

TEST REPORT

FOR

JINDAL CHROMITE MINES

M/S JINDAL STAINLESS LTD.

**AT/PO: KALIAPANI, TAHASIL: SUKINDA, DIST: JAJPUR
ODISHA**



PREPARED BY:

INSPECTORATE GRIFFITH INDIA PVT. LTD.

DECEMBER 2014



INSPECTORATE

TEST REPORT

AMBIENT AIR MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0219

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: AMBIENT AIR SAMPLE

*SAMPLING LOCATION: ENTRY TO MINES (TOE OF OB DUMPS)

SAMPLE NO.	DATE OF MONITORING	TIME OF SAMPLING	TEST PARAMETERS											
			PM10	PM2.5	SO2	NO2	CO	O3	Pb	NH3	C6H6	BaP	As	Ni
			µg/M ³	µg/M ³	µg/M ³	µg/M ³	mg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³	ng/M ³	ng/M ³	ng/M ³
1	02.12.14 - 03.12.14	24 HOUR	48.8	30.6	5.8	10.4	NT	8.8	0.0048	10.6	BDL	BDL	ND	0.186
2	08.12.14 - 09.12.14	24 HOUR	50.8	36.2	5.8	11.8	NT	13.6	0.0082	13.8	BDL	BDL	ND	0.196
3	11.12.14 - 12.12.14	24 HOUR	52.6	34.2	6.4	12.0	NT	11.2	0.0076	10.8	BDL	BDL	ND	0.232
4	15.12.14 - 16.12.14	24 HOUR	47.4	22.6	6.0	10.4	NT	10.2	0.0072	9.6	BDL	BDL	ND	0.182
5	18.12.14 - 19.12.14	24 HOUR	51.8	23.9	5.6	10.8	NT	12.8	0.0068	13.2	BDL	BDL	ND	0.227
6	22.12.14 - 23.12.14	24 HOUR	52.4	37.4	6.8	11.8	NT	12.0	0.0059	10.2	BDL	BDL	ND	0.188
7	25.12.14 - 26.12.14	24 HOUR	42.4	29.0	6.2	10.8	NT	12.2	0.0080	10.6	BDL	BDL	ND	0.168
CPCB Standard		ANNUAL	60	40	50	40	-	-	0.50	100	05	01	06	20
		24 HOUR	100	60	80	80	-	-	1.0	400	-	-	-	-
		8 HOUR	-	-	-	-	02	100	-	-	-	-	-	-
		1 HOUR	-	-	-	-	04	180	-	-	-	-	-	-

NOTE: ND: NOT DETECTABLE ; NT: NOT TRACEABLE

MDL of instrument :- 10ppb (for Benzene & Benzo(a)pyrene)

*Indicates information supplied by the customer for which the laboratory has no control



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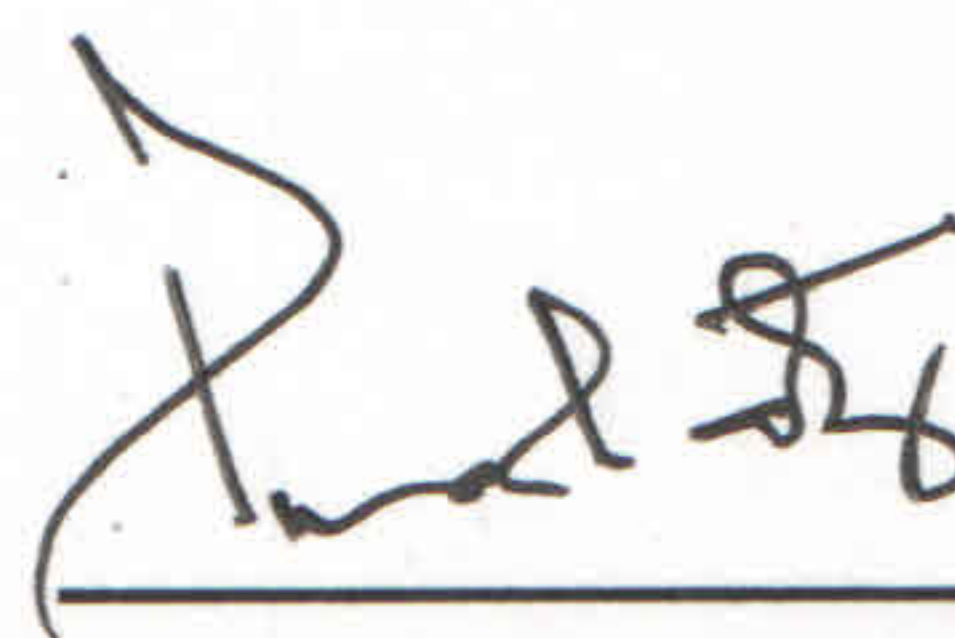
841 (P) Rasulgarh

Bhubaneswar-751010

Odisha

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AUTHORISED SIGNATORY

TEST RESULTS RELATE TO THE SAMPLE TESTED ONLY

THE CONTENTS OF THE REPORT SHALL NOT BE REPRODUCED EITHER IN FULL OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF THE ISSUING AUTHORITY

LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE

TEST REPORT

AMBIENT AIR MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0220

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: AMBIENT AIR SAMPLE

*SAMPLING LOCATION: MAHAGIRI

SAMPLE NO.	DATE OF MONITORING	TIME OF SAMPLING	TEST PARAMETERS											
			PM10	PM2.5	SO2	NO2	CO	O3	Pb	NH3	C6H6	BaP	As	Ni
			µg/M ³	µg/M ³	µg/M ³	µg/M ³	mg/M ³	µg/M ³	µg/M ³	µg/M ³	µg/M ³	ng/M ³	ng/M ³	ng/M ³
1	04.12.14 - 05.12.14	24 HOUR	38.4	24.6	6.2	10.0	NT	12.8	0.0071	9.8	BDL	BDL	ND	0.178
2	09.12.14 - 10.12.14	24 HOUR	48.0	34.2	6.4	11.2	NT	12.0	0.0068	10.8	BDL	BDL	ND	0.217
3	12.12.14 - 13.12.14	24 HOUR	39.4	27.6	4.8	9.8	NT	8.4	0.0043	9.2	BDL	BDL	ND	0.156
4	16.12.14 - 17.12.14	24 HOUR	38.8	22.4	5.8	10.6	NT	8.2	0.0064	10.4	BDL	BDL	ND	0.188
5	19.12.14 - 20.12.14	24 HOUR	52.7	37.6	8.4	10.6	NT	14.2	0.0092	13.6	BDL	BDL	ND	0.218
6	23.12.14 - 24.12.14	24 HOUR	47.8	30.4	8.2	12.7	NT	12.0	0.0058	10.4	BDL	BDL	ND	0.220
7	26.12.14 - 27.12.14	24 HOUR	48.8	32.6	6.4	10.2	NT	12.6	0.0038	12.0	BDL	BDL	ND	0.174
CPCB Standard		ANNUAL	60	40	50	40	-	-	0.50	100	05	01	06	20
		24 HOUR	100	60	80	80	-	-	1.0	400	-	-	-	-
		8 HOUR	-	-	-	-	02	100	-	-	-	-	-	-
		1 HOUR	-	-	-	-	04	180	-	-	-	-	-	-

NOTE: ND: NOT DETECTABLE ; NT: NOT TRACEABLE

MDL of instrument :- 10ppb (for Benzene & Benzo(a)pyrene)

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LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE

TEST REPORT

AMBIENT AIR MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0221

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: AMBIENT AIR SAMPLE

*SAMPLING LOCATION: MARUABIL

SAMPLE NO.	DATE OF MONITORING	TIME OF SAMPLING	TEST PARAMETERS											
			PM10 µg/M ³	PM2.5 µg/M ³	SO ₂ µg/M ³	NO ₂ µg/M ³	CO mg/M ³	O ₃ µg/M ³	Pb µg/M ³	NH ₃ µg/M ³	C ₆ H ₆ µg/M ³	BaP ng/M ³	As ng/M ³	Ni ng/M ³
1	05.12.14 - 06.12.14	24 HOUR	54.2	33.8	6.4	11.2	NT	8.8	0.0082	12.6	BDL	BDL	ND	0.236
2	08.12.14 - 09.12.14	24 HOUR	47.6	32.0	6.2	11.6	NT	12.2	0.0088	14.0	BDL	BDL	ND	0.210
3	11.12.14 - 12.12.14	24 HOUR	47.2	32.4	5.2	10.6	NT	12.0	0.0036	10.6	BDL	BDL	ND	0.172
4	15.12.14 - 16.12.14	24 HOUR	50.8	32.4	6.0	10.8	NT	11.6	0.0052	10.2	BDL	BDL	ND	0.223
5	18.12.14 - 19.12.14	24 HOUR	53.9	36.4	7.6	12.4	NT	13.8	0.0086	14.0	BDL	BDL	ND	0.238
6	22.12.14 - 23.12.14	24 HOUR	56.8	36.4	7.8	12.6	NT	14.0	0.0076	13.8	BDL	BDL	ND	0.232
7	25.12.14 - 26.12.14	24 HOUR	38.6	27.2	5.8	10.2	NT	8.7	0.0028	10.0	BDL	BDL	ND	0.192
CPCB Standard		ANNUAL	60	40	50	40	-	-	0.50	100	05	01	06	20
		24 HOUR	100	60	80	80	-	-	1.0	400	-	-	-	-
		8 HOUR	-	-	-	-	02	100	-	-	-	-	-	-
		1 HOUR	-	-	-	-	04	180	-	-	-	-	-	-

NOTE: ND: NOT DETECTABLE; NT: NOT TRACEABLE

MDL of instrument :- 10ppb (for Benzene & Benzo(a)pyrene)

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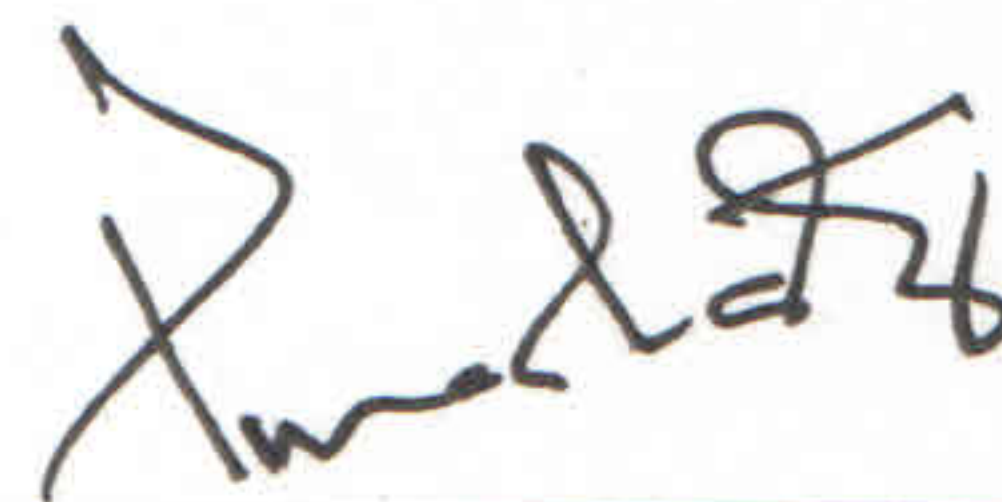


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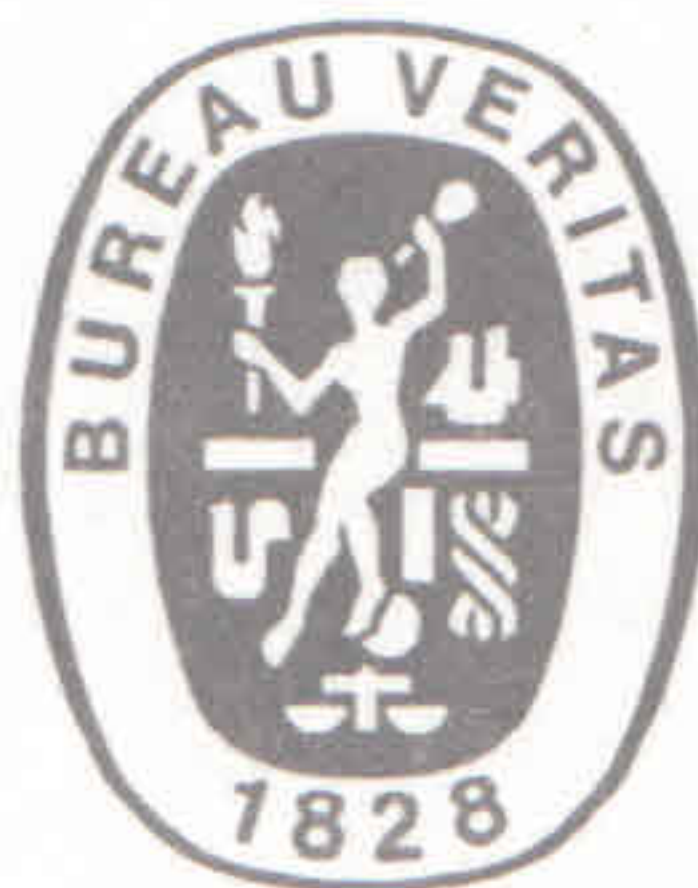
TEST RESULTS RELATE TO THE SAMPLE TESTED ONLY



AUTHORISED SIGNATORY

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LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE

TEST REPORT

AMBIENT AIR MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0222

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: AMBIENT AIR SAMPLE

*SAMPLING LOCATION: SARUABIL

SAMPLE NO.	DATE OF MONITORING	TIME OF SAMPLING	TEST PARAMETERS											
			PM10 µg/M ³	PM2.5 µg/M ³	SO2 µg/M ³	NO2 µg/M ³	CO mg/M ³	O3 µg/M ³	Pb µg/M ³	NH3 µg/M ³	C6H6 µg/M ³	BaP ng/M ³	As ng/M ³	Ni ng/M ³
1	03.12.14 - 04.12.14	24 HOUR	42.6	28.4	6.0	10.8	NT	9.0	0.0042	12.0	BDL	BDL	ND	0.212
2	09.12.14 - 10.12.14	24 HOUR	38.6	27.4	5.8	10.8	NT	13.0	0.0072	12.0	BDL	BDL	ND	0.204
3	12.12.14 - 13.12.14	24 HOUR	52.4	28.2	5.8	10.2	NT	11.4	0.0046	10.2	BDL	BDL	ND	0.187
4	16.12.14 - 17.12.14	24 HOUR	50.6	28.4	6.0	10.8	NT	12.4	0.0072	11.2	BDL	BDL	ND	0.194
5	19.12.14 - 20.12.14	24 HOUR	56.3	38.2	9.2	11.4	NT	12.0	0.0086	14.2	BDL	BDL	ND	0.236
6	23.12.14 - 24.12.14	24 HOUR	56.8	37.4	6.8	11.4	NT	13.0	0.0076	12.2	BDL	BDL	ND	0.224
7	26.12.14 - 27.12.14	24 HOUR	47.8	32.0	6.2	11.4	NT	13.4	0.0064	12.0	BDL	BDL	ND	0.223
CPCB Standard		ANNUAL	60	40	50	40	-	-	0.50	100	05	01	ND	ND
		24 HOUR	100	60	80	80	-	-	1.0	400	-	-	ND	ND
		8 HOUR	-	-	-	-	02	100	-	-	-	-	ND	ND
		1 HOUR	-	-	-	-	04	180	-	-	-	-	ND	ND

NOTE: ND: NOT DETECTABLE ; NT: NOT TRACEABLE

MDL of instrument :- 10ppb (for Benzene & Benzo(a)pyrene)

*Indicates information supplied by the customer for which the laboratory has no control

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LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE

TEST REPORT

DUST FALL MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0223

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: DUST FALL SAMPLE

S. NO.	TEST PARAMETERS	UNIT	*LOCATION		
			MINES ENTRY POINT	MARUABIL	MAHAGIRI
1	NICKEL	µg/M ³	ND	ND	ND
2	COBALT	µg/M ³	ND	ND	ND
3	ARSENIC	µg/M ³	ND	ND	ND
4	MERCURY	µg/M ³	ND	ND	ND

NOTE: ND - NOT DETECTABLE

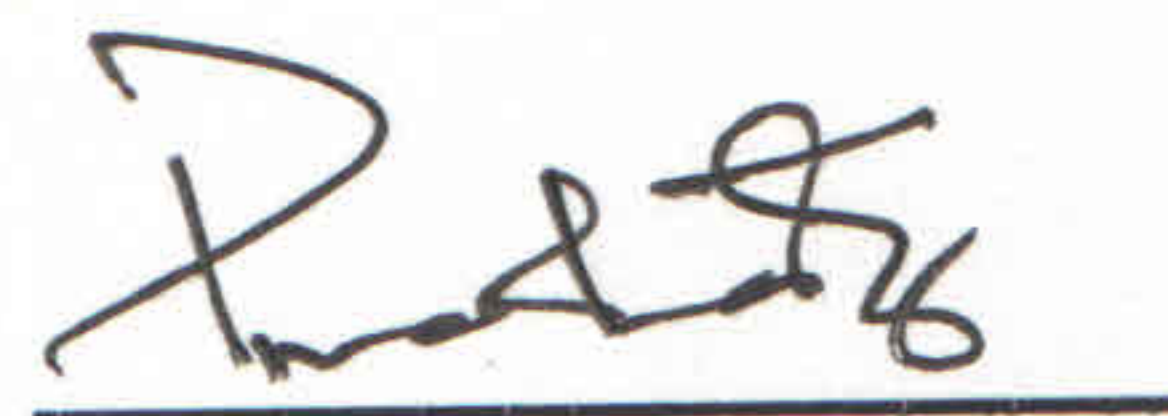
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LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE

TEST REPORT

FUGITIVE EMISSION MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0224

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI,
TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: FUGITIVE AIR SAMPLE

SL. NO.	DATE OF MONITORING	*SAMPLING LOCATION	TEST PARAMETERS				
			SPM	RPM	SO2	NO2	CO
			µg/M ³	µg/M ³	µg/M ³	µg/M ³	mg/M ³
1	01.12.2014	Mines Entry Point	232.2	118.6	10.4	14.8	NT
2	29.12.2014	Stack Yard Loading and Unloading Point	218.4	112.2	11.0	13.6	NT
3	30.12.2014	OB Dump Unloading Point	252.4	104.0	9.8	13.4	NT

NOTE: ND - NOT DETECTABLE, NT - NOT TRACEABLE

*Indicates information supplied by the customer for which the laboratory has no control.

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TEST RESULTS RELATE TO THE SAMPLE TESTED ONLY

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LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE

TEST REPORT

GROUND WATER LEVEL MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0225

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: GROUND WATER LEVEL

*SAMPLING LOCATION: TUBE WELL INSIDE THE MINING LEASE

DATE OF MEASUREMENT: 22.12.2014

SL. NO.	DEPTH FROM SURFACE LEVEL
	M
1	4.5

*Indicates information supplied by the customer for which the laboratory has no control



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LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE
TEST REPORT

GROUND WATER TESTING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0226

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI,
TAHASIL - SUKINDA, DIST. - JAIPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

*SAMPLING LOCATION: TUBE WELL INSIDE THE MINING LEASE

SAMPLE COLLECTION DATE: 20.12.2014

SL. NO.	PARAMETERS	UNIT	ANALYSIS RESULT
1	COLOUR	Hazen	2.0
2	ODOUR		Agreeable
3	TASTE		Agreeable
4	TURBIDITY	NTU	0.32
5	DISSOLVED SOLIDS	mg/l	263.9
6	pH		7.29
7	TOTAL HARDNESS (as CaCO ₃)	mg/l	173.4
8	COPPER	mg/l	0.0024
9	IRON	mg/l	0.069
10	MANGANESE	mg/l	0.0046
11	NITRATE	mg/l	2.27
12	FLUORIDE	mg/l	0.018
13	ZINC	mg/l	0.045
14	ALUMINIUM	mg/l	0.0174
15	CHLORIDE	mg/l	9.86
16	SELENIUM	mg/l	<0.001
17	SULPHATE	mg/l	1.07
18	ALKALINITY (as CaCO ₃)	mg/l	158.4
19	CALCIUM	mg/l	19.56
20	MAGNESIUM	mg/l	29.86
21	RESIDUAL FREE CHLORINE	mg/l	ND
22	BORON	mg/l	0.006
23	MOLIBDENUM	mg/l	<0.01
24	SULPHIDE (as H ₂ S)	mg/l	1.12
25	MERCURY	mg/l	<0.001
26	CADMIUM	mg/l	<0.001
27	ARSENIC	mg/l	<0.001
28	LEAD	mg/l	0.004
29	SILVER	mg/l	<0.001
30	HEXAVALENT CHROMIUM	mg/l	0.124
31	NICKEL	mg/l	0.052
32	BARIUM	mg/l	<0.01
33	E. COLI	MPN/100ml	ND
34	T. COLI	MPN/100ml	ND
35	MINERAL OIL	mg/l	ND

NOTE:ND - NOT DETECTABLE

*Indicates information supplied by the customer for which the laboratory has no control

Goutam Saha

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INSPECTORATE

841 (P) Rasulgarh

Bhubaneswar SAMPLE TESTED ONLY

Odisha

Tel : 0674 27461

[Signature]

AUTHORISED SIGNATORY

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LABORATORY: PLOT NO. 211, GROUND FLOOR, R.A. ZONE-B, BHUBANESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



INSPECTORATE

TEST REPORT

SURFACE WATER TESTING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0227

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER:

JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI,
TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: SURFACE WATER

SAMPLE ID: SW/01
SW/02

SAMPLE COLLECTION DATE: 20.12.2014

SL. NO.	PARAMETERS	UNIT	ANALYSIS RESULT	
			*MINES DRAIN WATER OUTSIDE LEASE AREA	*SUMP ON QUERRY TOP
1	COLOUR	Hazen	3.0	6.0
2	ODOUR		Agreeable	Agreeable
3	pH		7.19	7.82
4	COPPER	mg/l	0.0076	0.0024
5	IRON	mg/l	0.46	0.529
6	MANGANESE	mg/l	0.335	0.094
7	NITRATE	mg/l	0.038	0.186
8	FLUORIDE	mg/l	0.46	0.23
9	ZINC	mg/l	0.0464	0.0243
10	SELENIUM	mg/l	<0.001	<0.001
11	MERCURY	mg/l	0.003	<0.001
12	ARSENIC	mg/l	0.0082	0.0048
13	LEAD	mg/l	0.004	0.006
14	HEXAVALENT CHROMIUM	mg/l	0.012	0.092
15	NICKEL	mg/l	0.02	0.029
16	SUSPENDED SOLIDS	mg/l	31.46	29.8
17	OIL & GREASE	mg/l	3.8	5.6
18	TOTAL RESIDUAL CHLORINE	mg/l	ND	ND
19	BOD	mg/l	1.19	2.18
20	COD	mg/l	3.57	11.51
21	CADMIUM	mg/l	0.014	0.01
22	TOTAL CHROMIUM	mg/l	0.035	0.186
23	DISSOLVED PHOSPHATE AS P	mg/l	2.79	0.89
24	SULPHIDE	mg/l	1.93	1.45
25	VANADIUM	mg/l	0.004	0.002
26	AMMONIACAL NITROGEN (as N)	mg/l	1.46	1.12
27	TEMPERATURE	°C	28.5	27.4
28	TKN	mg/l	2.8	2.46
29	DISSOLVED SOLID	mg/l	290.08	181.75
30	FREE AMMONIA	mg/l	ND	ND
31	PARTICULAR SIZE OF SS	%	100	100

NOTE: ND - NOT DETECTABLE

*Indicates information supplied by the customer for which the laboratory has no control.



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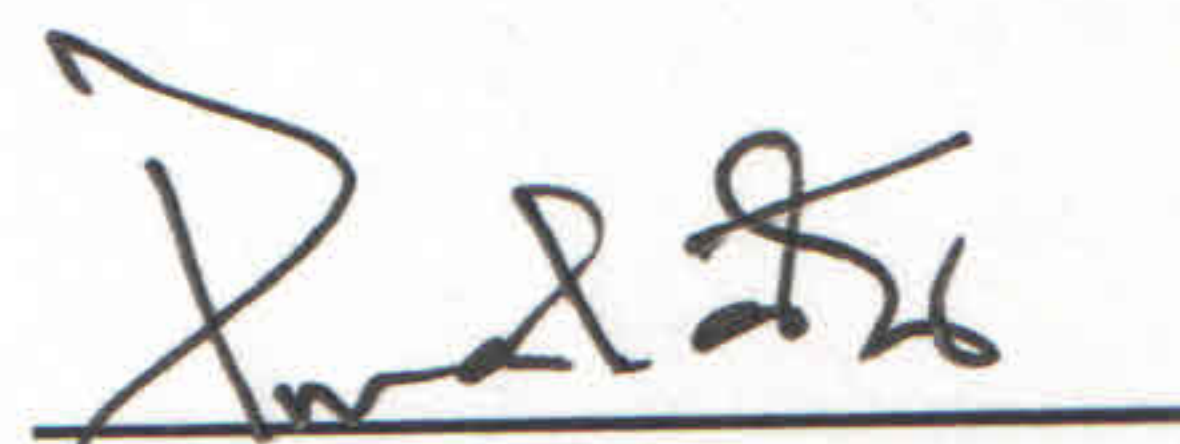
INSPECTORATE
841 (P) Rasulgarh
Bhubaneswar-751010
Odisha

TEST RESULTS RELATE TO THE SAMPLES ONLY

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LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.



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INSPECTORATE

TEST REPORT

SURFACE WATER TESTING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0228

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: SURFACE RUN-OFF WATER

SL. NO.	PARAMETERS	UNIT	ANALYSIS RESULT
1	HEXAVALENT CHROMIUM	mg/l	0.116

NOTE: ND - NOT DETECTABLE

*Indicates information supplied by the customer for which the laboratory has no control



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INSPECTORATE
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Odisha
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TEST RESULTS RELATE TO THE SAMPLE TESTED ONLY

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INSPECTORATE

TEST REPORT

SOIL TESTING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0229

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: SOIL

SAMPLE COLLECTION DATE: 20.12.2014

SL. NO.	PARAMETERS	UNIT	ANALYSIS RESULT
			*NEAR THE QUERRY AREA
1	pH		7.36
2	CATION EXCHANGE CAPACITY	Meq/100gm	43.6
3	PHOSPHORUS	%	0.03
4	NITROGEN	mg/kg	275.0
5	WATER HOLDING CAPACITY	%	43.8
6	BULK DENSITY	gm/cc	1.26
7	TEXTURE		Loamy Sand
8	MOISTURE	%	5.27
9	MANGANESE	%	0.316
10	CHROMIUM	%	7.75
11	IRON	%	27.85
12	NICKEL	%	0.382
13	COBALT	%	0.027
14	ARSENIC	mg/kg	0.9
15	MERCURY	mg/kg	0.134

NOTE: ND - NOT DETECTABLE

*Indicates information supplied by the customer for which the laboratory has no control.



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TEST RESULTS RELATE TO THE SAMPLE TESTED ONLY

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INSPECTORATE

TEST REPORT

NOISE LEVEL MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/14-15/0230

DATE: 29.01.2015

*NAME AND ADDRESS OF CUSTOMER: JINDAL CHROMITE MINES, M/S JINDAL STAINLESS LTD., AT/PO - KALIAPANI, TAHASIL - SUKINDA, DIST. - JAJPUR, ODISHA.

*CUSTOMER REFERENCE: WORK ORDER NO.: JCM/WO/015/12-13/2013 & EXTEND LETTER DATE: 28.09.2013 & 01.10.14

SAMPLE PARTICULARS: NOISE LEVEL

MONITORING DATE: 25.09.2014 to 27.09.2014

*MONITORING STATION	RESULT in Db(A) Leq	
	DAY (6 AM TO 9 PM)	NIGHT (9 PM TO 6 AM)
KALIAPANI VILLAGE	62.3	40.0
CHINGUDIPAL VILLAGE	62.0	41.7
BETWEEN QUARRY AND BASE OF MAHAGIRI	61.5	42.0
NEAR PLANT AND WORKSHOP	63.9	41.5
NEAR SECURITY GATE	62.2	35.2

*Indicates information supplied by the customer for which the laboratory has no control.

Goutam Saha

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INSPECTORATE

TEST RESULTS RELATE TO THE SAMPLE TESTED ONLY

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