BEFORE THE HN'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI

SUPPLEMENTARY COUNTER AFFIDAVIT
IN
O.A.NO.1003 OF 2024

1

IN THE MATTER OF:
ASHOK KUMAR AND ANR.
LATE SH. DHARAM SINGH ... APPLICANTS

VERSUS

STATE OF U.P. & ORS. ... RESPONDENTS

NDH: 07.03.2025

INDEX OF FILING

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1.	Supplementary Counter Affidavit	**1-3**
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FILED BY:

Shannu Baghel

[SHANNU BAGHEL]
ADVOCATE
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Chamber No.617, D Block,
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Supreme Court of India,
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Enrolment No.D/6618/2018

Filed on: .02.2025

2

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Supplementary Counter Affidavit

IN

O.A. No. 1003 OF 2024

Ashok Kumar Singh S/o Late Shri Dharam Singh. ...Applicant

Versus

State of U.P. & Ors. ...Respondents

Supplementary Counter Affidavit on behalf of respondent No. 5 & 6 New Panthar Security Guard Sernces through its prop Bani Singh S/o Rajnath Singh HO Saler Complex 306 Shankar Vihar Colony Kureshi Aligarh-202101 PRESENTLY AT DELHI

1. That in the aforesaid letter petition respondent no. 5 and 6 filed detail counter affidavit which are matter of record.

2. That Hydro Geological report could not be filed at the time of filing the counter affidavit the deponent obtained Hydro Geological Report and the same is being brought on record by means of this affidavit and the same is marked as Annuxure-

NOTARY
Name: R.P. Bansal
Area: New Delhi
Regn. No. 10678/14
Expiry Date: 28/6/20..
GOVT. OF INDIA

बनी सिंह

DEPONENT

3

Verification

Verified at New Delhi on 27 FEB 2025 day of February 2025 That the Counter of the above affidavit are true and correct my knowledge and belief and nothing material has been concealed therefrom.

Shaw Bashel
IDENTIFIED BY

DEPONENT

NOTARY
R.P. Bansal
Area: New Delhi
Regn. No. 10678/14
GOVT. OF INDIA

27 FEB 2025

404

ANNEXURE-C-1

4

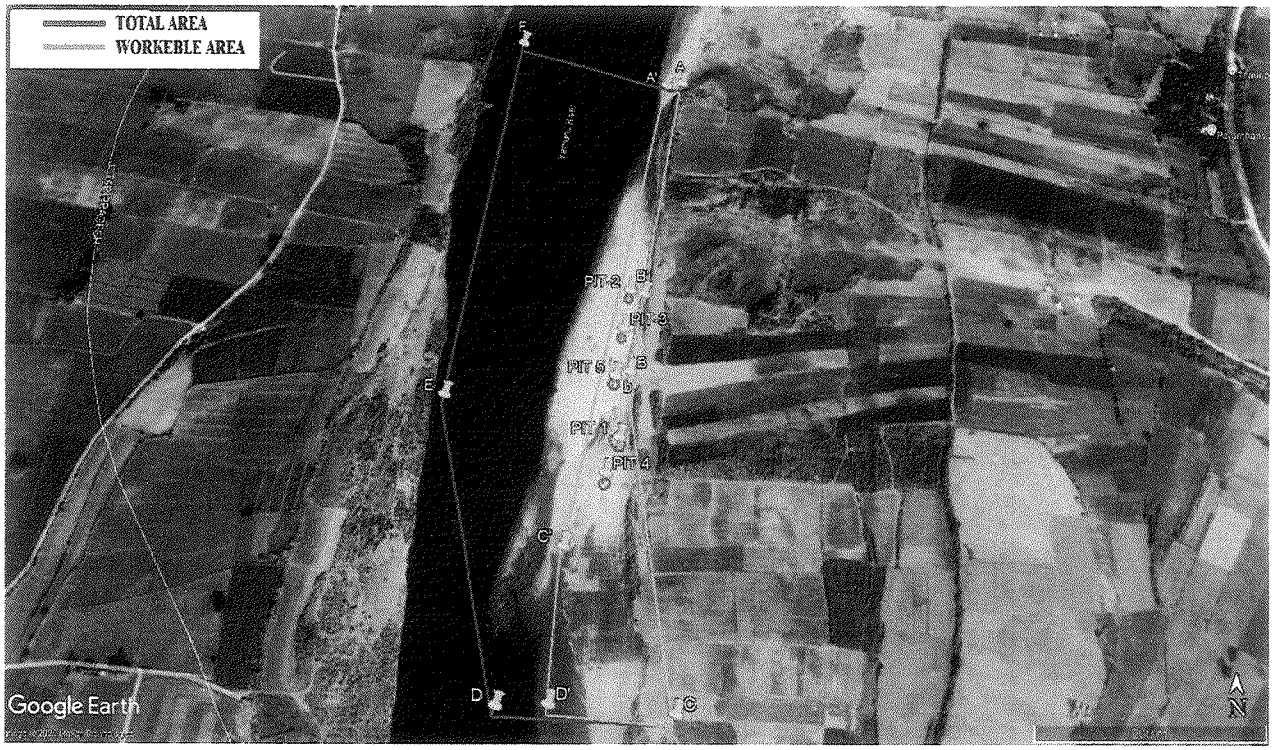
HYDRO-GEOLOGICAL REPORT

of

Sand/Morrum Mining from Yamuna Riverbed

At

Gata No.303mi ,313mi, 290mi, 301mi, 303, 304mi,314mi,297mi,298mi, 302mi, 311mi, 312mi, 313mi&314mi Khand No.-02, Village-Panchayara, Tehsil-Loni, Ghaziabad, U.P.,



For

M/s New Panther Security Guard Service

5

1-Introduction

Ground water is a precious and the most widely distributed resource of the earth and unlike any other mineral resource, it gets its annual replenishment from the meteoric precipitation. The world's total water resources are estimated at 1.37 × 108 million ha-m. Of these global water resources about 97.2% is salt water mainly in oceans, and only 2.8% is available as fresh water at any time on the planet earth. Out of this 2.8%, about 2.2% is available as surface water and 0.6% as ground water.

Even out of this 2.2% of surface water, 2.15% is fresh water in glaciers and icecaps and only of the order of 0.01% (1.36 × 104 M ha-m) is available in lakes and reservoirs, and 0.0001% in streams; the remaining being in other forms -0.001% as water vapour in atmosphere, and 0.002% as soil moisture in the top 0.6 m. Out of 0.6% of stored ground water, only about 0.3% (41.1 × 104 M ha-m) can be economically extracted with the present drilling technology, the remaining being unavailable as it is situated below a depth of 800 m.

Thus, ground water is the largest source of fresh water on the planet excluding the polar icecaps and glaciers. The amount of ground water within 800 m from the ground surface is over 30 times the amount in all fresh water lakes and reservoirs, and about 3000 times the amount in stream channels, at any one time.

At present nearly one fifth of all the water used in the world is obtained from ground water resources. Agriculture is the greatest user of water accounting for 80% of all consumption. It takes, roughly speaking, 1000 tons of water to grow one ton of grain and 2000 tons to grow one ton of rice. Animal husbandry and fisheries all require abundant water. Some 15% of world's crop land is irrigated. The present irrigated area in India is 60 million hectares (M ha) of which about 40% is from ground water. Surface water and ground water may be viewed as two different forms of occurrence of the same total water resources. Tubewell schemes may be integrated with the canal irrigation schemes (composite irrigation) by suitably spacing them along a line in between the distributary and the drainage line and so designing that the subsoil water level is kept steady at a desired level.

The tubewells intercept the canal seepage and serve as an anti-water logging measure and enable the benefit of irrigation facilities to be spread to wider areas. Supplemental ground water irrigation is proposed to be introduced in the command areas of a number of major irrigation systems like the Yamuna canal, the Cauvery and the Krishna deltas to enable intensive agricultural development.

2-Location

District Ghaziabad is situated in the middle of Ganga-Yamuna doab and spreads over 1966 sq Km. It is bounded by longitude 770 12' 780 13' latitude 280 26' 280 2.0 RAINFALL & CLIMATE 54' and is underlain by Quaternary sediments. The district is administratively divided into 4 tehsil and is further divided into 8 development blocks. Ghaziabad is drained by river Yamuna and Ganga and their tributaries namely Hindon and Kali, Minor distributaries of Kali Nadi being Hawa drain Chhoiya Nala and Chhoiya Nadi. The irrigation in major part of the district is by means of minor irrigation structures such as tubewells capacity wells and surface irrigation system i.e. canals. Upper Ganga canal and its tributaries irrigate western part of the district and Anup Shalon branch of upper Ganga Canal irrigate eastern part of the district. Hapur and Loni block are practically devoid or surface irrigation.

Geographical Area (Sq. Km.)	488 km^2
Number of Tehsil/Block	Tehsil 4 / Block 8
Number of Panchayat/Villages	Panchayat 73 / Vill. 580
Population	3,343,334

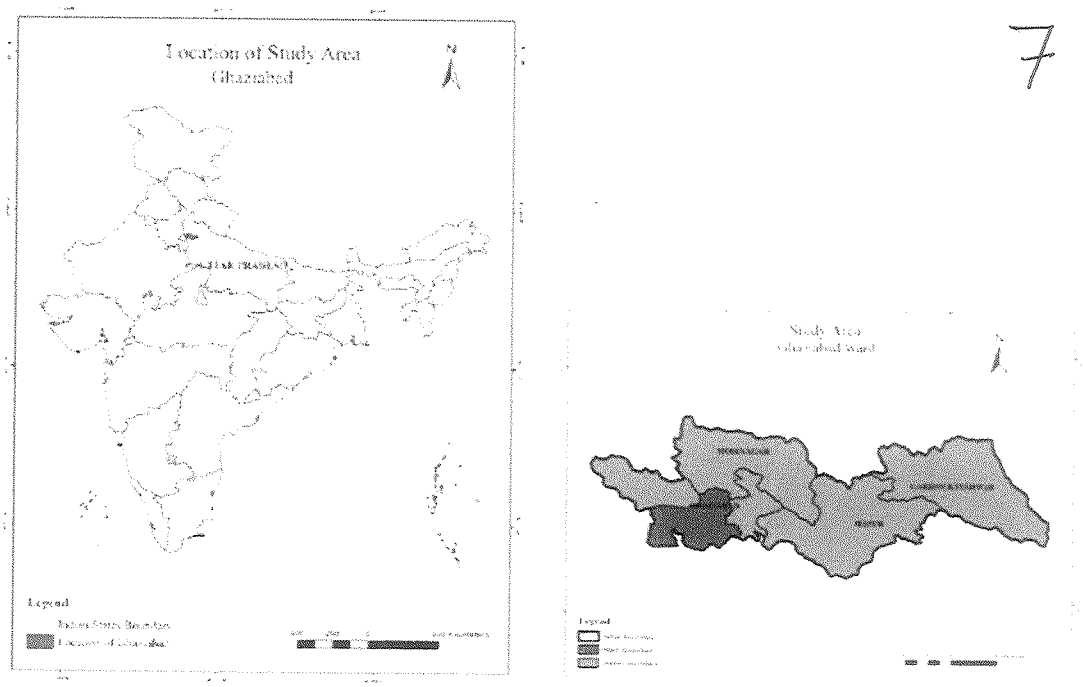
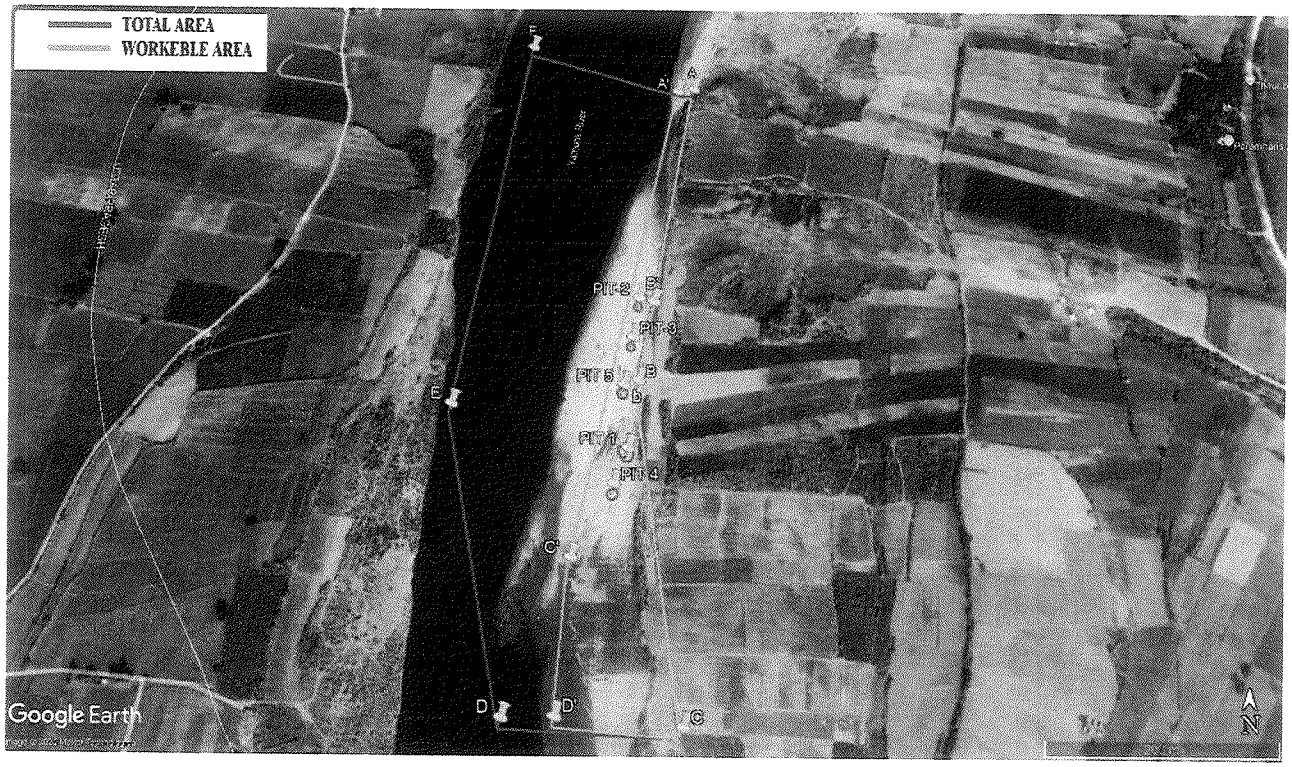


Figure-1.Map of district Ghaziabad

3- Project site

The mining site is locate at Gata No.303mi ,313mi, 290mi, 301mi, 303, 304mi, 314mi,297mi, 298mi, 302mi, 311mi, 312mi, 313mi &314mi , Khand No.-02, Village-Panchayara, Tehsil-Loni, Ghaziabad, U.P., on river Yamuna River Bed.

Figure-2 Project Site showing Total area & Workable Area

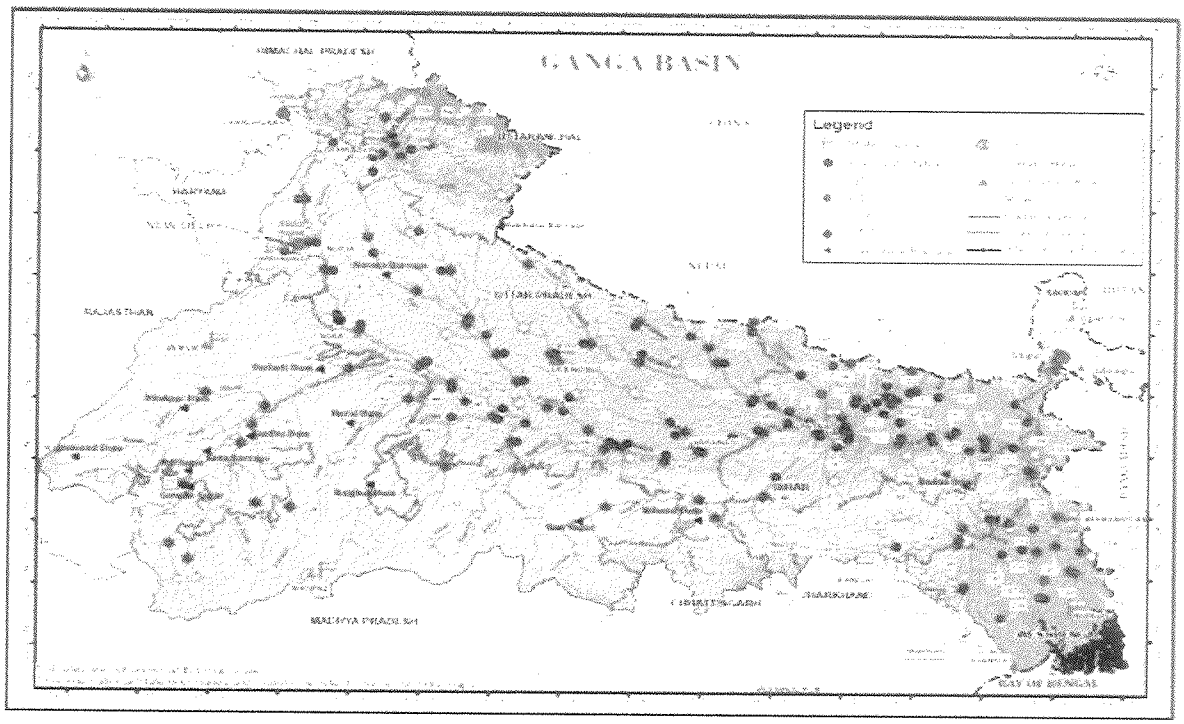


4-Physiographic divisions

8

The Ghaziabad district in Uttar Pradesh, India, is situated within the Ganga-Yamuna Doab, meaning it lies between the Ganges and Yamuna rivers, presenting a mostly flat plain topography with the Hindon river flowing through it, dividing the area into "Cis Hindon" (east of Hindon) and "Trans Hindon" (west of Hindon) regions; the land is primarily composed of alluvial deposits and can be further categorized into older alluvial plains, older floodplains, and active floodplains depending on proximity to the river bank.

Figure -3. Map of Ganga Basin



5-Climate and Rainfall

The rainfall in the area is mainly due to southwest monsoon and nearly 80 to 85% of the annual rains occurs between July and September. Remaining 15% to 20% rain is distributed unevenly, some times rain also occurs between January and March. The normal Annual rainfall of the district has been reported to be 731 mm based on data from 1901 to 1970.

There is a large variation in rainfall in space and time. The district is endowed with typical climate with extremes in summer as in winters. The mercury shoots up to 40^{0}C or even more during peak summer and dips to less than 5^{0}C during the month of January. Winter spans from mid of November to mid of February. Summer months are April to middle of June which ends with onset of monsoon.

6-Topography

The topography of Ghaziabad district in Uttar Pradesh, India is primarily a flat plain, situated within the Ganga-Yamuna Doab, characterized by the presence of older alluvial plains, older flood plains, and active flood plains, with the Hindon River being a major drainage feature, and the Yamuna River forming its western boundary, marking a distinct border with Delhi; the land is generally flat with slight variations in elevation due to the river systems and their associated floodplains. Average elevation of district is 216m with range of 198-243m for minimum to maximum.

Figure-4 Elevation map of Ghaziabad district

7-Geomorphology

The entire district of Ghaziabad forms the part of Ganga-Yamuna doab, eastern boundary is marked by Ganga river and the river Yamuna defines the western boundaries. The area represents almost a monotonous flat plain dissected by drainage of different order. Ghaziabad town is situated almost in the old flood plain of river Hindon. Morphologically, the area can be divided into 3 morpho units viz a viz (i) older Alluvial Plain (ii) Older Flood Plain and (iii) Active Flood Plain. The banks of rivers are steep and ravinous. The older alluvium occupies the entire upland and interfluve area occurring between major drainage ways i.e. Yamuna and Hindon and Hindon and Ganga.

8-Land use / land cover

The predominant land use is agriculture, occupying the largest area, with built-up areas concentrated mostly in the western part of the district, constituting the second highest land use category; open land makes up a smaller portion, while water bodies represent a very small percentage of the total land area; overall, agriculture and built-up areas take up the majority of the land in Ghaziabad district. The LULC map shows the change in LULC pattern from 2000-2020.

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Source: Prepared by Authors based on USGS, 2020

Figure-5 LULC map shows the change in LULC pattern from 2000-2020.

9-Soil

The development of soils in the district can be ascertained to different erosional and depositional agencies. Different morphological units have been bestowed with different types of soils. The soil range from pure sand to stiff clays, with combinations of these two extreme litho units. The pure sand is called Bhur. Clay is called Matiyar. When the sand is mixed with clay in equal proportion the soil may be termed as Dumat or loam a good agricultural soil.

10-Hydrogeology

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Regionally the eastern half of the district forms part of Ganga alluvial plain where as its western part in close proximity of Hindon and Yamuna rivers represents marginal alluvial plain Tectonically the alluvial plain of Ganga basin represents a structural trough (Fore deep) or down wrap of earth crust. The Original of which is correlated to plate tectonic and Himalayan uplift. The area is underlain by quaternary sediments, there thickness increase from west to east and also towards north east. As per available subsurface alluvium in the district varies from 115 m to 450 m. In Hindon Yamuna doab, the thickness of quaternary sediments including alluvial deposit varies from 300 m the north to 115 m in the central part of the Western side of Hindon river.On the basis of exploratory drilling carried out in the area Annexure-I three tier aquifer system has been identified down to a depth of 450 mbgl. The first aquifer system extends down to a depth of 125 mbgl and extends down to 200 mbgl in north part of the district. Thickness of aquifer decreases in the western part of the district and depth of bedrock is shallow. The aquifer material is medium to coarse grained sand exception being Trans Hindon area. The yield varies between 1000 and 2500 lpm. Transmissivity ranges from 300-2000 m2/day. The quality of formation water is good in the eastern part of the district and deteriorates in the western part of the district in trans Hindon area. Second aquifer system exists in the depth ranges of 170- 350 mbgl. The aquifer medium is medicine to fine grained sand with occasional coarse grained sand. The quality of formation water is good. The tubewells are yielding 1000-2000 lpm at a considerably high drawdown. The third aquifer system occurs below 350m and continues down to depth explored of 450 m. Since no tubewell has been constructed in this aquifer group, therefore aquifer parameters are not known. As per electrical log the quality of formation water seems to be good.

11-Ground Water Resources Assessment

Groundwater resource assessment of the Loni Block has been estimated by Central Ground Water Board and Govt. of Uttar Pradesh for the year (2023-24).The details are given below:

Annual Extractable Ground water Resources (ham)	7,113.88
Ground water Extraction for all uses (ham)	9,813.99
Ground Water Recharge (ham)	7,904.31
Irrigation	8,493.60
Domestic	88.27
Industry	1,232.12
Total	9,813.99
Natural Discharges (ham)	790.43
Stage of Extraction	137.96

Groundwater resource assessment of the Loni block

According to Block wise Ground Water Resources Assessment 2023-24 done by CGWA Loni Block falls under Over Exploited.

12. Hydrogeological controls of ground water

The groundwater availability is controlled by hydro-geological situation characterized by occurrence of alluvial formation. The hydro- geological set-up & the following distinct physiographic units influence the controls of ground water occurrence.

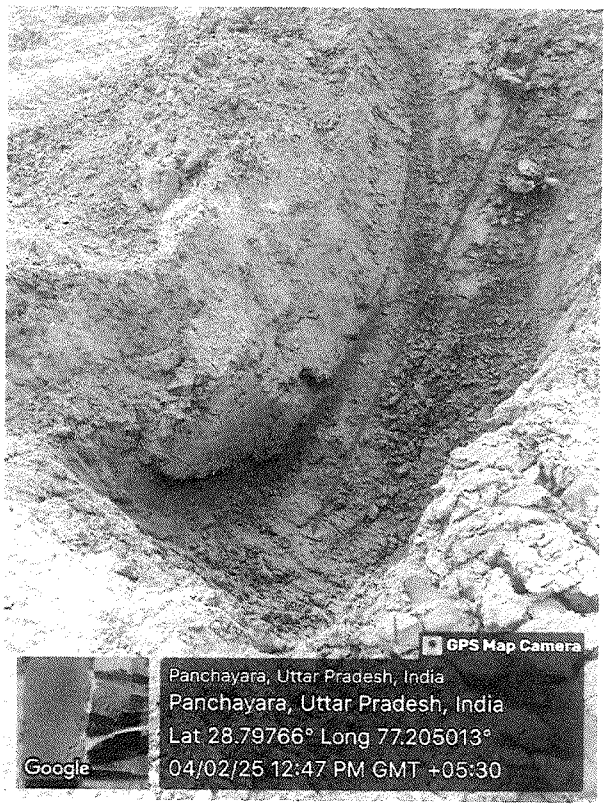
(I) Isolated & nearly closed alluvial basin.

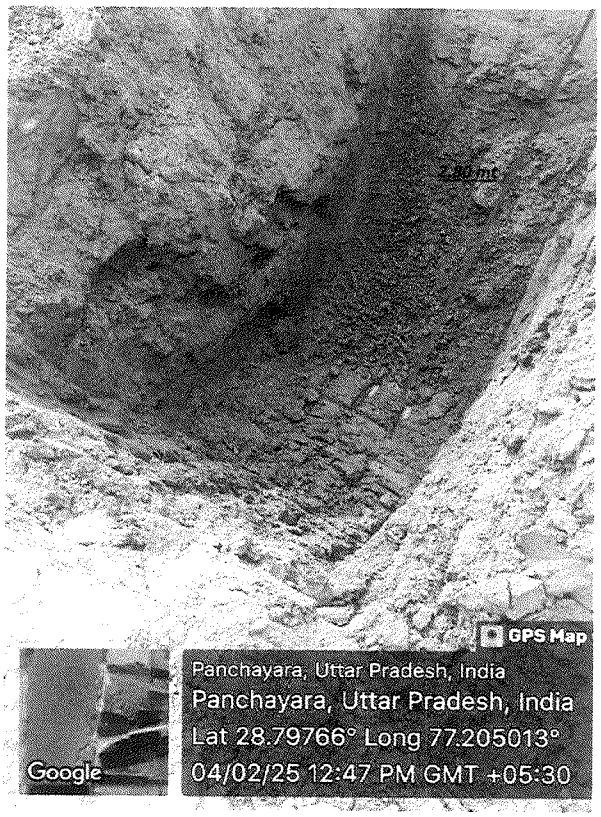
(II) Newer flood plain deposits.

13- Analysis of percolation of water

The mining site is locate at Gata No.303mi ,313mi, 290mi, 301mi, 303, 304mi, 297mi, 298mi, 302mi, 311mi, 312mi, 313mi &314mi, Khand No.-02, Village-Panchayara, Tehsil-Loni, Ghaziabad, U.P. on river Yamuna River Bed and ultimate mining depth is 2.40mt. Max. & Min. elevation is 208mRL & 207mRL with zero level of 205mRL. Many small pits were dugged in the mining area more than mining depth to check percolation of water from

ground and there no percolation of water occur, hence mining will not disturb the water level of that area. The photographs of pits shown in fig.





PANKAJ PANDE
(GEOLOGIST)

GSTIN : 09AAIFN90[illegible]

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TEST CERTIFICATE

15

Test Report of	Report Code	Date of Issue
Surface Water	SW-270125-010	31/01/2025

Issued To: Shri Bani Singh

Project Site- Village- Panchayara, Tehsil-Loni, District-Ghaziabad, U.P. Lease Area: 12.512 Ha.

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	NTL Representative
Sample Received Date	:	26/01/2025
Sample Quantity	:	2.0 Lt.
Analysis Duration	:	27/01/2025 to 31/01/2025
Sample Description	:	Surface Water

TEST RESULTS

S. No.	Parameter	Test Method	Results	Unit
1.	pH value	IS-3025(Part-11)	7.50	-
2.	Chemical Oxygen Demand (as O_2)	IS:3025(Part-58)	23.0	mg/l
3.	Dissolve Oxygen	IS: 3025 (Part - 38)	6.5	mg/l
4.	Biological Oxygen Demand (as O_2) 3 days at 27 ^{0}C	IS:3025(Part-44)	4.0	mg/l
5.	Total Suspended Solid (TSS)	IS:3025(Part-17)	7.2	mg/l

Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

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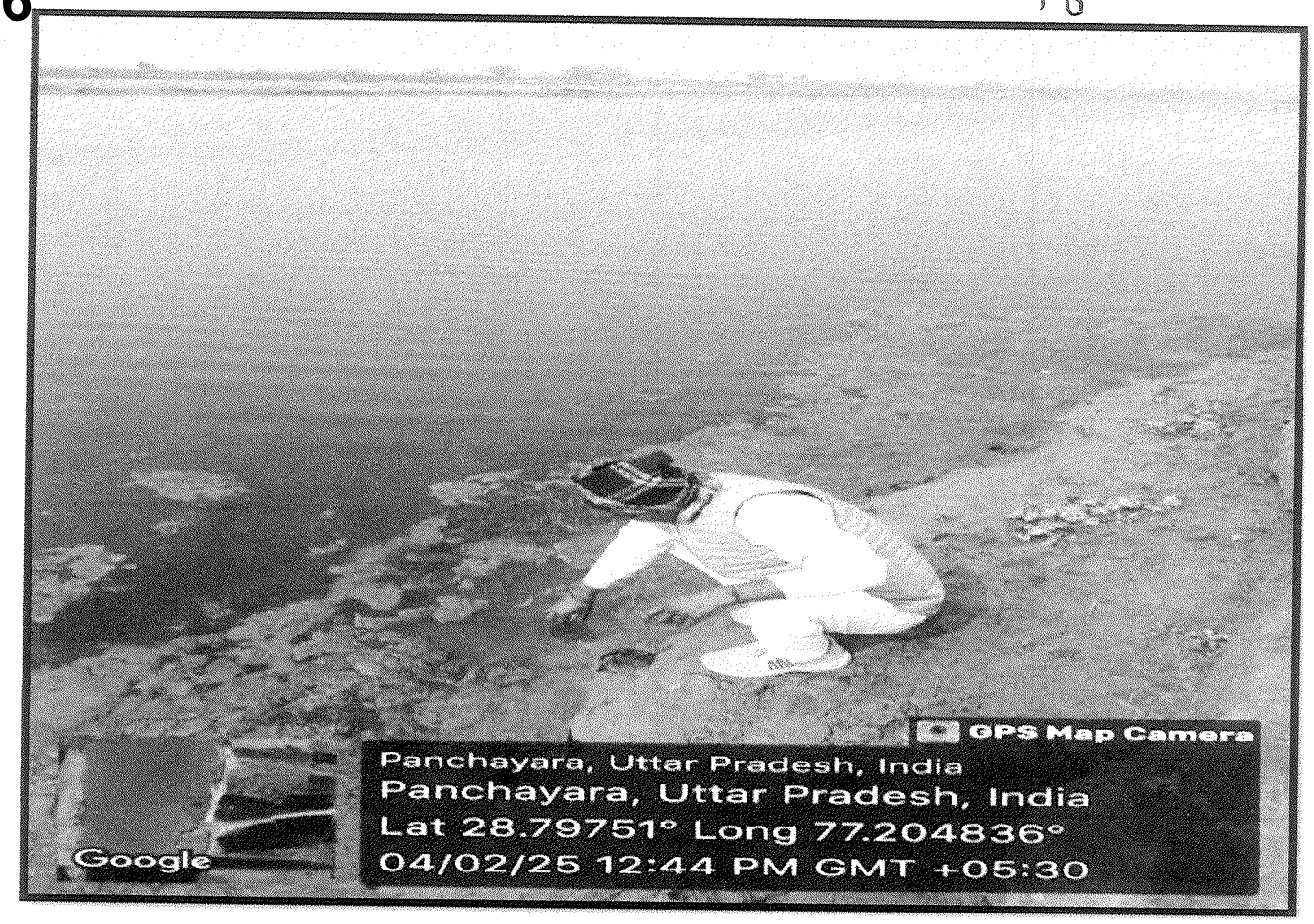
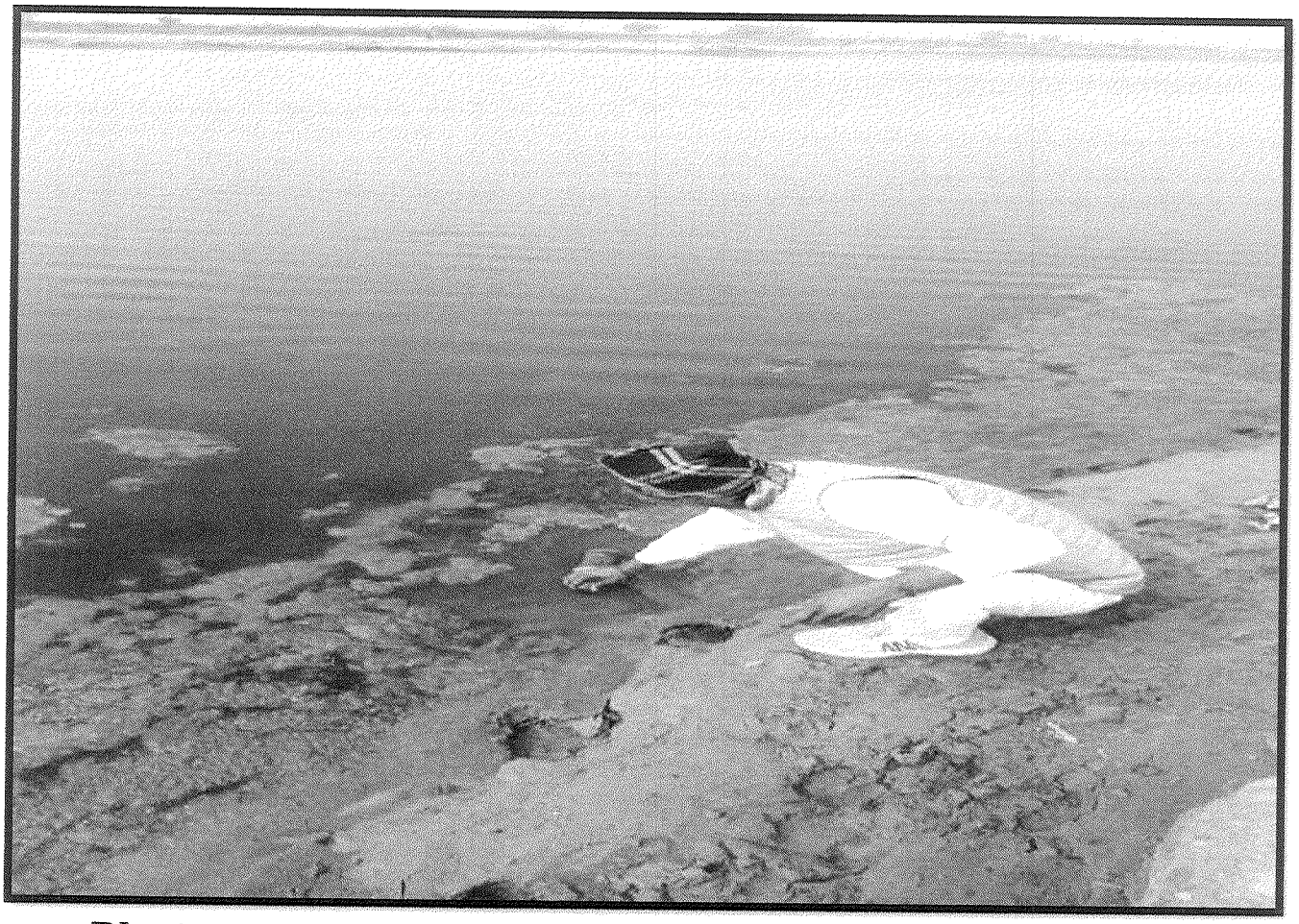
AUTHORIZED SIGNATORY

16





Photographs of Water Collection from yamuna river

GSTIN : 09AAIFN90[illegible]

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TEST CERTIFICATE

17

Test Report of	Report Code	Date of Issue
Ground Water	W-270125-011	31/01/2025

Issued To: Shri Bani Singh

Project Site- Village- Panchayara, Tehsil-Loni, District-Ghaziabad, U.P. Lease Area: 12.512 Ha.

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	NTL Representative
Sample Received Date	:	26/01/2025
Sample Quantity	:	2.0 Lt.
Analysis Duration	:	27/01/2025 to 31/01/2025
Sample Description	:	Ground Water 1 (Hand Pump)

RESULTS

Essential test as per IS:10500-2012/ RA 2023

S. No.	Parameter	Test Method	Results	Units	Desirable Limit	Extended Limit
1.	pH	IS:3025(Part-11)	7.16	-	6.0 – 9.0	-
2.	Colour	IS:3025(Part-4)	<5.00	Hazen	5	15
3.	Odour	IS:3025(Part-5)	Agreeable	-	Agreeable	Agreeable
4.	Taste	IS:3025(Part-8)	Agreeable	-	Agreeable	-
5.	Turbidity	IS:3025(Part-10)	<1.00	NTU	1	5
6.	Total Hardness (as CaCO3)	IS:3025(Part-21)	389.2	mg/l	200	600
7.	Chloride (as Cl)	IS:3025(Part-32)	176.50	mg/l	250	1000
8.	Calcium (as Ca)	IS: 3025 (P- 40)	98.16	mg/l	75	200
9.	Iron (as Fe)	IS:3025(Part-52)	0.220	mg/l	1	No Relaxation
10.	Nitrate (as NO_3)	IS: 3025 (P- 34)	14.88	mg/l	45	No Relaxation
11.	Total Dissolved Solid	IS:3025(Part-16)	821.0	mg/l	500	2000
12.	Alkalinity (as Ca CO_3)	IS: 3025 (P- 23)	364.0	mg/l	200	600
13.	Sulphate (as SO_4)	IS: 3025 (P- 24)	125.12	mg/l	200	400

MICROBIOLOGICAL REQUIREMENT

RESULTS

S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012/ RA 2023
1.	*Escherichia coli*	IS-15185	Absent	Absent/100ml
2.	*Coliform Bacteria*	IS-15185	Absent	Absent/100ml

Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
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3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory
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GSTIN : 09AAIFN9004D1ZD

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TEST CERTIFICATE

18

Test Report of	Report Code	Date of Issue
Ground Water	W-270125-012	31/01/2025

Issued To: Shri Bani Singh

Project Site- Village- Panchayara, Tehsil-Loni, District-Ghaziabad, U.P. Lease Area: 12.512 Ha.

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	NTL Representative
Sample Received Date	:	26/01/2025
Sample Quantity	:	2.0 Lt.
Analysis Duration	:	27/01/2025 to 31/01/2025
Sample Description	:	Ground Water 2 (Hand Pump)

RESULTS

Essential test as per IS:10500-2012/ RA 2023

S. No.	Parameter	Test Method	Results	Units	Desirable Limit	Extended Limit
1.	pH	IS:3025(Part-11)	7.38	-	6.0 – 9.0	-
2.	Colour	IS:3025(Part-4)	<5.00	Hazen	5	15
3.	Odour	IS:3025(Part-5)	Agreeable	-	Agreeable	Agreeable
4.	Taste	IS:3025(Part-8)	Agreeable	-	Agreeable	-
5.	Turbidity	IS:3025(Part-10)	<1.00	NTU	1	5
6.	Total Hardness (as CaCO3)	IS:3025(Part-21)	360.0	mg/l	200	600
7.	Chloride (as Cl)	IS:3025(Part-32)	154.20	mg/l	250	1000
8.	Calcium (as Ca)	IS: 3025 (P- 40)	96.40	mg/l	75	200
9.	Iron (as Fe)	IS:3025(Part-52)	0.218	mg/l	1	No Relaxation
10.	Nitrate (as NO_3)	IS: 3025 (P- 34)	12.60	mg/l	45	No Relaxation
11.	Total Dissolved Solid	IS:3025(Part-16)	854.0	mg/l	500	2000
12.	Alkalinity (as Ca CO_3)	IS: 3025 (P- 23)	380.0	mg/l	200	600
13.	Sulphate (as SO_4)	IS: 3025 (P- 24)	121.0	mg/l	200	400

MICROBIOLOGICAL REQUIREMENT

RESULTS

S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012/ RA 2023
1.	*Escherichia coli*	IS-15185	Absent	Absent/100ml
2.	*Coliform Bacteria*	IS-15185	Absent	Absent/100ml

Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
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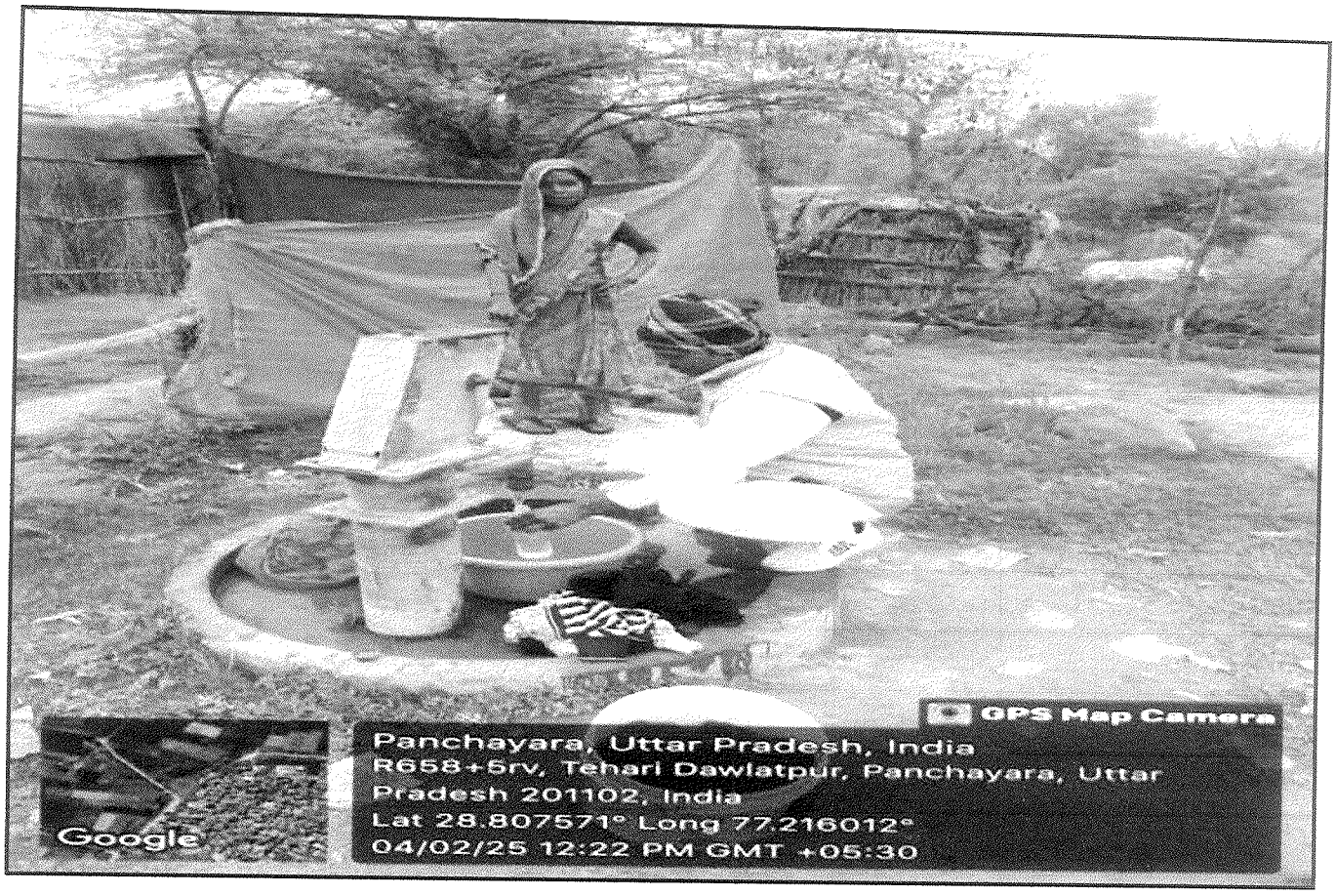

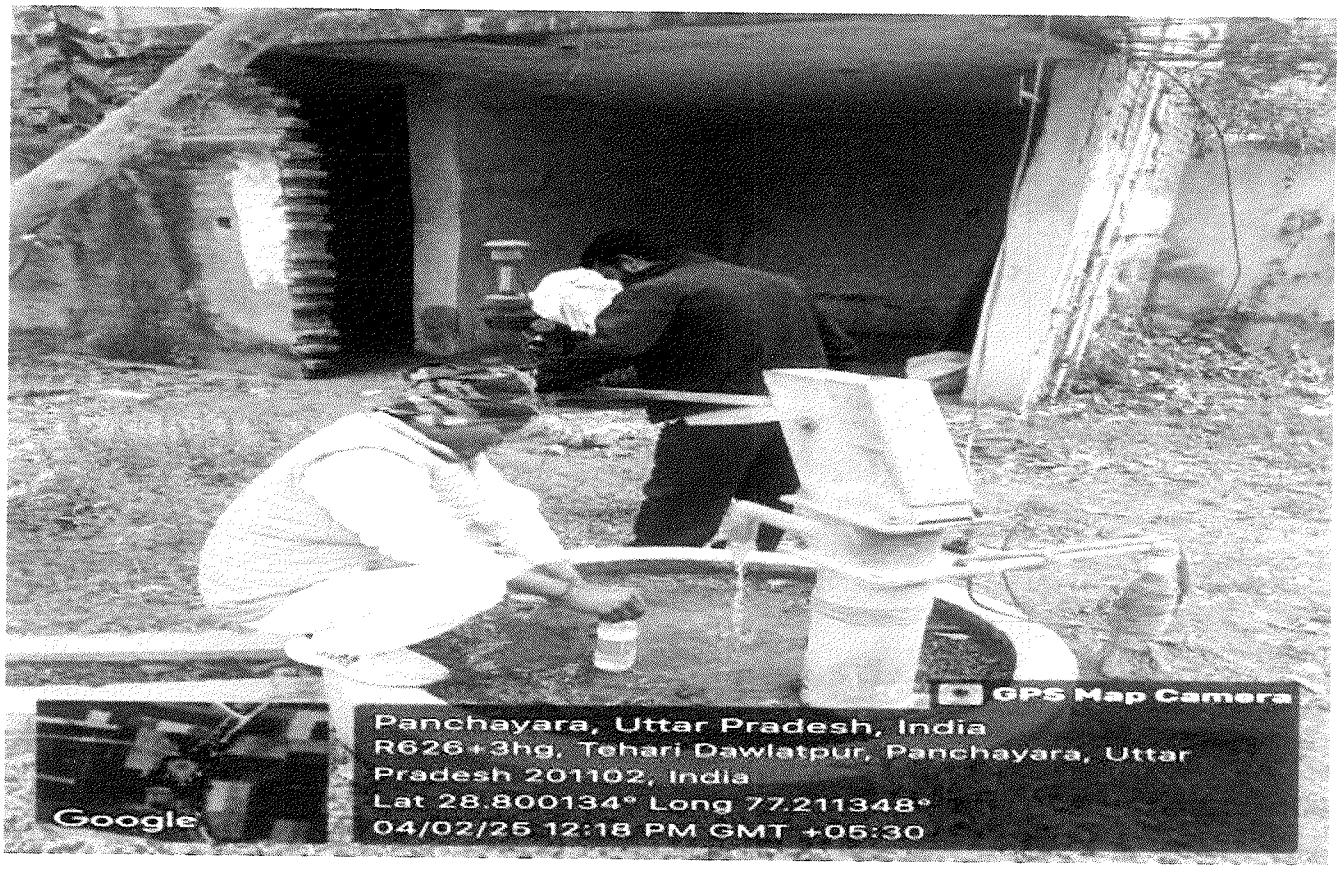

Photographs of Water Collection from Hand Pump