



PUNJAB POLLUTION CONTROL BOARD

Regional Office, Ferozpur Road, Near Dhara Singh Colony, St. No. 2, Faridkot
Email: ppcbfdk@yahoo.com

No 6304

Through e-mail

Dated 21/10/2022

To

The Registrar,
Hon'ble National Green Tribunal,
New Delhi.

Subject: Status report in the matter of O.A. No. 606 of 2022 - Public Action Committee & Ors v/s State of Punjab & others.

Reference: Order dated 30.08.2022 of the Hon'ble NGT, New Delhi in the subject cited application.

Please find enclosed a status report by Punjab Pollution Control Board, Nodal Agency in this case on behalf of Joint Committee in O.A. No. 606 of 2022 titled as Public Action Committee & Ors v/s State of Punjab & others for consideration of Hon'ble National Green Tribunal please.

DA: As above


21/10/22
**Environmental Engineer
Regional Office, Faridkot**

Subject Report of the Committee constituted vide Orders dated 30.08.2022 passed by Hon'ble NGT in the matter of O.A. No. 606 of 2022 titled as **Public Action Committee &Ors Vs. State of Punjab &Ors.**

Background

Public Action Committee filed an application against M/s Malbros International Pvt. Ltd. (Distillery), Village Mansoorwal, Tehsil Zira, District Ferozepur in the Hon'ble NGT bearing O.A. No. 606 of 2022. After hearing the plea of petitioners, the Hon'ble NGT issued directions for formation of Joint Committee comprising of CPCB, State PCB, State Ground Water Board and Deputy Commissioner Ferozepur and has directed the same to meet within two weeks, undertake visit to the site, look into the grievance of the application, associate the applicant and representative of the concerned project proponent, verify the factual position and submit the factual report within one month. The operating para of Hon'ble NGT Order dated 30.08.2022 is reproduced as under:-

"2. Prima facie, the allegations made in the application raise questions relating to environment arising out of the implementation of the enactments specified in Schedule I to the National Green Tribunal Act, 2010. In view of the allegations made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position. Accordingly, we constitute a Joint Committee comprising of representative of CPCB, State PCB, State Ground Water Board and Deputy Commissioner, Firozpur and direct the same to meet within two weeks, undertake visits to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponent, verify the factual position and submit its report within one month by e-mail at judicialngt@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF. The State PCB will be the nodal agency for coordination and compliance.

3. In case, the Joint Committee observes any violation of consent conditions/environmental norms then it shall forward a copy of its report to:-

(i) the Project Proponent to enable it to comply with the recommendations contained in its report or file objections against the observations/recommendations in the report of the Joint Committee and file its response before this Tribunal as desired within one month from the date of receipt of a copy of the report of the Joint Committee; and

(ii) the State PCB, State Ground Water Board and Deputy Commissioner, Firozpur to enable them to take appropriate remedial action by giving notice to/hearing the project proponent and following due process of law in accordance with Statutory provisions mandating them to take remedial

Qureshi

Palt

Sharma

S

A

Ghosh

action for prevention, control and abatement of environmental pollution/degradation and protection and improvement of environment and they shall separately submit their action taken report within one month from the date of receipt of a copy of the report of the Joint Committee.

The response/reports be submitted within one month by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF."

History of Complaint

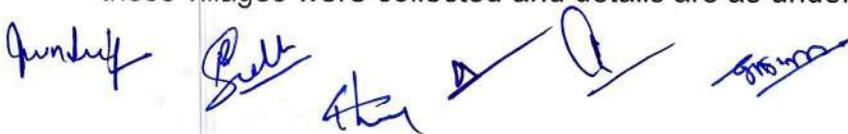
A complaint was received on 18.07.2022 against contamination of ground water in Vill. Mahian Wala Kalan, Teh. Zira, Distt. Ferozepur. It was alleged in the complaint that during the drilling of borewell in the premises of Gurudwara Samadhi Bhagat Dinni Chand Ji in Vill. Mahian Wala Kalan, polluted water was observed. It was further alleged that the liquor factory i.e. M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Teh. Zira, District Ferozepur has polluted the ground water in surrounding villages by discharging polluted water through borewell.

The site under the complaint was visited by the Tehsildar Zira alongwith officer of the Board on 18.07.2022. During visit, the issue was discussed with the representatives of the Management Committee and they informed that the sample of polluted water was collected in a bottle after drilling the borewell at the depth of 650 ft. However, they further informed that now the depth of the tubewell has been decreased to around 500-550 ft. and water at this level is found clear. After discussions, the Management Committee verbally requested as under:

- Sample can be collected from the tubewell after it becomes operational in coming 2-3 days.
- The groundwater sample from the Govt. Middle School may be collected instead of tubewell drilled at the site as the water is clear in nature.
- They assured that they will inform the location of borewells from where samples can be collected in future.

As requested by the Committee members of Samadhi Bhagat Dinni Chand Ji, groundwater sample from the tubewell provided at Govt. Middle School was collected on the same day i.e. 18.07.2022 and the analysis results of this sample is discussed in the subsequent paras.

The village Mahian wala kalan and RatoulRohi were visited by the officer of the Board on 19.07.2022 to ascertain the factual position in surrounding villages and ground water samples of tubewells installed in the agricultural fields of these villages were collected and details are as under: -



Sr No.	Place of sample collection	Depth of tubewell (as informed by the representative)	Physical appearance
1	From the tubewell installed in the field of Sh. Gurpreet Singh S/o Sh. Mohan Singh, Vill. Mahian Wala Kalan, Tehsil Zira, District Ferozepur (30.933089, 74.951809)	450 ft	Colorless and odorless
2	From the tubewell installed in the field of Sh. Gurdarshan Singh S/o Sh. Gurmel Singh, Vill. RatolRohi, Tehsil Zira, District Ferozepur (30.909191, 74.946655)	700 ft	Colorless and odorless

The premises of the industry was also visited by the officer of the Board on 19.07.2022 and no borewell for discharge of effluent was found in the premises of the industry and groundwater samples from the tubewells from various locations inside the industrial premises were collected and details are as under: -

Sr. No.	Place of sample collection	Depth of tubewell (as informed by the representative)	Physical appearance
1	Near D.M. Plant	600 ft	Colorless and odorless
2	Near bottling unit	450 ft	Colorless and odorless
3	Near new water	600 ft	Colorless and odorless

As discussed on 18.07.2022 with the Committee members of Gurudwara Samadhi Bhagat Duni Chand Ji, Village Mahianwala Kalan, they refused to advise the location of borewell from where ground water samples could be collected to ascertain ground water quality in the area. Therefore, the visiting officer collected some more ground water samples from nearby area of the industry i.e. from villages Mansoor Wala and RatolRohi as per the details given below:

Sr. No.	Place of sample collection	Depth of tubewell (as informed by the owner)	Physical appearance
1	From the tubewell installed at Gurudwara Smadh Bhagat Duni Chand, Mahian Wala Kalan, Tehsil Zira, Ferozepur (30.94144, 74.95072)	500 ft	Colorless and odorless
2	From the tubewell installed in the field of Sh. Jagjeet Singh S/o Sh. Balwinder Singh, Vill. Mansoorwal Kalan, Tehsil Zira, District Ferozepur (30.91111111, 74.98083333)	200 ft	Colorless and odorless
3	From the tubewell installed in the field of Sh. Surjeet Singh S/o Sh. Mal Singh, Vill. Mansoorwal Kalan, Tehsil Zira, District Ferozepur (30.912500, 74.971667)	500 ft	Colorless and odorless

Jasdeep Singh *Beeth* *Atar Singh* *Q* *Onkar*

4	From the tubewell installed in the field of Sh. Manna Singh S/o Sh. Dhira Singh, Vill. RatolRohi, Tehsil Zira, District Ferozepur (30.914722, 74.950000)	450 ft	Colorless and odorless
5	From the tubewell installed at Veterinary Dispensary of Village RatolRohi, Tehsil Zira, District Ferozepur (30.916111, 74.95)	410 ft	Colorless and odorless

- Organic pollutant parameters such as BOD & COD have not been found in any of the 11 samples collected on 18.07.2022, 19.07.2022 and 22.07.2022.
- Inorganic parameters such as TSS as well as heavy metals such as lead, Arsenic, Mercury, Nickel, Chromium, Copper and Cadmium have also not been found in any of these samples.
- Out of the total 11 ground water samples collected, the concentration of TDS was found between 500 mg/l to 1000 mg/l in 7 samples, between 1000 mg/l to 1100 mg/l in 2 samples, between 1500 mg/l to 1600 mg/l in one sample and between 1900 mg/l to 2000 mg/l in remaining one sample.
- The value of TDS in the sample collected from tubewell installed in Gurudwara Smadh Bhagat Duni Chand in village Mahianwala Kalan were found to be 724 mg/l.
- TDS value ranges from 538 mg/l to 956 mg/l in the samples collected on 19.07.2022 from the tubewells located inside the industry.

Conclusion of report

- All the samples collected were found to be colorless and odorless.
- Organic pollutant parameters such as BOD & COD have not been found in any of the 11 samples collected on 18.07.2022, 19.07.2022 and 22.07.2022. Due to the absence of organic parameters in the groundwater samples, there is no indication of discharge of wastewater by the industry in the underground water.
- Inorganic pollutants such as TSS and heavy metals i.e. Lead, Arsenic, Mercury, Nickel, Chromium, Copper and Cadmium have not been found in the ground water samples collected from various locations inside/near the industry. This indicates that there is no chemical pollution in the groundwater.
- The conc. of TDS in all the 11 no. samples collected, has been found to be within the permissible limits of 2000 mg/l as per IS 10500:2012 drinking water standards. However, variation in TDS values at different locations within same area may be due to geogenic conditions.

The copy of said report is attached as **Annexure-I**.

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

Handwritten signature

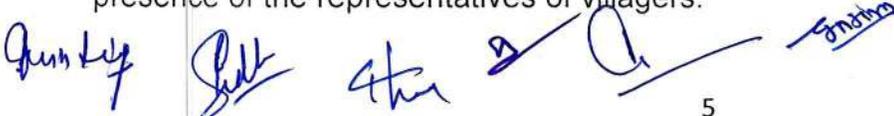
Visit of NGT Monitoring Committee

Subsequently, Hon'ble NGT Monitoring Committee headed by Justice Jasbir Singh, Former Judge, Punjab & Haryana Court; Sh. S.C. Aggarwal, IAS (Retd.) Former Chief Secretary, Punjab and Sant Balbir Singh Seechewal alongwith villagers; SDM Zira; DSP, Zira & officials of the Deptt. of Revenue; Excise; Animal Husbandry; PPCB; Mining and Agriculture, visited the area as well as the industry on 18.08.2022. The villagers apprised the Committee that during the drilling of tubewell in the premises of Gurudwara Samadhi Bhagat Dunning Chand Ji in Vill. Mahian Wala Kalan, polluted water was observed. Therefore, first of all, the Committee visited the premises of Gurudwara Smadhi Bhagat Dunning Chand ji in village Mahian Wala Kalan, Tehsil Zira, Distt. Ferozepur and collected water sample of the tubewell installed in the Gurudwara premises. The water sample was found colorless & odourless. Thereafter, the Committee visited the site of the tubewell installed in the parking area of the industry and collected water sample of this tubewell. The color of the water sample was beige/ sandy whereas it was also odourless. As per directions of the Committee, three sets of water samples were collected from tubewells and each set of samples has been sent to PBTI, Mohali; M/s Shri Ram Institute for Industrial Research, Delhi and PPCB lab. at Patiala for analysis.

Stagnation of wastewater was observed near the septic tank existing adjoining to the boundary wall of the industry. On the request of the villagers to the Committee, soil sample from the area near to the said septic tank and soil /ash sample from the fuel ash disposal area of the industry were also collected by the Department of Agriculture. The soil samples have been sent to PAU, Ludhiana and Soil Testing Lab, Faridkot for analysis.

During visit, the villagers also raised the issue of illegal mining carried out by the industry adjoining to its boundary wall. In this regard, Executive Engineer-cum-District Mining Officer, Golewala Drainage Division, Ferozepur apprised the Monitoring Committee that notices have been issued to the concerned and presented copies of the same.

Thereafter, NGT Monitoring Committee visited the premises of the industry. During visit, Sh. Jasbir Dhiman, Vice President (Technical) of the industry informed the Committee that there are three working tubewells in the industrial premises whereas 4th tubewell is not operatable due to leakage in the pipeline and 5th tubewell has been closed recently due to advise of Vastu Consultant. But no borewell was found in the industrial premises meant for discharge of wastewater in the ground. The Monitoring Committee directed the PPCB officials to collect tubewell water samples, find out the reason for stagnation of wastewater near the septic tank and also verify the statement given by the representative of the industry, on the next very day in the presence of the representatives of villagers.



The officials of PPCB, Naib Tehsildar and Deptt. of Agriculture alongwith representatives of villagers i.e. Sh. Sandeep Dhillon S/o S. Major Singh R/o Ratol Rohi; Dr. Harvinder Singh S/o S. Nachattar Singh R/o Sodhiwala and S. Rajdeep Singh S/o S. Randhir Singh R/o Ratol Rohi visited the industry on 19.08.2022 and collected water samples of 3 no. operational tubewells installed at different locations in the industrial premises. On the request of the villagers, the efforts were made to make the 4th tubewell operational, but could not succeed. Further, the recently closed tubewell (5th) was also made operational after removing the upper layer of soil with JCB. The tubewell was continued to operate with temporary fittings for one hour and thereafter the water sample of this tubewell was collected. The color of the water sample was light beige / sandy whereas it was odourless. The earlier laid pipeline connected with this tubewell led to fresh water reservoir. The area at a distance of about 30-35 ft. from the 5th tubewell was also dug with the help of JCB and found underground pipe of another abandoned tubewell, but not connected with any pipeline.

The area around boundary wall/ septic tank, effluent treatment plant etc. of the industry was visited alongwith the representatives of the villagers and no stagnation of wastewater was observed within the Industrial premises, Also, the representatives of villages could not show any borewell/tubewell other than as mentioned in the preceding para within the industrial premises. The boundary wall of the industry is adjacent to the septic tank existing outside boundary wall. Therefore, the premises of the industry behind the septic tank / boundary wall was visited and found that there are about 50 labour quarters adjoining to the boundary wall of the industry and wastewater generated from the bathing section of labor quarters is directly going outside industrial premises for stagnation near septic tank, whereas wastewater from the toilet section is going into septic tank existing outside the boundary of the industry.

Statuary Clearances obtained by M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Teh. Zira, District Ferozepur

Ministry of Environment and Forest, Govt. of India granted environmental clearance under EIA notification 2006 to M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Teh. Zira, District Ferozepur for installation of 100 KLD grain based distillery on 25.09.2006. The industry applied for no objection certificate and the same was granted by Punjab Pollution Control Board vide No. 04 dated 11.5.2006 for the production of Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS) and liquor @ 100 KLD with certain conditions mentioned therein. Consent to operate under the provisions of Water Act, 1974 and Air Act, 1981 were granted to the industry vide No. F-2249 dated 10.8.2007 and F-1580 dated 10.8.2007, respectively, for the production of Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS) 50 KLD.

Amber *Salt* *4th* *Q* *5th*

Later on, the industry was granted consent under the provisions of Water Act, 1974 and Air Act, 1981 by Punjab Pollution Control Board vide No. V-259 dated 19.12.2012 and No. V-241 dated 19.12.2012, respectively, for the production of Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS) and liquor @ 100 KLD and for recycling of trade effluent @ 657 KLD and discharge of treated effluent @ 40 KLD onto land for irrigation. For the treatment of effluent, the industry had installed effluent treatment plant consisting of anaerobic biological treatment, aerobic treatment system and three stage RO system and MEE for evaporation of rejects of RO system. The permeate of RO system is recycled back into the system.

Punjab Pollution Control Board granted no objection certificate (NOC) vide No. CTE-98 dated 15.3.2016 for enhancement of production capacity from 100 KLD to 600 KLD of ENA/RS. The industry applied for Environmental Clearance to the Ministry environment and forest, Govt. of India for enhancement of its capacity from 100 KLD to 600 KLD of ENA/RS and co-generation power plant of capacity 40 MW, which was granted on 15.1.2018. Thereafter, the industry obtained fresh NOC vide no. CTE/EXP/FZR/2021/15384779 dated 27.4.2021 for enhancement production capacity from 100 KLD to 600 KLD of ENA/RS. The industry was granted consent to operate under the provisions of Water Act, 1974 and Air Act, 1981 vide No. CTOW/V/FZR/2021/16885572 dated 12.11.2021 and vide No. CTOA/V/FZR/2021/16885533 dated 12.11.2021, respectively, for the production of grain based anhydrous denatured ethanol/ ENA/RS/industrial alcohol plant @ 280 KLD, co-generation power plant of capacity 12 MW and by-products namely animal feed supplements/cattle feed, poultry feed @140 TPD. The industry discharges its effluent @ 1960 KLD. For the treatment of 1960 KLD effluent, it has installed following 02 streams of effluent treatment plants:-

- Anaerobic treatment followed by aerobic and RO system
- Aerobic system followed by RO system

The whole of the effluent after both the treatment systems is recycled back into the process and also as feed in DM plant. For the treatment of domestic effluent (10 KLD), the industry has installed septic tanks.

Earlier, the industry was operating two boilers of capacities 14 TPH & 10 TPH. However, in the year 2021, the industry has installed a new rice husk fired boiler of capacity 65 TPH and dismantled the boiler of capacity 14 TPH & other existing boiler of capacity 10 TPH boiler is not being operated. ESP has been installed as an air pollution control device with the boiler of capacity 65 TPH. Stack emissions sample was collected by the Board from the stack of 65 TPH capacity boiler on 06.04.2022 and as

Handwritten signatures and initials in blue ink.

per the analysis results, the concentration of particulate matter was found to be within the prescribed limits.

Findings of the Monitoring Committee

Based on the discussion held with the officers of various departments, village panchayats and field visits made by the Monitoring Committee and collection of ground water samples, soil samples, water samples and reports submitted by the departments, the overall findings of the Monitoring Committee are as under:

- 1 *The ground water sample collected from Samaadhi Bhagat Baba Duni Chand ji has been found containing faecal contamination which may be due to domestic sources for its contamination.*
- 2 *The ground water sample collected from tubewell near parking area of the industry has been found containing faecal contamination may be due to domestic sources. The higher values of TSS, COD and Turbidity in the ground water samples due to presence inorganic compounds / constituents in the ground. The higher values of Iron and Lead in the ground water samples may be due to iron fitting in the pipeline laid for abstraction of ground water.*
- 3 *The ground water samples collected from the tubewell installed near new canal reservoir inside the industry has been found contaminated due to T.Coli. and domestic source may be source of contributing T.Coli. The higher values of Alkanity and Boron have been found due to geogenic conditions.*
- 4 *There is insignificant contamination in ground water in the tubewell near bottling plant inside the industry due to insignificant values of F.Coli parameter and organic parameters (BOD and COD).*
- 5 *The higher value of F.Coli and T.Coli found in the ground water samples collected from tubewell installed near effluent treatment plant inside the industry may be due to faecal contamination in ground water, which may be due to domestic sources. The contribution of lower concentration of BOD and COD may also be due to presence of F.Col and T.Coli parameters.*
- 6 *The higher value of COD, TSS and Turbidity in the ground water samples collected from the tubewell near transport office inside the industry may be due to inorganic compounds / constituents. The higher value of Iron may be due to iron fitting in the pipeline laid for abstraction of ground water. The slight higher value of Boron in ground water sample may be due to geogenic reasons.*
- 7 *From the analysis results of ground water samples analyzed by all the three laboratories, indicate that ground water contamination is probably due to faecal*

Handwritten signatures and initials:
Gandhi, P. B., G. K., S. O., S. M.

contamination, which may be due to domestic sources. Possibility of discharge of industrial effluent in underground water is feeble as no such assessment from the analysis results has been found.

- 8(a) On the analysis results of ground water sample collected by Department of Agriculture and analyzed by PAU, Ludhiana and soil testing laboratory, Faridkot, it has been mentioned that the ground water can be used for light soil and in case, it is to be used for agriculture purposes on heavy soil, it may be used by mixing with canal water. It has also been recommended by PAU, Ludhiana and soil testing laboratory, Faridkot that in case canal water is not available, ground water can be used by adding Gypsum (fertilizer) as 2.5 to 03 quintal / acre of land after every found watering (irrigation).
- 8(b) On the analysis results of soil samples analyzed by PAU, Ludhiana and soil testing laboratory, Faridkot it has been mentioned that due to high pH in soil samples, there is need to add green manure or organic manure. Further, it has been mentioned by Chief Agriculture Officer, Ferozepur that in soil samples from Mansoorwal Kalan and adjoining villages analyzed by soil testing laboratory, Zira from time to time, the parameters have been found within the norms.
- 8(c) Overall, Chief Agriculture Officer, Ferozepur has mentioned in his report dated 14.09.2022 that the quality of soil and yield of crop in the adjoining area of the industry are not being affected due to any discharge of the industry.
- 9 Deptt. of Mining-cum-Executive Engineer, Deptt. of Drainage, Ferozepur, has reported that the persons indulged in the illegal mining, have been identified and the violators have been issued notices under the Punjab Minor Mineral Rules, 2013 and action is under process.
- 10 Deptt. of Animal Husbandry has reported that nitrate content found in the fodder sample is injurious to the health of animals.

The above report of Monitoring Committee dated 21.09.2022 is enclosed herewith as **Annexure-II**.

Case filed in Hon'ble Punjab & Haryana High Court, Chandigarh

A writ petition was filed by M/s Malbros International Pvt. Ltd bearing CWP No.16500 of 2022 titled as "M/S MALBROS INTERNATIONAL PVT. LTD. AND ANR. VS STATE OF PUNJAB AND OTHERS" and the relevant order dated 29.07.2022 reproduced as under:-

"Learned Senior Counsel for the petitioners contends that workers/employees and other related persons to the business of the

[Handwritten signatures and initials]

petitioners are being illegally stopped by the mob and the mob has created untoward hindrances in the ingress and egress to the industrial premises of the petitioners. In CWP No.15430 of 2022, this Court has directed the concerned SSP to prevent happening of untoward incidents within the vicinity of the factory premises.

In the meanwhile, respondent No.5 shall take all possible steps to ensure that no hindrance is created in ingress and egress of the factory premises by the agitators. Protest, if any, by the protestors be allowed beyond 300 meters from the factory premises in accordance with law”

Copy of order dated 29.07.2022 is attached as **Annexure-III**.

The protest site was visited by the Deputy Commissioner Ferozpur; SSP Ferozpur; SDM Zira alongwith officer of PPCB on 30.09.2022 to apprise the protestors about the orders dated 29.07.2022.

The case was lastly heard on 11.10.2022 and the relevant order dated 11.10.2022 reproduced as under:-

“It seems that the State has been soft peddling the entire issue. Despite the repeated assurances given and strenuous efforts made by the Advocate General, Punjab, it does not seem to be making any headway despite the petitioners agitating and suffering immense losses including the pecuniary burden of having to meet the financial liability.

In order to balance equities and to ensure that conflicting interests are resolved, hearing of the case is adjourned to 22.11.2022.

In the meanwhile, an amount of Rs.5 Crores shall be deposited by the respondent – State with the Registry of this Court within a period of one week.”

Copy of order dated 11.10.2022 is attached as **Annexure-IV**.

The protest site was visited by SDM Zira and DSP Zira on 23.9.22 to request the protestors to nominate their representatives to apprise them regarding findings of the report. But they failed to nominate their representatives. The protest site was again visited by the SDM Zira, DSP Zira; Naib Tehsildar Zira alongwith officers of PPCB on 24.09.2022 and again the protestors failed to nominate their representatives and requested the team to come on 26.09.2022. The protest site was again visited by the DSP Zira; Tehsildar & Naib Tehsildar Zira alongwith officers of PPCB on 26.09.2022. But again the protestors had not nominated their representatives, as such, the protestors sitting in the dharna were apprised regarding findings of the NGT Monitoring

Grundy *Rak* *the* *A* *A* *Grundy*

Committee report. However, the protestors were not satisfied with the said report of the NGT Monitoring Committee.

In compliance to the decision of the Hon'ble National Green Tribunal, Joint Committee members comprising of Sh. Sagar Setia, Additional Deputy Commissioner, Ferozpur (representative of Deputy Commissioner, Ferozpur), Sh. Gurnam Singh, Regional Director, CPCB, Sh. Pardeep Gupta, Chief Environmental Engineer PPCB, Sh. Ramandeep Singh Sidhu, Environmental Engineer, PPCB Faridkot, Sh. Aushpreet Singh, Assistant Environmental Engineer, PPCB Faridkot and Sh. Gurjinder Singh, Sub Divisional Engineer of Dept. of Water Resource (canal division), Harike, Ferozpur (representative of State Ground Water Board) decided to hold a meeting with Public Action Committee (PAC) and industry representatives. Accordingly, a meeting was taken with the representatives of PAC and industry representatives on 07.10.2022. During the meeting, issues were discussed as under:-

● **Interaction with Public Action Committee:-**

Six members of PAC were present, however, they have refused to sign the attendance sheet. During discussion, they have apprised that they are not local people & are residents of Ludhiana. On enquiry, it was found that they have not personally visited the borewells of the industry alleged by them in complaint except borewell of the industry provided in parking area (as per contention of the industry this borewell has been closed long time back and has been monitored by Monitoring Committee as detailed above). PAC apprised that groundwater has been contaminated by reverse boring at different depths and in ash dumping area. Due to which diseases like cancers and death of Animal takes place. The ash from the boiler is creating air pollution problem resulting into death of Animals. The members provided copy of petition filed by them before Hon'ble NGT to the committee and asked that suitable technology be utilized for detection of borewells inside the industry. No statistical data/ written facts have been given by the PAC to the Committee. They requested to visit the site to verify their allegations.



Interaction of Joint Committee with the members of Public Action Committee

Handwritten signatures and initials in blue ink, including the name 'Gurjinder'.

- **Interaction with representation of the industry:-**

Sh. Pawan Bansal, CAO, Sh. Sapan Kayat, President Corporation Affairs and Sh. Jasbir Singh Dhawan, Vice President (Technical) were present and they have submitted that the industry had been sincerely complying all the rules & regulations under Air & Water Acts. The capacity of distillery was increased by taking EC (environmental clearance) with the consent of general public of nearby villages on 4th May 2016. The distillery has been working with the increased capacity of 280 KLD since 3rd Feb 2022. The written representation of the industry is attached herewith as **Annexure-V**.

Further, the industry submitted that as per the conclusive observations of the Monitoring Committee, the industry was not found guilty w.r.t. contamination of ground water and there was no effluence found in the samples.

The industry had to close the production w.e.f. 24.07.2022 due to protest going on in front of gate of industry, which has caused huge financial loss to them. The industry has requested that Hon'ble Punjab & Haryana High Court has also given directions vide order dated 29th July 2022 to the State of Punjab that all the obstructions upto 300 meters should be immediately cleared from the factory gate so that adequate passage could be provided for the movement of man power & inflow-outflow of trucks containing material.



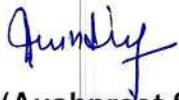
Interaction of Joint Committee with the representatives of the industry

It was felt by Joint Committee that the Govt. Agencies as well as NGT Monitoring Committee have already carried out monitoring on the observations of the Public Action Committee and the industry is lying closed w.e.f. 24.07.2022, so no useful purpose will be served by repeating the exercise already conducted by NGT Monitoring Committee.

Handwritten signatures in blue ink:
Gundup f, Aka, SA, [Signature], [Signature]

However, the Joint Committee shall carry out visit to the site in case Hon'ble NGT considers so in view of facts explained above or as & when for monitoring in case, the industry re-commissions its operation.

The status report may accordingly be filed for further orders of the Hon'ble National Green Tribunal, please.



(Aushpreet Singh)
Assistant Environmental Engineer
PPCB, Faridkot



(Gurjinder Singh)
Sub Divisional Engineer,
Dept. of Water Resource (canal
division), Harike, Ferozepur



(Ramandeep Singh Sidhu)
Environmental Engineer,
PPCB, Faridkot



(Pardeep Gupta)
Chief Environmental Engineer
PPCB, Bathinda



(Gurnam Singh)
Regional Director,
CPCB, Chandigarh



(Sadar Setia)
Additional Deputy Commissioner,
Ferozepur

Subject: Report regarding complaint against contamination of ground water in Village Mahian Wala Kalan, Tehsil Zira, District Ferozepur.

Background

A complaint was received on 18.07.2022 against contamination of ground water in Vill. Mahian Wala Kalan, Teh. Zira, Distt. Ferozepur. It was alleged in the complaint that during the drilling of borewell in the premises of Gurudwara Samadhi Bhagat Dunning Chand Ji in Vill. Mahian Wala Kalan, polluted water was observed.

It was further alleged that the liquor factory i.e. M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Teh. Zira, District Ferozepur has polluted the ground water in surrounding villages by discharging polluted water through borewell.

Inspection

The site under the complaint was visited by the Tehsildar Zira along with officer of the Board on 18.07.2022. During visit, the issue was discussed with the representatives of the Management Committee and they informed that the sample of polluted water was collected in a bottle after drilling the borewell at the depth of 650 ft. However, they further informed that now the depth of the tubewell has been decreased to around 500-550 ft. and water at this level is found clear. After discussions, the Management Committee verbally requested as under:

- Sample can be collected from the tubewell after it becomes operational in coming 2-3 days.
- The groundwater sample from the Govt. Middle School may be collected instead of tubewell drilled at the site as the water is clear in nature.
- They assured that they will inform the location of borewells from where samples can be collected in future.

As requested by the Committee members of Samadhi Bhagat Dunning Chand Ji, groundwater sample from the tubewell provided at Govt. Middle School was collected on the same day i.e. 18.07.2022 and the analysis results of this sample is discussed in the subsequent paras.

The village Mahian wala kalan and Ratoul Rohi were visited by the officer of the Board on 19.07.2022 to ascertain the factual position in surrounding villages and ground water samples of tubewells installed in the agricultural fields of these villages were collected and details are as under: -

Sr. No.	Place of sample collection	Depth of tubewell (as informed by the representative)	Physical appearance
1	From the tubewell installed in the field of Sh. Gurpreet Singh S/o Sh. Mohan Singh, Vill. Mahian Wala Kalan, Tehsil Zira, District Ferozepur (30.933089, 74.951809)	450 ft	Colorless and odorless
2	From the tubewell installed in the field of Sh. Gurdarshan Singh S/o Sh. Gurmel Singh, Vill. Ratol Rohi, Tehsil Zira, District Ferozepur (30.909191, 74.946655)	700 ft	Colorless and odorless

The premises of the industry was also visited by the officer of the Board on 19.07.2022 and no borewell for discharge of effluent was found in the premises of the industry and groundwater samples from the tubewells from various locations inside the industrial premises were collected and details are as under: -

Sr. No.	Place of sample collection	Depth of tube well (as informed by the representative of the industry)	Physical appearance
1	Near D.M. Plant	600 ft	Colorless and odorless
2	Near bottling unit	450 ft	Colorless and odorless
3	Near new water reservoir	600 ft	Colorless and odorless

As discussed on 18.07.2022 with the Committee members of Gurudwara Samadhi Bhagat Dunning Chand Ji, Village Mahianwala Kalan, they refused to advise the location of borewell from where ground water samples could be collected to ascertain

ground water quality in the area. Therefore, the visiting officer collected some more ground water samples from nearby area of the industry i.e. from villages Mansoor Wala and Ratol Rohi as per the details given below:

Sr. No.	Place of sample collection	Depth of tubewell (as informed by the owner)	Physical appearance
1	From the tubewell installed at Gurudwara Smadh Bhagat Duni Chand, Mahian Wala Kalan, Tehsil Zira, Ferozepur (30.94144, 74.95072)	500 ft	Colorless and odorless
2	From the tubewell installed in the field of Sh. Jagjeet Singh S/o Sh. Balwinder Singh, Vill. Mansoorwal Kalan, Tehsil Zira, District Ferozepur (30.91111111, 74.98083333)	200 ft	Colorless and odorless
3	From the tubewell installed in the field of Sh. Surjeet Singh S/o Sh. Mal Singh, Vill. Mansoorwal Kalan, Tehsil Zira, District Ferozepur (30.912500, 74.971667)	500 ft	Colorless and odorless
4	From the tubewell installed in the field of Sh. Manna Singh S/o Sh. Dhira Singh, Vill. Ratol Rohi, Tehsil Zira, District Ferozepur (30.914722, 74.950000)	450 ft	Colorless and odorless
5	From the tubewell installed at Veterinary Dispensary of Village Ratol Rohi, Tehsil Zira, District Ferozepur (30.916111, 74.95)	410 ft	Colorless and odorless

The ground water samples were sent to Head Office Lab of the Board for analysis.

29

About the industry

(I) Statutory Clearances

The industry M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Teh. Zira, District Ferozepur was established in the year 2007 for production of 100 KLD of ENA/RS after getting NOC / CTE from the Board as well as environmental clearance from MoEF. The industry commissioned in 2007 itself with production capacity of 50 KLD of ENA/RS in first phase and total 100 KLD production capacity was commissioned by the industry in the year 2012.

The industry obtained consent to establish and environmental clearance from the Board and MoEF&CC respectively in the year 2018 for expansion of its production capacity from 100 KLD ethanol to 600 KLD after expansion (i.e. additional 500 KLD in two phases). Thereafter, the industry obtained consents to operate from the Board for commissioning with production capacity of 280 KLD ethanol.

(II) Water Pollution Control status

The industry has installed two effluent treatment plants (ETP), based on tertiary treatment for treatment of trade effluent generated by the industry. The industry has installed Multi Effect Evaporator to achieve the Zero Liquid Discharge (ZLD).

The treated effluent @ 1790 KLD from these ETPs is recycled into the process, DM plant, cooling towers, boiler feed and for ash quenching.

(III) Air Pollution Control status

The industry has installed three boilers of capacities 65 TPH, 14 TPH and 10 TPH. Electrostatic Precipitator (ESP) has been provided as air pollution control device with the 65 TPH capacity boiler whereas bag filters have been provided as pollution control devices with other two boilers separately. At present, the industry is operating 65 TPH boilers only and the other two boilers are not being operated.

2p

Recently, emission sampling has been carried out by the Board from the stacks of these boilers, results of which are as under: -

S. No.	Date of sample collection	Point of sample collection	Results (mg/Nm ³)	Prescribed limits (mg/Nm ³)
1.	06.04.2022	From the stack of 65 TPH capacity boiler	42	50
2.	25.11.2021	From the stack of 14 TPH capacity boiler	101	500
3.		From the stack of 10 TPH capacity boiler	96	500

(IV) Discussion on analysis results of ground water samples collected on 18.07.2022, 19.07.2022 & 22.07.2022

The analysis results of the ground water samples collected on 18.07.2022, 19.07.2022 & 22.07.2022 are attached as **Annexure-A**.

- Organic pollutant parameters such as BOD & COD have not been found in any of the 11 samples collected on 18.07.2022, 19.07.2022 and 22.07.2022.
- Inorganic parameters such as TSS as well as heavy metals such as lead, Arsenic, Mercury, Nickel, Chromium, Copper and Cadmium have also not been found in any of these samples.
- Out of the total 11 ground water samples collected, the concentration of TDS was found between 500 mg/l to 1000 mg/l in 7 samples, between 1000 mg/l to 1100 mg/l in 2 samples, between 1500 mg/l to 1600 mg/l in one sample and between 1900 mg/l to 2000 mg/l in remaining one sample.
- The value of TDS in the sample collected from tubewell installed in Gurudwara Smadh Bhagat Duni Chand in village Mahianwala Kalan were found to be 724 mg/l.
- TDS value ranges from 538 mg/l to 956 mg/l in the samples collected on 19.07.2022 from the tubewells located inside the industry.

Conclusion

- All the samples collected were found to be colorless and odorless.
- Organic pollutant parameters such as BOD & COD have not been found in any of the 11 samples collected on 18.07.2022, 19.07.2022 and 22.07.2022. Due to the absence of organic parameters in the groundwater samples, there is no indication of discharge of wastewater by the industry in the underground water.
- Inorganic pollutants such as TSS and heavy metals i.e. Lead, Arsenic, Mercury, Nickel, Chromium, Copper and Cadmium have not been found in the groundwater samples collected from various locations inside / near the industry. This indicates that there is no chemical pollution in the groundwater.
- The conc. of TDS in all the 11 no. samples collected, has been found to be within the permissible limits of 2000 mg/l as per IS 10500:2012 drinking water standards. However, variation in TDS values at different locations within same area may be due to geogenic conditions.

22/7/2022

Co-ordinates of the location	GPS co-ordinates of sample point	30.938444, 74.954167	30.933089, 74.951809	30.909191, 74.946655	19.07.2022	19.07.2022	19.07.2022	19.07.2022	19.07.2022	19.07.2022	19.07.2022	22.07.2022	22.07.2022	22.07.2022	22.07.2022	22.07.2022	22.07.2022	22.07.2022	22.07.2022	22.07.2022	Permissible Drinking Water Standards as per IS10500:2012 (mg/l)
1	Colour	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	15 hazen Unit
2	Odour	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Agreeable
3	pH	7.4	8.2	8	8.2	8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	6-8.5
4	BOD	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	shall not be detectable
5	COD	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	shall not be detectable
6	TSS	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	shall not be detectable
7	Turbidity (NTU)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	shall not be detectable
8	Ammonical N	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
9	TKN	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5
10	EC (µs/cm)	3270	1124	1150	870	1483	1016	1204	1276	1831	1737	2550	2550	1533	1533	1533	1533	1533	1533	2000	
11	TDS (mg/l)	1912	752	747	538	956	688	747	724	769	1099	1043	1043	887	887	887	887	887	887	2000	
12	THS (mg/l)	1542	598	591	458	761	542	617	654	935	935	935	935	935	935	935	935	935	935	600	
13	THardness (mg/l)	640	96	80	120	160	100	160	168	296	296	296	296	296	296	296	296	296	296	600	
14	Ca Hardness (mg/l)	--	52	56	40	84	40	40	40	40	40	40	40	40	40	40	40	40	40	600	
15	Mg Hardness (mg/l)	--	44	24	80	76	60	--	--	--	--	--	--	--	--	--	--	--	--	600	
16	Ca (mg/l)	80	21	22	16	34	16	29	34	54	34	54	34	54	34	54	34	54	34	200	
17	Mg (mg/l)	107	11	6	19	18	15	21	20	39	18	39	18	39	18	39	18	39	18	100	
18	Cl (mg/l)	240	186	98	45	218	59	142	53	142	109	109	109	109	109	109	109	109	109	1000	
19	Sulphate (mg/l)	298	98	102	75	135	90	132	141	218	214	214	214	214	214	214	214	214	214	400	
20	T Alkalinity (mg/l)	445	233	324	350	252	353	324	472	410	400	400	400	400	400	400	400	400	400	600	
21	Na (mg/l)	610	200	204	164	280	184	178	184	275	261	261	261	261	261	261	261	261	261	600	
22	K (mg/l)	40	9	10	9	10	25	25	21	42	41	41	41	41	41	41	41	41	41	600	
23	Fe (mg/l)	0.18	0.12	0.17	0.16	0.15	0.21	0.32	0.41	0.44	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.3	
24	Zn (mg/l)	0.1	BDL	0.13	0.11	BDL	BDL	BDL	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.15	
25	T Cr (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	
26	N (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	
27	Pb (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.02	
28	Cu (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01	
29	Hg (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01	
30	As (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	
31	Cd (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.003	
32	SAR	10.5	8.8	10	6.6	9.7	7.9	3	6	8.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	0.003	
33	T CoII	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	shall not be detectable	
34	F CoII	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	shall not be detectable

From the borewell installed at Govt. Middle School, Village Mahanawala Kalan

Submersible pump in the filed of Sh. Gurpreet Singh S/o Sh. Mohan Singh, Village Mahanawala Kalan (450 ft depth)

Submersible pump in the filed of Sh. Gurdaran Singh S/o Sh. Gurmail Singh, Village Ratoul Rohi (700 ft depth)

From borewell installed near DM plant inside the industry (600 ft. depth)

From borewell installed near bottling plant inside the industry (450 ft. depth)

From borewell installed near new water reservoir inside the industry (600 ft. depth)

From the borewell installed at the field of Sh. Duni Chand, Sh. Smaadh Bhagat Jagreet Singh S/o Sh. Mahan Wala Singh, Kalan (depth 500ft)

From the borewell installed in the field of Sh. Mansoorwal Kalan (Depth 200ft)

From the borewell installed in the field of Sh. Surjeet Singh, VIII. Sh. Singh, VIII. Ratal Kalan (Depth 500ft)

From the borewell installed in the field of Sh. Manna Village Ratal Rohi (Depth 410 ft)

From the borewell installed in Veterinary Dispensary of

2

OFFICE OF THE MONITORING COMMITTEE

Constituted by the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter Shree Nath Sharma Vs Union of India & Ors and other Environmental issues.

(Official Address: Tower No.5, 4th Floor, Forest Complex,
Sector 68, SAS Nagar) Tel. No. 0172-2298091
Email: ceccswm606@gmail.com

To

The Deputy Commissioner,
Ferozepur.

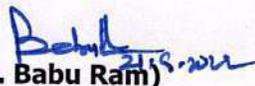
No. CMC/2022/1265

Dated: 21.9.2022

Subject: Report on visit to M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Tehsil Zira, District Ferozepur by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal on various environmental issues of State of Punjab on 18.8.2022

It is submitted that the Monitoring Committee, constituted by the Hon'ble National Green Tribunal on various environmental issues, received a complaint dated 12.8.2022 from Gram Panchayat, village Ratoul Rohi and other nearby villages regarding pollution caused by M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Tehsil Zira, District Ferozepur, wherein, it has been alleged that the industry discharges its effluent into underground and causes diseases to the animals and residents of the area.

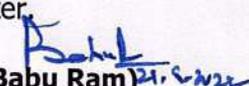
Accordingly, the Monitoring Committee under the Chairmanship of Justice Jasbir Singh, Former Judge, Punjab and Haryana High Court visited the industry on 18.8.2022 and collected groundwater and soil samples and a report has been prepared, which is enclosed herewith. It is requested that necessary action in the matter may kindly be taken.


(Dr. Babu Ram)
Technical Expert,
Monitoring Committee

Endst. No. CMC/2022/1266

Dated: 21.9.2022

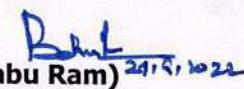
A copy is forwarded to the Member Secretary, Punjab Pollution Control Board, Patiala for information please. He is requested to take necessary action in the matter.


(Dr. Babu Ram)
Technical Expert,
Monitoring Committee

Endst. No. CMC/2022/1267

Dated: 21.9.2022

A copy is forwarded to the Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda for information and necessary action.


(Dr. Babu Ram)
Technical Expert,
Monitoring Committee

Report on visit to M/s Malbros International Pvt. Ltd, , Mansoorwal Kalan, Tehsil Zira, District Ferozepur by the Monitoring Committee, constituted by the Hon'ble National Green Tribunal on various environmental issues of State of Punjab on 18.8.2022

1.0 Background

Ministry of Environment and Forest, Govt. of India granted environmental clearance under EIA notification 2006 to M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Teh. Zira, District Ferozepur for installation of 100 KLD grain based distillery on 25.09.2006. The industry applied for no objection certificate and the same was granted by Punjab Pollution Control Board vide No. 04 dated 11.5.2006 for the production of Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS) and liquor @ 100 KLD with certain conditions mentioned therein. Consent to operate under the provisions of Water Act, 1974 and Air Act, 1981 were granted to the industry vide No. F-2249 dated 10.8.2007 and F-1580 dated 10.8.2007, respectively, for the production of Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS) 50 KLD.

Later on, the industry was granted consent under the provisions of Water Act, 1974 and Air Act, 1981 by Punjab Pollution Control Board vide No. V-259 dated 19.12.2012 and No. V-241 dated 19.12.2012, respectively, for the production of Extra Neutral Alcohol (ENA)/ Rectified Spirit (RS) and liquor @ 100 KLD and for recycling of trade effluent @ 657 KLD and discharge of treated effluent @ 40 KLD onto land for irrigation. For the treatment of effluent, the industry had installed effluent treatment plant consisting of anaerobic biological treatment, aerobic treatment system and three stage RO system and MEE for evaporation of rejects of RO system. The permeate of RO system is recycled back into the system.

Punjab Pollution Control Board granted no objection certificate (NOC) vide No. CTE-98 dated 15.3.2016 for enhancement of production capacity from 100 KLD to 600 KLD of ENA/RS. The industry applied for Environmental Clearance to the Ministry environment and forest, Govt. of India for enhancement of its capacity from 100 KLD to 600 KLD of ENA/RS and co-generation power plant of capacity 40 MW, which was granted on 15.1.2018. Thereafter, the industry obtained fresh NOC vide no. CTE/EXP/FZR/2021/15384779 dated 27.4.2021 for enhancement of production capacity from 100 KLD to 600 KLD of ENA/RS. The industry was granted consent to operate under the provisions of Water Act, 1974 and Air Act, 1981 vide No. CTOW/V/FZR/2021/16885572 dated 12.11.2021 and vide No. CTOA/V/FZR/2021/16885533 dated 12.11.2021, respectively, for the production of grain based anhydrous denatured ethanol/ ENA/RS/industrial alcohol plant @ 280 KLD, co-generation power plant of capacity 12 MW and by-products namely animal feed supplements/cattle feed, poultry feed @140 TPD. The industry discharges its effluent @ 1960 KLD. For the treatment of 1960 KLD effluent, it has installed following 02 streams of effluent treatment plants:-

- i. Anaerobic treatment followed by aerobic and RO system
- ii. Aerobic system followed by RO system

The whole of the effluent after both the treatment systems is recycled back into the process and also as feed in DM plant. For the treatment of domestic effluent (10 KLD), the industry has installed septic tanks.

2.0 visit to the industry by the Monitoring Committee

The Monitoring Committee received a complaint on 12.8.2022 from Gram Panchayat, Village Ratoul Rohi and other nearby villages regarding pollution caused by the industry namely M/s Malbros International Pvt. Ltd., Mansoorwal Kalan, Zira, District Ferozepur alleging in the complaint that the industry discharges its effluent into underground and causes diseases to animals and residents of the area and requested that the said industry may be visited.

Accordingly, the Monitoring Committee made its plan to visit the industry on 18.8.2022.

The following were present during the visit.

a) Members of the Monitoring Committee

Sr. No.	Name and Designation in the Deptt.	Name & Designation in the Monitoring Committee
1.	Justice Jasbir Singh, Former Judge, Punjab and Haryana High Court	Chairman
2.	Sh. S. C. Agrawal, IAS (Retd), Former Chief Secretary, Punjab	Senior Member
3.	Sant Balbir Singh Seechewal	Member

b) District Administration

- i) Sh. Inder Pal, SDM, Zira
- ii) Sh. Vinod Kumar, Naib Tehsildar
- iii) Sh. Palwinder Singh, DSP, Zira
- iv) Sh. Arvind Parkash Sharma, DRO, Ferozepur

c) Punjab Pollution Control Board

- i) Er. Rajiv Goyal, Senior Environmental Engineer
- ii) Er. Rohit Singla, Environmental Engineer
- iii) Er. Ramandepp Singh Sidhu, Environmental Engineer
- iv) Er. Aushpreet Singh, Assistant Environmental Engineer
- v) Ms. Sonam Dogra, Scientific Assistant

d) Other Departments

- i) Dr. Tejpal Singh, Chief Agriculture officer
- ii) Sh. Vikram Dev Thakur, Excise Officer, Ferozepur
- iii) Mrs. Ramneet Kaur, District Mining Officer, Ferozepur
- iv) Dr. Amarvir Singh, Veterinary Officer, Zira

e) Representatives of nearby villages

- i) Sh. Sandeep Dhillon S/o Sh. Major Singh, Village Ratoul Rohi
- ii) Dr. Harvinder Singh S/o Sh. Nachatar Singh, Village Sadhu Wala
- iii) Sh. Rasdeep Singh S/o Sh. Randhir Singh, Village Ratoul Rohi

2.1 Interaction with the officers of various departments and representative of village Panchayats and collection of groundwater samples by the Monitoring Committee.

During visit, the monitoring committee observed that the industry was not in operation due to protest made by villagers of nearby villages. The photograph showing the industry not in operation is mentioned as per **Plate-1**.



Plate-1: Photograph showing interaction being made with the departments and villagers and the industry not in operation

Therefore, the Monitoring Committee visited the following areas/sites:-

1. It was apprised to the Monitoring Committee that during the drilling of tubewell in the premises of Gurudwara Samaadhi Bhagat Dunning Chand Ji in Vill. Mahian Wala Kalan, polluted water was observed. Therefore, first of all, the Monitoring Committee visited the premises of Gurudwara Samaadhi Bhagat Dunning Chand Ji in village Mahian Wala Kalan, Tehsil Zira, Distt. Ferozepur and collected water sample of the tubewell installed in the Gurudwara premises. The water sample was found colorless & odourless. The photograph showing officers sealing collected ground water samples in the presence of Monitoring Committee from Gurudwara Samaadhi Bhagat Dunning Chand Ji in Vill. Mahian Wala Kalan is mentioned as per **Plate-2**.



Plate-2: Photograph showing officers sealing collected ground water samples in the presence of Monitoring Committee from Samaadhi Bhagat Dunning Chand Ji in Vill. Mahian Wala Kalan being sealed

2. The Monitoring Committee visited the site of the tubewell installed in the parking area of the industry and collected water sample of the tubewell. The color of the water sample was beige / sandy whereas, it was also odourless. The photograph showing water being abstracted from the tubewell installed in the parking area is mentioned as per **Plate-3**.



Plate-3: Photograph showing water being abstracted from the tubewell installed in the parking area

3. Stagnation of wastewater was observed near the septic tank existing near the boundary wall of the industry. On the request of the villagers, soil sample from the area near the septic tank and soil /ash sample from the fuel ash disposal area of the industry were collected by the Department of Agriculture. The soil/ fuel ash samples were sent to PAU, Ludhiana and Soil Testing Lab, Faridkot for analysis. The photograph showing fuel ash sample being collected by the officers of the departments in the presence of the Monitoring Committee is mentioned as per **Plate-4**.



Plate-4 Photograph showing fuel ash sample being collected by the officers of the departments in the presence of the Monitoring Committee

The analysis results of soil testing lab, Faridkot and PAU Ludhiana mentioning the soil testing reports and ground water samples reports are annexed as per **Annexures - 4A to 4E**.

4. The villagers also raised the issue of illegal mining carried out by the industry adjoining to its boundary wall. In this regard, Executive Engineer-cum District Mining Officer, Golewala Drainage Division, Ferozpur apprised the Monitoring Committee that notices have been issued to the concerned persons and presented copies of the same, which are annexed as per **Annexures – 5A and 5B**. The photograph showing illegal mining done in the area is mentioned as per **Plate-5**.

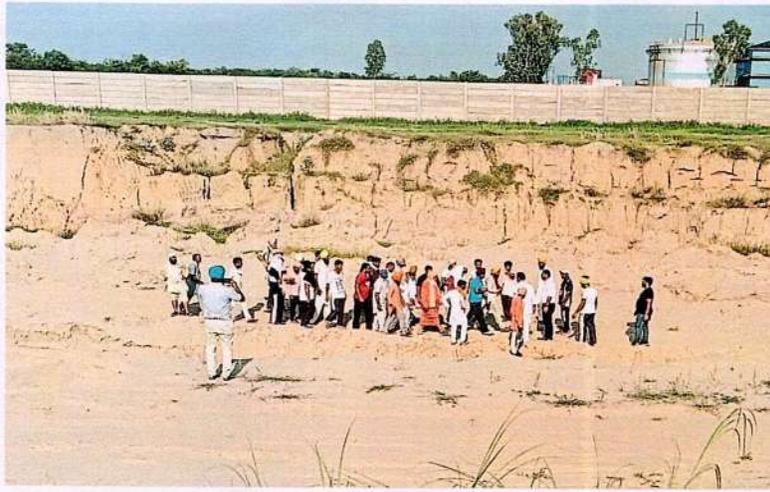


Plate-5 Photograph showing illegal mining done in the area

5. Monitoring Committee visited the premises of the industry. During visit, Sh. Jasbir Dhiman, Vice President (Technical) of the industry informed the Monitoring Committee that there are 03 working tubewells in the industrial premises, whereas, 4th tubewell is not in operatable condition due to leakage in the pipeline and 5th tubewell has been closed recently due to advise of Vastu Consultant. The Monitoring Committee directed the officers of PPCB to collect water samples of tubewell and find out the reasons for stagnation of wastewater near the septic tank. It was also directed to verify the statement given by the representative of the industry, on the next day in the presence of the representatives of villagers.
6. The officers of PPCB, Naib Tehsildar and Deptt. of Agriculture alongwith representatives of villagers i.e. Sh. Sandeep Dhillon S/o S. Major Singh R/o Ratol Rohi; Dr. Harvinder Singh S/o S. Nachattar Singh R/o Sodhiwala and S. Rajdeep Singh S/o S.Randhir Singh R/o Ratol Rohi visited the industry on 19.08.2022 and collected ground water samples of 3 no. operational tubewells installed at different locations in the industrial premises. On the request of the villagers, the efforts were made to make the 4th tubewell operational, but could not succeed. Further, the recently closed tubewell (5th) was also made operational after removing the upper layer of soil with JCB. The tubewell was continuously operated for one hour and thereafter, ground water sample of the tubewell was collected. The color of the water sample was light beige / sandy, whereas it was odourless. Earlier laid pipeline connected with this tubewell was found leading to fresh water reservoir. The area at a distance of about 30-35 ft. from the 5th tubewell was also dug with the help of JCB and found underground pipe of another abandoned tubewell, but it was not connected with any pipeline. The photograph showing water being abstracted from the tubewell installed near new canal reservoir inside the industry is mentioned as per **Plate-6**.

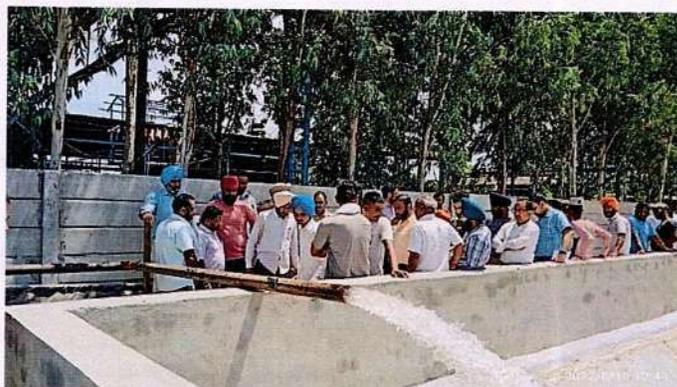


Plate-6 Photograph showing water being

abstracted from the tubewell installed near new canal reservoir inside the industry

7. The area around boundary wall / septic tank, effluent treatment plant etc. of the industry were visited alongwith the representatives of the villagers and no stagnation of wastewater was observed within the industrial premises. Also, the representatives of villages could not show any borewell/tubewell other than as mentioned in the aforesaid paras within the industrial premises. The photograph showing the villagers in the presence of officers of the department visiting the industry on 19.08.2022 is mentioned as per **Plate-7**.

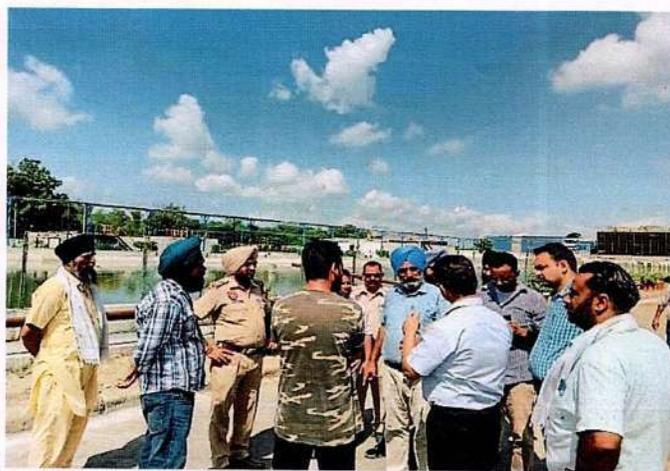


Plate-7 Photograph showing the villagers in the presence of officers of the department visiting the industry on 19.08.2022

The boundary wall of the industry is adjacent to the septic tank and the same is existing outside boundary wall. Therefore, the premises of the industry behind the septic tank / boundary wall was visited and found that there are about 50 labour quarters adjoining the boundary wall of the industry and wastewater generated from the bathing section of labor quarters is directly going outside industrial premises for stagnation near septic tank, whereas, wastewater from the toilet section is going into septic tank existing outside the boundary of the industry. Further, it was observed that the industry has made arrangements for sprinkling of water through flexible pipes on fuel ash to suppress the dust emissions, which was found cut at one point outside the boundary wall. This fuel ash has also been dumped in the low lying area located outside the boundary wall (report of Punjab Pollution Control Board dated 18/19.8.2022 is annexed as per **Annexure-5C**).

8. Earlier, the industry was operating two boilers of capacities 14 TPH & 10 TPH. However, in the year 2021, the industry has installed a new rice husk fired boiler of capacity 65 TPH and dismantled the boiler of capacity 14 TPH & other existing boiler of capacity 10 TPH boiler is not being operated. ESP has been installed as an air pollution control device with the boiler of capacity 65 TPH. Stack emissions sample was collected by PPCB from the stack of 65 TPH capacity boiler on 06.04.2022 and as per the analysis results, the concentration of particulate matter was found to be within the prescribed limits.

Therefore, overall the officers of Punjab Pollution Control Board in the presence of members of the Monitoring Committee and representative of nearby villages have collected the groundwater samples on 18.8.2022 and 19.8.2022 from 06 locations mentioned as under:-

- i) Borewell installed in the premises of Samaadhi Bhagat Baba Duni Chand ji in village Mahian Wala Kalan, Zira
- ii) Borewell near parking area of M/s Malbros International Pvt. Ltd, Mansoorwala, Zira, Ferozepur
- iii) Tubewell near new canal reservoir inside M/s Malbros International Pvt. Ltd, Mansoorwala, Zira, Ferozepur
- iv) Tubewell near bottling plant inside M/s Malbros International Pvt. Ltd, Mansoorwala, Zira, Ferozepur
- v) Tubewell near effluent treatment plant inside M/s Malbros International Pvt. Ltd, Mansoorwala, Zira, Ferozepur
- vi) Tubewell near transport office inside M/s Malbros International Pvt. Ltd, Mansoorwala, Zira, Ferozepur

The groundwater samples duly sealed and signed by the authorized officer of Punjab Pollution Control Board were sent to the following laboratories for analysis of the various parameters.

- i) Punjab Pollution Control Board, Patiala
- ii) Punjab Biotechnology Incubator, Mohali
- iii) Shriram Institute For Industrial Research, Delhi

The analysis results of ground water samples analyzed by Punjab Pollution Control Board, PBTI and Shriram Institute are annexed as per **Annexures- 1, 2 and 3**, respectively.

Similarly, 01 ground water sample, 02 soil samples and 02 fuel ash samples were collected and their analysis results are mentioned in **Annexures -4A, 4B, 4C and 4D**.

The analysis results of said groundwater samples are mentioned as per **Table-1 to 6** given below:-

Table-1 : Analysis results of groundwater samples - Borewell installed in the premises of Samaadhi Bhagat Baba Duni Chand ji in village Mahian Wala Kalan, Zira (Depth: 670 ft)

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
1.	pH		7.6	7.8	7.5	6.5-8.5	No relaxation
2.	Total Suspended Solids (TSS)	mg/l	3	2	BDL		
3.	Total Dissolved Solids (TDS)	mg/l	961	1024	945	500	2000
4.	Biochemical Oxygen Demand (BOD ₃ at 27oC)	mg/l	<1	Not Detected	BDL		
5.	Chemical Oxygen Demand (COD) Total	mg/l	8	4	6		
6.	Faecal Coliform	MPN/100 ml	7.9 x 10 ²	348 (Organism)	BDL		
7.	Nickel (as Ni)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.02	No relaxation

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
8.	Zinc (as Zn)	mg/l	BDL (MDL 0.005)	0.01	BDL	5	15
9.	Copper (as Cu)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.05	1.5
10.	Lead (as Pb)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.01	No relaxation
11.	Chromium (as Cr)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.05	No relaxation
12.	Iron (as Fe)	mg/l	0.06	0.1	0.11	0.3	No relaxation
13.	Total Kjeldahi Nitrogen (TKN)	mg/l	1	0.8	BDL		
14.	Ammonical Nitrogen	mg/l	0.02	0.1	BDL	0.5	No relaxation
15.	Arsenic (As)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.01	0.5
16.	Mercury (as Hg)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.001	No relaxation
17.	Cadmium (as Cd)	mg/l	BDL (MDL 0.001)	Not Detected	BDL	0.003	No relaxation
18.	Fluoride (as F)	mg/l	0.58	0.8	0.7	1.0	1.5
19.	Total Phosphate	mg/l	0.3	0.2	BDL		
20.	Chloride (as Cl)	mg/l	97	95	101	250	1000
21.	Sulphate (as SO ₄)	mg/l	222	413	234	200	400
22.	Turbidity	NTU	2.2	1	BDL	1	5
23.	Total Coliform	MPN/100 ml	2.4 x 10 ³	700 (Organism)	430	Shall not be detectable	
24.	Nitrate (as NO ₃)	mg/l	5.3	Not Detected	3.33	45	No relaxation
25.	Alkalinity (as CaCO ₃)	mg/l	274	254	250	200	600
26.	Sodium (as Na)	mg/l	272	329	272		
27.	Potassium (as K)	mg/l	4.5	4	3.2		
28.	Calcium (as Ca)	mg/l	28	12	26	75	200
29.	Magnesium (as Mg)	mg/l	8.7	21	9	30	100
30.	Conductivity	us/cm	1483	1585	1422		
31.	Total Hardness (as CaCO ₃)	mg/l	106	118	106	200	600
32.	Sodium Adsorption Ratio		11.5	12.9	11.5		
33.	Total Fixed Dissolved Solids	mg/l	845	884	804		
34.	Boron (as B)	mg/l	0.51	0.7	0.4	0.5	1.0
35.	%Na	mg/l	-	86	83		

Table-2: Analysis results of groundwater samples - Borewell near parking area of M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
1.	pH		7.87	7.8	7.7	6.5-8.5	No relaxation
2.	Total Suspended Solids (TSS)	mg/l	730	824	824		
3.	Total Dissolved Solids (TDS)	mg/l	944	1060	960	500	2000
4.	Biochemical Oxygen Demand (BOD ₃ at 27°C)	mg/l	2	4	BDL		
5.	Chemical Oxygen Demand (COD) Total	mg/l	18	36	23		
6.	Faecal Coliform	MPN/100 ml	3.4 x 10 ²	542 (Organism)	94		
7.	Nickel (as Ni)	mg/l	BDL (MDL 0.005)	0.01	BDL	0.02	No relaxation
8.	Zinc (as Zn)	mg/l	0.05	0.1	0.10	5	15
9.	Copper (as Cu)	mg/l	0.12	0.2	BDL	0.05	1.5
10.	Lead (as Pb)	mg/l	0.04	0.08	BDL	0.01	No relaxation
11.	Chromium (as Cr)	mg/l	BDL (MDL 0.005)	0.02	BDL	0.05	No relaxation
12.	Iron (as Fe)	mg/l	0.54	1.3	0.66	0.3	No relaxation
13.	Total Kjeldahi Nitrogen (TKN)	mg/l	1	1.8	0.9		
14.	Ammonical Nitrogen	mg/l	0.02	0.4	0.4	0.5	No relaxation
15.	Arsenic (As)	mg/l	0.009	0.01	BDL	0.01	0.5
16.	Mercury (as Hg)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.001	No relaxation
17.	Cadmium (as Cd)	mg/l	BDL (MDL 0.001)	Not Detected	BDL	0.003	No relaxation
18.	Fluoride (as F)	mg/l	BDL (MDL 0.1)	0.8	0.69	1.0	1.5
19.	Total Phosphate	mg/l	0.2	0.8	0.6		
20.	Chloride (as Cl)	mg/l	73	76	77	250	1000
21.	Sulphate (as SO ₄)	mg/l	216	366	292	200	400
22.	Turbidity	NTU	212	820	190	1	5
23.	Total Coliform	MPN/100 ml	7.9 x 10 ²	940 (Organism)	720	Shall not be detectable	
24.	Nitrate (as NO ₃)	mg/l	14.2	Not Detected	10.2	45	No relaxation
25.	Alkalinity (as	mg/l	435	387	395	200	600

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
	CaCO ₃)						
26.	Sodium (as Na)	mg/l	259	318	268		
27.	Potassium (as K)	mg/l	8.1	8	6		
28.	Calcium (as Ca)	mg/l	30	21	28	75	200
29.	Magnesium (as Mg)	mg/l	28	29	25	30	100
30.	Conductivity	us/cm	1515	1630	1488		
31.	Total Hardness (as CaCO ₃)	mg/l	190	173	175	200	600
32.	Sodium Adsorption Ratio		8.1	10.7	8.8		
33.	Total Fixed Dissolved Solids	mg/l	810	1660	882		
34.	Boron (as B)	mg/l	0.577	0.8	BDL	0.5	1.0
35.	%Na	mg/l	-	80	76		

Table-3: Analysis results of groundwater samples - Tubewell near new canal Reservoir inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur (Depth: 600-650 ft)

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
1.	pH		7	8.0	7.6	6.5-8.5	No relaxation
2.	Total Suspended Solids (TSS)	mg/l	4.6	4	BDL		
3.	Total Dissolved Solids (TDS)	mg/l	1605	1545	1567	500	2000
4.	Biochemical Oxygen Demand (BOD ₃ at 27oC)	mg/l	<1	Not Detected	BDL		
5.	Chemical Oxygen Demand (COD) Total	mg/l	9	12	8		
6.	Faecal Coliform	MPN/100 ml	<1	900 (Organism)	BDL		
7.	Nickel (as Ni)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.02	No relaxation
8.	Zinc (as Zn)	mg/l	BDL (MDL 0.005)	0.02	BDL	5	15
9.	Copper (as Cu)	mg/l	BDL (MDL 0.005)	0.01	BDL	0.05	1.5
10.	Lead (as Pb)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.01	No relaxation
11.	Chromium (as Cr)	mg/l	BDL (MDL	Not Detected	BDL	0.05	No relaxation

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
			0.005)				
12.	Iron (as Fe)	mg/l	BDL (MDL 0.01)	0.1	BDL	0.3	No relaxation
13.	Total Kjeldahi Nitrogen (TKN)	mg/l	0.08	0.9	BDL		
14.	Ammonical Nitrogen	mg/l	BDL (MDL : 0.5)	0.3	BDL	0.5	No relaxation
15.	Arsenic (As)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.01	0.5
16.	Mercury (as Hg)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.001	No relaxation
17.	Cadmium (as Cd)	mg/l	BDL (MDL 0.001)	Not Detected	BDL	0.003	No relaxation
18.	Fluoride (as F)	mg/l	1.35	1.2	0.99	1.0	1.5
19.	Total Phosphate	mg/l	0.6	0.06	0.6		
20.	Chloride (as Cl)	mg/l	178	167	179	250	1000
21.	Sulphate (as SO4)	mg/l	240	390	354	200	400
22.	Turbidity	NTU	1.06	1	BDL	1	5
23.	Total Coliform	MPN/100 ml	348	1100 (Organism)	170	Shall not be detectable	
24.	Nitrate (as NO3)	mg/l	6.6	2	2.72	45	No relaxation
25.	Alkalinity (as CaCO3)	mg/l	785	703	706	200	600
26.	Sodium (as Na)	mg/l	345	528	536		
27.	Potassium (as K)	mg/l	5.8	7	4.8		
28.	Calcium (as Ca)	mg/l	22	34	25	75	200
29.	Magnesium (as Mg)	mg/l	28	22	21	30	100
30.	Conductivity	us/cm	2520	2510	2223		
31.	Total Hardness (as CaCO3)	mg/l	170	173	148	200	600
32.	Sodium Adsorption Ratio		11.5	11	19.2		
33.	Total Fixed Dissolved Solids	mg/l	1503	1449	1332		
34.	Boron (as B)	mg/l	1.27	1.8	BDL	0.5	1.0
35.	%Na	mg/l	-	81	88		

Table-4: Analysis results of groundwater samples – Tubewell near bottling plant inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur (Depth: 600-650 ft)

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
1.	pH		7.20	8.1	7.9	6.5-8.5	No relaxation
2.	Total Suspended Solids (TSS)	mg/l	5.2	3	BDL		
3.	Total Dissolved Solids (TDS)	mg/l	1023	1208	1022	500	2000
4.	Biochemical Oxygen Demand (BOD ₃ at 27°C)	mg/l	<1	Not Detected	BDL		
5.	Chemical Oxygen Demand (COD) Total	mg/l	5	8	BDL		
6.	Faecal Coliform	MPN/100 ml	<1	542 (Organism)	BDL		
7.	Nickel (as Ni)	mg/l	0.009	Not Detected	BDL	0.02	No relaxation
8.	Zinc (as Zn)	mg/l	BDL (MDL 0.005)	0.02	BDL	5	15
9.	Copper (as Cu)	mg/l	BDL (MDL 0.005)	0.01	BDL	0.05	1.5
10.	Lead (as Pb)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.01	No relaxation
11.	Chromium (as Cr)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.05	No relaxation
12.	Iron (as Fe)	mg/l	0.02	0.06	BDL	0.3	No relaxation
13.	Total Kjeldahi Nitrogen (TKN)	mg/l	1	1.2	BDL		
14.	Ammonical Nitrogen	mg/l	BDL (MDL : 0.2)	0.3	BDL	0.5	No relaxation
15.	Arsenic (As)	mg/l	BDL (MDL 0.005)	0.006	BDL	0.01	0.5
16.	Mercury (as Hg)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.001	No relaxation
17.	Cadmium (as Cd)	mg/l	BDL (MDL 0.001)	Not Detected	BDL	0.003	No relaxation
18.	Fluoride (as F)	mg/l	0.62	0.7	0.38	1.0	1.5
19.	Total Phosphate	mg/l	0.3	0.05	0.6		
20.	Chloride (as Cl)	mg/l	111	114	121	250	1000
21.	Sulphate (as SO ₄)	mg/l	215	437	254	200	400
22.	Turbidity	NTU	0.69	1	BDL	1	5
23.	Total Coliform	MPN/100	11	1700	BDL	Shall not be	

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
		ml		(Organism)		detectable	
24.	Nitrate (as NO ₃)	mg/l	2.8	Not Detected	0.81	45	No relaxation
25.	Alkalinity (as CaCO ₃)	mg/l	240	245	250	200	600
26.	Sodium (as Na)	mg/l	223	340	288		
27.	Potassium (as K)	mg/l	3.2	4	2.8		
28.	Calcium (as Ca)	mg/l	22	16	16	75	200
29.	Magnesium (as Mg)	mg/l	12	12	12	30	100
30.	Conductivity	us/cm	1628	1685	1456		
31.	Total Hardness (as CaCO ₃)	mg/l	105	92	89	200	600
32.	Sodium Adsorption Ratio		9.4	13.9	13.3		
33.	Total Fixed Dissolved Solids	mg/l	976	1161	869		
34.	Boron (as B)	mg/l	0.47	0.6	0.40	0.5	1.0
35.	%Na	mg/l	-	88	87		

Table-5: Analysis results of groundwater samples – Tubewell near effluent treatment plant inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur (Depth: 600-650 ft)

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
1.	pH		7.4	8.1	7.8	6.5-8.5	No relaxation
2.	Total Suspended Solids (TSS)	mg/l	1.6	Not Detected	BDL		
3.	Total Dissolved Solids (TDS)	mg/l	553	670	599	500	2000
4.	Biochemical Oxygen Demand (BOD ₅ at 27°C)	mg/l	<1	2	BDL		
5.	Chemical Oxygen Demand (COD) Total	mg/l	2	16	BDL		
6.	Faecal Coliform	MPN/100 ml	240 x 10 ¹	345 (Organism)	BDL		
7.	Nickel (as Ni)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.02	No relaxation
8.	Zinc (as Zn)	mg/l	BDL (MDL 0.005)	0.04	BDL	5	15
9.	Copper (as Cu)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.05	1.5
10.	Lead (as Pb)	mg/l	BDL	Not	BDL	0.01	No

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
			(MDL 0.005)	Detected			relaxation
11.	Chromium (as Cr)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.05	No relaxation
12.	Iron (as Fe)	mg/l	BDL (MDL : 0.01)	0.03	BDL	0.3	No relaxation
13.	Total Kjeldahi Nitrogen (TKN)	mg/l	0.6	0.8	BDL		
14.	Ammonical Nitrogen	mg/l	BDL (MDL : 0.5)	0.1	BDL	0.5	No relaxation
15.	Arsenic (As)	mg/l	0.009	0.01	BDL	0.01	0.5
16.	Mercury (as Hg)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.001	No relaxation
17.	Cadmium (as Cd)	mg/l	BDL (MDL 0.001)	Not Detected	BDL	0.003	No relaxation
18.	Fluoride (as F)	mg/l	1.11	0.9	0.71	1.0	1.5
19.	Total Phosphate	mg/l	0.5	0.1	BDL		
20.	Chloride (as Cl)	mg/l	36	34	39	250	1000
21.	Sulphate (as SO ₄)	mg/l	130	139	120	200	400
22.	Turbidity	NTU	BDL (MDL : 0.5)	Not Detected	BDL	1	5
23.	Total Coliform	MPN/100 ml	542 x 10 ¹	900 (Organism)	540	Shall not be detectable	
24.	Nitrate (as NO ₃)	mg/l	4.7	Not Detected	2.2	45	No relaxation
25.	Alkalinity (as CaCO ₃)	mg/l	315	291	308	200	600
26.	Sodium (as Na)	mg/l	80	244	204		
27.	Potassium (as K)	mg/l	2	3	1.8		
28.	Calcium (as Ca)	mg/l	8	4	6	75	200
29.	Magnesium (as Mg)	mg/l	3	4	3	30	100
30.	Conductivity	us/cm	992	1024	872		
31.	Total Hardness (as CaCO ₃)	mg/l	32	26	30	200	600
32.	Sodium Adsorption Ratio		6.1	19.2	16.3		
33.	Total Fixed Dissolved Solids	mg/l	489	640	510		
34.	Boron (as B)	mg/l	0.48	0.6	BDL	0.5	1.0
35.	%Na	mg/l	-	95	93		

Table-6: Analysis results of groundwater samples – Tubewell near transport office inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur (Depth: 600-650 ft, sample was collected at a depth of 150 ft)

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
1.	pH		7.50	8.1	7.8	6.5-8.5	No relaxation
2.	Total Suspended Solids (TSS)	mg/l	447	160	486		
3.	Total Dissolved Solids (TDS)	mg/l	798	784	777	500	2000
4.	Biochemical Oxygen Demand (BOD ₃ at 27oC)	mg/l	<1	6	BDL		
5.	Chemical Oxygen Demand (COD) Total	mg/l	28	48	27		
6.	Faecal Coliform	MPN/100 ml	<1	940 (Organism)	BDL		
7.	Nickel (as Ni)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.02	No relaxation
8.	Zinc (as Zn)	mg/l	0.01	0.01	BDL	5	15
9.	Copper (as Cu)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.05	1.5
10.	Lead (as Pb)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.01	No relaxation
11.	Chromium (as Cr)	mg/l	BDL (MDL 0.005)	Not Detected	BDL	0.05	No relaxation
12.	Iron (as Fe)	mg/l	0.69	0.6	1.13	0.3	No relaxation
13.	Total Kjeldahi Nitrogen (TKN)	mg/l	1	1.2	2.6		
14.	Ammonical Nitrogen	mg/l	BDL (MDL 0.2)	0.4	1.96	0.5	No relaxation
15.	Arsenic (As)	mg/l	0.009	Not Detected	BDL	0.01	0.5
16.	Mercury (as Hg)	mg/l	BDL (MDL 0.0005)	Not Detected	BDL	0.001	No relaxation
17.	Cadmium (as Cd)	mg/l	BDL (MDL 0.001)	Not Detected	BDL	0.003	No relaxation
18.	Fluoride (as F)	mg/l	0.1	1.4	0.27	1.0	1.5
19.	Total Phosphate	mg/l	0.5	0.8	1.4		
20.	Chloride (as Cl)	mg/l	49	48	55	250	1000
21.	Sulphate (as SO ₄)	mg/l	185	166	134	200	400
22.	Turbidity	NTU	177	196	140	1	5
23.	Total Coliform	MPN/100 ml	161	14000 (Organism)	110	Shall not be detectable	

Sr. No	Parameter	Units	PBTI Lab, Mohali	Shriram Institute Lab, Delhi	PPCB Lab	Standards as per IS: 10500: 2012	
						Acceptable limit	Permissible limit
24.	Nitrate (as NO ₃)	mg/l	5.6	Not Detected	0.43	45	No relaxation
25.	Alkalinity (as CaCO ₃)	mg/l	355	322	322	200	600
26.	Sodium (as Na)	mg/l	79.2	251	244		
27.	Potassium (as K)	mg/l	3	3	4		
28.	Calcium (as Ca)	mg/l	12	6	9	75	200
29.	Magnesium (as Mg)	mg/l	3.4	5	3	30	100
30.	Conductivity	us/cm	1167	1230	1044		
31.	Total Hardness (as CaCO ₃)	mg/l	44	35	37	200	600
32.	Sodium Adsorption Ratio		5.2	16.9	17.3		
33.	Total Fixed Dissolved Solids	mg/l	632	802	661		
34.	Boron (as B)	mg/l	0.59	1.1	0.4	0.5	1.0
35.	%Na	mg/l		93	93		

2.2 Discussion on the analysis results of ground water samples

2.2.1 Ground water sample collected from borewell installed in the premises of Samaadhi Bhagat Baba Duni Chand Ji in Village Mahian Wala Kalan, Zira.

The analysis results indicate that the values of parameters namely F.Coli, T.Coli and Sulphate have been found as 348-790 MPN/100 ml, 430-2400 MPN/100 ml and 222-413 mg/l, respectively, which are higher than the permissible limits as ND, ND and 400 mg/l, respectively. The values of TSS, BOD and COD have been found negligible (TSS: 2-3 mg/l, BOD: <1 mg/l and COD: 4-8 mg/l). The value of TDS has been found varied between 945-1024 mg/l, which is higher than the acceptable limits of 500 mg/l but within permissible limits of 2000 mg/l. All other parameters as mentioned in Table-1 are within the permissible limits. The value of Sulphate (413 mg/l) has been found marginally higher than the permissible limits of 400 mg/l.

The probable reasons for higher values of F.Coli and T.Coli in the ground water samples are due to faecal contamination, which may be due to improper handling of faecal waste (domestic waste).

2.2.2 Ground water sample collected from borewell near parking area of M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur

The perusal of analysis results as mentioned in Table-2 given above, indicate that the values of parameters namely TSS, COD, BOD, F.Coli, T.Coli, Lead, Iron and Turbidity have been found varied between 730-824 mg/l, 18-36 mg/l, BDL-4 mg/l, 94-542 MPN/100 ml, 720-940 MPN/100 ml, BDL-0.08 mg/l, 0.54-1.3 mg/l and 190-820 mg/l, respectively. Since there is insignificant value of BOD in the ground water sample, as such, the higher value of TSS, COD and Turbidity in the ground water sample may be due to presence of inorganic compounds/constituents in the ground water. The higher value of Lead and Iron in the ground water sample may be due

to iron fitting in the pipeline laid for abstraction of ground water. The higher value of T.Coli and F.Coli in ground water sample may be due to faecal contamination in ground water, the probable reason for the same may be due to contamination of faecal waste discharge.

2.2.3 Ground water sample collected from tubewell near new canal reservoir inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur

The analysis results of ground water samples as mentioned in Table-3 given above, indicate that the values of TSS, BOD, COD, T.Coli, Alkalinity and Boron have been observed to be BDL-4.6 mg/l, BDL-<1 mg/l, 8-12 mg/l, 170-1100 MPN/100 ml, 703-785 mg/l and BDL-1.8 mg/l, respectively. The values of TSS, BOD and COD are insignificant. The value of F.Coli determined by M/s Shriram Institute Lab, Delhi, mentioned as 900 MPN/100 ml may be neglected because the value of said parameter as determined by PBTI Lab and PPCB Lab has been determined as <1 and BDL, respectively and are matching to each other. The higher values of Alkalinity (703-785 mg/l) and Boron (1.27-1.80 mg/l) in ground water sample may be due to geogenic reasons. The higher value of T.Coli, which has been observed as 170-1100 MPN/100 ml may be due to domestic sources.

2.2.4 Ground water sample collected from tubewell near bottling plant inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur

The analysis results of ground water samples as mentioned in Table-4 given above, indicate that the values of TSS, BOD, COD, T.Coli and Sulphate have been observed to be BDL-5.2 mg/l, BDL-<1 mg/l, BDL-8 mg/l, BDL-11 MPN/100 ml and 215-437 mg/l, respectively. The values of TSS, BOD and COD are insignificant. The value of F.Coli and T.Coli determined by M/s Shriram Institute Lab, Delhi, mentioned as 542 MPN/100 ml and 1700 MPN/100 ml, respectively, may be neglected because the value of said parameters as determined by PBTI Lab and PPCB Lab are F.Coli: <1 and BDL and T.Coli: 11 and BDL, respectively and the same are matching to each other. The value of Sulphate (437 mg/l) has been found marginally higher than the permissible limits of 400 mg/l.

These analysis results indicate that there is insignificant contamination in ground water due to F.Coli parameter and organic parameters (BOD and COD).

2.2.5 Ground water sample collected from tubewell near effluent treatment plant inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur

The analysis results of ground water samples as mentioned in Table-5 given above, indicate that the values of BOD, COD, F.Coli and T.Coli have been observed to be BDL-2 mg/l, BDL-16 mg/l, 345-2400 MPN/100 ml and 900-5420 MPN/100 ml, respectively. The higher value of F.Coli and T.Coli indicate that there is faecal contamination in ground water which may be due to domestic sources. The contribution of lower concentration of BOD and COD may be due to presence of F.Col and T.Coli parameters in the domestic sources.

2.2.6 Ground water sample collected from tubewell near transport office inside M/s Malbros International Pvt. Ltd, Mansoorwal, Zira, Ferozepur

The analysis results of ground water samples as mentioned in Table-6 given above, indicate that the values of TSS, BOD, COD, F.Coli, Iron, Turbidity, T.Coli and Boron have been observed to be 160-486 mg/l, BDL-6 mg/l, 27-48 mg/l, BDL-940 MPN/100 ml, 0.6-1.13 mg/l, 140-196 mg/l, 110-14000 MPN/100 ml and 0.4-1.1 mg/l, respectively. Since there is insignificant value of BOD in the ground water sample, as such, the higher value of TSS, COD and Turbidity in the ground water sample may be due to presence of inorganic compounds/constituents in the ground water. The higher value of Iron in the ground water sample may be due to iron fitting in the pipeline laid for abstraction of ground water. The value of Boron in ground water sample is marginally higher than permissible value and it may be due to geogenic reasons. The value of F.Coli and T.Coli determined by M/s Shriram Institute Lab, Delhi, mentioned as 940 MPN/100 ml and 14000 MPN/100 ml, respectively, which may be neglected as the values of these parameters as analyzed by PPCB Lab and PBTI are F.Coli: BDL, T.Coli: 110 MPN/100 ml and F.Coli: <1 MPN/100 ml, T.Coli:, 161 MPN/100 ml, respectively, which are almost matching to each other and these values of said parameters may be considered for assessing the ground water quality.

From the above analysis results, it has been observed that the values of F.Coli and BOD are insignificant. The higher value of COD (27-48 mg/l), TSS (160-486 mg/l) and Turbidity (140-196 mg/l) may be due to inorganic compounds/constituents. The higher value of Iron (0.6-1.13 mg/l) may be due to iron fitting in the pipeline laid for abstraction of ground water. The slight higher value of Boron (1.1 mg/l) as compared to permissible limits of 1.0 mg/l in ground water sample may be due to geogenic reasons.

2.3 Collection of ground water, fuel ash and soil samples by Department of Agriculture and their analysis results

2.3.1 Ground water sample collected by Department of Agriculture from borewell in parking area of the industry and its analysis results

Department of Agriculture has informed that ground water sample was collected from borewell/tubewell installed in parking area of the industry on 18.8.2022 and the sample was divided into 04 parts, out of which 01 part was delivered to farmers, 01 part has been retained by the department, 01 part of sample was sent to PAU Ludhiana and 01 part of sample was sent to soil testing laboratory, Faridkot for analysis of various parameters.

PAU Ludhiana has submitted analysis results of part of ground water sample (**Annexure-4A**) and the same are mentioned **Table-7** given below.

Table-7: The analysis results of ground water sample analyzed by PAU, Ludhiana

Lab No.	Depth	Parameters in milli equivalent per litre			Ca-Mg	RSC	Cond.	Category of water	Gypsum (Q/acre)	pH
		Carbo nate	Bi-carbo nate	Chlor ide						
Fe/18	-	Nil	8.2	3.0	3.5	4.7	1409	2	3.0	8.1

2.3.1.1 Discussion on the analysis results of part of ground water sample analyzed by PAU, Ludhiana

PAU, Ludhiana has submitted that the ground water can be used for light soil and incase, it is to be used for agriculture purposes on heavy soil, it may be used by mixing with canal water. It

has also been recommended by PAU, Ludhiana that incase canal water is not available, ground water can be used by adding Gypsum (fertilizer) @ 03 quintal/acres of land after every four waterings (irrigation).

2.3.2 Part of the ground water sample analyzed by soil testing laboratory, Faridkot

Part of the ground water sample collected from borewell installed in parking area of the industry was sent to soil testing laboratory, Faridkot for its analysis and the analysis results as submitted by the said laboratory are mentioned in **Annexure-4B** and the same are also mentioned in **Table-8**, given below.

Table-8: Analysis results of ground water sample analyzed by soil testing laboratory, Faridkot

Sr. No	Depth	Millequ				RSC	EC (μ mho)	Category	Gypsum/acres	Remarks
		CO ₃	HCO ₃	Cl	Ca-Mg					
756	W-2	2.0	6.0	-	3.8	4.2	1440	No. 2	05 bags Gypsum / acre	--

2.3.2.1 Discussion on the analysis results

Soil testing laboratory, Faridkot has submitted that the ground water can be used for light soil and in case, it is to be used for agriculture purposes on heavy soil, it may be used by mixing with canal water. It has also been recommended by the said laboratory that in case canal water is not available, ground water can be used by adding Gypsum (fertilizer) @ 05 bags/acres of land after every four waterings (irrigation).

2.3.3 Fuel ash and soil samples collected by Deptt. of Agriculture and analyzed by PAU, Ludhiana and soil testing laboratory, Faridkot

Department of Agriculture has informed that 02 samples of fuel ash and 02 samples of soil were collected from different 04 locations outside the premises of the industry. Fuel ash samples were divided into 04 parts, out of which 01 part was given to the farmers, 01 part was retained by the department, 01 part was sent to PAU, Ludhiana and 01 part was sent to soil testing laboratory, Faridkot.

It has been informed that PAU, Ludhiana has not examined the fuel ash samples and submitted the comments mentioning "no need to check". The fuel ash samples, sent to soil testing laboratory, Faridkot, have been analyzed (**marked as 1B and 2B**) and the analysis results (**Annexure-4C**) are mentioned in **Table-9**. Soil sample collected from 02 locations were sent to 02 laboratories i.e PAU, Ludhiana and soil testing laboratory, Faridkot. The analysis results of soil samples analyzed by PAU, Ludhiana are mentioned in **Table-10**.

Table-9: Analysis results of fuel ash and soil sample analyzed by soil testing laboratory, Faridkot

Sample Code	pH	EC	OC	P	K	Zn	Cu	Fe	S	Mn
		Mmhos/cm	(%)	(ppm)						
1B	8.45	0.66	0.36	31.23	82.26	1.88	0.88	36.07	96.65	1.96
2B	9.02	0.51	0.32	81.67	107.53	1.20	0.42	10.65	67.16	4.53

3B	9.28	0.34	0.34	19.44	95.85	1.02	0.52	6.14	28.63	1.80
4B	8.96	0.53	0.60	32.38	77.81	1.516	1.09	71.00	88.09	5.03

Table-10: Analysis results of soil sample analyzed by PAU, Ludhiana

Sample No.	Field No.	pH	EC (millmho)/cm	Organic Carbon	Phosphorus	Potash
44	1	8.3	0.46	0.360	>20.4	300
45	2	9.1	0.47	0.150	>20.4	270

These analysis results are mentioned at **Annexure- 4D**

2.3.3.1 Discussion on the analysis results of fuel ash and soil samples

2.3.3.1(a) Analysis results submitted by soil testing laboratory, Faridkot (1B to 4B)

Department of Agriculture has not submitted any comments on fuel ash samples (**1B & 2B**). On soil samples (**3B & 4B**) analyzed by said laboratory, Chief Agriculture officer, Ferozepur has submitted his comments dated 14.9.2022 (**Annexure- 4E**), wherein, it has been mentioned that due to high pH in soil samples, there is need to add green manure or organic manure. Further, it has been mentioned by Chief Agriculture officer, Ferozepur that in the soil samples analyzed by soil testing laboratory, Zira from the Mansoorwal Kalan and adjoining villages from time to time, the parameters have been found within the norms.

2.3.3.1(b) Analysis results of soil samples submitted by PAU, Ludhiana

PAU, Ludhiana has submitted that due to high pH in soil, there is need to add green manure or organic manure in the agriculture fields.

2.4 Illegal mining in the area

During the visit of the Monitoring Committee, the villagers informed that illegal mining has been done in the area adjoining to the industry. The District Mining Officer-cum-Executive Engineer, Deptt. of Drainage, Ferozepur submitted that the department has already identified the persons indulged in carrying out illegal mining in the area and notices under the Punjab Minor Mineral Rules, 2013 have been issued to the violators. The copies of the notices are annexed as per **Annexures-5A and 5B**.

2.5 Report of Deptt. of Animal Husbandry- Animal Death

During the visit of the Monitoring Committee, the villagers informed that their domestic animals have been died due to pollution caused by the industry. The Deptt. of Animal Husbandry informed that fodder samples were collected for analysis of parameters and it has been observed that nitrate content has been found in fodder which is injurious to animals. Copy of the report is annexed as per **Annexure-6**.

3.0 Overall Findings of the Monitoring Committee

Based on the discussion held with the officers of various departments, village panchayats and field visits made by the Monitoring Committee and collection of ground water samples, soil samples and reports submitted by the departments, the overall findings of the Monitoring Committee are as under.

1. The ground water sample collected from Samaadhi Bhagat Baba Duni Chand ji has been found containing faecal contamination, which may be due to domestic sources for its contamination.
 2. The ground water sample collected from tubewell near parking area of the industry has been found containing faecal contamination may be due to domestic sources. The higher values of TSS, COD and Turbidity in the ground water samples due to presence inorganic compounds/ constituents in the ground. The higher values of Iron and Lead in the ground water samples may be due to iron fitting in the pipeline laid for abstraction of ground water.
 3. The ground water samples collected from the tubewell installed near new canal reservoir inside the industry has been found contaminated due to T.Coli and domestic source may be a source of contributing T.Coli. The higher values of Alkanity and Boron have been found due to geogenic conditions.
 4. There is insignificant contamination in ground water in the tubewell near bottling plant inside the industry due to insignificant values of F.Coli parameter and organic parameters (BOD and COD).
 5. The higher value of F.Coli and T.Coli found in the ground water samples collected from tubewell installed near effluent treatment plant inside the industry may be due to faecal contamination in ground water, which may be due to domestic sources. The contribution of lower concentration of BOD and COD may also be due to presence of F.Col and T.Coli parameters.
 6. The higher value of COD, TSS and Turbidity in the ground water samples collected from the tubewell near transport office inside the industry may be due to inorganic compounds/constituents. The higher value of Iron may be due to iron fitting in the pipeline laid for abstraction of ground water. The slight higher value of Boron in ground water sample may be due to geogenic reasons.
 7. From the analysis results of ground water samples analyzed by all the three laboratories, indicate that ground water contamination is probably due to faecal contamination, which may be due to domestic sources. Possibility of discharge of industrial effluent in underground water is feeble as no such assessment from the analysis results has been found.
- 8(a) On the analysis results of ground water sample collected by Department of Agriculture and analyzed by PAU, Ludhiana and soil testing laboratory, Faridkot, it has been mentioned that the ground water can be used for light soil and in case, it is to be used for agriculture purposes on heavy soil, it may be used by mixing with canal water. It has also been recommended by PAU, Ludhiana and soil testing laboratory, Faridkot that in case canal water is not available, ground water can be used by adding Gypsum (fertilizer) as 2.5 to 03 quintal/acres of land after every four waterings (irrigation).
- 8(b) On the analysis results of soil samples analyzed by PAU Ludhiana and soil testing laboratory, Faridkot, it has been mentioned that due to high pH in soil samples, there is need to add green manure or organic manure. Further, it has been mentioned by Chief Agriculture officer, Ferozepur that in soil samples from Mansoorwal Kalan and adjoining villages, analyzed by soil testing laboratory, Zira from time to time, the parameters have been found within the norms.

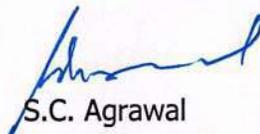
8(c) Overall, Chief Agriculture officer, Ferozepur has mentioned in his report dated 14.9.2022 (**Annexure-4E**) that the quality of soil and yield of crop in the adjoining area of the industry are not being affected due to any discharge of the industry.

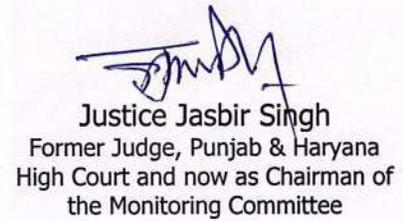
9. Deptt. of Mining-cum-Executive Engineer, Deptt. of Drainage, Ferozepur, has reported that the persons indulged in the illegal mining, have been identified and the violators have been issued notices under the Punjab Minor Mineral Rules, 2013 and action is under process.

10. Deptt. of Animal Husbandry has reported that nitrate content found in the fodder sample is injurious to the health of animals.

The report is sent to the Deputy Commissioner, Ferozepur and Punjab Pollution Control Board, Patiala to take further necessary action in the matter.


Sant Balbir Singh Seechewal


S.C. Agrawal


Justice Jasbir Singh
Former Judge, Punjab & Haryana
High Court and now as Chairman of
the Monitoring Committee

PUNJAB POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
NABHA ROAD, PATIALA
GROUND WATER REPORT

1. Laboratory Sample No	GW 129 (32) H.O Lab/ G.W. Monitoring/2022
2. U.I.R Number	U.I.R-7C 704518000000005238
3. Name of Industry	Ground Water sample collected from the premises of M/s Malbro Industrial (P) Ltd, Mansoor Wala, Zira, Ferozpur, Faridkot
4. Name of Sample collecting Officer	Fr. Aushpreet Singh, AEE
5. Designation of authorizing Test	EE RO, Faridkot
6. Date & Time of Sample collection	19.08.2022
7. Date & Time of Sample receipt in Lab	20.08.2022
8. Period of Analysis	20.08.2022 to 08.09.2022
9. Test Methods	As per relevant parts of IS: 3025/ Methods of APHA

Results

As per Annexure-Attached

--End of Report--

Scientific Officer

Endst. No. 19438-40

Dt. 13-9-22

A copy of the above is forwarded to the:-

1. The Chief Environment Engineer (Water), Punjab Pollution Control Board, Ludhiana
2. The Senior Environment Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda
3. The Environment Engineer, Punjab Pollution Control Board, Regional Office, Faridkot

Asst. Scientific Officer

o/c

14/9/22

Sr. No.	Parameters	Tubewell near new canal Reservoir inside the industry	Tube well near Bottling Plant inside the Industry	Tubewell near water treatment plant inside the industry	Tubewell near transform office inside the industry
1.	pH				
2.	EC	7.6			
3.	TSS mg/l	2223	7.9	7.8	7.8
4.	TDS mg/l	BDL	1456	872	1044
5.	TFS mg/l	1567	BDL	BDL	486
6.	COD mg/l	1332	1022	599	777
7.	BOD mg/l	8	869	510	661
8.	Turb NTU	BDL	BDL	BDL	27
9.	T.H mg/l	BDL	BDL	BDL	BDL
10.	Ca mg/l	148	BDL	BDL	140
11.	Mg mg/l	25	89	30	37
12.	F mg/l	21	16	6	9
13.	NO3 mg/l	0.99	12	3	3
14.	Cl mg/l	2.72	0.38	0.71	0.27
15.	SO4 mg/l	179	0.81	2.2	0.43
16.	TAlka	354	121	39	55
17.	Amm.N	706	254	120	134
18.	Na mg/l	BDL	250	308	322
19.	K mg/l	536	BDL	BDL	1.96
20.	TKN	4.8	288	204	244
21.	PO4 mg/l	BDL	2.8	1.8	4
22.	SAR	0.6	BDL	BDL	2.6
23.	%Na	19.2	0.6	BDL	1.4
24.	Fe mg/l	88	13.3	16.3	17.3
25.	T.Coli MPN/100 ml	87	93	93	93
26.	F.Coli MPN100 ml	BDL	BDL	BDL	1.13
27.	B mg/l	170	BDL	540	110
		BDL	BDL	BDL	BDL
			0.40	BDL	0.4

Note: 1) Zn, As, Hg, Ni, Cu, T.Cr, Cd, & Pb were BDL.
2) BDL means below method Detection Limit.

M. K. Singh

**PUNJAB POLLUTION CONTROL BOARD VATAVARAN BHAVAN,
NABHA ROAD, PATIALA
GROUND WATER REPORT**

1. Laboratory Sample No.	GW 127-128/ H.O.Lab./ G.W. Monitoring/2022
2. ULR Number	ULR-TC704518000000005237
3. Name of Industry	Ground Water sample collected From different locations of Tehsil, Zira Distt, Ferozepur
4. Name of Sample collecting Officer	Er. Aushpreet Singh, AEE
5. Designation of authorizing Test	EE RO, Faridkot
6. Date & Time of Sample collection	18.08.2022
7. Date & Time of Sample receipt in Lab.	19.08.2022
8. Period of Analysis	19.08.2022 to 08.09.2022
9. Test Methods	As per relevant parts of IS:3025/ Methods of APHA

Results

Sr. no.	parameters	Borewell installed in village Mohianwala Kalan, Zira, Ferozpur	Borewell near Parking area of M/s Malbro Industrial pvt. Ltd. Mansoorwala, Zira, Ferozpur
1	pH	7.5	7.7
2	Conductivity	1422	1488
3	TSS mg/l	BDL	824
4	TDS mg/l	945	960
5	TFS mg/l	804	882
6	COD mg/l	6	21
7	BOD mg/l	BDL	BDL
8	Turbidity NTU	BDL	190
9	TH as CaCO ₃	106	175
10	Ca mg/l	26	28
11	Mg mg/l	9	25
12	F mg/l	0.7	0.69
13	NO ₃ as N mg/l	3.33	10.2
14	Cl mg/l	101	77
15	SO ₄ mg/l	234	292
16	TAlk as CaCO ₃ mg/l	250	395
17	Ammonical Nitrogen mg/l	BDL	0.4
18	Na mg/l	272	268
19	K mg/l	3.2	6
20	TKN	BDL	0.9
21	Phosphate mg/l	BDL	0.6
22	SAR	11.5	8.8
23	%Na	83	76
24	Fe mg/l	0.11	0.66
25	Zn mg/l	BDL	0.10
26	Boron mg/l	0.4	BDL
27	T. coli MPN/100 ml	430	720
28	F.coli MPN/100 ml	BDL	94

Note: 1) As, Hg, Ni, Cu, T.Cr, Cd, & Pb were BDL.
2) BDL means below method Detection Limit.

End of Report--

[Signature]
Scientific Officer
13/9/22

Endst. No: 19444-46

Dt. 13-9-22

A copy of the above is forwarded to the:-

1. The Chief Environmental Engineer (Water), Punjab Pollution Control Board, Ludhiana
2. The Senior Environment Engineer, Punjab Pollution Control Board, Zonal Office, Bathinda.
3. The Environment Engineer, Punjab Pollution Control Board, Regional Office -Faridkot.

[Signature]
Asst. Scientific Officer
13/9/22

o/c

Punjab Biotechnology Incubator

(Department of Science, Technology & Environment, GoP)

A Component of Knowledge City, Mohali

An NABL Accredited State Analytical Agency



TC-6117

Approved | FSSAI Empanelled | EIC Approved | APEDA Approved | PPCB Approved | Notified State Water Lab - GoP | Notified Under EPA - GoI



No.PBTI/FA0/200822/001536 / 1594

Dated: 31/08/22

ULR : TC611722000001462F

TEST REPORT

Sample Registration No.

: PBTI/FA0/200822/001536

Sample code given by customer

: Borewell Installed in Village Mahian Waia Kalan, Zira, Ferozepur, 1-A to 1-E

Issued to:

Punjab Pollution Control Board,
Regional Office, Ferozepur Road, Dhara Singh Colony,
Near St. No.2,
Faridkot.
PUNJAB

SAMPLE PARTICULARS

Your Ref. No. : Letter No. SPL/AEE-1/2, dt. 18/08/2022
Date of Receipt : 19/08/2022
Name/Nature of sample : Ground Water
Sample code given by customer : Borewell Installed in Village Mahian Wala Kalan, Zira, Ferozepur, 1-A to 1-E
Condition of the sample : Intact coded lac sealed sample under refrigerated and preserved conditions
Brand name : NA
Qty/Pkg. : 8.050L approx in plastic cans (2L X 4) and plastic container (50ml)
Batch No.: : NA
Date of Manufacture : : NA/NM
Sampling Method : Sample not drawn by PBTI. Sample drawn by PPCB
Test Start Date : 20/08/2022
Test Completion Date : 31/08/2022

[Handwritten Signature]
31/8/2022

Authorized Signatory

Punjab Biotechnology Incubator Lab

Employee Code: 16

Note:

1. The above results pertain only to the sample tested.
2. There is no addition, deviation or exclusion from the method mentioned.
3. The report shall not be used for advertising or any legal purpose without written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
4. This report cannot be re-produced, except when in full, without the written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
5. Perishable samples will be destroyed after testing, others after one month from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.

Format No : PBTI/F/7.8/02

Revision No. 00 & 25.04.2019

Page No. 1/3

National Referral Lab for LMO/GMO Detection under Seeds Act 1966 | Referral Lab under Food Safety and Standards Act 2006

C-134, Industrial Focal Point, Phase-VIII, SAS Nagar (Mohali) - 160 071, Punjab, India

Phone : +91-172-5020893, 5093595, E-mail : pbt2005@yahoo.com

Website : www.pbtlabs.com, /pbt_dst



Dated :

ULR : TC611722000001462F

Sample Registration No. : PBTI/FA0/200822/001536

Sample code given by customer : Borewell Installed in Village Mahian Wala Kalan, Zira, Ferozepur, 1-A to 1-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
1	pH	7.6		IS 3025 (Part 11)
2	Total Suspended Solids (TSS)	3	mg/l	IS 3025 (Part 17)
3	Total Dissolved Solids (TDS)	961	mg/l	IS 3025 (Part 16)
4	Biochemical Oxygen Demand (BOD3 at 27oC)	<1	mg/l	IS 3025 (Part 44)
5	Chemical Oxygen Demand (COD) Total	8	mg/l	IS 3025 (Part 58)
6	Faecal Coliform, MPN/100ml	7.9 x 10 ²	MPN/100ml	IS 1622: 1981
7	Nickel (as Ni)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
8	Zinc (as Zn)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
9	Copper (as Cu)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
10	Lead (as Pb)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
11	Chromium (as Cr)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
12	Iron (as Fe)	0.06	mg/l	APHA 3125 B By ICP-MS
13	Total Kjeldahl Nitrogen (TKN)	1	mg/l	IS 3025 (Part 34)
14	Ammonia (NH3)	0.02	mg/l	IS 3025 (Part 34)
15	Arsenic (As)	BDL(MDL 0.005)	mg/l	APHA- 3125 B By ICP-MS
16	Mercury (as Hg)	BDL(MDL 0.0005)	mg/l	APHA- 3125 B By ICP-MS
17	Cadmium (as Cd)	BDL(MDL 0.001)	mg/l	APHA- 3125 B By ICP-MS
18	Fluoride (as F)	0.58	mg/l	IS 3025 (Part 60)
19	Total Phosphate	0.3	mg/l	APHA 4500-P
20	Chloride (as Cl)	97	mg/l	IS 3025 (Part 32)
21	Sulphate (as SO4)	222	mg/l	IS 3025 (Part 24)
22	Turbidity	2.2	NTU	IS 3025 (Part 10)
23	Total Coliform	2.4 x 10 ³	MPN/100 ml	IS 1622 : 1981
24	Nitrate (as NO3)	5.3	mg/l	IS 3025 (Part 34)



Dated :

ULR : TC611722000001462F

Sample Registration No. : PBT/FA0/200822/001536

Sample code given by customer : Borewell Installed in Village Mahian Wala Kalan, Zira, Ferozepur, 1-A to 1-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
25	Alkalinity (as CaCO ₃)	274	mg/l	IS 3025 (Part 23)
26	Sodium (as Na)	272	mg/l	IS 3025 (Part 45)
27	Potassium (as K)	4.5	mg/l	IS 3025 (Part 45)
28	Calcium (as Ca)	28	mg/l	IS 3025 (Part 40)
29	Magnesium (as Mg)	8.7	mg/l	IS 3025 (part 46)
30	Conductivity	1483	us/cm	APHA 2510-B
31	Hardness Total (as CaCO ₃)	106	mg/l	IS 3025 (Part 21)
32	Sodium Adsorption Ratio	11.5		IS 11624: 1986
33	Total Fixed Dissolved Solids	845	mg/l	IS 3025 (Part 18)
34	Boron (as B)	0.51	mg/l	APHA- 3125 B By ICP-MS

BDL:Below Detection Limit

MDL:Method Detection Limit

[Signature]
31/8/2022

Authorized Signatory
Punjab Biotechnology Incubator Lab



Punjab Biotechnology Incubator

(Department of Science, Technology & Environment, GoP)

A Component of Knowledge City, Mohali

An NABL Accredited State Analytical Agency



TC-6117

IS Approved | FSSAI Empanelled | EIC Approved | APEDA Approved | PPCB Approved | Notified State Water Lab - GoP | Notified Under EPA - Govt



No.PBTI/FA0/200822/001537

11595

Dated : 31/08/22

ULR : TC611722000001463F

TEST REPORT

Sample Registration No. : PBTI/FA0/200822/001537
Sample code given by customer : Borewell Near Parking Area of M/s Malbros International Private Limited, Mansoorwala, Zira, Ferozepur, 2-A to 2-E

Issued to:

Punjab Pollution Control Board,
Regional Office, Ferozepur Road, Dhara Singh Colony,
Near St. No.2,
Faridkot.
PUNJAB

SAMPLE PARTICULARS

Your Ref. No. : Letter No. SPL/AEE-1/2, dt. 18/08/2022
Date of Receipt : 19/08/2022
Name/Nature of sample : Ground Water
Sample code given by customer : Borewell Near Parking Area of M/s Malbros International Private Limited, Mansoorwala, Zira, Ferozepur, 2-A to 2-E
Condition of the sample : Intact coded lac sealed sample under refrigerated and preserved conditions
Brand name : NA
Qty/Pkg. : 8.050L approx in plastic cans (2L X 4) and plastic container (50ml)
Batch No.: : NA
Date of Manufacture : : NA/NM
Sampling Method : Sample not drawn by PBTi. Sample drawn by PPCB
Test Start Date : 20/08/2022
Test Completion Date : 31/08/2022

K. H. S.
31/8/2022
Authorized Signatory
Punjab Biotechnology Incubator Lab
Employee Code: 16

Note:

1. The above results pertain only to the sample tested.
2. There is no addition, deviation or exclusion from the method mentioned.
3. The report shall not be used for advertising or any legal purpose without written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
4. This report cannot be re-produced, except when in full, without the written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
5. Perishable samples will be destroyed after testing, others after one month from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.

Format No : PBTI/F/7.8/02
Revision No. 00 & 25.04.2019

Page No. 1/3

National Referral Lab for LMO/GMO Detection under Seeds Act 1966 | Referral Lab under Food Safety and Standards Act 2006

C-134, Industrial Focal Point, Phase-VIII, SAS Nagar (Mohali) - 160 071, Punjab, India

Phone : +91-172-5020893, 5093595, E-mail : pbt2005@yahoo.com

Website : www.pbtlabs.com, /pbt_dst



Dated :

ULR : TC611722000001463F

Sample Registration No.

: PBT/FA0/200822/001537

Sample code given by customer

: Borewell Near Parking Area of M/s Malbros International Private Limited,
Mansoorwala, Zira, Ferozepur, 2-A to 2-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
1	pH	7.87		IS 3025 (Part 11)
2	Total Suspended Solids (TSS)	730	mg/l	IS 3025 (Part 17)
3	Total Dissolved Solids (TDS)	944	mg/l	IS 3025 (Part 16)
4	Biochemical Oxygen Demand (BOD ₃ at 27°C)	2	mg/l	IS 3025 (Part 44)
5	Chemical Oxygen Demand (COD) Total	18	mg/l	IS 3025 (Part 58)
6	Faecal Coliform, MPN/100ml	3.4 x 10 ²	MPN/100ml	IS 1622: 1981
7	Nickel (as Ni)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
8	Zinc (as Zn)	0.05	mg/l	APHA 3125 B By ICP-MS
9	Copper (as Cu)	0.12	mg/l	APHA 3125 B By ICP-MS
10	Lead (as Pb)	0.04	mg/l	APHA 3125 B By ICP-MS
11	Chromium (as Cr)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
12	Iron (as Fe)	0.54	mg/l	APHA 3125 B By ICP-MS
13	Total Kjeldahl Nitrogen (TKN)	1	mg/l	IS 3025 (Part 34)
14	Ammonia (NH ₃)	0.02	mg/l	IS 3025 (Part 34)
15	Arsenic (As)	0.009	mg/l	APHA- 3125 B By ICP-MS
16	Mercury (as Hg)	BDL(MDL 0.0005)	mg/l	APHA- 3125 B By ICP-MS
17	Cadmium (as Cd)	BDL(MDL 0.001)	mg/l	APHA- 3125 B By ICP-MS
18	Fluoride (as F)	BDL(MDL0.1)	mg/l	IS 3025 (Part 60)
19	Total Phosphate	0.2	mg/l	APHA 4500-P
20	Chloride (as Cl)	73	mg/l	IS 3025 (Part 32)
21	Sulphate (as SO ₄)	216	mg/l	IS 3025 (Part 24)
22	Turbidity	212	NTU	IS 3025 (Part 10)
23	Total Coliform	7.9 x 10 ²	MPN/100 ml	IS 1622 : 1981
24	Nitrate (as NO ₃)	14.2	mg/l	IS 3025 (Part 34)
25	Alkalinity (as CaCO ₃)	435	mg/l	IS 3025 (Part 23)
26	Sodium (as Na)	259	mg/l	IS 3025 (Part 45)
27	Potassium (as K)	8.1	mg/l	IS 3025 (Part 45)
28	Calcium (as Ca)	30	mg/l	IS 3025 (Part 40)



Dated :

ULR : TC611722000001463F

Sample Registration No.

: PBTI/FA0/200822/001537

Sample code given by customer

: Borewell Near Parking Area of M/s Malbros International Private Limited,
Mansoorwala, Zira, Ferozepur, 2-A to 2-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
29	Magnesium (as Mg)	28	mg/l	IS 3025 (part 46)
30	Conductivity	1515	us/cm	APHA 2510-B
31	Hardness Total (as CaCO ₃)	190	mg/l	IS 3025 (Part 21)
32	Sodium Adsorption Ratio	8.1		IS 11624: 1986
33	Total Fixed Dissolved Solids	810	mg/l	IS 3025 (Part 18)
34	Boron (as B)	0.577	mg/l	APHA- 3125 B By ICP-MS

BDL:Below Detection Limit

MDL:Method Detection Limit

Handwritten signature and date
31/8/2022

Authorized Signatory
Punjab Biotechnology Incubator Lab



Punjab Biotechnology Incubator

(Department of Science, Technology & Environment, GoP)

A Component of Knowledge City, Mohali

An NABL Accredited State Analytical Agency



BIS Approved | FSSAI Empanelled | EIC Approved | APEDA Approved | PPCB Approved | Notified State Water Lab - GoP | Notified Under EPA - GoI



No.PBTI/FA0/200822/001539

17596

Dated : 31/08/22

TEST REPORT

ULR : TC611722000001481F

Sample Registration No. : PBTI/FA0/200822/001539

Sample code given by customer : Tubewell near new Coral Reservoir Inside the Industry, Depth- 600 feet-650 feet, 1-A to 1-E

Issued to:

Punjab Pollution Control Board,
Regional Office, Ferozepur Road, Dhara Singh Colony,
Near St. No.2,
Faridkot.
PUNJAB

SAMPLE PARTICULARS

Ycur Ref. No. : Letter No. SPL/AEE-1/2, dt. 19/08/2022

Date of Receipt : 20/08/2022

Name/Nature of sample : **Ground Water**

Sample code given by customer : Tubewell near new Coral Reservoir Inside the Industry, Depth- 600 feet-650 feet, 1-A to 1-E

Condition of the sample : Intact coded lac sealed sample under refrigerated and preserved conditions

Brand name : NA

Qty/Pkg. : 8.050L approx in plastic cans (2L X 4) and plastic container (50ml)

Batch No.: : NA

Date of Manufacture : : NA/NM

Sampling Method : Sample not drawn by PBTi. Sample drawn by PPCB

Test Start Date : 20/08/2022

Test Completion Date : 31/08/2022

Authorized Signatory

Punjab Biotechnology Incubator Lab

Employee Code: 16

Note:

1. The above results pertain only to the sample tested.
2. There is no addition, deviation or exclusion from the method mentioned.
3. The report shall not be used for advertising or any legal purpose without written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
4. This report cannot be re-produced, except when in full, without the written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
5. Perishable samples will be destroyed after testing, others after one month from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.

Format No : PBTI/F/7.8/02

Revision No. 00 & 25.04.2019

Page No. 1/3

National Referral Lab for LMO/GMO Detection under Seeds Act 1966 | Referral Lab under Food Safety and Standards Act 2006

C-134, Industrial Focal Point, Phase-VIII, SAS Nagar (Mohali) - 160 071, Punjab, India

Phone : +91-172-5020893, 5093595, E-mail : pbt2005@yahoo.com

Website : www.pbttilabs.com, /pbt_i_dst



Dated :

ULR : TC611722000001481F

Sample Registration No. : PBTI/FA0/200822/001539

Sample code given by customer : Tubewell near new Coral Reservoir Inside the Industry, Depth- 600 feet-650 feet, 1-A to 1-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
1	pH	7		IS 3025 (Part 11)
2	Total Suspended Solids (TSS)	4.6	mg/l	IS 3025 (Part 17)
3	Total Dissolved Solids (TDS)	1605	mg/l	IS 3025 (Part 16)
4	Biochemical Oxygen Demand (BOD ₃ at 27°C)	<1	mg/l	IS 3025 (Part 44)
5	Chemical Oxygen Demand (COD) Total	9	mg/l	IS 3025 (Part 58)
6	Faecal Coliform, MPN/100ml	<1	MPN/100ml	IS 1622: 1981
7	Nickel (as Ni)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
8	Zinc (as Zn)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
9	Copper (as Cu)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
10	Lead (as Pb)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
11	Chromium (as Cr)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
12	Iron (as Fe)	BDL(MDL 0.01)	mg/l	APHA 3125 B By ICP-MS
13	Total Kjeldahl Nitrogen (TKN)	0.8	mg/l	IS 3025 (Part 34)
14	Ammonia (NH ₃)	BDL (MDL:0.5)	mg/l	IS 3025 (Part 34)
15	Arsenic (As)	BDL(MDL 0.005)	mg/l	APHA- 3125 B By ICP-MS
16	Mercury (as Hg)	BDL(MDL 0.0005)	mg/l	APHA- 3125 B By ICP-MS
17	Cadmium (as Cd)	BDL(MDL 0.001)	mg/l	APHA- 3125 B By ICP-MS
18	Fluoride (as F)	1.35	mg/l	IS 3025 (Part 60)
19	Total Phosphate	0.6	mg/l	APHA 4500-P
20	Chloride (as Cl)	178	mg/l	IS 3025 (Part 32)
21	Sulphate (as SO ₄)	240	mg/l	IS 3025 (Part 24)
22	Turbidity	1.06	NTU	IS 3025 (Part 10)
23	Total Coliform	348	MPN/100 ml	IS 1622 : 1981
24	Nitrate (as NO ₃)	6.6	mg/l	IS 3025 (Part 34)



Dated :

ULR : TC611722000001481F

Sample Registration No.

: PBTI/FA0/200822/001539

Sample code given by customer

: Tubewell near new Coral Reservoir Inside the Industry, Depth- 600 feet-650 feet, 1-A to 1-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
25	Alkalinity (as CaCO ₃)	785	mg/l	IS 3025 (Part 23)
26	Sodium (as Na)	345	mg/l	IS 3025 (Part 45)
27	Potassium (as K)	5.8	mg/l	IS 3025 (Part 45)
28	Calcium (as Ca)	22	mg/l	IS 3025 (Part 40)
29	Magnesium (as Mg)	28	mg/l	IS 3025 (part 46)
30	Conductivity	2520	us/cm	APHA 2510-B
31	Hardness Total (as CaCO ₃)	170	mg/l	IS 3025 (Part 21)
32	Sodium Adsorption Ratio	11.5		IS 11624: 1986
33	Total Fixed Dissolved Solids	1503	mg/l	IS 3025 (Part 18)
34	Boron (as B)	1.27	mg/l	APHA- 3125 B By ICP-MS

BDL:Below Detection Limit

MDL:Method Detection Limit

X/Lu
31/8/2022

Authorized Signatory
Punjab Biotechnology Incubator Lab

Punjab Biotechnology Incubator

(Department of Science, Technology & Environment, GoP)

A Component of Knowledge City, Mohali

An NABL Accredited State Analytical Agency



TC-6117



BIS Approved | FSSAI Empanelled | EIC Approved | APEDA Approved | PPCB Approved | Notified State Water Lab - GoP | Notified Under EPA - G



No.PBTI/FA0/200822/001540

1599

Dated : 31/08/2022

TEST REPORT

ULR : TC611722000001482F

Sample Registration No. : PBTI/FA0/200822/001540

Sample code given by customer : Tubewell near Bottling Plant Inside the Industry, Depth- 600 feet-650 feet, 2-A to 2-E

Issued to:

Punjab Pollution Control Board,
Regional Office, Ferozepur Road, Dhara Singh Colony,
Near St. No.2,
Faridkot,
PUNJAB

SAMPLE PARTICULARS

Your Ref. No. : Letter No. SPL/AEE-1/2, dt. 19/08/2022
Date of Receipt : 20/08/2022
Name/Nature of sample : Ground Water
Sample code given by customer : Tubewell near Bottling Plant Inside the Industry, Depth- 600 feet-650 feet, 2-A to 2-E
Condition of the sample : Intact coded lac sealed sample under refrigerated and preserved conditions
Brand name : NA
Qty/Pkg. : 8.050L approx in plastic cans (2L X 4) and plastic container (50ml)
Batch No.: : NA
Date of Manufacture : : NA/NM
Sampling Method : : Sample not drawn by PBTi. Sample drawn by PPCB
Test Start Date : : 20/08/2022
Test Completion Date : : 31/08/2022

[Signature]
31/8/2022

Authorized Signatory
Punjab Biotechnology Incubator Lab
Employee Code: 16

Note:

1. The above results pertain only to the sample tested.
2. There is no addition, deviation or exclusion from the method mentioned.
3. The report shall not be used for advertising or any legal purpose without written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
4. This report cannot be re-produced, except when in full, without the written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
5. Perishable samples will be destroyed after testing, others after one month from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.

Format No : PBTI/F/7.8/02
Revision No. 00 & 25.04.2019

Page No. 1/3

National Referral Lab for LMO/GMO Detection under Seeds Act 1966 | Referral Lab under Food Safety and Standards Act 200

C-134, Industrial Focal Point, Phase-VIII, SAS Nagar (Mohali) - 160 071, Punjab, India

Phone : +91-172-5020893, 5093595, E-mail : pbt2005@yahoo.com

Website : www.pbttilabs.com, /pbt_dst



Dated :

ULR : TC611722000001482F

Sample Registration No. : PBT/FA0/200822/001540

Sample code given by customer : Tubewell near Bottling Plant inside the Industry, Depth- 600 feet-650 feet, 2-A to 2-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
1	pH	7.20		IS 3025 (Part 11)
2	Total Suspended Solids (TSS)	5.2	mg/l	IS 3025 (Part 17)
3	Total Dissolved Solids (TDS)	1023	mg/l	IS 3025 (Part 16)
4	Biochemical Oxygen Demand (BOD ₅ at 27°C)	<1	mg/l	IS 3025 (Part 44)
5	Chemical Oxygen Demand (COD) Total	5	mg/l	IS 3025 (Part 58)
6	Faecal Coliform, MPN/100ml	<1	MPN/100ml	IS 1622: 1981
7	Nickel (as Ni)	0.009	mg/l	APHA 3125 B By ICP-MS
8	Zinc (as Zn)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
9	Copper (as Cu)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
10	Lead (as Pb)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
11	Chromium (as Cr)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
12	Iron (as Fe)	0.02	mg/l	APHA 3125 B By ICP-MS
13	Total Kjeldahl Nitrogen (TKN)	1	mg/l	IS 3025 (Part 34)
14	Ammonia (NH ₃)	BDL (MDL:0.2)	mg/l	IS 3025 (Part 34)
15	Arsenic (As)	BDL(MDL 0.005)	mg/l	APHA- 3125 B By ICP-MS
16	Mercury (as Hg)	BDL(MDL 0.0005)	mg/l	APHA- 3125 B By ICP-MS
17	Cadmium (as Cd)	BDL(MDL 0.001)	mg/l	APHA- 3125 B By ICP-MS
18	Fluoride (as F)	0.62	mg/l	IS 3025 (Part 60)
19	Total Phosphate	0.3	mg/l	APHA 4500-P
20	Chloride (as Cl)	111	mg/l	IS 3025 (Part 32)
21	Sulphate (as SO ₄)	215	mg/l	IS 3025 (Part 24)
22	Turbidity	0.69	NTU	IS 3025 (Part 10)
23	Total Coliform	11	cfu/ml/MPN /100 ml	IS 1622 : 1981
24	Nitrate (as NO ₃)	2.8	mg/l	IS 3025 (Part 34)
25	Alkalinity (as CaCO ₃)	240	mg/l	IS 3025 (Part 23)



Dated :

ULR : TC611722000001482F

Sample Registration No.

: PBTI/FA0/200822/001540

Sample code given by customer

: Tubewell near Bottling Plant Inside the Industry, Depth- 600 feet-650 feet, 2-A to 2-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
26	Sodium (as Na)	223	mg/l	IS 3025 (Part 45)
27	Potassium (as K)	3.2	mg/l	IS 3025 (Part 45)
28	Calcium (as Ca)	22	mg/l	IS 3025 (Part 40)
29	Magnesium (as Mg)	12	mg/l	IS 3025 (part 46)
30	Conductivity	1628	us/cm	APHA 2510-B
31	Hardness Total (as CaCO ₃)	105	mg/l	IS 3025 (Part 21)
32	Sodium Adsorption Ratio	9.4		IS 11624: 1986
33	Total Fixed Dissolved Solids	976	mg/l	IS 3025 (Part 18)
34	Boron (as B)	0.47	mg/l	APHA- 3125 B By ICP-MS

BDL:Below Detection Limit

MDL:Method Detection Limit

[Handwritten Signature]
31/8/22

Authorized Signatory
Punjab Biotechnology Incubator Lab



Punjab Biotechnology Incubator

(Department of Science, Technology & Environment, GoP)

A Component of Knowledge City, Mohali

An NABL Accredited State Analytical Agency



BIS Approved | FSSAI Empanelled | EIC Approved | APEDA Approved | PPCB Approved | Notified State Water Lab - GoP | Notified Under EPA - GoI



No.PBTI/FA0/200822/001541

1598

Dated : 31/08/22

ULR : TC611722000001483F

TEST REPORT

Sample Registration No. : PBTI/FA0/200822/001541
 Sample code given by customer : Tubewell near Water Treatment Plant Inside the Industry, Depth- 600 feet-650 feet, 3A to 3E

Issued to:

Punjab Pollution Control Board,
 Regional Office, Ferozepur Road, Dhara Singh Colony,
 Near St. No.2,
 Faridkot.
 PUNJAB

SAMPLE PARTICULARS

Your Ref. No. : Letter No. SPL/AEE-1/2, dt. 19/08/2022
 Date of Receipt : 20/08/2022
 Name/Nature of sample : Ground Water
 Sample code given by customer : Tubewell near Water Treatment Plant Inside the Industry, Depth- 600 feet-650 feet, 3A to 3E
 Condition of the sample : Intact coded lac sealed sample under refrigerated and preserved conditions
 Brand name : NA
 Qty/Pkg. : 8.050L approx in plastic cans (2L X 4) and plastic container (50ml)
 Batch No.: : NA
 Date of Manufacture : : NA/NM
 Sampling Method : : Sample not drawn by PBTI. Sample drawn by PPCB
 Test Start Date : : 20/08/2022
 Test Completion Date : : 31/08/2022

[Signature]
 31/8/2022
 Authorized Signatory
 Punjab Biotechnology Incubator Lab
 Employee Code: 16

Note:

- The above results pertain only to the sample tested.
- There is no addition, deviation or exclusion from the method mentioned.
- The report shall not be used for advertising or any legal purpose without written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
- This report cannot be re-produced, except when in full, without the written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
- Perishable samples will be destroyed after testing, others after one month from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.

Format No : PBTI/F/7.8/02
 Revision No. 00 & 25.04.2019

Page No. 1/3

National Referral Lab for LMO/GMO Detection under Seeds Act 1966 | Referral Lab under Food Safety and Standards Act 2006

C-134, Industrial Focal Point, Phase-VIII, SAS Nagar (Mohali) - 160 071, Punjab, India

Phone : +91-172-5020893, 5093595, E-mail : pbt2005@yahoo.com

Website : www.pbtlabs.com, /pbt_dst



Dated :

ULR : TC611722000001483F

Sample Registration No. : PBTI/FA0/200822/001541

Sample code given by customer : Tubewell near Water Treatment Plant inside the Industry, Depth- 600 feet-650 feet, 3A to 3E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
1	pH	7.4		IS 3025 (Part 11)
2	Total Suspended Solids (TSS)	1.6	mg/l	IS 3025 (Part 17)
3	Total Dissolved Solids (TDS)	553	mg/l	IS 3025 (Part 16)
4	Biochemical Oxygen Demand (BOD ₃ at 27°C)	<1	mg/l	IS 3025 (Part 44)
5	Chemical Oxygen Demand (COD) Total	2	mg/l	IS 3025 (Part 58)
6	Faecal Coliform, MPN/100ml	240x10 ¹	MPN/100ml	IS 1622: 1981
7	Nickel (as Ni)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
8	Zinc (as Zn)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
9	Copper (as Cu)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
10	Lead (as Pb)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
11	Chromium (as Cr)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
12	Iron (as Fe)	BDL(MDL 0.01)	mg/l	APHA 3125 B By ICP-MS
13	Total Kjeldahl Nitrogen (TKN)	0.6	mg/l	IS 3025 (Part 34)
14	Ammonia (NH ₃)	BDL(MDL:0.5)	mg/l	IS 3025 (Part 34)
15	Arsenic (As)	0.009	mg/l	APHA- 3125 B By ICP-MS
16	Mercury (as Hg)	BDL(MDL 0.0005)	mg/l	APHA- 3125 B By ICP-MS
17	Cadmium (as Cd)	BDL(MDL 0.001)	mg/l	APHA- 3125 B By ICP-MS
18	Fluoride (as F)	1.11	mg/l	IS 3025 (Part 60)
19	Total Phosphate	0.5	mg/l	APHA 4500-P
20	Chloride (as Cl)	36	mg/l	IS 3025 (Part 32)
21	Sulphate (as SO ₄)	130	mg/l	IS 3025 (Part 24)
22	Turbidity	BDL(MDL0.5)	NTU	IS 3025 (Part 10)
23	Total Coliform	542x10 ¹	MPN/100 ml	IS 1622 : 1981
24	Nitrate (as NO ₃)	4.7	mg/l	IS 3025 (Part 34)
25	Alkalinity (as CaCO ₃)	315	mg/l	IS 3025 (Part 23)



Dated :

ULR : TC611722000001483F

Sample Registration No.

: PBTI/FA0/200822/001541

Sample code given by customer

: Tubewell near Water Treatment Plant Inside the Industry, Depth- 600 feet-650 feet, 3A to 3E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
26	Sodium (as Na)	80	mg/l	IS 3025 (Part 45)
27	Potassium (as K)	2	mg/l	IS 3025 (Part 45)
28	Calcium (as Ca)	8	mg/l	IS 3025 (Part 40)
29	Magnesium (as Mg)	3	mg/l	IS 3025 (part 46)
30	Conductivity	992	us/cm	APHA 2510-B
31	Hardness Total (as CaCO ₃)	32	mg/l	IS 3025 (Part 21)
32	Sodium Adsorption Ratio	6.1		IS 11624: 1986
33	Total Fixed Dissolved Solids	489	mg/l	IS 3025 (Part 18)
34	Boron (as B)	0.48	mg/l	APHA- 3125 B By ICP-MS

BDL: Below Detection Limit

MDL:Method Detection Limit

[Signature]
31/8/2022

Authorized Signatory
Punjab Biotechnology Incubator Lab



Punjab Biotechnology Incubator

(Department of Science, Technology & Environment, GoP)

A Component of Knowledge City, Mohali

An NABL Accredited State Analytical Agency



TC-6117

BIS Approved | FSSAI Empanelled | EIC Approved | APEDA Approved | PPCB Approved | Notified State Water Lab - GoP | Notified Under EPA - Govt



No.PBTI/FA0/200822/001542

11599

Dated : 31/08/22

ULR : TC611722000001484F

TEST REPORT

Sample Registration No. : PBTI/FA0/200822/001542
Sample code given by customer : Tubewell near Transport Office inside the Industry, Depth- 600 feet-650 feet, 4-A to 4-E

Issued to:

Punjab Pollution Control Board,
Regional Office, Ferozepur Road, Dhara Singh Colony,
Near St. No.2,
Faridkot.
PUNJAB

SAMPLE PARTICULARS

Your Ref. No. : Letter No. SPL/AEE-1/2, dt. 19/08/2022
Date of Receipt : 20/08/2022
Name/Nature of sample : Ground Water
Sample code given by customer : Tubewell near Transport Office inside the Industry, Depth- 600 feet-650 feet, 4-A to 4-E
Condition of the sample : Intact coded lac sealed sample under refrigerated and preserved conditions
Brand name : NA
Qty/Pkg. : 8.050L approx in plastic cans (2L X 4) and plastic container (50ml)
Batch No. : NA
Date of Manufacture : NA/NM
Sampling Method : Sample not drawn by PBTi. Sample drawn by PPCB
Test Start Date : 20/08/2022
Test Completion Date : 31/08/2022

[Signature]
31/8/2022

Authorized Signatory

Punjab Biotechnology Incubator Lab

Employee Code: 16

Note:

1. The above results pertain only to the sample tested.
2. There is no addition, deviation or exclusion from the method mentioned.
3. The report shall not be used for advertising or any legal purpose without written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
4. This report cannot be re-produced, except when in full, without the written permission from the Chief Executive Officer, Punjab Biotechnology Incubator.
5. Perishable samples will be destroyed after testing, others after one month from the date of issue of the report, unless otherwise agreed with the customer or as required by the applicable regulations.

Format No : PBTI/F/7.8/02
Revision No. 00 & 25.04.2019

Page No. 1/3

National Referral Lab for LMO/GMO Detection under Seeds Act 1966 | Referral Lab under Food Safety and Standards Act 2006

C-134, Industrial Focal Point, Phase-VIII, SAS Nagar (Mohali) - 160 071, Punjab, India

Phone : +91-172-5020893, 5093595, E-mail : pbt2005@yahoo.com

Website : www.pbtlabs.com, /pbt_dst



Dated :

ULR : TC611722000001484F

Sample Registration No.

: PBTI/FA0/200822/001542

Sample code given by customer

: Tubewell near Transport Office inside the Industry, Depth- 600 feet-650 feet, 4-A to 4-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
1	pH	7.50		IS 3025 (Part 11)
2	Total Suspended Solids (TSS)	447	mg/l	IS 3025 (Part 17)
3	Total Dissolved Solids (TDS)	798	mg/l	IS 3025 (Part 16)
4	Biochemical Oxygen Demand (BOD ₃ at 27°C)	<1	mg/l	IS 3025 (Part 44)
5	Chemical Oxygen Demand (COD) Total	28	mg/l	IS 3025 (Part 58)
6	Faecal Coliform, MPN/100ml	<1	MPN/100ml	IS 1622: 1981
7	Nickel (as Ni)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
8	Zinc (as Zn)	0.01	mg/l	APHA 3125 B By ICP-MS
9	Copper (as Cu)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
10	Lead (as Pb)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
11	Chromium (as Cr)	BDL(MDL 0.005)	mg/l	APHA 3125 B By ICP-MS
12	Iron (as Fe)	0.69	mg/l	APHA 3125 B By ICP-MS
13	Total Kjeldahl Nitrogen (TKN)	1	mg/l	IS 3025 (Part 34)
14	Ammonia (NH ₃)	BDL (MDL: 0.2)	mg/l	IS 3025 (Part 34)
15	Arsenic (As)	0.009	mg/l	APHA- 3125 B By ICP-MS
16	Mercury (as Hg)	BDL(MDL 0.0005)	mg/l	APHA- 3125 B By ICP-MS
17	Cadmium (as Cd)	BDL(MDL 0.001)	mg/l	APHA- 3125 B By ICP-MS
18	Fluoride (as F)	0.1	mg/l	IS 3025 (Part 60)
19	Total Phosphate	0.5	mg/l	APHA 4500-P
20	Chloride (as Cl)	49	mg/l	IS 3025 (Part 32)
21	Sulphate (as SO ₄)	185	mg/l	IS 3025 (Part 24)
22	Turbidity	177	NTU	IS 3025 (Part 10)
23	Total Coliform	161	MPN/100 ml	IS 1622 : 1981
24	Nitrate (as NO ₃)	5.6	mg/l	IS 3025 (Part 34)
25	Alkalinity (as CaCO ₃)	355	mg/l	IS 3025 (Part 23)
26	Sodium (as Na)	79.2	mg/l	IS 3025 (Part 45)



Dated :

ULR : TC611722000001484F

Sample Registration No.

: PBTI/FA0/200822/001542

Sample code given by customer

: Tubewell near Transport Office inside the Industry, Depth- 600 feet-650 feet, 4-A to 4-E

Test Results

S.No.	Parameter	Results	Units	Standard / Specification / Method Followed
27	Potassium (as K)	3	mg/l	IS 3025 (Part 45)
28	Calcium (as Ca)	12	mg/l	IS 3025 (Part 40)
29	Magnesium (as Mg)	3.4	mg/l	IS 3025 (part 46)
30	Conductivity	1167	us/cm	APHA 2510-B
31	Hardness Total (as CaCO ₃)	44	mg/l	IS 3025 (Part 21)
32	Sodium Adsorption Ratio	5.2		IS 11624: 1986
33	Total Fixed Dissolved Solids	632	mg/l	IS 3025 (Part 18)
34	Boron (as B)	0.59	mg/l	APHA- 3125 B By ICP-MS

BDL: Below Detection Limit

MDL:Method Detection Limit

Xit
3/18/2022

Authorized Signatory
Punjab Biotechnology Incubator Lab



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012218F

TEST REPORT

NO : C1/0000301526

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 07-09-2022
Job No : 2208-1-411-1633
Booking No : RG2223/1/4949
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 18-08-2022

Sample Description:

Job No. 2208-1-411-1633

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE: 2-A, LOCATION: BOREWELL NEAR PARKING AREA OF M/S, MALBROS INTERNATIONAL PVT. LTD., MANSOORWAL, ZIRA, FEROZEPUR; COORDINATES: 30°55'00" N, 74°57'21" E; COLOUR AND ODOUR: BEIGE/SANDY AND ODOURLESS, SUBJECT: REGARDING ANALYSIS OF GROUND WATER SAMPLES COLLECTED ON 18.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD IN THE PRESENCE OF NGT MONITORING COMMITTEE" WAS RECEIVED. SEALED THUS

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

<u>S.No</u>	<u>Tests</u>	<u>Results</u>	<u>Protocol</u>
1	pH	7.8	IS: 3025 Pt-11-2022
2	Conductivity, $\mu\text{S/cm}$	1630	IS: 3025 Pt-14-2019
3	Turbidity, NTU	820	IS: 3025 Pt-10-1984, RA 2017
4	Total Dissolved Solids, mg/l	1060	IS:3025 Pt-16-1984, RA 2017
5	Total Suspended Solids, mg/l	824	IS: 3025 Pt-17-1984, RA 2017
6	Total Hardness (as CaCO_3), mg/l	173	IS: 3025 Pt-21-2009, RA 2019
7	Total Alkalinity (as CaCO_3), mg/l	387	IS: 3025 Pt-23-1986, RA 2019
8	Sodium Adsorption Ratio (SAR), (millimole/litre) ^{1/2}	10.7	IS: 11624:2019 guidelines
9	Sulphate (as SO_4), mg/l	366	IS: 3025 Pt-24-1983, RA 2019
10	% Sodium	80	As per Customer Protocol

Aash
AUTHORISED SIGNATORY
EMPLOYEE CODE: (4105)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012218F

TEST REPORT

NO : C1/0000301526

11	Biochemical Oxygen Demand (BOD), mg/l (at 20°C for 5 days)	4	APHA 23rd Ed., 5210
12	Chlorides (as Cl), mg/l	76	IS: 3025 Pt-32-1988, RA 2019
13	Fluoride (as F), mg/l	0.8	APHA 23rd Ed.4500 F
14	Phosphate (as P), mg/l	0.8	APHA 23rd Ed., 4500-P
15	Total Fixed Solids, mg/l	1660	IS: 3025 Pt-18-1984, RA2021
16	Nitrates (as N), mg/l (Detection Limit: 2 mg/l)	Not Detected	IS: 3025 Pt-34-1988, RA 2019
17	Boron (as B), mg/l	0.8	IS: 3025 Pt-57-2005, RA 2017

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 07.09.2022

End of Report


AUTHORISED SIGNATORY
EMPLOYEE CODE: (4105)

GC-01(Rev.05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301527

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH,AEE

Date : 07-09-2022
Job No : 2208-1-411-1632
Booking No : RG2223/1/4949
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 18-08-2022

Sample Description:

Job No. 2208-1-411-1632

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE: 1-A, LOCATION: BOREWELL INSTALLED IN VILLAGE MAHIAN WALA KALAN, ZIRA, FEROZEPUR; COORDINATES: 30°56'28" N, 74°57'01" E; DEPTH OF BOREWELL: 670 FT; COLOUR AND ODOUR: COLOURLESS AND ODOURLESS, SUBJECT: REGARDING ANALYSIS OF GROUND WATER SAMPLES COLLECTED ON 18.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD IN THE PRESENCE OF NGT MONITORING COMMITTEE SEALED IN PRESENCE OF SH. JASBIR SINGH, PRESIDENT, BABA DUNI CHAND JI COMMITTEE" WAS RECEIVED. SEALED THUS

PPCB
AEE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Protocol
1	pH	7.8	IS: 3025 Pt-11-2022
2	Conductivity, $\mu\text{S}/\text{cm}$	1585	IS: 3025 Pt-14-2019
3	Turbidity, NTU	1	IS: 3025 Pt-10-1984, RA 2017
4	Total Dissolved Solids, mg/l	1024	IS:3025 Pt-16-1984, RA 2017
5	Total Suspended Solids, mg/l	2	IS: 3025 Pt-17-1984, RA 2017
6	Total Hardness (as CaCO_3), mg/l	118	IS: 3025 Pt-21-2009, RA 2019
7	Total Alkalinity (as CaCO_3), mg/l	254	IS: 3025 Pt-23-1986, RA 2019
8	Sodium Adsorption Ratio (SAR), (millimole/litre) ^{1/2}	12.9	IS: 11624:2019 guidelines
9	Sulphate (as SO_4), mg/l	413	IS: 3025 Pt-24-1983, RA 2019
10	% Sodium	86	As per Customer Protocol

Aash

AUTHORISED SIGNATORY
EMPLOYEE CODE:(4105)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301527

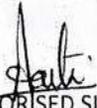
11	Biochemical Oxygen Demand (BOD), mg/l (at 20°C for 5 days) (Detection Limit: 1 mg/l)	Not Detected	APHA 23rd Ed., 5210
12	Chlorides (as Cl), mg/l	95	IS: 3025 Pt-32-1988, RA 2019
13	Fluoride (as F), mg/l	0.8	APHA 23rd Ed.4500 F
14	Phosphate (as P), mg/l	0.2	APHA 23rd Ed., 4500-P
15	Total Fixed Solids, mg/l	884	IS: 3025 Pt-18-1984, RA2021
16	Nitrates (as N), mg/l (Detection Limit: 2 mg/l)	Not Detected	IS: 3025 Pt-34-1988, RA 2019
17	Boron (as B), mg/l	0.7	IS: 3025 Pt-57-2005, RA 2017

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 07.09.2022

End of Report


AUTHORISED SIGNATORY
EMPLOYEE CODE: (4105)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
gad@shriraminstitute.org

ULR NO. : TC544422000012181F

TEST REPORT

NO : C1/0000301425

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind-Attn: ER. AUSHPREET SINGH,AEE

Date : 06-09-2022
Job No : 2208-1-411-1652
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1652

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 3-C, LOCATION: TUBEWELL NEAR WATER TREATMENT PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- 30.9206398, 74.9607944, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

SNo.	Tests	Results	Protocol
1	Chemical Oxygen Demand, mg/l	16	APHA 23rd Ed.5220
2	Ammoniacal Nitrogen (as N), mg/l	0.1	IS: 3025 Pt-34-1988, RA 2019
3	Total Kjeldahl Nitrogen (as N), mg/l	0.8	IS: 3025 Pt-34-1988, RA 2019

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 06.09.2022

—End of report —

AUTHORISED SIGNATORY
EMPLOYEE CODE:(688)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
gad@shriraminstitute.org

ULR NO. : TC544422000012182F

TEST REPORT

NO : C1/0000301427

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH,AEE

Date : 06-09-2022
Job No : 2208-1-411-1653
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1653

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 4-C, LOCATION: TUBEWELL NEAR TRANSPORT OFFICE INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'10"N, 74°57'34"E, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- LIGHT BEIGE SANDY & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

SNo.	Tests	Results	Protocol
1	Chemical Oxygen Demand, mg/l	48	APHA 23rd Ed.5220
2	Ammoniacal Nitrogen (as N), mg/l	0.4	IS: 3025 Pt-34-1988, RA 2019
3	Total Kjeldahl Nitrogen (as N), mg/l	1.2	IS: 3025 Pt-34-1988, RA 2019

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 06.09.2022

—End of report —

AUTHORISED SIGNATORY
EMPLOYEE CODE:(6083)

GC-01(Rev-05)

1/1

Note: The results relate only to the items tested / calibrated above.

Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
gad@shriraminstitute.org

ULR NO. : TC544422000012183F

TEST REPORT

NO : C1/0000301428

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH
COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1656
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1656

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 3-D, LOCATION: TUBEWELL NEAR WATER TREATMENT PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- 30.9206398, 74.9607944, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH.SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Detection Limit	Protocol
1	Nickel (as Ni), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
2	Copper (as Cu), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
3	Zinc (as Zn), mg/l	0.04	-	IS: 3025 Pt-2-2019
4	Lead (as Pb), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
5	Chromium (as Cr), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
6	Iron (as Fe), mg/l	0.03	-	IS: 3025 Pt-2-2019

AUTHORISED SIGNATORY
EMPLOYEE CODE: (6083)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012183F

TEST REPORT

NO : C1/0000301428



7	Cadmium (as Cd), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
8	Arsenic (as As), mg/l	0.01	-	IS: 3025 Pt-37-1988, RA 2019
9	Mercury (as Hg), mg/l	Not Detected	0.001	APHA 23rd Ed.3112

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 06.09.2022

End of Report


AUTHORISED SIGNATORY
EMPLOYEE CODE: (683)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012184F

TEST REPORT

NO : C1/0000301429

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZPUR ROAD, NEAR DHARA SINGH
COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1657
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1657

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 4-D, LOCATION: TUBEWELL NEAR TRANSPORT OFFICE INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'10"N, 74°57'34"E, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- LIGHT BEIGE SANDY & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Detection Limit	Protocol
1	Nickel (as Ni), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
2	Copper (as Cu), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
3	Zinc (as Zn), mg/l	0.01	-	IS: 3025 Pt-2-2019
4	Lead (as Pb), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
5	Chromium (as Cr), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
6	Iron (as Fe), mg/l	0.6	-	IS: 3025 Pt-2-2019

AUTHORISED SIGNATORY
EMPLOYEE CODE: (6083)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012184F

TEST REPORT

NO : C1/0000301429



7	Cadmium (as Cd), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
8	Arsenic (as As), mg/l	Not Detected	0.005	IS: 3025 Pt-37-1988, RA 2019
9	Mercury (as Hg), mg/l	Not Detected	0.001	APHA 23rd Ed.3112

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 06.09.2022

End of Report

INDUST


AUTHORISED SIGNATORY
EMPLOYEE CODE:(6083)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi - 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012185F

TEST REPORT

NO : C1/0000301431

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1660
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1660

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 3-E, LOCATION: TUBEWELL NEAR WATER TREATMENT PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- 30.9206398, 74.9607944, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

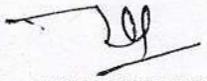
PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

<u>SNo.</u>	<u>Tests</u>	<u>Results</u>	<u>Protocol</u>
1	MPN Coliform per 100 ml	900 Organisms	IS: 1622:1981, RA-2019
2	MPN Fecal Coliform per 100 ml	345 Organisms	IS: 1622:1981, RA-2019

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 06.09.2022

—End of report —


AUTHORISED SIGNATORY
EMPLOYEE CODE: (6082)

GC-01(Rev-05)

1/1

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012150F

TEST REPORT

NO : C1/0000301335

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH
COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH,AEE

Date : 06-09-2022
Job No : 2208-1-411-1647
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1647

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 2-B, LOCATION: TUBEWELL NEAR BATTERY PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- (30.9209009, 74.9633763); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Detection Limit	Protocol
1	Calcium (as Ca), mg/l	16	-	IS: 3025 Pt-40-1981,RA 2019
2	Magnesium (as Mg), mg/l	12	-	IS: 3025 Pt-46-1984,RA 2019
3	Sodium (as Na), mg/l	340	-	APHA 23rd Ed., 3111
4	Potassium (as K), mg/l	4	-	APHA 23rd Ed., 3111

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 05.09.2022

End of Report

AUTHORISED SIGNATORY
EMPLOYEE CODE:(6982)

GC-01(Rev-05)

1/1

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi - 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012151F

TEST REPORT

NO : C1/0000301336

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO.2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1650
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1650

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 1-C, LOCATION: TUBEWELL NEAR NEW CANAL RESERVOIR INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'11" N, 74°57'34" E (30.9199667, 74.9596159); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

<u>SNo.</u>	<u>Tests</u>	<u>Results</u>	<u>Protocol</u>
1	Chemical Oxygen Demand, mg/l	12	APHA 23rd Ed.5220
2	Ammoniacal Nitrogen (as N), mg/l	0.3	IS: 3025 Pt-34-1988, RA 2019
3	Total Kjeldahl Nitrogen (as N), mg/l	0.9	IS: 3025 Pt-34-1988, RA 2019

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 05.09.2022

—End of report —

AUTHORISED SIGNATORY
EMPLOYEE CODE:(685)

GC-01(Rev-05)

1/1

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860 Fax : 91-11-27667207
See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi - 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012153F

TEST REPORT

NO : C1/0000301338

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH
COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1654
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1654

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 1-D, LOCATION: TUBEWELL NEAR NEW CANAL RESERVOIR INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'11" N, 74°57'34"E (30.9199667, 74.9596159); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Detection Limit	Protocol
1	Nickel (as Ni), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
2	Copper (as Cu), mg/l	0.01	-	IS: 3025 Pt-2-2019
3	Zinc (as Zn), mg/l	0.02	-	IS: 3025 Pt-2-2019
4	Lead (as Pb), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
5	Chromium (as Cr), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
6	Iron (as Fe), mg/l	0.1	-	IS: 3025 Pt-2-2019

AUTHORISED SIGNATORY
EMPLOYEE CODE: (6083)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012153F

TEST REPORT

NO : C1/0000301338

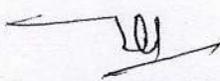


7	Cadmium (as Cd), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
8	Arsenic (as As), mg/l	Not Detected	0.005	IS: 3025 Pt-37-1988, RA 2019
9	Mercury (as Hg), mg/l	Not Detected	0.001	APHA 23rd Ed.3112

DOR: 22.08.2022
DOS : 22.08.2022
DOC: 05.09.2022

End of Report

INDUS


AUTHORISED SIGNATORY
EMPLOYEE CODE: (6062)

GC-01(Rev.05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012149F

TEST REPORT

NO : C1/0000301334

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH
COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1646
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1646

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 1-B, LOCATION: TUBEWELL NEAR NEW CANAL RESERVOIR INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'11" N, 74°57'34"E (30.9199667, 74.9596159); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Detection Limit	Protocol
1	Calcium (as Ca), mg/l	34	-	IS: 3025 Pt-40-1981, RA 2019
2	Magnesium (as Mg), mg/l	22	-	IS: 3025 Pt-46-1984, RA 2019
3	Sodium (as Na), mg/l	528	-	APHA 23rd Ed., 3111
4	Potassium (as K), mg/l	7	-	APHA 23rd Ed., 3111

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 05.09.2022

End of Report

AUTHORISED SIGNATORY
EMPLOYEE CODE: (683)

GC-01(Rev-05)

1/1

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi - 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012154F

TEST REPORT

NO : C1/0000301339

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH
COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1655
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1655

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 2-D, LOCATION: TUBEWELL NEAR BATTERY PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- (30.9209009, 74.9633763); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Detection Limit	Protocol
1	Nickel (as Ni), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
2	Copper (as Cu), mg/l	0.01	-	IS: 3025 Pt-2-2019
3	Zinc (as Zn), mg/l	0.02	-	IS: 3025 Pt-2-2019
4	Lead (as Pb), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
5	Chromium (as Cr), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
6	Iron (as Fe), mg/l	0.06	-	IS: 3025 Pt-2-2019

AUTHORISED SIGNATORY
EMPLOYEE CODE: (6583)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012154F

TEST REPORT

NO : C1/0000301339



7	Cadmium (as Cd), mg/l	Not Detected	0.01	IS: 3025 Pt-2-2019
8	Arsenic (as As), mg/l	0.006	-	IS: 3025 Pt-37-1988, RA 2019
9	Mercury (as Hg), mg/l	Not Detected	0.001	APHA 23rd Ed.3112

DOR: 22.08.2022
DOS : 22.08.2022
DOC: 05.09.2022

End of Report

INDUS

AUTHORISED SIGNATORY
EMPLOYEE CODE: (6083)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

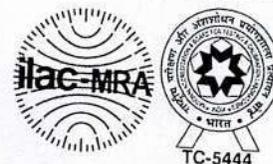
ULR NO. : TC544422000012152F

TEST REPORT

NO : C1/0000301337

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH,AEE

Date : 06-09-2022
Job No : 2208-1-411-1651
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1651

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 2-C, LOCATION: TUBEWELL NEAR BATTERY PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- (30.9209009, 74.9633763); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PPCB
AEE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

SNo.	Tests	Results	Protocol
1	Chemical Oxygen Demand, mg/l	8	APHA 23rd Ed.5220
2	Ammoniacal Nitrogen (as N), mg/l	0.3	IS: 3025 Pt-34-1988, RA 2019
3	Total Kjeldahl Nitrogen (as N), mg/l	1.2	IS: 3025 Pt-34-1988, RA 2019

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 05.09.2022

—End of report —

AUTHORISED SIGNATORY
EMPLOYEE CODE: (682)

GC-01(Rev-05)

1/1

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi - 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC544422000012186F

TEST REPORT

NO : C1/0000301432

Issued To :
Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 06-09-2022
Job No : 2208-1-411-1661
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022



Sample Description:

Job No. 2208-1-411-1661

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 4-E, LOCATION: TUBEWELL NEAR TRANSPORT OFFICE INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'10"N, 74°57'34"E, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- LIGHT BEIGE SANDY & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

PPCB
AAE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

SNo.	Tests	Results	Protocol
1	MPN Coliform per 100 ml	14000 Organisms	IS: 1622:1981, RA-2019
2	MPN Fecal Coliform per 100 ml	940 Organisms	IS: 1622:1981, RA-2019

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 06.09.2022

—End of report—

AUTHORISED SIGNATORY
EMPLOYEE CODE: (685)

GC-01(Rev-05)

1/1

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301717

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH,AEE

Date : 09-09-2022
Job No : 2208-1-411-1642
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022

Sample Description:

Job No. 2208-1-411-1642

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 1-A, LOCATION: TUBEWELL NEAR NEW CANAL RESERVOIR INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'11" N, 74°57'34"E (30.9199667, 74.9596159); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PPLB
AEE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Protocol
1	pH	8.0	IS: 3025 Pt-11-2022
2	Conductivity, μ S /cm	2510	IS: 3025 Pt-14-2019
3	Turbidity, NTU	1	IS: 3025 Pt-10-1984, RA 2017
4	Total Dissolved Solids, mg/l	1545	IS:3025 Pt-16-1984, RA 2017
5	Total Suspended Solids, mg/l (Detection Limit: 1 mg/l)	4	IS: 3025 Pt-17-1984, RA 2017
6	Total Hardness (as CaCO ₃), mg/l	173	IS: 3025 Pt-21-2009, RA 2019
7	Total Alkalinity (as CaCO ₃), mg/l	703	IS: 3025 Pt-23-1986, RA 2019

AUTHORISED SIGNATORY
EMPLOYEE CODE:(6083)

GC-01(Rev.05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301717

8	Sodium Adsorption Ratio (SAR), (millimole/litre) ^{1/2}	11	IS: 11624:2019 guidelines
9	Sulphate (as SO ₄), mg/l	390	IS: 3025 Pt-24-1983, RA 2019
10	% Sodium	81	As per Customer Protocol
11	Biochemical Oxygen Demand (BOD), mg/l (at 20°C for 5 days) (Detection Limit: 1 mg/l)	Not Detected	APHA 23rd Ed., 5210
12	Chlorides (as Cl), mg/l	167	IS: 3025 Pt-32-1988, RA 2019
13	Fluoride (as F), mg/l	1.2	APHA 23rd Ed.4500 F
14	Phosphate (as P), mg/l	0.06	APHA 23rd Ed., 4500-P
15	Total Fixed Solids, mg/l	1449	IS: 3025 Pt-18-1984, RA2021
16	Nitrates (as N), mg/l	2	IS: 3025 Pt-34-1988, RA 2019
17	Boron (as B), mg/l	1.8	IS: 3025 Pt-57-2005, RA 2017

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 09.09.2022

End of Report

AUTHORISED SIGNATORY
EMPLOYEE CODE: (608)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301718

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 09-09-2022
Job No : 2208-1-411-1643
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022

Sample Description: Job No. 2208-1-411-1643

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 2-A, LOCATION: TUBEWELL NEAR BATTERY PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- (30.9209009, 74.9633763); DEPTH OF BOREWELL:-600 FT.-650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATIONS WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI SEALED THUS WAS RECEIVED.

PPCB
AEE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Protocol
1	pH	8.1	IS: 3025 Pt-11-2022
2	Conductivity, $\mu\text{S/cm}$	1685	IS: 3025 Pt-14-2019
3	Turbidity, NTU	1	IS: 3025 Pt-10-1984, RA 2017
4	Total Dissolved Solids, mg/l	1208	IS:3025 Pt-16-1984, RA 2017
5	Total Suspended Solids, mg/l (Detection Limit: 1 mg/l)	3	IS: 3025 Pt-17-1984, RA 2017
6	Total Hardness (as CaCO_3), mg/l	92	IS: 3025 Pt-21-2009, RA 2019
7	Total Alkalinity (as CaCO_3), mg/l	245	IS: 3025 Pt-23-1986, RA 2019

AUTHORISED SIGNATORY
EMPLOYEE CODE: (683)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301718

8	Sodium Adsorption Ratio (SAR), (millimole/litre) ^{1/2}	13.9	IS: 11624:2019 guidelines
9	Sulphate (as SO ₄), mg/l	437	IS: 3025 Pt-24-1983, RA 2019
10	% Sodium	88	As per Customer Protocol
11	Biochemical Oxygen Demand (BOD), mg/l (at 20°C for 5 days) (Detection Limit: 1 mg/l)	Not Detected	APHA 23rd Ed., 5210
12	Chlorides (as Cl), mg/l	114	IS: 3025 Pt-32-1988, RA 2019
13	Fluoride (as F), mg/l	0.7	APHA 23rd Ed. 4500 F
14	Phosphate (as P), mg/l	0.05	APHA 23rd Ed., 4500-P
15	Total Fixed Solids, mg/l	1161	IS: 3025 Pt-18-1984, RA2021
16	Nitrates (as N), mg/l (Detection Limit: 2 mg/l)	Not Detected	IS: 3025 Pt-34-1988, RA 2019
17	Boron (as B), mg/l	0.6	IS: 3025 Pt-57-2005, RA 2017

DOR: 22.08.2022
DOS: 22.08.2022
DOC: 09.09.2022

End of Report

AUTHORISED SIGNATORY
EMPLOYEE CODE: (60831)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301715

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH, AEE

Date : 09-09-2022
Job No : 2208-1-411-1644
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022

Sample Description:

Job No. 2208-1-411-1644

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 3-A, LOCATION: TUBEWELL NEAR WATER TREATMENT PLANT INSIDE THE INDUSTRY; CO-ORDINATES:- 30.9206398, 74.9607944, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- COLOURLESS & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

PPCB
AEE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Protocol
1	pH	8.1	IS: 3025 Pt-11-2022
2	Conductivity, $\mu\text{S/cm}$	1024	IS: 3025 Pt-14-2019
3	Turbidity, NTU (Detection Limit: 1 NTU)	Not Detected	IS: 3025 Pt-10-1984, RA 2017
4	Total Dissolved Solids, mg/l	670	IS:3025 Pt-16-1984, RA 2017
5	Total Suspended Solids, mg/l (Detection Limit: 1 mg/l)	Not Detected	IS: 3025 Pt-17-1984, RA 2017
6	Total Hardness (as CaCO_3), mg/l	26	IS: 3025 Pt-21-2009, RA 2019
7	Total Alkalinity (as CaCO_3), mg/l	291	IS: 3025 Pt-23-1986, RA 2019

AUTHORISED SIGNATORY
EMPLOYEE CODE:(6083)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301715

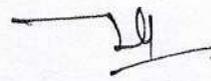
8	Sodium Adsorption Ratio (SAR), (millimole/litre) ^{1/2}	19.2	IS: 11624:2019 guidelines
9	Sulphate (as SO ₄), mg/l	139	IS: 3025 Pt-24-1983, RA 2019
10	% Sodium	95	As per Customer Protocol
11	Biochemical Oxygen Demand (BOD), mg/l (at 20°C for 5 days)	2	APHA 23rd Ed., 5210
12	Chlorides (as Cl), mg/l	34	IS: 3025 Pt-32-1988, RA 2019
13	Fluoride (as F), mg/l	0.9	APHA 23rd Ed.4500 F
14	Phosphate (as P), mg/l	0.1	APHA 23rd Ed., 4500-P
15	Total Fixed Solids, mg/l	640	IS: 3025 Pt-18-1984, RA2021
16	Nitrates (as N), mg/l (Detection Limit: 2 mg/l)	Not Detected	IS: 3025 Pt-34-1988, RA 2019
17	Boron (as B), mg/l	0.6	IS: 3025 Pt-57-2005, RA 2017

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 09.09.2022

End of Report


AUTHORISED SIGNATORY
EMPLOYEE CODE: (6083)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301716

Issued To :

Client Code : (FARI01P2181)
PUNJAB POLLUTION CONTROL BOARD,
FEROZEPUR ROAD, NEAR DHARA SINGH COLONY,
ST. NO 2,
FARIDKOT
PUNJAB-151203
Kind Attn: ER. AUSHPREET SINGH,AEE

Date : 09-09-2022
Job No : 2208-1-411-1645
Booking No : RG2223/1/4950
Booking Date : 20-08-2022
Customer Ref No. : SPL/AEE-1/3
Customer Ref Dt. : 19-08-2022

Sample Description:

Job No. 2208-1-411-1645

ONE SEALED SAMPLE OF GROUND WATER, SAMPLE CODE : 4-A, LOCATION: TUBEWELL NEAR TRANSPORT OFFICE INSIDE THE INDUSTRY; CO-ORDINATES:- 30°55'10"N. 74°57'34"E, DEPTH OF BOREWELL: 600 - 650 FT.; COLOUR & ODOUR:- LIGHT BEIGE SANDY & ODOURLESS, SUBJECT:- REGARDING ANALYSIS OF GROUND WATER SAMPLE COLLECTED ON 19.08.2022, DECLARED AS "GROUND WATER SAMPLES FROM DIFFERENT LOCATION WERE COLLECTED BY PUNJAB POLLUTION CONTROL BOARD ON 19.08.2022, IN THE PRESENCE OF SH. SANDEEP DHILLON S/O SH. MAJOR SINGH, R/O RATOL RONI; DR. HARVINDR SINGH S/O SH. NACHATAN SINGH R/O SADHUWALA; SH. RAJDEEP SINGH S/O SH. RANDHEER SINGH R/O RATOL RONI, SEALED THUS, WAS RECEIVED.

PPCB
AEE

Note: The sampling was not carried out by Shriram Institute for Industrial Research. The sample details provided in the test certificate are based on the declaration by party.

S.No	Tests	Results	Protocol
1	pH	8.1	IS: 3025 Pt-11-2022
2	Conductivity, $\mu\text{S/cm}$	1230	IS: 3025 Pt-14-2019
3	Turbidity, NTU	196	IS: 3025 Pt-10-1984, RA 2017
4	Total Dissolved Solids, mg/l	784	IS:3025 Pt-16-1984, RA 2017
5	Total Suspended Solids, mg/l	160	IS: 3025 Pt-17-1984, RA 2017
6	Total Hardness (as CaCO ₃), mg/l	35	IS: 3025 Pt-21-2009, RA 2019
7	Total Alkalinity (as CaCO ₃), mg/l	322	IS: 3025 Pt-23-1986, RA 2019
8	Sodium Adsorption Ratio (SAR), (millimole/litre) ^{1/2}	16.9	IS: 11624:2019 guidelines

AUTHORISED SIGNATORY
EMPLOYEE CODE:(6083)

GC-01(Rev-05)

1/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi - 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

TEST REPORT

NO : C1/0000301716

9	Sulphate (as SO ₄), mg/l	166	IS: 3025 Pt-24-1983, RA 2019
10	% Sodium	93	As per Customer Protocol
11	Biochemical Oxygen Demand (BOD), mg/l (at 20°C for 5 days)	6	APHA 23rd Ed., 5210
12	Chlorides (as Cl), mg/l	48	IS: 3025 Pt-32-1988, RA 2019
13	Fluoride (as F), mg/l	1.4	APHA 23rd Ed.4500 F
14	Phosphate (as P), mg/l	0.8	APHA 23rd Ed., 4500-P
15	Total Fixed Solids, mg/l	802	IS: 3025 Pt-18-1984, RA2021
16	Nitrates (as N), mg/l (Detection Limit: 2 mg/l)	Not Detected	IS: 3025 Pt-34-1988, RA 2019
17	Boron (as B), mg/l	1.1	IS: 3025 Pt-57-2005, RA 2017

DOR: 22.08.2022

DOS: 22.08.2022

DOC: 09.09.2022

End of Report

AUTHORISED SIGNATORY
EMPLOYEE CODE:(6083)

GC-01(Rev-05)

2/2

Note: The results relate only to the items tested / calibrated above.
Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-27000100, 27667267, 27667860

Fax : 91-11-27667207

See overleaf for terms & conditions

Amount

ਵੱਲੋਂ

ਮੁੱਖ ਖੇਤੀਬਾੜੀ ਅਫਸਰ
ਫਰੀਦਕੋਟ।

ਰੀਕੌਰਡ ਨੰਬਰ 5749
ਮਿਤੀ 5/9/22

ਵੱਲ

ਭੈ ਪਰਖ ਅਫਸਰ
ਫਿਰੋਜਪੁਰ (ਜ਼ਿਲ੍ਹਾ)



S.T.O.
CAO
12/9/22

ਵਿਸ਼ਾ- ਮਿੱਟੀ ਅਤੇ ਪਾਣੀ ਦੇ ਨਮੂਨਿਆਂ ਦੇ ਰਿਜਲਟ ਭੇਜਣ ਸੰਬੰਧੀ।

ਹਵਾਲਾ- ਆਪ ਦੇ ਦਫਤਰ ਦਾ ਪੱਤਰ ਨੰ.245 ਮਿਤੀ 22/08/22

ਉਪਰੋਕਤ ਵਿਸ਼ੇ ਦੇ ਸੰਬੰਧ ਵਿਚ ਆਪ ਵੱਲੋਂ ਭੇਜੇ ਗਏ ਜੀਰਾ ਬਲਾਕ ਦੇ ਪਿੰਡ ਮਨਸੂਰਵਾਲ ਕਲਾਂ ਦੇ ਮਿੱਟੀ ਅਤੇ ਪਾਣੀ ਦੇ ਸੈਪਲ ਦੇ ਟੈਸਟਿੰਗ ਰਿਜਲਟ ਨਾਲ ਨੱਥੀ ਅਨੁਸਾਰ ਭੇਜੇ ਜਾਂਦੇ ਹਨ। ਇੱਥੇ ਜ਼ਿਕਰਯੋਗ ਇਹ ਹੈ ਕਿ ਆਪ ਵੱਲੋਂ ਮਿੱਟੀ ਦੇ ਸੈਪਲਾਂ ਦੇ ਨਾਲ ਫਿਊਲ ਐਸ਼ ਦੇ ਸੈਪਲ ਵੀ ਭੇਜੇ ਗਏ ਸਨ। ਜੇ ਕਿ ਲੈਬਾਰਟਰੀ ਵਿਖੇ ਮੌਜੂਦ ਮਿੱਟੀ ਵਾਲੇ standard procedure ਨਾਲ ਹੀ ਟੈਸਟ ਕੀਤੇ ਗਏ ਹਨ। ਇਹ ਆਪ ਜੀ ਦੀ ਜਾਣਕਾਰੀ ਹਿੱਤ ਹੈ।

ਨੱਥੀ: ਟੈਸਟਿੰਗ ਰਿਜਲਟ
ਮਿੱਟੀ ਦੇ ਸੈਪਲ (1B,2B,3B,4B)
ਪਾਣੀ ਦਾ ਸੈਪਲ (W-2)

ਮੁੱਖ ਖੇਤੀਬਾੜੀ ਅਫਸਰ
ਫਰੀਦਕੋਟ।
5/9/22

ਪੰਜਾਬ ਖੇਤੀਬਾੜੀ ਯੂਨੀਵਰਸਿਟੀ, ਲੁਧਿਆਣਾ

221
0934

ਭੂਮੀ ਵਿਭਾਗ

ਮਿੱਟੀ ਪਰਖ ਪ੍ਰਯੋਗਸ਼ਾਲਾ

ਨੰ : ਸ.ਟ.ਲ.

ਪਾਣੀ ਪਰਖ ਰੀਪੋਰਟ

ਲੁਧਿਆਣਾ.....

ਸਿੰਚਾਈ ਯੋਗਤਾ ਵਾਸਤੇ

ਮਿੱਟੀ.....

ਮਿਲਣ ਦੀ ਮਿਤੀ.....

- ਦੂਜਾ ਸੇਤ -

ਮਿੱਟੀ ਦੀ ਕਿਸਮ..... ਬਲਾਕ..... ਜ਼ਿਲ੍ਹਾ.....

ਪ੍ਰਯੋਗ-ਸ਼ਾਲਾ ਨੰ : Lab No.	ਭੂੰਘਾਈ Depth	ਮਿਲੀ-ਇਕਵੇਲੈਂਟ ਪ੍ਰਤੀ ਲਿਟਰ Milli equivalent per litre			ਕੈਲਸ਼ੀਅਮ ਮੈਗਨੀਸ਼ੀਅਮ Calcium Magnesium	ਬਾਕੀ ਸੋਡੀਅਮ ਕਾਰਬੋਨੇਟ Residual Sodium Carbonate	ਚਾਲਕਤਾ ਮਾਈਕਰੋਮਹੋਸ Conductance (Micro-mhos/cm)	ਪਾਣੀ ਦੀ ਸ਼੍ਰੇਣੀ Category of water	ਜਿਪਸਮ ਕੁਇੰਟਲ (ਪ੍ਰਤੀ ਏਕੜ) Gypsum (q/acre)	REMARKS
		ਕਾਰਬੋਨੇਟ Carbo-nate	ਬਾਈ-ਕਾਰਬੋਨੇਟ Bicar-bonate	ਕਲੋ-ਰਾਈਡ Chlo-ride						
FL 1-18		NL	8.2	3.0	3.5	4.7	1404	2	3.0	

pn
8.1

ਨਿਸ਼ਾਨ ਕੀਤੀ ਗਈ ਹੇਠ ਲਿਖੀ ਸਿਫਾਰਸ਼ ਤੇ ਚੱਲੋ

- ਪਹਿਲਾ ਸੇਤ -

ਸਿਫਾਰਸ਼ਾਂ

1. ਪਾਣੀ ਸਭ ਪ੍ਰਕਾਰ ਦੀ ਮਿੱਟੀ ਅਤੇ ਫ਼ਸਲਾਂ ਵਾਸਤੇ ਠੀਕ ਹੈ ।
2. ਪਾਣੀ ਸਾਹਮਣੇ ਦੱਸੀ ਕਿਸਮ ਜਾਂ ਇਸ ਤੋਂ ਹਲਕੀ ਮਿੱਟੀ ਵਾਸਤੇ ਵਰਤਿਆ ਜਾ ਸਕਦਾ ਹੈ । ਇਸ ਤੋਂ ਭਾਰੀ ਮਿੱਟੀ ਦੀ ਸਿੰਚਾਈ ਵਾਸਤੇ ਨਹਿਰ ਦੇ ਪਾਣੀ ਨਾਲ ਮਿਲਾ ਕੇ ਵਰਤੋ । ਜਾਂ ਜੇਕਰ ਨਹਿਰ ਦਾ ਪਾਣੀ ਨਾ ਮਿਲਦਾ ਹੋਵੇ ਤਾਂ ਉੱਪਰ ਦੱਸੀ ਜਿਪਸਮ ਦੀ ਮਾਤਰਾ ਟਿਊਬਵੈੱਲ ਦੇ ਹਰ 4 ਪਾਣੀਆਂ ਬਾਅਦ ਪਾਓ । ਜਾਂ ਜੇਕਰ ਜਿਪਸਮ ਦਾ ਪ੍ਰਬੰਧ ਨਾ ਹੋ ਸਕੇ ਤਾਂ ਸਹਿਨਸ਼ੀਲ/ਅਧ ਸਹਿਨਸ਼ੀਲ ਫ਼ਸਲਾਂ ਵਾਸਤੇ ਇਹ ਪਾਣੀ ਲਾਇਆ ਜਾ ਸਕਦਾ ਹੈ ਪਰ ਨਾਲ ਜ਼ਰੂਰੀ ਹੈ ਕਿ ਜੰਤਰ ਦੀ ਹਰੀ ਖਾਦ ਇੱਕ ਸਾਲ ਛੱਡ ਕੇ ਦਬਾਈ ਜਾਵੇ ।
3. ਪਾਣੀ ਵਿੱਚ ਚੂਨੇ ਦੀ ਕਮੀ ਹੈ । ਇਸ ਨੂੰ ਉੱਪਰ ਲਿਖੇ ਪ੍ਰਤੀ ਏਕੜ ਜਿਪਸਮ ਦੀ ਮਾਤਰਾ ਨਾਲ ਮਿਲਾ ਕੇ ਵਰਤੋ । ਜਿਪਸਮ ਪਾਣੀ ਵਿੱਚ ਮਿਲਾ ਕੇ ਜਾਂ ਸਿੱਧਾ ਖੇਤ ਵਿੱਚ ਪਾਇਆ ਜਾ ਸਕਦਾ ਹੈ ।
4. ਪਾਣੀ ਵਰਤਣ ਦੇ ਯੋਗ ਨਹੀਂ ।
5. ਪਾਣੀ ਵਰਤਣ ਦੇ ਇੱਕ ਸਾਲ ਬਾਅਦ ਮਿੱਟੀ ਪਰਖ ਕਰਵਾਓ ।
6. ਵਿਸ਼ੇਸ਼ ਹਦਾਇਤਾਂ ।

[Signature] 23/8/22

ਸੀਨੀਅਰ ਮਿੱਟੀ ਕੈਮਿਸਟ

NOT CORRECTED



ਖੇਤੀਬਾੜੀ ਅਤੇ ਕਿਸਾਨ ਭਲਾਈ ਵਿਭਾਗ, ਪੰਜਾਬ

ਭੋ-ਪਰਖ ਲੈਬੋਰਟਰੀ, ਫ਼ਰੀਦਕੋਟ



ਪਾਣੀ ਪਰਖ ਰਿਪੋਰਟ

ਨੰ: ਸ.ਟ.ਲ.....

(ਸਿੰਚਾਈ ਲਈ ਯੋਗਤਾ)

ਫ਼ਰੀਦਕੋਟ.....

ਮਿੱਟੀ ਦੀ ਕਿਸਮ.....

ਨਾਮ..... ਮਾਸੂਰਦਾਲ ਕਲਾਂ

ਪਿਤਾ ਦਾ ਨਾਮ.....

ਪਿੰਡ..... ਮਾਸੂਰਦਾਲ

ਤਹਿਸੀਲ.....

ਬਲਾਕ..... ਜੀਹ

ਜਿਲ੍ਹਾ..... ਫ਼ਿਰੋਜ਼ਪੁਰ

ਪਰਖ ਸਾਲਾ ਨੰਬਰ	ਫ਼ੀਪਾਈ	ਮਿਲੀਇਕਵੈਲੈਂਟ ਪ੍ਰਤੀ ਲੀਟਰ				ਬਾਕੀ ਸੋਡੀਅਮ ਕਾਰਬੋਨੇਟ	ਚਾਲਕਤਾ ਮਾਈਕਰ ਮਹੋਚ	ਪਾਣੀ ਦੀ ਸ਼੍ਰੇਣੀ	ਜਿਪਸਮ ਪ੍ਰਤੀ ਏਕੜ	ਵਿਸ਼ੇਸ਼ ਕਥਨ
		ਕਾਰਬੋਨੇਟ	ਬਾਈਕਾਰਬੋਨੇਟ	ਕਲੋਰਾਈਡ	ਕੈਲਸ਼ੀਅਮ					
756	W-2	2.0	60	-	3.8	4.2	1440	(2) ਨਿੱਕਰ	(3) ਗੁੱਟੇ ਕਿਸਾਨ ਦੀ ਏਕੜ ਦੇ ਕਿਸਾਬ ਸਾਲ ਚਾਰ ਪਾਣੀਆਂ ਵਿਖੇ ਵਾਰਿ.	

(✓) ਨਿਸ਼ਾਨੀ ਅਨੁਸਾਰ ਹੇਠ ਲਿਖੀਆਂ ਸਿਫਾਰਸ਼ਾਂ ਤੇ ਚੱਲੋਂ।

1. ਪਾਣੀ ਸਭ ਪ੍ਰਕਾਰ ਦੀ ਮਿੱਟੀ ਅਤੇ ਫਸਲਾਂ ਵਾਸਤੇ ਠੀਕ ਹੈ।
2. ਪਾਣੀ ਸਾਹਮਣੇ ਦੱਸੀ ਕਿਸਮ ਜਾਂ ਇਸ ਤੋਂ ਹਲਕੀ ਮਿੱਟੀ ਲਈ ਵਰਤਿਆ ਜਾ ਸਕਦਾ ਹੈ। ਇਸ ਤੋਂ ਭਾਰੀ ਮਿੱਟੀ ਦੀ ਸਿੰਚਾਈ ਵਾਸਤੇ ਨਹਿਰ ਦੇ ਪਾਣੀ ਨਾਲ ਮਿਲਾਕੇ ਵਰਤੋਂ। ਜੇਕਰ ਨਹਿਰ ਦਾ ਪਾਣੀ ਨਾ ਮਿਲਦਾ ਹੋਵੇ ਤਾਂ ਸਹਿਣਸ਼ੀਲ ਫਸਲਾਂ ਦੀ ਸਿੰਚਾਈ ਲਈ ਵਰਤਿਆ ਜਾ ਸਕਦਾ ਹੈ।
3. ਪਾਣੀ ਵਿੱਚ ਚੂਨੇ ਦੀ ਕਮੀ ਹੈ ਉਪਰ ਲਿਖੇ ਪ੍ਰਤੀ ਏਕੜ ਜਿਪਸਮ ਦੀ ਮਾਤਰਾ ਨਾਲ ਮਿਲਾਕੇ ਵਰਤੋਂ। ਜਿਪਸਮ ਪਾਣੀ ਵਿੱਚ ਮਿਲਾਕੇ ਜਾਂ ਸਿੱਧੇ ਖੇਤ ਵਿੱਚ ਪਾਇਆ ਜਾ ਸਕਦਾ ਹੈ। ਜੇਕਰ ਜਿਪਸਮ ਦਾ ਪ੍ਰਬੰਧ ਨਾ ਹੋ ਸਕੇ ਤਾਂ ਸਹਿਣਸ਼ੀਲ, ਅਪਸਹਿਣਸ਼ੀਲ ਫਸਲਾਂ ਵਾਸਤੇ ਇਹ ਪਾਣੀ ਲਾਇਆ ਜਾ ਸਕਦਾ ਹੈ। ਪਰ ਜਰੂਰੀ ਹੈ ਕਿ ਜੰਤਰ (ਹਰੀ ਖਾਦ)। ਸਾਲ ਫੱਡ ਕੇ ਦਬਾਈ ਜਾਵੇ।
4. ਪਾਣੀ ਵਰਤਣ ਯੋਗ ਨਹੀਂ ਹੈ।

ਵਿਸ਼ੇਸ਼ ਹਦਾਇਤਾਂ:

- 6 ਮਹੀਨੇ ਬਾਅਦ ਪਾਣੀ ਦੁਬਾਰਾ ਟੈਸਟ ਕਰਵਾਓ।
- ਪਾਣੀ ਵਿੱਚ ਨਮਕੀਨ/ਖਾਰੇ ਪਦਾਰਥਾਂ ਦੀ ਮਾਤਰਾ ਵੱਧ ਹੋਣ ਤੇ ਸਾਲ ਬਾਅਦ ਮਿੱਟੀ ਟੈਸਟ ਕਰਵਾਓ।
- ਝੋਨੇ ਦੀ ਫਸਲ ਲਈ ਜਿਪਸਮ ਦੀ ਸਿਫਾਰਿਸ਼ ਕੀਤੀ ਮਾਤਰਾ ਚਾਰ ਗੁਣਾ ਕਰ ਦਿਓ।

ਭੋ ਪਰਖ ਅਫਸਰ
 ਭੋ ਪਰਖ ਲੈਬੋਰਟਰੀ,
 ਫ਼ਰੀਦਕੋਟ।

ਨਮਕੀਨ ਪਦਾਰਥਾਂ ਵਾਸਤੇ ਸਹਿਣਸ਼ੀਲ ਫਸਲਾਂ ਦਾ ਵੇਰਵਾ

ਸਹਿਣਸ਼ੀਲ	ਅਪਸਹਿਣਸ਼ੀਲ	ਜਿੰਨ੍ਹਾਂ ਫਸਲਾਂ ਤੇ ਜਿਆਦਾ ਅਸਰ ਹੁੰਦਾ ਹੈ।
ਝੋਨਾ	ਜੌਂ	ਕਪਾਹ (ਉੱਗਣ ਸਮੇਂ)
ਢੰਚਾ / ਜੰਤਰ	ਗੰਨਾ	ਮੱਕੀ
ਚਕੰਦਰ	ਜਵੀ	ਮੂੰਗਫਲੀ
ਪਾਲਕ	ਰਾਇਆ	ਮਟਰ
ਸਲਗਮ	ਕਪਾਹ	ਕਾਓਪੀਜ
	ਬਰਸੀਮ	ਮੂੰਗੀ
	ਸੇਂਜੀ	ਮਾਂਹ
	ਬਾਜਰਾ	ਮਸਰ
	ਆਲੂ	ਸੂਰਜਮੁੱਖੀ
	ਤਰਬਜ	ਗੁਆਰਾ

ਆਈ.ਸੀ.ਪੀ-ਓ.ਈ.ਐਸ ਲੈਬਾਰਟਰੀ ਫਰੀਦਕੋਟ (ਖੇਤੀਬਾੜੀ ਅਤੇ
ਕਿਸਾਨ ਭਲਾਈ ਵਿਭਾਗ)

Testing results

Sample code	pH	EC	OC	P	K	Zn	Cu	Fe	S	Mn
		Mmhos/cm	(%)	(ppm)						
1B	8.45	0.66	0.36	31.23	82.26	1.88	0.88	36.07	96.65	1.96
2B	9.02	0.51	0.32	81.67	107.53	1.20	0.42	10.65	67.16	4.53
3B	9.28	0.34	0.34	19.44	95.85	1.02	0.52	6.14	28.63	1.80
4B	8.96	0.53	0.60	32.38	77.81	1.516	1.09	71.00	88.09	5.03

ਡਾ. ਪਰਖ ਅਫਸਰ
ਫਰੀਦਕੋਟ। 5/9/22

ਸੇ. ਮਾਲਬਰੋਜ ਇੰਟਰਨੈਸ਼ਨਲ ਪ੍ਰਾਇ.ਲਿਮ: ਪਿੰਡ ਮੰਨਸੂਰਵਾਲ ਕਲਾਂ, ਬਲਾਕ ਜ਼ੀਰਾ, ਤੋਂ ਪ੍ਰਾਪਤ ਮਿੱਟੀ ਅਤੇ ਪਾਣੀ ਦੀ ਵਿਸ਼ੇਸ਼ ਰਿਪੋਰਟ ਸਬੰਧੀ।

ਸੇ. ਮਾਲਬਰੋਜ ਇੰਟਰਨੈਸ਼ਨਲ ਪ੍ਰਾਇ.ਲਿਮ: ਪਿੰਡ ਮੰਨਸੂਰਵਾਲ ਕਲਾਂ, ਬਲਾਕ ਜ਼ੀਰਾ, ਜ਼ਿਲ੍ਹਾ ਫਿਰੋਜ਼ਪੁਰ (ਪੰਜਾਬ) ਦੇ ਗੇਟ ਅੱਗੇ ਸਥਾਨਕ ਕਿਸਾਨ ਜੱਥੇਬੰਦੀਆਂ ਨੇ ਧਰਨਾ ਲਗਾਇਆ ਹੋਇਆ ਹੈ। ਕਿਸਾਨਾਂ ਨੇ ਇਸ ਧਰਨੇ ਨੂੰ ਦੂਰ ਕਰਨ ਹਿੱਤ ਮਿਤੀ 18-08-2022 ਨੂੰ ਮਾਨਯੋਗ ਐਨ.ਜੀ.ਟੀ. ਚੇਅਰਮੈਨ ਜਸਟਿਸ ਸ਼੍ਰੀ ਜਸਬੀਰ ਸਿੰਘ (ਰਿਟਾਇਰਡ), ਪੰਜਾਬ ਅਤੇ ਹਰਿਆਣਾ ਹਾਈਕੋਰਟ, ਚੰਡੀਗੜ੍ਹ ਅਤੇ ਮਾਨਯੋਗ ਸ਼੍ਰੀ ਬਲਬੀਰ ਸਿੰਘ ਸੀਚੇਵਾਲ, ਮੈਂਬਰ ਰਾਜ ਸਭਾ ਜੀ ਦੇ ਦੌਰੇ ਦੌਰਾਨ ਮੌਕੇ ਤੇ ਹੀ ਇਹਨਾਂ ਦੇ ਜੁਥਾਨੀ ਹੁਕਮਾਂ ਦੀ ਪਾਲਣਾ ਕਰਦੇ ਹੋਏ ਨਿਮਨ-ਹਸਤਾਖਰ ਦੇ ਦਫਤਰ ਅਧੀਨ ਭੌ-ਪਰਖ ਅਫਸਰ, ਜ਼ੀਰਾ ਨੇ ਮਾਨੀਟਰਿੰਗ ਕਮੇਟੀ ਦੀ ਹਾਜ਼ਰੀ ਵਿੱਚ ਜਿਸ ਸਥਾਨ ਤੋਂ ਕਿਸਾਨਾਂ ਨੇ ਕਿਹਾ ਫਿਊਲ ਐਸ/ਮਿੱਟੀ ਦੇ ਚਾਰ ਨਮੂਨੇ ਪਰਖ ਹਿੱਤ ਲਏ ਸਨ। ਹਰੇਕ ਨਮੂਨੇ ਦੇ ਇੱਕੋ ਚਾਰ ਜਿਹੇ ਭਾਗ ਕੀਤੇ ਗਏ। ਇਨ੍ਹਾਂ ਚਾਰੇ ਨਮੂਨਿਆਂ ਵਿੱਚੋਂ ਹਰੇਕ ਇੱਕ-ਇੱਕ ਨਮੂਨਾ ਉਸ ਵੇਲੇ ਮੌਕੇ ਤੇ ਮੌਜੂਦ ਜੱਥੇਬੰਦੀਆਂ ਦੇ ਨੁਮਾਇੰਦਿਆਂ ਨੇ ਰੱਖ ਲਿਆ ਅਤੇ ਬਾਕੀ ਦੇ ਨਮੂਨੇ ਮਿਤੀ 18-08-2022 ਨੂੰ ਮਾਨੀਟਰਿੰਗ ਕਮੇਟੀ ਦੀ ਸਲਾਹ ਤੇ ਕਿਸੇ ਸੁਰੱਖਿਅਤ ਥਾਂ ਤੇ ਰੱਖਣ ਦੇ ਉਪਰਾਲੇ ਵਜੋਂ ਉਪਰੋਕਤ ਨਮੂਨੇ ਭੌ-ਪਰਖ ਪ੍ਰਯੋਗਸ਼ਾਲਾ, ਜ਼ੀਰਾ ਵਿੱਚ ਦੋ ਤਾਲਿਆ ਵਾਲੀ ਅਲਮਾਰੀ ਵਿੱਚ ਨਿਮਨਹਸਤਾਖਰ, ਭੌ-ਪਰਖ ਅਫਸਰ ਜ਼ੀਰਾ, ਬਲਾਕ ਖੇਤੀਬਾੜੀ ਅਫਸਰ ਜ਼ੀਰਾ ਅਤੇ ਕਿਸਾਨ ਜੱਥੇਬੰਦੀਆਂ ਦੀ ਹਾਜ਼ਰੀ ਵਿੱਚ ਰੱਖੇ ਗਏ। ਕਿਉਂਕਿ ਮਿਤੀ 19-08-2022 ਤੋਂ ਮਿਤੀ 21-08-2022 ਤੱਕ ਸਰਕਾਰੀ ਛੁੱਟੀਆਂ ਸਨ, ਇਸ ਲਈ ਇਹ ਨਮੂਨੇ ਮਿਤੀ 22-08-2022 ਨੂੰ ਪੰਜਾਬ ਖੇਤੀਬਾੜੀ ਯੂਨੀਵਰਸਿਟੀ, ਲੁਧਿਆਣਾ ਦੀ ਭੌ-ਪਰਖ ਪ੍ਰਯੋਗਸ਼ਾਲਾ ਅਤੇ ਭੌ-ਪਰਖ ਪ੍ਰਯੋਗਸ਼ਾਲਾ ਫਰੀਦਕੋਟ ਨੂੰ ਪਰਖ ਹਿੱਤ ਭੇਜੇ ਗਏ। ਇਸ ਤਰ੍ਹਾਂ ਸਬੰਧਤ ਫੈਕਟਰੀ ਦੇ ਨੇੜੇ ਦੇ ਟਿਊਬਵੈਲ ਤੋਂ ਪਾਣੀ ਦੇ ਚਾਰ ਨਮੂਨੇ ਲਏ ਗਏ। ਜਿਨ੍ਹਾਂ ਵਿੱਚੋਂ ਇੱਕ ਨਮੂਨਾ ਮੌਕੇ ਤੇ ਮੌਜੂਦ ਕਿਸਾਨ ਜੱਥੇਬੰਦੀਆਂ ਦੇ ਨੁਮਾਇੰਦਿਆਂ ਨੇ ਰੱਖ ਲਿਆ ਅਤੇ ਬਾਕੀ ਮਿੱਟੀ ਦੇ ਨਮੂਨਿਆਂ ਦੇ ਨਾਲ ਭੌ-ਪਰਖ ਅਫਸਰ, ਜ਼ੀਰਾ ਦੀ ਅਲਮਾਰੀ ਵਿੱਚ ਰੱਖੇ ਗਏ। ਕਿਸਾਨ ਜੱਥੇਬੰਦੀਆਂ ਨੂੰ ਇਸ ਅਲਮਾਰੀ ਦੇ ਇੱਕ ਤਾਲੇ ਦੀਆਂ ਤਿੰਨੋਂ ਚਾਬੀਆਂ ਦੇ ਦਿੱਤੀਆਂ ਸਨ।

ਮਿਤੀ 22-08-2022 ਨੂੰ ਉਪਰੋਕਤ ਨਮੂਨਿਆਂ ਵਿੱਚੋਂ ਇੱਕ-ਇੱਕ ਨਮੂਨਾ ਪੰਜਾਬ ਖੇਤੀਬਾੜੀ ਯੂਨੀਵਰਸਿਟੀ, ਲੁਧਿਆਣਾ ਅਤੇ ਦੂਜਾ ਭੌ-ਪਰਖ ਅਫਸਰ, ਫਰੀਦਕੋਟ ਨੂੰ ਪਰਖ ਹਿੱਤ ਭੇਜ ਦਿੱਤਾ ਗਿਆ। ਪੰਜਾਬ ਖੇਤੀਬਾੜੀ ਯੂਨੀਵਰਸਿਟੀ, ਲੁਧਿਆਣਾ ਅਤੇ ਭੌ-ਪਰਖ ਅਫਸਰ, ਫਰੀਦਕੋਟ ਦੀਆਂ ਭੌ-ਪਰਖ ਪ੍ਰਯੋਗਸ਼ਾਲਾ ਪਾਸੋਂ ਪ੍ਰਾਪਤ ਪਿੰਡ ਮੰਨਸੂਰਵਾਲ ਕਲਾਂ, ਬਲਾਕ ਜ਼ੀਰਾ ਦੇ ਮਿੱਟੀ ਦੇ ਸੈਂਪਲ ਦੇ ਨਤੀਜਿਆਂ ਮੁਤਾਬਿਕ ਸੈਂਪਲ ਕੋਡ B1 (ਦੂਸਰੀ ਲੋਕੇਸ਼ਨ) ਦੀ ਪਰਖ ਰਿਪੋਰਟ ਮੁਤਾਬਿਕ ਇਸ ਜ਼ਮੀਨ ਦੀ ਮਿੱਟੀ ਪੂਰੀ ਤਰ੍ਹਾਂ ਲਈ ਵਾਹੀ ਦੇ ਯੋਗ ਹੈ। ਇਸ ਵਿੱਚ ਜੈਵਿਕ ਕਾਰਬਨ ਘੱਟ ਹੋਣ ਕਾਰਨ ਰੂੜੀ, ਹਰੀ ਖਾਦ ਜਾਂ ਕੰਪੋਸਟ ਦੀ ਸਿਫਾਰਿਸ਼ ਕੀਤੀ ਜਾਂਦੀ ਹੈ। ਇਸ ਵਿੱਚ ਕਿਸੇ ਤੱਤ ਦੀ ਘਾਟ ਨਹੀਂ ਪਾਈ ਗਈ ਅਤੇ ਸੈਂਪਲ 2B, 3B ਅਤੇ 4B (ਬਾਕੀ ਦੀਆਂ ਤਿੰਨ ਲੋਕੇਸ਼ਨਾਂ) ਦੀ ਪਰਖ ਰਿਪੋਰਟ ਮੁਤਾਬਿਕ ਇਹਨਾਂ ਜ਼ਮੀਨਾਂ ਦੀ ਮਿੱਟੀ ਵਿੱਚ ਖਾਰਾਪਣ ਵੱਧ ਹੋਣ ਕਰਕੇ ਇਸ ਵਿੱਚ ਹਰੀ ਖਾਦ ਜਾਂ ਰੂੜੀ ਦੀ ਵਰਤੋਂ ਕਰਨ ਦੀ ਸਿਫਾਰਿਸ਼ ਕੀਤੀ ਜਾਂਦੀ ਹੈ। ਇਸ ਵਿੱਚ ਕਿਸੇ ਤੱਤ ਦੀ ਘਾਟ ਨਹੀਂ ਪਾਈ ਗਈ। ਇਸੇ ਤਰ੍ਹਾਂ ਭੌ-ਪਰਖ

ਪ੍ਰਯੋਗਸ਼ਾਲਾ, ਜ਼ੀਰਾ ਨੂੰ ਮੰਨਸੂਰਵਾਲ ਕਲਾਂ ਅਤੇ ਨਾਲ ਲੱਗਦੇ ਪਿੰਡਾਂ ਦੇ ਪ੍ਰਾਪਤ ਮਿੱਟੀ ਦੇ ਸੈਂਪਲਾਂ ਦੀ ਪਰਖ ਰਿਪੋਰਟਾਂ ਠੀਕ ਹਨ। ਇਸੇ ਤਰ੍ਹਾਂ ਪਾਣੀ ਦੇ ਸੈਂਪਲ ਦੀ ਵੀ ਪ੍ਰਯੋਗਸ਼ਾਲਾਵਾਂ ਦੀ ਪਰਖ ਰਿਪੋਰਟ ਵਿੱਚ ਪਾਣੀ ਸੰਭੀਅਮ ਕਾਰਬੋਨੇਟ ਦੀ ਮਾਤਰਾ ਵੱਧ ਹੋਣ ਕਾਰਨ ਇਸ ਨੂੰ ਦੂਜੀ ਸ਼੍ਰੇਣੀ ਵਿੱਚ ਰੱਖਿਆ ਗਿਆ ਹੈ। ਇਹ ਪਾਣੀ ਹਲਕੀ ਮਿੱਟੀ ਲਈ ਵਰਤਿਆ ਜਾ ਸਕਦਾ ਹੈ। ਭਾਰੀ ਮਿੱਟੀ ਦੀ ਸਿੰਚਾਈ ਵਾਸਤੇ ਨਹਿਰ ਦੇ ਪਾਣੀ ਨਾਲ ਮਿਲਾ ਕੇ ਵਰਤਿਆ ਜਾ ਸਕਦਾ ਹੈ। ਜੇਕਰ ਨਹਿਰ ਦਾ ਪਾਣੀ ਨਾਂ ਮਿਲਦਾ ਹੋਵੇ ਤਾਂ ਸ਼ਹਿਨਸ਼ੀਲ ਫਸਲਾਂ ਦੀ ਸਿੰਚਾਈ ਲਈ ਵਰਤਿਆ ਜਾ ਸਕਦਾ ਹੈ, ਇਸ ਤੋਂ ਇਲਾਵਾ ਤਿੰਨ ਬੈਗ ਜਿਪਸਮ ਪ੍ਰਤੀ ਏਕੜ ਦੇ ਹਿਸਾਬ ਨਾਲ ਚਾਰ ਪਾਣੀਆਂ ਪਿੱਛੇ ਪਾਇਆ ਜਾਣਾ ਜ਼ਰੂਰੀ ਹੈ। ਜਿਸ ਕਰਕੇ ਕਿਸਾਨਾਂ ਦੇ ਖੇਤੀ ਖਰਚ ਵਿੱਚ ਵਾਧਾ ਹੋਵੇਗਾ। ਇਸੇ ਤਰ੍ਹਾਂ ਭੌ-ਪਰਖ ਪ੍ਰਯੋਗਸ਼ਾਲਾ, ਜ਼ੀਰਾ ਨੂੰ ਮੰਨਸੂਰਵਾਲ ਕਲਾਂ ਅਤੇ ਨਾਲ ਲੱਗਦੇ ਪਿੰਡਾਂ ਦੇ ਪ੍ਰਾਪਤ ਪਾਣੀ ਦੇ ਸੈਂਪਲਾਂ ਦੀ ਪਰਖ ਰਿਪੋਰਟਾਂ ਠੀਕ ਹਨ।

ਉਪਰੋਕਤ ਨਿਰੀਖਣ ਦੇ ਨਾਲ-ਨਾਲ ਇਹ ਵੀ ਲਿਖਣਾ ਜ਼ਰੂਰੀ ਹੈ ਕਿ ਲਏ ਗਏ ਫਿਊਲ ਐਸ/ਮਿੱਟੀ ਅਤੇ ਪਾਣੀ ਦੇ ਨਮੂਨਿਆਂ ਦੀ ਪਰਖ ਰਿਪੋਰਟ, ਵਾਹੀਯੋਗ ਜ਼ਮੀਨਾਂ/ਫਸਲਾਂ ਲਈ ਉਪਰੋਕਤ ਸਿਫਾਰਿਸ਼ਾਂ ਸਮੇਤ ਲਾਗੂ ਹੈ। ਇਸ ਦੇ ਨਾਲ ਹੀ ਪਿੰਡ ਮੰਨਸੂਰਵਾਲ ਕਲਾਂ ਵਿਖੇ ਸਥਿਤ ਸਬੰਧਤ ਫੈਕਟਰੀ ਦੇ ਨਾਲ ਲੱਗਦੀਆਂ ਜ਼ਮੀਨਾਂ ਦੇ ਰੁਟੀਨ ਵਿੱਚ ਮਿੱਟੀ ਪਰਖ ਦੀਆਂ ਟੈਸਟ ਰਿਪੋਰਟਾਂ ਅਤੇ ਪ੍ਰਾਪਤ ਹੋ ਰਹੇ ਝਾੜ ਤੋਂ ਇਹ ਸਵੈ ਸਪੱਸ਼ਟ ਹੈ ਕਿ ਸਬੰਧਤ ਫੈਕਟਰੀ ਵੱਲੋਂ ਕਿਸੇ ਵੀ ਤਰ੍ਹਾਂ ਦੇ ਨਿਕਾਸ ਨਾਲ ਫਸਲਾਂ ਤੇ ਕੋਈ ਮਾੜਾ ਪ੍ਰਭਾਵ ਨਹੀਂ ਪੈ ਰਿਹਾ ਹੈ।


ਮੁੱਖ ਖੇਤੀਬਾੜੀ ਅਫਸਰ 14/09/2022
ਫਿਰੋਜ਼ਪੁਰ

Registered

FORM-R

See Rule 85(5)

Notice

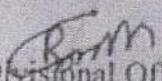
To,

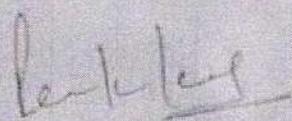
Smt. Dimpal Malhotra W/o Sh. Deep Malhotra S/o Sh. Om Malhotra
Old Cantt. Road, Faridkot, Tehsil and Distt. Faridkot

Where it appears that you have raised 16313 Metric Tonne Sand Minor Mineral without lawful authority and 16313 Metric Tonne Ordinary Earth upto the month 08/2022 from the land situated in Malbroj Factory, Village Ratol Rohi, Tehsil Zira & District Ferozepur (Khasra No. 18//13/2-18-23, 21//3-8-13/2).

You are therefore directed to appear, in person or through a duly authorized representative before Executive Engineer-cum District Mining Officer, Ferozepur (Address:- Golewala Drainage Division, 89-Jhoke Road at Ferozepur) on 02/09/2022 at 1:30 pm and to produce or cause to be produced at that time the accounts and documents specified below, lodge at that time any objection which you may wish to prefer in support thereof and produce any evidence in this regard.

In the event of your failure to comply with this notice, I shall proceed to assess the royalty to the best of my judgement under rule 85(5) of the Punjab Minor Mineral Rules, 2013 and furthermore you will be liable to prosecution under Rule 76.


Sub Divisional Officer-cum
Assistant District Mining Officer
Drainage Cont. Sub-Division,
C.C. Makhu


Executive Engineer-cum-
District Mining Officer
Golewala Drainage Division
Ferozepur

Seal of the/Assessing Authority

No. 1626

Dated: 10/08/2022

Place: Ferozepur

16/08/2022

Registered

FORM-R

See Rule 85(5)

Notice

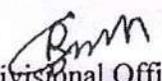
To,

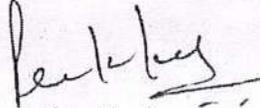
1. Sh Hardev Singh S/o Sarwan Singh S/o Kesar Singh
2. Sh Sukdev Singh S/o Sarwan Singh S/o Kesar Singh
Village Ratol Rohi, Teshil Zira, Distt. Ferozepur
3. Smt. Dimpri Malhotra W/o Sh.Deep Malhotra S/o Sh.Om Parkash
Old Cantt.Road, Faridkot, Tehsil and Distt. Faridkot

Where it appears that you have raised 25952 Metric Tonne Sand Minor Mineral without lawful authority and 25952 Metric Tonne Ordinary Earth upto the month 06/2022 from the land situated in Malbroj Factory, Village Ratol Rohi, Tehsil Zira & District Ferozepur (Khasra No.18//8-13/1).

You are therefore directed to appear, in person or through a duly authorized representative before Executive Engineer-cum District Mining Officer, Ferozepur (Address:- Golewala Drainage Division, 89-Jhoke Road at Ferozepur) on 02/09/2022 at 1:30 pm and to produce or cause to be produced at that time the accounts and documents specified below, lodge at that time any objection which you may wish to prefer in support thereof and produce any evidence in this regard.

In the event of your failure to comply with this notice, I shall proceed to assess the royalty to the best of my judgement under rule 85(5) of the Punjab Minor Mineral Rules, 2013 and furthermore you will be liable to prosecution under Rule 76.


Sub Divisional Officer- cum
Assitant District Mining Officer
Drainage Cont.Sub-Division,
C.C Makhu


Executive Engineer-cum-
District Mining Officer
Golewala Drainage Division
Ferozepur

Seal of the/Assessing Authority

No. 1626-A, 1627-28

Dated: 10/08/2022

Place: Ferozepur 16/08/2022

Subject: Detail note of visit dated 18.08.2022 & 19.08.2022 – M/s Malbros International Pvt. Ltd., Village Mansoorwal Kalan, Tehsil Zira, District Ferozepur.

It is submitted as under:-

- Hon'ble NGT Monitoring Committee headed by Justice Jasbir Singh, Former Judge, Punjab Haryana Court; Sh. S.C. Aggarwal, IAS (Retd.) Former Chief Secretary, Punjab and Sant Balbir Singh Seechewal alongwith villagers; SDM Zira; DSP, Zira & officials of the Deptt. of Revenue; Excise; Animal Husbandry; PPCB; Mining and Agriculture, visited the area as well as the industry on 18.08.2022. The villagers apprised the Committee that during the drilling of tubewell in the premises of Gurudwara Samadhi Bhagat Dunning Chand Ji in Vill. Mahian Wala Kalan, polluted water was observed. Therefore, first of all, the Committee visited the premises of Gurudwara Smadhi Bhagat Dunning Chand ji in village Mahian Wala Kalan, Tehsil Zira, Distt. Ferozepur and collected water sample of the tubewell installed in the Gurudwara premises. The water sample was found colorless & odourless. Thereafter, the Committee visited the site of the tubewell installed in the parking area of the industry and collected water sample of this tubewell. The color of the water sample was beige / sandy whereas it was also odourless. As per directions of the Committee, three sets of water samples were collected from tubewells and each set of samples has been sent to PBTI, Mohali; M/s Shri Ram Institute for Industrial Research, Delhi and PPCB lab at Patiala for analysis.
- Stagnation of wastewater was observed near the septic tank existing adjoining to the boundary wall of the industry. On the request of the villagers to the Committee, soil sample from the area near to the said septic tank and soil /ash sample from the fuel ash disposal area of the industry were also collected by the Department of Agriculture. The soil samples have been sent to PAU, Ludhiana and Soil Testing Lab, Faridkot for analysis.
- During visit, the villagers also raised the issue of illegal mining carried out by the industry adjoining to its boundary wall. In this regard, Executive Engineer-cum-District Mining Officer, Golewala Drainage Division, Ferozepur apprised the Monitoring Committee that notices have been issued to the concerned and presented copies of the same.

smj

Seal

smj

- Thereafter, NGT Monitoring Committee visited the premises of the industry. During visit, Sh. Jasbir Dhiman, Vice President (Technical) of the industry informed the Committee that there are three working tubewells in the industrial premises whereas 4th tubewell is not operatable due to leakage in the pipeline and 5th tubewell has been closed recently due to advise of Vastu Consultant. But no borewell was found in the industrial premises meant for discharge of wastewater in the ground. The Monitoring Committee directed the PPCB officials to collect tubewell water samples, find out the reason for stagnation of wastewater near the septic tank and also verify the statement given by the representative of the industry, on the next very day in the presence of the representatives of villagers.
- The officials of PPCB, Naib Tehsildar and Deptt. of Agriculture alongwith representatives of villagers i.e. Sh. Sandeep Dhillon S/o S. Major Singh R/o Ratol Rohi; Dr. Harvinder Singh S/o S. Nachattar Singh R/o Sodhiwala and S. Rajdeep Singh S/o S. Randhir Singh R/o Ratol Rohi visited the industry on 19.08.2022 and collected water samples of 3 no. operational tubewells installed at different locations in the industrial premises. On the request of the villagers, the efforts were made to make the 4th tubewell operational, but could not succeed. Further, the recently closed tubewell (5th) was also made operational after removing the upper layer of soil with JCB. The tubewell was continued to operate with temporary fittings for one hour and thereafter the water sample of this tubewell was collected. The color of the water sample was light beige / sandy whereas it was odourless. The earlier laid pipeline connected with this tubewell led to fresh water reservoir. The area at a distance of about 30-35 ft. from the 5th tubewell was also dug with the help of JCB and found underground pipe of another abandoned tubewell, but not connected with any pipeline.
- The area around boundary wall / septic tank, effluent treatment plant etc. of the industry was visited alongwith the representatives of the villagers and no stagnation of wastewater was observed within the industrial premises. Also, the representatives of villages could not show any borewell / tubewell other than as mentioned in the preceding para within the industrial premises. The boundary wall of the industry is adjacent to the septic tank existing outside boundary wall. Therefore, the premises of the industry behind the septic tank /boundary wall was visited and found that there are about 50 labour quarters adjoining to the

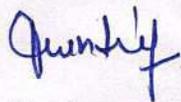
rmj

Pradeep

Quinty

boundary wall of the industry and wastewater generated from the bathing section of labor quarters is directly going outside industrial premises for stagnation near septic tank, whereas wastewater from the toilet section is going into septic tank existing outside the boundary of the industry. The industry has dumped the fuel ash in the low lying area adjoining to the industry and has made provision for sprinkling of water through flexible pipes to suppress the dust emission, which was found cut at one point outside the boundary wall.

- Earlier, the industry was operating two boilers of capacities 14 TPH & 10 TPH. However, in the year 2021, the industry has installed a new rice husk fired boiler of capacity 65 TPH and dismantled the boiler of capacity 14 TPH & other existing boiler of capacity 10 TPH boiler is not being operated. ESP has been installed as an air pollution control device with the boiler of capacity 65TPH. Emission sample was collected by the Board from the stack of 65 TPH capacity boiler on 06.04.2022 and as per the analysis results, the concentration of particulate matter was found to be within the prescribed limits. Emission sample(s) would now be collected as and when the industry comes in operation.



(Aushpreet Singh)
Asst. Environmental
Engineer



(Ramandeep Singh Sidhu)
Environmental Engineer



(Rohit Singla)
Environmental Engineer

133

CWP-16500-2022

**M/S MALBROS INTERNATIONAL PVT. LTD. AND ANR. VS
STATE OF PUNJAB AND OTHERS**

Present: Mr. Puneet Bali, Sr. Advocate with
Mr. Rishab Siyla, Advocate,
Mr. Shivam Sharma, Advocate and
Ms. Vidisha, Advocate
for the petitioner.

Learned Senior Counsel for the petitioners contends that workers/employees and other related persons to the business of the petitioners are being illegally stopped by the mob and the mob has created untoward hindrances in the ingress and egress to the industrial premises of the petitioners. In CWP No.15430 of 2022, this Court has directed the concerned SSP to prevent happening of untoward incidents within the vicinity of the factory premises.

Notice of motion for 08.08.2022.

On the asking of the Court, Ms. Kanica Sachdeva, AAG, Punjab accepts notice on behalf of the State and submits that the official respondents would take every endeavour to maintain law and order situation at the site.

Interim order in the same terms as passed in CWP No.15430 of 2022.

To be heard along with CWP No.15430 of 2022.

In the meanwhile, respondent No.5 shall take all possible steps to ensure that no hindrance is created in ingress and egress of the factory premises by the agitators. Protest, if any, by the protestors be allowed beyond 300 meters from the factory premises in accordance with law.

**(RAJ MOHAN SINGH)
JUDGE**

29.07.2022
Prince

268 **CM-15953-CWP-2022 in/and
CWP-16500-2022 (O&M)**

M/S MALBROS INTERNATIONAL PVT. LTD. AND ANR.
V/S
STATE OF PUNJAB AND OTHERS

Present: Mr. Puneet Bali, Sr. Advocate with
 Mr. Sandeep Tayal, Mr. Rishabh Singla,
 Ms. Vidisha Swaroop & Mr. Sachin Jain, Advocates
 for the petitioners.

 Mr. Vinod Ghai, Advocate General, Punjab, assisted by
 Mr. Amanpal, Addl. AG, Punjab.

 Mr. R.S. Bains, Sr. Advocate with
 Mr. Amarjeet, Advocate for respondent No.9.

CM-15953-CWP-2022

The instant application has been filed under Section 151 of the Code of Civil Procedure, for placing on record the objections/observation to the sample analysis report placed on record by the petitioner.

Notice in the application to the non-applicant/petitioners for the date fixed.

Main Case

The Advocate General, Punjab prays for yet more time to explore the possibilities of an amicable resolution of the issue and contends that all steps within the domain of the State are being undertaken to resolve the controversy and to enable the petitioners to carry on their industrial operations without any hindrance.

A detailed order was passed on 28.09.2022 noticing the report of the Monitoring Committee constituted by the NGT as well as the judgment of the Hon'ble Supreme Court in the matter of **Amit Sahni Vs. Commissioner of Police and others bearing Civil Appeal No.3282 of 2020 decided on 07.10.2020** and granting time to the State to take effective steps. The said order is extracted again and is as under:-

“The instant petition raises a grievance where the lawful operations of an established industrial unit are being stalled by protestors alleging violation of environment norms. The plea raised by the petitioner is that it has all requisite environmental approvals, however, it is not being allowed to function due to failure of State to ensure Rule of law and giving all leverage to the protestors, even though their claim has no valid basis and is in clear violation of the guidelines given/issued by the Hon’ble Supreme Court and Division Bench of this Court about holding of protests.

The matter has been listed on various occasions and the State has been seeking time to find an amicable resolution of the issue and including test by the monitoring Committee of N.G.T.

On resumed hearing, learned counsel for the petitioners has handed over today in Court a report of Monitoring Committee constituted by the Hon’ble National Green Tribunal in O.A. No. 360 of 2018 in the matter of ‘Shree Nath Sharma Vs. Union of India and others’ and other environmental issues.

A detailed investigation with regard to the effluent discharge/ pollutant emission from the factory of the petitioners, if any, was conducted by the Monitoring Committee. The relevant extract of the same is reproduced hereinafter below:

“3.0 Overall Findings of the Monitoring Committee

Based on the discussion held with the officers of the various departments, village Panchayats and field visits made by the Monitoring Committee and collection of ground water samples, soil samples and reports submitted by the departments, the overall findings of the Monitoring Committee are as under:

- 1. The ground water sample collected from Samaadhi Bhagat Baba Duni Chand ji has been found containing*

faecal contamination, which may be due to domestic sources for its contamination.

2. *The ground water sample collected from tubewell near parking area of the industry has been found containing faecal contamination may be due to domestic sources. The higher values of TSS, COD and Turbidity in the ground water samples due to presence inorganic compounds/constituents in the ground. The higher values of Iron and Lead in the ground water samples may be due to iron fitting in the pipeline laid for abstraction of ground water.*

3. *The ground water samples collected from the tubewell installed near new canal reservoir inside the industry has been found contaminated due to T.Coli and domestic source may be a source of contributing T.Coli. The higher values of Alkanity and Boron have been found due to geogenic conditions.*

4. *There is insignificant contamination in ground water in the tubewell near bottling plant inside the industry due to insignificant values of F.Coli parameter and organic parameters (BOD and COD).*

5. *The higher value of F.Coli and T.Coli found in the ground water samples collected from tubewell installed near effluent treatment plant inside the industry may be due to faecal contamination in ground water, which may be due to domestic sources. The contribution of lower concentration of BOD and COD may also be due to presence of F.Col and T.Coli parameters.*

6. *The higher value of COD, TSS and Turbidity in the ground water samples collected from the tubewell near transport office inside the industry may be due to inorganic compounds/constituents. The higher value of Iron may be due to iron fitting in the pipeline laid for abstraction of ground water. The slight higher value of*

Boron in ground water sample may be due to geogenic reasons.

7. *From the analysis results of ground water samples analyzed by all the three laboratories, indicate that ground water contamination is probably due to faecal contamination, which may be due to domestic sources. Possibility of discharge of industrial effluent in underground water is feeble as no such assessment from the analysis results has been found.”*

*Learned counsel appearing on behalf of the petitioner contends that at the initial stages, the investigations were conducted by the Punjab Pollution Control Board and no effluent discharge and/or pollutant emissions were attributed to the petitioner. It was, however on the demand of the protesters that the NGT Monitoring Committee had been requested to carry out the search/investigation. Samples were drawn from the places identified by the protestors. Even in the aforesaid investigation, the Monitoring Committee of the NGT has not found any effluent/polluting emission being discharged or emitted by the petitioner factory. He contends that the agencies and instrumentalities of the State are soft peddling the issue at the cost of rule of law. He places further reliance on the order dated 30.11.2018 passed by a Division Bench of this Court in **CWP-PIL NO.-40 of 2018** titled as **‘Mohit Kapoor Vs. State of Punjab and others**. The relevant extract of the same reads as under:*

“However, as an interim measure, in order to ensure peace and tranquility, we issue the following directions which will abide and shall be carried out by all the respective parties:

i) *The organizers who have planned to stage any Dharna, protest or demonstration either on 2nd December, 2018, as stated by them in the public notice or any other date, shall do so only after obtaining prior*

permission from the District Administration and shall carry out peaceful activities only at the place identified to carry out the same by the District Administration.

ii) The police authorities shall ensure that those coming to participate in the agitation do not carry any weapons, which includes fire arms, knives, lathis and the likes.

iii) The organizers shall give an undertaking to the Administration that they shall ensure peaceful protest/demonstration/agitation at the designated site only.

iv) The police authorities and the State Government shall ensure videography of any protest/demonstration being held to the maximum extent possible.

v) The police authorities keep a strict vigil and regulate entries from all the entry points of District Patiala.

*The police authorities, the District Administration, the State Government and the organizers of the associations are further directed to ensure the compliance of the directions issued in this regard by the Hon'ble Apex Court in **Destruction of Public and Private Properties v. State of Andhra Pradesh and others (2009)** **5 Supreme Court Cases 212.**”*

*A further reference is made to the judgment of the Hon'ble Supreme Court in the matter of **Amit Sahni Vs. Commissioner of Police & others** bearing **Civil Appeal No.3282 of 2020** and decided on 07.10.2020. The observations made in the aforesaid judgment are reproduced hereinafter below:*

“18. Furthermore, we live in the age of technology and the internet where social movements around the world have swiftly integrated digital connectivity into their toolkit; be it for organising, publicity or effective

communication. Technology, however, in a near paradoxical manner, works to both empower digitally fuelled movements and at the same time, contributes to their apparent weaknesses. The ability to scale up quickly, for example, using digital infrastructure has empowered movements to embrace their often-leaderless aspirations and evade usual restrictions of censorship; however, the flip side to this is that social media channels are often fraught with danger and can lead to the creation of highly polarised environments, which often see parallel conversations running with no constructive outcome evident. Both these scenarios were witnessed in Shaheen Bagh, which started out as a protest against the Citizenship Amendment Act, gained momentum across cities to become a movement of solidarity for the women and their cause, but came with its fair share of chinks - as has been opined by the interlocutors and caused inconvenience of commuters.

19. *We have, thus, no hesitation in concluding that such kind of occupation of public ways, whether at the site in question or anywhere else for protests is not acceptable and the administration ought to take action to keep the areas clear of encroachments or obstructions*

20. *We are also of the view that the High Court should have monitored the matter rather than disposing of the Writ Petition and creating a fluid situation. No doubt, it is the responsibility of the respondent authorities to take suitable action, but then such suitable action should produce results. In what manner the administration should act is their responsibility and they should not hide behind the court orders or seek support therefrom for carrying out their administrative functions. The courts adjudicate the legality of the actions and are not meant to give shoulder to the administration to fire their guns from. Unfortunately, despite a lapse of a considerable period of*

time, there was neither any negotiations nor any action by the administration, thus warranting our intervention.

21. *We only hope that such a situation does not arise in the future and protests are subject to the legal position as enunciated above, with some sympathy and dialogue, but are not permitted to get out of hand.”*

Learned counsel for the petitioner contends that the respondent authorities have failed to point out any lapse and/or omission on the part of the petitioner, however, despite the same, the State agencies have not been able to uphold the rule of law. They have allowed a free hand to the protesters. The State Agencies want the Court to shoulder their obligation and to take responsibility for the actions required to be taken by them. Such conduct on the part of the State instrumentalities has been repeatedly deprecated by this Court as well as the Hon'ble Supreme Court. He contends that the petitioner unit/factory has been established with an investment of more than Rs.300 crores and financial institutional borrowing to the tune of Rs.200 crores. The salary bill of the petitioner unit/factory itself runs into Rs.1.5 crores and a further amount of Rs.2 crores per month has to be paid towards the installment against the institutional borrowings. The factory has remained closed for a period of two months due to inaction on the part of the respondent authorities resulting in immense loss to the petitioner unit. The respondent – State is not willing to shoulder any obligation or liability for such loss that has occasioned solely due to inaction on the part of the respondent-State to enforce the rule of law.

Learned Advocate General Punjab prays for a further two weeks' time to amicably resolve the issue with dialogue.

In the interest of justice, adjourned to 11.10.2022.

However, it has been put without contradiction to the Advocate General Punjab that the State is required to take all such effective measures as are required to enforce the rule of

law on its responsibility as guardian of all stake-holders and that the State is liable to compensate the petitioner for its inability to ensure protection of the rights of the petitioner to carry on business/trade and occupation within the statutory parameters. State cannot express its helplessness when decisions to uphold law are to be taken. In the event of State continuing to reflect its handicap or claim for more time, an aggrieved cannot be made to suffer financial bankruptcy and it must remain prepared to adequately compensate the victims of sovereign failure to uphold law.

Counsel for the petitioners has handed over an affidavit of Rajesh Kumar today, in the Court as per which the total expenses/losses already suffered by the petitioners on account of non-operation of the Unit are Rs.13.73 crores. He contends that the petitioners have not been found non-compliant of any law or requirements prescribed therein and yet the State has failed to provide adequate arrangement to allow petitioners to operate. He further contends that the respondent State has allowed disgruntled people/unruly mob to take control of the State machinery which has opted to kneel down rather than to uphold sovereignty of Rule of Law.

Learned Advocate General, Punjab, on the other hand, does not dispute the report of the Monitoring Committee or that the assertion of the petitioners that it is compliant of all laws and re-iterates that they are taking all effective steps in their command and would rather seek order from the Court to implement the orders.

Such a request cannot be accepted. The instrumentalities of the State need to firmly saddle themselves and take responsibility. They cannot be permitted to ask Court of law to lend its shoulder for discharge of their

functions. The matter has remained pending for more than 03 months and the situation has remained same despite observances.

It seems that the State has been soft peddling the entire issue. Despite the repeated assurances given and strenuous efforts made by the Advocate General, Punjab, it does not seem to be making any headway despite the petitioners agitating and suffering immense losses including the pecuniary burden of having to meet the financial liability.

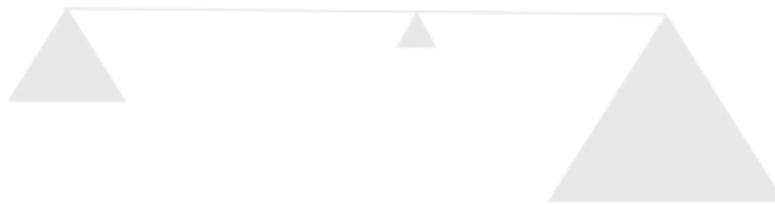
In order to balance equities and to ensure that conflicting interests are resolved, hearing of the case is adjourned to 22.11.2022.

In the meanwhile, an amount of Rs.5 Crores shall be deposited by the respondent – State with the Registry of this Court within a period of one week.

October 11, 2022.
raj arora

(VINOD S. BHARDWAJ)
JUDGE

सत्यमेव जयते





Malbros

International Pvt. Ltd.

Village Mansoorwal, Tehsil Zira,
District Ferozpur-142050 (Punjab)
Mob. : +91-9914932846
Email : malbros@oasisgrp.in

10-10-2022

To

The Deputy Commissioner ,
Ferozpur , Punjab

Subject : Submissions in respect of meeting called on 07-10-2022 at Ferozpur.

Respected Madam ,

M/s Malbros International Pvt. Ltd. is actively engaged in distillation of spirits since 2007 and equipped with Zero Discharge Technology i.e there is no effluent discharge on land or in air (water balance enclosed). The distillery is sincerely complying all the rules & regulations under the Air & Water Acts . The capacity of the distillery was increased by taking EC (environment clearance) with the consent of general public of nearby villages on 4TH May 2016 . The distillery has been working with increased capacity of 280 KLD since 3rd Feb 2022.

It is further submitted to your Goodself that :

1. The distillery is frequently supervised by the officials of MOE&FC , CPCB , PPCB and they had never observed anything adverse in last 15 years. There is 24x7 monitoring by the CPCB through online CCTV Cameras & water testing flow meters on inlets-outlets .
2. Total Investment of the Industry is Rs. 300 Crores with the installed capacity of 280 KLPD. The industry is providing direct employment to the 1200 families of the nearby villages .
3. Malbros International Pvt. Ltd. is amongst the major ethanol supplier selling 75 lacs Bulk Liters every month to the OMCs . It is also supplying PML to the State of Punjab.
4. The industry is consuming large quantity of rotten grains/nakku.(Nakku: 350days x 700 MT/Day= 245,000 MT pa x 20/-Kg= 490.20 Crores)
5. The industry is consuming large quantity of rice husk /straw/parali from the farmers (Rice Husk : 350 days x 350 MT/Day =1,22,500 MT pax10/Kg- = 122.50 Cr.) in eco-friendly environment and creating awareness among the farmers not to burn the paddy waste/parali by using it as alternative fuel in the industry.



Malbros

International Pvt. Ltd.

Village Mansoorwal, Tehsil Zira,
District Ferozepur-142050 (Punjab)

Mob. : +91-9914932846

Email : malbros@oasisgrp.in

6. The industry is also selling cattle feed , poultry feed at cheaper rates to local traders which is also contributing to the prosperity of the whole area .(Poultry Feed, Cattle Feed = 350 Days x 120MT/ Day x 25/-Kg = 105.00 Cr.)
7. The avg. land holding in Punjab is 3.62 acres and rice yield per acre is 3000 Kg considering that factor apx. $3.62 \times 3 \text{ T} = 10.86$; $245000 \text{ MT}/10.86 =$ nearly 22,500 families of the farmers are dependent upon the industry.
8. As you are aware that there has been complete blockade at factory gate by protesters since 24'th of July 2022 which has resulted in complete stoppage of all industrial activities causing loss of apx.Rs.22 Lacs per day i.e Rs. 16 Crores in last 79 days .
9. The industry is also contributing heftily to the State Exchequer in terms of Excise duties , GST , VAT to the tune of apx. 10 crores annually which is also adversely affected due to the blockade.
10. Monitoring Committee under Hon'ble NGT after the receipt of some complaint from gram-panchayat of Ratoul Rohi & nearby villages of the factory constituted a committee comprising of **Justice Jasbeer Singh former Judge Punjab & Haryana High Court , Shri SC Agrawal IAS (Retd.) former Chief Secretary Punjab , Sant Balbeer Singh Seechewal** , members of District Administration , Punjab Pollution Control Board , other departments & local representatives of nearby villages to visit the factory site on 18-08-2022 and took three samples each and sent them to the reputed labs of the country for detailed examination from pollution angle .
11. **As per the conclusive observation of the monitoring committee industry was not found guilty of any contamination of ground water and there was no effluence found in the samples .**
12. Hon'ble Punjab & Haryana High Court has also given directions vide order dated 29th July 2022 to the State of Punjab that all the obstructions upto 300 Mtrs. should be immediately cleared from the factory gate so that adequate passage could be provided for the movement of man power & inflow -outflow of trucks containing materials . Despite the Order of Hon'ble High Court Local Administration and Police has not been able to restore the normal position till now .



Malbros

International Pvt. Ltd.

Village Mansoorwal, Tehsil Zira,
District Ferozepur-142050 (Punjab)

Mob. : +91-9914932846

Email : malbros@oasisgrp.in

It is henceforth requested to your Goodself that appropriate law and order situation is maintained outside the factory enclosure so that right to work is ensured to us and our workers, staff members etc. and the industry is not prevented in carrying out its commercial activities .

Thanking You ,

Yours Faithfully ,

For Malbros International Pvt. Ltd.

Pawan Bansal
Chief Administrative Officer

Cc : XEN, Regional Office, PPCB, Faridkot