

# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/A

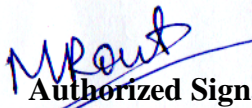
Issued Date-04.04.2022

## AMBIENT AIR QUALITY MONITORING TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
 Sample Description : Ambient Air  
 Date of Monitoring : 30.03.2022  
 Date of Receiving : 31.03.2022  
 Date of Analysis : 31.03.2022  
 Sample Collected by : Mr. B.K.Samantaray.

### ANALYSIS RESULT

Sl. No.	LOCATION	MONITORING REPORT					
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	NH <sub>3</sub> (µg/m <sup>3</sup> )
1	At the boundary near the water harvesting pond (East Direction)	74.9	38.1	13.4	17.2	0.5	<20
2	At the Boundary near ESP (South Direction)	74.7	37.9	13.7	17.3	0.5	<20
3	At the Boundary near Coal Fines Stock yard (North Direction)	75.6	38.7	13.9	17.8	0.6	<20
4	Near Ball mill, Iron ore fines stock yard	75.8	39.6	12.5	15.7	0.4	<20
<b>NAAQ Standard-2009</b>		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4.0</b>	<b>400</b>
<b>Methods of Analysis</b>		<b>IS: 5182 (Part-23)</b>	<b>IS: 5182 (Part-24,2019)</b>	<b>IS: 5182 (Part-2)</b>	<b>IS: 5182 (Part-6)</b>	<b>IS: 5182 (Part-10)</b>	<b>IS: 5182 (Part-25,2019)</b>

  
 Authorized Signatory

Notes:

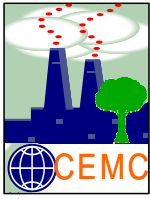


- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
 E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
 E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

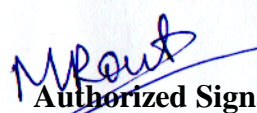
Report No. - CEMC/ASL/040422/A

Issued Date-04.04.2022

## AMBIENT AIR QUALITY MONITORING TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
 Sample Description : Ambient Air  
 Date of Monitoring : 30.03.2022  
 Date of Receiving : 31.03.2022  
 Date of Analysis : 31.03.2022  
 Sample Collected by : Mr. B.K.Samantaray.

Sl. No.	LOCATION	MONITORING REPORT					
		O3 ( $\mu\text{g}/\text{m}^3$ )	Pb ( $\mu\text{g}/\text{m}^3$ )	Ni ( $\text{ng}/\text{m}^3$ )	As ( $\text{ng}/\text{m}^3$ )	Benzene ( $\mu\text{g}/\text{m}^3$ )	BaP ( $\text{ng}/\text{m}^3$ )
1	At the boundary near the water harvesting pond (East Direction)	<10	<0.06	<0.6	<0.44	<1	<1
2	At the Boundary near ESP (South Direction)	<10	<0.06	<0.6	<0.44	<1	<1
3	At the Boundary near Coal Fines Stock yard (North Direction)	<10	<0.06	<0.6	<0.44	<1	<1
4	Near Ball mill, Iron ore fines stock yard	<10	<0.06	<0.6	<0.44	<1	<1
<b>NAAQ Standard-2009</b>		<b>100</b>	<b>1.0</b>	<b>20</b>	<b>6</b>	<b>5</b>	<b>1</b>
<b>Methods of Analysis</b>		<b>IS: 5182 (Part-9)</b>	<b>IS: 5182 (Part-22)</b>	<b>IS: 5182 (Part-26)</b>	<b>As per CPCB method followed by AAS</b>	<b>IS: 5182 (Part-11)</b>	<b>IS: 5182 (Part-12)</b>

  
 Authorized Signatory

Notes:

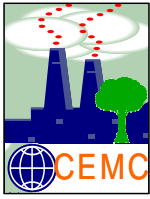
- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.



Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
 E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
 E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/F

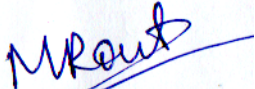
Issued Date-04.04.2022

## FUGITIVE EMISSION MONITORING TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
Sample Description : Fugitive Emission  
Date of Monitoring : 30.03.2022  
Date of Receiving : 31.03.2022  
Date of Analysis : 31.03.2022  
Sample Collected by : Mr. B.K.Samantaray.

## ANALYSIS RESULT

Sl. No.	LOCATION	RESULT	
		RSPM ( $\mu\text{g}/\text{m}^3$ )	SPM ( $\mu\text{g}/\text{m}^3$ )
1	Proportioning System (Ash & Coke Fines Bunker)	415	1203
2	Raw Material Transfer point of Mixture (Mixture Building)	426	1234
3	Ball Mill (Cool Grinding)	398	1179
4	Ball Mill (Flux & Coke Grinding)	409	1231
5	Finished Product Transfer points and plant de-dusting system	347	1196
6	Travelling Grate & Rotary Kiln	358	1124
<b>Standard as per Environment (Protection Act) 3<sup>rd</sup> Amendment Rules-2012 by MoEF &amp; CC. at 10 m distance from the source</b>		--	<b>2000*</b>

  
**Authorized Signatory**



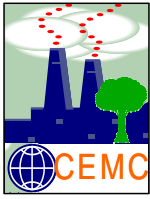
### Notes:

- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha  
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha  
Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India)  
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/N

Issued Date-04.04.2022

## AMBIENT NOISE MONITORING TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
Sample Description : Noise Monitoring  
Date of Monitoring : 30.03.2022  
Sample Collected by : Mr. B.K.Samantaray.

### ANALYSIS RESULT

Sl. No.	Location	Noise Level In Day Time dB(A)	Noise Level In Night Time dB(A)
01	Ball Mill (Cool Grinding)	73.9	69.6
02	Raw Material Transfer point of Mixture (Mixture Building)	74.5	69.2

### NATIONAL STANDARD NOISE LEVEL

Area Code	Category of Area/Zone	Permissible Limit in dB (A)	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

Authorized Signatory  
Notes:

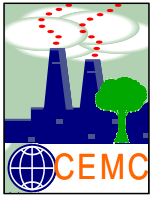


- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha  
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha  
Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India)  
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/St

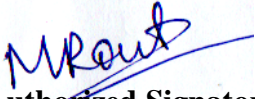
Issued Date-04.04.2022

## STACK EMISSION MONITORING TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
Sample Description : Stack Monitoring  
Date of Monitoring : 30.03.2022  
Sample Collected by : Mr. B.K.Samantaray.  
Stack Height : 30m

### ANALYSIS RESULT

Sl. No.	Location of Sampling	Flue Gas Temp. in K	Concentration of Particulate Matter (PM) in mg/Nm <sup>3</sup>
			Result
01	ESP	402	42.5
Permissible Limit as per CTO			50

  
Authorized Signatory  
Notes:

Seal of Laboratory

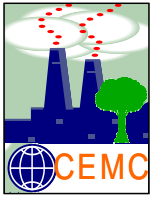


- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha  
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha  
Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India)  
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/DW

Issued Date-04.04.2022

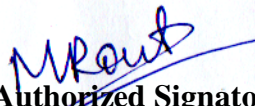
## DRINKING WATER TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
Sample Description : Ground Water  
Date of Sampling : 30.03.2022  
Date of Receiving : 31.03.2022  
Date of Analysis : 31.03.2022  
Sample Collected by : Mr. B.K.Samantaray.  
Sample Location : Canteen(RO Water)

### ANALYSIS RESULT

Sl. No	Parameter	Unit	Desired Limit of drinking water (BIS:10500:2012)	Permissible Limit of drinking water (BIS:10500:2012)	Result
1	Colour	Hazen	5	15	<5
2	Odour	-	Agreeable	Agreeable	AL
3	Taste	-	Agreeable	-	AL
4	Turbidity	NTU	1	5	<1
5	pH Value @ 25°C	-	6.5-8.5	No Relaxation	6.63
6	Total Dissolved Solid	mg/l	500	2000	42
7	Alkalinity as CaCO <sub>3</sub>	mg/l	200	600	28
8	Total Hardness as CaCO <sub>3</sub>	mg/l	200	600	24
9	Iron as Fe	mg/l	0.3	No Relaxation	0.07
10	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	45	No Relaxation	0.14
11	Sulphate as SO <sub>4</sub>	mg/l	200	400	1.3
12	Fluoride as F	mg/l	1.0	1.5	<0.05
13	Calcium as Ca	mg/l	75	200	6.41
14	Chloride as Cl <sup>-</sup>	mg/l	250	1000	2.6

N.B: AL – Agreeable

  
Authorized Signatory  
Notes:

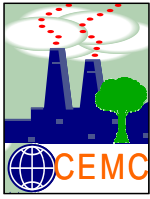


- The result relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha  
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha  
Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India)  
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/SW

Issued Date-04.04.2022

## SURFACE WATER TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
Sample Description : Surface Water  
Date of Sampling : 30.03.2022  
Date of Receiving : 31.03.2022  
Date of Analysis : 31.03.2022  
Sample Collected by : Mr. B.K.Samantaray.  
Sample Location : Reservoir

## ANALYSIS RESULT

Sl. No	Parameter	Unit	GSR 422E Standards	Result
1	Colour	Hazen	--	7
2	Odour	-	--	U/O
3	pH Value @ 25°C	-	5.5-9.0	6.68
4	Total Dissolved Solid	mg/l	2100	395
5	Iron as Fe	mg/l	3.0	0.49
6	Sulphate as SO <sub>4</sub>	mg/l	1000	13.8
7	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	50	15.6
8	Boron as B	mg/l	2.0	0.13
9	BOD for 3 days @ 27 <sup>0</sup> C	mg/l	30	2.0
10	COD	mg/l	250	14

N.B: U/O- Un-objectionable

Authorized Signatory

Notes:

- The result relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.



Seal of Laboratory

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha  
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha  
Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India)  
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/WW

Issued Date-04.04.2022

## WASTE WATER TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
Sample Description : Waste Water  
Date of Sampling : 30.03.2022  
Date of Receiving : 31.03.2022  
Date of Analysis : 31.03.2022  
Sample Collected by : Mr. B.K.Samantaray.  
Sample Location : STP Outlet

## ANALYSIS RESULT

Sl. No.	Parameter	Unit	Effluent Discharge Standard	Testing Method	Result
1.	pH Value @ 25°C	--	6.5-9.0	APHA 4500 H <sup>+</sup> B	7.07
2.	Total Suspended Solids	mg/l	<20	APHA 2540 D	11.8
3.	B.O.D for 3 days @ 27°C	mg/l	<10	APHA 5210 B	9.4
4.	COD	mg/l	<50	APHA 5220 C	38
5.	Oil & Grease	mg/l	--	APHA 5520 B	0.6

Authorized Signatory

Notes:

- The result relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.



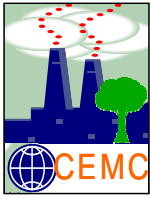
Seal of Laboratory

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314





# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha  
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha  
Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India)  
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/W

Issued Date-04.04.2022

## WATER TEST REPORT

Name of Company : Ardent Steel Ltd., Keonjhar, Odisha.  
Sample Description : Bore Well Water  
Date of Sampling : 30.03.2022  
Date of Receiving : 31.03.2022  
Date of Analysis : 31.03.2022  
Sample Collected by : Mr. B.K.Samantaray.  
Sample Location : Bore Well

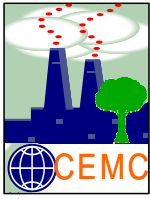
## GROUND WATER TEST REPORT

Sr. No.	Parameters	Unit	BW1	BW2	BW3	IS10500:2012	
						Acceptable Limit	Permissible Limit
1	Colour	Hazen	<05	<05	<05	5	15
2	Odour	--	AL	AL	AL	AL	AL
3	Taste	--	AL	AL	AL	AL	AL
4	Turbidity	NTU	<1.0	<1.0	<1.0	1	5
5	pH Value @ 25°C	mg/l	7.38	7.41	7.28	6.5-8.5	No Relaxation
6	Total Hardness (as CaCO <sub>3</sub> )	mg/l	142	150	146	200	600
7	Iron (as Fe)	mg/l	0.22	0.20	0.21	0.3	No Relaxation
8	Chloride (as Cl)	mg/l	32	36	34	250	1000
9	Residual, free Chlorine	mg/l	ND	ND	ND	0.2	1.0
10	Total Dissolved Solids	mg/l	192	212	196	500	2000
11	Calcium (as Ca)	mg/l	38.47	40.88	40.08	75	200
12	Magnesium (as Mg)	mg/l	11.18	11.66	11.18	30	100
13	Copper (as Cu)	mg/l	<0.03	<0.03	<0.03	0.05	1.5
14	Manganese (as Mn)	mg/l	<0.05	<0.05	<0.05	0.1	0.3
15	Sulphate (as SO <sub>4</sub> )	mg/l	13.1	13.8	13.6	200	400
16	Nitrate (as NO <sub>3</sub> )	mg/l	3.7	4.6	4.4	45	No Relaxation
17	Fluoride (as F)	mg/l	0.14	0.16	0.15	1.0	1.5
18	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	<0.001	<0.001	<0.001	0.001	0.002
19	Mercury (as Hg)	mg/l	<0.001	<0.001	<0.001	0.001	No Relaxation
20	Cadmium (as Cd)	mg/l	<0.003	<0.003	<0.003	0.003	No Relaxation
21	Selenium (as Se)	mg/l	<0.001	<0.001	<0.001	0.01	No Relaxation
22	Arsenic (as As)	mg/l	<0.001	<0.001	<0.001	0.01	0.05

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314



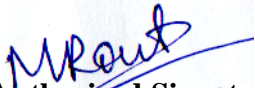
# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

23	Cyanide (as CN)	mg/l	ND	ND	ND	0.05	No Relaxation
24	Lead (as Pb)	mg/l	<0.01	<0.01	<0.01	0.01	No Relaxation
25	Zinc (as Zn)	mg/l	<0.05	<0.05	<0.05	5	15
26	Chromium (as Cr)	mg/l	<0.05	<0.05	<0.05	0.05	No Relaxation
27	Mineral Oil	mg/l	<0.05	<0.05	<0.05	0.5	No Relaxation
28	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	142	140	138	200	600
29	Aluminium (as Al)	mg/l	<0.01	<0.01	<0.01	0.03	0.2
30	Boron (as B)	mg/l	<0.2	<0.2	<0.2	0.5	1.0
31	Total Coliform	MPN/100ml	Absent	Absent	Absent	Absent in 100 mL Sample	Absent
32	Faecal Coliform		Absent	Absent	Absent	Absent in 100 mL Sample	Absent

N.B: AL – Agreeable

**\*END OF REPORT\***

  
**Authorized Signatory**  
Notes:

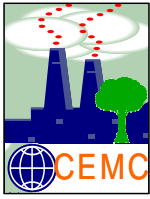


- The result relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- [cemc\\_consultancy@yahoo.co.in](mailto:cemc_consultancy@yahoo.co.in), [cemc122@gmail.com](mailto:cemc122@gmail.com), website: [www.cemc.in](http://www.cemc.in).

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: [cemclab@yahoo.in](mailto:cemclab@yahoo.in), Mobile: 9937631956, 8895177314



# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2015 & OHSAS 45001:2018 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF(Wildlife) & CWLW, Odisha Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India) MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report No. - CEMC/ASL/040422/SW

Issued Date-04.04.2022

Name of Company : Ardent Steel Ltd.  
Sample Description : Waste material  
Date of Monitoring : 30.03.2022  
Date of Receiving : 31.03.2022  
Date of Analysis : 31.03.2022  
Sample Collected by : Mr. B.K.Samantaray  
Sampling material : Used Oil

## ANALYSIS RESULT

Sl. No	Parameter	Unit of measurement	As per HWMR-2016 Schedule-V, Part-A, Max	Used Oil
1	Polychlorinated biphenyls (PCBs)	ppm	<2	ND
2	Cadmium+Chromium+Nickel (as Cd+Cr+Ni)	ppm	500	1.21
3	Lead (as Pb)	ppm	100	0.12
4	Polyaromatic Hydrocarbon	%	6	ND
5	Arsenic (as As)	ppm	5.0	<0.001

\*ND-Not Detected, ppm-parts per million

\*The test parameter is within the standard limit

**\*END OF REPORT\***

Authorized Signatory

Notes:

- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.

This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.



Laboratory Seal

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS& GIS, Baseline Survey, Hydrological & Geological Studies, Socio-economic Studies, DGPS & ETS Survey.

Regd. Office: 1<sup>st</sup> Floor, N-5/305, IRC village, Nayapalli, Bhubaneswar-751015, Odisha, India, Mobile: 9861032826  
E-mail- cemc\_consultancy@yahoo.co.in, cemc122@gmail.com, website: www.cemc.in.

Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101,  
E-mail: cemclab@yahoo.in, Mobile: 9937631956, 8895177314