



**Nilawar Laboratories**  
(A Unit of MNEC Consultants Pvt. Ltd)

**NABL ACCREDITED LAB VIDE - TC-9782**  
**CIN No. U74140MH112009PTC196108**



**TEST REPORT**

<b>Project Name &amp; Address</b>	: Urtan Coal Field, Taluka – Kotma, District – Anuppur (MP)		
<b>Customer Name &amp; Address</b>	: JMS Mining Pvt. Ltd., Kolkata		
<b>Contact Details</b>	: 9822438061	<b>Customer Reference</b>	: --
<b>Test Report No</b>	: NL/WATER/879	<b>Sampling Date</b>	: 06/02/2024 to 07/02/2024
<b>Sample Received On</b>	: 08/02/2024	<b>Report Issue Date</b>	: 28/02/2024
<b>Sample ID.</b>	: NL-0433/MAR24/WA-07to WA-10	<b>Date of Test Start</b>	: 08/02/2024
<b>Sampling Plan Ref.</b>	: As per Work Order	<b>Date of Test complete</b>	: 15/02/2024
<b>Sampling Method Ref.</b>	: APHA 24 <sup>th</sup> Edition	<b>Sample Description</b>	: Ground Water Sample
<b>Sampling By</b>	: Lab	<b>ULR No.</b>	: TC97822400000552F
<b>Environmental Condition at the time of Sampling</b>	: Avg. Temperature : 29.9 °C Avg. Humidity : 55 % Weather condition : Sunny	<b>Environmental Condition at the time of Testing</b>	: Temp. : 25.0 °C : Humidity : 45 %
<b>Sample Quantity Received</b>	: General Parameters – 2 liter PVC Bottle 04 samples, Metals – 250 ml PVC Bottles 04 samples, Oil & Grease – 1 liter glass bottle 04 samples.		

**I. Chemical Testing**  
**III. Water**

**DESCRIPTION LIST GROUND WATER SAMPLES**

Sr. No.	Lab Sample Code	Client Sample code	Location	Lat.	Long.
				(Northing)	(Easting)
1	WA-07	U-GW-1	Thoda Village Hand Pump	23°14.912"N	81°59.498"E
2	WA-08	U-GW-2	Dug Well Baskhali Village	23°14.975'N	081°59.837'E
3	WA-09	U-GW-3	Pairichua Village Hand Pump	23°13.733' N	82°00.695' E
4	WA-10	U-GW-4	Teliyantola Village Hand Pump	23°17.537' N	81°59.367' E



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**Laboratory :** At Km 16.5, Nilawar Motors Complex, Amravati Road, Waddhamna, Nagpur - 440 023. Mob. : +91-9922409055, 9552550955



**TEST RESULT**

Sr. No.	Parameters	Units	Result				Test Method Used	As Per IS 10500:2012	
								Acceptable	Permissible
<b>Client sample Code</b>			U GW-1	U GW-2	U GW-3	U GW-4			
<b>Lab sample code</b>			WA-07	WA-08	WA-09	WA-10			
<b>Physical Parameters</b>									
1	Colour	Hazen	2.9	2.2	1.9	3.9	IS 3025 (Part 4)	5	15
2	Odour	-	AG	AG	AG	AG	IS 3025 (Part 5)	Agreeable	Agreeable
3	Taste	-	AG	AG	AG	AG	IS 3025 (Part 8)	Agreeable	Agreeable
4	Turbidity	NTU	0.6	0.5	0.8	0.9	IS 3025 (Part 10)	1	5
5	pH at 25 0C	-	7.15	7.32	7.88	7.29	IS 3025 (Part 11)	6.5-8.5	No Relaxation
<b>Inorganic Parameters</b>									
6	Electrical Conductivity	µS/cm	416	386	692	348	IS 3025 (Part 14 )	-	-
7	Total Dissolved Solids	mg/l	256	238	426	220	IS 3025 (Part 16)	500	2000
8	Total Suspended Solids	mg/l	15.2	14.8	8.6	4.2	IS 3025 (Part 17)	-	-
9	Total Alkalinity as CaCO <sub>3</sub>	mg/l	105	96	108	132	IS 3025 (Part 23)	200	600
10	Total Hardness as CaCO <sub>3</sub>	mg/l	144	132	168	184	IS 3025 (Part 21)	200	600
11	Calcium Hardness as CaCO <sub>3</sub>	mg/l	78	94	102	112	IS 3025 (Part 21)	-	-
12	Calcium as Ca <sup>++</sup>	mg/l	31.2	37.6	40.8	44.8	IS 3025 (Part 40 )	75	200
13	Magnesium as Mg <sup>++</sup>	mg/l	15.8	9.1	15.8	17.3	IS 3025 (Part 46 )	30	100
14	Sodium as Na	mg/l	14.52	19.22	16.36	65.93	IS 3025 (Part 45 )	-	-
15	Potassium as K	mg/l	7.24	10.02	3.89	39.62	IS 3025 (Part 45 )	-	-
16	Chlorides as Cl	mg/l	56.3	38.4	19.3	54.8	IS 3025 (Part 32)	250	1000





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<b>Client sample Code</b>			U GW-1	U GW-2	U GW-3	U GW-4			
<b>Lab sample code</b>			WA-07	WA-08	WA-09	WA-10			
17	Sulphates as SO <sub>4</sub>	mg/l	18.6	30.85	14.23	152.31	APHA 24 <sup>th</sup> Edition	200	400
18	Nitrates as NO <sub>3</sub>	mg/l	3.124	10.324	5.422	1.625	APHA 24 <sup>th</sup> Edition	45	No Relaxation+
19	Fluoride as F	mg/l	0.26	0.18	0.37	0.61	APHA 24 <sup>th</sup> Edition	1	1.5
<b>Pollutants</b>									
20	Amonical Nitrogen as NH <sub>3</sub> -N	mg/l	0.241	0.187	0.049	0.146	IS 3025 (Part34)	0.5	No Relaxation
21	Nitrite Nitrogen as NO <sub>2</sub> -N	mg/l	0.09	BDL	BDL	0.017	IS 3025 (Part34)	-	-
22	Total Phosphate as PO <sub>4</sub> -P	mg/l	BDL	BDL	BDL	0.089	IS 3025 (Part 31)	-	-
23	Total Oil & Grease	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 39)	0.5	No Relaxation
<b>Trace Metals</b>									
24	Aluminium as Al	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 55)	0.03	0.2
25	Arsenic as As	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 37)	0.01	0.05
26	Boron as B	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 37)	0.5	1
27	Cadmium as Cd	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 41)	0.003	No Relaxation
28	Chromium as Cr <sup>6+</sup>	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 52)	0.05	No Relaxation
29	Copper as Cu	mg/l	0.034	0.022	0.015	0.026	IS 3025 (Part 42)	0.05	1.5
30	Iron as Fe	mg/l	0.185	0.138	0.211	0.209	IS 3025 (Part 53)	0.3	No Relaxation
31	Lead as Pb	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 47)	0.01	No Relaxation
32	Manganese as Mn	mg/l	0.071	BDL	0.082	BDL	APHA 24 <sup>th</sup> Edition	0.1	0.3
33	Mercury as Hg	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 48)	0.001	No Relaxation





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								Acceptable	Permissible
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<b>Lab sample code</b>			<b>WA-07</b>	<b>WA-08</b>	<b>WA-09</b>	<b>WA-10</b>			
34	Zinc as Zn	mg/l	0.196	0.245	0.495	0.405	IS 3025 (Part 49)	5	15
35	Nickel as Ni	mg/l	BDL	BDL	BDL	BDL	IS 3025 (Part 54)	0.02	No Relaxation

For M/s Nilawar Laboratories,

  


**Dinesh Bangadkar**  
**(Authorized Signatory)**

Note -

1. This report should not be reproduced wholly or in part and not to be used as evidence in any court of law.
2. The results listed referred to the tested samples and applicable parameters only.
3. Our liability is limited to the commercial value of the test/tests carried out.
4. NR-No Relaxation, AG-Agreeable; NA- Not Applicable; BDL- Below Detection Limit.

Checked By,



**Nikita Bhangde**  
**(Chemist)**

-----End of Report-----



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