

तार : पर्यावरण

GRAM : PARYAVARAN

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड लखनऊ

UTTAR PRADESH POLLUTION CONTROL BOARD LUCKNOW



क्षेत्रीय कार्यालय
Regional Office

सन्दर्भ सं०

Ref. No. 1345/सहमत - 156/2019

दिनांक 03-08-2019
Dated : 20

To,

The Deputy Registrar (Judicial)
National Green Tribunal,
Principal Bench, New Delhi

Subject:- Hon'ble NGT order dated 05-07-2019(O.A.No.95/2019) in the matter of Ram Sharan Vs. State of Uttar Pradesh before NGT, Principal Bench, New Delhi.

Hon'ble Sir,

That the Hon'ble NGT has pass Following order in OA no.95/2019 on dated 05/07/2019.

"....The above deficiencies may call for action, including recovery of compensation for illegal drawl of water and other violations. Let a further action taken report be furnished by Central Pollution Control Board (CPCB), State Pollution Control Board (SPCB) And Central Ground Water Authority (CGWA). The state PCB will be the nodal agency. The committee may assess the compensation within one month. Pending such assessment, a sum Rs. 10 lakhs be recovered from the unit, by way of interim compensation which may be deposited with the CPCB to be used for restoration of environment. The Committee may also examine whether hardness of the water is because of the geogenic reasons or contamination. Copy Of this order be sent by e-mail to CPCB, CGWA and State PCB. Report be furnished by the State PCB by e-mail at judicial-ngt@gov.in within one month."

With respect is stated that in compliance of order mentioned above the Uttar Pradesh Pollution Control Board has complied with the aforesaid order on 05-07-2019. In accordance to the compliance of order passed by the Hon'ble NGT the industry is in question M/s J.B.Daruka Paper Ltd, Sitapur has been inspected by the UPPCB, CGWA and CPCB officers dated on 26.07.2019, in joint collaboration.

The copy of the joint inspection report is annexed herewith this letter for your kind perusal.

Lucknow

Dated:

With Regards,

(Dr. Ram Karan)

Regional Officer

U.P. Pollution Control Board,
Lucknow

JOINT INSPECTION REPORT OF M/S J. B. DARUKA PAPER LIMITED, SITAPUR(UP)

**In the matter of
Ram Sharan Vs State of Uttar Pradesh (Original Application no. 95 of 2019)**

In compliance of Hon'ble NGT order dated 05.07.2019 in the matter of Ram Sharan Vs State of Uttar Pradesh (Original Application no. 95 of 2019), inspection of M/s J.B. Daruka Paper Limited, A-1, Industrial Area, Avenia Grant, Shahajahanpur Road, Sitapur (UP) (Hereafter referred as 'the unit') was carried out by a joint team of CPCB, Regional Directorate (North), Lucknow and UPPCB, Regional Office, Lucknow on July 26, 2019. During inspection, the unit was in operation. The salient details, observations and recommendations based on inspection are as below:

1.	Name and address of the unit	M/s J.B. Daruka Paper Limited, A-1, Industrial Area, Avenia Grant, Shahajahanpur Road, Sitapur (UP)		
2.	Name of Contact person with designation Phone Email:	Mr. Suresh Kumar Agarwal, Director 9415047448 sureshjbDaruka@gmail.com		
3.	Year of commissioning	1998		
4.	Category of Industry	Pulp and Paper		
5.	Installed Capacity, TPD (As per consent)	50 TPD		
6.	Energy required, KWH /MT	2017-18	2018-19	2019-20(upto 26.07.2019)
		490	480	480
7.	Status of consents	a. Air Consent	Valid upto 31.12.2020	
		b. Water Consent	Valid upto 31.12.2020	
		c. HW authorization	Valid upto 01.08.2024	
8.	Product manufactured in TPD/TPM/TPA			
	S. No.	Product (grade/type) & By Product manufactured	Product manufactured in MTA	
			2017-18	2018-19
	a.	Media Kraft Paper	14892.879	16127.841
b.	Soda Ash	2436.100	2917.350	834.00

9.	Raw material used				
	S. No.	Raw Materials	Raw Material Consumption per ton of product		
			2017-18	2018-19	2019-20(upto 26.07.2019)
a.	Bagasse (50 % moisture)	4.5	4.5	4.5	

10.	Water Consumption & Waste Water Generated: (Avg. for June, 2019)				
	S. No.	Section/ Aera	Water Consumption, KLD	Wastewater Generated, KLD	Water Consumption KL/MT of Paper produced
	a	Process	900	800	21 KL/MT
	b	Cooling	100		
c	Domestic	50			

11. Effluent Treatment facilities provided:
ETP comprises of Krofta, Equalization Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, Media Sand Filter, Activated Carbon Filter and Filter Press
Disposal Details:
Treated effluent from ETP is discharged into Pirai Nalla, which meets to Saraiyan River after traversing approx. 10 km. Saraiyan River ultimately meets River Gomti.
Sample collected form ETP analysed and results are: mentioned in observations at serial no .9

12.	Fuel Consumption				
	Sr. No.	Type of Fuel	Fuel Consumption, MT or KL		
			2017-18	2018-19	2019-20(upto 26.07.2019)
	a.	Coal	-	-	
	b.	Furnace oil	-	-	
c.	Diesel	-	5.5 KL/Day	5.5 KL/Day	
d.	Rice Husk	42 MT/Day	42 MT/Day	40 MT/Day	

13.	Stack Details and Source Emission Status				
	Sr. No.	Stack Attached To	Stack Height (m)	Stack Dia.(m)	Control equipment
	a.	Boiler (10 TPH)	32	1.15m	Multi Cyclone Separator
b.	Boiler(08TPH)	30	1.15m	Dust collector	

14.	Solid Waste Status			
	Sr. No.	HW /Solid Waste Generated	Quantity	Storage Facility
a.	ETP Sludge	No information provided	Sludge Drying Beds	Sold to Board Mill

	b.	Used Oil	0.135 KL/Month	Drums	Recyclers
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Observations:

1. The unit has infrastructure to produce Media Kraft Paper using Bagasse as major raw material with reported installed capacity of 50 TPD. During inspections, unit was in operation with reported production of 48.216 TPD (on 25.07.2019).
2. The unit has Water and Air consent, which was valid upto 31.12.2020.
3. The unit presently meets its fresh water requirement through two (02) borewells. Electromagnetic water meter is installed at the borewells and log book is maintained by the unit. Earlier, the unit has installed three borewells. During inspection, the unit has found dismantled third/additional borewell.
4. As per log book of the unit, the avg. fresh water consumption for the month of June,2019 was 1050 KLD.
5. The unit does not have valid NOC from CGWA (Central Ground Water Authority) for abstraction of ground water. The last issued NOC was valid upto 27.02. 2019.The unit has applied for renewal on 26.02.2019.
6. The unit has installed Krofta for fibre recovery before ETP.
7. The unit has installed Effluent Treatment Plant (ETP) based on Activated Sludge Process, which comprises of following units:
 - Equalization Tank,
 - Primary Clarifier,
 - Aeration Tank,
 - Secondary Clarifier
 - Media Sand Filter,
 - Activated Carbon Filter and
 - Drum Thickener
8. The unit has installed OCEMS for pH, TSS, BOD, COD and flow, which is connected with CPCB/U PPCB server.
9. During inspection, ETP was in operation. Samples were collected from Equalization Tank of ETP, Aeration Tank and Outlet of ETP. Analysis results is presented below:

N. N.
T. N.

Sampling locations	Parameters								
	pH	SS (mg/l)	BOD (mg/l)	COD (mg/l)	TDS (mg/l)	Colour (Hazen)	SAR	MLSS (mg/l)	MLVSS (mg/l)
Inlet of ETP	7.03	931	342	621	2006	--	---	---	---
Aeration Tank	---	---	---	---	---	---	---	6378	3716
Outlet of ETP	8.07	6.94	16.7	53	444	150	0.80	---	---
Standards as per E(P) Rule,1986	5.5-9.0	100	30	--	--	--	26	--	--

10. It is evident from the analysis results that unit is complying with the stipulated norms of effluent discharged as prescribed under E(P) Rule, 1986. The TSS reduction is more than 93%, which is quite in higher side.
11. The unit is recycling effluent after Krofta into Low Pressure Shower, Vacuum pump sealing etc.
12. The overflow of Primary Clarifier is partially collected in lagoon for reuse in the process such as in pulp mill and remaining is send to Aeration Tank for further treatment.
13. The unit has provided electromagnetic flow meter for recycling of effluent into process.
14. Treated effluent from ETP is discharged into Pirai Nalla, which meets to Saraiyan River and after traversing approx. 10 km. Saraiyan River meets River Gomti.
15. The unit has installed FBR based Chemical Recovery Plant with capacity 140 ton solid fired per day. During inspection, CRP was operational with present 110 ton solid fired per day. It was informed that CRP is operated with the frequency of 15-17 days in a month after storage of sufficient quantity of WBL (Weak Black Liquor). Log book regarding operation of CRP is found maintained.
16. The unit has two boilers with capacity 10 TPH and 08 TPH using bagasse as fuel. Boiler with capacity 10 TPH is equipped with Dust collector and 08 TPH is equipped with Multi Cyclone Separator. Emission from 10 TPH boiler is emitted through stack of height approx. 38 m and emissions from 08 TPH boiler is emitted with stack of height approx. 35 m. During inspection, only 10 TPH boiler was operational.
17. The unit has 07(seven) DG sets with capacity 3.2 MW, 2.2 MW, 750 KVA, 500 KVA, 500 KVA, 125 KVA and 180 KVA. All DG sets are kept in closed room, but are not acoustic. The

T. S. Daruka

stack (approx. 30 m) is provided only for 3.2 MW and 2.2 MW. It was informed by the unit representative; the unit is operated with the DG set only. No external power connection has taken. During inspection, the unit is in the process to made DG Sets room acoustic.

18. It is also informed by the unit representative that DG set with capacity 2.2 MW is non-functional.

19. The unit has not provided any display board regarding hazardous waste generated outside the main factory gate, on quantity and nature of hazardous chemicals being used in the plant, water and air emissions and solid waste generated within the factory premises in compliance of Hon'ble Supreme Court order dated 14.10.2003 in the matter of Writ Petition (C) No. 657/1995(Research Foundation for Science, Technology and Natural Resource Policy Vs Union of India & Ors).

20. As per Hon'ble NGT order dated 05.07.2019, committee may examine whether hardness of the water is because of the geogenic reasons or contamination. Hence, Ground water sample at same three locations were collected and analyzed at CGWB laboratory. Analysis results are presented below:

Parameters	Unit	Industry premises	Village Advernia Grant	Opposite CRP (Primary School Premises)	Standards as per IS 10500:2012 (permissible limit)
pH	--	7.57	7.62	7.56	6.5-8.5
Electrical Conductivity	µS/Cm	433	444	441	--
CO ₃	mg/l	Nil	Nil	Nil	--
HCO ₃	mg/l	262	256	256	--
Chloride	mg/l	11	14	14	1000
Fluoride	mg/l	0.27	0.30	0.21	1.5
NO ₃	mg/l	BDL	BDL	BDL	45
SO ₄	mg/l	18	11	12	400

M. N.

T. S. S.

[Signature]

Total Hardness	mg/l	215	220	220	600
Ca	mg/l	42	44	40	200
Mg	mg/l	26	26	29	100
Na	mg/l	14	15	14	--
K	mg/l	3.5	3.6	3.5	--

21. The hardness found in the three samples is well within permissible limit. All other constituents are also within permissible limit and constituent appear to be of geogenic in nature.

22. The status of compliance of recommendation made by the joint inspection team dated April 15,2019 are as below:

Sl. No.	Recommendations	Compliance status
1.	The unit should install acoustic enclosure and adequate stack height in all DG sets.	Not complied, the unit is in the process to made DG set room acoustic and installing stack in all DG sets. The unit has installed stack in DG set with capacity 3.2 MW.
2.	The unit should expediate to obtain NOC from CGWA for ground water abstraction.	Not complied, the unit has applied for renewal of NOC on 26.02.2019.
3.	The unit should obtain permission from CGWA for additional one borewell.	Complied, the unit has dismantled additional borewell.
4.	The unit should install electromagnetic flow meter for the water recycled in the process and maintain log book of same	Complied, the unit has installed electromagnetic flow meter for water recycled from ETP and maintain log book of same.
5.	The unit should ensure to comply with the Hon'ble Supreme Court order dated 14.10.2003 in the matter of Writ Petition (C) No. 657/1995(Research Foundation for Science, Technology and Natural Resource Policy Vs Union of India & Ors).	Not complied, Environmental display board was found under preparation and 70% content writing work was completed.

- As per Hon'ble NGT order, the Environmental compensation (EC) has been calculated. The details of EC calculation are annexed herewith as Annexure-1. As per calculation, the unit should impose EC of Amount Rs. 30,90,000/- (Thirty Lac Ninety Thousand

Rupees Only). However, as per Hon'ble NGT order, the unit has submitted interim compensation of amount Rs. 100000/- (Ten Lac) to CPCB on 31.07.2019.

Recommendation:

It is evident from the results that the unit is although found complying. The unit may be directed to comply with the following:

1. The unit should expediate to install acoustic enclosure and adequate stack height in all DG sets.
2. The unit should expediate to obtain NOC from CGWA for ground water abstraction.
3. The unit should expediate to install environmental display board at the main gate as per Hon'ble Supreme Court order dated 14.10.2003 in the matter of Writ Petition (C) No. 657/1995 (Research Foundation for Science, Technology and Natural Resource Policy Vs Union of India & Ors).

Inspection Team:

1. Dr. Ram Karan, Regional Officer, UPPCB, RO, Lucknow
2. Sh. T.K. Pant, Sc. 'D', CGWB, Northern Region, Lucknow
3. Sh. Runa Oraon, Sc. 'D', CPCB, RD(N)-Lucknow

De
02/08/19

Runa
02/08/19

T.K. Pant
21/8/19

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No. 95/2019**

Ram Sharan Vs State of Uttar Pradesh

Name of Industry	Category	Date of previous inspection	Date of present inspection compliance verification	No. of violating days	Environmental Compensation
M/s J.B. Daruka Paper Limited, A-1, Industrial Area, Avenia Grant, Shahajahanpur Road, Sitapur (UP)	Red	15.04.2019	26.07.2019	103	30,90,000

Criteria considered for calculation of Environmental Compensation (EC)
 $EC = PI \times N \times R \times S \times LF$

Where, EC is Environmental Compensation in ₹

PI = Pollution Index of industrial sector

N = Number of days of violation took place

R = A factor in Rupees (₹) for EC

S = Factor for scale of operation

LF = Location factor

A. PI (Pollution Index) criteria considers for calculation

For Red category of industries, PI= 80

For Orange category of industries, PI= 50

For Green category of industries, PI= 30

For White category of industries, PI= 10

Here, the Paper unit comes under Red Category. Hence, PI=80





- B. N considers for calculation of period of violation 'N' is the date of violation observed (i.e. date of visit) and date of compliance observed (here it is considered as date of inspection for compliance verification in compliance of Hon'ble NGT), which will be 103 days.
- C. R (A factor in Rupees (₹) for EC) considers for calculation 'R' is Rs. 250/- per day
- D. S considers for calculation in terms of scale of operation which may be 0.5 for micro or small, 1.0 for medium and 1.5 for large units. Here, the unit is in Large Scale, hence 'S' is 1.5.
- E. LF considers for calculation of Location Factor (LF) based on population The population of nearby City is around 1.77 lac and hence LF is considered as '1'

Detailed calculation of EC:

- Where, $PI=80, N=103, R= \text{Rs. } 250/- \text{ per day, } S=1.5 \text{ and } LF=1.0$
- Environmental Compensation (EC) per day = $80 \times 250 \times 1.5 \times 1 = 30,000/- \text{ per day}$
- No. of Violating days (N) = 103
- Hence, Total EC = $30,000 \times 103 = 30,90,000/-$ (Thirty Lac Ninety Thousand Rupees only)

By
 2/1/2019
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केन्द्रीय प्रदूषण नियंत्रण बोर्ड आंचलिक प्रयोगशाला		Central Pollution Control Board Zonal Laboratory	
Doc No. CB/ZLN/QR/5.10/2	Issue No. : 02	Dt of Issue : 22.11.2015	Page No. : 1 of 1
Amendment no. : 00	Amendment Dt: 00	Approved by : TM	Issued by: QM

पिकप भवन, विभूति खण्ड, गोमती नगर, लखनऊ
फ़ोन : 0522 : 4087600
फैक्स : 0522 : 4087602



PICUP Bhawan, Vibhuti Khand, Gomatnagar, Lucknow
Phone : 0522- 4087600
Fax : 0522 - 4087602

**WASTEWATER
TEST REPORT**

S.No W/2019/321

	Date of test report: 01/08/2019	Date/period of testing: 27/07-01/08/2019
1	परियोजना /Project/Test Programme	P- III (8)
2	नमूने का स्रोत /भूजल /सरिता /अन्य/Sample Source (STP/ETP/Drain/any other)	Industry
3	नमूने का प्रकार /ग्रैब/कम्पोजिट/Type of Sample (Grab/Composite)	Grab
4	नमूने एकत्र करने वाले व्यक्ति का विवरण/ Sample Collected/Deposited by	Sh. Runa Oraon, Scientist 'D'
5	नमूना एकत्रीकरण की तिथि/Date of Sample collection	26/07/2019
6	प्रयोगशाला में नमूना प्राप्ति की तिथि/Date of sample receipt in laboratory	27/07/2019
7	नमूना एकत्रण पद्धति/Sampling procedure.....Please Refer.....	CB/ZLN/SOP/5.7/2 & CB/ZLN/QR/5.7/1 Issue No. 01
8	विश्लेषण हेतु आवेदनकर्ता/Analysis indented by	Sh. Runa Oraon, Scientist 'D'

क्रम सं. S. No.	पैरामीटर Parameter	इकाई Unit	नमूनों का विवरण/कोड इत्यादि Description of sample/Code etc.			
			RUF-1	RUF-2	RUF-3	
1.	पी एच/ pH		7.03 (30.8°C)	8.07 (30.5°C)	---	
2.	रंग/ Colour	हेजल, Hazen	---	150	---	
3.	एस.एस./ SS	मि.ग्र./लि, mg/L	931	6.94	---	
4.	टी.डी.एम./ TDS	मि.ग्र./लि, mg/L	2006	444	---	
5.	एम.एल.एस.एस/ MLSS	मि.ग्र./लि, mg/L	---	---	6378	
6.	एम.एल.वी.एस.एस/ MLVSS	मि.ग्र./लि, mg/L	---	---	3716	
7.	बी.ओ.डी. /BOD	मि.ग्र./लि, mg/L	342	16.7	---	
8.	सी.ओ.डी. /COD	मि.ग्र./लि, mg/L	621	53.0	---	
9.	एस.ए.आर./S.A.R.		---	0.80	---	

विश्लेषण विधि हेतु कृ.प.उ./Test methods followed are appended overleaf

CODE	Description
RUF-1	Industry
RUF-2	Industry
RUF-3	Industry

End of Test Report

C.K. Dixit
01-08-2019
(C.K. Dixit)

Runa Oraon
01.08.2019
वी० के० संचालक
आंचलिक 'घ'

आख्या बनाने वाले के हस्ताक्षर/ Prepared by (Name & Sign)

अधिकृत हस्ताक्षरकर्ता/ Authorized Signatory

Note : 1. The results in the Test Report relate only to the items tested : 2. The report shall not be reproduced except in full, without the written permission of laboratory

RUF-1 → Eq. tank of ETP
RUF-2 → outlet of ETP
RUF-3 → AT of ETP

Runa

REPORT ON THE JOINT INSPECTION OF M/s J.B.Daruka papers Ltd, Sitapur on 26.07.2019

PURPOSE: To verify the allegations made by Shri Ram sharan (Applicant). (Original Application No 95/2019)

The inspection on the part of CGWA was done in the light of facts that the Industry is water intensive and falls in the SAFE block "AIYALA "of Sitapur district as per Dynamic Ground Water Resource Estimation 2013

A joint team of members from UPPCB Lucknow, CPCB Lucknow and CGWB Lucknow visited the plant and adjoining area around "M/s J.B.Daruka papers Ltd, Sitapur "in order to verify the allegations made by Shri Ram sharan (Applicant). The team members are as given below

1. Dr Runa Oram (Scientist-D) from CPCB, Lucknow
2. Dr Ramkaran (RO) from UPPCB, Lucknow
3. Shri T.K.Pant (Scientist-D) CGWB, Lucknow.

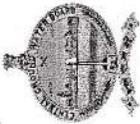
Compliance condition as per NOC issued by CGWA.	Results of Inspection	Remark
02 number of Tube well; No additional ground water abstraction structure is permitted.	02 number of Tubewells were found	Complied
02 Tube well to be fitted with water meter	Both the Tubewells are fitted with water meter	Complied
Tubewell meter to be functional	Both the meters were functional.	Complied
Ground water regime monitoring by 03 number of Piezometer	03 number of Piezometer have been installed in the campus and all three have telemetry system	Complied
Compliance condition of Ground water abstraction 2750m ³ /day Not exceeding 8,25,000 m ³ /year.	Ground water is being abstracted with both the Tube wells. As per average taken for the last two years from the day of inspection, the industry has abstracted Ground water @1336m ³ /day and average annual abstraction is 381479m ³ .	Complied
Industry to take up measures to recharge ground water to the tune of 4,96,000m ³ /year By adopting ponds with recharge shafts	Industry has taken up 17 numbers of ponds. Recharge shafts as proposed are not constructed, hence the required quantum of recharge is short. As per abstraction record of the last two years the mandatory recharge stands at 190740m ³ /year and as per compliance, the industry is recharging only 1, 28,432m ³ /year hence the deficit recharge is 62308 m ³ /year.	Partially complied
Village security plan for at least one village	Exempted as per order "Modification of condition of NOC dated 01.02.2019"	Exempted

T.K.Pant

Firm to ensure recycling and reuse of waste water after adequate treatment	ETP installed and is in working condition.	Complied
Ground water quality to be monitored twice in a year	Pre and Post monsoon tube well water analysis report received for 2018.	Complied
Whether hardness of water is geo-genic or contamination.	Three samples were collected from the same locations as done by joint CPCB and UPPCB and were analyzed in the NABL accredited lab of CGWB, Lucknow. The hardness found in the three samples is well within permissible limit. All other constituents are also within permissible limit and constituents appear to be of geogenic in nature.	Within permissible limit.

T.K. Pant
T.K.PANT 2/8/2019
Scientist-D

ULR NO-TC870518000000 F



CENTRAL GROUND WATER BOARD, NORTHERN REGION, LUCKNOW
 Bhujal Bhawan, Ram Ram Bank Chauraha
 Sitapur Road Yojana, Lucknow -226021
 Chemical Quality Results
 Procedure as per SOP-01



T-1688

NABL 17025:2005 Accredited Laboratory

DOC NO. CGWB/NR/CARes

DOC. Name-Chemical Analysis Result

Clause No. 5.10

PROTOCOL OF TEST AND METHOD	Permissible Limit
E.C by APHA 22nd Ed. 2012, 2510 B	3000 µS/cm
T.H by APHA 22nd Ed. 2012, 2340 C	600 mg/l
Cl by APHA 22nd Ed. 2012, 4500 Cl B	1000 mg/l
pH by APHA 22nd Ed. 2012, 4500H ⁺ B	6.5-8.5
CO ₃ by APHA 22 nd Ed. 2320B	
HCO ₃ by APHA 22 nd Ed. 2320B	
SO ₄ by APHA 22 nd Ed. 4500SO4E	400 mg/l

PROTOCOL OF TEST AND METHOD	Permissible
NO ₃ by APHA 22nd Ed. 2012, 4500 NO ₃ B	45 mg/l
F by APHA 22nd Ed. 2012, 4500 F	1.5 mg/l
Na by APHA 22nd Ed. 2012, 3500 Na B	-
K by APHA 22nd Ed. 2012, 3500 K D	-
Ca by APHA 22 nd Ed. 3500Ca B	200 mg/l
Mg by APHA 22 nd Ed. 3500Mg B	100 mg/l

Test item - Ground Water
 Sample condition - O.K
 Discipline- Chemical Testing
 Group - Water

ck Taha

TYPE - STI

Results of chemical analysis of water samples received from Shri T. K. Pant, Sc-D

Lot No.	Sl.No.	District	Block	Location	Source	Lat.	Long.	Date of collectio	Date of analysis	pH	EC µS/cm	CO ₃ mg/l	HCO ₃ mg/l	Cl mg/l	F mg/l	NO ₃ mg/l	SO ₄ mg/l	TH mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l
181	1	Sitapur	Shallow TW	J.B. Darukla paper td Premises.	27.60084 & 80.60696	26-07-201	26-07-201	Jul-19	7.57	433	nil	262	11	0.27	BDL	18	215	42	26	14	14	3.5
181	2	Sitapur	IM II	Primary School Advema Grant, Sitap	27.59555 & 80.61217	26-07-202	26-07-202	Jul-19	7.56	441	nil	256	14	0.21	BDL	12	220	40	29	14	14	3.5
181	3	Sitapur	IM II	Village Advema Grant, Sitapur	27.61300 & 80.61511	26-07-202	26-07-202	Jul-19	7.62	414	nil	256	14	0.30	BDL	11	220	44	26	15	15	3.6

nd-Not Detectable

BDL-below detection limit eg. 0.2mg/l for F, PO₄ & <5 mg/l for NO₃, SO₄, SO₂ & <2mg/l for Na & < 1mg/l for K

Analysed by - (Dr. Madhavi Rajak)
 STA (CHE)
 01.08.19

CK
 OIC, Chemical
 C.G.W.B.NR, Lucknow

CK
 Authorized signatory
 OMI/ITM
 CGWB,NR, Lucknow

Rev. No. 1
 APPROVED BY
 QUALITY MANAGER

ISSUED BY: TECHNICAL MANAGER

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