township)

was under the Sawat Development Authority (SDA). Out of 53 sources 5 (10%) sources were found contaminated with total Coliforms and 1(2%) was contaminated with *E.coli* whereas 90% tube wells were supplying safe drinking water. The 10% tube wells supplying unsafe drinking water may have been receiving contamination from environment or some sewage line/s was/were passing along those.

g. Distribution Lines

A total of 18 water samples have been collected from the sources from where community collects water for drinking. Those were not proper taps, but community attached some types of facets/pipes in between lines (where they found some leakage) to get water near their homes. Out of 18 water samples 13 (72%) were found contaminated with Total Coliforms whereas, 7 (38%) with *E.coli*.

h. Taps/Water Supply

A total of 274 samples have been collected from household taps receiving drinking water from water supply lines. Out of 274 sources 181 (66%) were found contaminated with Total Coliforms whereas 109 (40%) with *E.coli*. Overall 184 (67%) sources were unsafe whereas 90 (33%) found safe for drinking.

The analytical findings show that drinking water at sources was almost safe but the contaminations entered in the distribution system due to leakages in the pipe lines.

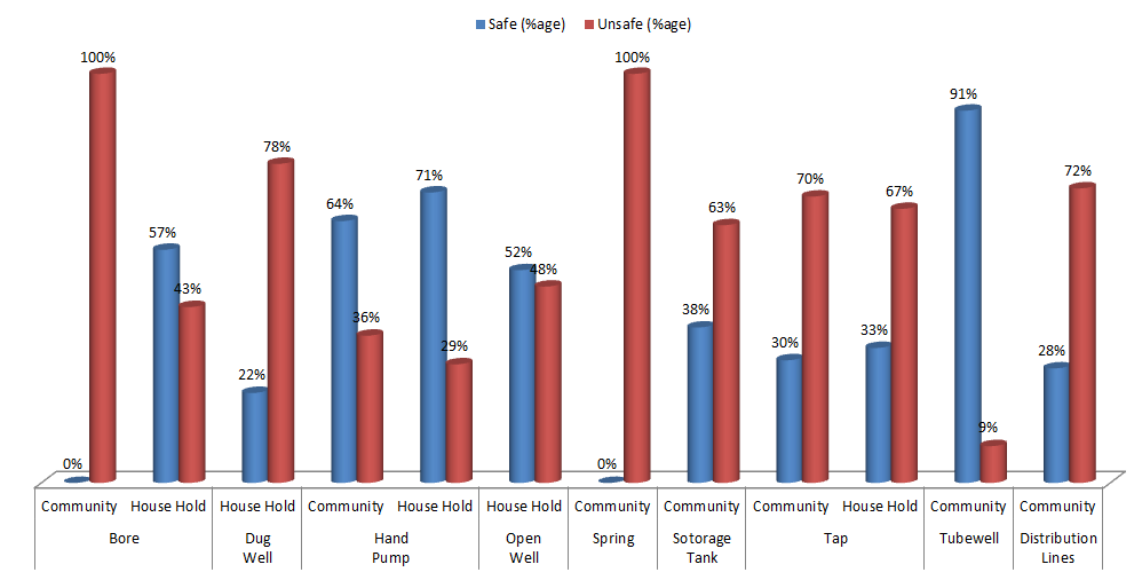


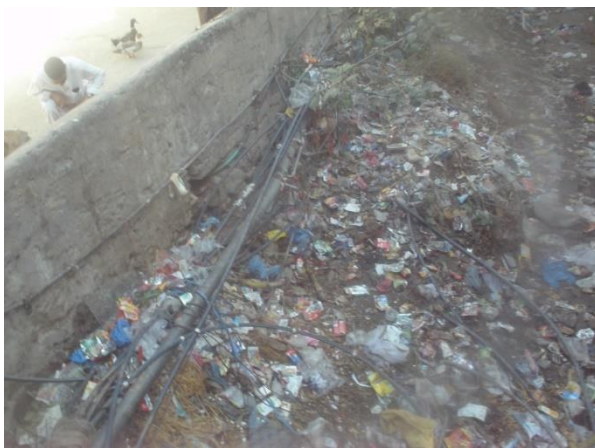
Figure 5: Water quality status of different drinking water sources



A pipeline crossing a sewerage line at Mingora



View of open well at Maingano Chum Amankot



*Distribution of water supply line at Landi
Kas Khawar*



*Distribution line along the drain at Kakari
Ada Landi Kas*

Figure 6: Poor condition of water supply lines and sewage system

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

1. Overall 502 water samples were collected, out of those 279 (55%) were found contaminated whereas, 223 (45%) were found safe, majority of sources were almost safe in terms of chemical parameters but a large number was found contaminated with bacteria.
2. A number of tube wells were found non-functional, the major reasons were; non-payment of electricity bills, lowering of water table (Rahim Abad), damaged water supply lines and wastage of more than 50% water (Moulababa). In addition to this illegal connections were installed, even before the water reached to the storage tanks. Due to above noted reasons the availability of safe drinking water has become difficult and people are forced to take unsafe water from unprotected private sources or from illegal connections outside their houses.
3. The water samples taken from most of consumer ends were found contaminated whereas; the main sources (tube wells) were supplying safe water. It is because the majority of households do not apply for water meters and illegally get water from the WSS pipelines or from the water point in the street, linking loose rubber or plastic tubes. Those leaking connections are a major source of bacteriological contamination. There is no mechanism for control of water quality contamination at the consumer end; because there is no realization of the fact that drinking water contamination is directly related to health problems.
4. The present water supply schemes are unable to fulfil the drinking water requirements of the community. The community is coping up with water shortage through private water sources. In some areas (Dolat Khel, Akhunbaba), people were using community hand pumps installed by NGOs by fitting a missile motor on a hand pump thus enabling it to provide water for six to seven houses. The cost was shared by the consumers.
5. The majority of tube wells and water supply lines in Mingora City were installed in 1967 and therefore most of those were out-dated and damaged. The shortage of technical staff is another problem. A tube well operator has to spend 18-20 hours on

duty. The lack of technical staff, training and awareness is the main reason for poor management of water supply system.

6. Due to the non-payment of bills for water from the community and lack of systematic revenue collection procedure from the government departments, people think that water is a free commodity and they waste it without realizing its importance.
7. There is a general perception at the supplier and consumer end that there is no epidemic in their area therefore, the water supplied to the inhabitants is safe. The authorities must mobilize WASH activities in the area, creating awareness about the importance of hygiene, sanitation and safe drinking water for health. The health sector may also take part in the campaign creating a realization among the masses about waterborne diseases, and there long term effects on the financial wellbeing of a person.
8. The old schemes have rusted pipelines, some of those more than 50 years old. As subsurface mapping is not available, it is very difficult to trace the defective pipelines. The per capita water requirement is 30 gallons. A new water supply scheme is usually approved on the basis of population expansion, but by the time a new WSS is approved and funds are released the streets and houses have been constructed in the area, without any planning for provision of water supply and sewage systems.
9. A new WSS is planned only on the basis of groundwater availability in that area. During boring only chemical quality is being tested, which is almost good in the valley. After the construction of a new tube well, surface or sub surface pipelines are laid keeping in view the availability of space. As streets, houses, open drains and septic tanks have already been constructed, therefore it becomes difficult to keep proper distance between water and sewage conveyance lines.

4.2 Recommendations

1. The water supply lines of the city are very old and need to be replaced by new lines to meet the drinking water requirement of the community. The WSSC (Water Supply and Sanitation Services Company) Mingora City may conduct an immediate survey to find out the actual condition of damaged water supply lines in the city. After budget estimation, it should be decided whether supply lines need to be replaced or repair of old lines would serve the purpose. In the present scenario the only long term solution is to “undo and redo”. The Government must be mobilized to grant funds for the replacement of existing water supply lines, not all at once, but area wise annually. Similarly a proper drainage system (closed sewage pipe) is also needed in the city. This is the only sustainable and effective solution to avoid contamination of drinking water.
2. The proper town planning plays a very important role in the management of a water supply system. The inter-departmental collaboration is needed to be built to avoid the duplicate efforts. The town planners should take into consideration the complete mapping for the installation of water supply lines and sewage lines before allowing the construction of houses, streets and link roads. This will ensure a proper water conveyance system avoiding the mixing of drinking water with sewage water.
3. The illegal connections by the community must be discouraged by the service providers (WSSC/PHED) and whole community may be brought under regular water billing network. The billing amount which is very nominal needs to be rationalized, and the revenue thus generated can be utilized in repair and maintenance of water supply system.
4. As a short term effective solution of the microbial contamination, it is recommended that chlorination of storage tanks may be done before water supply to the community. The residual effect of the chlorine protects the water from further contamination even if contaminated water enters from small leakages during the distribution.
5. The chlorine dose at source should be enough (2-5mg/L) to ensure there will be sufficient residual chlorine (0.5-1.5 mg/L) present in the water at source to protect the water during storage and distribution and it should be ≥ 0.2 mg/L at the point of consumer delivery (NSDWQ, 2010). In general, chlorine has a taste/odor threshold at >0.3 mg/L. For effective disinfection, the WHO recommends at least 30 minutes contact time, where the residual chlorine concentration is ≥ 0.5 mg/L

6. Regular water quality monitoring of water sources by independent surveillance body needs to be planned to check the quality of drinking water being supplied and to rule out the causes of contamination, if present. The microbial quality needs to be monitored on quarterly basis whereas, chemical quality monitoring once a year is sufficient.
7. Where the water supply has been disconnected due to the lowering of water table, the depth of the tube wells should be increased. The groundwater recharge needs to be planned through rain water by using inverted wells for the sustainability of the source/s of water supply schemes.
8. The current repair and maintenance process of the damaged supply lines is very poor due to lack of technical staff as well as slow process of funding from the government departments. There must be readily available fund allocation and available technical manpower to overcome the problems. There must be a strong and systematic revenue collection process for utility bills to overcome the budget shortages.
9. The training programs may be planned for new and existing professionals of water supply agencies for repair maintenance and disinfection treatments (calculating the chlorine demand before dosing, testing of chlorine at source as well as at consumer ends, storage and handling of chemicals etc.).The service provider needs to develop guidelines for consumers to promote cleaning/disinfection of household level underground and overhead tanks on regular basis.
10. The dug/open wells at community as well as house hold levels should be protected, properly covered to avoid entrance of microbial contamination through rain water etc.
11. The septic tanks at household level should be lined properly, maintaining an appropriate distance of at least 50 feet (US-EPA) from water sources to protect the drinking water from faecal contamination.
12. There must be clear segregation of the responsibilities among the departments in terms of service provider; independent surveillance body and regulator at provincial level and all should be accountable for their duties.
13. There must be implementation and enforcement of Drinking Water Policy for KP and National Drinking Water Quality Standards by the stakeholders involved in provision of safe drinking water.

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6. ANNEXURE

DRINKING WATER QUALITY ANALYSIS RESULTS OF MINGORA CITY, DISTRICT SWAT

Sr. No.	Location Code	Owned by	Source	Depth (feet)	EC	pH	Taste	Color	Odor	Turb	Ca	Hard	Mg	Alk.	HCO ₃	CO ₃	Cl	K	Na	NO ₃ (N)	SO ₄	TDS	F	As	Total Coliforms	E. Coli	Safe/ Unsafe
	Permissible limit NSDWQ				NGVS	6.5-8.5	Un obj	Clear	O less	5 NTU	NGVS	500 mg/l	NGVS	NGVS	NGVS		250 mg/l	NGVS	NGVS	10 mg/l	NGVS	1000 mg/l	1.5 mg/l	50 µg/l	Nil CFU/1ml	Nil CFU/1ml	
1	Akhun Baba, U/C Shagai	TMA	Tube well	100	470	8.1	Un obj	Clear	O less	0.20	44	250	34.02	3.6	180	BDL	25	2	8	2.00	45	275	0.21	0.31	Nil	Nil	Safe
2	Umar Sadiq	-	Tap		500	8.9	Un obj	Clear	O less	0.52	40	260	38.88	4.0	200	30	25	1	10	3.40	35	285			Nil	Nil	Safe
3	Community Base	-	Hand Pump		740	7.9	Un obj	Clear	O less	0.61	52	350	53.46	5.0	250	BDL	75	1	20	5.50	35	411			4	Nil	Unsafe
4	Abdul Malik	-	Tap		490	8.2	Un obj	Clear	O less	0.41	40	240	34.02	3.6	180	BDL	25	1	8	3.10	45	275			10	Nil	Unsafe
5	Naseer Khan	-	Tap		470	8.2	Un obj	Clear	O less	0.35	40	240	34.02	3.6	180	BDL	25	1	8	3.00	44	273			10	Nil	Unsafe
6	Siraj Ahmad	-	Tap		480	7.7	Un obj	Clear	O less	0.75	40	250	36.45	3.8	190	BDL	24	2	8	3.00	45	283			7	3	Unsafe
7	Takal Mama	-	Tap		470	7.8	Un obj	Clear	O less	0.56	40	250	36.45	3.8	190	BDL	25	1	9	4.30	44	288			Nil	Nil	Safe
8	Bakhat Bhadar	-	Tap		470	8.2	Un obj	Clear	O less	1.01	40	250	36.45	3.6	180	BDL	25	1	8	5.10	44	285			8	Nil	Unsafe
9	Akbar Ali	-	Tap		660	8.1	Un obj	Clear	O less	20.10	72	320	34.02	5.0	250	BDL	30	1	20	3.40	62	384			10	2	Unsafe
10	Community Base	-	Hand Pump		470	8.1	Un obj	Clear	O less	0.20	44	250	34.02	3.6	180	BDL	25	2	8	2.00	45	275			Nil	Nil	Safe
11	Shagai, U/C shagai	TMA	Tube well	150	460	8.8	Un obj	Clear	O less	0.75	56	250	26.73	3.6	180	20	20	1	8	3.40	37	272	0.16	0.50	Nil	Nil	Safe
12	Anwar Said	-	Tap		450	8.4	Un obj	Clear	O less	0.35	36	250	38.88	3.6	180	BDL	25	1	8	3.40	34	266			Nil	Nil	Safe
13	Anwar	-	Tap		460	8.4	Un obj	Clear	O less	0.44	36	240	36.45	3.4	170	BDL	26	1	8	3.30	35	259			8	Nil	Unsafe
14	Sartaj	-	Bore		450	8.4	Un obj	Clear	O less	0.68	44	240	31.59	3.2	160	BDL	25	1	8	3.50	40	261			Nil	Nil	Safe
15	Muhammad Saleem	-	Tap		450	8.3	Un obj	Clear	O less	0.56	68	250	19.44	3.6	180	BDL	27	1	8	4.90	39	230			Nil	Nil	Safe
16	Muhammad Islam	-	Tap		420	8.5	Un obj	Clear	O less	0.89	70	250	18.22	3.4	170	BDL	25	1	8	3.00	35	210			6	Nil	Unsafe
17	Akhun Zada	-	Tap		1890	7.8	Un obj	Clear	O less	1.34	110	750	115.40	12.0	600	BDL	150	16	120	6.70	140	1041			10	Nil	Unsafe
18	Muhammad Ali	-	Bore		520	8.0	Un obj	Clear	O less	0.25	60	270	29.10	4.0	200	BDL	30	1	10	2.30	40	300	0.20	1.2	3	Nil	Unsafe
19	Community Base	-	Hand Pump		580	7.9	Un obj	Clear	O less	0.66	60	300	36.40	4.4	220	BDL	25	1	10	3.70	40	320	0.12	0.7	7	Nil	Unsafe
20	Siraj	-	Bore		440	8.3	Un obj	Clear	O less	0.75	44	240	31.50	4.0	200	BDL	23	1	8	2.90	38	278	0.15	0.3	Nil	Nil	Safe
21	Khona Chum, U/C Said Sharif	TMA	Tube well	40	450	8.5	Un obj	Clear	O less	0.35	55	230	22.40	2.4	120	BDL	53	1	5	2.10	32	249	0.14	1.3	Nil	Nil	Safe
22	Mehboob Alam	-	Tap		440	8.8	Un obj	Clear	O less	0.75	56	210	17.01	2.4	120	30	50	1	5	2.50	35	247			Nil	Nil	Safe

23	Khan	-	Tap		440	8.9	Un obj	Clear	O less	0.56	52	210	19.44	2.4	120	30	50	1	6	2.50	36	247			6	Nil	Unsafe
24	Umar Ali	-	Tap		440	8.9	Un obj	Clear	O less	0.40	50	200	18.22	2.6	130	30	48	1	6	2.30	35	246			Nil	Nil	Safe
25	Fazali Rahim Sheena	-	Tap		440	8.8	Un obj	Clear	O less	0.60	50	220	23.00	2.4	120	30	48	1	6	2.50	34	245			10	2	Unsafe
26	Fazali Rahim	-	Tap		1560	7.9	Un obj	Clear	O less	2.80	176	700	63.18	10.0	500	BDL	157	3	62	8.00	79	875			Nil	Nil	Unsafe
27	Umar Ali		Bore		570	8.1	Un obj	Clear	O less	1.10	60	270	29.16	3.6	180	BDL	45	1	11	4.50	50	324	0.08	1.2	8	Nil	Unsafe
28	Community Base		Hand Pump		430	8.4	Un obj	Clear	O less	1.15	52	200	17.01	2.4	120	BDL	45	1	6	3.20	35	242	0.05	0.5	6	Nil	Unsafe
29	Ahmad Said		Bore		430	8.2	Un obj	Clear	O less	1.10	52	200	17.01	2.4	120	BDL	44	1	6	3.20	34	240	0.05	0.6	Nil	Nil	Safe
30	Community Base		Spring		420	8.2	Un obj	Clear	O less	0.75	52	200	17.01	2.4	120	BDL	44	1	5	2.40	34	235	0.12	1.4	15	5	Unsafe
31	Shahi Bagh # 1, U/C Saidu Sharif	TMA	Tube well	90	460	8.3	Un obj	Clear	O less	1.10	44	230	255.70	3.0	150	BDL	21	1	8	5.10	40	25	0.17	1.6	Nil	Nil	Safe
32	Saidu sharif tank		Tap		500	8.5	Un obj	Clear	O less	0.35	72	230	277.40	3.2	160	BDL	25	1	8	3.00	50	277			Nil	Nil	Safe
33	Govt. High School, Bar Kally, Saidu Sharif		Tap		430	8.4	Un obj	Clear	O less	0.40	40	220	238.30	2.6	130	BDL	21	1	9	5.80	40	244			Nil	Nil	Safe
34	Govt. High School, Bar Kally, Saidu Sharif		Bore		450	8.4	Un obj	Clear	O less	0.75	42	230	248.50	2.8	140	BDL	21	1	8	5.00	40	248	0.12	0.5	Nil	Nil	Safe
35	Rozi Khan		Tap		440	8.6	Un obj	Clear	O less	0.66	40	230	246.30	2.8	140	20	21	2	8	4.00	42	246			Nil	Nil	Safe
36	Communal point		Distribution lines		480	8.6	Un obj	Clear	O less	0.89	48	240	267.30	3.0	150	20	21	1	8	5.00	48	267			8	Nil	Unsafe
37	Ihsan Khan		Tap		490	8.3	Un obj	Clear	O less	1.00	50	250	273.00	3.0	150	BDL	23	2	8	4.00	52	273			Nil	Nil	Safe
38	Nasir Ali		Tap		490	8.8	Un obj	Clear	O less	1.10	52	250	272.80	3.0	150	30	25	1	8	4.00	50	273			Nil	Nil	Safe
39	Sarfaraz Khan		Tap		490	8.4	Un obj	Clear	O less	0.76	50	250	272.00	3.0	150	BDL	23	2	8	4.00	48	272			Nil	Nil	Safe
40	Muhammad Iqbal		Tap		490	8.3	Un obj	Clear	O less	0.40	52	250	280.30	3.0	150	BDL	25	2	8	5.00	52	280			Nil	Nil	Safe
41	Shahi Bagh # 2, U/C Saidu Sharif	TMA	Tube well	80	470	7.8	Un obj	Clear	O less	1.10	52	220	21.87	2.6	130	BDL	38	1	5	4.90	45	263	0.45	BDL	Nil	Nil	Safe
42	Naveed		Tap		460	8.0	Un obj	Clear	O less	1.20	50	220	23.08	2.6	130	BDL	35	1	6	4.40	44	257			Nil	Nil	Safe
43	Waris Khan		Tap		470	8.0	Un obj	Clear	O less	1.50	50	240	27.94	2.6	130	BDL	32	1	5	5.50	44	262			8	Nil	Unsafe
44	Ihsan Ullah		Tap		480	8.3	Un obj	Clear	O less	0.75	52	230	24.30	2.6	130	BDL	35	1	7	5.90	45	268			Nil	Nil	Safe
45	Asif		Tap		470	8.0	Un obj	Clear	O less	0.89	50	230	25.51	2.6	130	BDL	37	1	5	4.40	45	261			8	Nil	Unsafe
46	Water tank direct line		Tap		450	8.1	Un obj	Clear	O less	1.10	52	220	21.87	2.6	130	BDL	35	1	6	4.90	44	260			10	Nil	Unsafe
47	Sherzada		Tap		570	8.0	Un obj	Clear	O less	1.15	60	290	34.02	4.0	200	BDL	45	1	7	3.40	39	321			10	2	Unsafe

48	Inzar Gul		Tap		470	8.2	Un obj	Clear	O less	0.25	52	240	26.73	2.6	130	BDL	44	1	5	4.60	45	272			1	Nil	Unsafe
49	Nasim Gul		Tap		480	8.4	Un obj	Clear	O less	0.07	52	220	21.87	2.8	140	BDL	40	1	6	4.90	40	267			Nil	Nil	Safe
50	Taj Malook		Tap		470	8.1	Un obj	Clear	O less	0.05	48	220	24.30	2.8	140	BDL	40	1	5	3.80	43	262			Nil	Nil	Safe
51	Afsar Abad, U/C Faizabad	TMA	Tube well	110	690	7.9	Un obj	Clear	O less	0.07	64	330	41.31	4.6	230	BDL	50	1	16	6.20	45	385	0.12	1.7	Nil	Nil	Safe
52	Ashfaq Ahmad		Tap		665	7.9	Un obj	Clear	O less	0.06	66	330	40.09	4.6	230	BDL	55	2	17	6.60	44	393			14	Nil	Unsafe
53	Shah Bali Jan		Tap		670	7.9	Un obj	Clear	O less	0.02	60	300	36.45	5.0	250	BDL	45	2	16	3.20	39	369			Nil	Nil	Safe
54	Amir Zeb		Tap		920	7.6	Un obj	Clear	O less	0.46	96	500	63.18	8.2	410	BDL	75	2	34	6.00	45	593			Nil	Nil	Safe
55	Amir Zeb		Bore		1120	7.5	Un obj	Clear	O less	1.23	85	530	77.00	7.6	380	BDL	100	2	40	8.20	44	617	0.16	2.4	Nil	Nil	Safe
56	Habib Khan		Bore		740	8.5	Un obj	Clear	O less	1.20	80	360	38.00	6.0	300	30	45	2	18	7.60	39	447	0.14	1.2	10	Nil	Unsafe
57	Ameen Ul Haq		Tap		680	8.3	Un obj	Clear	O less	1.40	94	350	28.00	5.6	280	BDL	45	2	16	5.40	45	421			Nil	Nil	Safe
58	Khalid		Tap		670	8.5	Un obj	Clear	O less	1.50	90	330	25.00	5.2	260	BDL	43	2	15	7.50	47	411			Nil	Nil	Safe
59	Akhtar Ali		Tap		680	8.3	Un obj	Clear	O less	1.10	92	330	25.00	5.4	270	BDL	40	1	13	5.20	44	399			Nil	Nil	Safe
60	Saltant Khan		Bore		670	8.2	Un obj	Clear	O less	1.30	90	320	23.00	5.2	260	BDL	42.5	2	16	7.20	46	407	0.16	0.5	5	Nil	Unsafe
61	College Colony, Nazir Chum, U/C Saidu Sharif	TMA	Tube well	150	690	8.2	Un obj	Clear	O less	1.50	92	320	21.00	5.2	260	BDL	40	2	17	6.60	44	402	0.09	2.2	Nil	Nil	Safe
62	Water tank		Tap		920	8.4	Un obj	Clear	O less	1.50	100	400	36.00	7.2	360	BDL	50	2	36	6.40	45	513			Nil	Nil	Safe
63	Community Base		Hand Pump		920	8.2	Un obj	Clear	O less	3.10	102	410	37.00	7.0	350	BDL	50	1	34	5.50	50	509	0.08	2.8	Nil	Nil	Safe
64	Amir Sayyab		Tap		660	8.2	Un obj	Clear	O less	1.70	98	360	28.00	5.6	280	BDL	45	2	17	7.40	55	445			Nil	Nil	Safe
65	Zar bad Shah		Tap		710	8.4	Un obj	Clear	O less	1.07	96	350	26.00	5.8	290	BDL	45	2	16	7.10	45	436			Nil	Nil	Safe
66	Muhammad Raziq		Tap		680	8.4	Un obj	Clear	O less	1.10	96	350	27.00	5.4	270	BDL	45	3	19	6.40	45	425			Nil	Nil	Safe
67	Waqar Hotel		Tap		710	8.5	Un obj	Clear	O less	1.10	95	350	27.00	5.6	280	BDL	42	2	18	7.20	42	426			10	Nil	Unsafe
68	Zahoor		Tap		680	8.4	Un obj	Clear	O less	1.70	95	330	22.00	5.0	250	BDL	42.5	2	17	7.60	45	407			Nil	Nil	Safe
69	Office Zakat Distt Office		Tap		700	8.6	Un obj	Clear	O less	1.60	92	320	21.87	5.4	270	20	42.5	2	17	5.00	47	406			8	2	Unsafe
70	Ghulam Ullah		Tap		720	8.2	Un obj	Clear	O less	1.80	95	360	29.00	5.4	270	BDL	42.5	2	17	6.80	50	428			5	2	Unsafe
71	Faizabad, No.1 Shaheen Abad Road, U/C Faizabad	TMA	Tube well	120	720	8.7	Un obj	Clear	O less	1.20	85	350	29.76	5.4	270	20	45	2	14	5.00	49	412	0.15	0.2	Nil	Nil	Safe
72	Gulshireen		Bore		710	9.0	Un obj	Clear	O less	2.10	79	330	33.41	5.4	270	30	44	2	13	3.10	48	393	0.12	2.5	Nil	Nil	Safe
73	Bilal Majid		Tap		680	8.9	Un obj	Clear	O less	2.10	76	300	32.10	5.0	250	20	34	1	33	9.00	45	405			10	Nil	Unsafe

74	Community Base		Hand Pump		910	8.3	Un obj	Clear	O less	2.30	76	450	26.73	7.6	380	BDL	50	3	19	5.10	45	506	0.14	2.2	Nil	Nil	Safe
75	Abid Shah		Tap		710	8.6	Un obj	Clear	O less	2.40	76	340	63.18	5.0	250	20	45	3	19	6.80	56	415			Nil	Nil	Safe
76	Water tank store		Storage Tank		720	8.7	Un obj	Clear	O less	1.80	68	350	36.45	5.4	270	20	45	2	19	7.40	48	420			4	Nil	Unsafe
77	Ghani		Tap		680	8.2	Un obj	Clear	O less	1.90	55	320	43.74	5.2	260	BDL	43	2	19	8.20	47	402			6	Nil	Unsafe
78	Rehmat Ghani		Tap		670	8.3	Un obj	Clear	O less	2.90	56	320	44.34	5.2	260	BDL	44	1	18	5.80	52	396			3	Nil	Unsafe
79	Community Bore		Bore		680	8.4	Un obj	Clear	O less	2.10	56	350	43.70	5.4	270	BDL	45	1	23	5.00	52	409	0.14	1.7	6	Nil	Unsafe
80	Asad Iqbal		Tap		670	8.2	Un obj	Clear	O less	1.80	68	350	48.00	4.6	230	BDL	62.5	2	20	4.50	52	406			4	Nil	Unsafe
81	Faizabad No.2, U/C Amankot	TMA	Tube well	150	410	7.9	Un obj	Clear	O less	1.20	44	180	17.01	2.8	140	BDL	25	1	10	5.00	25	228	0.08	1.1	Nil	Nil	Safe
82	Tamur Jan		Tap		360	7.6	Un obj	Clear	O less	1.40	42	170	15.79	2.6	130	BDL	23	1	11	5.10	28	221			8	Nil	Unsafe
83	Alam Sher		Tap		350	7.5	Un obj	Clear	O less	1.50	42	170	15.79	2.8	140	BDL	25	1	10	2.20	26	214			10	4	Unsafe
84	Muhammad Tahir		Tap		350	7.8	Un obj	Clear	O less	1.10	44	180	17.01	3.0	150	BDL	26	1	10	2.50	27	226			10	Nil	Unsafe
85	Fazal Hameed		Tap		360	7.4	Un obj	Clear	O less	1.90	40	180	19.44	3.0	150	BDL	26	1	10	2.90	24	223			6	3	Unsafe
86	Suleman		Tap		350	8.2	Un obj	Clear	O less	2.10	40	170	17.01	2.8	140	BDL	28	1	11	1.40	25	212			10	Nil	Unsafe
87	Hayatullah		Tap		350	8.2	Un obj	Clear	O less	1.80	40	180	19.44	2.8	140	BDL	28	1	9	3.20	28	224			6	2	Unsafe
88	Rozi Rehman		Tap		360	8.2	Un obj	Clear	O less	1.70	40	170	17.01	2.8	140	BDL	26	1	9	2.10	25	211			6	2	Unsafe
89	Sayid		Tap		350	7.9	Un obj	Clear	O less	1.80	40	170	17.01	2.6	130	BDL	35	1	9	1.20	26	211			20	Nil	Unsafe
90	Imran		Tap		350	8.0	Un obj	Clear	O less	1.90	36	180	21.87	2.6	130	BDL	25	1	9	4.00	28	217			20	3	Unsafe
91	Mullababa No.1 U/C Landi Kas	TMA	Tube well	120	780	7.9	Un obj	Clear	O less	3.10	76	330	34.02	5.6	280	BDL	50	3	34	2.00	60	434	0.08	0.1	2	Nil	Unsafe
92	Aqal Mand		Hand Pump		770	7.9	Un obj	Clear	O less	15.50	76	330	34.02	5.6	280	BDL	48	3	30	7.30	62	453	0.15	3.1	10	Nil	Unsafe
93	Nishat Chowk		Tap		770	8.1	Un obj	Clear	O less	21.10	72	340	38.88	5.6	280	BDL	50	3	30	7.20	67	461			10	Nil	Unsafe
94	Swat Electric		Tap		930	7.9	Un obj	Clear	O less	2.90	102	400	35.23	6.4	320	BDL	60	10	25	9.20	53	518			10	Nil	Unsafe
95	Asad		Bore		775	7.9	Un obj	Clear	O less	2.80	76	340	36.45	5.4	270	BDL	50	3	33	7.80	55	450	0.14	2.8	10	Nil	Unsafe
96	Asghar Khan		Tap		780	7.7	Un obj	Clear	O less	17.10	76	340	36.45	5.6	280	BDL	51	3	32	7.60	55	455			20	13	Unsafe
97	Consumer point		Tap		1430	7.5	Un obj	Clear	O less	3.10	96	600	87.48	8.0	400	BDL	188	2	75	7.70	101	824			10	Nil	Unsafe
98	Kalalala		Bore		770	7.7	Un obj	Clear	O less	15.30	70	330	37.66	5.4	270	BDL	67.5	3	31	4.60	55	447	0.16	3.1	7	Nil	Unsafe
99	Muhammad Rehman		tap		770	7.8	Un obj	Clear	O less	22.10	76	330	34.02	5.4	270	BDL	67.5	3	31	5.50	53	451			10	Nil	Unsafe
100	Said Rehman		tap		770	7.8	Un obj	Clear	O less	6.10	75	330	34.62	5.4	270	BDL	67.5	3	31	4.90	55	450			10	Nil	Unsafe

101	Makan Bagh, Near Punjab Bank, Press Club, U/C Landikas	TMA	Tube well	140	760	8.2	Un obj	Clear	O less	1.20	72	330	36.45	5.2	260	BDL	67.5	1	30	6.20	30	420	0.09	2.4	Nil	Nil	Safe
102	Shahzad		Tap		760	8.3	Un obj	Clear	O less	1.10	72	330	36.45	5.2	260	BDL	67.5	1	28	6.30	30	419			4	Nil	Unsafe
103	Akbar Ali		Tap		780	8.1	Un obj	Clear	O less	1.80	62	330	42.52	5.4	270	BDL	67.5	1	28	9.80	28	434			12	Nil	Unsafe
104	Sadiq Akbar		Bore		650	8.5	Un obj	Clear	O less	1.90	70	260	20.65	4.0	200	BDL	65	1	27	6.00	30	360	0.16	2.1	4	Nil	Unsafe
105	Mir Salam		Tap		770	8.0	Un obj	Clear	O less	2.10	68	350	43.74	5.0	250	BDL	67	1	28	8.20	32	426			Nil	Nil	Safe
106	Fazal Wahid		Tap		820	8.1	Un obj	Clear	O less	1.20	68	350	43.74	6.0	300	BDL	70	1	35	5.50	33	455			Nil	Nil	Safe
107	Community Base		Tap		690	8.2	Un obj	Clear	O less	1.40	68	300	31.59	5.0	250	BDL	70	3	28	3.70	20	387			Nil	Nil	Safe
108	community point		Tap		710	8.1	Un obj	Clear	O less	1.10	64	300	34.02	4.6	230	BDL	66	1	28	7.30	31	394			10	Nil	Unsafe
109	Consumer point		Tap		720	8.3	Un obj	Clear	O less	1.80	70	300	30.37	5.2	260	BDL	50	5	28	6.50	31	400			14	Nil	Unsafe
110	Community Base		Tap		720	8.5	Un obj	Clear	O less	2.30	68	300	31.59	5.2	260	BDL	60	2	28	5.70	30	401			2	Nil	Unsafe
111	Zahid Abad, GT Road, U/C Rahimabad	TMA	Tube well	150	680	8.5	Un obj	Clear	O less	1.20	80	300	24.30	5.0	250	BDL	62	2	18	3.20	25	375	0.11	1.3	Nil	Nil	safe
112	Tariq		Tap		840	8.0	Un obj	Clear	O less	1.50	80	390	46.17	5.4	270	BDL	83	2	24	6.80	35	462			8	Nil	Unsafe
113	Rahmat Ali		Tap		1240	8.0	Un obj	Clear	O less	1.30	140	550	48.60	9.4	470	BDL	85	3	39	7.00	60	689			4	2	Unsafe
114	Gohar		Tap		950	8.3	Un obj	Clear	O less	1.69	95	400	39.48	6.0	300	BDL	85	1	30	8.60	60	529			8	3	Unsafe
115	Rasheed		Tap		950	8.1	Un obj	Clear	O less	1.80	92	400	41.31	6.0	300	BDL	82	1	30	9.20	58	525			4	3	Unsafe
116	Kaki		Tap		810	7.9	Un obj	Clear	O less	1.90	80	360	38.88	5.6	280	BDL	60	1	30	7.50	40	451			20	8	Unsafe
117	Jamshed		Bore		780	8.2	Un obj	Clear	O less	1.10	80	340	34.02	5.2	260	BDL	60	1	30	7.20	40	433	0.12	0.5	Nil	Nil	Safe
118	Akhtar Zada		Bore		810	8.2	Un obj	Clear	O less	2.10	80	360	38.88	5.8	290	BDL	60	1	30	6.40	39	451	0.14	2.1	7	Nil	Unsafe
119	Tariq		Bore		810	8.0	Un obj	Clear	O less	1.50	80	350	36.45	5.6	280	BDL	60	1	28	9.50	34	450	0.15	2.4	10	Nil	Unsafe
120	Faramush		Tap		780	8.1	Un obj	Clear	O less	1.80	75	350	39.48	5.4	270	BDL	55	1	30	6.50	40	431			20	7	Unsafe
121	Makan Bagh, U/C Landi Kass	TMA	Tube well	90	218	8.0	Un obj	Clear	O less	1.20	20	110	14.58	1.6	80	BDL	16	1	7	1.20	9	121	0.09	1.5	Nil	Nil	Safe
122	Usman Ali Shah		Tap		227	7.8	Un obj	Clear	O less	2.30	20	110	14.58	1.6	80	BDL	17	2	7	2.20	8	126			4	2	Unsafe
123	Mehranzeb		Tap		416	7.9	Un obj	Clear	O less	2.40	44	190	19.44	2.6	130	BDL	37.5	2	15	3.90	18	231			3	2	Unsafe
124	Manzoor		Bore		225	8.0	Un obj	Clear	O less	2.10	20	100	12.15	1.6	80	BDL	18	1	10	2.00	10	128	0.08	2.3	Nil	Nil	Safe
125	Barkat		Tap		229	7.7	Un obj	Clear	O less	1.80	20	100	12.15	1.6	80	BDL	17	0	8	2.60	10	127			5	3	Unsafe
126	Shehzad		Tap		347	7.4	Un obj	Clear	O less	1.20	28	140	17.01	2.2	110	BDL	30	1	15	6.50	10	196			5	Nil	Unsafe

127	Farid Gul		Tap		278	7.3	Un obj	Clear	O less	1.10	28	130	14.58	2.0	100	BDL	17	1	10	3.90	11	159			8	2	Unsafe
128	Saleem		Tap		569	7.2	Un obj	Clear	O less	1.50	60	250	24.30	4.0	200	BDL	50	1	25	5.80	8.5	314			12	4	Unsafe
129	Haider Ali		Tap		313	7.2	Un obj	Clear	O less	1.90	35	150	15.18	1.8	90	BDL	30	1	10	5.90	22	193			8	2	Unsafe
130	Rizwan Khan		Tap		970	7.3	Un obj	Clear	O less	2.90	100	400	36.40	7.2	360	BDL	70	1	50	4.10	70	562			10	2	Unsafe
131	Chinar Colony, Amankot No.2, U/C Faizabad	TMA	Tube well	80-90	305	7.4	Un obj	Clear	O less	3.20	25	150	21.20	1.8	90	BDL	27	1	10	7.90	12	185	0.14	2.2	Nil	Nil	Safe
132	Muhammad Rehman		Tap		306	7.7	Un obj	Clear	O less	1.80	48	150	7.29	1.8	90	BDL	27	1	10	9.30	11	199			5	Nil	Unsafe
133	Aurangzeb		Bore		1150	7.7	Un obj	Clear	O less	1.20	90	450	54.67	8.0	400	BDL	67	7	65	3.20	95	633	0.13	3.5	10	Nil	Unsafe
134	Akhtar Ali		Bore		1282	7.7	Un obj	Clear	O less	1.20	108	530	63.18	7.8	390	BDL	125	1	60	6.40	90	710			6	Nil	Unsafe
135	Zar Jan		Tap		288	7.9	Un obj	Clear	O less	1.30	30	110	8.51	1.6	80	BDL	15	1	15	6.40	14	160			Nil	Nil	Safe
136	Ali Rehman		Tap		382	7.5	Un obj	Clear	O less	0.39	52	170	9.72	2.4	120	BDL	35	1	10	6.00	17	223			8	Nil	Unsafe
137	Water Tank		Storage Tank		1292	7.2	Un obj	Clear	O less	0.07	130	550	54.60	7.0	350	BDL	150	1	60	6.90	96	732			6	Nil	Unsafe
138	Abdul Rehman		Tap		396	7.2	Un obj	Clear	O less	0.80	48	200	19.44	2.2	110	BDL	19	1	10	7.00	40	234			10	Nil	Unsafe
139	Community Base		Hand Pump		1578	6.8	Un obj	Clear	O less	1.10	180	620	41.31	8.0	400	BDL	240	2	85	7.30	52	872	0.12	5.1	10	Nil	Unsafe
140	Qari Muhammad Sharif		Bore		384	7.1	Un obj	Clear	O less	0.90	44	180	17.01	2.4	120	BDL	37	1	10	7.00	23	235			6	Nil	Unsafe
141	Chiner Colony Amankot No.1, Scheme Non- functional, U/C Faizabad	TMA	Tube well	100	623	7.5	Un obj	Clear	O less	1.30	74	300	27.95	5.0	250	BDL	42	1	17	6.20	10	349	0.14	1.4	Nil	Nil	Safe
142	Amankot No.3, Miangano Chum, U/C Faizabad	TMA	Tube well	150	473	7.2	Un obj	Clear	O less	1.70	56	230	21.87	3.0	150	BDL	52	1	9	6.70	5	265	0.13	1.4	Nil	Nil	Safe
143	Sher Ghani		Tap		384	7.3	Un obj	Clear	O less	1.40	44	230	29.16	3.0	150	BDL	47	1	7	6.10	10	255			Nil	Nil	Safe
144	Iqbal		Bore		386	7.2	Un obj	Clear	O less	0.20	44	230	29.16	3.0	150	BDL	44	1	5	6.10	10	250	0.19	3.2	Nil	Nil	Safe
145	Gul Muhammad Khan		Bore		396	7.2	Un obj	Clear	O less	0.85	52	230	24.30	2.6	130	BDL	40	1	5	6.60	9	239	0.12	2.4	Nil	Nil	Safe
146	Shah qasim		Bore		854	7.1	Un obj	Clear	O less	0.08	116	360	17.01	5.6	280	BDL	70	1	30	6.80	39	471	0.13	1.3	7	Nil	Unsafe
147	Rahmat Ali		Tap		865	7.3	Un obj	Clear	O less	0.10	105	360	23.69	6.4	320	BDL	55	3	38	7.00	35	483			Nil	Nil	Safe
148	Noor Ali		Tap		850	7.4	Un obj	Clear	O less	0.06	120	360	14.58	6.2	310	BDL	54	1	35	6.40	30	469			Nil	Nil	Safe
149	Sher Ali		Bore		1285	7.4	Un obj	Clear	O less	0.14	128	550	55.89	9.0	450	BDL	95	1	81	9.40	40	713	0.90	0.8	20	Nil	Unsafe
150	Community Base		Hand Pump		893	7.2	Un obj	Clear	O less	0.05	140	370	4.86	6.0	300	BDL	55	2	39	7.00	40	492	0.13	0.7	Nil	Nil	Safe

151	Abdul Ghaffar		Tap		970	7.5	Un obj	Clear	O less	0.20	95	420	44.35	7.0	350	BDL	80	2	40	6.60	42	543			Nil	Nil	Safe
152	Barn, Usman Abad U/S Injaro Derai	TMA	Tube well	150	897	7.3	Un obj	Clear	O less	0.04	100	380	31.59	6.0	300	BDL	75	1	38	6.50	41	495	0.13	2.4	Nil	Nil	safe
153	Storey Khan		Tap		845	7.3	Un obj	Clear	O less	0.05	96	360	29.16	6.0	300	BDL	70	1	30	6.80	36	472			10	Nil	Unsafe
154	Abu Bakar		Open Well		1140	7.2	Un obj	Clear	O less	0.05	110	480	49.82	8.0	400	BDL	120	1	45	6.50	37	632			6	Nil	Unsafe
155	Noman		Tap		882	7.1	Un obj	Clear	O less	0.03	100	380	31.59	6.0	300	BDL	80	1	30	6.00	36	485			10	Nil	Unsafe
156	Hamyun		Dug Well		1130	7.6	Un obj	Clear	O less	0.38	120	480	43.74	8.4	420	BDL	105	1	60	0.80	40	625			6	Nil	Unsafe
157	Kamran		Tap		1144	7.5	Un obj	Clear	O less	0.03	110	480	49.82	8.0	400	BDL	105	1	58	7.00	38	633			12	2	Unsafe
158	Miraj Muhammad		Tap		1570	7.5	Un obj	Clear	O less	0.16	160	650	60.75	10.0	500	BDL	200	5	60	7.30	50	868			8	Nil	Unsafe
159	M. Rehman		Open Well		1110	7.5	Un obj	Clear	O less	0.04	120	480	43.74	8.0	400	BDL	105	1	44	5.10	35	611			12	Nil	Unsafe
160	Barkat Ali		Tap		1111	7.6	Un obj	Clear	O less	0.08	120	480	43.74	8.0	400	BDL	105	1	45	7.20	34	621			8	Nil	Unsafe
161	Fazal Rehman		Open Well		152	7.8	Un obj	Clear	O less	0.07	18	100	13.37	1.6	80	BDL	8	1	3	0.50	8	102			8	Nil	Unsafe
162	Gulkada No.1, U/C Gulkada	TMA	Tube well	80	748	7.8	Un obj	Clear	O less	0.08	76	350	38.88	5.6	280	BDL	60	2	28	1.50	35	415	0.12	3.5	Nil	Nil	Safe
163	Yaqub Khan		Storage Tank		887	7.5	Un obj	Clear	O less	0.01	60	380	55.89	6.4	320	BDL	75	1	38	6.00	40	488			8	2	Unsafe
164	Mir Alam		Tap		155	7.9	Un obj	Clear	O less	0.02	15	100	15.18	1.6	80	BDL	6	0.5	3	0.10	8	96			10	4	Unsafe
165	Arshad Farooq		Tap		154	7.8	Un obj	Clear	O less	0.02	16	100	14.58	1.6	80	BDL	8	0.5	3	0.10	8	99			10	2	Unsafe
166	Khursheed Ali		Bore		1170	7.2	Un obj	Clear	O less	0.01	160	550	36.45	9.4	470	BDL	90	1	30	5.00	25	647	0.13	3.2	8	2	Unsafe
167	Akhtar Ali		Tap		158	7.8	Un obj	Clear	O less	0.12	14	100	15.79	1.6	80	BDL	9	0.5	3	0.21	7	98			13	3	Unsafe
168	Huzrat Ali		Hand Pump		638	7.8	Un obj	Clear	O less	0.27	80	350	36.45	6.0	300	BDL	13	1	12	0.50	31	356	0.12	2.8	7	3	Unsafe
169	Amir Nowshad		Tap		655	7.4	Un obj	Clear	O less	0.03	78	350	37.66	6.0	300	BDL	13	1	11	5.00	20	363			18	6	Unsafe
170	Moazam		Tap		1069	7.4	Un obj	Clear	O less	0.01	120	500	48.60	8.2	410	BDL	85	1	35	3.50	45	596			10	3	Unsafe
171	Dr. Sahib Zada		Tap		850	7.6	Un obj	Clear	O less	0.22	110	400	30.37	6.6	330	BDL	80	1	25	0.20	26	471			Nil	Nil	Safe
172	Gulkada No.2, U/C Gulkada	TMA	Tube well	170	740	7.4	Un obj	Clear	O less	0.02	70	350	42.52	6.0	300	BDL	65	1	20	2.00	20	407	0.16	1.2	10	4	Unsafe
173	Sher Shah		Tap		647	7.6	Un obj	Clear	O less	BDL	40	340	58.32	6.0	300	BDL	40	2	30	0.60	14	367			Nil	Nil	Safe
174	Alam Zeb		Tap		642	7.6	Un obj	Clear	O less	0.05	48	340	53.46	6.0	300	BDL	38	1	30	0.70	15	369			11	3	Unsafe
175	Islam udin		Storage Tank		1604	6.9	Un obj	Clear	O less	0.13	120	670	89.91	12.0	580	BDL	170	20	63	5.40	50	885			Nil	Nil	Unsafe
176	Ameer Khan		Tap		1606	6.9	Un obj	Clear	O less	0.19	120	670	89.91	12.0	580	BDL	170	1	111	0.40	48	890			6	2	Unsafe

177	Sultan		Tap		660	7.6	Un obj	Clear	O less	0.03	44	350	58.32	6.0	300	BDL	40	1	12	0.00	30	365			7	2	Unsafe
178	Sanaullah Khan		Bore		635	7.3	Un obj	Clear	O less	0.22	42	350	59.53	6.0	300	BDL	40	1	11	0.20	24	358	0.20	1.7	Nil	Nil	Safe
179	Abdul Qadir		Bore		804	7.3	Un obj	Clear	O less	0.05	80	360	38.88	6.4	320	BDL	50	1	28	5.00	32	444	0.09	3.4	8	3	Unsafe
180	Emad Khan		Tap		611	7.4	Un obj	Clear	O less	BDL	28	300	55.89	5.4	270	BDL	25	2	20	6.00	22	341			Nil	Nil	Safe
181	Ibrahim		Open Well		842	7.1	Un obj	Clear	O less	0.05	52	380	60.75	6.0	300	BDL	70	1	34	8.00	30	463			10	2	Unsafe
182	Khawajaabad, U/C Gulkada	TMA	Tube well	175	606	7.9	Un obj	Clear	O less	0.24	60	300	36.45	5.0	250	BDL	50	1	11	1.40	23	338	0.09	2.8	3	Nil	Unsafe
183	Azizullah		Storage Tank		653	7.7	Un obj	Clear	O less	0.09	80	330	31.59	5.6	280	BDL	28	1	12	6.00	15	362			12	2	Unsafe
184	Rashid Iqbal		Tap		411	8.3	Un obj	Clear	O less	0.18	25	170	26.12	3.0	150	BDL	20	1	31	8.00	14	243			10	2	Unsafe
185	Razam Ali Shah		Tap		2007	7.1	Un obj	Clear	O less	0.38	14	790	106.90	10.0	500	BDL	230	1	12	5.00	1	1110			10	3	Unsafe
186	Anwar Baig		Tap		611	7.7	Un obj	Clear	O less	0.10	30	300	54.67	5.4	270	BDL	25	1	20	6.00	20	339			8	3	Unsafe
187	Sirajullah		Open Well		760	7.5	Un obj	Clear	O less	0.08	60	350	48.60	6.0	300	BDL	50	1	30	4.00	35	422			12	6	Unsafe
188	-		Tap		610	7.7	Un obj	Clear	O less	0.10	30	290	52.24	5.2	260	BDL	25	1	32	3.00	30	340			8	3	Unsafe
189	Samin Khan		Tap		635	7.7	Un obj	Clear	O less	0.09	70	300	30.37	5.4	270	BDL	28	1	20	5.00	16	350			Nil	Nil	Safe
190	Nawab		Tap		703	7.2	Un obj	Clear	O less	0.43	70	340	40.09	6.0	300	BDL	35	1	25	4.00	24	393			10	4	Unsafe
191	Siraj Muhammad		Tap		760	7.3	Un obj	Clear	O less	0.35	52	370	58.32	5.6	280	BDL	60	1	24	5.00	35	420			8	3	Unsafe
192	Gunbad Maira U/C Rang Muhallah	TMA	Tube well	175	641	7.5	Un obj	Clear	O less	0.12	40	330	55.89	5.4	270	BDL	38	1	15	4.00	30	360	0.07	2.1	Nil	Nil	Safe
193	Said Muhammad		Storage Tank		646	7.6	Un obj	Clear	O less	0.22	40	330	55.89	5.4	270	BDL	35	1	15	5.00	28	359			4	Nil	Unsafe
194	Zahoor Islam		Tap		640	7.6	Un obj	Clear	O less	0.02	40	330	55.89	5.4	270	BDL	35	1	15	4.60	28	357			8	2	Unsafe
195	Nigan Hussain		Tap		629	7.8	Un obj	Clear	O less	0.07	44	270	38.88	5.0	250	BDL	50	7	30	0.30	25	346			10	2	Unsafe
196	Ikramullah		Tap		1079	7.5	Un obj	Clear	O less	0.95	60	550	97.20	9.6	480	BDL	70	4	31	2.00	41	600			5	Nil	Unsafe
197	Sarfarz Khan		Hand Pump		1018	7.4	Un obj	Clear	O less	0.13	72	520	82.62	8.6	430	BDL	65	1	28	5.50	41	572	0.20	4.5	5	3	Unsafe
198	Kifayat Ullah		Tap		533	7.5	Un obj	Clear	O less	0.05	70	280	25.51	4.6	230	BDL	17	1	8	2.00	28	296			Nil	Nil	Safe
199	Shukat Ali		Tap		535	7.3	Un obj	Clear	O less	0.50	60	280	31.59	4.6	230	BDL	15	1	9	1.30	35	295			5	2	Unsafe
200	Muhmes Sheen		Storage Tank		533	7.3	Un obj	Clear	O less	0.13	60	260	26.73	4.8	240	BDL	15	1	8	1.60	35	297			7	4	Unsafe
201	Sarfaraz Khan		Bore		510	7.6	Un obj	Clear	O less	0.36	72	280	24.30	5.0	250	BDL	15	1	7	0.20	19	289	0.08	2.1	6	2	Unsafe

202	Kokarai Ada U/C Landi Kas	TMA	Tube well	140	520	7.6	Un obj	Clear	O less	0.24	75	280	22.48	5.0	250	BDL	16	1	9	0.30	20	294	0.06	1.8	10	Nil	Unsafe
203	Ashraf		Bore		515	7.6	Un obj	Clear	O less	0.14	70	280	250.00	5.0	250	BDL	18	1	9	2.00	19	250	0.09	1.2	10	3	Unsafe
204	Sajjad Ali		Tap		520	7.2	Un obj	Clear	O less	0.15	80	280	19.44	5.0	250	BDL	18	1	7	1.40	20	302			4	3	Unsafe
205	Musaber Khan		Tap		530	7.1	Un obj	Clear	O less	0.08	76	280	21.87	5.0	250	BDL	22	3	7	1.10	22	307			12	6	Unsafe
206	Muhmas		Tap		520	7.1	Un obj	Clear	O less	0.33	75	280	22.48	5.0	250	BDL	20	3	9	1.10	20	304			5	3	Unsafe
207	Sham Shorahman		Tap		910	7.0	Un obj	Clear	O less	0.23	130	450	30.38	7.4	370	BDL	68	2	24	1.80	20	504			Nil	Nil	Safe
208	Ghohar ali		Tap		290	7.8	Un obj	Clear	O less	0.14	52	160	7.29	2.2	110	BDL	13	1	4	6.20	14	185			10	4	Unsafe
209	Amjad Ali		Tap		1020	7.7	Un obj	Clear	O less	0.20	140	500	36.45	8.0	400	BDL	95	3	19	0.90	34	571			Nil	Nil	Safe
210	Adnan faida		Tap		290	7.8	Un obj	Clear	O less	0.05	48	150	7.29	2.2	110	BDL	13	2	3	6.00	15	181			8	3	Unsafe
211	Gumbat Mera Road U/C Rang Muhallah	TMA	Tube well	160	280	7.9	Un obj	Clear	O less	0.06	50	150	6.08	2.2	110	BDL	13	2	3	7.50	13	186	0.09	2.5	Nil	Nil	Safe
212	Amjad Ali		Hand Pump		260	8.2	Un obj	Clear	O less	0.08	48	150	7.29	2.2	110	BDL	13	2	3	3.00	12	164	0.10	3.1	Nil	Nil	Safe
213	Abdul Haleem		Tap		266	8.2	Un obj	Clear	O less	0.03	45	150	9.11	2.2	110	BDL	13	2	3	5.00	12	172			Nil	Nil	Safe
214	Sami Ullah		Tap		270	8.2	Un obj	Clear	O less	0.03	45	150	9.11	2.2	110	BDL	13	1	3	7.00	13	181			5	Nil	Unsafe
215	Rahmad Ali		Storage Tank		280	8.0	Un obj	Clear	O less	0.07	40	150	12.15	2.2	110	BDL	10	2	3	4.70	17	171			14	2	Unsafe
216	Abdul Wahab		tap		850	7.6	Un obj	Clear	O less	0.08	70	400	54.68	7.0	350	BDL	10	1	23	18.00	26	474			5	Nil	Unsafe
217	Gul Farosh		Bore		260	7.9	Un obj	Clear	O less	0.15	36	150	14.58	2.2	110	BDL	10	1	3	3.30	15	160	0.09	2.2	Nil	Nil	Safe
218	Noor Rehim		Tap		266	7.9	Un obj	Clear	O less	0.04	40	150	12.15	2.2	110	BDL	10	1	3	3.00	17	162			4	Nil	Unsafe
219	Hamid Iqbal		Bore		290	7.5	Un obj	Clear	O less	0.36	32	150	17.01	2.2	110	BDL	10	1	2	4.00	15	161	0.06	1.6	Nil	Nil	Safe
220	Imranzeb		Bore		290	7.4	Un obj	Clear	O less	0.10	40	150	12.15	2.2	110	BDL	13	1	4	8.00	15	187	0.10	2.2	Nil	Nil	Safe
221	Amankot Bngladesh U/C Faizabad	TMA	Tube well	150	310	7.4	Un obj	Clear	O less	0.14	40	160	14.58	2.4	120	BDL	13	1	3	8.00	16	195	0.90	3.1	Nil	Nil	Safe
222	Community Base		Hand Pump		310	7.4	Un obj	Clear	O less	0.22	40	160	14.58	2.4	120	BDL	12	1	3	7.40	14	189	0.10	2.4	Nil	Nil	Safe
223	Shakeel Khan		Tap		1070	7.3	Un obj	Clear	O less	0.31	150	500	30.38	7.0	350	BDL	70	1	30	14.00	45	598			Nil	Nil	Unsafe
224	Fazal Wadood		Hand Pump		320	7.5	Un obj	Clear	O less	0.11	52	190	14.58	2.6	130	BDL	15	1	4	8.40	15	217	0.09	2.7	5	Nil	Unsafe
225	Zafar Ali		Tap		310	7.6	Un obj	Clear	O less	0.15	52	150	4.86	3.0	150	BDL	15	2	3	7.90	17	219			12	Nil	Unsafe
226	Farhad Ali		Tap		310	7.3	Un obj	Clear	O less	0.13	52	150	4.86	2.2	110	BDL	15	1	4	8.70	10	191			Nil	Nil	Safe
227	Ibrar Ahmad		Tap		320	7.3	Un obj	Clear	O less	0.02	52	150	4.86	2.2	110	BDL	12	1	5	12.00	7	201			Nil	Nil	Unsafe

228	Community Base		Hand Pump		740	7.4	Un obj	Clear	O less	0.39	100	360	26.73	5.0	250	BDL	65	2	12	7.00	21	408	0.09	1.9	Nil	Nil	Safe
229	Abdul Ullah		Tap		750	7.2	Un obj	Clear	O less	0.79	92	350	29.16	5.2	260	BDL	58	2	21	8.00	22	416			Nil	Nil	Safe
230	Ikram		Hand Pump		310	7.3	Un obj	Clear	O less	0.26	50	150	6.08	2.2	110	BDL	13	1	4	9.70	7	190	0.10	2.3	2	Nil	Unsafe
231	Ingro Derai U/C Baran	TMA	Tube well	100-130	310	7.3	Un obj	Clear	O less	0.12	48	150	7.29	2.2	110	BDL	13	1	6	8.80	13	193	0.09	3.4	Nil	Nil	Safe
232	Muhammad Irfan		Hand Pump		360	7.1	Un obj	Clear	O less	0.14	56	150	2.43	2.2	110	BDL	15	1	6	9.00	12	198	0.08	1.5	Nil	Nil	Safe
233	Kishwar		Tap		270	7.9	Un obj	Clear	O less	0.06	48	190	17.01	3.0	150	BDL	13	1	6	13.00	10	243			6	Nil	Unsafe
234	Mashangi		Tap		410	7.0	Un obj	Clear	O less	0.02	76	200	2.43	3.0	150	BDL	18	1	6	13.00	9	260			10	Nil	Unsafe
235	Shahab Khan		Tap		340	7.0	Un obj	Clear	O less	0.07	56	150	2.43	2.2	110	BDL	15	1	6	9.00	16	202			8	Nil	Unsafe
236	Community Base		Hand Pump		350	7.0	Un obj	Clear	O less	0.06	55	150	3.04	2.2	110	BDL	18	1	6	5.00	26	197	0.12	4.5	Nil	Nil	Safe
237	Shah Bakhat Rawan		Tap		320	7.0	Un obj	Clear	O less	0.18	52	220	21.87	2.8	140	BDL	18	1	6	2.20	17	210			7	1	Unsafe
238	Sarfaraz		Open Well		320	7.5	Un obj	Clear	O less	0.25	48	150	7.29	2.2	110	BDL	21	1	4	5.00	16	185			6	Nil	Unsafe
239	Bahadsha Zarin		Tap		340	7.3	Un obj	Clear	O less	0.21	56	150	2.43	2.4	120	BDL	15	1	6	6.00	14	193			6	Nil	Unsafe
240	Muzaffar Khan		Dug Well		370	8.0	Un obj	Clear	O less	0.23	52	160	7.29	2.6	130	BDL	15	1	6	7.50	13	206			Nil	Nil	Safe
241	Barn School U/C Barn # 3	TMA	Tube well	140	510	7.7	Un obj	Clear	O less	0.27	72	280	24.30	5.0	250	BDL	15	1	7	9.50	19	289	0.13	2.3	Nil	Nil	Safe
242	Rahmad Zeb		Tap		520	7.6	Un obj	Clear	O less	0.14	75	280	22.47	5.0	250	BDL	16	1	9	8.50	20	295			Nil	Nil	Safe
243	Hamad		Tap		1020	7.7	Un obj	Clear	O less	0.31	120	450	36.45	6.8	340	BDL	56	4	40	9.00	60	563			Nil	Nil	Safe
244	Arshad Ali		Open Well		1020	7.8	Un obj	Clear	O less	0.11	120	460	38.88	6.8	340	BDL	60	3	40	9.00	62	566			3	Nil	Unsafe
245	Fayaz		Tap		1020	7.8	Un obj	Clear	O less	0.10	116	460	41.31	6.8	340	BDL	61	1	36	9.50	62	561			Nil	Nil	Safe
246	Raj		Open Well		1020	7.2	Un obj	Clear	O less	0.06	120	460	38.88	6.8	340	BDL	60	1	40	9.00	60	564			2	Nil	Unsafe
247	Akram		Tap		1030	7.5	Un obj	Clear	O less	0.11	118	460	40.10	6.8	340	BDL	62	1	41	5.00	59	567			Nil	Nil	Safe
248	Hayat Iqbal		Tap		1370	7.5	Un obj	Clear	O less	0.15	176	530	21.87	8.0	400	BDL	125	3	65	8.50	85	756			2	Nil	Unsafe
249	Dilwar Khan		Bore		1040	7.6	Un obj	Clear	O less	0.08	120	450	36.45	6.8	340	BDL	80	1	40	7.00	70	574	0.12	3.5	Nil	Nil	Safe
250	Community Base		Tap		1040	7.2	Un obj	Clear	O less	0.10	120	450	36.45	6.8	340	BDL	77	3	39	7.00	58	575			3	Nil	Unsafe
251	Fizgat Park, U/C Watka Shahdara	TMA	Tube well	100	750	7.0	Un obj	Clear	O less	0.15	70	340	40.10	5.6	280	BDL	50	3	31	8.00	30	423	0.09	2.5	Nil	Nil	Safe
252	Rahmad Ullah		Open Well		1850	7.3	Un obj	Clear	O less	0.15	200	820	77.76	10.0	520	BDL	250	3	72	8.20	80	1025			10	2	Unsafe
253	Umar zada		Tap		1270	7.1	Un obj	Clear	O less	0.14	116	620	80.19	9.2	460	BDL	103	2	19	9.00	82	714			10	2	Unsafe
254	Suleman		Tap		1430	7.1	Un obj	Clear	O less	0.41	116	740	109.35	8.6	430	BDL	145	3	41	9.20	64	773			12	Nil	Unsafe
255	Communtiy Base		Hand Pump		1220	7.1	Un obj	Clear	O less	0.35	112	650	89.91	5.6	280	BDL	138	5	42	9.10	66	661	0.40	1.7	6	Nil	Unsafe

256	Saiful Malook		Tap		1390	7.4	Un obj	Clear	O less	0.27	92	600	89.91	8.0	400	BDL	130	2	36	9.70	62	693			14	Nil	Unsafe
257	Hakimullah		Tap		1790	7.6	Un obj	Clear	O less	0.19	120	750	109.35	10.0	520	BDL	225	10	60	3.00	82	959			8	Nil	Unsafe
258	Umar Naseeb		Bore		1080	7.7	Un obj	Clear	O less	0.11	100	500	60.75	8.2	410	BDL	90	3	32	3.00	38	613	0.30	2.2	3	Nil	Unsafe
259	Muhammad Ismail		Tap		1040	7.4	Un obj	Clear	O less	0.05	40	450	85.05	8.2	410	BDL	87	2	34	2.00	32	539			Nil	Nil	Safe
260	Fazal Khaliq		Tap		1630	7.5	Un obj	Clear	O less	0.13	208	650	31.59	11.0	540	BDL	187	17	60	2.00	42	883			Nil	Nil	Safe
261	Kana Baba No.04, U/C Shahdara	TMA	Tube well	90	740	8.2	Un obj	Clear	O less	0.19	120	350	12.15	6.4	320	BDL	45	2	14	1.40	20	414	0.20	3.5	Nil	Nil	Safe
262	Sher Muhammad		Tap		650	7.5	Un obj	Clear	O less	0.03	100	330	19.44	6.6	330	BDL	40	3	20	3.00	21	410			Nil	Nil	Safe
263	Haider Ali		Dug Well		650	7.4	Un obj	Clear	O less	0.22	108	330	14.58	6.2	310	BDL	38	3	17	2.00	18	391			5	Nil	Unsafe
264	Ahmad Ali		Tap		730	7.4	Un obj	Clear	O less	0.05	108	360	21.87	6.2	310	BDL	40	2	15	1.80	23	409			14	1	Unsafe
265	Community Base		Hand Pump		730	7.4	Un obj	Clear	O less	BDL	108	360	21.87	6.2	310	BDL	38	2	14	2.00	23	402	0.12	2.5	Nil	Nil	Safe
266	Storage tank Community Based		Storage Tank		730	7.4	Un obj	Clear	O less	0.05	108	370	24.30	6.4	320	BDL	38	2	14	3.00	24	410			Nil	Nil	Safe
267	Sabir		Tap		750	7.5	Un obj	Clear	O less	0.24	100	370	29.16	6.4	320	BDL	48	2	15	2.00	27	422			3	Nil	Unsafe
268	Inayat Ullah		Tap		730	7.5	Un obj	Clear	O less	0.09	92	340	26.73	6.2	310	BDL	40	2	15	4.00	27	402			Nil	Nil	Safe
269	Community Base		Hand Pump		730	7.6	Un obj	Clear	O less	0.18	92	340	26.73	6.0	300	BDL	48	2	17	2.00	28	403	0.60	2.2	Nil	Nil	Safe
270	Hayatabad Mingora U/C Shahdara Kanababa # 5	TMA	Tube well	140	730	7.5	Un obj	Clear	O less	0.38	96	340	24.30	6.0	300	BDL	45	2	15	2.00	28	408	0.40	BDL	Nil	Nil	Safe
271	Imran		Tap		610	7.5	Un obj	Clear	O less	0.10	108	320	12.15	5.6	280	BDL	35	2	14	2.00	23	371			9	2	Unsafe
272	Govt. Girls School Hayatabad		Bore		690	7.1	Un obj	Clear	O less	0.08	88	350	31.59	6.0	300	BDL	48	2	10	1.60	23	391	0.30	1.3	10	Nil	Unsafe
273	Nasir		Dug Well		590	7.5	Un obj	Clear	O less	0.10	96	340	24.30	5.0	250	BDL	30	2	12	1.60	24	347			3	Nil	Unsafe
274	Sajjad		Tap		790	7.3	Un obj	Clear	O less	0.09	100	400	36.45	8.4	420	BDL	45	7	16	1.70	20	484			8	Nil	Unsafe
275	Sharifabad U/C Shaifabad	TMA	Tube well	180	590	7.4	Un obj	Clear	O less	0.43	64	360	48.60	6.0	300	BDL	27	2	12	1.70	27	368	0.20	1.5	6	Nil	Unsafe
276	Sahib Zada		Tap		590	8.2	Un obj	Clear	O less	0.35	80	300	24.30	6.0	300	BDL	27	2	12	3.00	28	361			Nil	Nil	Safe
277	Bakhti Rawan		Storage Tank		590	7.8	Un obj	Clear	O less	0.12	72	300	29.16	6.0	300	BDL	27	2	12	3.00	28	358			Nil	Nil	Safe
278	Noor Muhmmad		Tap		560	7.6	Un obj	Clear	O less	0.22	80	300	24.30	5.4	270	BDL	27	2	12	2.00	16	337			Nil	Nil	Safe
279	Taj Jihan		Hand Pump		580	7.3	Un obj	Clear	O less	0.02	80	340	34.02	5.4	270	BDL	27	2	12	3.00	16	346	0.30	2.5	Nil	Nil	Safe
280	Tahir Khan		Hand Pump		630	7.5	Un obj	Clear	O less	0.07	88	350	31.59	6.0	300	BDL	27	2	12	4.00	21	371	0.30	2.0	Nil	Nil	Safe

281	Adam Khan		Tap		1340	7.9	Un obj	Clear	O less	0.95	80	580	92.34	9.2	460	BDL	125	14	57	0.20	82	740			10	4	Unsafe
282	Nazir Ahmad		Tap		890	8.0	Un obj	Clear	O less	0.13	120	410	26.73	6.8	340	BDL	73	1	17	0.30	31	490			Nil	Nil	Safe
283	Fazal Rahman		Tap		880	7.8	Un obj	Clear	O less	0.05	120	410	26.73	6.8	340	BDL	78	1	20	4.00	30	497			Nil	Nil	Safe
284	Khalil-ur-Rehman		Tap		890	7.6	Un obj	Clear	O less	0.50	84	470	63.18	7.0	350	BDL	75	1	17	3.00	29	492			Nil	Nil	Safe
285	Kana baba No.6 Hayatabad, U/C Shahdara	TMA	Tube well	100	880	8.2	Un obj	Clear	O less	0.13	68	470	72.90	6.8	340	BDL	65	2	6	9.00	27	485	0.30	1.2	Nil	Nil	Safe
286	Kana Baba Road No.7, U/C Shahdara	TMA	Tube well	60	870	8.1	Un obj	Clear	O less	0.36	44	590	116.64	8.8	440	BDL	63	1	6	2.00	50	554	0.20	1.5	Nil	Nil	Safe
287	Kana Baba No.1, U/C Shahdara	TMA	Tube well	80	880	7.9	Un obj	Clear	O less	0.24	76	500	75.33	7.4	370	BDL	65	1	6	7.00	29	505	0.20	2.4	Nil	Nil	Safe
288	Water Tank#01		Storage Tank		660	8.2	Un obj	Clear	O less	0.14	60	410	63.18	6.6	330	BDL	45	1	6	2.00	14	396			Nil	Nil	Safe
289	Water Tank#2		Storage Tank		930	8.1	Un obj	Clear	O less	0.15	100	450	48.60	6.4	320	BDL	85	1	16	8.00	35	513			6	4	Unsafe
290	Humayun		Tap		880	7.9	Un obj	Clear	O less	0.08	64	490	80.19	7.4	370	BDL	75	1	25	2.00	33	509			3	Nil	Unsafe
291	Fazal Rehman		Tap		610	7.8	Un obj	Clear	O less	0.33	80	330	31.59	6.2	310	BDL	38	1	19	2.00	28	392			5	1	Unsafe
292	Muhammad Abas		Dug Well		610	7.7	Un obj	Clear	O less	0.23	80	330	31.59	6.0	300	BDL	38	1	14	2.00	25	378			8	3	Unsafe
293	Faisal		Tap		1210	7.4	Un obj	Clear	O less	0.14	120	570	65.61	8.8	440	BDL	100	2	44	2.00	64	668			Nil	Nil	Safe
294	Mian Sher Ali		Tap		610	7.9	Un obj	Clear	O less	0.20	80	300	24.30	5.0	250	BDL	30	11	20	2.00	25	349			6	1	Unsafe
295	Ijaz Ahmad		Tap		1150	7.6	Un obj	Clear	O less	0.05	10	590	77.76	8.2	410	BDL	110	1	15	2.00	66	633			6	2	Unsafe
296	Dowlat Khe1, U/C MakanBagh	TMA	Tube well	80	610	8.0	Un obj	Clear	O less	0.06	62	300	35.23	5.4	270	BDL	38	2	20	2.00	12	340	0.20	3.5	Nil	Nil	Safe
297	Community Base		Tap		610	7.6	Un obj	Clear	O less	0.08	62	300	35.23	5.4	270	BDL	38	1	10	4.00	15	341			6	Nil	Unsafe
298	Kareem Ullah		Tap		720	7.7	Un obj	Clear	O less	0.03	76	350	38.88	6.0	300	BDL	38	2	17	6.00	20	398			6	Nil	Unsafe
299	Community Base		Tap		610	7.8	Un obj	Clear	O less	0.03	56	300	38.88	5.2	260	BDL	30	1	15	2.00	30	336			4	Nil	Unsafe
300	Fateh khan		tap		610	7.9	Un obj	Clear	O less	0.07	72	300	29.16	5.0	250	BDL	30	1	12	3.00	33	340			Nil	Nil	Safe
301	Community Base		Tap		470	8.0	Un obj	Clear	O less	0.08	68	250	19.44	3.4	170	BDL	30	1	8	6.00	22	277			Nil	Nil	Safe
302	Salman		Tap		640	8.1	Un obj	Clear	O less	0.15	76	300	26.73	5.0	250	BDL	30	1	14	7.00	28	357			Nil	Nil	Safe
303	Malik Khwaja Muhammad		Tap		440	8.2	Un obj	Clear	O less	0.04	72	230	12.15	3.0	150	BDL	27	1	5	6.00	29	263			Nil	Nil	Safe
304	Aftab Ali		Bore		470	8.2	Un obj	Clear	O less	0.36	68	230	14.58	3.0	150	BDL	25	1	7	9.00	21	266	0.16	2.4	4	Nil	Unsafe
305	Bakht Sher		Tap		470	8.3	Un obj	Clear	O less	0.10	70	230	13.36	3.0	150	BDL	25	1	8	8.00	21	264			Nil	Nil	Safe

306	Nawa Killi U/C Shahdara	TMA	Tube well	120	630	8.1	Un obj	Clear	O less	0.14	70	300	30.37	5.0	250	BDL	33	1	14	7.00	25	354	0.13	2.2	Nil	Nil	Safe
307	Misal Bacha		Tap		640	7.9	Un obj	Clear	O less	0.22	70	300	30.37	5.0	250	BDL	33	1	11	8.00	25	356			4	Nil	Unsafe
308	Ijaz Ul Haq		Open well		630	7.9	Un obj	Clear	O less	0.31	72	300	29.16	5.0	250	BDL	33	1	14	6.00	26	352			10	Nil	Unsafe
309	M.Noor Uddin		Open well		1220	8.0	Un obj	Clear	O less	0.11	80	550	85.05	9.0	450	BDL	120	1	51	8.00	40	682			4	Nil	Unsafe
310	Zahir		Distribution lines		650	8.0	Un obj	Clear	O less	0.15	68	300	31.59	5.0	250	BDL	38	1	12	8.00	24	360			5	Nil	Unsafe
311	Amirzeb		Distribution lines		540	7.9	Un obj	Clear	O less	0.13	68	250	19.44	4.0	200	BDL	25	2	12	6.00	25	298			2	Nil	Unsafe
312	Naveed		Distribution lines		540	7.7	Un obj	Clear	O less	0.02	70	250	18.22	4.0	200	BDL	38	1	12	6.00	23	309			4	Nil	Unsafe
313	Sher Ali Khan		Open well		540	7.5	Un obj	Clear	O less	0.39	76	250	14.58	4.0	200	BDL	38	2	13	6.00	23	313			Nil	Nil	Safe
314	Rehmat Ali		Distribution lines		540	8.2	Un obj	Clear	O less	0.79	72	250	17.01	4.0	200	BDL	33	2	20	5.00	27	313			Nil	Nil	Safe
315	Said Raheem		Open Well		790	8.1	Un obj	Clear	O less	0.26	80	380	43.74	6.4	320	BDL	30	2	25	6.00	40	439			Nil	Nil	Safe
316	College colony Near Wadudy High School U/C Sadiu Sharif	TMA	Tube well	150	540	8.0	Un obj	Clear	O less	0.12	80	250	12.15	4.0	200	BDL	23	1	13	7.00	30	310	0.30	2.2	Nil	Nil	Safe
317	Govt. Continental Model School Wadudya		Tap		590	8.1	Un obj	Clear	O less	0.14	75	300	27.33	5.0	250	BDL	30	2	14	3.00	20	332			Nil	Nil	Safe
318	Water Storage Tank		Storage Tank		590	7.7	Un obj	Clear	O less	0.06	72	320	34.02	5.4	270	BDL	28	2	15	2.00	19	341			Nil	Nil	Safe
319	Hassnain		Tap		590	7.5	Un obj	Clear	O less	0.02	70	270	23.08	5.0	250	BDL	23	2	15	6.00	21	331			Nil	Nil	Safe
320	Parvaiz Iqbal		Tap		595	7.9	Un obj	Clear	O less	0.07	68	300	31.59	5.0	250	BDL	23	1	15	9.00	23	351			Nil	Nil	Safe
321	Islambacha		Tap			7.8	Un obj	Clear	O less	0.06	85	400	45.56	6.4	320	BDL	54	1	23	5.00	40	463			4	Nil	Unsafe
322	Rasheed Ali		Bore		840	7.8	Un obj	Clear	O less	0.18	40	150	12.15	2.4	120	BDL	18	1	7	4.00	20	188	0.12	1.5	2	Nil	Unsafe
323	Fazal Manan		Tap		330	7.6	Un obj	Clear	O less	0.25	40	160	14.58	2.6	130	BDL	18	1	7	3.00	17	189			Nil	Nil	Safe
324	Community Bore		Bore		335	7.6	Un obj	Clear	O less	0.21	40	160	14.58	2.6	130	BDL	18	1	7	3.00	15	187	0.30	1.2	5	Nil	Unsafe
325	Bacha Was Khan		Tap		330	7.4	Un obj	Clear	O less	0.23	40	150	12.15	2.6	130	BDL	13	1	7	4.00	14	183			Nil	Nil	Safe
326	Kanababa # 3 U/C Shahdara	TMA	Tube well	70	320	7.4	Un obj	Clear	O less	0.27	40	150	12.15	2.6	130	BDL	23	1	7	2.00	13	183	0.20	2.6	Nil	Nil	Safe

327	Fazal Mullah		Distribution lines		330	7.3	Un obj	Clear	O less	0.14	36	150	14.58	2.4	120	BDL	13	1	6	2.00	14	165			Nil	Nil	Safe
328	Sammiullah		Hand Pump		260	7.4	Un obj	Clear	O less	0.31	40	200	24.30	3.0	150	BDL	20	1	6	3.20	15	210			Nil	Nil	Safe
329	Imran		Distribution lines		380	7.4	Un obj	Clear	O less	0.11	48	250	31.59	4.0	200	BDL	33	1	15	4.50	25	274			4	2	Unsafe
330	Taj M. Khan		Distribution lines		520	7.4	Un obj	Clear	O less	0.10	32	280	48.60	4.6	230	BDL	13	0.5	5	8.00	20	293			3	1	Unsafe
331	Sher Malik		Distribution lines		530	7.4	Un obj	Clear	O less	0.06	50	300	42.52	5.0	250	BDL	18	1	15	4.00	20	314			4	2	Unsafe
332	Shahid Ali		Distribution lines		570	8.2	Un obj	Clear	O less	0.11	65	330	40.70	6.0	300	BDL	24	1	8	8.00	23	347			Nil	Nil	Safe
333	M. Alam		Bore		620	7.9	Un obj	Clear	O less	0.15	50	300	42.52	5.2	260	BDL	12	1	5	3.00	16	320	0.12	2.2	6	2	Unsafe
334	Fazal Nawab		Open Well		580	8.1	Un obj	Clear	O less	0.08	30	250	42.52	2.6	130	BDL	15	0.5	10	1.20	9	268			Nil	Nil	Safe
335	Nadir Khan		Distribution lines		470	8.1	Un obj	Clear	O less	0.10	35	220	32.19	3.0	150	BDL	52	1	12	7.00	20	261			4	2	Unsafe
336	Spring Near Saidu Shareef Ziarat		Spring		450	7.9	Un obj	Clear	O less	0.15	25	230	40.70	3.0	150	BDL	32	1	12	8.00	20	256	0.13	2.5	6	2	Unsafe
337	Farm Rahimabad U/C Rahimabad	TMA	Tube well	180	430	8.1	Un obj	Clear	O less	0.15	25	230	40.70	3.0	150	BDL	35	1	12	5.00	20	246	0.14	4.1	Nil	Nil	Safe
338	Habibullah		Tap		430	7.8	Un obj	Clear	O less	0.14	40	230	31.59	3.0	150	BDL	30	1	12	5.00	22	249			4	2	Unsafe
339	Aurangzeb		Tap		450	8.2	Un obj	Clear	O less	0.41	42	240	32.80	3.0	150	BDL	32	1	11	8.00	20	264			7	3	Unsafe
340	Aurangzeb		Open Well		460	8.2	Un obj	Clear	O less	0.35	42	230	30.37	3.0	150	BDL	30	0.5	10	7.00	19	253			2	Nil	Unsafe
341	Zakir ullah		Tap		450	7.9	Un obj	Clear	O less	0.27	40	230	31.59	3.0	150	BDL	29	0.5	12	6.00	20	250			8	Nil	Unsafe
342	Shamas		Tap		430	7.9	Un obj	Clear	O less	0.19	30	240	40.09	3.0	150	BDL	35	1	14	9.00	20	270			10	Nil	Unsafe
343	Community Point		Tap		460	7.8	Un obj	Clear	O less	0.11	32	230	36.45	2.4	120	BDL	30	1	14	8.20	20	260			3	Nil	Unsafe
344	Sher Badsha		Tap		440	8.3	Un obj	Clear	O less	0.05	30	200	30.37	2.6	130	BDL	35	1	14	8.50	25	245			12	Nil	Unsafe
345	Barkat		Tap		410	7.9	Un obj	Clear	O less	0.13	30	220	35.23	2.6	130	BDL	32	1	16	8.00	30	258			12	Nil	Unsafe
346	Hayat Gul		Tap		430	7.6	Un obj	Clear	O less	0.19	60	220	17.01	2.6	130	BDL	35	1	15	6.00	31	264			5	Nil	Unsafe
347	By Pass Rehmanabad, U/C Rahimabad	TMA	Tube well	120	450	7.6	Un obj	Clear	O less	0.03	56	220	19.44	2.6	130	BDL	38	1	14	8.00	32	274	0.30	3.5	Nil	Nil	Safe

348	Gulsyed		Storage Tank		490	7.5	Un obj	Clear	O less	0.22	55	220	20.04	2.6	130	BDL	38	1	14	5.00	30	258			Nil	Nil	Safe
349	Nasim Khan		Tap		440	7.5	Un obj	Clear	O less	0.05	60	220	17.01	2.6	130	BDL	36	1	14	5.00	20	248			8	2	Unsafe
350	Bakht Sher Ali		Tap		450	7.6	Un obj	Clear	O less	BDL	62	220	15.79	2.6	130	BDL	38	1	14	8.00	18	262			6	3	Unsafe
351	Nasir Khan		Tap		440	7.6	Un obj	Clear	O less	0.05	44	170	14.58	2.4	120	BDL	45	1	15	2.00	20	226			9	4	Unsafe
352	Rafiq		Hand Pump		370	8.3	Un obj	Clear	O less	0.24	85	400	45.56	6.4	320	BDL	54	1	23	5.00	40	463	0.12	2.4	Nil	Nil	Safe
353	Amirzada		Tap		430	8.0	Un obj	Clear	O less	0.05	48	180	14.58	2.4	120	BDL	52	1	17	2.00	24	237			6	3	Unsafe
354	Zafar Hussain		Tap		380	8.3	Un obj	Clear	O less	0.13	60	170	4.86	2.4	120	BDL	48	0.5	16	2.00	5	215			5	2	Unsafe
355	Nasimullah		Tap		410	8.2	Un obj	Clear	O less	0.19	72	170	-2.43	1.8	90	BDL	25	0.5	7	8.00	18	228			6	4	Unsafe
356	Ali Shah		Bore		490	8.1	Un obj	Clear	O less	0.03	52	220	21.87	3.0	150	BDL	65	0.5	18	8.00	25	272	0.14	2.2	Nil	Nil	Safe
357	Azizabad		Distribution lines		430	8.2	Un obj	Clear	O less	0.22	48	220	24.30	2.4	120	BDL	55	1	15	4.10	18	251			Nil	Nil	Safe
358	Rehmat Ali		Tap		690	8.1	Un obj	Clear	O less	0.05	72	370	46.17	6.6	330	BDL	18	1	9	5.00	20	386			4	2	Unsafe
359	Abdur Rehman		Hand Pump		460	8.3	Un obj	Clear	O less	BDL	72	250	17.01	3.2	160	BDL	52	0.5	8	3.00	22	281	1.5	2.5	Nil	Nil	Safe
360	Hazrat Umer		Tap		680	8.1	Un obj	Clear	O less	0.05	70	340	40.10	6.0	300	BDL	50	1	10	2.00	15	375			15	3	Unsafe
361	Kamran Khan		Tap		422	7.5	Un obj	Clear	O less	0.24	52	250	29.16	3.4	170	BDL	40	1	10	2.00	15	258			10	5	Unsafe
362	Bismillah Town Ship U/C Kanju	PHED	Tube well	225	416	7.9	Un obj	Clear	O less	0.09	52	230	24.30	3.6	180	BDL	30	1	9	3.00	15	253	0.09	1.3	Nil	Nil	Safe
363	SDDA Nursery U/C Kanju # 4	PHED	Tube well	425	645	8.0	Un obj	Clear	O less	0.18	124	320	2.43	5.2	260	BDL	60	1	8	2.10	16	377	0.19	2.7	Nil	Nil	Safe
364	Kanju Township		Distribution lines		440	8.3	Un obj	Clear	O less	0.38	56	230	21.87	3.2	160	BDL	18	0	9	7.20	19	252			Nil	Nil	Safe
365	Community Point		Tap		620	7.7	Un obj	Clear	O less	0.10	80	300	24.30	5.0	250	BDL	45	1	12	2.80	21	346			6	Nil	Unsafe
366	Fazal-e-haq		Tap		760	7.7	Un obj	Clear	O less	0.08	92	350	29.16	6.4	320	BDL	45	8	33	2.90	16	428			Nil	Nil	Safe
367	Dost M. Khan		Bore		423	8.3	Un obj	Clear	O less	0.10	52	240	26.73	3.4	170	BDL	38	1	7	3.20	15	256	0.15	3.0	5	Nil	Unsafe
368	Rasheed Ali		Tap		416	8.2	Un obj	Clear	O less	0.09	56	230	21.87	3.4	170	BDL	35	1	7	2.50	15	249			5	Nil	Unsafe
369	Naimatullah		Tap		418	8.2	Un obj	Clear	O less	0.43	60	230	19.44	3.4	170	BDL	38	1	7	1.20	14	247			Nil	Nil	Safe
370	Tariq		Bore		415	8.1	Un obj	Clear	O less	0.35	52	230	24.30	3.2	160	BDL	34	1	6	2.10	14	237	0.14	2.4	Nil	Nil	Safe
371	Amjad Ali		Tap		764	7.9	Un obj	Clear	O less	0.12	72	370	46.17	6.8	340	BDL	40	2	22	3.10	21	421			Nil	Nil	Safe
372	Ashraf		Tap		630	8.1	Un obj	Clear	O less	0.22	60	300	36.45	5.0	250	BDL	34	1	12	8.20	20	350			Nil	Nil	Safe
373	Attaullah		Tap		638	8.1	Un obj	Clear	O less	0.02	48	320	48.60	5.0	250	BDL	45	1	13	6.50	18	352			Nil	Nil	Safe

374	Storage		Storage Tank		638	8.3	Un obj	Clear	O less	0.07	56	320	43.74	5.0	250	BDL	42	1	14	5.90	21	354			Nil	Nil	Safe
375	Dr. Tahir		Tap		620	8.2	Un obj	Clear	O less	0.95	48	300	43.74	5.0	250	BDL	40	1	14	5.30	23	343			10	Nil	Unsafe
376	Red Crescent PRCS Office		Tap		626	8.2	Un obj	Clear	O less	0.05	48	300	43.74	4.0	200	BDL	83	1	14	6.0	25	361			Nil	Nil	Safe
377	Jahanzeb		Tap		626	8.2	Un obj	Clear	O less	0.13	52	300	41.31	4.0	200	BDL	40	1	14	5.7	15	352			Nil	Nil	Safe
378	Nawab Ali		Tap		550	8.3	Un obj	Clear	O less	0.19	52	250	29.16	4.0	200	BDL	60	1	14	6.7	20	306			Nil	Nil	Safe
379	Shoukat Khan		Tap		530	8.0	Un obj	Clear	O less	0.03	50	250	30.38	3.8	190	BDL	38	1	15	1.2	18	294			Nil	Nil	Safe
380	Dr. Fazal-e-Akbar		Tap		535	8.1	Un obj	Clear	O less	0.22	52	240	26.73	4.0	200	BDL	40	1	13	6.1	20	298			Nil	Nil	Safe
381	Rehman		Tap		545	8.0	Un obj	Clear	O less	0.05	52	270	34.02	3.8	190	BDL	35	1	10	7.5	16	308			Nil	Nil	Safe
382	SDDA Office		Tap		533	8.1	Un obj	Clear	O less	BDL	60	280	31.59	3.8	190	BDL	32	1	8	8.1	18	303			Nil	Nil	Safe
383	Kanju Town Ship, U/C Kanju	SDA	Tube well	425	513	8.2	Un obj	Clear	O less	0.05	60	260	26.73	3.6	180	BDL	30	1	8	8.3	15	287			Nil	Nil	Safe
384	Commercial Point		Tap		512	8.3	Un obj	Clear	O less	0.24	55	250	27.33	3.6	180	BDL	32	1	8	7.5	20	285			Nil	Nil	Safe
385	DFO working plan office		Tap		517	8.1	Un obj	Clear	O less	0.09	40	250	36.45	3.6	180	BDL	32	1	8	8.8	22	286			Nil	Nil	Safe
386	Tap		Tap		527	8.1	Un obj	Clear	O less	0.18	40	250	36.45	3.8	190	BDL	35	1	8	9.3	17	293			Nil	Nil	Safe
387	Asghar – Barkat		Tap		505	8.2	Un obj	Clear	O less	0.38	56	250	26.73	3.4	170	BDL	30	1	8	9.1	15	279			Nil	Nil	Safe
388	Water Tank		Tap		507	8.1	Un obj	Clear	O less	0.10	60	270	29.16	3.4	170	BDL	30	1	6	8.0	18	282			Nil	Nil	Safe
389	Iftikhar Ahmed		Tap		580	8.1	Un obj	Clear	O less	0.08	60	280	31.59	3.8	190	BDL	45	1	8	9.1	20	320			Nil	Nil	Safe
390	Imad Habib		Tap		507	8.0	Un obj	Clear	O less	0.10	60	250	24.30	3.4	170	BDL	40	1	8	6.2	18	281			Nil	Nil	Safe
391	Adnan		Tap		600	8.2	Un obj	Clear	O less	0.09	48	320	48.60	5.6	280	BDL	25	1	7	5.6	16	338			Nil	Nil	Safe
392	Rahimabad Mohallah. Islamabad		Tap		609	8.1	Un obj	Clear	O less	0.43	40	320	53.46	5.8	290	BDL	28	1	7	6.4	18	350			Nil	Nil	Safe
393	Akbar Alam Khan		Bore		610	8.3	Un obj	Clear	O less	0.35	48	320	48.60	5.6	280	BDL	30	1	8	3.2	20	338	0.15	4.5	Nil	Nil	Safe
394	Akhter Ali		Bore		746	8.1	Un obj	Clear	O less	0.12	100	350	24.30	6.0	300	BDL	42	3	20	4.2	25	413			Nil	Nil	Safe
395	Ali Syed		Bore		451	7.6	Un obj	Clear	O less	0.22	80	250	12.15	3.4	170	BDL	30	1	7	3.2	18	264			Nil	Nil	Safe
396	Ali Market- Rahimabad U/C Rahimabad	TMA	Tube well	130	602	7.6	Un obj	Clear	O less	0.02	80	300	24.30	5.0	250	BDL	35	1	8	5.1	22	343	0.18	2.3	Nil	Nil	Safe
397	Zafar Shah		Open Well		1004	7.5	Un obj	Clear	O less	0.07	80	520	77.76	7.6	380	BDL	55	1	30	8.0	55	562			Nil	Nil	Safe
398	Asif Ali Shah		Bore		550	7.5	Un obj	Clear	O less	0.95	56	230	21.87	4.0	200	BDL	40	1	30	2.0	28	306	0.14	1.5	Nil	Nil	Safe
399	Raham Dad Khan		Bore		490	7.6	Un obj	Clear	O less	0.13	46	230	27.94	3.6	180	BDL	40	1	15	3.0	22	273	0.12	1.3	Nil	Nil	Safe

400	Imran		Hand Pump		655	7.6	Un obj	Clear	O less	0.05	80	350	36.45	5.6	280	BDL	23	1	8	8.7	20	375	0.30	2.4	Nil	Nil	Safe
401	Bakat Rawan		Open Well		460	8.3	Un obj	Clear	O less	0.50	80	230	7.29	3.4	170	BDL	30	1	8	8.9	20	288			Nil	Nil	Safe
402	Nawe Kale No. 2, U/C Barn	TMA	Tube well	150	470	8.0	Un obj	Clear	O less	0.13	68	230	14.58	3.6	180	BDL	30	1	8	2.8	19	260	0.16	3.2	Nil	Nil	Safe
403	Misal Badsha		Tap		466	8.3	Un obj	Clear	O less	0.36	68	230	14.58	3.6	180	BDL	30	1	8	2.8	19	261			Nil	Nil	Safe
404	Sher Ali Khan		Dug Well		600	8.2	Un obj	Clear	O less	0.24	76	250	14.58	3.6	180	BDL	25	1	8	5.2	16	272			Nil	Nil	Safe
405	Sami Ullah		Tap		447	8.1	Un obj	Clear	O less	0.14	86	300	20.65	5.0	250	BDL	30	1	5	4.8	19	333			4	2	Unsafe
406	Asif		Dug Well		470	8.2	Un obj	Clear	O less	0.15	80	220	4.86	2.8	140	BDL	30	1	5	2.9	50	268			2	Nil	Unsafe
407	Abu Bakar		Tap		467	8.1	Un obj	Clear	O less	0.08	75	250	15.10	4.0	200	BDL	32	1	5	4.2	15	282			5	2	Unsafe
408	Inamullah		Dug Well		448	7.6	Un obj	Clear	O less	0.33	48	250	31.59	4.0	200	BDL	30	1	5	2.2	15	260			2	Nil	Unsafe
409	Community Base		Dug Well		468	7.6	Un obj	Clear	O less	0.23	48	250	31.59	4.0	200	BDL	30	1	5	3.4	15	266			3	Nil	Unsafe
410	Amir Khan		Tap		474	7.5	Un obj	Clear	O less	0.14	44	250	34.02	4.0	200	BDL	30	1	5	3.0	16	263			5	3	Unsafe
411	Yousaf		Tap		466	7.5	Un obj	Clear	O less	0.20	32	250	41.31	4.0	200	BDL	28	1	5	6.5	15	271			6	3	Unsafe
412	Khan Baba		Tap		475	7.6	Un obj	Clear	O less	0.05	44	250	34.02	4.2	210	BDL	13	1	5	4.8	16	260			5	3	Unsafe
413	Fazal Hadi		Storage Tank		584	7.6	Un obj	Clear	O less	0.06	64	250	21.87	4.0	200	BDL	30	1	5	3.0	14	269			7	3	Unsafe
414	Malik Shahjahan		Distribution lines		480	8.3	Un obj	Clear	O less	0.08	72	290	26.73	4.8	240	BDL	35	1	5	4.0	22	323			4	Nil	Unsafe
415	Aziz ullah		Distribution lines		478	8.0	Un obj	Clear	O less	0.03	52	240	26.73	4.0	200	BDL	30	1	5	3.5	20	270			8	Nil	Unsafe
416	M. Zaib		Distribution lines		638	8.3	Un obj	Clear	O less	0.03	56	240	24.30	4.0	200	BDL	26	1	7	2.8	20	267			6	2	Unsafe
417	Hazrat Ali Bacha		Bore		465	8.2	Un obj	Clear	O less	0.07	62	330	42.52	5.0	250	BDL	40	1	7	8.2	22	361	0.30	2.5	Nil	Nil	Safe
418	Saleh M.		Distribution lines		739	8.1	Un obj	Clear	O less	0.08	52	240	26.73	4.0	200	BDL	30	1	7	3.0	19	269			5	2	Unsafe
419	Nasrullah		Distribution lines		740	8.2	Un obj	Clear	O less	0.15	70	350	42.52	5.6	280	BDL	60	1	20	5.0	25	409			4	3	Unsafe
420	Zareef Khan		Bore		741	8.1	Un obj	Clear	O less	0.04	36	400	75.33	6.8	340	BDL	33	1	20	6.8	23	422	0.14	2.7	Nil	Nil	Safe
421	Sher Alam Khan		Tap		741	7.6	Un obj	Clear	O less	0.36	40	380	68.04	6.8	340	BDL	35	1	10	7.5	22	413			7	2	Unsafe
422	Guligram, U/C Takhtaband	PHED	Tube well	120	650	7.6	Un obj	Clear	O less	0.10	40	380	68.04	6.8	340	BDL	35	1	10	8.2	22	416	0.14	3.4	Nil	Nil	Safe

423	Bacha Khan		Tap		740	7.5	Un obj	Clear	O less	0.14	56	350	51.03	5.2	260	BDL	40	1	15	4.3	20	358			4	3	Unsafe
424	Sardar Ali		Tap		742	7.5	Un obj	Clear	O less	0.22	52	360	55.89	6.0	300	BDL	42	1	20	7.1	25	407			5	4	Unsafe
425	Taj M. Khan		Tap		922	7.6	Un obj	Clear	O less	0.31	56	350	51.03	6.6	330	BDL	35	1	18	6.1	28	414			8	2	Unsafe
426	Rasool Khan		Bore		743	7.6	Un obj	Clear	O less	0.11	130	450	30.37	7.0	350	BDL	65	3	25	5.5	41	529	0.20	3.2	Nil	Nil	Safe
427	Siraj Badsha		Hand Pump		749	8.3	Un obj	Clear	O less	0.15	72	350	41.31	6.0	300	BDL	48	1	18	5.3	26	410	0.40	3.1	Nil	Nil	Safe
428	Sahibzar		Tap		730	8.0	Un obj	Clear	O less	0.13	80	350	36.45	6.0	300	BDL	45	1	20	7.5	23	419			8	Nil	Unsafe
429	Ikram Ullah Shah		Tap		735	8.3	Un obj	Clear	O less	0.02	80	400	48.60	5.4	270	BDL	30	1	15	8.0	30	402			5	Nil	Unsafe
430	Fazal Mehboob		Tap		736	8.2	Un obj	Clear	O less	0.39	80	400	48.60	5.6	282	BDL	30	1	15	8.0	28	407			6	Nil	Unsafe
431	Rafiullah		Bore		758	8.1	Un obj	Clear	O less	0.79	64	390	55.89	5.8	290	BDL	30	1	15	8.0	31	406	0.50	1.6	Nil	Nil	Safe
432	Guligran-2, U/C Takhtaband	PHED	Tube well	150	701	8.2	Un obj	Clear	O less	0.26	64	400	58.32	5.8	290	BDL	30	1	15	9.0	35	417	0.21	1.2	Nil	Nil	Safe
433	Omer Khan		Tap		329	8.1	Un obj	Clear	O less	0.12	40	340	58.32	6.2	310	BDL	30	1	16	6.0	30	388			5	2	Unsafe
434	Arshad Hussain		Bore		707	7.6	Un obj	Clear	O less	0.14	32	150	17.01	2.8	140	BDL	13	0	16	2.0	12	183	0.30	0.7	Nil	Nil	Safe
435	Zairat Gul		Tap		718	7.6	Un obj	Clear	O less	0.06	20	360	75.33	6.8	340	BDL	33	1	15	3.0	30	392			6	2	Unsafe
436	Masjid Khairabad		Bore		722	7.5	Un obj	Clear	O less	0.02	36	500	99.63	5.2	260	BDL	35	1	15	7.0	27	401	0.20	2.1	Nil	Nil	Safe
437	Faridullah		Bore		725	7.5	Un obj	Clear	O less	0.07	48	360	58.32	5.8	290	BDL	30	1	15	9.0	32	398	1.40	1.7	Nil	Nil	Safe
438	Rashid		Tap		740	7.6	Un obj	Clear	O less	0.06	48	360	58.32	6.2	310	BDL	35	1	15	7.0	30	404			7	2	Unsafe
439	Badsha Wahid		Tap		834	7.6	Un obj	Clear	O less	0.18	44	380	65.61	5.4	270	BDL	50	1	15	9.0	36	413			7	3	Unsafe
440	Rahim Khan		Hand Pump		1248	8.3	Un obj	Clear	O less	0.25	64	400	58.32	6.4	320	BDL	50	1	15	9.0	36	456			Nil	Nil	Safe
441	M. Yaqoob		Tap		849	8.0	Un obj	Clear	O less	0.21	140	550	48.60	9.4	470	BDL	72	1	22	9.0	47	652	0.12	2.2	12	6	Unsafe
442	Jamalabad, U/C Sangota	PHED	Tube well	140	839	8.3	Un obj	Clear	O less	0.23	70	450	66.82	7.2	360	BDL	56	1	15	7.0	13	469	0.14	2.5	Nil	Nil	Safe
443	M. Sher		Tap		466	8.2	Un obj	Clear	O less	0.27	24	460	97.20	7.4	370	BDL	56	1	15	7.0	33	479			6	2	Unsafe
444	Musatfa		Tap		829	8.1	Un obj	Clear	O less	0.14	40	460	87.48	7.4	370	BDL	35	1	15	7.0	35	466			7	2	Unsafe
445	Omerzada		Tap		806	8.2	Un obj	Clear	O less	0.31	104	400	34.02	6.0	300	BDL	45	1	20	7.0	36	451			8	3	Unsafe
446	Qari Ali Said		Tap		835	8.1	Un obj	Clear	O less	0.11	120	380	19.44	6.0	300	BDL	50	1	20	9.1	36	467			9	2	Unsafe
447	Said Ali		Tap		930	7.6	Un obj	Clear	O less	0.10	120	380	19.44	7.0	350	BDL	80	1	30	3.4	40	515			10	3	Unsafe
448	Sher Afzal		Open Well		845	7.6	Un obj	Clear	O less	0.06	78	400	49.82	7.0	350	BDL	45	1	30	7.2	44	490			Nil	Nil	Safe
449	Sher Afzal		Tap		460	7.5	Un obj	Clear	O less	0.11	60	250	24.30	4.0	200	BDL	15	1	7	3.0	15	256			9	2	Unsafe
450	Sher Bahad Khan		Tap		460	7.5	Un obj	Clear	O less	0.15	60	250	24.30	4.0	200	BDL	18	1	7	2.5	14	255			8	3	Unsafe

451	Imran Ali		Tap		466	7.6	Un obj	Clear	O less	0.08	64	250	21.87	4.0	200	BDL	13	1	7	4.0	15	260			10	4	Unsafe
452	Main Sangota, U/C Sangota	PHED	Tube well	265	450	7.6	Un obj	Clear	O less	0.10	60	240	22.00	4.0	200	BDL	13	1	7	3.0	15	251	0.06	1.2	Nil	Nil	Safe
453	Zahir Shah		Tap		450	8.3	Un obj	Clear	O less	0.15	60	230	19.00	4.0	200	BDL	13	1	7	4.0	12	250			12	2	Unsafe
454	Waheed Iqbal		Tap		460	8.0	Un obj	Clear	O less	0.15	60	240	22.00	4.0	200	BDL	13	1	8	4.0	12	254			10	Nil	Unsafe
455	Shah Feroz Khan		Tap		460	8.3	Un obj	Clear	O less	0.14	60	240	22.00	4.0	200	BDL	12	1	6	4.0	15	254			7	4	Unsafe
456	Fazal Hayat		Tap		460	8.2	Un obj	Clear	O less	0.41	60	240	21.00	4.0	200	BDL	15	1	7	4.0	15	257			5	1	Unsafe
457	Suleman		Open Well		460	8.1	Un obj	Clear	O less	0.35	60	240	21.00	4.0	200	BDL	15	1	7	4.0	15	257			Nil	Nil	Safe
458	Sajid Khan		Tap		330	8.2	Un obj	Clear	O less	0.27	32	130	21.00	2.6	130	BDL	20	1	7	3.0	11	183			5	6	Unsafe
459	Sher M.		Bore		330	8.1	Un obj	Clear	O less	0.19	36	170	19.00	2.6	130	BDL	18	1	7	3.0	12	184	0.14	2.7	Nil	Nil	Safe
460	Ghufranullah		Tap		330	7.6	Un obj	Clear	O less	0.11	36	170	19.00	2.6	130	BDL	17	1	7	3.0	13	184			8	3	Unsafe
461	Anwar Ali		Tap		315	7.6	Un obj	Clear	O less	0.05	32	160	19.00	2.6	130	BDL	15	1	7	2.5	12	175			10	1	Unsafe
462	Manglawar, U/C Manglawar	PHED	Tube well	160	330	7.5	Un obj	Clear	O less	0.13	52	160	7.29	2.7	135	BDL	17	1	4	2.0	13	184	0.50	2.2	Nil	Nil	Safe
463	Hazrat Bilal		Tap		476	7.5	Un obj	Clear	O less	0.19	56	260	36.00	4.0	200	BDL	21	0	4	6.0	11	267			12	4	Unsafe
464	Rafiullah		Tap		322	7.6	Un obj	Clear	O less	0.03	56	260	36.00	4.0	200	BDL	15	0	4	2.0	9	178			15	7	Unsafe
465	Alhter Ali		Tap		324	7.6	Un obj	Clear	O less	0.22	36	140	12.00	2.6	130	BDL	17	1	6	2.0	9	179			18	5	Unsafe
466	Muzafar Shah		Tap		280	8.3	Un obj	Clear	O less	0.05	38	150	13.37	2.8	140	BDL	19	1	8	2.0	12	156			13	4	Unsafe
467	Fazal Rehman		Open Well		280	8.0	Un obj	Clear	O less	BDL	32	140	14.58	2.2	110	BDL	19	0	4	2.0	12	156			Nil	Nil	Safe
468	Anwar Syed		Bore		460	8.3	Un obj	Clear	O less	0.05	32	140	14.58	2.2	110	BDL	17	0	4	2.0	10	239	0.60	3.4	Nil	Nil	Safe
469	Azizullah		Open Well		460	8.2	Un obj	Clear	O less	0.24	48	220	24.30	4.2	210	BDL	13	1	4	4.0	11	247			Nil	Nil	Safe
470	Fazal Karim		Open Well		552	8.1	Un obj	Clear	O less	0.09	48	230	26.73	4.2	210	BDL	18	1	4	2.0	11	299			Nil	Nil	Safe
471	Shoukat Khan		Bore		456	8.2	Un obj	Clear	O less	0.18	70	290	41.31	5.6	280	BDL	14	1	3	2.0	10	249	0.60	3.1	Nil	Nil	Safe
472	Kala Masjid Kanju Chowk U/C Kanju	PHED	Tube well	300	460	8.1	Un obj	Clear	O less	0.38	44	230	26.73	4.6	230	BDL	13	0	3	2.0	10	250	0.30	3.2	Nil	Nil	Safe
473	Bakht Biland Khan		Hand Pump		444	7.6	Un obj	Clear	O less	0.10	48	240	29.16	4.6	230	BDL	13	0	3	2.0	13	246			Nil	Nil	Safe
474	Fazal Wadood		Bore		460	7.6	Un obj	Clear	O less	0.08	48	230	26.73	4.4	220	BDL	15	0	4	1.0	14	254	0.14	2.1	Nil	Nil	Safe
475	Akhtar Ali		Open Well		460	7.5	Un obj	Clear	O less	0.10	48	240	29.16	4.6	230	BDL	15	0	5	1.0	14	254			Nil	Nil	Safe
476	M. Rehman		Tap		460	7.5	Un obj	Clear	O less	0.09	48	240	29.16	4.6	230	BDL	15	0	5	2.0	13	258			12	2	Unsafe
477	Alamgir		Tap		460	7.6	Un obj	Clear	O less	0.43	48	240	26.73	4.6	230	BDL	15	0	5	2.0	11	255			11	3	Unsafe
478	Asif		Tap		460	7.6	Un obj	Clear	O less	0.35	48	240	29.16	4.6	230	BDL	15	0	5	3.0	12	262			8	2	Unsafe

479	Inam ul Hadi		Tap		460	8.3	Un obj	Clear	O less	0.12	48	240	26.73	4.6	230	BDL	15	0	5	2.0	12	253			12	4	Unsafe
480	Bakht Akhbar		Tap		460	8.0	Un obj	Clear	O less	0.22	48	240	34.02	4.6	230	BDL	15	0	5	2.0	14	256			12	3	Unsafe
481	Nil		Tap		460	8.3	Un obj	Clear	O less	0.02	48	240	31.59	4.6	230	BDL	15	0	5	4.0	9	273			8	2	Unsafe
482	Near BHU Dheri U/C Dheri	PHED	Tube well	300	460	8.2	Un obj	Clear	O less	0.07	52	260	34.02	4.8	240	BDL	15	0	5	9.0	14	290	0.12	2.2	Nil	Nil	Safe
483	Fazal Qayyum		Tap		460	8.1	Un obj	Clear	O less	0.95	40	270	35.24	4.4	220	BDL	15	0	6	2.0	9	256			12	3	Unsafe
484	Aziz ur rehman		Tap		460	8.2	Un obj	Clear	O less	0.13	40	270	35.24	4.4	220	BDL	15	2	12	2.0	9	256			10	2	Unsafe
485	Ihsan uddin		Hand Pump		640	8.1	Un obj	Clear	O less	0.05	44	300	38.88	5.8	290	BDL	23	2	12	8.0	13	354	0.30	2.2	Nil	Nil	Safe
486	Hasan ul Haq		Tap		648	7.6	Un obj	Clear	O less	0.50	48	330	46.17	5.2	260	BDL	25	2	10	8.0	25	358			10	6	Unsafe
487	Aziz Ahmed		Open Well		645	7.6	Un obj	Clear	O less	0.13	50	320	48.60	5.6	280	BDL	30	1	8	8.0	14	356			4	Nil	Unsafe
488	Abdul Jabir		Bore		645	7.5	Un obj	Clear	O less	0.36	48	320	48.60	5.8	290	BDL	30	0	14	7.0	15	356	0.30	1.5	5	Nil	Unsafe
489	Bashir Ahmed		Tap		780	7.5	Un obj	Clear	O less	0.24	50	390	63.18	7.4	370	BDL	25	0	12	8.0	24	436			8	Nil	Unsafe
490	M. Ali Khan		Tap		780	7.6	Un obj	Clear	O less	0.14	56	390	63.18	7.2	360	BDL	28	2	12	8.0	25	432			10	3	Unsafe
491	Jahangir		Tap		780	7.6	Un obj	Clear	O less	0.15	56	400	63.18	7.2	360	BDL	25	0	4	8.0	25	435			15	4	Unsafe
492	Dheri Kanju Air port U/C Dheri	PHED	Tube well	160	470	8.3	Un obj	Clear	O less	0.08	48	260	38.88	5.0	250	BDL	18	0	5	4.0	10	279			Nil	Nil	Safe
493	Shereenzada		Tap		460	8.0	Un obj	Clear	O less	0.33	48	260	38.88	4.8	240	BDL	15	0	5	4.0	12	273			Nil	Nil	Safe
494	M. Ameen		Open Well		460	8.3	Un obj	Clear	O less	0.23	52	260	38.88	4.8	240	BDL	15	0	5	4.0	10	271			10	Nil	Unsafe
495	Amir Rehman		Tap		460	8.2	Un obj	Clear	O less	0.14	52	260	38.88	4.8	240	BDL	15	1	10	4.0	9	270			10	Nil	Unsafe
496	Gul Farosh		Open Well		480	8.1	Un obj	Clear	O less	0.20	40	240	34.02	3.6	180	BDL	18	1	10	8.0	21	267			Nil	Nil	Safe
497	Bahadur Khan		Tap		482	8.2	Un obj	Clear	O less	0.05	40	240	34.02	3.6	180	BDL	18	1	10	8.0	21	267			9	Nil	Unsafe
498	Reham Bad Shah		Tap		480	8.1	Un obj	Clear	O less	0.06	40	240	34.02	3.6	180	BDL	18	1	10	8.0	21	267			7	Nil	Unsafe
499	Ihsanuddin		Open Well		485	7.6	Un obj	Clear	O less	0.08	40	240	34.02	3.6	180	BDL	18	1	10	8.0	21	267			Nil	Nil	Safe
500	Alamgir		Open Well		480	7.6	Un obj	Clear	O less	0.03	40	240	34.02	3.6	180	BDL	18	1	10	8.0	21	267			Nil	Nil	Safe
501	Akhtar Ali		Open Well		480	7.5	Un obj	Clear	O less	0.03	40	240	34.02	3.6	180	BDL	18	1	10	8.0	21	267			Nil	Nil	Safe
502	Ghareebabad Kanju U/C Kanju # 2	PHED	Tube well	300	475	7.5	Un obj	Clear	O less	0.07	40	240	34.02	3.6	180	BDL	18	0	6	8.0	21	267			Nil	Nil	Safe