

Job No.750001

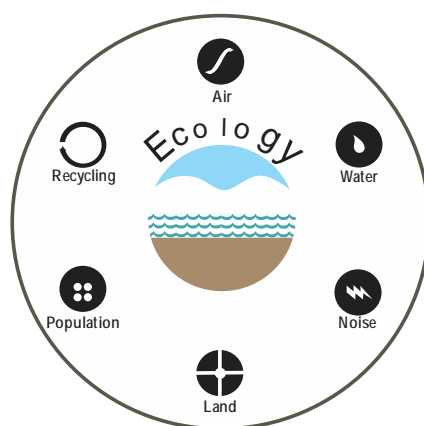
**Annual Environmental Monitoring Report  
of  
Talcher Coalfields  
For  
2014-15**



**Mahanadi Coalfields Limited**

*(A Subsidiary of Coal India Ltd.)*

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[ Assistance from Environment Division, CMPDI(HQs), Ranchi ]

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## Introduction

The state of Odisha is one of the top mineral rich states of the country where development of mining industry holds great promise for the growth of the state, country and its people. The state is endowed with a variety of mineral resources, coal being a major one. It has two important coalfields of the country, namely Talcher and Ib-valley coalfield.

Talcher coalfield is the largest repository of power grade coal in India. It occupies a basin in the south-eastern part of the Mahanadi Valley belt of Gondwana Basin and covers an area of about 1800 sq.kms and is located mainly in Angul district of Orissa. It is located between longitudes 20 degree 53 minute to 21 degree 12 minute North and longitudes 84 degree to 85 degree 23 minute East. The strike length of the coalfield in east-west direction is about 80 kms and the width in north-south direction is about 26 Kms. The total area of the coalfield is about 1800 sq.kms.

Talcher coalfield is strategically located to supply power grade coal to other parts of the country, especially to southern and western India power houses. The coalfield is situated near Cuttack-Sambalpur railway line, which is linked to Howrah-Chennai and Howrah-Mumbai railway line. It is only 192 kms away from a major port in the eastern coast of Odisha i.e. Paradeep port. Railway link is available between Talcher and Paradeep-via-Cuttack. Now Dhamra, Talcher coalfield is also favorably located for consumers of Southern and western India itself where coal can be transported either by rail or rail cum sea route.

## HISTORY OF EXPLORATION IN TALCHER COALFIELD

The occurrence of coal in the coalfield was known as early as 1837, when first systematic search for coal was done by Blandford Brothers. The public works department of the Govt. had dug out 80 tonnes of coal from six shafts sunk in the year 1875 from Gopalprasad area.

L.L Firmer examined Gopalprasad area in 1918. M/s Villiers Ltd. took up drilling in the eastern part of the basin in early twenties, as a result of which coal seams (seam-I), in working thickness range, were discovered in Karharbari formations and underground mines in Deulbera, Talcher and Handidua were started.

Indian Bureau of Mines (IBM) and erstwhile National Coal Development Corporation (NCDC) undertook detailed exploration by drilling in the eastern part of the coalfield in late fifties. Geological survey of India carried out regional exploration in the central part of the coalfield in 1963-65. Around this time Gopalprasad and its adjoining blocks received attention. During the period 1971-75, northern and western areas of Nandira i.e. Bharatpur and Kalinga blocks were explored.

The regional exploration brought to the light occurrence of many thick younger coal seams in Barakar formations. These seams were of power grade coal, quality varying from grade E to G.

To develop the area for supplying power grade coal to east coast and southern power houses, Ministry of Energy decided to intensify prospecting of the area in 1980. To speed up exploration, external Govt. agencies like MECL (Mineral Exploration Corporation) and Directorate of Mining and Geology, Govt. of Orissa, were also engaged.

## **HISTORY OF MINING IN TALCHER COALFIELD**

Underground mines in seam-I were started in twenties as mentioned earlier. Consequent to exploration by NCDC in Fifties, South Balanda OCP (1.0 Mty) and Nandira underground mines were planned for production of C/D grade coal in sixties. Coal from South Balanda was initially planned for supply to Talcher Power Station of OSEB, located nearby, by cross country transport system over a distance of about 10 kms.

Fertilizer Corporation of India (FCI) opened up coal based fertilizer plant near South Balanda. Total coal from South Balanda and Nandira were linked to FCI for movement by road/ belt conveyors. As an alternative, Jagannath OCP (2.0 Mty) was opened by NCDC to supply power grade coal to Talcher thermal power station of erstwhile Orissa State Electricity Board (OSEB). As the demand of power grade coal increased over the years, rail transport to southern power houses started from Jagannath OCP through Balanda and Jagannath sidings and the production capacity of the project was enhanced to 3.0 Mty and then to 4.0 Mty and now to 6.0 Mty.

Expansion Project report of 8.0 Mty for Jagannath OCP is being formulated.

To supply coal to Thermal Power Station (6x120mw) of NALCO, near Angul, Bharatpur OCP was opened in 1985. The project has now been expanded to 20.0 Mty.

To supply coal to Super Thermal Power Station of NTPC (6x500 MW) located at Kaniah, Lingaraj OCP (5 Mty) had been taken up for operation in 1991. Coal from Lingaraj to NTPC, Kaniah is being transported by MGR covering a distance of around 22kms. The project has now been expanded to 16.0 Mty capacity.

Kalinga OCP (8 Mty) (now renamed as Balram OCP) was opened in 1991 to supply coal to North Madras and Tuticorin power houses by rail. The project has been expanded to 15.0 Mty.

Ananta opencast project (4 Mty) was started in 1988 for supply of coal to power station of Vizag Steel Plant at Vizag and charge chrome project of ICCL at Choudwar. This coal is being transported by rail system from colliery siding. The project has now been expanded to 15.0 Mty.



Chhendipada OCP, a pilot project of 0.35 Mty capacity was approved in 1997 near Chhendipada to develop the north western part of the coalfield and the mine is working accordingly.

Hingula-II OCP (2.0 Mty) was approved in 1999 to supply coal to Thermal Power Stations of Southern India. The project capacity has now been expanded to 15.0 Mty.

Bhubaneswari (20.0 Mty) and Kaniah OCP (10.0 Mty) were formulated subsequently to meet the growing demand of coal from the coalfield. Both Bhubaneswari and Kaniah OCPs are running mines. Another OCP, namely Kaniah-II OCP (10.0 Mty) has been planned near Kaniah OCP. Coal from Kaniah and Kaniah-II OCP will be linked to Kaniah STPS of NTPC.

All the above mines are being operated by MCL, a subsidiary of CIL. Not a single captive block mine has yet been operational.

## **LOCATION**

Talcher coalfield constitutes the south-eastern most part of the Lower Gondwana basins within the Mahanadi Valley graben bounded by Latitude : 20o53' to 21o12' N and Longitude: 84o ' to 85o23'E.

The major part of the coalfield including the present coal mining area falls in Angul district. A very small part in the west lies in Sambalpur district and another small part lying to the east of Brahmani river falls in Dhenkanal district. A part of the coalfield in the north lies in Deogarh district.

## **COMMUNICATION**

The southeastern part of the coalfield where all the coal mining activities are taking place at present, is connected by rail to Bhubaneswar (150 Km.) - the capital city of

Odisha and located on Howrah-Chennai main railway line. It is also connected by rail and road to Paradeep port. National Highway No.42 connecting Cuttack-Angul-Sambalpur passes more or less parallel to the southern fringe of the coalfield at about 5 to 7 Km. NH-23 connecting Talcher-Samal-Pallahara passes through the eastern part of the coalfield. Another prominent district road is Angul-Chhendipada-Deogarh road passing through the central part of the coalfield. NH-200 originating from Chandikhol, also passes through north eastern part of the coalfield and joins with NH-23.

The coalfield is also suitably connected by railway network. Sambalpur-Talcher rail link, the connector to Howrah-Mumbai and Howrah-Chennai main railway lines, runs almost parallel to NH-42 and passes across the study area in east-west direction. The rail link carries heavy goods traffic of the industrial and mining activities of the region to the main network lines which are accessible at about 100-150 km distance from Talcher.

## **TOPOGRAPHY AND DRAINAGE**

Topographically the coalfield can be divided in two parts - eastern part and the western part. The eastern part largely covered by Barakar Formation (or Lower Kamthi Formation), is slightly undulating with an average elevation of around 150m above MSL. The western part comprises largely of steeply sloping Kamthi hillocks. Minimum and maximum elevation from MSL is 60m and 567m respectively for the coalfield. The terrain is undulating and accommodates large number of villages and fertile lands. The soil in this area varies from rich loams to the gravelly detritus of the hill slopes.

The coalfield is drained by the Brahmani River flowing along eastern fringe of the coalfield. Singhadajhor, Nandira and Tikra, Aunli are some of the important tributaries of the Bramhani River.

## CLIMATE AND RAINFALL

The climate of the area is generally dry and arid except in monsoon season. It is influenced by prevalence of dry air of the continental type. It is characterized by extreme conditions, summers being intensely warm and winters rather cold. The summer is severe during May-June when temperature rises as high as 49°C accompanied by high humidity. Winter is very pleasant, prevails during December-January. The area experiences warm to hot climate with temperature varying from

9.9oC to 44.4oC. Average humidity varies from 26% to 83%. Generally the humidity is highest in August and least in March. The climate of this region resembles with that of Deccan plateau.

Annual mean wind velocity is 7 Km/hr. with maximum speed of more than 20 Km/hr. It is generally observed that the wind speed in the area is light to moderate except in the early monsoon period when it is generally strong. Higher speed wind blows during latter part of summer or rainy season in the direction of South-West or North-East. Winds blow with slow or moderate speed in rest part of the year. In winter the winds blow either from West or North. Frequent variation in wind speed takes place only in summers.

The area has monsoon type climate with rain fall predominantly in the months of June to September and some in the other months. Average rainfall per annum is 1329 mm. Maximum rainfall per annum is 2200 mm and minimum is 700 mm as per records available.

## Environmental Quality Monitoring Stations

The details of various environmental quality monitoring stations are given in are given below:

<b>Air Monitoring Stations of Talcher CF (2014-15)( SPM,RPM,PM2.5,Nox,Sox )</b>			
<b>S.N O</b>	<b>Name of the Area</b>	<b>Name of the Project</b>	<b>Air Monitoring Station</b>
1	Jagannath	Jagannath OCP	Jagannath OCP - Time office
2			Mine Sub Station
3			Field Canteen
4			Jagannath Colony
5		Bhubaneswari OCP	B.C.M.L. Workshop
6			Hensmul Village - Talasahi
7			Naraharipur Village
8			Raghunathpur village
9		Ananata OCP	Field Canteen
10			Mine Sub Station
11			Ananta vihar colony
12			Hensmul Village - Talasahi
13	Lingaraj	Lingaraj OCP	Lingaraj CGM office
14			Near Radhakrishna Temple
15			Near C.T. Road (Lingaraj to Dera)
			Near Longijoda village
17			*Lingaraj Township (One in Pre & one in Post Monsoon)
18	Kaniha	Kaniha OCP	Site office
19			Telisingha Village
20			Near Jarada Village
21			Patharmunda Village
22	Bharatpur	Bharatpur OCP	Rejected dump yard near World bank Office
23			Nakeipasi village
24			Near Civil maintenance office of HingulaArea
25			Regional Store
26		Chhendipada	Near Site Office

27		OCP	Near Fire Station
28			MamuraSahi
29			DolamandapChhak
30	Hingula	Hingula OCP	Malibandha Village
31			Project Office
32			Bhalugadia Village
33			Gopal Prasad Village
34		Balram OCP	Natada Village
35			on backfilled area near field time office
36			Project Office, Balaram OCP
37			Nakeipasi Village
38	Talcher	Talcher Colliery (U/G)	GM Office
39			Canteen Talcher Colliery
40		Nandira Colliery (U/G)	Project Office
41			Natedi Village
42		Deulbera Colliery (U/G)	Managers Office
43			Deulbera Colony
44		Talcher west Colliery	Near Bunker

<b>Noise Monitoring Stations of Talcher CF (2014-15)( SPM,RPM,PM2.5,Nox,Sox )</b>			
<b>S.N O</b>	Name of the Area	Name of the Project	Air Monitoring Station
1	Jagannath	Jagannath OCP	Jagannath OCP - Time office
2			Mine Sub Station
3			Field Canteen
4			Jagannath Colony
5		Bhubaneswari OCP	B.C.M.L. Workshop
6			Hensmul Village - Talasahi
7			Naraharipur Village
8			Raghunathpur village
9		Ananata OCP	Field Canteen
10			Mine Sub Station
11			Ananta vihar colony
12			Hensmul Village - Talasahi
13	Lingaraj	Lingaraj OCP	Lingaraj CGM office
14			Near Radhakrishna Temple
15			Near C.T. Road (Lingaraj to Dera)
			Near Longijoda village
18	Kaniha	Kaniha OCP	Site office

19			Telisingha Village
20			Near Jarada Village
21			Patharmunda Village
22	Bharatpur	Bharatpur OCP	On back fill near rejected dump yard
23			Padmabatipur village
24			Near Civil maintenance office of Kalinga colony/pressure filter
26		Chhendipada OCP	Near Site Office
27			Near Mine working
28			Near Weigh bridge
30	Hingula	Hingula OCP	Malibandha Village
31			Project Office
32			Bhalugadia Village
33			Gopal Prasad Village
34		Balram OCP	Natada Village
35			on backfilled area near field time office
36			Project Office, Balaram OCP
37			Nakeipasi Village
38	Talcher	Talcher Colliery (U/G)	GM Office
39			Canteen Talcher Colliery
40		Nandira Colliery (U/G)	Project Office
41			Natedi Village
42		Deulbera Colliery (U/G)	Managers Office
43			Deulbera Colony
44		Talcher west Colliery	Near air shaft
			Near Haulage room at incline no.2

**DRINKING WATER SAMPLING STATIONS FOR APRIL'14-MARCH'15**

S.NO	Area	OCP	NAME OF STATIONS
1	Jagannath	Jagannath OCP	Jagannath colony tap water
2			Rakas village well water
3			Balanda colony tap water
4			Project office tube-well water
5		Ananta OCP	Ananta colony tap water
6			Hensmul village well water
7			Dera village tube-well water

8			Project site office water
9		Bhubaneswari OCP	Narharipur village tube well water
10			Jilinda village well water
11	Bharatpur		Bharatpur OCP
12		Old quarry water	
13		Chhendipada	Bore well water at site office
14	Lingraj	Lingraj OCP	Tap water G.M office
15			Lingaraj township water
16			MTK office LOCP
			Deulbera colony tap water
17			well from Balungakhamar village
18			well from Deulbera Village
19			well from Talabera village
20	Kaniha	Kaniha OCP	Project office/Site office tubewell water
21			Jarda village well water
22			Jamunia village well water
23			Kansamunda village well water
24	Hingula	Hingula OCP	Time office water
			Gopalprasad village bore well water
			Kumunda village bore well water
25		BalramOcp	Danara village well water
26			Balram colony tap water
27	Nakeipasi village bore well water		
28	Talcher		Talcher Town tap water

**EFFLUENT (4P) SAMPLING STATIONS FOR APRIL'14-MARCH'15  
(Ph, COD,TSS,O&G)**

S.N O	Area	OCP	NAME OF STATIONS
1	Jagannath	Jagannath OCP	mine discharge water
2			O & G trap outlet
3			O & G trap inlet

4		Ananta OCP	Mine discharge water
5			O & G trap outlet
6			O&G trap inlet (half yrly)
7		Bhuba neswar i	Mine discharge water in BangaruJhor
8	Bharatpur	Bharat pur OCP	Mine discharge at point of confluence with BangaruNallah
9			O & G trap outlet
10		Chhen dipada OCP	outlet of Mine discharge water
11			O & G trap outlet
12		Lingaraj	Lingara j OCP
13	O & G trap inlet		
14	O & G trap outlet		
15	Kaniah	Kaniah OCP	outlet of MDTP
16			O & G trap outlet
17	Hingula	Hingul a OCP	mine discharge water
18			discharge point at north of mine into singhdajhor
19			O & G trap outlet
		Balram OCP	O& G outlet
20	Talcher		Talcher colliery mine discharge
21			Nandira colliery mine discharge
22			Duelbera colliery mine discharge
23			Near Incline No.2 of talcher west colliery
24			Ranipark submersible pump

<b>EFFLUENT (3P) SAMPLING STATIONS FOR APRIL'14- MARCH'15(Ph, BOD,TSS)</b>			
<b>S.N O</b>	<b>Area</b>	<b>OCP</b>	<b>NAME OF STATIONS</b>
1	Jagannath	Jagannath OCP	DETP/STP OUTLET
2			DETP/STP INLET
3		Ananta OCP	DETP/STP OUTLET
4			DETP/STP INLET
5	Bharatpur	Bharatpur OCP	DETP/STP OUTLET
6			DETP/STP INLET
7	Lingraj	Lingraj OCP	Domestic effluent discharge from sedimentation pond(earthen pit)
8	Hingula	Balram OCP	DETP/STP OUTLET of Balram colony

<b>EFFLUENT (1P) SAMPLING STATIONS FOR APRIL'14- MARCH'15(Ph)</b>			
<b>S.NO</b>	<b>Area</b>	<b>OCP</b>	<b>NAME OF STATIONS</b>
1	Jagannath	Jagannath OCP	Mine sump water
2	Ananta	Ananta OCP	Mine sump water
3	Lingraj	Lingraj OCP	Mine sump water

## **Frequency of Environmental Monitoring**

### **(i) Ambient air quality monitoring**

To assess the pollution level in ambient air of the area located in and around the coal mines/projects and also determine the efficacy of mitigation measures, regular monitoring of the following parameters is being carried out.

Respirable particulate matter (RPM)

:

Suspended particulate matter (SPM)

:

One sample per fortnight

Sulphur dioxide (SO<sub>2</sub>) : Nitrogen oxides  
(NO<sub>x</sub>) :

(ii) Drinking water monitoring : Once in every month.

(iii) **Effluent quality monitoring**

5 parameters and 4 parameters : Once in a fortnight

1 parameter : once in every Month.

21 parameters : Once in a year

(iv) Well water level monitoring : Quarterly

(v) Noise level monitoring : Once in a fortnight

### **Methodology and Instruments used for Air Quality Analysis**

These are given in below Table

**Table**  
**Methodology and Instruments used for Air Quality Analysis**

SI.No.	Parameters	Method	Instruments
1	SPM and RPM	IS:5182 (Part-IV) (Gravimetric method)	High volume samplers, Respirable dust samplers & electronic balance, oven, etc.
2	SO <sub>2</sub>	IS:5182 (Part-II) (Sodium tetrachloro-mercurate method, also known as improved West and Gaeke Method) (Photometric method)	Milton-Roy Spectrophotometer.

3	NOX	IS:5182 (Part-VI) (Jacob &Hoccheiser Modified Method) (Photometric method)	-do-
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### Methodology and Instruments used for water & effluent analysis

Details are given in below Table.

**Table**

#### Methodology & Instruments used for Water and Effluent Analysis

Sl.No.	Parameters	Method/Instruments
1	PH	Electrometric/pH meter
2	Turbidity	Nephelometric/Nepheloturbidity meter
3	Total suspended solids, total dissolved solids, oil & grease and mineral oil	Gravimetric/oven, electronic balance
4	BOD	BOD test and titration/BOD incubator, pipette, burette, etc.
5	COD	Reactor digestion and titration/reactor digester
6	Coliform	MPN test/LTEK MPN kit.
7	Calcium, chloride, hardness, alkalinity	Titrimetric/pipette, burette, etc.
8	Cadmium, copper, iron, lead, manganese, mercury, nickel, total chromium & zinc	Selective absorption/atomic absorption spectro-photometer.
9	Ammonical nitrogen, arsenic, colour, dissolved phosphate, fluoride, hexavalent chromium, nitrate nitrogen phenolics, selenium, sulphate, sulphide, total residual chlorine, total Kjeldahl nitrogen & boron.	Photometric/DR 2000

### Methodology and Instruments used for Noise Level Measurement

Noise is measured in a weighted sound level i.e. dB(A) using a noise level meter once in day time (6:00 AM-10:00 PM) and once in night time (10:00 PM to 6:00 AM) for one day in each quarter from each station.

**Table : 1 Air Quality Data**
**Project: Ananta OCP**
**Monitoring Station: Ananta Vihar Colony**

Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
11-Apr-14	287	153	25	27	42	East to West & Sunny
22-Apr-14	275	137	26	28	46	East to West & Sunny
13-May-14	284	141	27	29	51	East to West & Sunny
28-May-14	289	137	28	30	58	East to West & Sunny
13-Jun-14	274	129	26	29	52	East to West & Sunny
27-Jun-14	243	115	22	24	38	East to West & cloudy Rainfall
14-Jul-14	253	125	23	25	40	South to North & Sunny
29-Jul-14	235	115	21	23	34	East to West & Rainfall
08-Aug-14	246	123	23	25	37	East to West & Rainfall
23-Aug-14	251	136	25	27	39	East to West & Sunny
06-Sep-14	230	122	23	25	31	East to West Cloudy & Rainfall
24-Sep-14	254	132	26	28	39	South to North & Sunny
14-Oct-14	232	127	24	26	37	East to West Cloudy & Rainfall
29-Oct-14	243	132	28	30	35	South to North & Sunny
08-Nov-14	312	143	29	32	49	East to West & Sunny
24-Nov-14	298	132	26	28	46	East to West & Sunny
05-Dec-14	289	128	25	28	51	East to West & Sunny
22-Dec-14	295	135	24	26	46	East to West & Sunny
09-Jan-15	299	132	26	28	52	East to West & Sunny
22-Jan-15	312	137	28	31	55	East to West & Sunny
10-Feb-15	354	149	29	34	58	West to East & Sunny
24-Feb-15	334	141	27	29	59	South to North & Sunny
10-Mar-15	365	159	30	33	60	West to East & Sunny
24-Mar-15	376	169	32	34	62	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	376.00	169.00	32.00	34.00	62.00	
<b>Minimum</b>	230.00	115.00	21.00	23.00	31.00	
<b>Average</b>	284.58	135.38	25.96	28.29	46.54	
<b>95 Percentile</b>	363.35	158.10	29.85	33.85	59.85	
<b>98 Percentile</b>	370.94	164.40	31.08	34.00	61.08	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in (µg/m3)*

**Table 2 Air Quality Data**
**Project: Ananta OCP**
**Monitoring Station: Field Canteen**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
11-Apr-14	315	159	29	31	62	East to West & Sunny
22-Apr-14	296	142	27	29	55	East to West & Sunny
13-May-14	312	153	29	31	61	East to West & Sunny
28-May-14	324	161	30	32	60	East to West & Sunny
13-Jun-14	317	152	29	32	58	East to West & Sunny
27-Jun-14	280	132	25	27	42	East to West & cloudy Rainfall
14-Jul-14	294	141	26	29	47	South to North & Sunny
29-Jul-14	276	123	22	24	39	East to West & Rainfall
08-Aug-14	283	132	25	27	48	East to West & Rainfall
23-Aug-14	295	144	28	30	51	East to West & Sunny
06-Sep-14	273	131	26	28	42	East to West Cloudy & Rainfall
24-Sep-14	284	140	29	31	49	South to North & Sunny
14-Oct-14	256	127	26	28	40	East to West Cloudy & Rainfall
29-Oct-14	264	135	27	29	38	South to North & Sunny
08-Nov-14	347	145	32	35	47	East to West & Sunny
24-Nov-14	322	136	27	29	51	East to West & Sunny
05-Dec-14	315	131	28	31	47	East to West & Sunny
22-Dec-14	327	143	27	29	52	East to West & Sunny
09-Jan-15	315	141	25	27	51	East to West & Sunny
22-Jan-15	327	148	27	29	53	East to West & Sunny
10-Feb-15	336	142	28	31	54	West to East & Sunny
24-Feb-15	345	146	26	28	56	South to North & Sunny
10-Mar-15	357	156	29	31	29	West to East & Sunny
24-Mar-15	368	164	31	33	36	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	368.00	164.00	32.00	35.00	62.00	
<b>Minimum</b>	256.00	123.00	22.00	24.00	29.00	
<b>Average</b>	309.50	142.67	27.42	29.63	48.67	
<b>95 Percentile</b>	355.50	160.70	30.85	32.85	60.85	
<b>98 Percentile</b>	362.94	162.62	31.54	34.08	61.54	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table 3 Air Quality Data**

**Project : Ananta OCP**

**Monitoring Station : Hensmul Village- Talasahi**

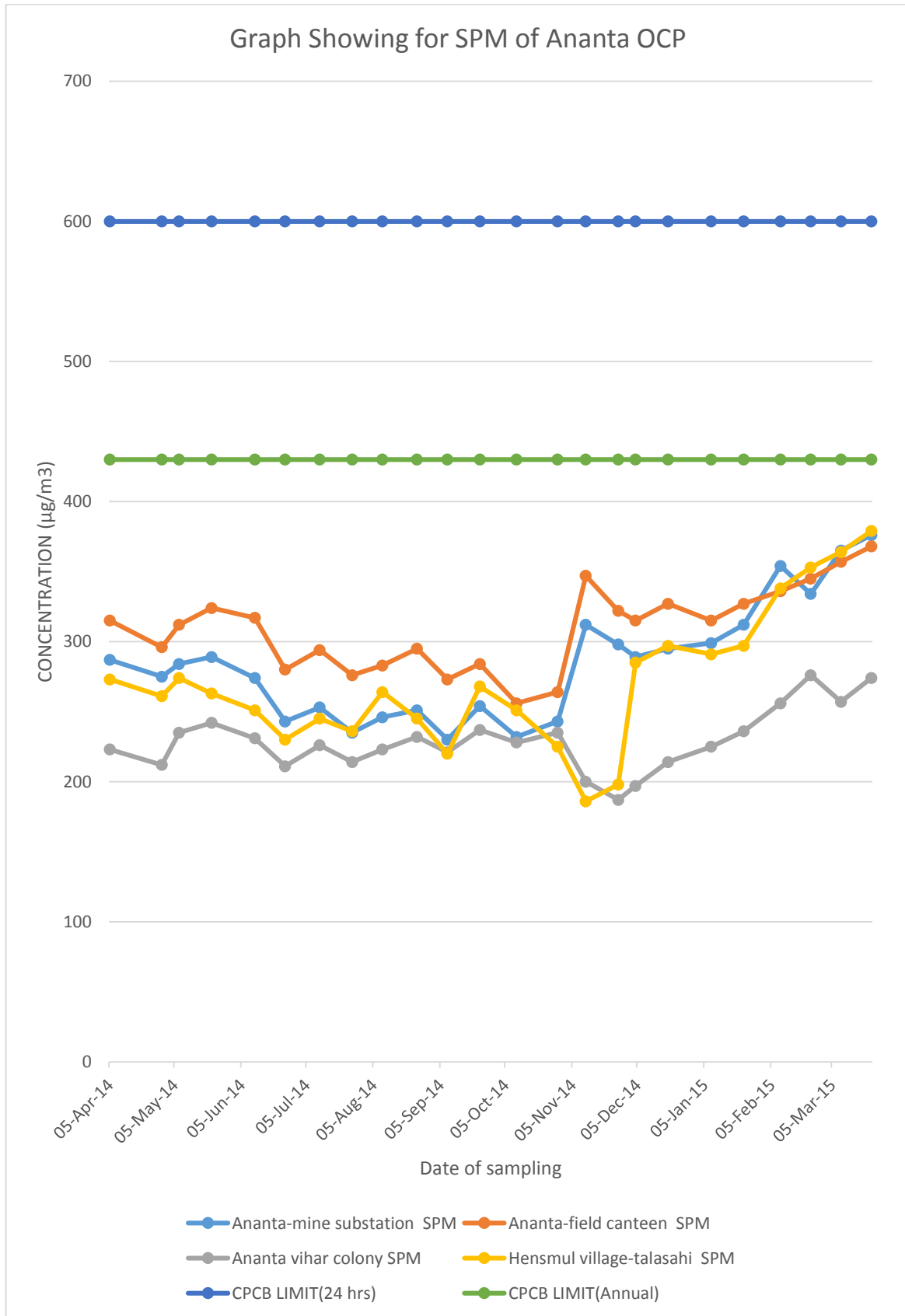
Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
05-Apr-14	273	146	27	29		South to north & Sunny
29-Apr-14	261	137	26	28	74	East to West & Sunny
07-May-14	274	141	27	29	43	East to West & Sunny
22-May-14	263	135	26	28	53	North to South & Sunny
11-Jun-14	251	125	27	29	51	East to West & Sunny
25-Jun-14	230	113	24	26	35	South to North & cloudy Rainfall
11-Jul-14	245	129	26	28	38	East to West Hot & Sunny
26-Jul-14	236	118	23	25	31	West to East & Cloudy
09-Aug-14	264	125	26	28	42	West to East & Cloudy
25-Aug-14	245	121	24	26	29	East to West & Sunny
08-Sep-14	220	113	22	24	21	East to West Cloudy & Rainfall
23-Sep-14	268	142	28	30	35	West to East & Sunny
10-Oct-14	251	138	26	28	31	East to West Cloudy & Rainfall
29-Oct-14	225	126	24	26	32	South to North & Sunny
11-Nov-14	186	105	23	25	39	East to West & Sunny
26-Nov-14	198	126	25	27	37	East to West & Sunny
04-Dec-14	285	143	26	28	47	East to West & Sunny
19-Dec-14	297	139	24	26	56	East to West & Sunny
08-Jan-15	291	132	23	25	51	West to East & Sunny
23-Jan-15	297	136	28	30	46	East to West & Sunny
09-Feb-15	338	148	25	27	43	South to North & Sunny
23-Feb-15	353	153	27	29	56	East to West & Sunny
09-Mar-15	364	163	27	30	49	East to West & Sunny
23-Mar-15	379	167	29	32	63	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	379.00	167.00	29.00	32.00	74.00	
<b>Minimum</b>	186.00	105.00	22.00	24.00	21.00	
<b>Average</b>	270.58	134.21	25.54	27.63	43.57	
<b>95 Percentile</b>	362.35	161.50	28.00	30.00	62.30	
<b>98 Percentile</b>	372.10	165.16	28.54	31.08	69.16	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

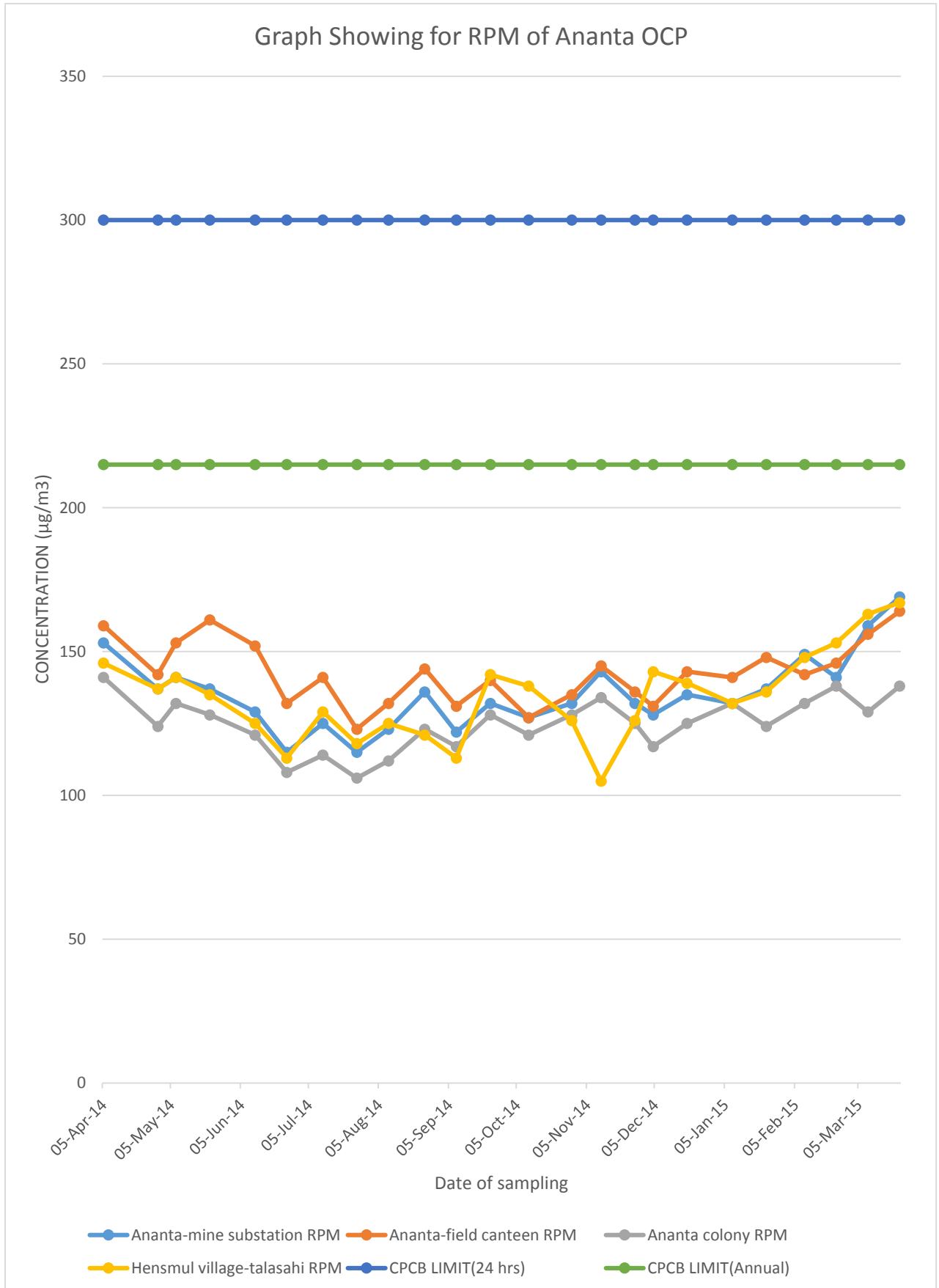
*All values are in  $\mu\text{g}/\text{m}^3$*

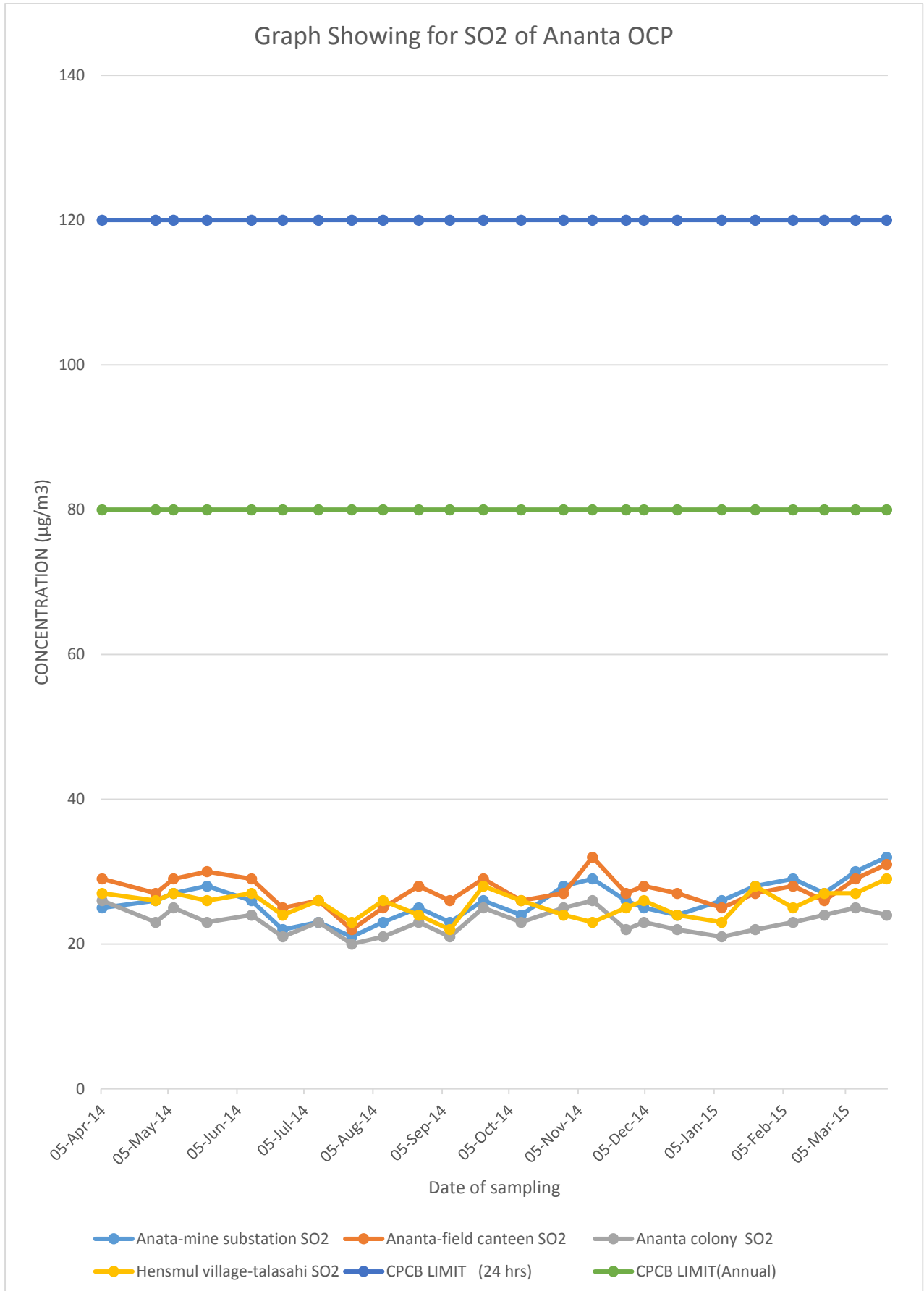
**Table 4 Air Quality Data**
**Project: Ananta OCP**
**Monitoring Station: Mine Sub Station**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
11-Apr-14	287	153	25	27	42	East to West & Sunny
22-Apr-14	275	137	26	28	46	East to West & Sunny
13-May-14	284	141	27	29	51	East to West & Sunny
28-May-14	289	137	28	30	58	East to West & Sunny
13-Jun-14	274	129	26	29	52	East to West & Sunny
27-Jun-14	243	115	22	24	38	East to West & cloudy Rainfall
14-Jul-14	253	125	23	25	40	South to North & Sunny
29-Jul-14	235	115	21	23	34	East to West & Rainfall
08-Aug-14	246	123	23	25	37	East to West & Rainfall
23-Aug-14	251	136	25	27	39	East to West & Sunny
06-Sep-14	230	122	23	25	31	East to West Cloudy & Rainfall
24-Sep-14	254	132	26	28	39	South to North & Sunny
14-Oct-14	232	127	24	26	37	East to West Cloudy & Rainfall
29-Oct-14	243	132	28	30	35	South to North & Sunny
08-Nov-14	312	143	29	32	49	East to West & Sunny
24-Nov-14	298	132	26	28	46	East to West & Sunny
05-Dec-14	289	128	25	28	51	East to West & Sunny
22-Dec-14	295	135	24	26	46	East to West & Sunny
09-Jan-15	299	132	26	28	52	East to West & Sunny
22-Jan-15	312	137	28	31	55	East to West & Sunny
10-Feb-15	354	149	29	34	58	West to East & Sunny
24-Feb-15	334	141	27	29	59	South to North & Sunny
10-Mar-15	365	159	30	33	60	West to East & Sunny
24-Mar-15	376	169	32	34	62	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	376.00	169.00	32.00	34.00	62.00	
<b>Minimum</b>	230.00	115.00	21.00	23.00	31.00	
<b>Average</b>	284.58	135.38	25.96	28.29	46.54	
<b>95 Percentile</b>	363.35	158.10	29.85	33.85	59.85	
<b>98 Percentile</b>	370.94	164.40	31.08	34.00	61.08	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

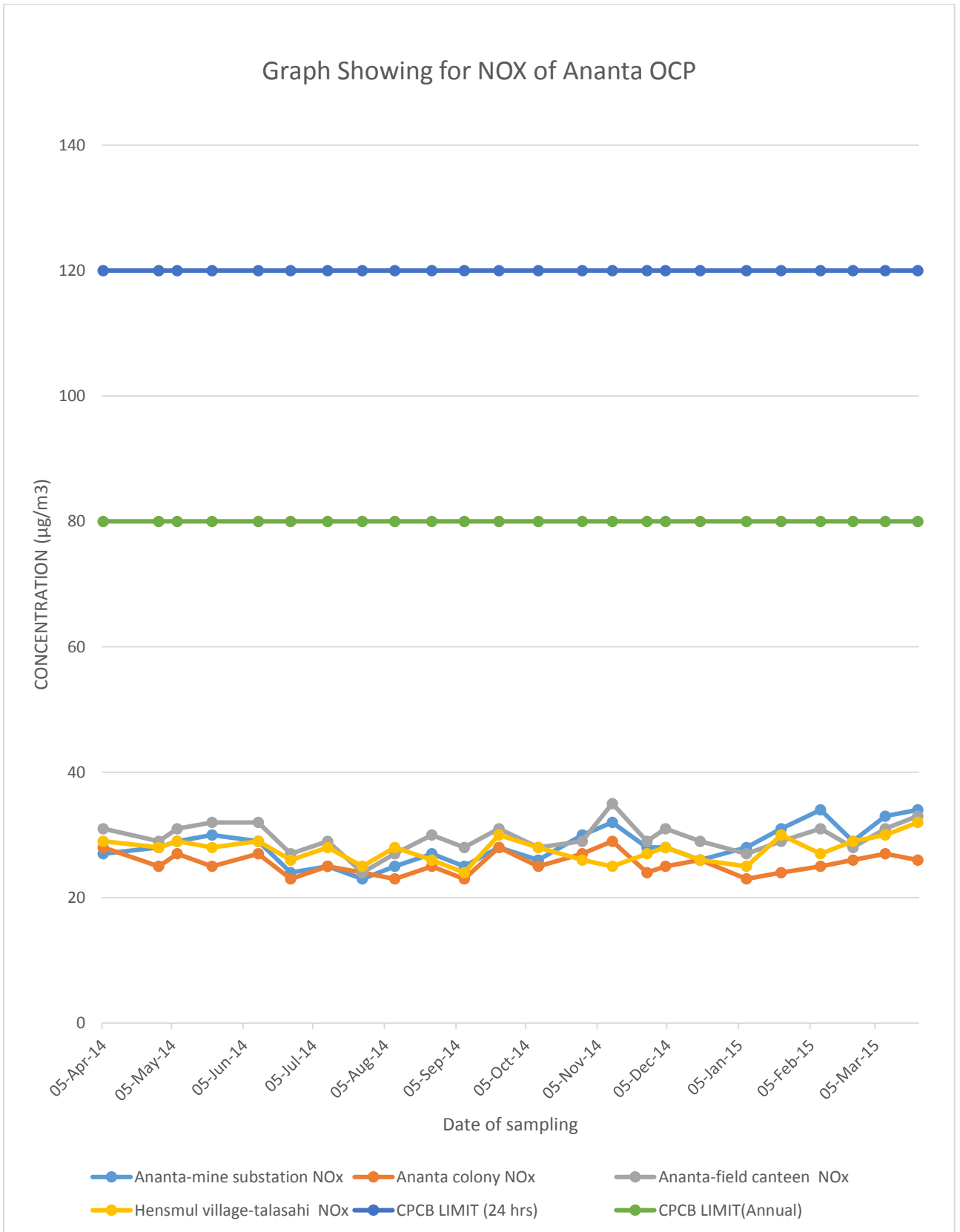
*All values are in µg/m<sup>3</sup>*

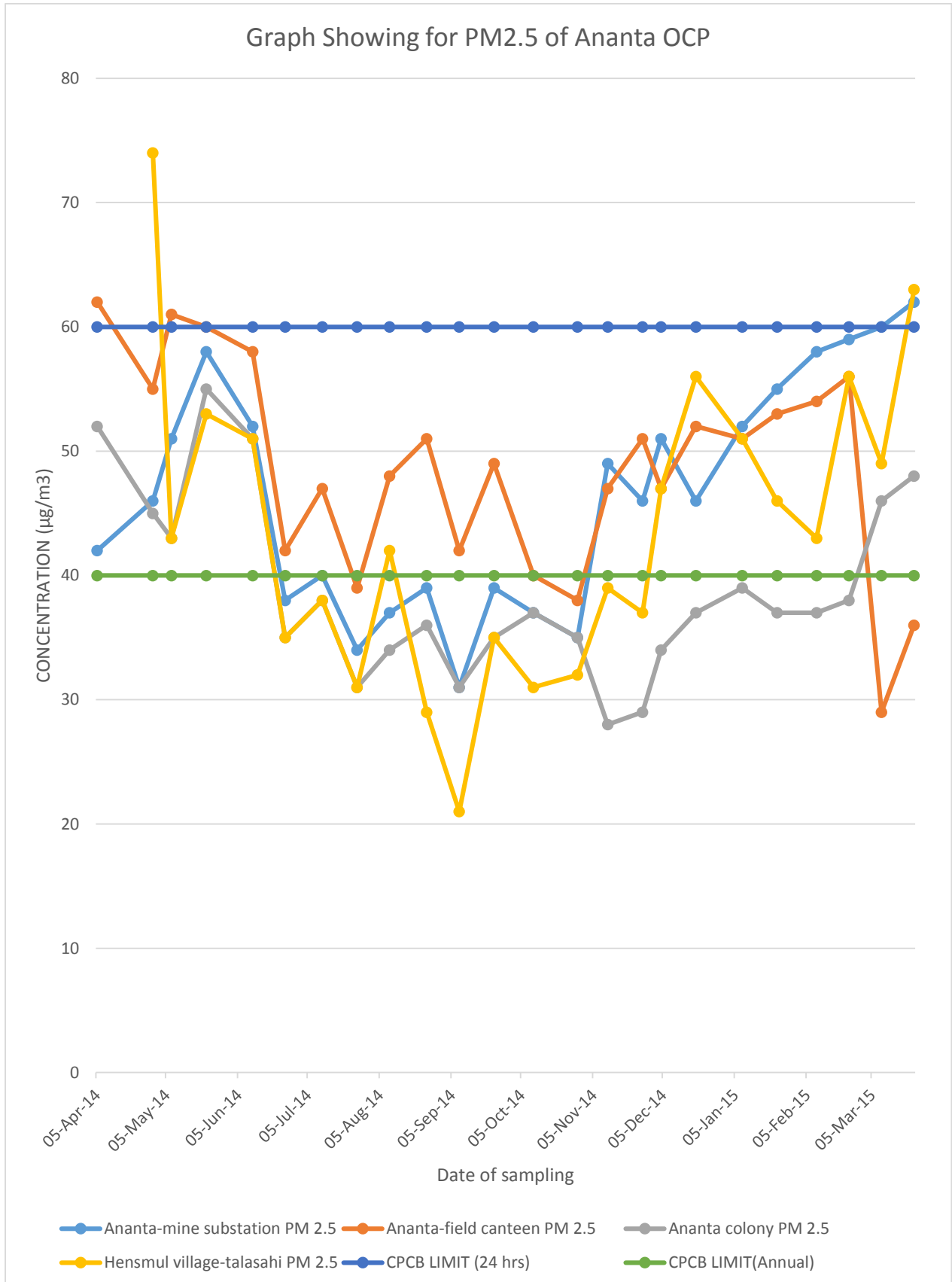






Graph Showing for NOX of Ananta OCP





**Table: 5 Heavy Metal Analysis**

**Project: Ananta OCP**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
22.12.14	Ananta field canteen	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
22.12.14	Ananta substation	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
22.12.14	Ananta vihar colony	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	6.8
19.12.14	Hensmul village(Ananta OCP)	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0

**Table:6 Heavy Metal Analysis**

**Project: Bhubaneswari OCP**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
19.12.14	Hensmul village(BBS OCP)	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	6.7
19.12.14	BCML workshop	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	8.2
19.12.14	Naraharipur	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
19.12.14	Raghunathpur	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	9.4

**Table: 7 Heavy Metal Analysis**

**Project: Jagannath OCP**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
25.12.14	Jagannath site office	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
25.12.14	Jagannath site station	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	6.3
25.12.14	Jagannath field canteen	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
25.12.14	Jagannath colony	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0

**Table 8 : Air Quality Data**

**Project: Bhubaneswari OCP**

**Monitoring Station: B.C.M.L Workshop**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
07-Apr-14	295	153	29	31	85	East to West & Sunny
29-Apr-14	184	132	27	29	71	East to West & Sunny
08-May-14	295	141	28	30	54	East to West & Sunny
23-May-14	298	136	25	27	57	North to South & Sunny
11-Jun-14	274	127	26	29	52	East to West & Sunny
25-Jun-14	219	117	23	25	39	South to North & cloudy Rainfall
11-Jul-14	229	127	25	28	41	East to West Hot & Sunny
26-Jul-14	218	109	23	25	33	West to East & Cloudy
09-Aug-14	235	124	25	27	39	West to East & Cloudy
25-Aug-14	282	135	27	29	51	East to West & Sunny
08-Sep-14	261	124	25	27	46	East to West Cloudy & Rainfall
23-Sep-14	287	138	27	29	51	West to East & Cloudy
10-Oct-14	266	130	25	27	45	East to West Cloudy & Rainfall
24-Oct-14	274	135	27	29	43	South to North & Sunny
11-Nov-14	296	149	29	32	45	East to West & Sunny
26-Nov-14	314	153	30	32	43	East to West & Sunny
04-Dec-14	329	151	27	29	51	East to West & Sunny
19-Dec-14	335	143	25	27	47	East to West & Sunny
08-Jan-15	322	149	26	28	53	West to East & Sunny
23-Jan-15	316	143	27	29	51	East to West & Sunny
09-Feb-15	345	156	26	28	54	South to North & Sunny
23-Feb-15	349	143	25	27	56	East to West & Sunny
09-Mar-15	315	136	26	28	52	East to West & Sunny
23-Mar-15	343	142	28	30	58	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	349.00	156.00	30.00	32.00	85.00	
<b>Minimum</b>	184.00	109.00	23.00	25.00	33.00	
<b>Average</b>	286.71	137.21	26.29	28.42	50.71	
<b>95 Percentile</b>	344.70	153.00	29.00	31.85	69.05	
<b>98 Percentile</b>	347.16	154.62	29.54	32.00	78.56	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in  $\mu\text{g}/\text{m}^3$*

**Table 9 Air Quality Data**

**Project: Bhubaneswari OCP**

**Monitoring Station: Hensmul Village-Talasahi**

<b>Date of Sampling</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	<b>Remarks</b>
04-Apr-14	273	146	27	29	81	South to north & Sunny
29-Apr-14	261	137	26	28	74	East to West & Sunny
07-May-14	274	141	27	29	43	East to West & Sunny
22-May-14	263	135	26	28	53	North to South & Sunny
04-Jun-14	251	125	27	29	51	East to West & Sunny
18-Jun-14	230	113	24	26	35	South to North & cloudy Rainfall
04-Jul-14	245	129	26	28	38	East to West Hot & Sunny
19-Jul-14	236	118	23	25	31	West to East & Cloudy
09-Aug-14	264	125	26	28	42	West to East & Cloudy
25-Aug-14	245	121	24	26	29	East to West & Sunny
08-Sep-14	220	113	22	24	21	East to West Cloudy & Rainfall
23-Sep-14	268	142	28	30	35	West to East & Sunny
10-Oct-14	251	138	26	28	31	East to West Cloudy & Rainfall
24-Oct-14	225	126	24	26	32	South to North & Sunny
11-Nov-14	186	105	23	25	39	East to West & Sunny
26-Nov-14	198	126	25	27	37	East to West & Sunny
04-Dec-14	285	143	26	28	47	East to West & Sunny
19-Dec-14	297	139	24	26	56	East to West & Sunny
08-Jan-15	291	132	23	25	51	West to East & Sunny
23-Jan-15	297	136	28	30	46	East to West & Sunny
09-Feb-15	338	148	25	27	43	South to North & Sunny
23-Feb-15	353	153	27	29	56	East to West & Sunny
09-Mar-15	364	163	27	30	49	East to West & Sunny
23-Mar-15	379	167	29	32	63	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	379.00	167.00	29.00	32.00	81.00	
<b>Minimum</b>	186.00	105.00	22.00	24.00	21.00	
<b>Average</b>	270.58	134.21	25.54	27.63	45.13	
<b>95 Percentile</b>	362.35	161.50	28.00	30.00	72.35	
<b>98 Percentile</b>	372.10	165.16	28.54	31.08	77.78	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All Values are in  $\mu\text{g}/\text{m}^3$*

**Table 10 Air Quality Data**
**Project: Bhubaneswari OCP**
**Monitoring Station: Naraharipur Village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
05-Apr-14	224	129	24	26	73	South to north & Sunny
29-Apr-14	236	125	23	25	70	East to West & Sunny
07-May-14	242	131	25	27	49	East to West & Sunny
22-May-14	231	175	23	25	55	North to South & Sunny
11-Jun-14	243	232	24	26	48	South to North & Sunny
25-Jun-14	222	120	22	24	41	East to West & cloudy Rainfall
11-Jul-14	235	132	24	26	45	East to West Hot & Sunny
26-Jul-14	223	125	22	24	41	West to East & Cloudy
09-Aug-14	231	136	24	26	47	West to East & Cloudy
25-Aug-14	239	131	25	27	44	East to West & Sunny
08-Sep-14	226	125	23	26	38	East to West Cloudy & Rainfall
23-Sep-14	254	132	25	27	40	West to East & Sunny
10-Oct-14	242	126	23	25	36	East to West Cloudy & Rainfall
29-Oct-14	253	131	25	27	39	South to North & Sunny
11-Nov-14	364	165	34	37	34	East to West & Sunny
26-Nov-14	326	149	32	34	48	East to West & Sunny
04-Dec-14	264	135	24	26	32	East to West & Sunny
19-Dec-14	275	140	23	25	38	East to West & Sunny
08-Jan-15	267	129	22	24	39	West to East & Sunny
23-Jan-15	279	132	24	26	39	East to West & Sunny
09-Feb-15	284	137	24	26	36	South to North & Sunny
23-Feb-15	314	131	23	26	45	East to West & Sunny
09-Mar-15	267	121	24	26	37	East to West & Sunny
23-Mar-15	235	127	23	25	37	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	232.00	34.00	37.00	73.00	73.00	
<b>Minimum</b>	120.00	22.00	24.00	32.00	32.00	
<b>Average</b>	138.17	24.38	26.50	43.79	43.79	
<b>95 Percentile</b>	173.50	30.95	32.95	67.75	67.75	
<b>98 Percentile</b>	205.78	33.08	35.62	71.62	71.62	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

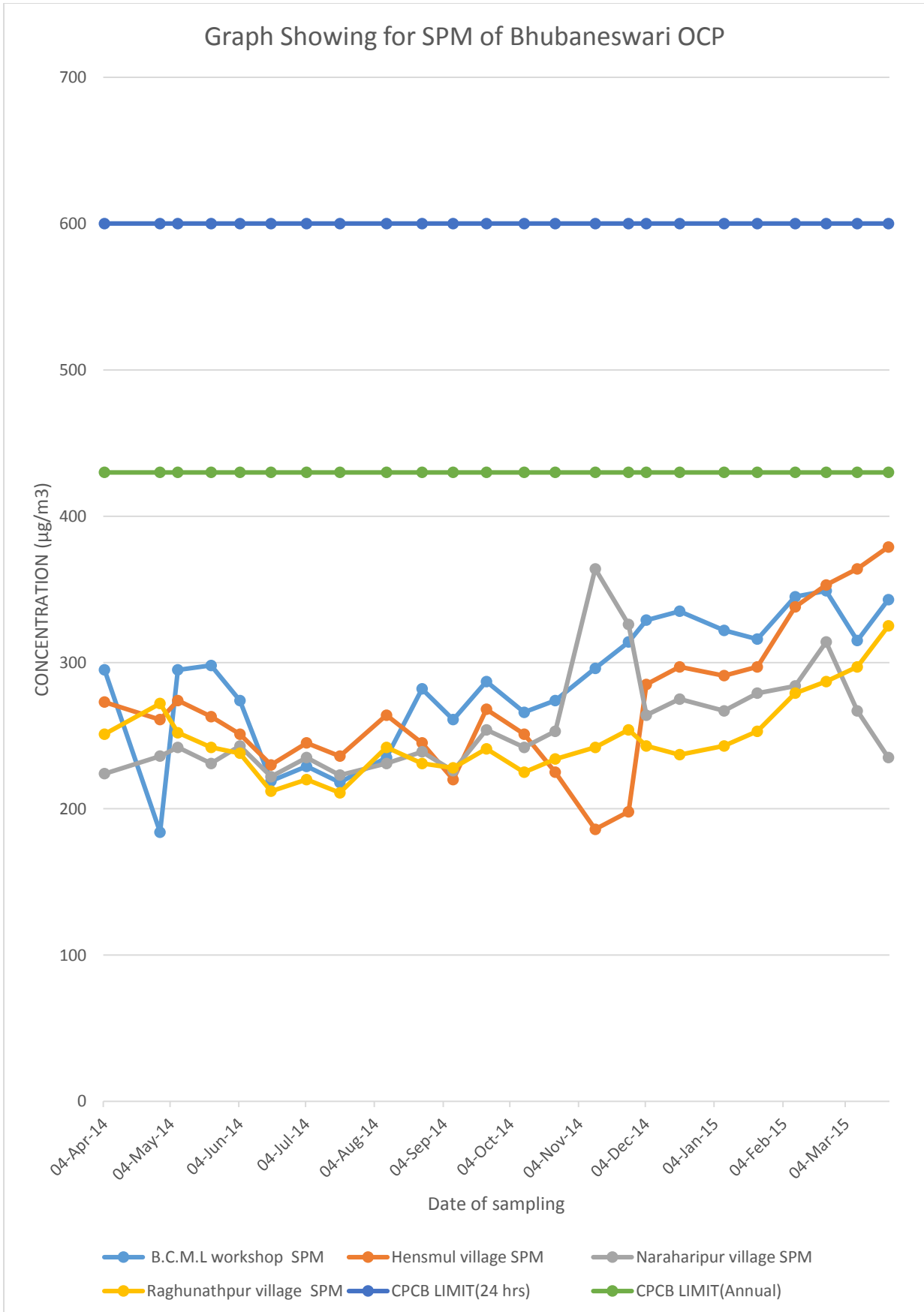
*All values are in (µg/m<sup>3</sup>)*

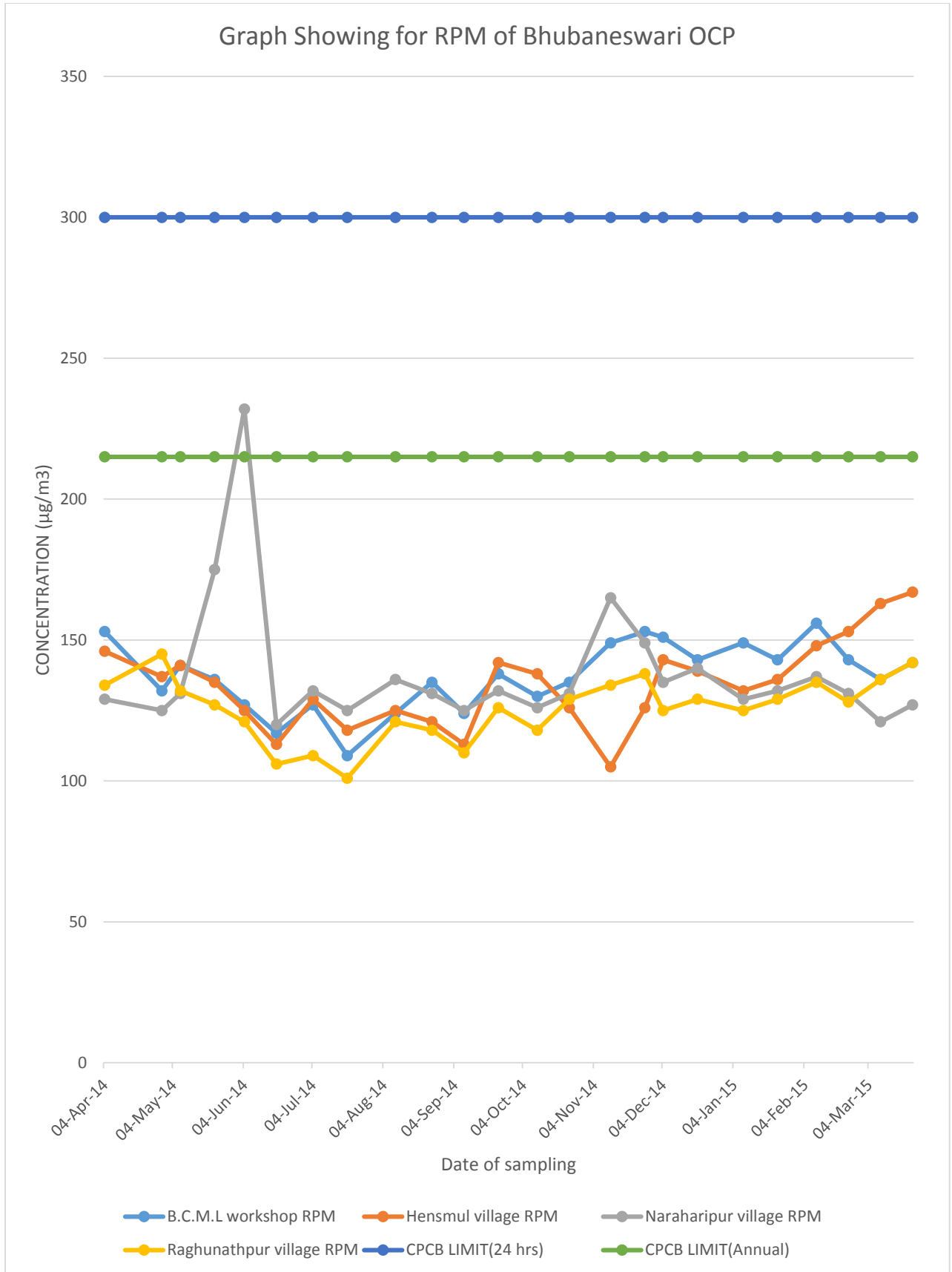
**Table 11 Air Quality Data**
**Project: Bhubaneswari OCP**
**Monitoring Station: Raghunathpur Village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
07-Apr-14	251	134	24	26	47	East to West & Sunny
29-Apr-14	272	145	25	27	45	East to West & Sunny
08-May-14	252	132	24	28	41	North to South & Sunny
23-May-14	242	127	22	24	52	North to South & Sunny
11-Jun-14	238	121	23	25	46	East to West & Sunny
25-Jun-14	212	106	21	23	31	South to North & cloudy Rainfall
11-Jul-14	220	109	22	25	35	East to West Hot & Sunny
26-Jul-14	211	101	20	23	29	West to East & Cloudy
09-Aug-14	242	121	22	24	31	West to East & Cloudy
25-Aug-14	231	118	23	25	34	East to West & Sunny
08-Sep-14	228	110	21	23	29	East to West Cloudy & Rainfall
23-Sep-14	241	126	24	26	32	West to East & Sunny
10-Oct-14	225	118	22	24	28	East to West Cloudy & Rainfall
24-Oct-14	234	129	23	25	30	South to North & Sunny
11-Nov-14	242	134	24	26	31	East to West & Sunny
26-Nov-14	254	138	23	25	32	East to West & Sunny
04-Dec-14	243	125	22	24	29	East to West & Sunny
19-Dec-14	237	129	21	23	35	East to West & Sunny
08-Jan-15	243	125	20	23	38	West to East & Sunny
23-Jan-15	253	129	23	26	42	East to West & Sunny
09-Feb-15	279	135	22	24	39	South to North & Sunny
23-Feb-15	287	128	21	23	35	East to West & Sunny
09-Mar-15	297	136	23	25	41	East to West & Sunny
23-Mar-15	325	142	24	26	43	East to West & Sunny
<b>Brief Statistics</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	325.00	145.00	25.00	28.00	52.00	
<b>Minimum</b>	211.00	101.00	20.00	23.00	28.00	
<b>Average</b>	248.29	125.75	22.46	24.71	36.46	
<b>95 Percentile</b>	295.50	141.40	24.00	26.85	46.85	
<b>98 Percentile</b>	312.12	143.62	24.54	27.54	49.70	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

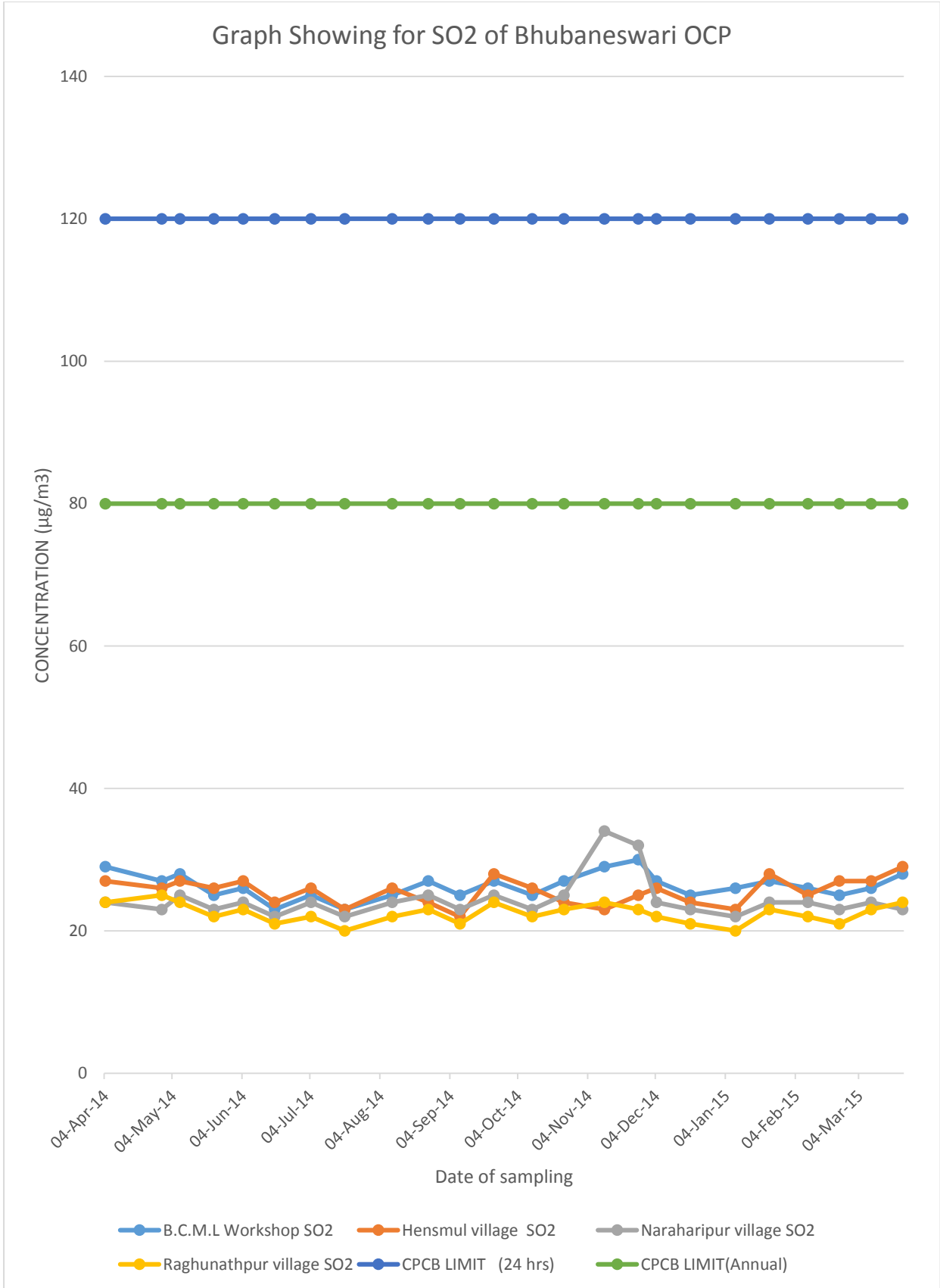
*All values are in  $\mu\text{g}/\text{m}^3$*

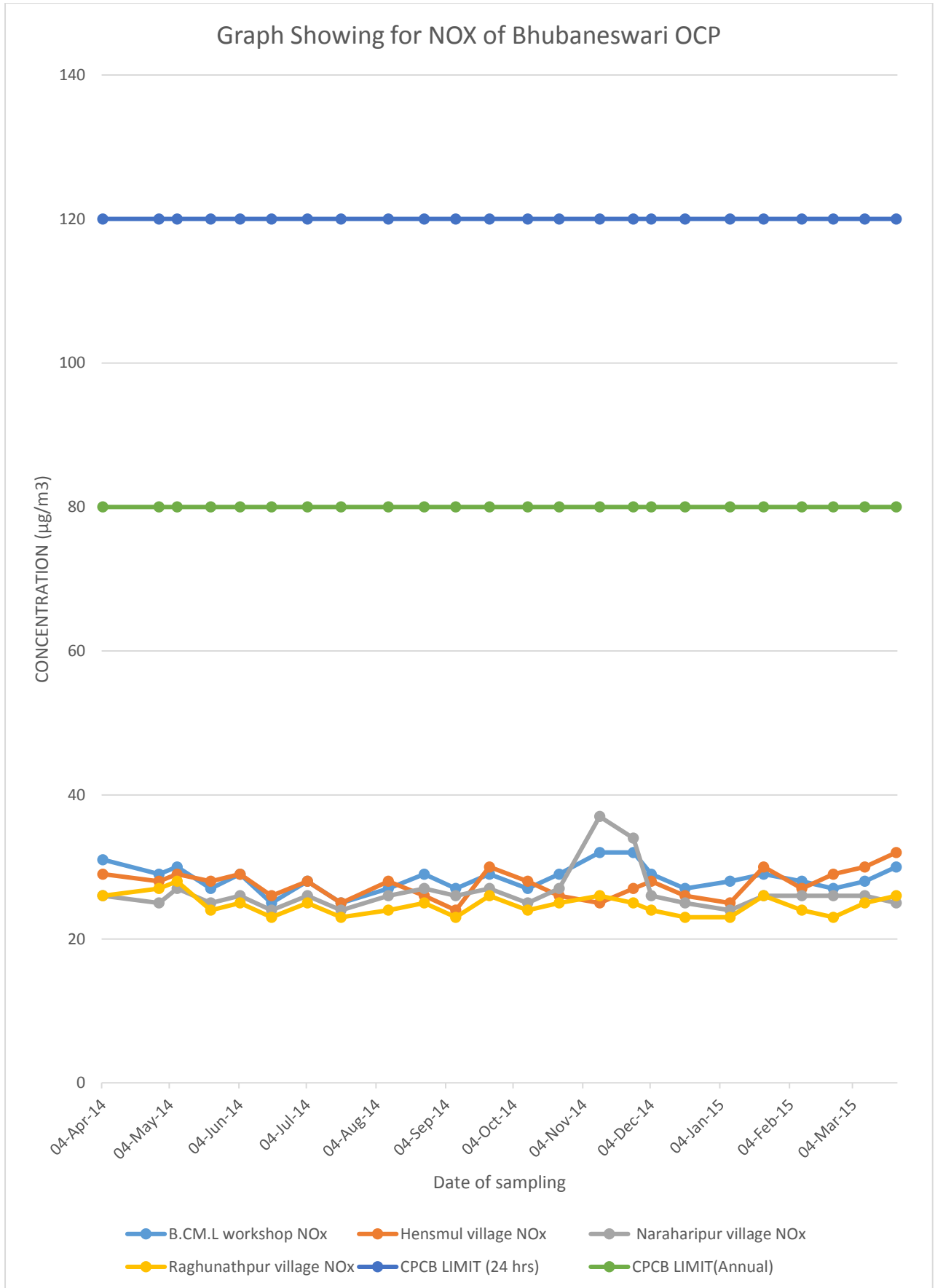
Graph Showing for SPM of Bhubaneswari OCP



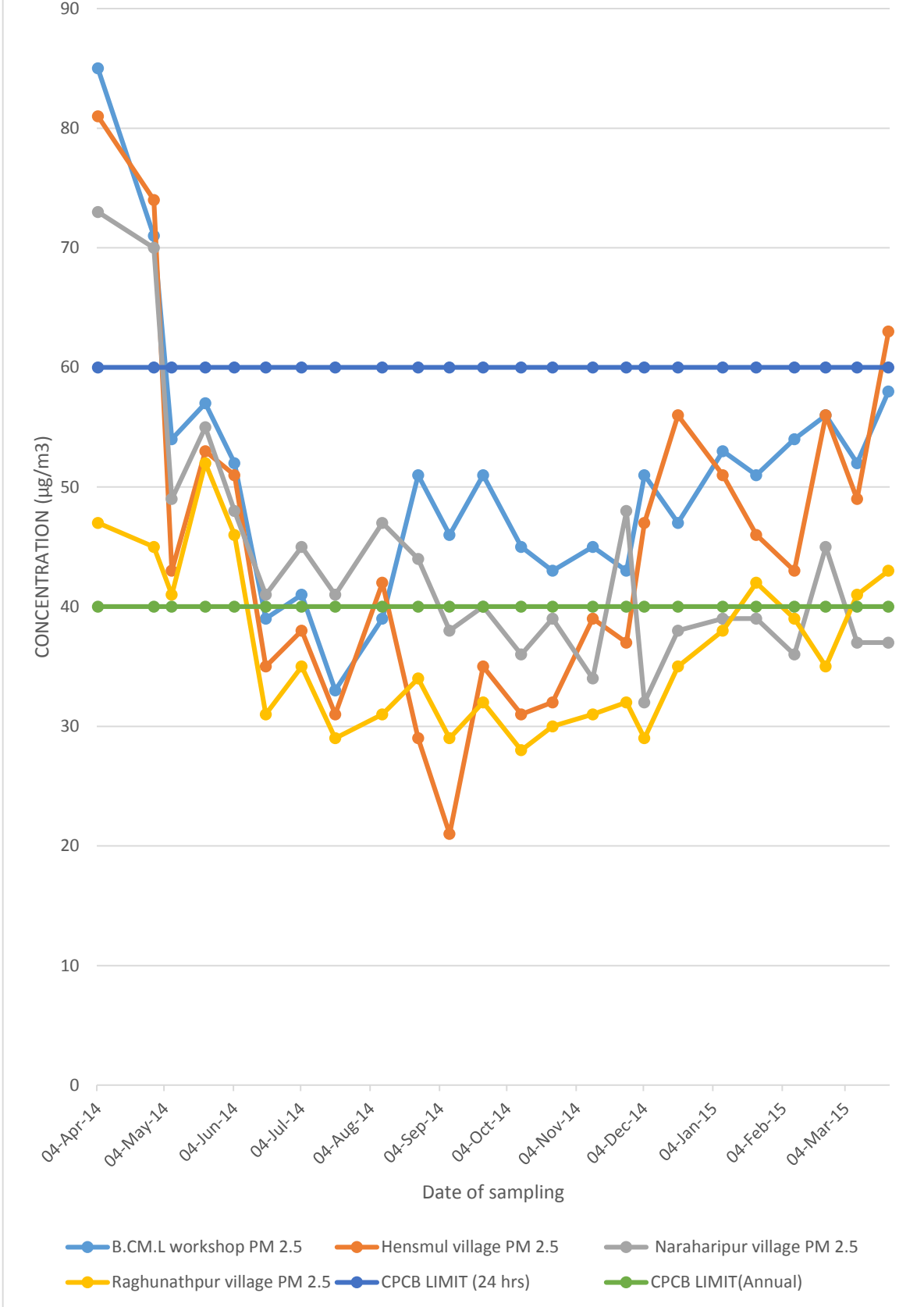


Graph Showing for SO<sub>2</sub> of Bhubaneswari OCP





Graph Showing for PM2.5 of Bhubaneswari OCP



**Table 12 Air Quality Data**

**Project: Jagannath OCP**

**Monitoring Station: Field Canteen**

Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
12-Apr-14	279	154	28	30	65	East to West & Sunny
22-Apr-14	267	134	26	28	58	East to West & Sunny
14-May-14	273	131	27	29	53	East to West & Sunny
29-May-14	261	128	25	27	58	East to West & Sunny
12-Jun-14	253	124	24	27	54	East to West & Sunny
26-Jun-14	223	115	21	23	39	South to North & cloudy Rainfall
12-Jul-14	235	127	23	25	41	East to West & Sunny
26-Jul-14	223	117	21	23	33	South to North & Rainfal
07-Aug-14	265	137	26	28	50	South to North & Rainfal
22-Aug-14	274	132	29	32	53	East to West & Sunny
05-Sep-14	254	121	27	29	47	East to West Cloudy & Rainfall
22-Sep-14	249	130	26	28	43	East to West Cloudy & Evening Rainfall
14-Oct-14	241	129	25	27	39	East to West Cloudy & Rainfall
28-Oct-14	269	138	29	32	40	South to North & Sunny
07-Nov-14	381	182	32	35	42	West to East & Sunny
22-Nov-14	326	161	28	31	45	East to West & Sunny
10-Dec-14	306	138	27	29	41	East to West & Sunny
25-Dec-14	297	134	24	26	38	West to East & Sunny
07-Jan-15						Coal India Strike
22-Jan-15	294	129	25	27	48	East to West & Sunny
06-Feb-15	385	168	30	34	60	West to East & Sunny
20-Feb-15	387	169	31	33	61	South to North & Sunny
07-Mar-15	385	164	33	36	62	South to North & Sunny
20-Mar-15	389	167	30	32	64	South to North & Sunny
<b>Brief stastic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	389.00	182.00	33.00	36.00	65.00	
<b>Minimum</b>	223.00	115.00	21.00	23.00	33.00	
<b>Average</b>	292.00	140.39	26.83	29.17	49.30	
<b>95 percentile</b>	386.80	168.90	31.90	34.90	63.80	
<b>98 percentile</b>	388.12	176.28	32.56	35.56	64.56	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in (µg/m3)*

**Table 13 Air Quality Data**

**Project: Jagannath OCP**

**Monitoring Station; Jagannath Colony**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
12-Apr-14	221	128	25	27	37	East to West & Sunny
21-Apr-14	245	139	24	25	39	East to West & Sunny
14-May-14	257	129	23	26	41	East to West & Sunny
29-May-14	241	121	22	24	54	East to West & Sunny
11-Jun-14	235	119	23	26	51	East to West & Sunny
25-Jun-14	211	102	20	22	32	South to North & cloudy Rainfall
11-Jul-14	224	109	21	24	37	East to West & Sunny
26-Jul-14	215	102	19	22	28	South to North & Rainfal
07-Aug-14	224	112	21	23	30	South to North & Rainfal
22-Aug-14	235	128	23	25	35	East to West & Sunny
05-Sep-14	217	112	21	23	28	East to West Cloudy & Rainfall
22-Sep-14	225	117	20	22	24	East to West Cloudy & Evening Rainfall
14-Oct-14	221	113	21	23	25	East to West Cloudy & Rainfall
28-Oct-14	234	119	22	24	32	South to North & Sunny
07-Nov-14	295	142	24	26	38	West to East & Sunny
22-Nov-14	287	138	25	27	37	East to West & Sunny
10-Dec-14	265	127	23	25	28	East to West & Sunny
25-Dec-14	276	132	22	24	35	West to East & Sunny
07-Jan-15						Coal India Strike
22-Jan-15	265	121	23	25	35	East to West & Sunny
06-Feb-15	274	129	24	26	37	West to East & Sunny
20-Feb-15	287	132	25	27	39	South to North & Sunny
07-Mar-15	293	129	24	26	41	South to North & Sunny
20-Mar-15	287	132	25	27	44	South to North & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	295.00	142.00	25.00	27.00	54.00	
<b>Minimum</b>	211.00	102.00	19.00	22.00	24.00	
<b>Average</b>	249.30	123.13	22.61	24.74	35.96	
<b>95 percentile</b>	292.40	138.90	25.00	27.00	50.30	
<b>98 percentile</b>	294.12	140.68	25.00	27.00	52.68	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in (µg/m<sup>3</sup>)*

**Table 14 Air Quality Data**

**Project: Jagannath OCP**

**Monitoring Station: Jagannath OCP-Time Office**

<b>Date of Sampling</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	<b>Remarks</b>
12-Apr-14	286	162	29	31	74	East to West & Sunny
28-Apr-14	295	153	30	32	61	East to West & Sunny
14-May-14	305	149	29	31	62	East to West & Sunny
29-May-14	312	141	28	30	59	East to West & Sunny
12-Jun-14	324	151	29	32	60	East to West & Sunny
26-Jun-14	289	131	25	27	47	East to West & cloudy Rainfall
12-Jul-14	295	146	27	29	53	East to West & Sunny
26-Jul-14	272	134	25	27	49	South to North & Rainfal
07-Aug-14	287	143	27	29	53	South to North & Rainfal
22-Aug-14	293	145	28	31	55	East to West & Sunny
05-Sep-14	271	136	26	28	46	East to West Cloudy & Rainfall
22-Sep-14	256	131	22	27	41	East to West Cloudy & Evening Rainfall
14-Oct-14	243	129	23	25	45	East to West Cloudy & Rainfall
28-Oct-14	253	132	24	26	42	South to North & Sunny
07-Nov-14	331	153	29	34	46	West to East & Sunny
22-Nov-14	318	146	27	29	48	East to West & Sunny
10-Dec-14	326	153	26	28	49	East to West & Sunny
25-Dec-14	335	148	25	28	54	West to East & Sunny
07-Jan-15						Coal India Strike
22-Jan-15	326	138	27	29	55	East to West & Sunny
06-Feb-15	354	156	28	32	56	West to East & Sunny
20-Feb-15	364	158	29	31	57	South to North & Sunny
07-Mar-15	355	154	30	32	50	South to North & Sunny
20-Mar-15	375	164	33	35	52	South to North & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	375.00	164.00	33.00	35.00	74.00	
<b>Minimum</b>	243.00	129.00	22.00	25.00	41.00	
<b>Average</b>	307.17	145.78	27.22	29.70	52.78	
<b>95 percentile</b>	363.10	161.60	30.00	33.80	61.90	
<b>98 percentile</b>	370.16	163.12	31.68	34.56	68.72	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in (µg/m3)*

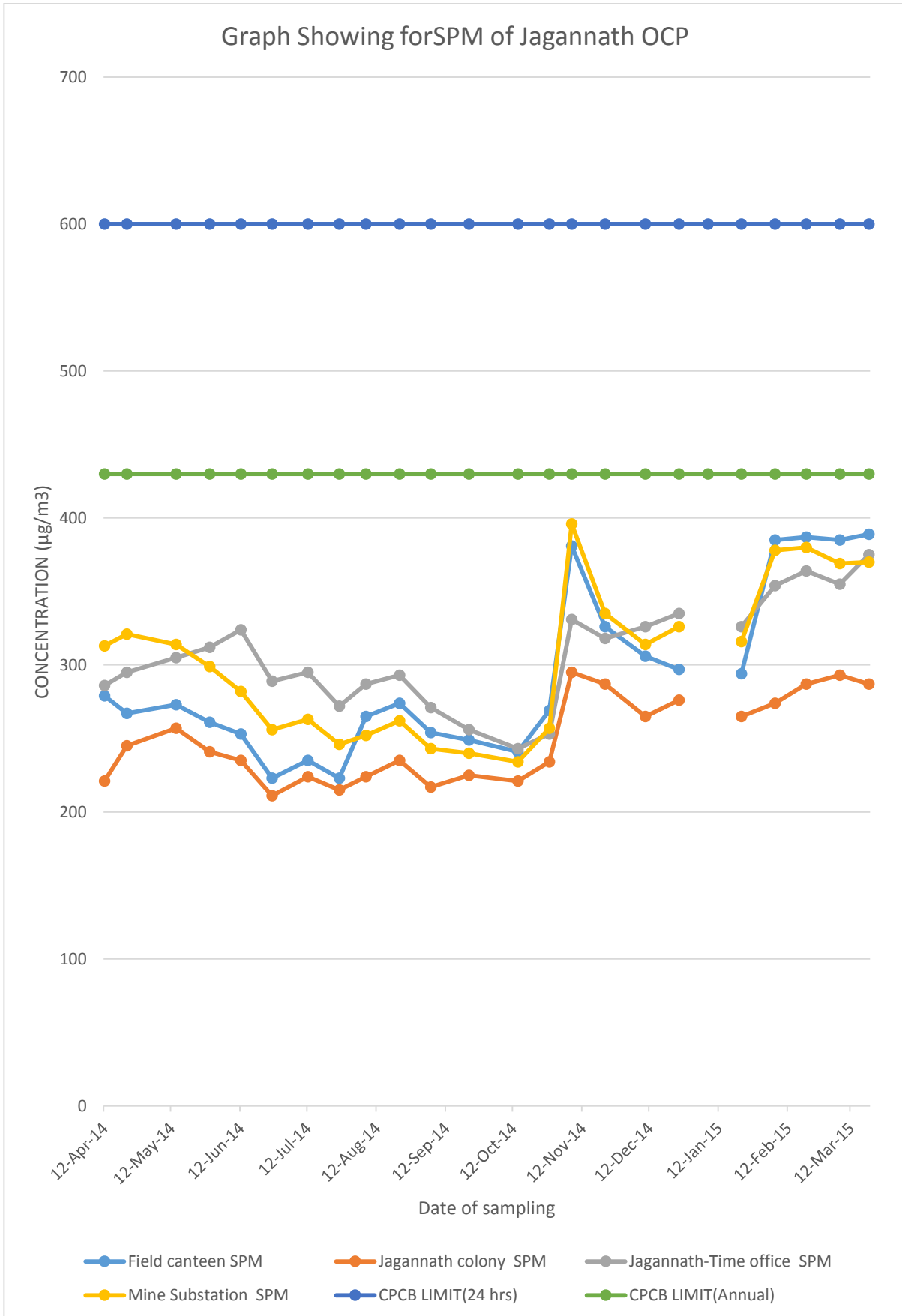
**Table 15 Air Quality Data**

**Project: Jagannath OCP**

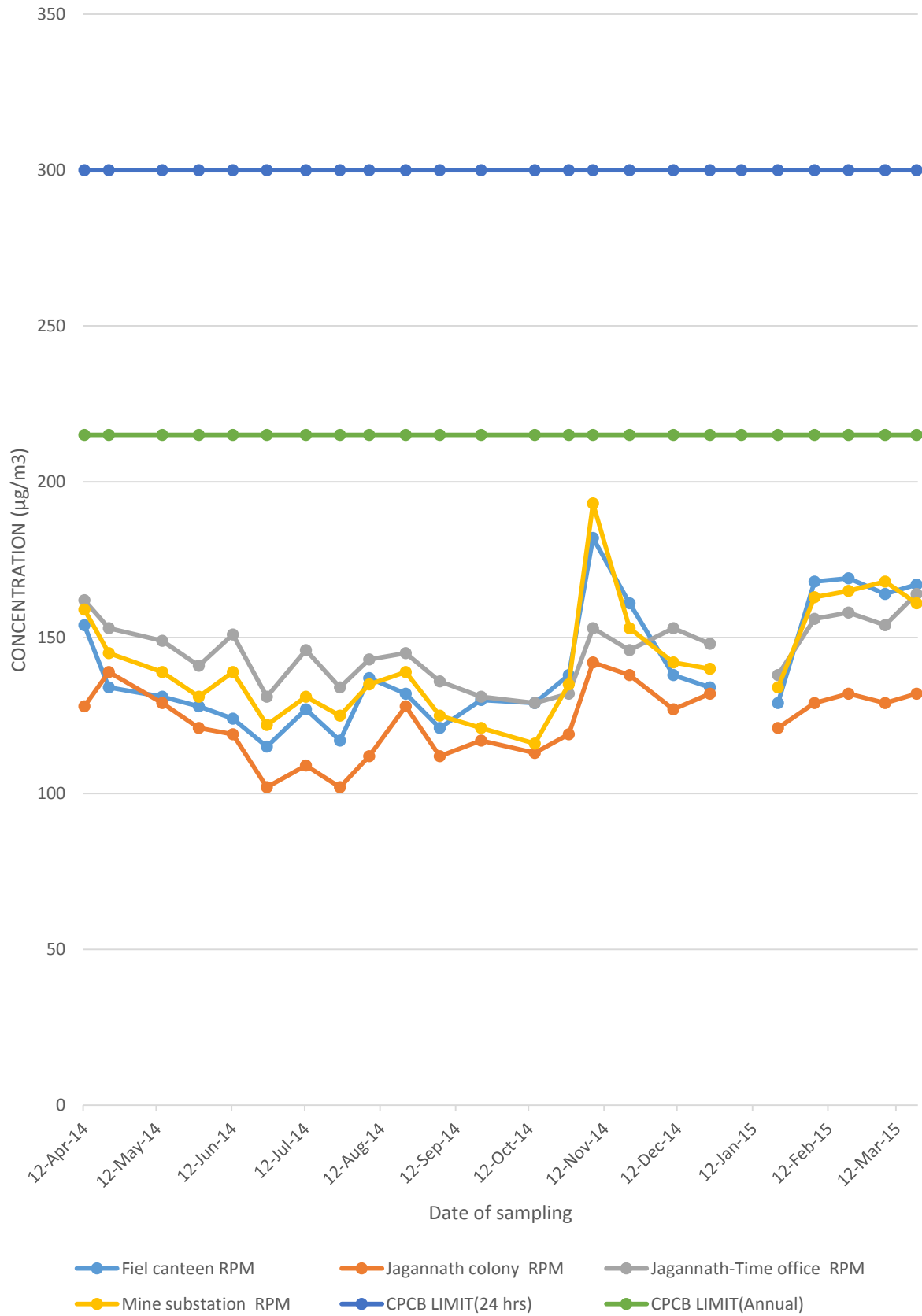
**Monitoring Station: Mine Sub Station**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
12-Apr-14	313	159	30	32	75	East to West & Sunny
22-Apr-14	321	145	29	31	76	East to West & Sunny
14-May-14	314	139	30	32	72	East to West & Sunny
29-May-14	299	131	29	31	56	East to West & Sunny
12-Jun-14	282	139	27	30	58	East to West & Sunny
26-Jun-14	256	122	23	25	42	South to North & cloudy Rainfall
12-Jul-14	263	131	24	26	46	East to West & Sunny
26-Jul-14	246	125	22	24	38	South to North & Rainfal
07-Aug-14	252	135	24	26	41	South to North & Rainfal
22-Aug-14	262	139	27	29	44	East to West & Sunny
05-Sep-14	243	125	24	26	38	East to West Cloudy & Rainfall
22-Sep-14	240	121	23	25	34	East to West Cloudy & Evening Rainfall
14-Oct-14	234	116	21	23	38	East to West Cloudy & Rainfall
30-Oct-14	257	135	27	29	40	South to North & Sunny
07-Nov-14	396	193	34	37	49	West to East & Sunny
25-Nov-14	335	153	29	31	52	East to West & Sunny
10-Dec-14	314	142	25	28	43	East to West & Sunny
25-Dec-14	326	140	26	29	55	West to East & Sunny
07-Jan-15						Coal India Strike
22-Jan-15	316	134	28	30	48	East to West & Sunny
06-Feb-15	378	163	29	33	58	West to East & Sunny
20-Feb-15	380	165	30	32	59	South to North & Sunny
07-Mar-15	369	168	32	34	61	South to North & Sunny
20-Mar-15	370	161	31	33	62	South to North & Sunny
Brief Statistics	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	
Maximum	396.00	193.00	34.00	37.00	76.00	
Minimum	234.00	116.00	21.00	23.00	34.00	
Average	302.87	142.65	27.13	29.39	51.52	
95 Percentile	379.80	167.70	31.90	33.90	74.70	
98 Percentile	388.96	182.00	33.12	35.68	75.56	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

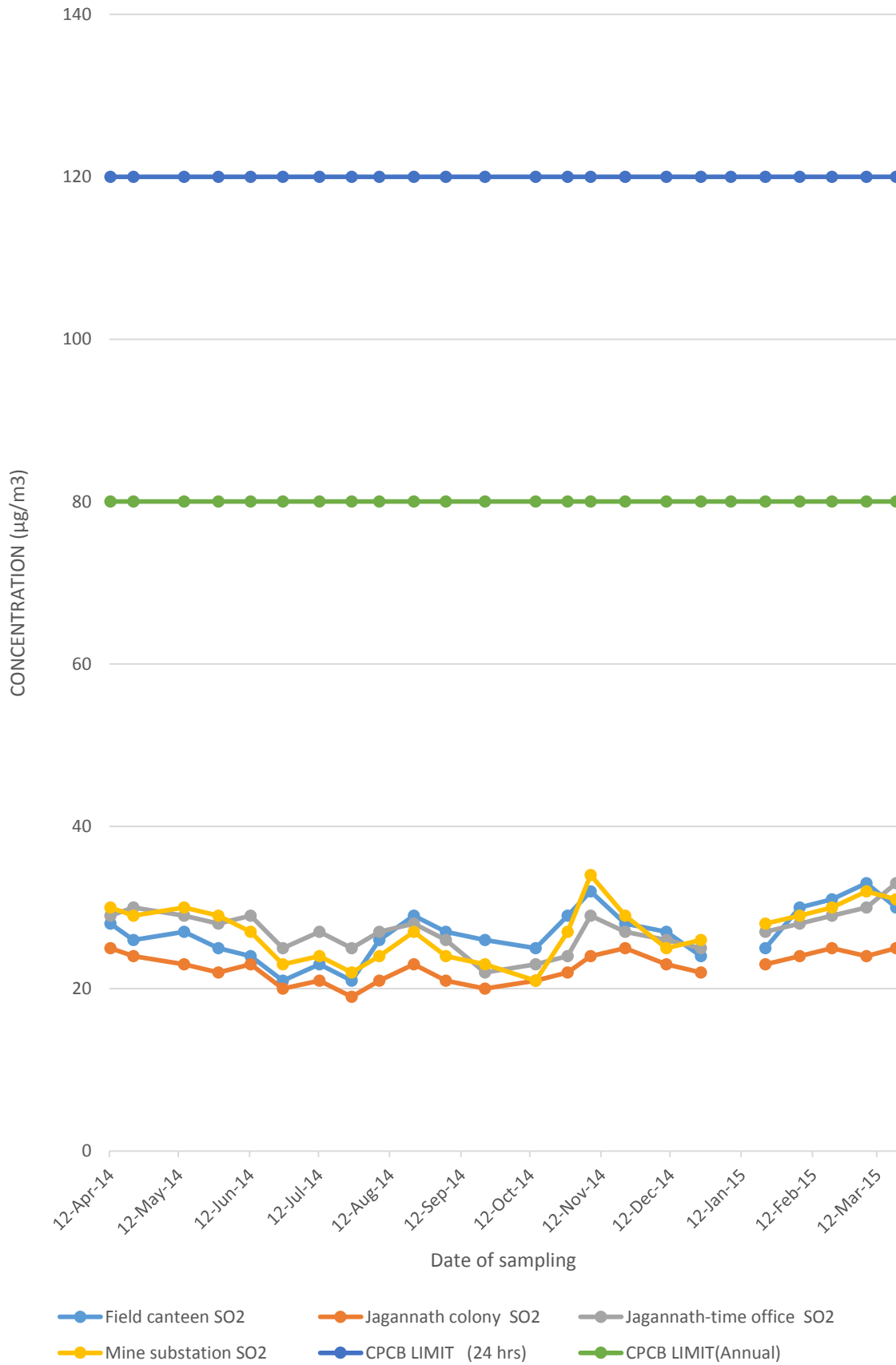
*All values are in (µg/m<sup>3</sup>)*



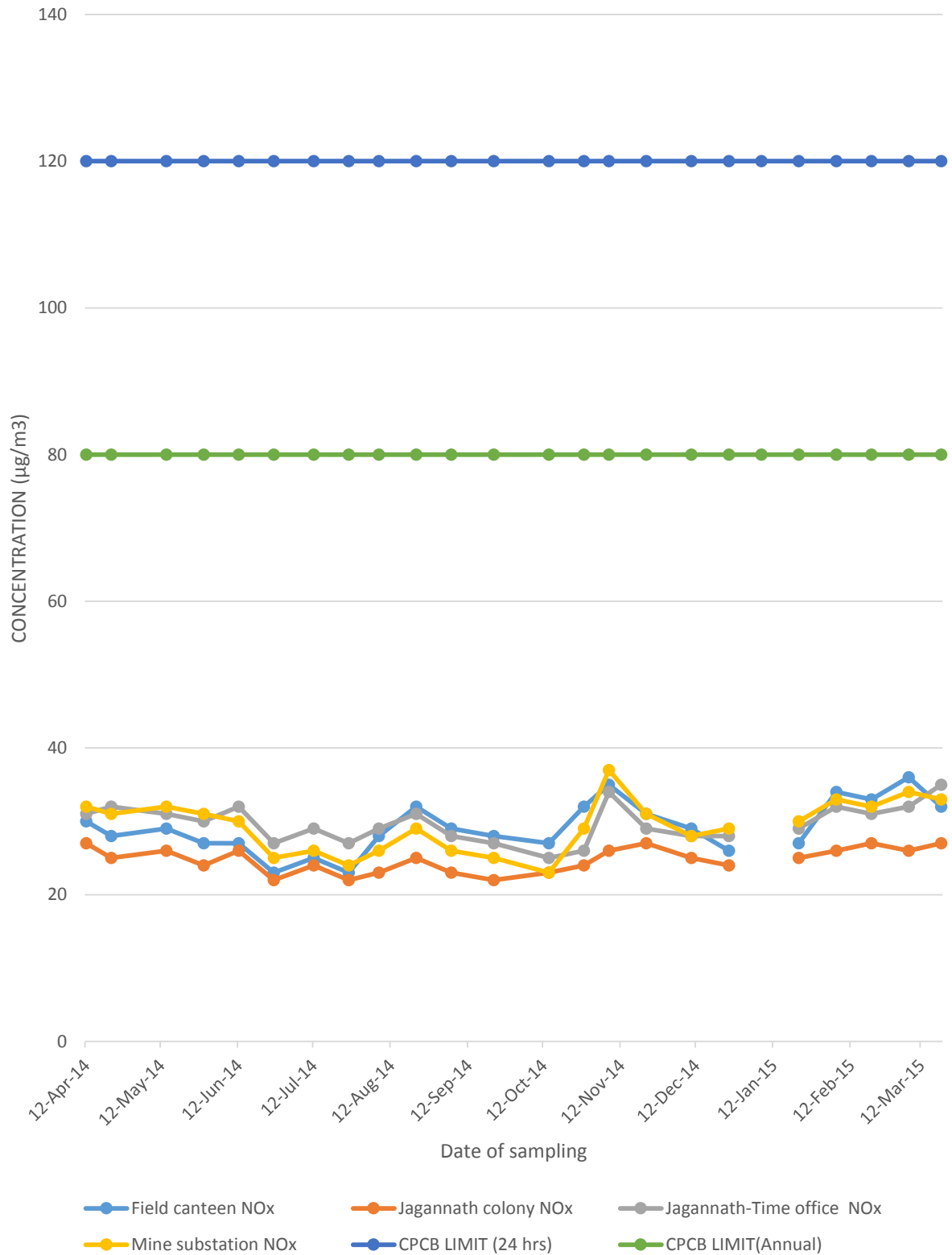
Graph Showing for RPM of Jagannath OCP



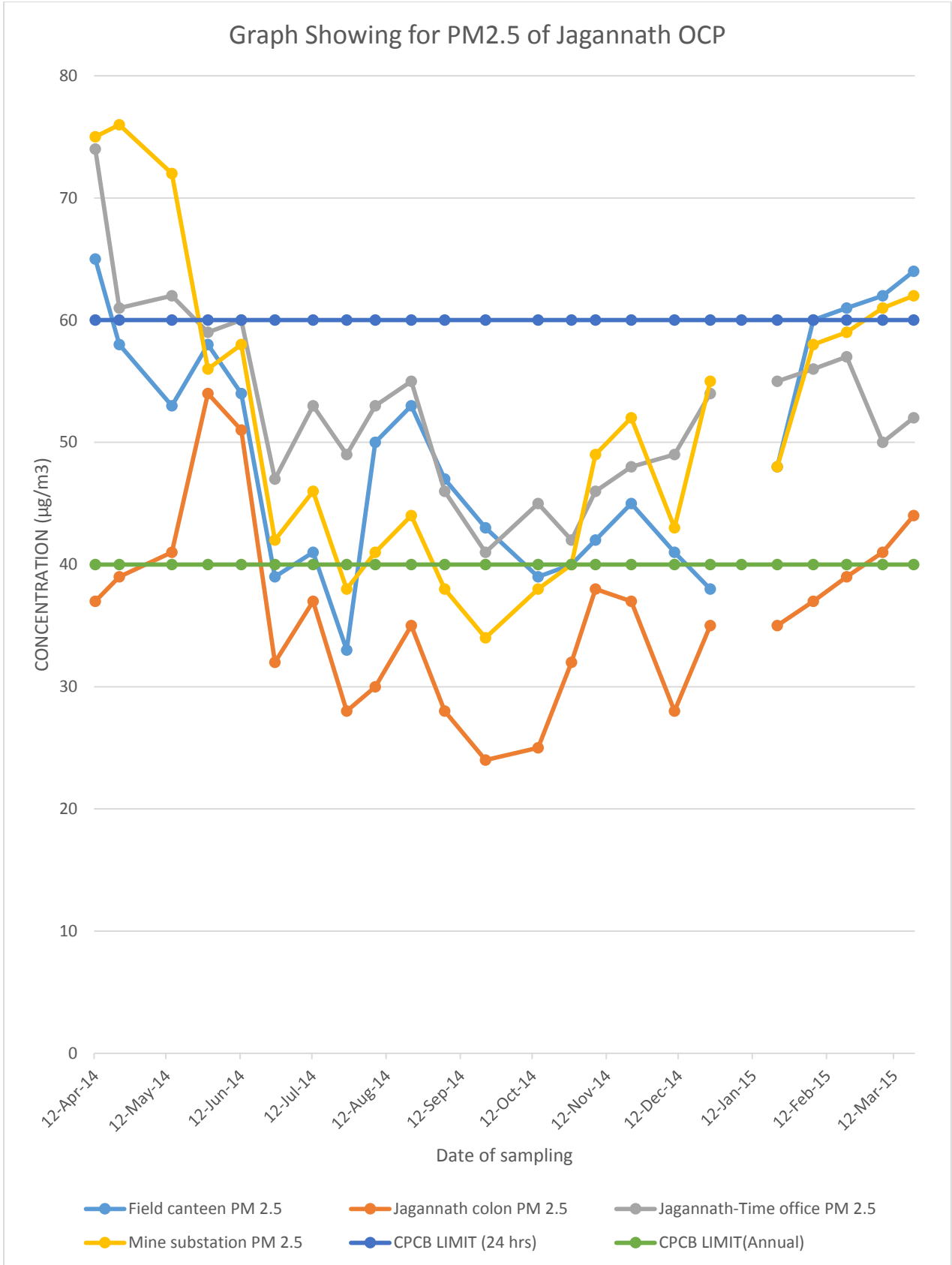
Graph Showing for SO<sub>2</sub> of Jagannath OCP



Graph Showing for NOX of Jagannath OCP



Graph Showing for PM2.5 of Jagannath OCP



**Table : 16 Air Quality Data**

**Project: Bharatpur OCP**

**Monitoring Station: Regional Store**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM 2.5	Remarks
10-Apr-14	242	138	25	27	56	South to north & Sunny
25-Apr-14	236	129	26	28	52	East to West & Sunny
12-May-14	246	134	27	29	57	North to South & Sunny
27-May-14	258	140	25	28	49	East to West & Sunny
07-Jun-14	268	131	26	29	42	South to North & Sunny
21-Jun-14	243	125	24	26	40	East to West & cloudy Rainfall
08-Jul-14	258	134	26	28	44	West to East & Sunny
23-Jul-14	240	128	25	27	40	West to East & Sunny
06-Aug-14	255	135	27	29	52	West to East & Sunny
21-Aug-14	262	139	28	31	54	East to West & Sunny
04-Sep-14	243	129	25	27	48	East to West Cloudy & Rainfall
20-Sep-14	234	120	24	26	41	East to West Cloudy & Evening Rainfall
09-Oct-14	241	127	27	29	38	East to West & Cloudy
24-Oct-14	249	134	26	28	36	East to West & Sunny
06-Nov-14	233	134	24	26	33	South to North & Sunny
21-Nov-14	245	138	26	28	37	East to West & Sunny
09-Dec-14	236	125	20	23	27	South to North & Sunny
24-Dec-14	241	130	23	26	32	South to North & Sunny
13-Jan-15	253	127	21	23	37	South to North & Sunny
29-Jan-15	267	129	22	24	37	East to West & Sunny
12-Feb-15	259	125	21	23	35	East to West Sunny & Night Rainfall
26-Feb-15	353	143	25	27	49	East to West Sunny
12-Mar-15	312	121	23	25	51	East to West Sunny
26-Mar-15	272	135	25	27	45	South to North & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM2.5</b>	
<b>Maximum</b>	353	143	28	31	57	
<b>Minimum</b>	233	120	20	23	27	
<b>Average</b>	256.08	131.25	24.55	26.83	43	
<b>95 percentile</b>	306	139.85	27	29	55.7	
<b>98 percentile</b>	334.14	141.62	27.58	30.08	56.54	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All Values are in  $\mu\text{g}/\text{m}^3$*

**Table : 17 Air Quality Data**  
**Project: Bharatpur OCP**  
**Monitoring Station: Reject dump yard/world bank office**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM 2.5	Remarks
10-Apr-14	285	138	26	29	59	South to North & Sunny
25-Apr-14	297	145	28	30	61	West to East & Sunny
12-May-14	283	138	26	28	55	West to East & Sunny
27-May-14	293	145	28	30	54	East to West & Sunny
07-Jun-14	299	131	29	32	51	East to West Cloudy & Rainfall
21-Jun-14	263	122	25	28	47	East to West Cloudy & Evening Rainfall
08-Jul-14	285	137	27	30	51	East to West & Cloudy
23-Jul-14	261	125	24	27	45	East to West & Sunny
06-Aug-14	285	132	26	29	49	South to North & Sunny
21-Aug-14	293	141	28	32	53	East to West & Sunny
04-Sep-14	274	132	25	28	47	South to North & Sunny
20-Sep-14	251	124	24	26	36	South to North & Sunny
09-Oct-14	273	131	26	28	39	South to North & Sunny
24-Oct-14	295	147	29	31	45	East to West & Sunny
06-Nov-14	338	159	31	33	45	East to West Sunny & Night Rainfall
21-Nov-14	321	142	29	31	47	East to West Sunny
09-Dec-14	314	139	25	27	45	East to West Sunny
24-Dec-14	326	141	26	28	50	South to North & Sunny
13-Jan-15	312	134	24	26	47	South to north & Sunny
29-Jan-15	329	143	26	28	51	East to West & Sunny
12-Feb-15	317	139	25	28	49	North to South & Sunny
26-Feb-15	345	139	27	29	58	East to West & Sunny
12-Mar-15	324	129	28	31	54	South to North & Sunny
26-Mar-15	342	135	30	33	57	East to West & cloudy Rainfall
<b>Brief stastic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM2.5</b>	
<b>Maximum</b>	345	159	31	33	61	
<b>Minimum</b>	251	122	24	26	36	
<b>Average</b>	300.21	137	26.75	29.25	49.79	
<b>95 percentile</b>	341.4	146.7	29.85	32.85	58.85	
<b>98 percentile</b>	343.62	153.48	30.54	33	60.08	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All Values are in µg/m<sup>3</sup>*

**Table : 18 Air Quality Data  
Project: Bharatpur OCP  
Monitoring Station: Nakeipasi Village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM 2.5	Remarks
07-Apr-14	172	108	23	25	51	East to West & Sunny
25-Apr-14	184	117	24	26	53	East to West & Sunny
08-May-14	194	132	25	27	43	North to South & Sunny
23-May-14	199	137	26	28	46	East to West & Sunny
12-Jun-14	212	129	24	27	39	East to West & Sunny
26-Jun-14	201	114	23	25	31	South to North & cloudy Rainfall
04-Jul-14	201	114	23	25	31	South to North & cloudy Rainfall
18-Jul-14	203	116	21	23	31	South to North & Rainfall
06-Aug-14	227	129	23	26	37	South to North & Rainfall
21-Aug-14	235	130	25	27	39	East to West & Sunny
04-Sep-14	221	125	23	26	31	East to West Cloudy & Rainfall
20-Sep-14	213	116	21	23	27	East to West Cloudy & Evening Rainfall
08-Oct-14	225	131	24	28	30	East to West & Sunny
24-Oct-14	241	130	25	27	32	East to West & Sunny
06-Nov-14	280	132	25	27	27	South to North & Sunny
21-Nov-14	273	134	25	27	30	East to West & Sunny
09-Dec-14	270	138	25	27	37	South to North & Sunny
24-Dec-14	273	135	21	24	40	South to North & Sunny
13-Jan-15	286	126	22	24	34	South to North & Sunny
29-Jan-15	291	131	24	26	37	East to West & Sunny
12-Feb-15	287	128	23	26	34	East to West Sunny & Night Rainfall
26-Feb-15	292	131	22	24	36	East to West Sunny
12-Mar-15	275	125	24	26	39	East to West Sunny
26-Mar-15	284	129	26	28	43	South to North & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM2.5</b>	
<b>Maximum</b>	292	138	26	28	53	
<b>Minimum</b>	172	108	21	23	27	
<b>Average</b>	239.13	126.54	23.63	25.92	36.58	
<b>95 percentile</b>	290.4	136.7	25.85	28	50.25	
<b>98 percentile</b>	291.54	137.54	26	28	52.08	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

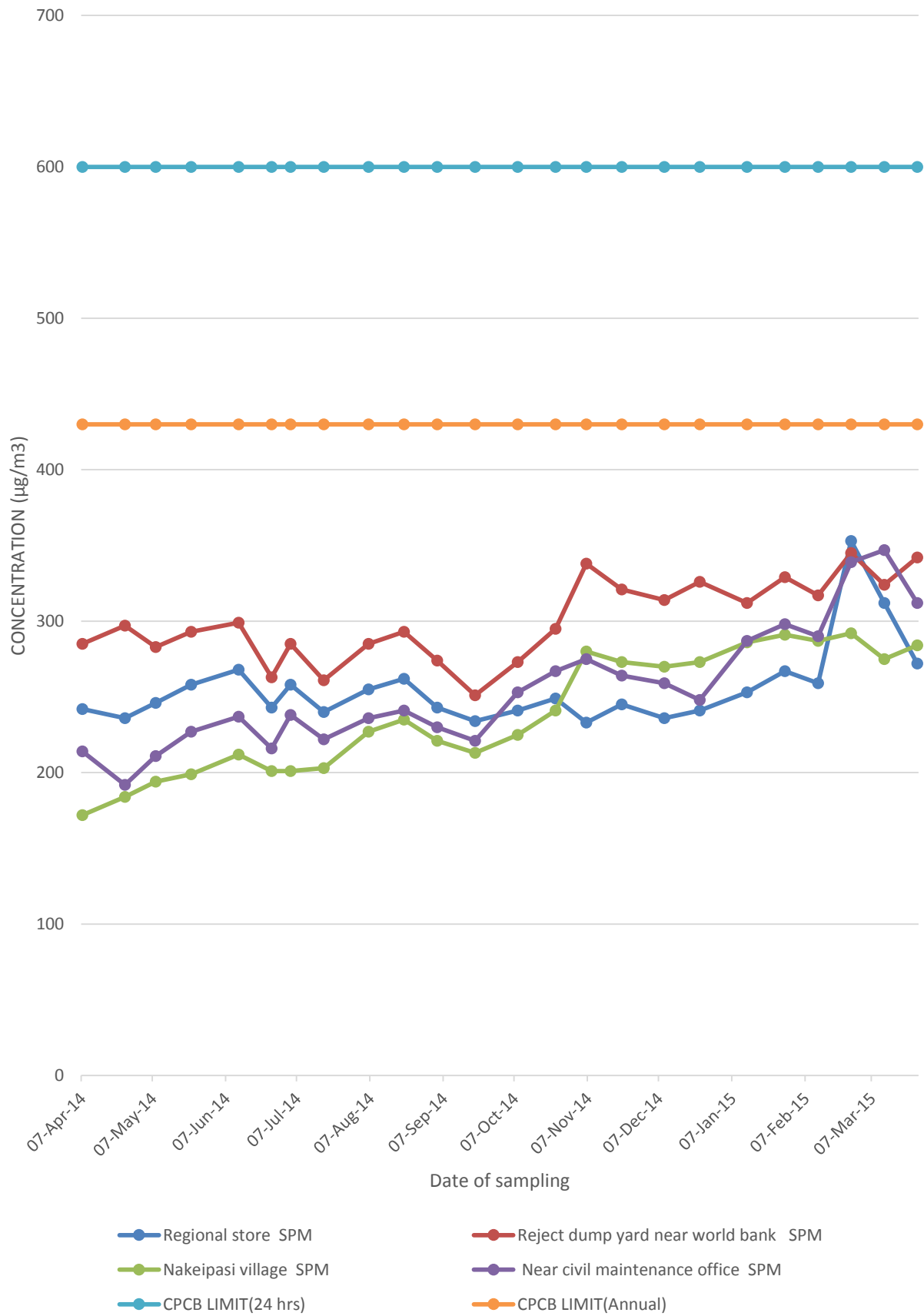
*All Values are in  $\mu\text{g}/\text{m}^3$*

**Table : 19 Air Quality Data**  
**Project: Bharatpur OCP**  
**Monitoring Station: Near civil maintenance office of kalinga colony**

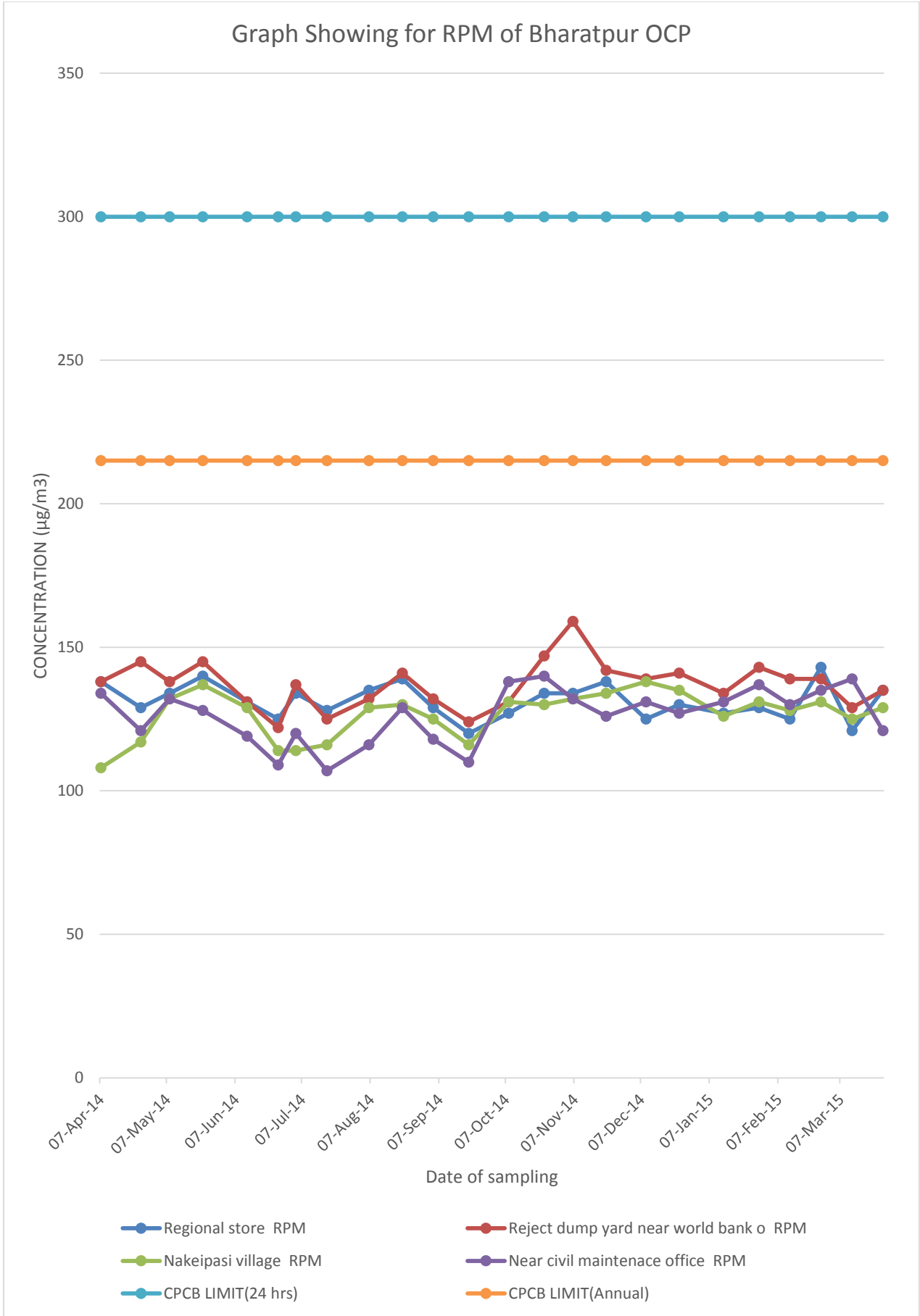
Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM 2.5	Remarks
08-Apr-14	214	134	27	29	45	East to West & Cloudy
25-Apr-14	192	121	25	27	42	West to East & Cloudy
09-May-14	211	132	26	28	54	West to East & Cloudy
24-May-14	227	128	24	27	58	East to West & Sunny
10-Jun-14	237	119	23	25	53	East to West Cloudy & Rainfall
24-Jun-14	216	109	21	23	45	East to West Cloudy & Evening Rainfall
10-Jul-14	238	120	23	25	34	East to West & Cloudy
25-Jul-14	222	107	22	24	28	East to West & Sunny
06-Aug-14	236	116	24	26	32	South to North & Sunny
21-Aug-14	241	129	26	28	37	East to West & Sunny
04-Sep-14	230	118	24	27	29	South to North & Sunny
20-Sep-14	221	110	22	25	30	South to North & Sunny
09-Oct-14	253	138	25	27	35	South to North & Sunny
24-Oct-14	267	140	28	30	38	East to West & Sunny
06-Nov-14	275	132	26	28	41	East to West Sunny & Night Rainfall
21-Nov-14	264	126	24	26	39	East to West Sunny
09-Dec-14	259	131	21	22	32	East to West Sunny
24-Dec-14	248	127	22	25	33	South to North & Sunny
13-Jan-15	287	131	25	28	52	East to West & Sunny
29-Jan-15	298	137	23	26	41	East to West & Sunny
12-Feb-15	290	130	24	27	38	East to West & Sunny
26-Feb-15	339	135	24	26	41	West to East & Sunny
12-Mar-15	347	139	26	28	45	South to North & Sunny
26-Mar-15	312	121	23	25	37	South to North & cloudy Rainfall
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM2.5</b>	
<b>Maximum</b>	347	140	28	30	58	
<b>Minimum</b>	192	107	21	22	28	
<b>Average</b>	255.17	126.25	24.08	26.33	39.96	
<b>95 percentile</b>	334.95	138.85	26.85	28.85	53.85	
<b>98 percentile</b>	343.32	139.54	27.54	29.54	56.16	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

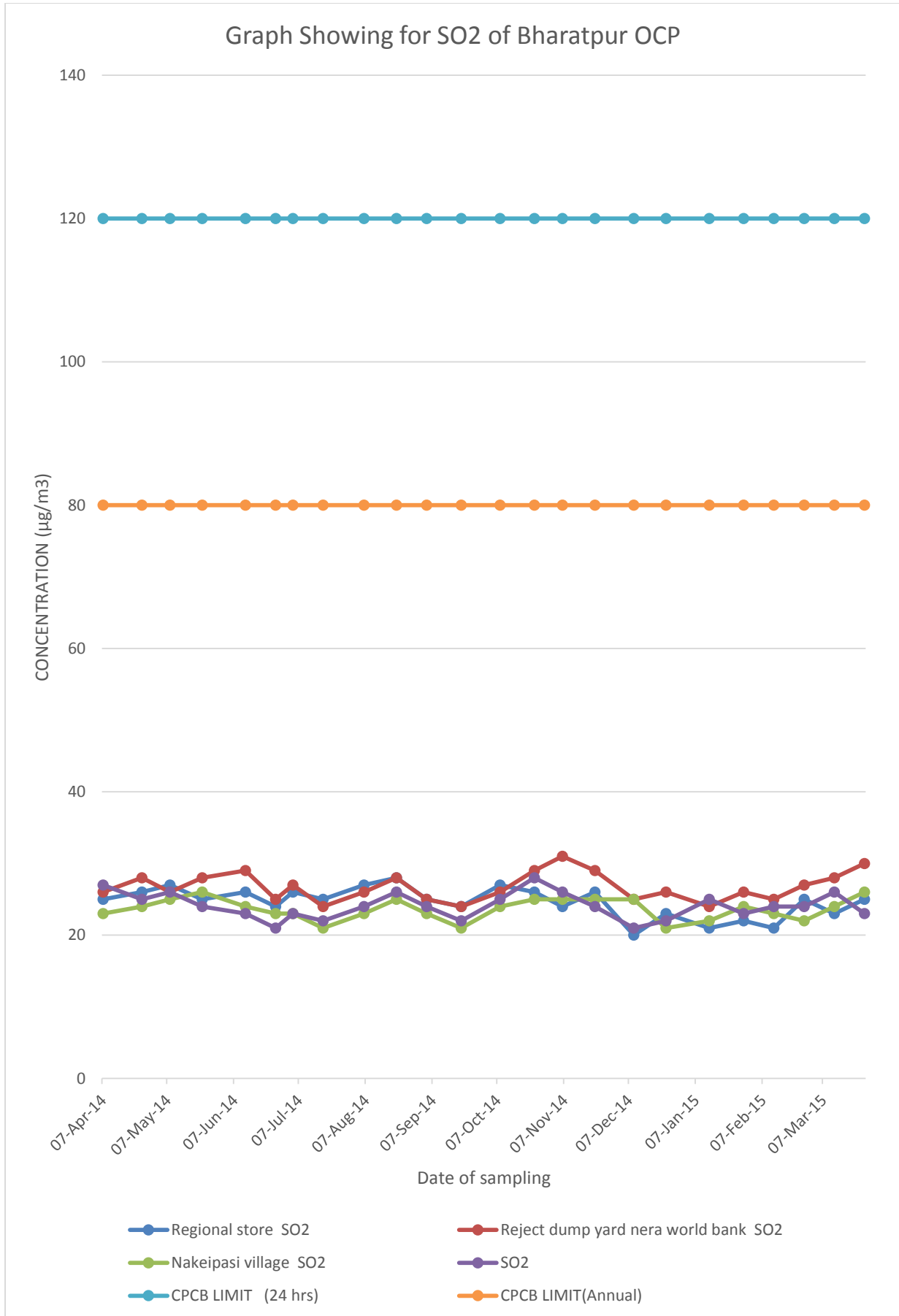
*All Values are in µg/m<sup>3</sup>*

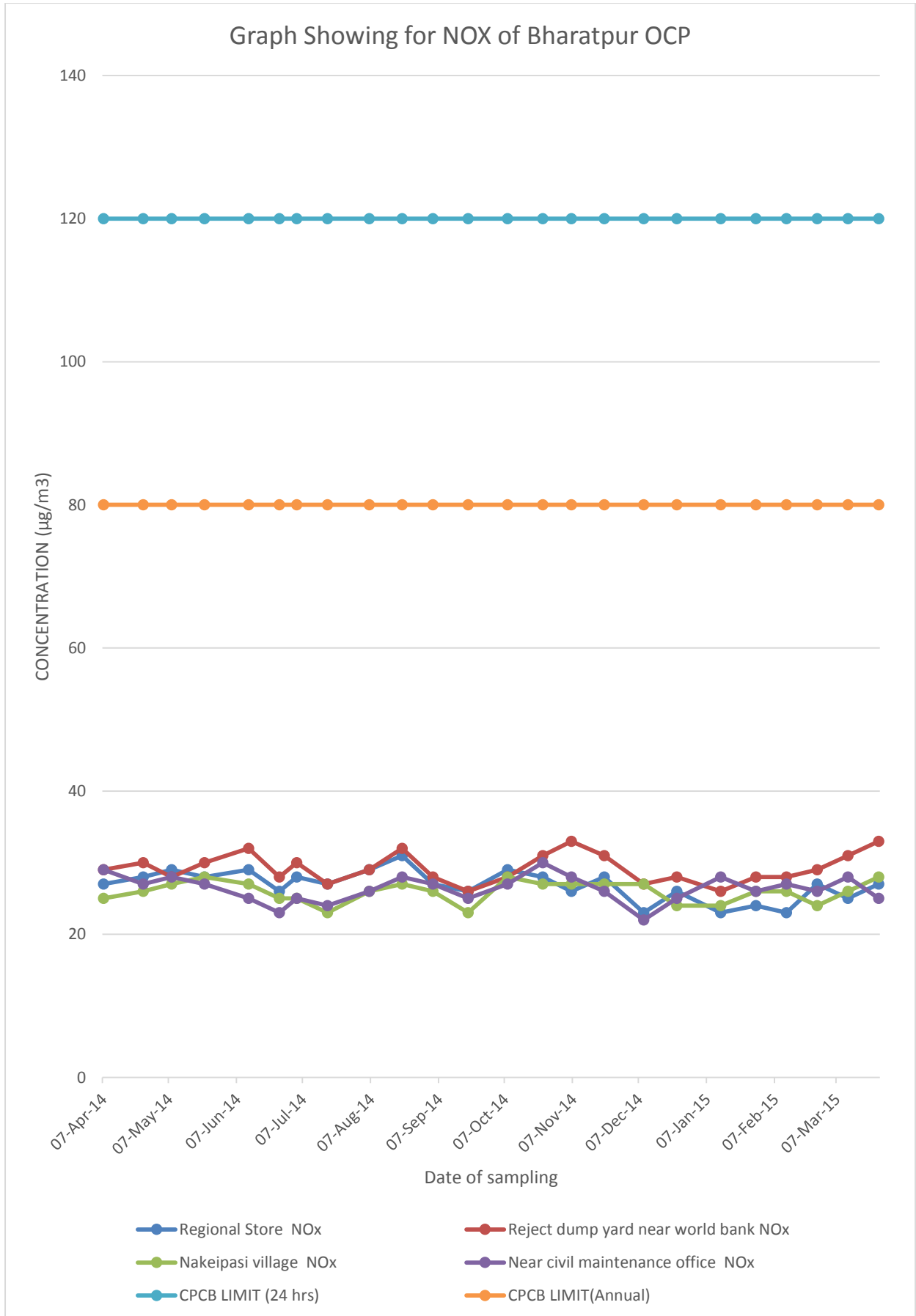
Graph Showing for SPM of Bharatpur OCP



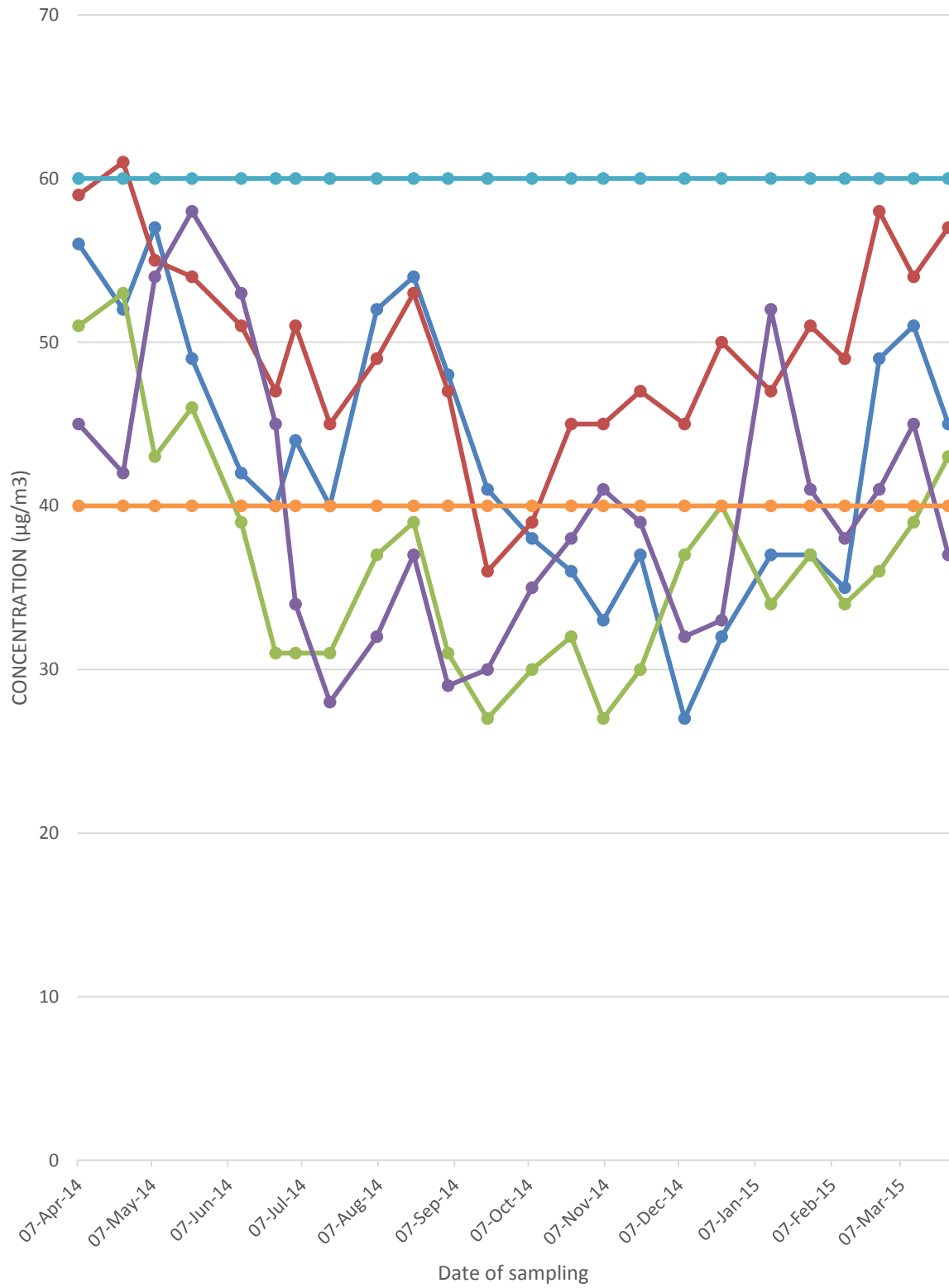
Graph Showing for RPM of Bharatpur OCP







Graph Showing for PM2.5 of Bharatpur OCP



**Table : 20 Air Quality Data  
Project: Chhendipada OCP  
Monitoring Station: Near Site Office**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
02-Apr-14	302	154	26	28	59	South to north & Sunny
18-Apr-14	315	143	28	30	60	South to north & Sunny
02-May-14	309	139	29	31	58	East to West & Sunny
16-May-14	314	145	31	33	46	East to West & Sunny
02-Jun-14	326	153	32	35	58	East to West & Sunny
16-Jun-14	310	139	27	29	50	South to North & cloudy Rainfall
02-Jul-14	325	147	28	32	55	West to East & Sunny
16-Jul-14	314	136	25	29	50	East to West & Rainfall
05-Aug-14	328	142	28	31	56	East to West & Rainfall
20-Aug-14	332	148	30	33	58	South to North & Sunny
01-Sep-14	314	136	27	29	50	South to North Cloudy & Rainfall
18-Sep-14	302	124	25	27	43	West to East & Cloudy
15-Oct-14	335	146	28	31	48	South to North & Sunny
29-Oct-14	321	142	29	32	52	South to North & Sunny
03-Nov-14	261	168	25	27	39	East to West & Sunny
17-Nov-14	274	131	27	29	42	South to North & Sunny
01-Dec-14	289	142	25	27	48	South to North & Sunny
16-Dec-14	295	145	26	28	51	South to North & Sunny
05-Jan-15	311	139	24	26	53	South to North & Sunny
20-Jan-15	327	145	27	29	51	South to North & Sunny
04-Feb-15	314	137	26	28	46	South to North & Sunny
18-Feb-15	317	141	27	29	51	East to West & Sunny
04-Mar-15	336	143	28	30	56	West to East & Sunny
18-Mar-15	358	149	29	32	51	South to North & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	358	168	32	35	60	
<b>Minimum</b>	261	124	24	26	39	
<b>Average</b>	313.71	143.08	27.38	29.79	51.29	
<b>95 percentile</b>	335.85	153.85	30.85	33	58.85	
<b>98 percentile</b>	347.88	161.56	31.54	34.08	59.54	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All Values are in µg/m<sup>3</sup>*

**Table : 21 Air Quality Data  
Project: Chhendipada OCP  
Monitoring Station: Near Fire Station**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
02-Apr-14	194	135	24	26	29	South to north & Sunny
18-Apr-14	216	124	25	27	30	South to north & Sunny
02-May-14	280	141	27	29	36	East to West & Sunny
16-May-14	294	137	26	28	45	East to West & Sunny
02-Jun-14	281	132	24	26	41	East to West & Sunny
16-Jun-14	161	118	22	24	34	South to North & cloudy Rainfall
02-Jul-14	184	128	24	26	37	West to East & Sunny
16-Jul-14	162	117	21	24	32	East to West & Rainfall
05-Aug-14	187	126	24	27	39	East to West & Rainfall
20-Aug-14	193	132	26	28	41	South to North & Sunny
01-Sep-14	182	124	24	26	38	South to North Cloudy & Rainfall
18-Sep-14	164	117	22	24	32	West to East & Cloudy
15-Oct-14	189	124	24	26	38	South to North & Sunny
29-Oct-14	214	128	25	27	34	South to North & Sunny
03-Nov-14	278	156	24	26	31	East to West & Sunny
17-Nov-14	285	148	25	27	35	South to North & Sunny
01-Dec-14	263	136	23	25	34	South to North & Sunny
16-Dec-14	246	127	22	24	35	South to North & Sunny
05-Jan-15	254	123	21	23	45	South to North & Sunny
20-Jan-15	263	127	23	25	40	South to North & Sunny
04-Feb-15	278	132	24	26	49	South to North & Sunny
18-Feb-15	250	128	22	24	38	East to West & Sunny
04-Mar-15	264	131	24	26	43	West to East & Sunny
18-Mar-15	309	135	25	27	34	South to North & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	309	156	27	29	49	
<b>Minimum</b>	161	117	21	23	29	
<b>Average</b>	232.96	130.25	23.79	25.88	37.08	
<b>95 percentile</b>	292.65	146.95	26	28	45	
<b>98 percentile</b>	302.1	152.32	26.54	28.54	47.16	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All Values are in µg/m<sup>3</sup>*

**Table : 22 Air Quality Data**  
**Project: Chhendipada OCP**  
**Monitoring Station: Dolamandap Chhak**

Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
03-Apr-14	211	139	25	27	40	East to West & Sunny
18-Apr-14	222	129	26	28	38	South to north & Sunny
02-May-14	258	134	24	26	35	East to West & Sunny
17-May-14	263	129	25	27	57	North to South & Sunny
03-Jun-14	274	135	27	29	50	East to West & Sunny
17-Jun-14	235	121	24	26	40	East to West & cloudy Rainfall
03-Jul-14	247	134	26	28	45	West to East & Sunny
17-Jul-14	238	127	24	26	39	East to West & Rainfall
05-Aug-14	246	135	26	28	43	East to West & Rainfall
20-Aug-14	251	140	28	30	44	South to North & Sunny
01-Sep-14	235	120	26	28	37	South to North Cloudy & Rainfall
18-Sep-14	221	112	23	26	30	West to East & Cloudy
15-Oct-14	243	123	24	27	32	South to North & Sunny
29-Oct-14	253	129	25	28	37	South to North & Sunny
03-Nov-14	296	162	26	29	36	East to West & Sunny
17-Nov-14	271	140	23	25	38	South to North & Sunny
01-Dec-14	257	134	24	27	35	South to North & Sunny
16-Dec-14	265	139	21	24	37	South to North & Sunny
05-Jan-15	273	131	23	25	35	South to North & Sunny
20-Jan-15	238	124	21	23	36	South to North & Sunny
04-Feb-15	243	124	23	25	40	South to North & Sunny
18-Feb-15	246	120	21	23	37	East to West & Sunny
04-Mar-15	253	119	22	24	32	West to East & Sunny
18-Mar-15	245	122	21	23	43	South to North & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	296	162	28	30	57	
<b>Minimum</b>	211	112	21	23	30	
<b>Average</b>	249.33	130.08	24.08	26.33	39	
<b>95 percentile</b>	273.85	140	26.85	29	49.25	
<b>98 percentile</b>	285.88	151.88	27.54	29.54	53.78	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

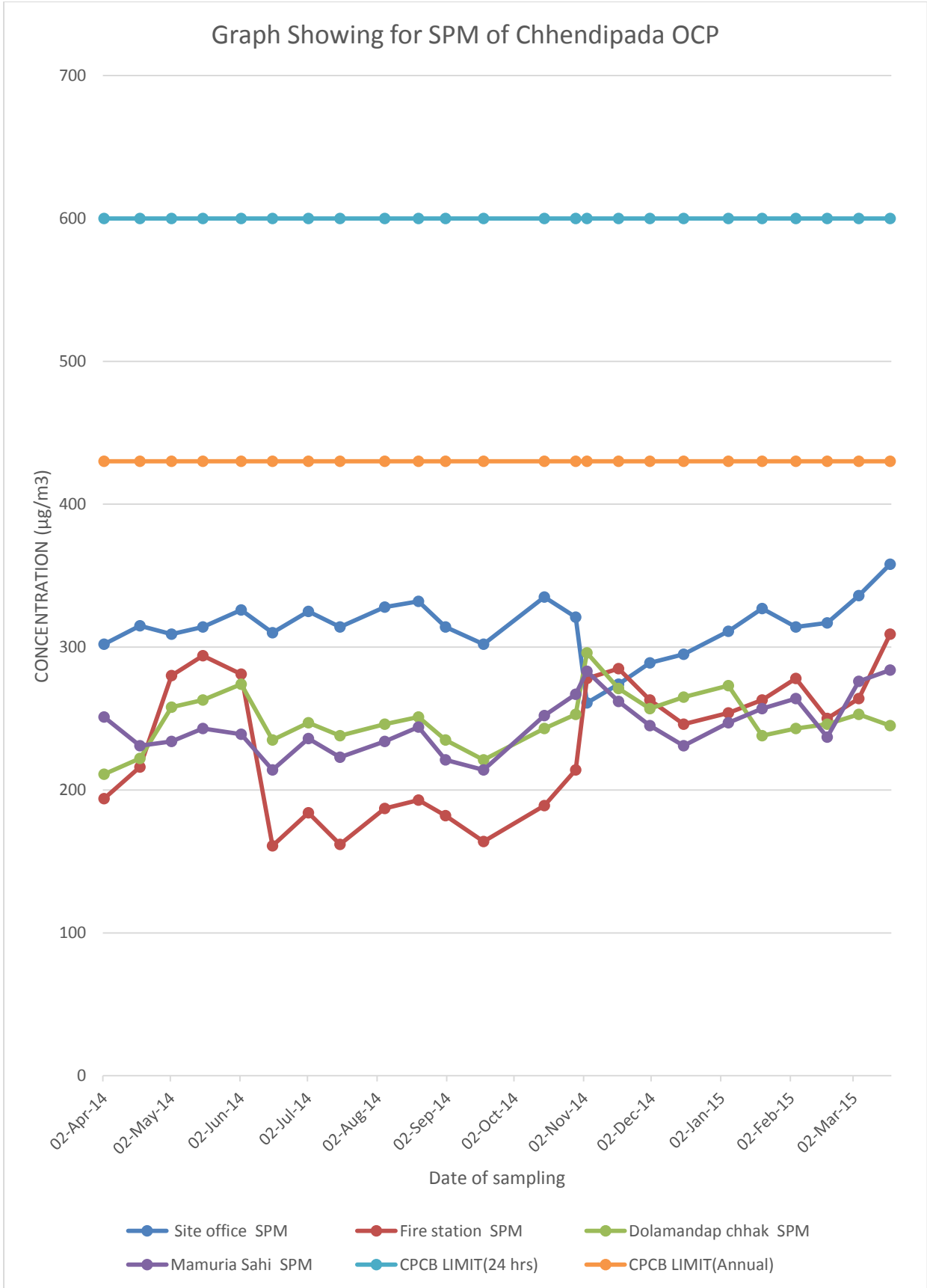
*All Values are in  $\mu\text{g}/\text{m}^3$*

**Table : 23 Air Quality Data  
Project: Chhendipada OCP  
Monitoring Station: Mamuria Sahi**

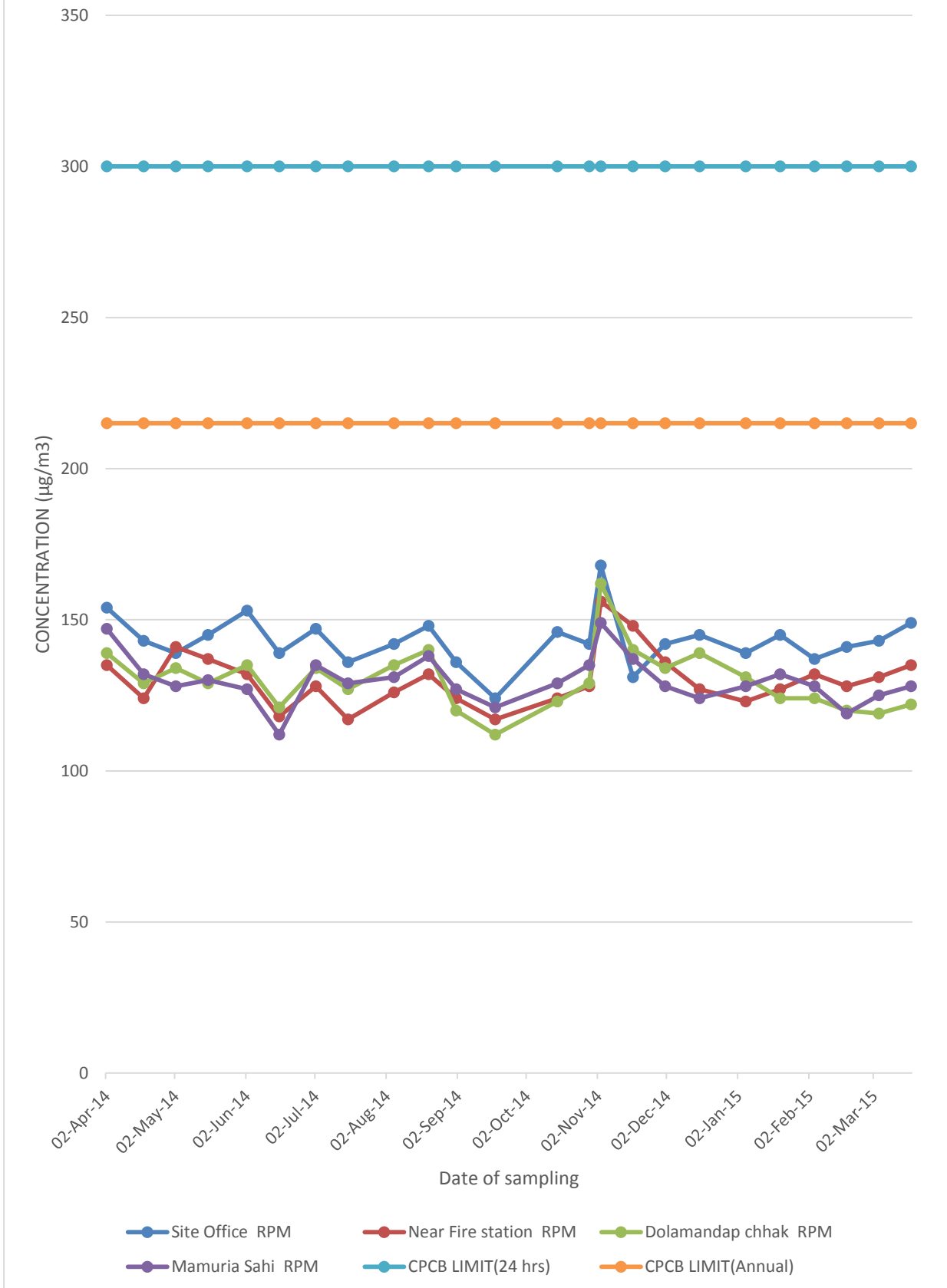
Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
03-Apr-14	251	147	22	24	37	East to West & Sunny
18-Apr-14	231	132	24	26	35	South to north & Sunny
02-May-14	234	128	25	27	32	East to West & Sunny
17-May-14	243	130	23	25	55	North to South & Sunny
03-Jun-14	239	127	26	28	51	East to West & Sunny
17-Jun-14	214	112	23	25	42	East to West & cloudy Rainfall
03-Jul-14	236	135	25	28	49	West to East & Sunny
17-Jul-14	223	129	23	26	41	East to West & Rainfall
05-Aug-14	234	131	25	28	48	East to West & Rainfall
20-Aug-14	244	138	27	29	45	South to North & Sunny
01-Sep-14	221	127	25	27	41	South to North Cloudy & Rainfall
18-Sep-14	214	121	24	26	36	West to East & Cloudy
15-Oct-14	252	129	25	27	38	South to North & Sunny
29-Oct-14	267	135	27	29	41	South to North & Sunny
03-Nov-14	283	149	28	30	29	East to West & Sunny
17-Nov-14	262	137	24	26	32	South to North & Sunny
01-Dec-14	245	128	21	23	36	South to North & Sunny
16-Dec-14	231	124	23	25	32	South to North & Sunny
05-Jan-15	247	128	20	22	35	South to North & Sunny
20-Jan-15	257	132	24	27	39	South to North & Sunny
04-Feb-15	264	128	25	27	42	South to North & Sunny
18-Feb-15	237	119	20	22	34	East to West & Sunny
04-Mar-15	276	125	23	25	39	West to East & Sunny
18-Mar-15	284	128	24	26	40	South to North & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	284	149	28	30	55	
<b>Minimum</b>	214	112	20	22	29	
<b>Average</b>	245.38	129.96	24	26.17	39.54	
<b>95 percentile</b>	281.95	145.65	27	29	50.7	
<b>98 percentile</b>	283.54	148.08	27.54	29.54	53.16	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

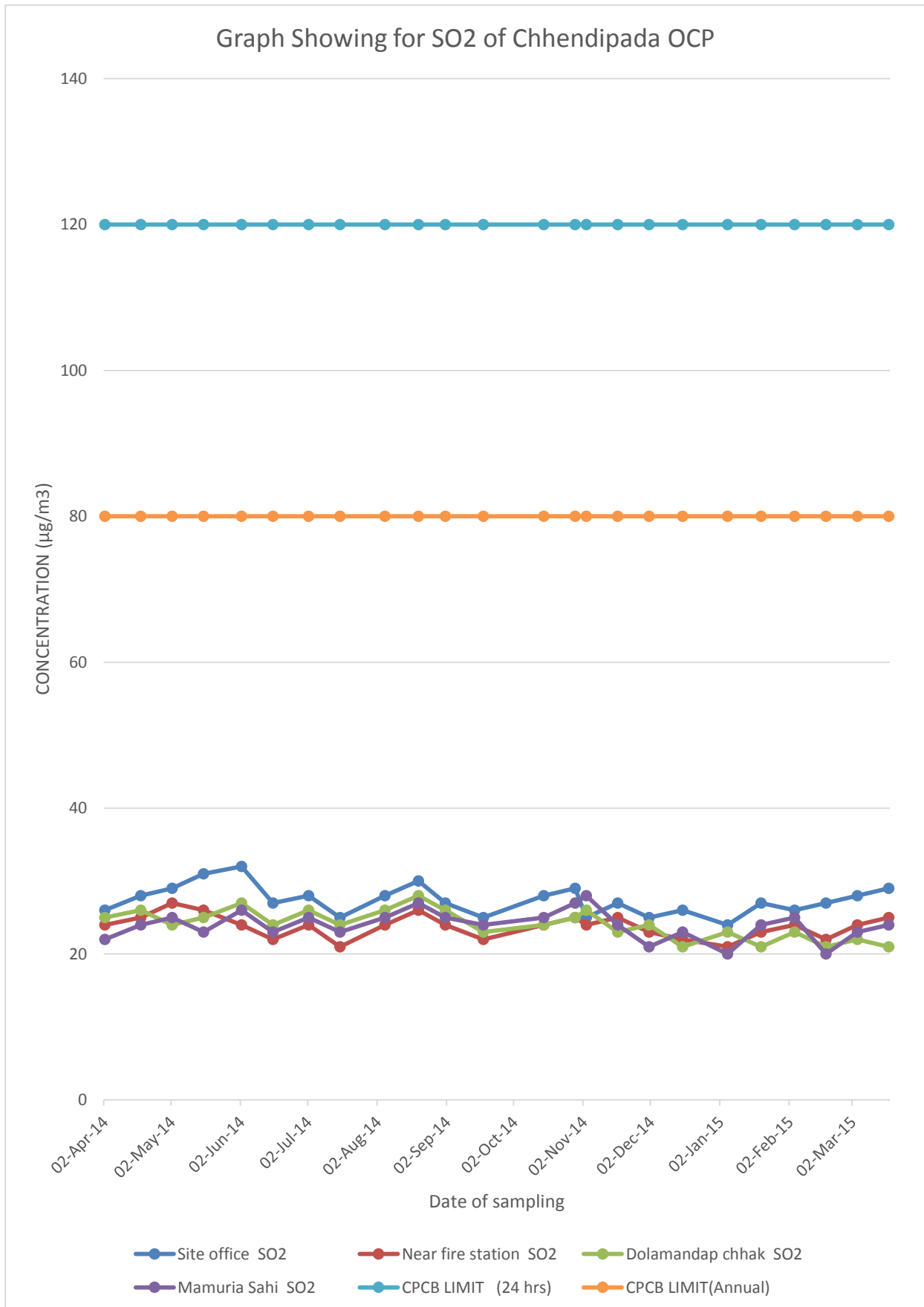
*All Values are in  $\mu\text{g}/\text{m}^3$*

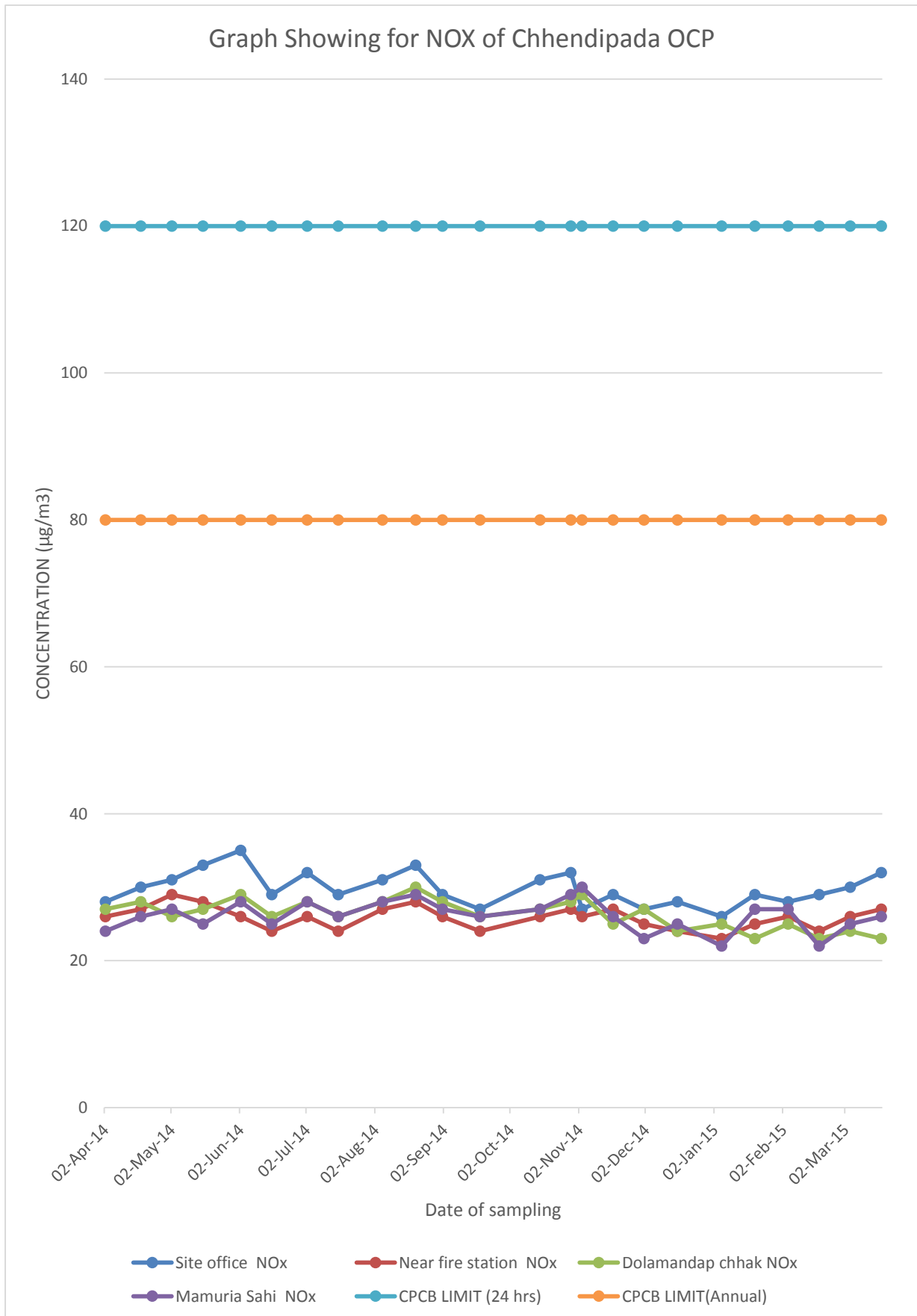
Graph Showing for SPM of Chhendipada OCP

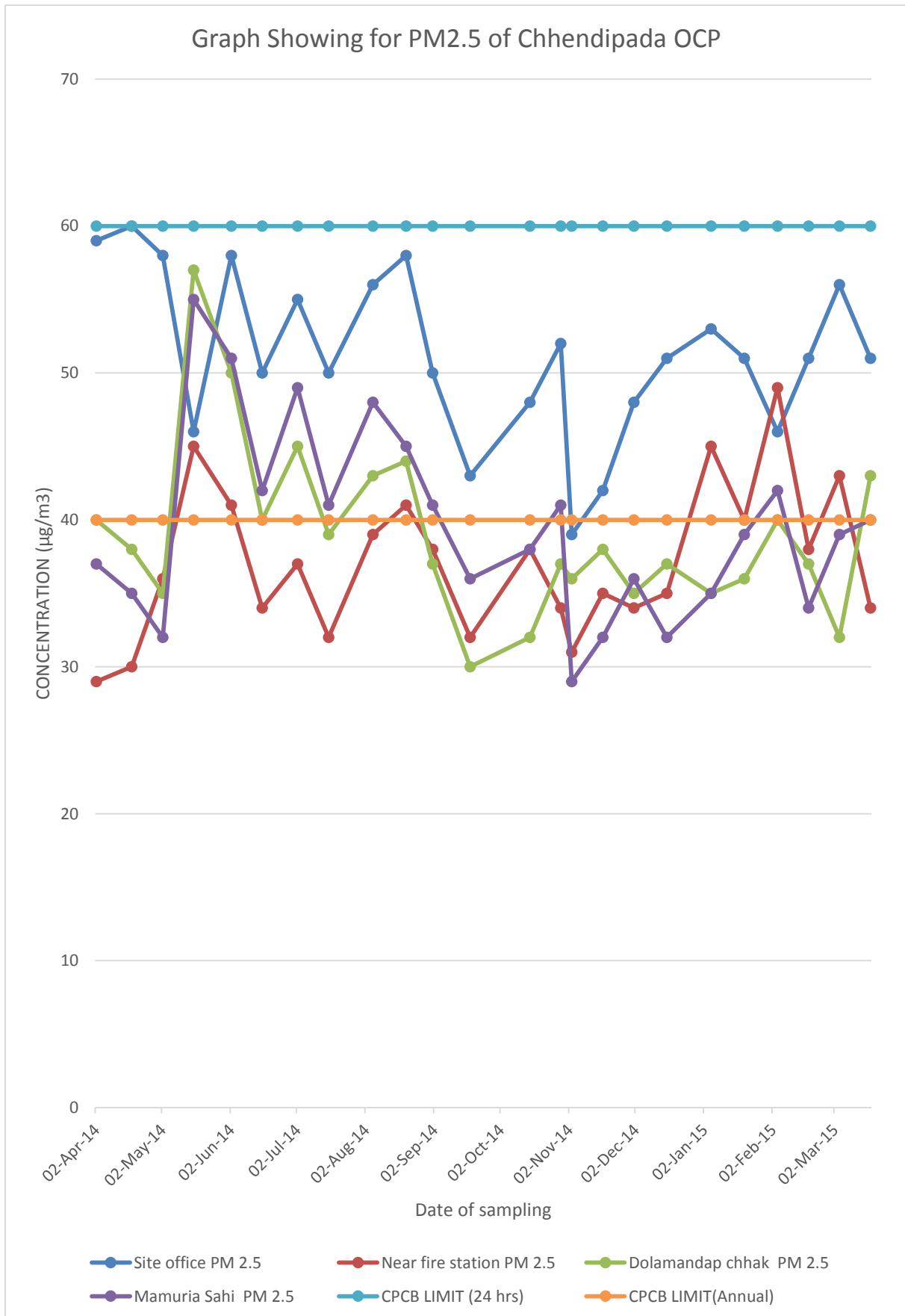


Graph Showing for RPM of Chhendipada OCP









**Table 24: Heavy Metal Analysis**

**Project: Bharatpur OCP**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
24.12.14	Kalinga civil maintainance office	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	7.6
24.12.14	regionall store	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
23.12.14	Nakeipasi(bharatpur OCP)	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
24.12.14	Reject dump yard	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0

**Table 25: Heavy Metal Analysis**

**Project: Chenndipada OCP**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
16.12.14	Mamuraia sahi	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
16.12.14	Near Fire station(Chhendipada OCP))	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	8.4
16.12.14	Dolamandapchhak	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
16.12.14	Nr. Site office	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	7.2

**Table : 26 Air Quality Data**  
**Project: Lingaraj OCP**  
**Monitoring Station : Lingaraj CGM Office**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
02-Apr-14	245	132	26	28	47	East to West & Sunny
23-Apr-14	257	141	27	29	45	East to West & Sunny
05-May-14	263	137	28	30	57	West to East & Sunny
20-May-14	285	142	29	31	59	East to West & Sunny
02-Jun-14	273	141	29	32	58	South to North & Sunny
16-Jun-14	241	123	25	27	45	East to West & cloudy Rainfall
02-Jul-14	253	134	26	28	47	East to West & Sunny
17-Jul-14	231	126	23	25	41	South to North & Rainfall
12-Aug-14	247	131	25	27	45	South to North & Rainfall
27-Aug-14	256	137	27	29	48	East to West Sunny & Rainfall
10-Sep-14	235	125	24	26	37	East to West Cloudy & Rainfall
26-Sep-14	246	134	26	28	41	West to East & Sunny
01-Oct-14	257	138	28	30	47	East to West & Sunny
16-Oct-14	264	134	27	29	40	East to West & Sunny
12-Nov-14	336	153	32	35	42	South to North & Sunny
27-Nov-14	317	142	29	31	37	East to West & Sunny
12-Dec-14	287	136	27	29	34	East to West & Sunny
29-Dec-14	251	125	23	25	37	East to West & Cloudy
12-Jan-15	264	129	25	27	41	West to East & Sunny
28-Jan-15	275	132	26	28	45	East to West & Sunny
11-Feb-15	296	139	27	29	47	South to North & Sunny
25-Feb-15	338	143	28	30	56	South to North & Sunny
11-Mar-15	346	148	29	32	51	South to North & Sunny
25-Mar-15	354	143	27	29	55	West to East & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	354.00	153.00	32.00	35.00	59.00	
<b>Minimum</b>	231.00	123.00	23.00	25.00	34.00	
<b>Average</b>	275.71	136.04	26.79	28.92	45.92	
<b>95 percentile</b>	344.80	147.25	29.00	32.00	57.85	
<b>98 percentile</b>	245.00	132.00	26.00	28.00	47.00	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in  $\mu\text{g}/\text{m}^3$*

**Table : 27 Air Quality Data**  
**Project: Lingaraj OCP**  
**Monitoring Station : Near C.T Road (Lingraj to Dera)**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
03-Apr-14	272	137	26	28	38	East to West & Sunny
23-Apr-14	285	146	28	30	42	East to West & Sunny
06-May-14	267	131	26	28	49	West to East & Sunny
21-May-14	274	129	25	27	53	North to South & Sunny
03-Jun-14	254	127	27	30	47	East to West & Sunny
17-Jun-14	221	114	23	25	34	East to West & cloudy Rainfall
03-Jul-14	235	127	25	27	39	East to West & Sunny
18-Jul-14	221	117	23	25	33	South to North & Rainfall
12-Aug-14	273	133	27	29	49	South to North & Rainfall
27-Aug-14	241	132	25	27	41	East to West Sunny & Rainfall
10-Sep-14	217	120	23	25	32	East to West Cloudy & Rainfall
26-Sep-14	241	129	25	27	39	West to East & Sunny
01-Oct-14	246	135	26	28	43	East to West & Sunny
16-Oct-14	249	127	25	28	39	East to West & Sunny
12-Nov-14	225	121	24	26	34	South to North & Sunny
27-Nov-14	245	126	23	25	37	East to West & Sunny
12-Dec-14	256	121	25	27	42	East to West & Sunny
27-Dec-14	264	134	24	27	46	East to West & Sunny
12-Jan-15	276	143	22	24	49	West to East & Sunny
28-Jan-15	264	128	24	27	38	East to West & Sunny
11-Feb-15	287	136	25	27	41	South to North & Sunny
25-Feb-15	296	127	26	28	45	South to North & Sunny
11-Mar-15	310	135	27	29	39	South to North & Sunny
25-Mar-15	317	138	28	30	53	West to East & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	317.00	146.00	28.00	30.00	53.00	
<b>Minimum</b>	217.00	114.00	22.00	24.00	32.00	
<b>Average</b>	259.83	129.71	25.08	27.25	41.75	
<b>95 percentile</b>	307.90	142.25	27.85	30.00	52.40	
<b>98 percentile</b>	272.00	137.00	26.00	28.00	38.00	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 28 Air Quality Data**  
**Project: Lingaraj OCP**  
**Monitoring Station: Near Langijoda Village/kandal village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
04-Jul-14	224	115	23	25	35	East to West & Sunny
19-Jul-14	216	104	21	23	29	South to North & Rainfall
12-Aug-14	224	112	23	25	34	South to North & Rainfall
27-Aug-14	211	108	21	23	28	East to West Sunny & Rainfall
10-Sep-14	203	101	20	22	25	East to West Cloudy & Rainfall
26-Sep-14	213	114	22	24	29	West to East & Sunny
01-Oct-14	224	121	23	25	35	East to West & Sunny
16-Oct-14	229	125	24	26	36	East to West & Sunny
12-Nov-14	306	141	27	29	26	South to North & Sunny
27-Nov-14	286	135	25	27	32	East to West & Sunny
11-Dec-14	265	129	26	28	35	West to East & Sunny
26-Dec-14	243	122	22	24	31	West to East & Sunny
12-Jan-15	253	129	23	26	35	West to East & Sunny
28-Jan-15	249	123	21	23	32	East to West & Sunny
11-Feb-15	253	126	23	25	36	South to North & Sunny
25-Feb-15	275	131	24	26	39	South to North & Sunny
11-Mar-15	284	129	23	25	42	South to North & Sunny
25-Mar-15	292	125	24	26	47	West to East & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	306.00	141.00	27.00	29.00	47.00	
<b>Minimum</b>	203.00	101.00	20.00	22.00	25.00	
<b>Average</b>	247.22	121.67	23.06	25.11	33.67	
<b>95 percentile</b>	294.10	135.90	26.15	28.15	42.75	
<b>98 percentile</b>	301.24	138.96	26.66	28.66	45.30	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in  $\mu\text{g}/\text{m}^3$*

**Table : 29 Air Quality Data**  
**Project: Lingaraj OCP**  
**Monitoring Station:Near Radhakrishna Temple**

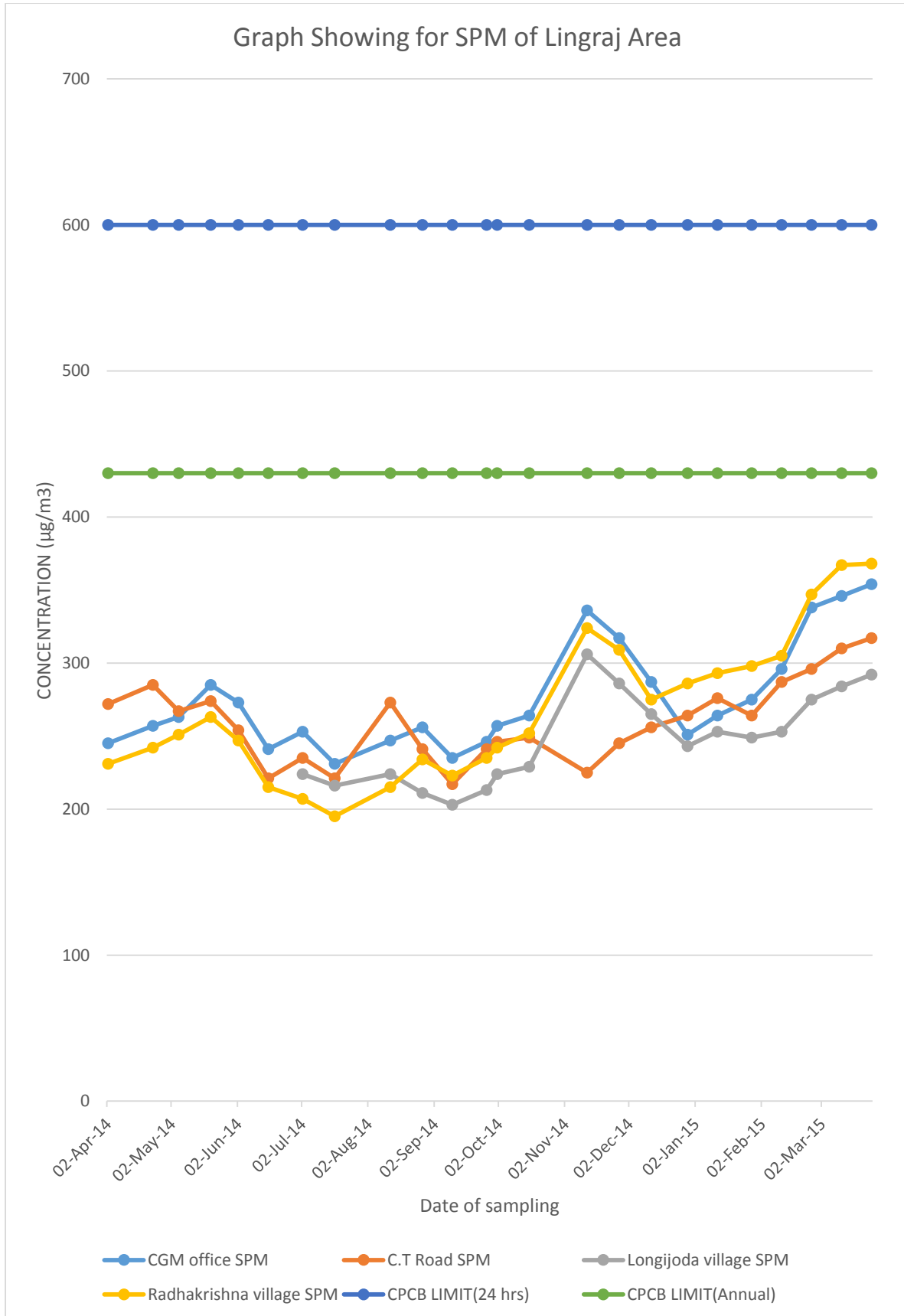
Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
05-Apr-14	231	128	24	26	73	South to north & Sunny
23-Apr-14	242	131	25	27	62	East to West & Sunny
07-May-14	251	128	23	25	52	East to West & Sunny
23-May-14	263	134	24	26	55	East to West & Sunny
09-Jun-14	247	121	24	27	50	West to East & Sunny
23-Jun-14	215	114	21	23	38	East to West & cloudy Rainfall
09-Jul-14	207	106	20	22	34	East to West & Rainfall
24-Jul-14	195	102	18	20	28	South to North & Rainfal
12-Aug-14	215	109	20	23	32	South to North & Rainfal
27-Aug-14	234	125	22	25	37	East to West Sunny & Rainfall
10-Sep-14	223	118	20	23	30	East to West Cloudy & Rainfall
26-Sep-14	235	124	24	26	37	West to East & Sunny
01-Oct-14	242	131	25	27	40	East to West & Sunny
16-Oct-14	252	129	24	27	41	East to West & Sunny
12-Nov-14	324	145	29	32	40	South to North & Sunny
27-Nov-14	309	136	27	29	42	East to West & Sunny
11-Dec-14	275	126	24	26	32	West to East & Sunny
26-Dec-14	286	129	25	27	36	West to East & Sunny
12-Jan-15	293	135	24	26	52	West to East & Sunny
28-Jan-15	298	139	27	29	54	East to West & Sunny
11-Feb-15	305	143	28	32	56	South to North & Sunny
25-Feb-15	347	152	29	33	58	South to North & Sunny
11-Mar-15	367	159	30	32	60	South to North & Sunny
25-Mar-15	368	147	26	28	59	West to East & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	368.00	159.00	30.00	33.00	73.00	
<b>Minimum</b>	195.00	102.00	18.00	20.00	28.00	
<b>Average</b>	267.67	129.63	24.29	26.71	45.75	
<b>95 percentile</b>	364.00	151.25	29.00	32.00	61.70	
<b>98 percentile</b>	231.00	128.00	24.00	26.00	73.00	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

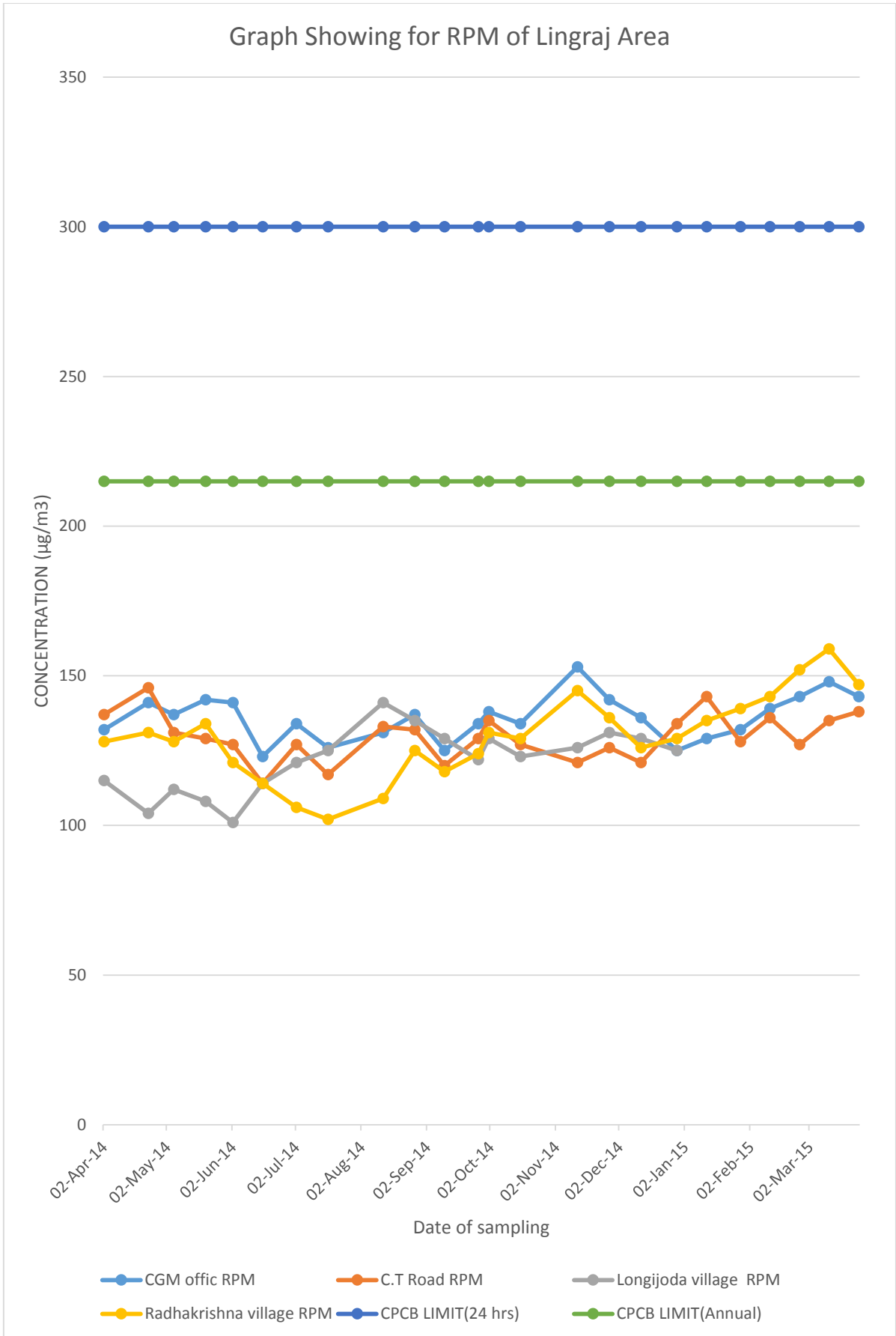
*All values are in  $\mu\text{g}/\text{m}^3$*

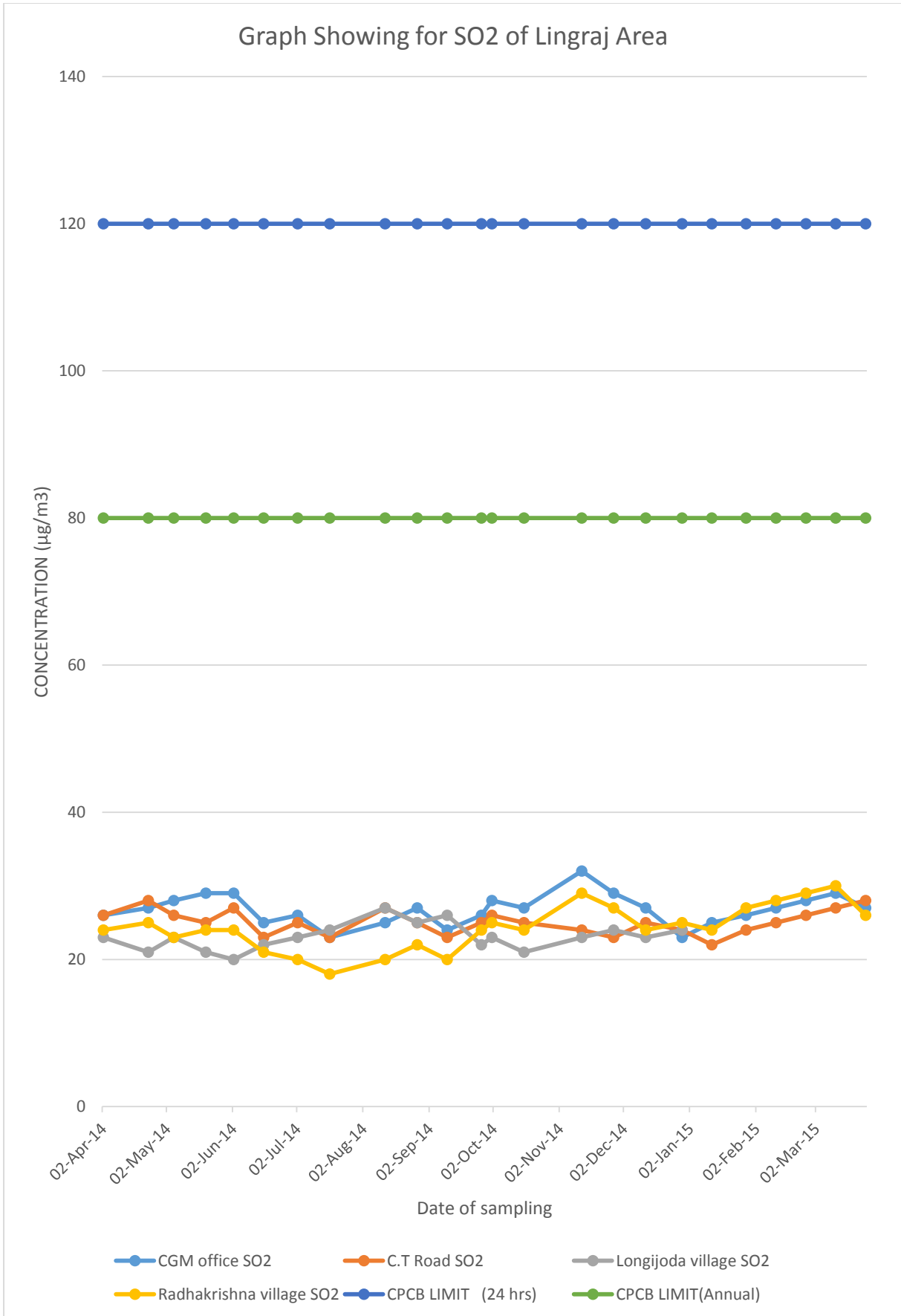
**Table : 30 Air Quality Data**  
**Project: Lingaraj OCP**  
**Monitoring Station:Lingaraj Township**

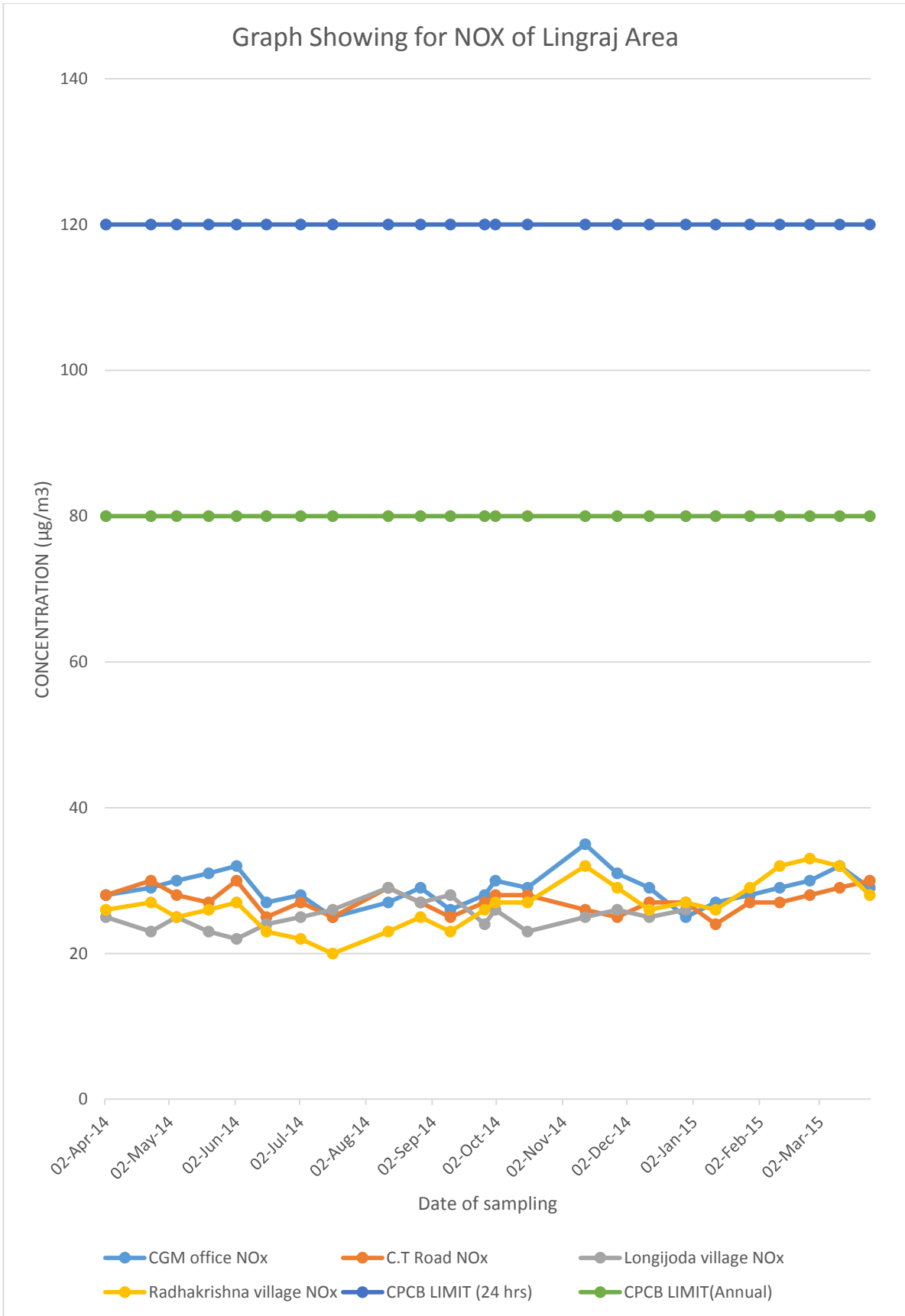
<b>Date of Sampling</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	<b>Remarks</b>
25-Jul-14	210	110	22	24	37	East to West & Rainfall

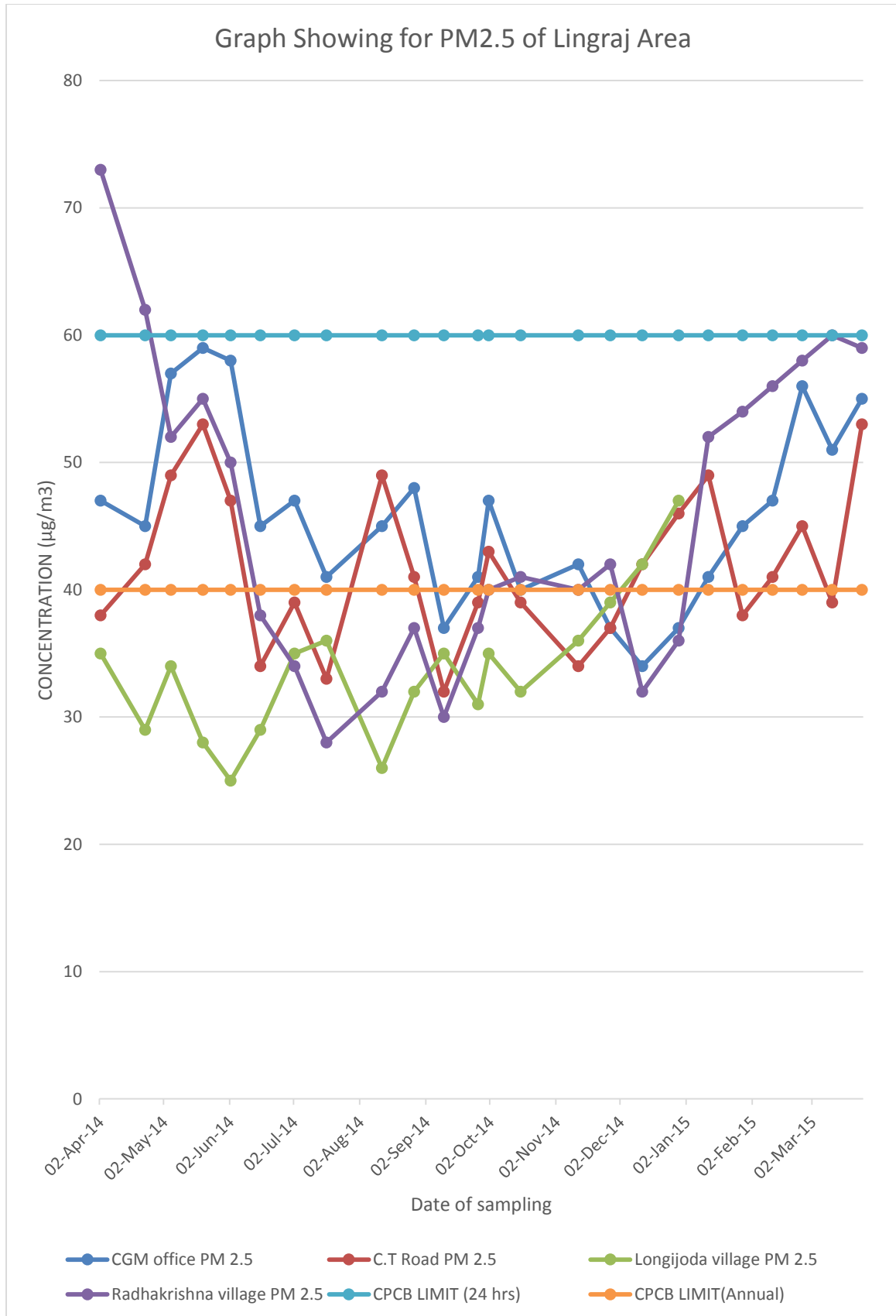
*All values are in  $\mu\text{g}/\text{m}^3$*











**Table : 31 Heavy Metal Analysis**

**Project : Lingraj U/G**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
27.12.14	Nr. CT road	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
27.12.14	Nr.Langijoda village	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	8.7
15.12.14	LingarajTownShip	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	6.9
27.12.14	Nr.Radhakrishna Temple	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
29.12.14	LingarajG.M.office	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	6.5

**Table :32 Air Level Data**  
**Project:Kaniha OCP**  
**Monitoring Station: Site Office**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
08-Apr-14	249	135	24	26	68	East to West & Sunny
24-Apr-14	257	142	26	28	60	South to north & Sunny
09-May-14	273	137	27	29	55	East to West & Sunny
23-May-14	284	141	29	31	54	East to West & Sunny
09-Jun-14	294	148	30	33	58	East to West & Sunny
23-Jun-14	212	115	24	26	41	East to West & cloudy Rainfall
09-Jul-14	205	111	23	25	37	West to East & Rainfall
24-Jul-14	197	103	21	23	31	East to West & Rainfall
11-Aug-14	214	110	23	25	35	East to West & Rainfall
26-Aug-14	247	134	25	27	39	South to North & Sunny
09-Sep-14	225	122	23	25	32	South to North Cloudy & Rainfall
25-Sep-14	235	126	24	26	35	East to West & Sunny
13-Oct-14	242	132	25	27	39	East to West Cloudy & Rainfall
27-Oct-14	279	137	28	30	45	South to North & Sunny
10-Nov-14	336	153	31	34	33	South to North & Sunny
25-Nov-14	315	134	28	31	45	East to West & Sunny
03-Dec-14	307	136	26	28	36	East to West & Sunny
18-Dec-14	313	127	24	27	34	East to West & Sunny
01-Jan-15	327	132	25	28	37	East to West & Sunny
16-Jan-15	315	138	26	29	48	South to North & Sunny
02-Feb-15	305	132	25	27	46	South to North & Sunny
16-Feb-15	301	130	24	26	48	South to North & Sunny
02-Mar-15	295	127	26	28	53	East to West & Sunny
16-Mar-15	306	131	27	29	47	East to West & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	336.0	153.0	31.0	34.0	68.0	
<b>Minimum</b>	197.0	103.0	21.0	23.0	31.0	
<b>Average</b>	272.2	130.5	25.6	27.8	44.0	
<b>95 percentile</b>	325.2	147.1	29.9	32.7	59.7	
<b>98 percentile</b>	249	135	24	26	68	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table :33 Air Level Data**  
**Project: Kaniha OCP**  
**Monitoring Station: Near Jarda Village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
09-Apr-14	195	125	25	27	62	South to north & Sunny
24-Apr-14	198	128	26	28	55	South to north & Sunny
10-May-14	206	131	24	26	40	East to West & Sunny
24-May-14	216	128	22	24	56	East to West & Sunny
09-Jun-14	223	132	24	26	57	East to West & Sunny
23-Jun-14	202	105	21	23	35	East to West & cloudy Rainfall
09-Jul-14	195	101	20	22	31	West to East & Rainfall
24-Jul-14	186	92	18	21	28	East to West & Rainfall
11-Aug-14	196	101	20	23	31	East to West & Rainfall
26-Aug-14	207	110	21	23	34	South to North & Sunny
09-Sep-14	198	104	20	22	30	South to North Cloudy & Rainfall
25-Sep-14	231	122	23	25	34	East to West & Sunny
13-Oct-14	228	119	21	23	35	East to West Cloudy & Rainfall
27-Oct-14	235	124	23	25	32	South to North & Sunny
10-Nov-14	293	139	26	28	22	South to North & Sunny
25-Nov-14	289	127	24	27	38	East to West & Sunny
03-Dec-14	274	129	23	26	36	East to West & Sunny
18-Dec-14	264	116	20	22	34	East to West & Sunny
01-Jan-15	272	124	21	23	36	East to West & Sunny
16-Jan-15	243	117	22	24	39	South to North & Sunny
02-Feb-15	262	124	23	25	40	South to North & Sunny
16-Feb-15	254	121	22	24	45	South to North & Sunny
02-Mar-15	215	118	21	23	36	East to West & Sunny
16-Mar-15	245	129	23	25	41	East to West & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	293.0	139.0	26.0	28.0	62.0	
<b>Minimum</b>	186.0	92.0	18.0	21.0	22.0	
<b>Average</b>	230.3	119.4	22.2	24.4	38.6	
<b>95 percentile</b>	286.8	131.9	25.9	27.9	56.9	
<b>98 percentile</b>	195.0	125.0	25.0	27.0	62.0	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 34 Air Level Data**  
**Project:Kaniha OCP**  
**Monitoring Station:Patharmunda Village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
08-Apr-14	204	109	23	25	58	East to West & Sunny
24-Apr-14	213	114	24	26	52	South to north & Sunny
09-May-14	226	124	26	28	42	East to West & Sunny
24-May-14	232	135	27	29	52	West to East & Sunny
10-Jun-14	241	128	28	30	49	East to West & Sunny
24-Jun-14	213	100	22	24	36	South to North & cloudy Rainfall
10-Jul-14	224	110	25	27	39	West to East & Sunny
25-Jul-14	209	101	23	25	32	East to West & Rainfall
11-Aug-14	221	118	24	26	39	East to West & Rainfall
26-Aug-14	226	123	23	25	32	South to North & Sunny
09-Sep-14	212	111	20	22	25	South to North Cloudy & Rainfall
25-Sep-14	245	134	25	27	36	East to West & Sunny
13-Oct-14	237	129	23	25	38	East to West Cloudy & Rainfall
27-Oct-14	245	132	26	28	35	South to North & Sunny
10-Nov-14	226	124	24	26	24	South to North & Sunny
25-Nov-14	247	116	23	25	25	East to West & Sunny
03-Dec-14	253	122	22	24	27	East to West & Sunny
18-Dec-14	242	120	21	23	32	East to West & Sunny
01-Jan-15	251	136	23	25	35	East to West & Sunny
16-Jan-15	259	122	25	27	32	South to North & Sunny
02-Feb-15	267	129	24	26	42	South to North & Sunny
16-Feb-15	273	125	23	25	40	South to North & Sunny
02-Mar-15	298	132	25	27	49	East to West & Sunny
16-Mar-15	336	141	26	28	60	East to West & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	336.0	141.0	28.0	30.0	60.0	
<b>Minimum</b>	204.0	100.0	20.0	22.0	24.0	
<b>Average</b>	241.7	122.3	24.0	26.0	38.8	
<b>95 percentile</b>	294.3	135.9	26.9	28.9	57.1	
<b>98 percentile</b>	204.0	109.0	23.0	25.0	58.0	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 35 Analysis of NAAQS Parameters**

**Project :Kaniha OCP**

DOM	Name of Location	NH3 (µg/m <sup>3</sup> )	O3 (µg/m <sup>3</sup> )	BaP (ng/m <sup>3</sup> )	Lead (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Ni (ng/m <sup>3</sup> )	Benzene (µg/m <sup>3</sup> )	Hg (ng/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )
20/11/2014	Patharmunda	<6.0	10.9	<0.5	<0.01	<1	<1	<0.01	<1.0	<0.1
3/12/2014	Patharmunda	8.7	9.8	<0.5	<0.01	<1	<1	<0.01	<1.0	<0.1
17/12/2014	Patharmunda	9.8	8.7	<0.5	<0.01	<1	<1	<0.01	<1.0	<0.1
2/1/2015	Patharmunda	8.7	7.6	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
15/1/2015	Patharmunda	6.5	7.2	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
2/2/2015	Patharmunda	6.2	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
16/2/2015	Patharmunda	6.5	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
2/3/2015	Patharmunda	<6.0	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
16/3/2015	Patharmunda	<6.0	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
16/4/2015	Patharmunda	<6.0	3.8	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1

**Table :36 Air Level Data**  
**Project: Kaniha OCP**  
**Monitoring Station:Telisingha Village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
09-Apr-14	211	117	21	23	73	South to north & Sunny
24-Apr-14	225	124	23	25	53	South to north & Sunny
10-May-14	238	132	25	27	53	East to West & Sunny
24-May-14	242	136	22	24	57	West to East & Sunny
10-Jun-14	236	129	24	26	53	East to West & Sunny
24-Jun-14	209	102	20	22	33	South to North & cloudy Rainfall
10-Jul-14	221	113	23	25	36	West to East & Sunny
25-Jul-14	213	105	22	24	30	East to West & Rainfall
11-Aug-14	227	123	25	27	41	East to West & Rainfall
26-Aug-14	231	127	24	26	35	South to North & Sunny
09-Sep-14	218	113	21	23	29	South to North Cloudy & Rainfall
25-Sep-14	223	118	22	25	31	East to West & Sunny
13-Oct-14	219	111	24	26	32	East to West Cloudy & Rainfall
27-Oct-14	226	125	25	27	28	South to North & Sunny
10-Nov-14	321	143	29	32	26	South to North & Sunny
25-Nov-14	307	129	27	29	27	East to West & Sunny
03-Dec-14	279	126	25	27	31	East to West & Sunny
18-Dec-14	286	123	23	25	39	East to West & Sunny
01-Jan-15	293	128	22	24	41	East to West & Sunny
16-Jan-15	289	124	24	26	38	South to North & Sunny
02-Feb-15	336	142	26	28	56	South to North & Sunny
16-Feb-15	326	139	25	27	58	South to North & Sunny
02-Mar-15	315	135	27	29	52	East to West & Sunny
16-Mar-15	320	137	29	32	59	East to West & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	336.00	143.00	29.00	32.00	73.00	
<b>Minimum</b>	209.00	102.00	20.00	22.00	26.00	
<b>Average</b>	258.79	125.04	24.08	26.21	42.13	
<b>95 percentile</b>	325.25	141.55	28.70	31.55	58.85	
<b>98 percentile</b>	211.00	117.00	21.00	23.00	73.00	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 37 Analysis of NAAQS Parameters**

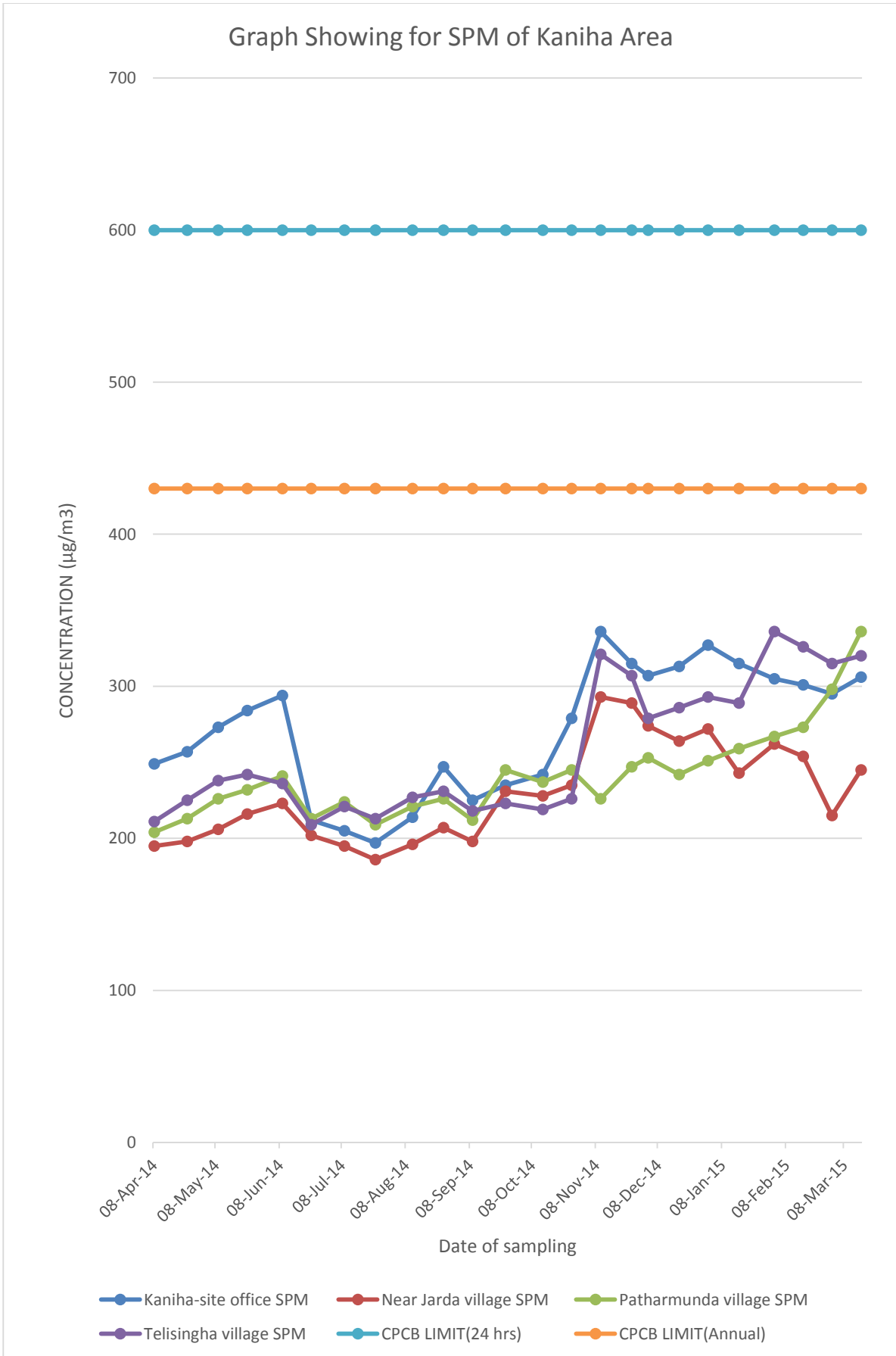
**Project :Kaniha OCP**

DOM	Name of Location	NH3 (µg/m3)	O3 (µg/m3)	BaP (ng/m3)	Lead (µg/m3)	As (ng/m3)	Ni (ng/m3)	Benzene (µg/m3)	Hg (ng/m3)	CO (mg/m3)
20/11/2014	Telisinga	<6.0	<3.0	<0.5	<0.01	<1	<1	<0.01	<1.0	<0.1
3/12/2014	Telisinga	<6.0	<3.0	<0.5	<0.01	<1	<1	<0.01	<1.0	<0.1
17/12/2014	Telisinga	<6.0	<3.0	<0.5	<0.01	<1	<1	<0.01	<1.0	<0.1
2/1/2015	Telisinga	<6.0	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
15/1/2015	Telisinga	<6.0	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
2/2/2015	Telisinga	<6.0	4.6	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
16/2/2015	Telisinga	<6.0	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
2/3/2015	Telisinga	<6.0	4.2	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
16/3/2015	Telisinga	6.5	3.7	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1
16/4/2015	Telisinga	<6.0	<3.0	<0.1	<1.0	<0.01	<0.01	<0.01	<1	<0.1

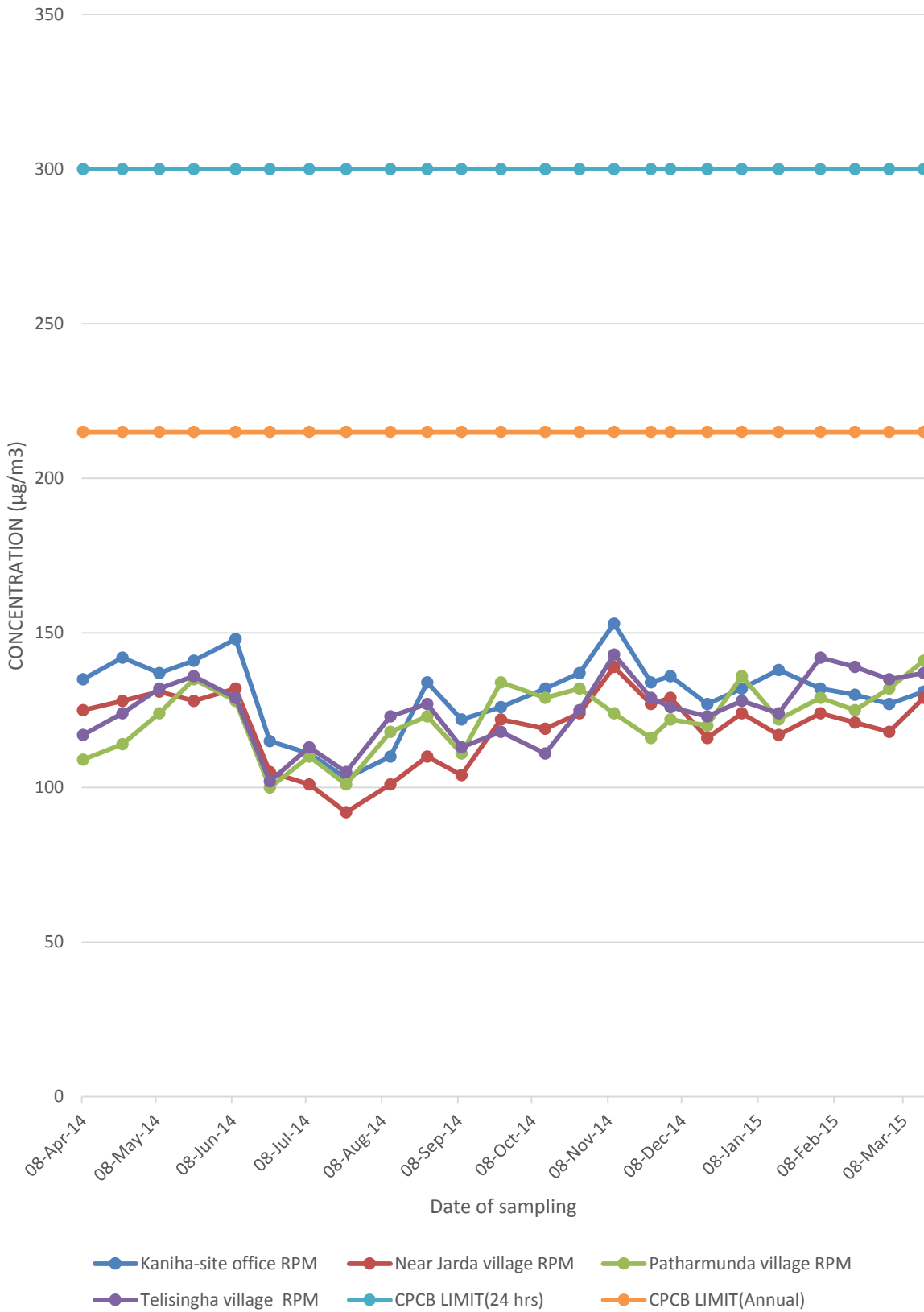
**Table : 38 Heavy Metal Analysis**

**Project :Kaniha OCP**

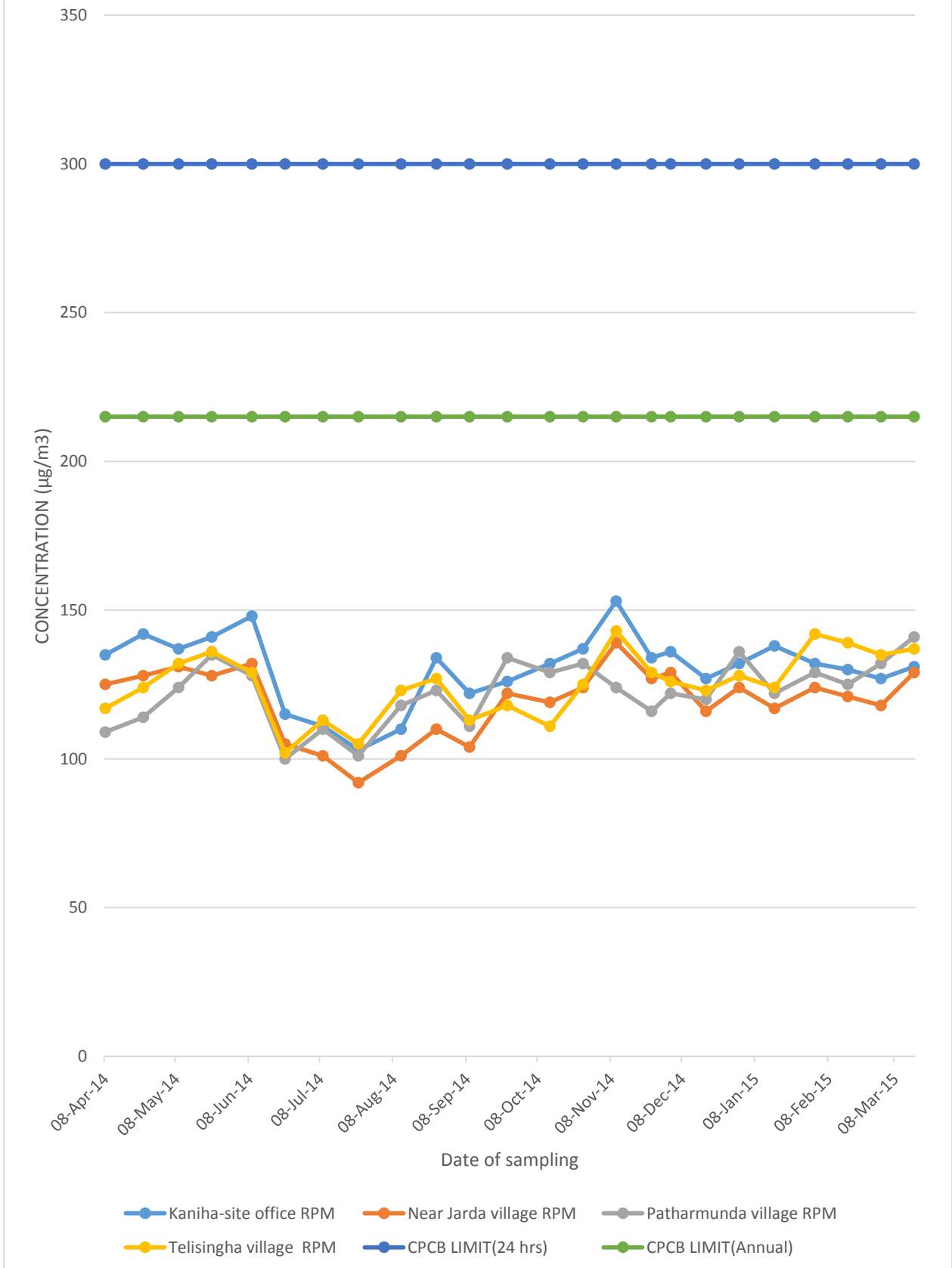
DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
17.12.14	Patharmunda	-	-	-	-	<0.01	<0.01	-	-	-	-
17.12.14	Kaniha PO	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	7.6
18.12.14	Telisingha	-	-	-	-	<0.01	<0.01	-	-	-	-
18.12.14	Nr. Jarda	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0

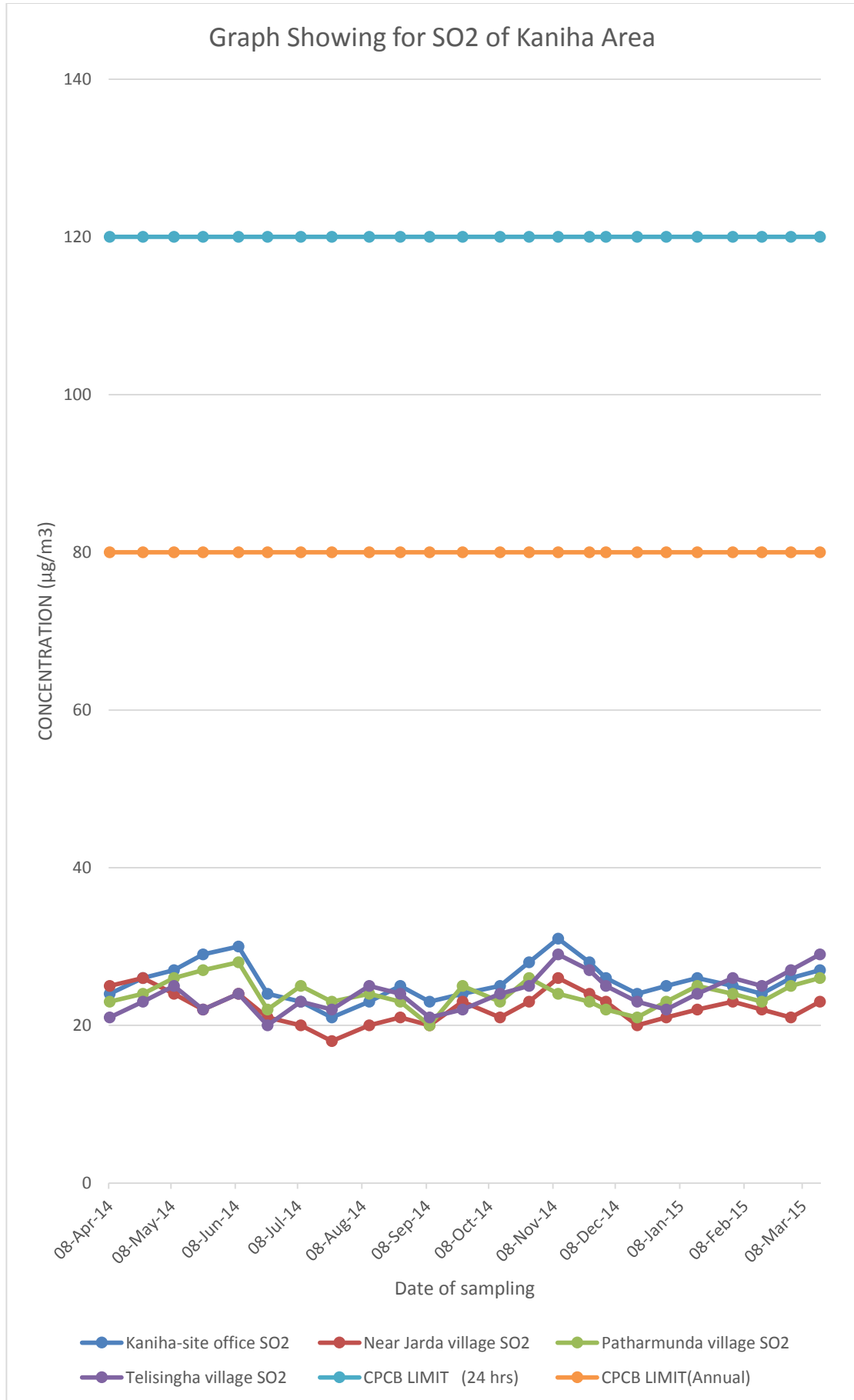


Graph Showing for RPM of Kaniha Area

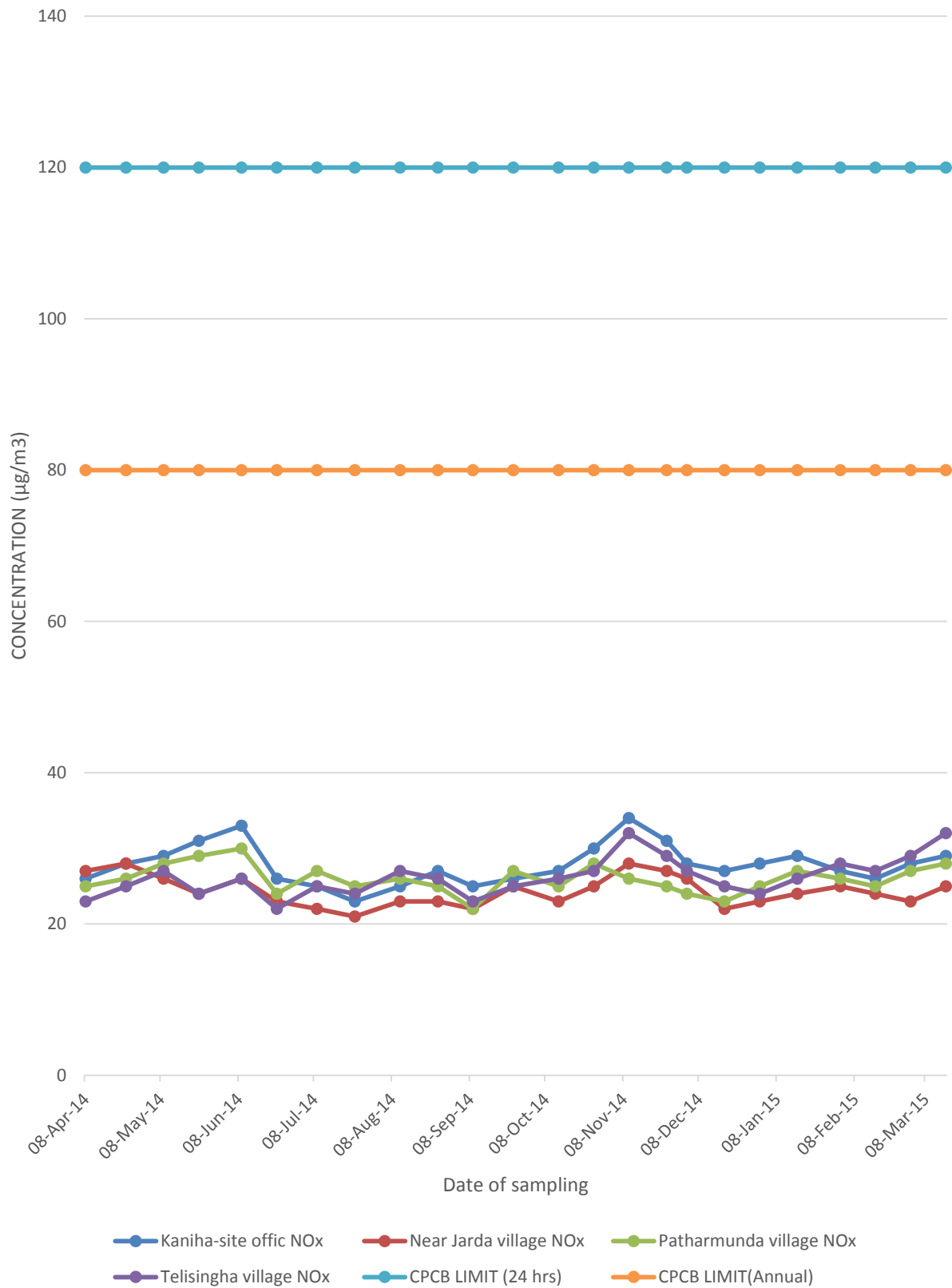


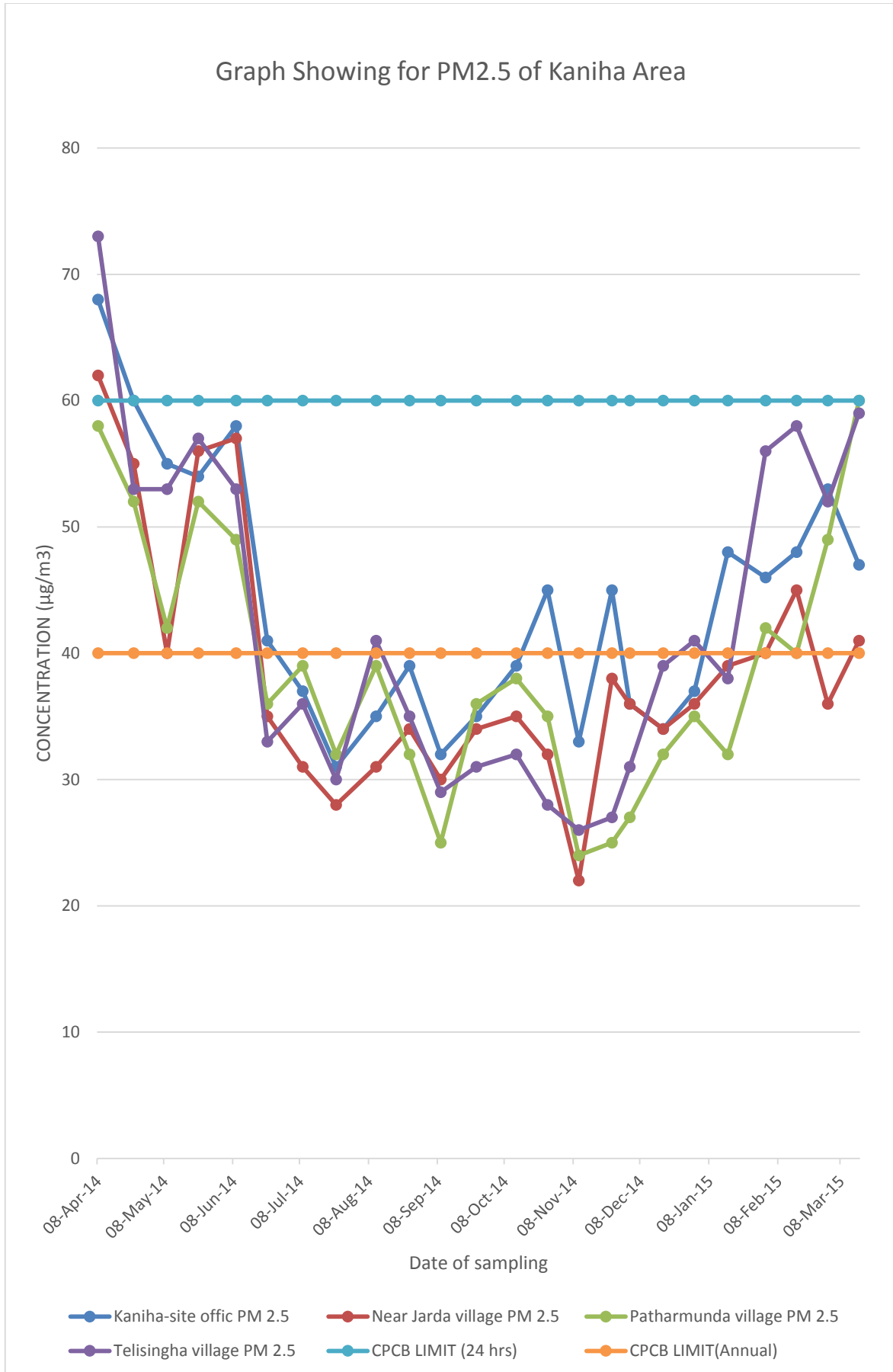
Graph Showing for RPM of Kaniha Area





Graph Showing for NOX of Kaniha Area





**Table : 39 Air Quality Data**  
**Project: Hingula OCP**  
**Monitoring Station: Project Office**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
04-Apr-14	275	151	27	29	53	East to West & Sunny
21-Apr-14	285	146	26	28	50	East to West & Sunny
05-May-14	295	139	27	29	53	West to East & Sunny
20-May-14	311	142	28	30	54	East to West & Sunny
05-Jun-14	297	139	29	32	58	East to West & Sunny
19-Jun-14	262	124	25	27	42	East to West & cloudy Rainfall
05-Jul-14	264	128	26	28	44	South to North & Sunny
20-Jul-14	245	112	23	25	36	East to West & Rainfall
01-Aug-14	265	127	25	27	39	East to West & Rainfall
16-Aug-14	285	134	27	29	41	South to North & Sunny
02-Sep-14	264	118	25	27	35	East to West Cloudy & Rainfall
16-Sep-14	275	131	26	29	41	East to West & Sunny
07-Oct-14	289	141	28	30	47	South to North & Sunny
22-Oct-14	295	143	29	32	48	East to West & Sunny
04-Nov-14	256	137	27	29	35	South to North & Sunny
18-Nov-14	263	129	24	26	37	East to West & Sunny
02-Dec-14	289	137	26	29	50	East to West & Sunny
17-Dec-14	296	143	25	28	47	East to West & Sunny
02-Jan-15	312	147	26	28	53	East to West & Sunny
17-Jan-15	325	143	27	29	51	East to West & Sunny
03-Feb-15	328	142	28	30	53	East to West & Sunny
17-Feb-15	346	148	25	27	57	East to West & Sunny
03-Mar-15	304	155	27	29	47	South to North & Sunny
17-Mar-15	357	159	29	32	49	South to North & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	357.00	159.00	29.00	32.00	58.00	
<b>Minimum</b>	245.00	112.00	23.00	25.00	35.00	
<b>Average</b>	290.96	138.13	26.46	28.71	46.67	
<b>95 percentile</b>	343.30	154.40	29.00	32.00	56.55	
<b>98 percentile</b>	351.94	157.16	29.00	32.00	57.54	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in (µg/m<sup>3</sup>)*

**Table : 40 Air Quality Data**  
**Project: Hingula OCP**  
**Monitoring Station: Malibanda village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
05-Apr-14	178	107	24	26	84	South to north & Sunny
21-Apr-14	183	114	22	24	57	East to West & Sunny
06-May-14	194	121	23	25	46	West to East & Sunny
20-May-14	185	134	24	26	52	North to South & Sunny
04-Jun-14	172	126	22	24	47	South to North & Sunny
18-Jun-14	151	116	20	22	36	East to West & cloudy Rainfall
04-Jul-14	164	125	22	24	39	South to North & Sunny
19-Jul-14	157	102	20	23	30	East to West & Rainfall
01-Aug-14	168	114	23	26	34	East to West & Rainfall
16-Aug-14	184	126	25	27	37	South to North & Sunny
02-Sep-14	163	116	23	25	30	East to West Cloudy & Rainfall
16-Sep-14	176	125	24	26	34	East to West & Sunny
07-Oct-14	214	132	26	28	39	South to North & Sunny
22-Oct-14	225	137	27	29	35	East to West & Sunny
04-Nov-14	205	109	23	25	32	South to North & Sunny
18-Nov-14	226	112	21	23	25	East to West & Sunny
02-Dec-14	222	110	20	23	27	East to West & Sunny
17-Dec-14	235	124	23	25	29	East to West & Sunny
02-Jan-15	243	129	22	24	31	East to West & Sunny
17-Jan-15	239	125	23	25	36	East to West & Sunny
03-Feb-15	309	137	26	28	47	East to West & Sunny
17-Feb-15	257	129	23	25	41	East to West & Sunny
03-Mar-15	278	136	25	27	34	South to North & Sunny
17-Mar-15	285	141	26	28	44	South to North & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	309.00	141.00	27.00	29.00	84.00	
<b>Minimum</b>	151.00	102.00	20.00	22.00	25.00	
<b>Average</b>	208.88	122.79	23.21	25.33	39.42	
<b>95 percentile</b>	283.95	137.00	26.00	28.00	56.25	
<b>98 percentile</b>	297.96	139.16	26.54	28.54	71.58	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in (µg/m<sup>3</sup>)*

**Table : 41 Air Quality Data**  
**Project: Hingula OCP**  
**Monitoring Station: Gopalprasad Village**

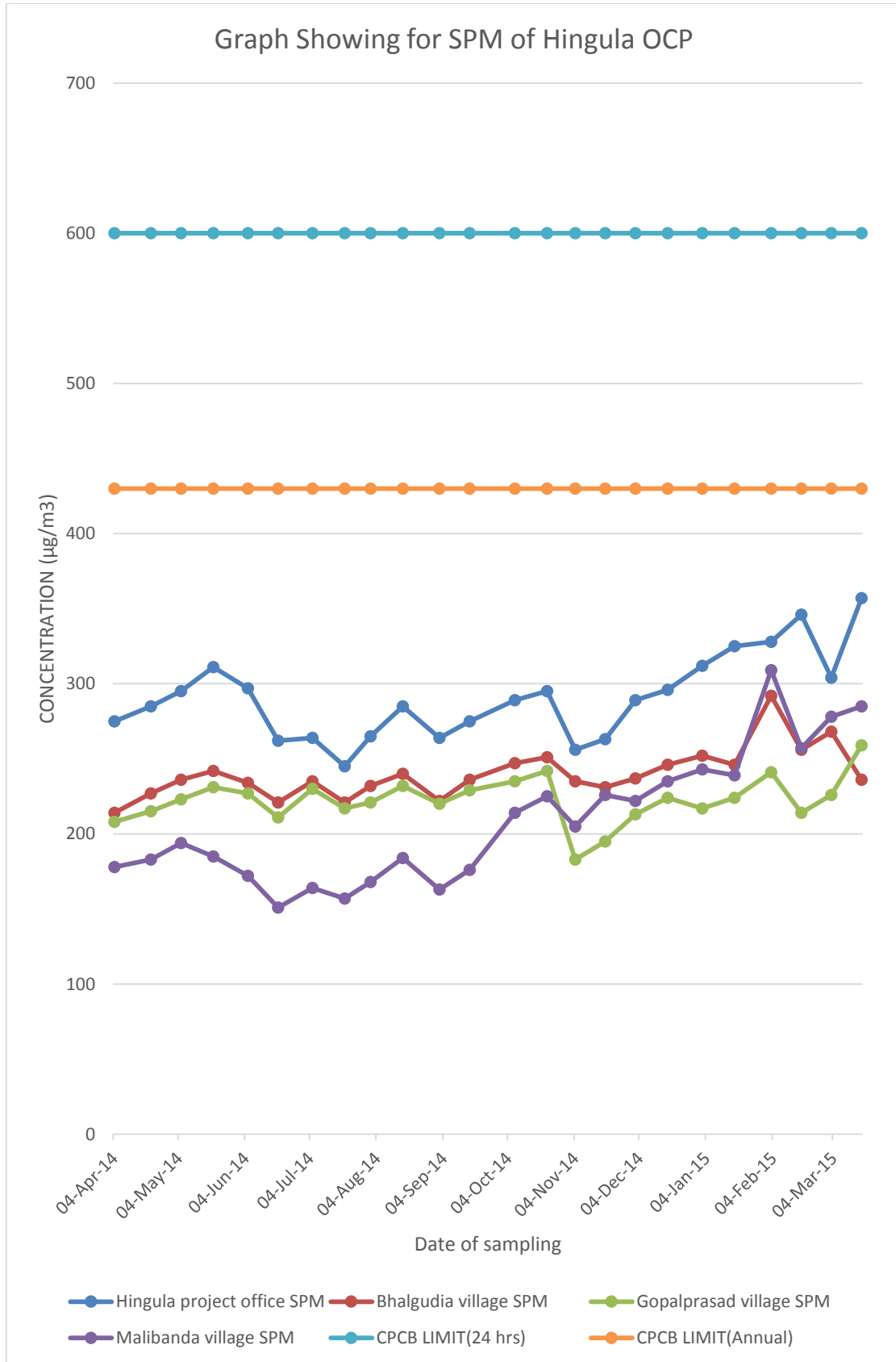
Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
04-Apr-14	208	117	21	23	34	East to West & Sunny
21-Apr-14	215	125	22	24	32	East to West & Sunny
05-May-14	223	134	24	26	42	West to East & Sunny
19-May-14	231	125	23	25	58	North to South & Sunny
04-Jun-14	227	119	21	23	54	South to North & Sunny
18-Jun-14	211	107	20	22	40	East to West & cloudy Rainfall
04-Jul-14	230	111	23	25	42	South to North & Sunny
19-Jul-14	217	102	21	23	38	East to West & Rainfall
01-Aug-14	221	111	24	26	29	East to West & Rainfall
16-Aug-14	232	126	22	25	31	South to North & Sunny
02-Sep-14	220	118	20	23	25	East to West Cloudy & Rainfall
16-Sep-14	229	124	22	25	29	East to West & Sunny
07-Oct-14	235	131	25	27	33	South to North & Sunny
22-Oct-14	242	138	24	26	38	East to West & Sunny
04-Nov-14	183	102	22	24	31	South to North & Sunny
18-Nov-14	195	111	21	23	32	East to West & Sunny
02-Dec-14	213	119	24	26	34	East to West & Sunny
17-Dec-14	224	125	23	25	32	East to West & Sunny
02-Jan-15	217	121	20	22	37	East to West & Sunny
17-Jan-15	224	117	21	23	42	East to West & Sunny
03-Feb-15	241	123	23	25	31	East to West & Sunny
17-Feb-15	214	111	21	23	35	East to West & Sunny
03-Mar-15	226	129	22	24	39	South to North & Sunny
17-Mar-15	259	134	24	26	46	South to North & Sunny
<b>Brief statistic</b>	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	
<b>Maximum</b>	259.00	138.00	25.00	27.00	58.00	
<b>Minimum</b>	183.00	102.00	20.00	22.00	25.00	
<b>Average</b>	222.38	120.00	22.21	24.33	36.83	
<b>95 percentile</b>	241.85	134.00	24.00	26.00	52.80	
<b>98 percentile</b>	251.18	136.16	24.54	26.54	56.16	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

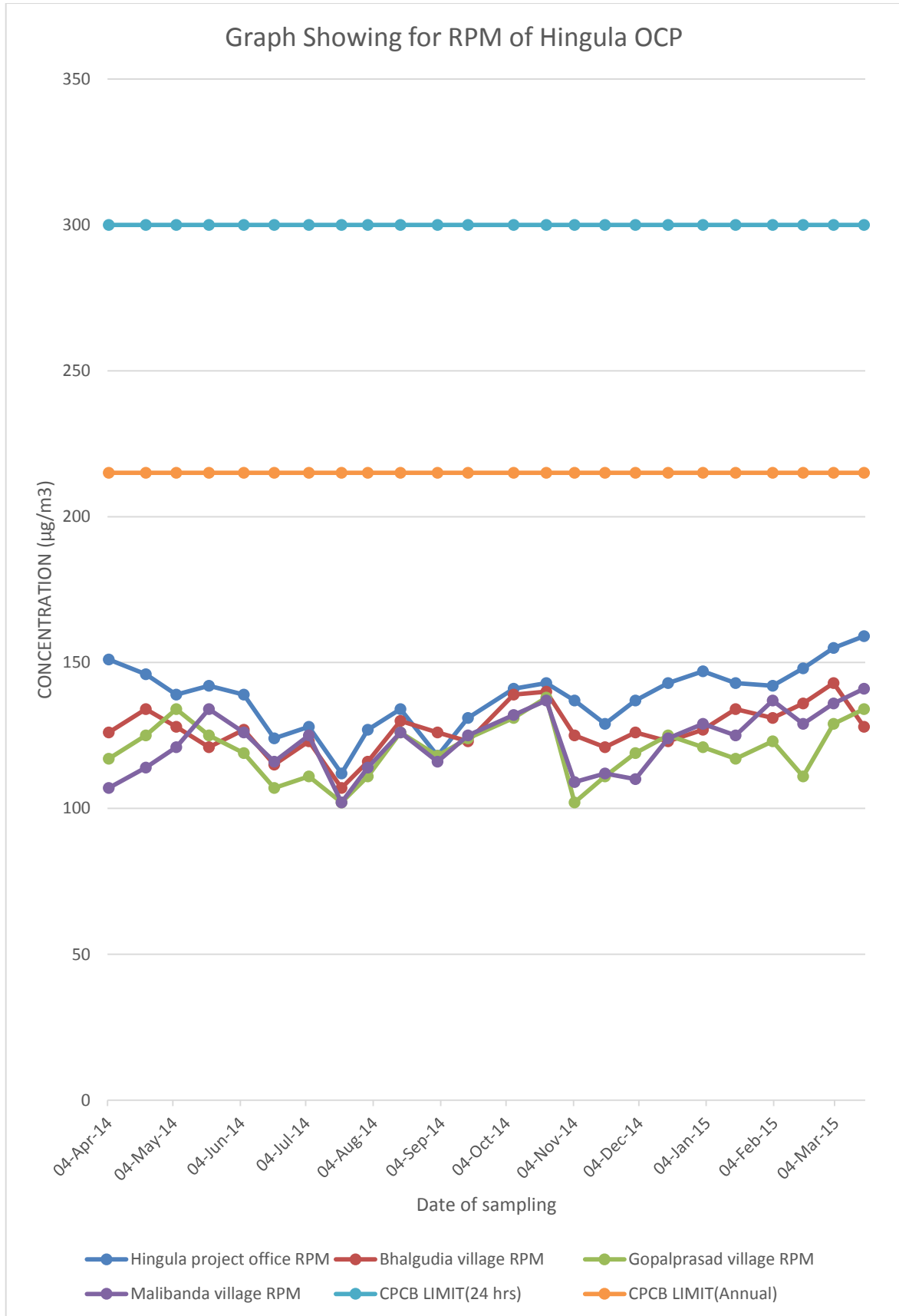
*All values are in (µg/m<sup>3</sup>)*

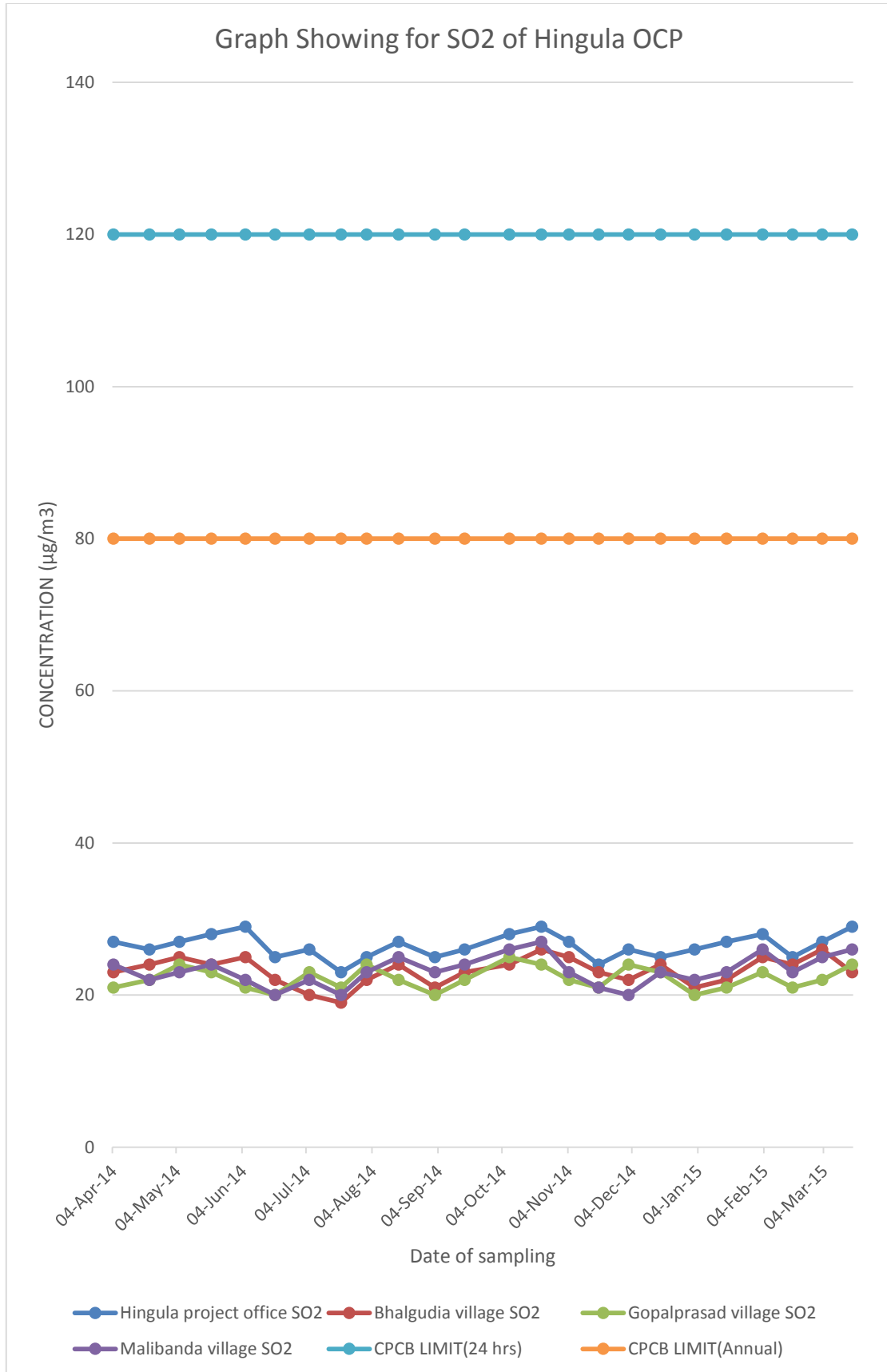
**Table : 42 Air Quality Data**  
**Project: Hingula OCP**  
**Monitoring Station: Bhalgudia Village**

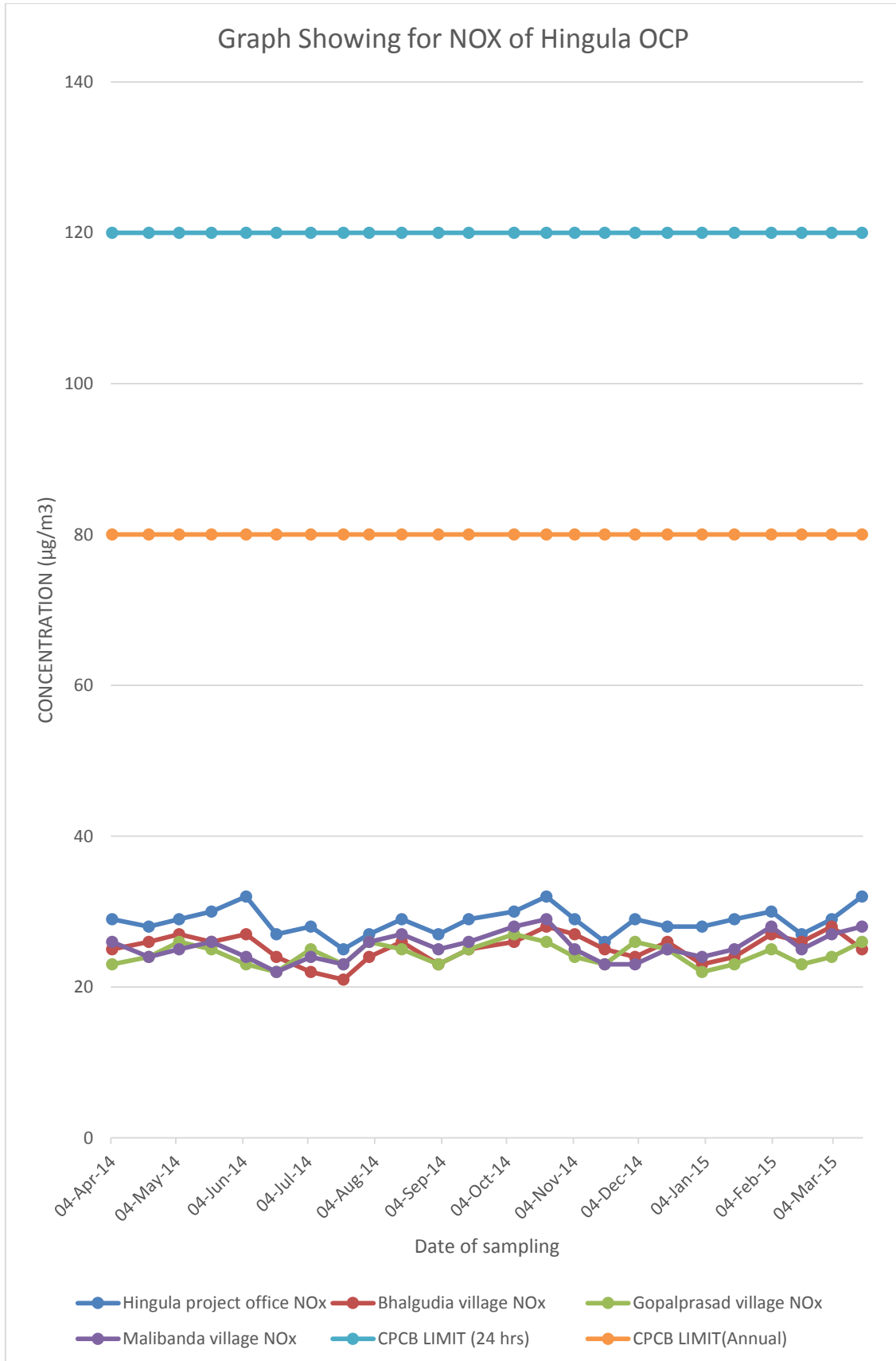
Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
05-Apr-14	214	126	23	25	42	South to north & Sunny
21-Apr-14	227	134	24	26	40	East to West & Sunny
06-May-14	236	128	25	27	56	West to East & Sunny
20-May-14	242	121	24	26	56	East to West & Sunny
05-Jun-14	234	127	25	27	51	East to West & Sunny
19-Jun-14	221	115	22	24	38	East to West & cloudy Rainfall
05-Jul-14	235	123	20	22	35	South to North & Sunny
20-Jul-14	221	107	19	21	29	East to West & Rainfall
01-Aug-14	232	116	22	24	31	East to West & Rainfall
16-Aug-14	240	130	24	26	35	South to North & Sunny
02-Sep-14	222	126	21	23	29	East to West Cloudy & Rainfall
16-Sep-14	236	123	23	25	32	East to West & Sunny
07-Oct-14	247	139	24	26	37	South to North & Sunny
22-Oct-14	251	140	26	28	39	East to West & Sunny
04-Nov-14	235	125	25	27	27	South to North & Sunny
18-Nov-14	231	121	23	25	26	East to West & Sunny
02-Dec-14	237	126	22	24	31	East to West & Sunny
17-Dec-14	246	123	24	26	39	East to West & Sunny
02-Jan-15	252	127	21	23	35	East to West & Sunny
17-Jan-15	246	134	22	24	36	East to West & Sunny
03-Feb-15	292	131	25	27	36	East to West & Sunny
17-Feb-15	256	136	24	26	41	East to West & Sunny
03-Mar-15	268	143	26	28	41	South to North & Sunny
17-Mar-15	236	128	23	25	35	South to North & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	292.00	143.00	26.00	28.00	56.00	
<b>Minimum</b>	214.00	107.00	19.00	21.00	26.00	
<b>Average</b>	239.88	127.04	23.21	25.21	37.38	
<b>95 percentile</b>	266.20	139.85	25.85	27.85	55.25	
<b>98 percentile</b>	280.96	141.62	26.00	28.00	56.00	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

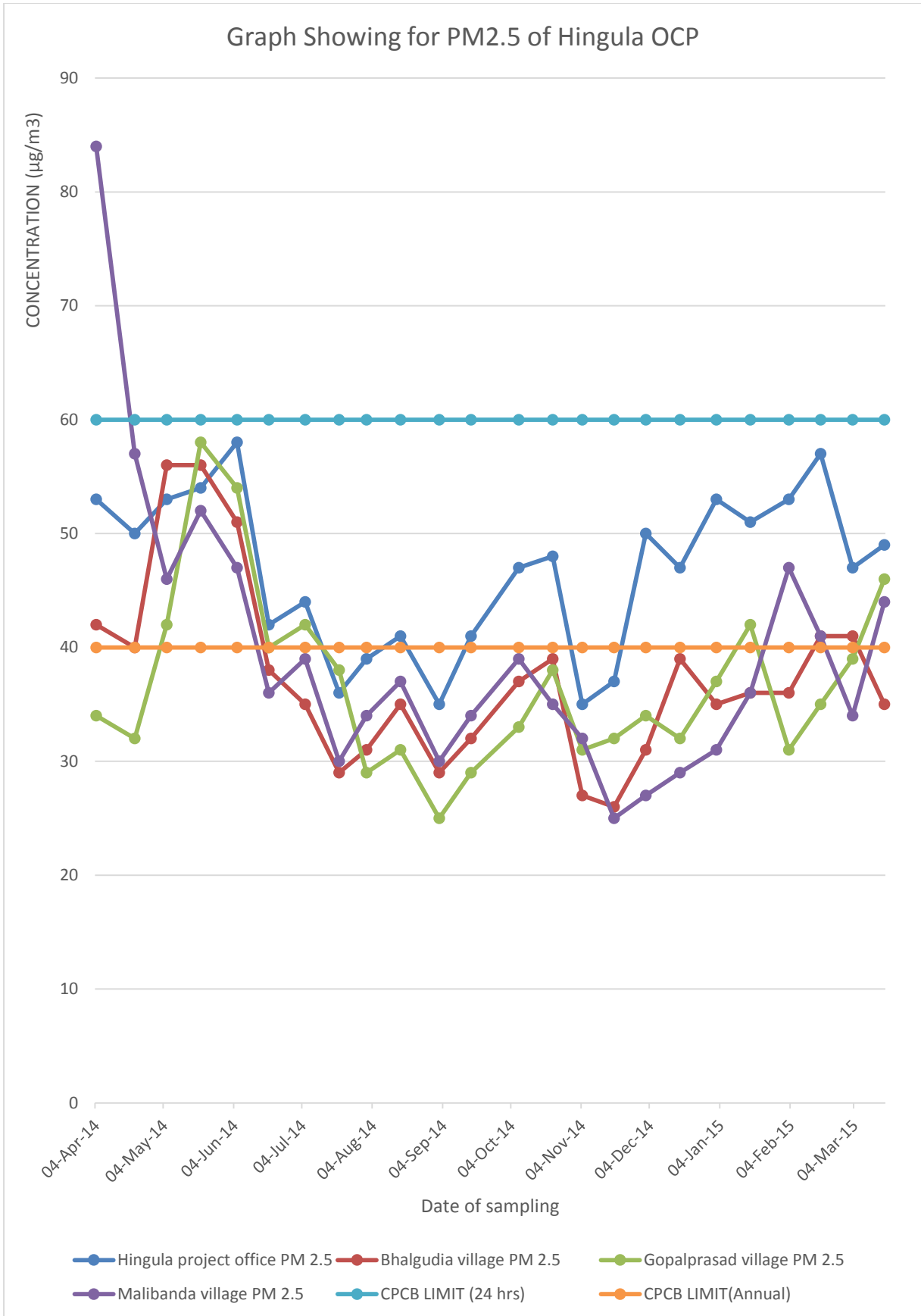
*All values are in ( $\mu\text{g}/\text{m}^3$ )*











**Table : 43 Air Quality Data**  
**Project: Balaram OCP**  
**Monitoring Station: Project Office**

Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
11-Apr-14	243	126	25	27	45	East to West & Sunny
28-Apr-14	257	142	26	28	47	East to West & Sunny
13-May-14	275	149	27	29	42	East to West & Sunny
28-May-14	286	139	28	30	54	East to West & Sunny
06-Jun-14	274	128	26	28	51	East to West & Sunny
20-Jun-14	250	120	24	26	40	East to West & cloudy Rainfall
07-Jul-14	254	122	23	25	37	West to East & Sunny
22-Jul-14	203	116	21	23	31	South to North & Rainfall
04-Aug-14	241	117	24	26	35	South to North & Rainfall
19-Aug-14	256	134	26	28	39	East to West & Sunny
03-Sep-14	227	125	24	26	31	East to West Cloudy & Rainfall
19-Sep-14	237	131	25	28	37	South to North & Sunny
08-Oct-14	287	145	28	30	41	East to West & Sunny
23-Oct-14	297	148	30	32	45	East to West & Sunny
05-Nov-14	385	165	32	35	34	East to West & Sunny
19-Nov-14	332	142	27	29	45	East to West & Sunny
08-Dec-14	357	149	27	30	46	East to West & Sunny
23-Dec-14	316	139	25	27	51	East to West & Sunny
06-Jan-15						Coal India Strike
21-Jan-15	309	132	27	29	52	East to West & Sunny
05-Feb-15	345	153	28	32	57	West to East & Sunny
19-Feb-15	332	151	26	29	58	East to West & Sunny
05-Mar-15	359	159	27	30	51	West to East & Sunny
19-Mar-15	367	167	28	31	56	West to East & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	385.00	167.00	32.00	35.00	58.00	
<b>Minimum</b>	203.00	116.00	21.00	23.00	31.00	
<b>Average</b>	290.83	139.09	26.26	28.61	44.57	
<b>95 percentile</b>	366.20	164.40	29.80	32.00	56.90	
<b>98 percentile</b>	377.08	166.12	31.12	33.68	57.56	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in ( $\mu\text{g}/\text{m}^3$ )*

**Table : 44 Air Quality Data**  
**Project: Balaram OCP**  
**Monitoring Station: On backfilled area near field time office**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
11-Apr-14	186	132	26	28	42	East to West & Sunny
28-Apr-14	193	127	23	25	40	East to West & Sunny
13-May-14	211	132	24	26	45	East to West & Sunny
28-May-14	224	118	23	25	56	East to West & Sunny
06-Jun-14	244	139	27	30	58	East to West & Sunny
20-Jun-14	221	118	25	27	43	East to West & cloudy Rainfall
07-Jul-14	234	125	25	27	43	West to East & Sunny
22-Jul-14	221	114	23	25	35	South to North & Rainfall
04-Aug-14	237	125	25	27	41	South to North & Rainfall
19-Aug-14	239	128	27	29	43	East to West & Sunny
03-Sep-14	245	135	26	29	40	East to West Cloudy & Rainfall
19-Sep-14	256	135	28	31	49	South to North & Sunny
08-Oct-14	275	139	26	28	52	East to West & Sunny
23-Oct-14	285	142	28	30	50	East to West & Sunny
05-Nov-14	361	153	29	32	27	East to West & Sunny
19-Nov-14	323	135	25	27	48	East to West & Sunny
08-Dec-14	342	143	26	28	41	East to West & Sunny
23-Dec-14	324	135	23	26	32	East to West & Sunny
06-Jan-15						Coal India Strike
21-Jan-15	315	137	26	28	52	East to West & Sunny
05-Feb-15	337	146	27	30	54	West to East & Sunny
19-Feb-15	326	148	28	30	56	East to West & Sunny
05-Mar-15	337	153	29	32	49	West to East & Sunny
19-Mar-15	356	162	30	32	54	West to East & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	361.00	162.00	30.00	32.00	58.00	
<b>Minimum</b>	186.00	114.00	23.00	25.00	27.00	
<b>Average</b>	273.57	135.70	26.04	28.35	45.65	
<b>95 percentile</b>	354.60	153.00	29.00	32.00	56.00	
<b>98 percentile</b>	358.80	158.04	29.56	32.00	57.12	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in (µg/m<sup>3</sup>)*

**Table : 45 Air Quality Data**  
**Project: Balaram OCP**  
**Monitoring Station: Natada Village**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
07-Jul-14	248	139	27	30	54	West to East & Sunny
22-Jul-14	236	124	25	28	48	South to North & Rainfall
04-Aug-14	245	136	27	29	51	South to North & Rainfall
19-Aug-14	247	139	25	27	46	East to West & Sunny
03-Sep-14	223	127	23	25	38	East to West Cloudy & Rainfall
19-Sep-14	218	121	21	23	31	South to North & Sunny
08-Oct-14	226	128	23	25	36	East to West & Sunny
23-Oct-14	236	134	24	26	34	East to West & Sunny
05-Nov-14	187	107	22	24	28	East to West & Sunny
19-Nov-14	196	114	21	23	30	East to West & Sunny
08-Dec-14	256	137	25	27	32	East to West & Sunny
23-Dec-14	243	132	24	26	36	East to West & Sunny
06-Jan-15						Coal India Strike
21-Jan-15	227	124	23	25	38	East to West & Sunny
05-Feb-15	278	132	25	27	37	West to East & Sunny
19-Feb-15	296	141	26	28	43	East to West & Sunny
05-Mar-15	263	134	27	29	47	West to East & Sunny
19-Mar-15	278	128	25	27	49	West to East & Sunny
<b>Brief Statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	296.00	141.00	27.00	30.00	54.00	
<b>Minimum</b>	187.00	107.00	21.00	23.00	28.00	
<b>Average</b>	241.35	129.24	24.29	26.41	39.88	
<b>95 percentile</b>	281.60	139.40	27.00	29.20	51.60	
<b>98 percentile</b>	290.24	140.36	27.00	29.68	53.04	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

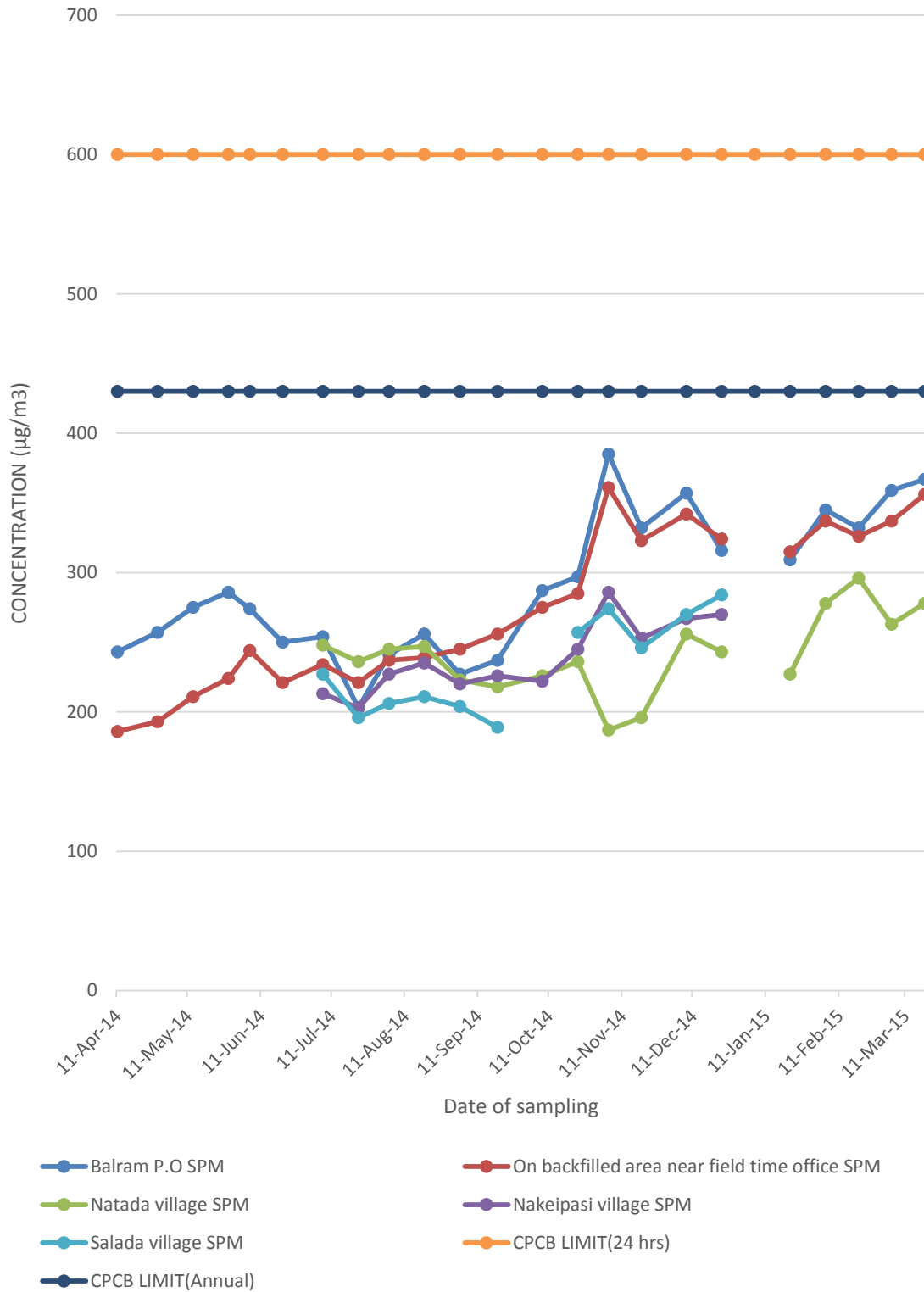
*All values are in (µg/m<sup>3</sup>)*

**Table : 46 Air Quality Data**  
**Project: Balaram OCP**  
**Monitoring Station: Nakeipasi village**

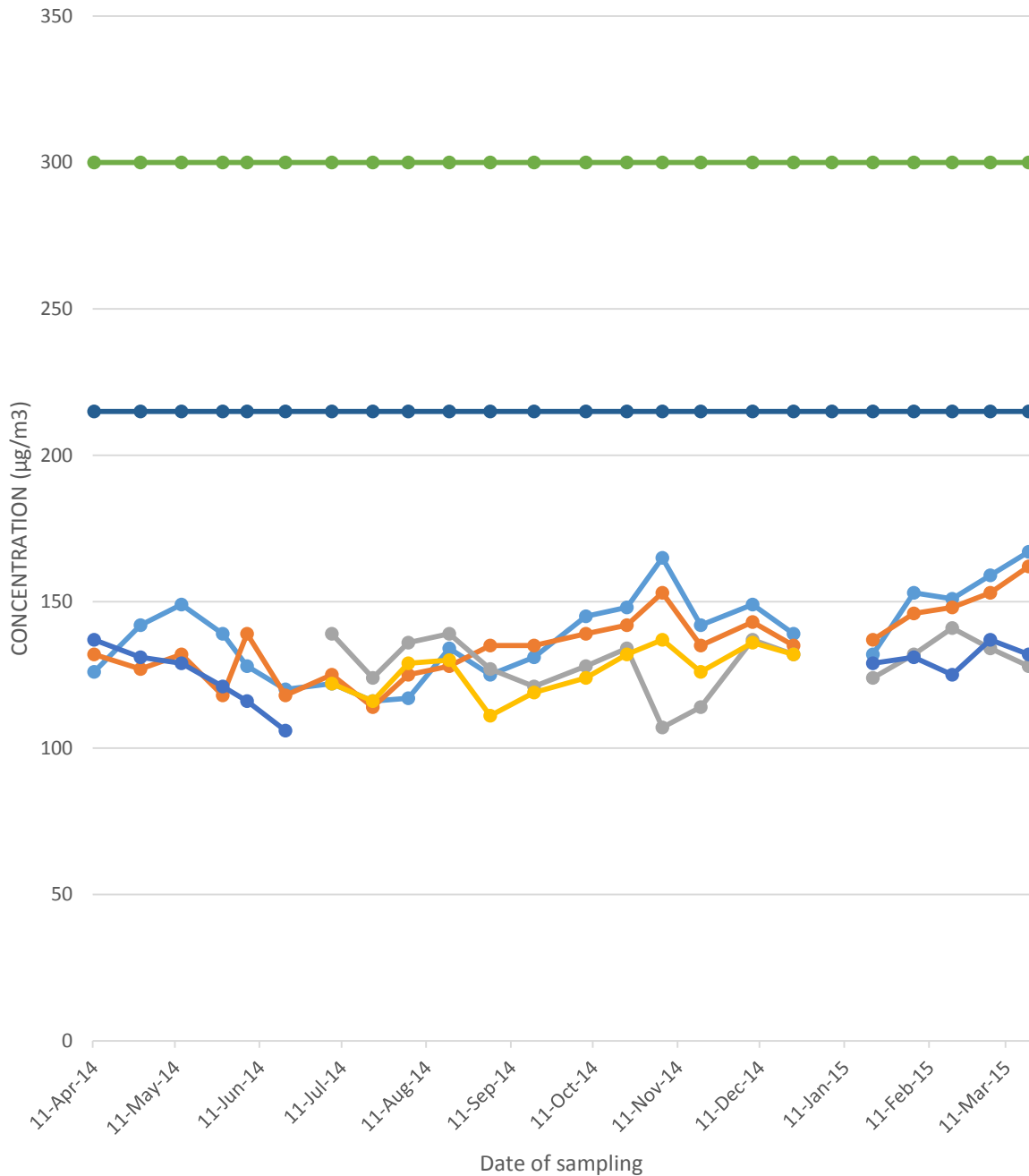
Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
07-Jul-14	213	122	25	27	39	East to West & Sunny
22-Jul-14	203	116	21	23	31	South to North & Rainfall
06-Aug-14	227	129	23	26	37	South to North & Rainfall
21-Aug-14	235	130	25	27	39	East to West & Sunny
03-Sep-14	220	111	23	25	27	East to West Cloudy & Rainfall
19-Sep-14	226	119	24	26	29	South to North & Sunny
09-Oct-14	222	124	23	25	28	East to West & Cloudy
23-Oct-14	245	132	24	28	30	East to West & Sunny
05-Nov-14	286	137	27	29	25	East to West & Sunny
19-Nov-14	253	126	24	26	27	East to West & Sunny
08-Dec-14	267	136	23	25	35	East to West & Sunny
23-Dec-14	270	132	22	24	39	East to West & Sunny
<b>Brief Statistic</b>	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	
<b>Maximum</b>	286.00	137.00	27.00	29.00	39.00	
<b>Minimum</b>	203.00	111.00	21.00	23.00	25.00	
<b>Average</b>	238.92	126.17	23.67	25.92	32.17	
<b>95 percentile</b>	277.20	136.45	25.90	28.45	39.00	
<b>98 percentile</b>	282.48	136.78	26.56	28.78	39.00	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

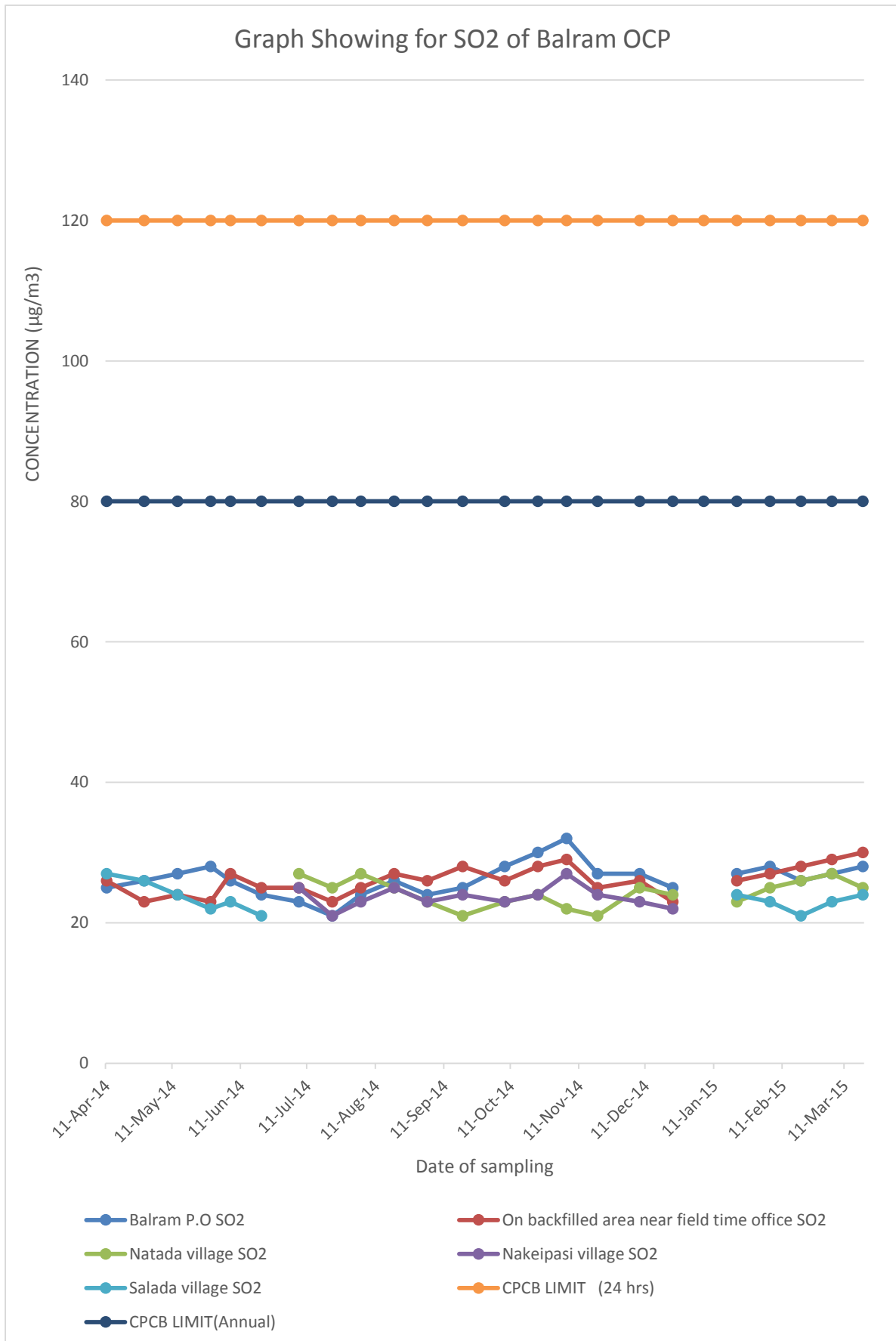
*All values are in ( $\mu\text{g}/\text{m}^3$ )*

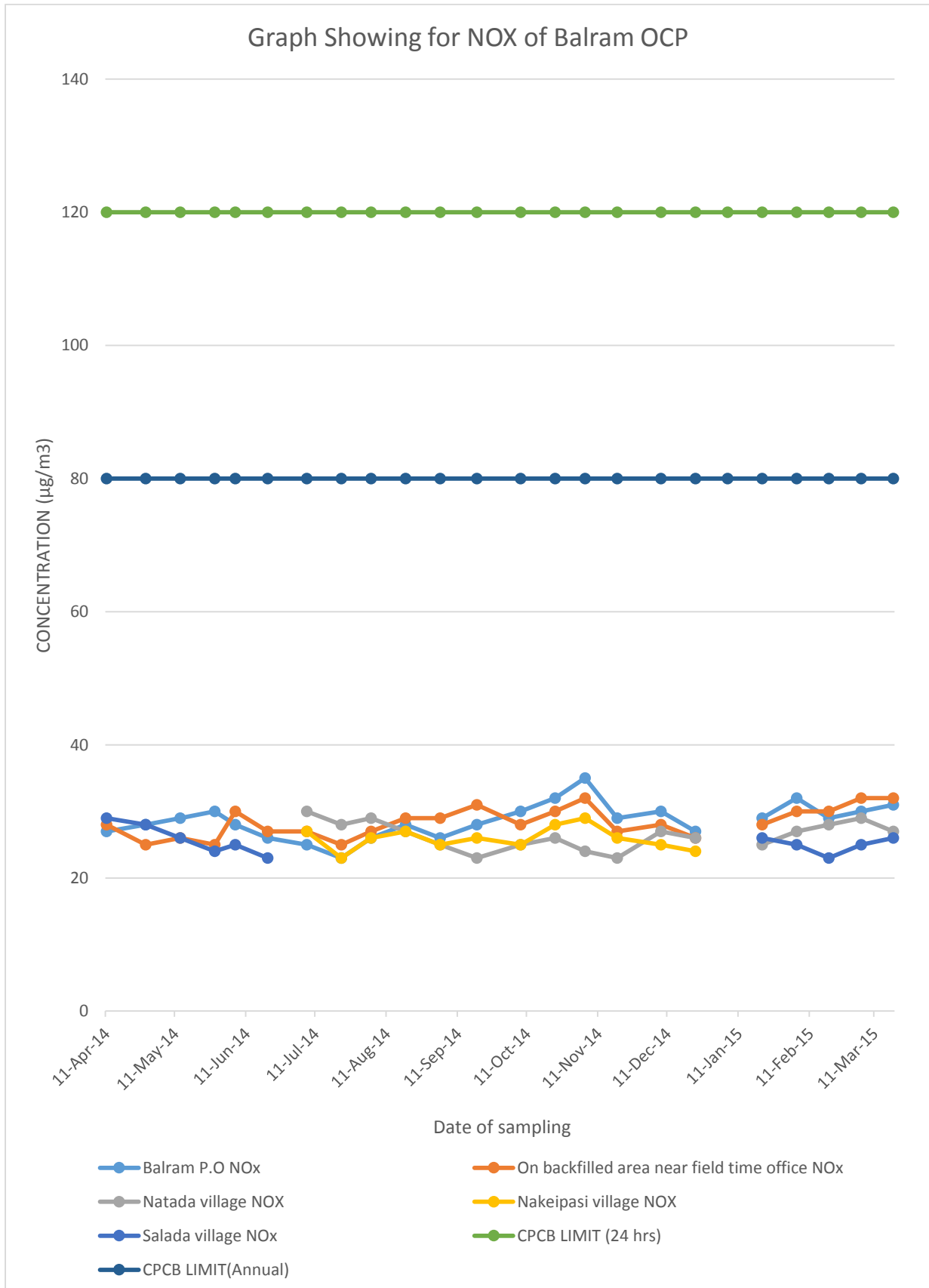
Graph Showing for SPM of Balram OCP

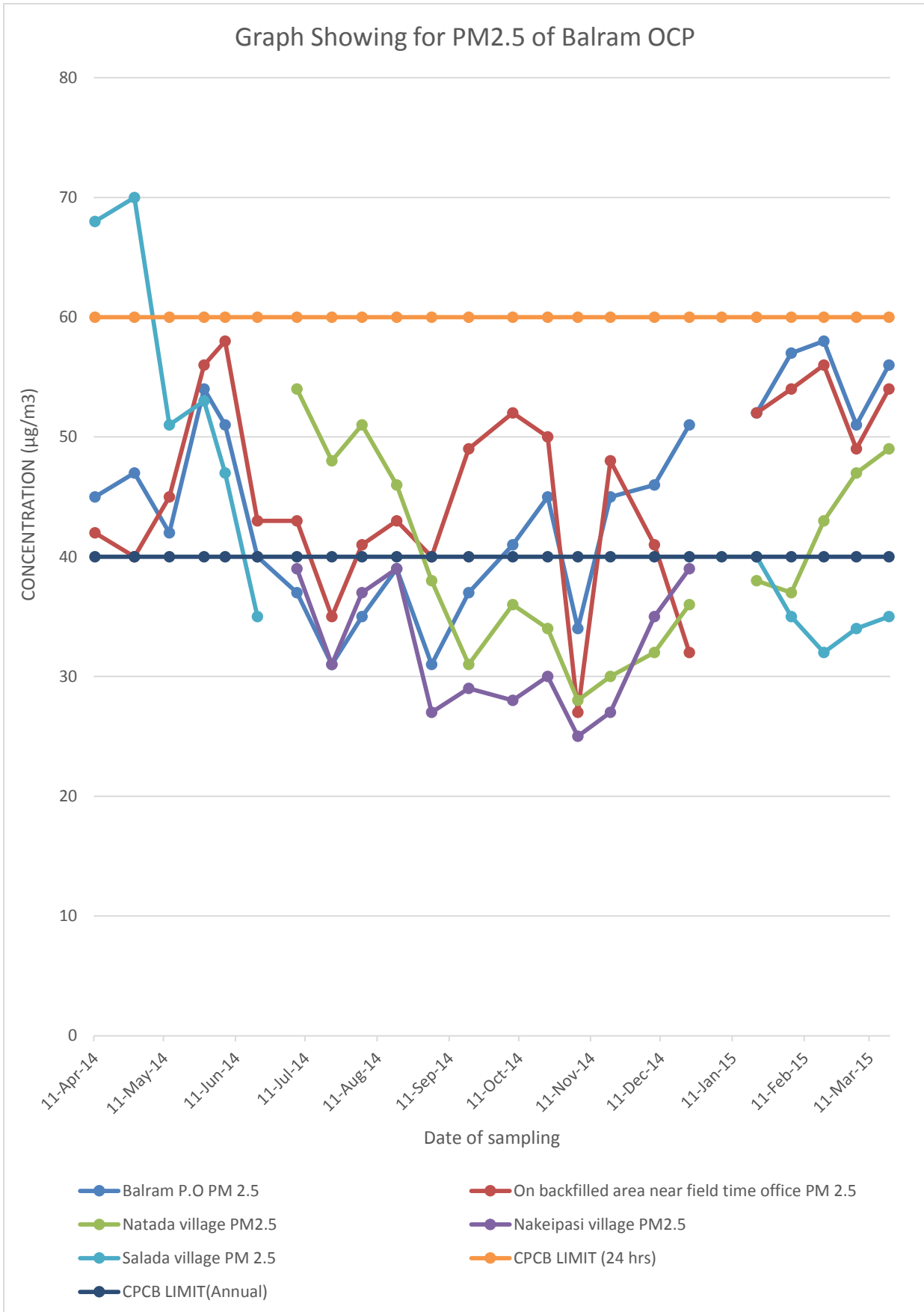


Graph Showing for RPM of Balram OCP









**Table : 47 Heavy Metal Analysis**

**Project : Hingula OCP**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
16.12.14	Malibandha village	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
17.12.14	Hingula po	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	6.8
17.12.14	Bhalugadia village	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
17.12.14	Gopalprasad village	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0

**Table : 48 Heavy Metal Analysis**

**Project : Balram OCP**

DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
16.12.14	Natada village	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
24.12.14	Nakeipasi(Balaram OCP)	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
23.12.14	on back field	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
23.12.14	Balram PO	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	6.4

**Table : 49 Air Quality Data**  
**Project: Talcher U/G**  
**Monitoring Station:Canteen Talcher Colliery**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
10-Apr-14	167	118	22	24	38	East to West & Sunny
22-Apr-14	178	126	24	26	35	East to West & Sunny
12-May-14	164	119	25	27	37	North to South & Sunny
27-May-14	175	126	24	26	36	East to West & Sunny
05-Jun-14	153	111	26	29	47	South to North & Sunny
19-Jun-14	131	106	21	23	34	East to West & cloudy Rainfall
05-Jul-14	142	115	22	25	37	South to North & Sunny
20-Jul-14	123	108	20	23	29	East to West & Rainfall
13-Aug-14	187	112	22	25	31	East to West & Rainfall
28-Aug-14	165	109	20	23	27	East to West Sunny & Rainfall
11-Sep-14	152	101	19	21	24	East to West Cloudy & Rainfall
27-Sep-14	184	116	25	27	36	South to North & Sunny
11-Oct-14	165	111	23	25	31	East to West Cloudy & Rainfall
25-Oct-14	213	116	24	26	29	South to North & Sunny
13-Nov-14	156	102	22	24	28	South to North & Sunny
28-Nov-14	175	112	21	23	29	South to North & Sunny
13-Dec-14	194	105	19	22	27	East to West & Sunny
27-Dec-14	199	101	18	20	26	East to West & Sunny
14-Jan-15	207	108	20	22	38	West to East & Sunny
30-Jan-15	224	112	23	25	35	East to West & Sunny
13-Feb-15	257	131	25	27	39	East to West & Sunny
27-Feb-15	263	127	23	25	43	East to West & Sunny
13-Mar-15	240	120	21	23	45	East to West & Sunny
27-Mar-15	247	126	23	25	44	East to West & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	263.00	131.00	26.00	29.00	47.00	
<b>Minimum</b>	123.00	101.00	18.00	20.00	24.00	
<b>Average</b>	185.88	114.08	22.17	24.42	34.38	
<b>95 percentile</b>	255.50	126.85	25.00	27.00	44.85	
<b>98 percentile</b>	167.00	118.00	22.00	24.00	38.00	
<b>Standard</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 50 Air Quality Data**  
**Project: Talcher U/G**  
**Monitoring Station : Dera colony**

<b>Date of Sampling</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	<b>Remarks</b>
10-Apr-14	171	127	21	23	45	South to north & Sunny
22-Apr-14	169	115	23	25	40	East to West & Sunny
12-May-14	152	107	21	23	35	North to South & Sunny
27-May-14	145	115	23	25	38	East to West & Sunny
05-Jun-14	165	119	23	26	42	South to North & Sunny
19-Jun-14	142	113	22	24	37	East to West & cloudy Rainfall
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	171.00	127.00	23.00	26.00	45.00	
<b>Minimum</b>	142.00	107.00	21.00	23.00	35.00	
<b>Average</b>	157.33	116.00	22.17	24.33	39.50	
<b>95 percentile</b>	170.50	125.00	23.00	25.75	44.25	
<b>98 percentile</b>	170.80	126.20	23.00	25.90	44.70	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in  $\mu\text{g}/\text{m}^3$*

**Table : 51 Air Quality Data**  
**Project: Talcher U/G**  
**Monitoring Station : G.M Office**

<b>Date of Sampling</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	<b>Remarks</b>
05-Jul-14	154	122	24	27	39	South to North & Sunny
20-Jul-14	242	117	21	23	31	East to West & Rainfall
13-Aug-14	263	125	23	26	37	East to West & Rainfall
28-Aug-14	224	116	22	24	34	East to West Sunny & Rainfall
11-Sep-14	215	108	21	23	28	East to West Cloudy & Rainfall
27-Sep-14	226	115	23	25	31	South to North & Sunny
11-Oct-14	234	123	24	26	36	East to West Cloudy & Rainfall
25-Oct-14	246	131	26	28	39	South to North & Sunny
13-Nov-14	164	107	23	25	31	South to North & Sunny
28-Nov-14	184	119	19	21	27	South to North & Sunny
13-Dec-14	216	115	22	24	34	East to West & Sunny
27-Dec-14	209	107	21	23	29	East to West & Sunny
14-Jan-15	214	115	22	24	28	West to East & Sunny
30-Jan-15	236	124	24	26	47	East to West & Sunny
13-Feb-15	243	126	24	26	48	East to West & Sunny
27-Feb-15	298	132	25	27	50	East to West & Sunny
13-Mar-15	245	125	24	26	43	East to West & Sunny
27-Mar-15	252	129	26	28	35	East to West & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	298.00	132.00	26.00	28.00	50.00	
<b>Minimum</b>	154.00	107.00	19.00	21.00	27.00	
<b>Average</b>	225.83	119.78	23.00	25.11	35.94	
<b>95 percentile</b>	268.25	131.15	26.00	28.00	48.30	
<b>98 percentile</b>	286.10	131.66	26.00	28.00	49.32	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in  $\mu\text{g}/\text{m}^3$*

**Table : 52 Air Quality Data**  
**Project: Talcher West Colliery**  
**Monitoring Station: Talcher West Near Bunker**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	Remarks
14-Apr-14	279	146	27	29	42	East to West & Sunny
28-Apr-14	281	137	28	30	44	East to West & Sunny
14-May-14	296	143	29	32	42	East to West & Sunny
29-May-14	274	137	26	28	58	North to South & Sunny
10-Jun-14	285	139	28	31	51	South to North & Sunny
26-Jun-14	251	123	24	26	35	East to West & cloudy Rainfall
10-Jul-14	264	136	26	29	49	South to North & Sunny
25-Jul-14	236	121	22	25	40	East to West & Rainfall
08-Aug-14	287	132	27	29	49	East to West & Rainfall
23-Aug-14	293	139	28	31	51	East to West & Sunny
06-Sep-14	275	126	26	28	46	East to West Cloudy & Rainfall
24-Sep-14	287	132	28	30	48	South to North & Sunny
11-Oct-14	164	127	26	28	38	East to West Cloudy & Rainfall
25-Oct-14	276	135	28	30	42	East to West & Sunny
08-Nov-14	289	131	29	32	37	East to West & Sunny
24-Nov-14	294	143	28	30	40	East to West & Sunny
15-Dec-14	287	136	26	28	45	East to West & Sunny
29-Dec-14	295	131	25	28	51	East to West & Sunny
15-Jan-15	304	138	26	28	53	South to North & Sunny
31-Jan-15	315	142	27	29	51	East to West & Sunny
14-Feb-15	326	149	28	30	54	East to West & Sunny
28-Feb-15	345	145	29	32	58	East to West & Sunny
14-Mar-15	356	154	30	33	51	East to West & Sunny
28-Mar-15	349	151	29	32	57	West to East & Sunny
<b>Brief statictic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	356.00	154.00	30.00	33.00	58.00	
<b>Minimum</b>	164.00	121.00	22.00	25.00	35.00	
<b>Average</b>	287.83	137.21	27.08	29.50	47.17	
<b>95 percentile</b>	348.40	150.70	29.00	32.00	57.85	
<b>98 percentile</b>	279.00	146.00	27.00	29.00	42.00	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 53 Air Quality Data  
Project: Nandira U/G  
Monitoring Station:Project Office**

Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
08-Apr-14	156	112	21	23	65	East to West & Sunny
25-Apr-14	164	106	23	25	52	East to West & Sunny
09-May-14	175	114	25	27	55	East to West & Sunny
24-May-14	171	108	23	25	52	East to West & Sunny
07-Jun-14	163	122	27	29	53	South to North & Sunny
21-Jun-14	134	111	24	26	40	East to West & cloudy Rainfall
04-Jul-14	137	125	25	27	43	East to West & Sunny
19-Jul-14	117	98	20	22	29	South to North & Rainfall
14-Aug-14	189	105	24	26	39	South to North & Rainfall
29-Aug-14	179	105	22	24	35	East to West Sunny & Rainfall
12-Sep-14	162	100	20	23	31	East to West Cloudy & Rainfall
29-Sep-14	175	113	24	26	34	East to West & Sunny
15-Oct-14	189	125	25	27	32	East to West & Sunny
28-Oct-14	237	132	27	29	35	South to North & Sunny
14-Nov-14	276	136	26	28	25	East to West & Sunny
29-Nov-14	254	123	23	25	32	East to West & Sunny
11-Dec-14	265	135	24	26	32	East to West & Sunny
26-Dec-14	255	128	23	25	39	West to East & Sunny
15-Jan-15	263	132	25	27	42	South to North & Sunny
31-Jan-15	276	131	26	29	45	East to West & Sunny
14-Feb-15	283	136	27	29	53	East to West & Sunny
28-Feb-15	267	132	24	26	50	East to West & Sunny
14-Mar-15	276	136	26	28	44	East to West & Sunny
28-Mar-15	285	142	27	29	46	West to East & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
<b>Maximum</b>	285.00	142.00	27.00	29.00	65.00	
<b>Minimum</b>	117.00	98.00	20.00	22.00	25.00	
<b>Average</b>	210.33	121.13	24.21	26.29	41.79	
<b>95 percentile</b>	281.95	136.00	27.00	29.00	54.70	
<b>98 percentile</b>	284.08	139.24	27.00	29.00	60.40	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 54 Air Quality Data**  
**Project: Nandira U/G**  
**Monitoring Station:Natedi Village**

Date of Sampling	SPM	RPM	SO2	NOx	PM2.5	Remarks
09-Apr-14	194	134	24	26	48	South to north & Sunny
25-Apr-14	185	128	25	27	42	East to West & Sunny
10-May-14	159	112	23	25	51	East to West & Sunny
24-May-14	162	119	25	27	49	East to West & Sunny
07-Jun-14	144	117	22	25	49	South to North & Sunny
21-Jun-14	121	102	20	22	32	East to West & cloudy Rainfall
08-Jul-14	129	109	21	23	35	East to West & Sunny
23-Jul-14	117	98	20	22	29	South to North & Rainfall
14-Aug-14	164	99	22	24	34	South to North & Rainfall
29-Aug-14	161	98	21	23	31	East to West Sunny & Rainfall
12-Sep-14	145	91	23	25	26	East to West Cloudy & Rainfall
29-Sep-14	167	102	24	26	28	East to West & Sunny
15-Oct-14	175	116	26	28	31	East to West & Sunny
30-Oct-14	215	119	25	27	32	South to North & Sunny
14-Nov-14	205	111	23	25	21	East to West & Sunny
29-Nov-14	214	126	22	24	31	East to West & Sunny
11-Dec-14	237	118	21	23	28	East to West & Sunny
26-Dec-14	228	115	20	22	33	West to East & Sunny
15-Jan-15	234	124	22	25	34	South to North & Sunny
31-Jan-15	227	121	23	25	34	East to West & Sunny
14-Feb-15	257	128	25	27	42	East to West & Sunny
28-Feb-15	243	122	23	25	39	East to West & Sunny
14-Mar-15	238	120	22	24	31	East to West & Sunny
28-Mar-15	247	124	23	25	34	West to East & Sunny
<b>Brief statistic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO2</b>	<b>NOx</b>	<b>PM2.5</b>	
Maximum	257.00	134.00	26.00	28.00	51.00	
Minimum	117.00	91.00	20.00	22.00	21.00	
Average	190.33	114.71	22.71	24.79	35.17	
95 percentile	246.40	128.00	25.00	27.00	49.00	
98 percentile	252.40	131.24	25.54	27.54	50.08	
<b>Standard</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in  $\mu\text{g}/\text{m}^3$*

**Table : 55 Air Quality Data**  
**Project : Deulbera Colliery**  
**Monitoring Station : Manager's Office**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM 2.5	Remarks
03-Apr-14	135	89	19	21	29	East to West & Sunny
23-Apr-14	145	93	20	22	30	East to West & Sunny
06-May-14	159	103	22	24	50	West to East & Sunny
21-May-14	164	114	24	26	49	East to West & Sunny
02-Jun-14	164	113	24	26	47	South to North & Sunny
16-Jun-14	145	109	22	24	35	East to West & cloudy Rainfall
02-Jul-14	153	112	23	25	37	East to West & Sunny
17-Jul-14	142	108	21	23	32	South to North & Rainfall
13-Aug-14	198	111	22	24	35	South to North & Rainfall
28-Aug-14	175	107	21	23	31	East to West Sunny & Rainfall
11-Sep-14	154	101	20	22	27	East to West Cloudy & Rainfall
27-Sep-14	163	112	22	24	29	South to North & Sunny
14-Oct-14	153	110	21	23	30	East to West Cloudy & Rainfall
29-Oct-14	214	123	23	25	29	South to North & Sunny
13-Nov-14	253	132	24	26	34	South to North & Sunny
28-Nov-14	242	126	23	25	36	South to North & Sunny
12-Dec-14	256	121	21	23	34	South to North & Sunny
29-Dec-14	236	119	22	24	39	East to West & Cloudy
14-Jan-15	241	124	23	25	39	West to East & Sunny
30-Jan-15	253	128	24	26	32	East to West & Sunny
13-Feb-15	274	134	25	27	39	East to West & Sunny
27-Feb-15	289	137	26	28	47	East to West & Sunny
13-Mar-15	242	114	23	25	34	East to West & Sunny
27-Mar-15	253	124	25	27	42	East to West & Sunny
<b>Brief statistcic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM<sub>2.5</sub></b>	
<b>Maximum</b>	289.00	137.00	26.00	28.00	50.00	
<b>Minimum</b>	135.00	89.00	19.00	21.00	27.00	
<b>Average</b>	200.13	115.17	22.50	24.50	36.08	
<b>95 percentile</b>	271.30	133.70	25.00	27.00	48.70	
<b>98 percentile</b>	282.10	135.62	25.54	27.54	49.54	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 56 Air Quality Data**  
**Project: Duelbera Colliery**  
**Monitoring Station : Duelbera Colony**

Date of Sampling	SPM	RPM	SO <sub>2</sub>	NO <sub>x</sub>	PM 2.5	Remarks
02-Apr-14	152	124	24	26	38	East to West & Sunny
23-Apr-14	167	112	22	24	33	East to West & Sunny
05-May-14	176	123	24	26	48	West to East & Sunny
20-May-14	183	125	26	28	46	North to South & Sunny
03-Jun-14	185	134	26	29	51	East to West & Sunny
17-Jun-14	152	118	23	26	38	East to West & cloudy Rainfall
03-Jul-14	163	124	24	27	41	East to West & Sunny
18-Jul-14	132	113	22	25	36	South to North & Rainfall
13-Aug-14	178	102	20	22	31	South to North & Rainfall
28-Aug-14	165	101	19	21	28	East to West Sunny & Rainfall
11-Sep-14	147	97	18	20	25	East to West Cloudy & Rainfall
27-Sep-14	150	101	20	22	27	South to North & Sunny
14-Oct-14	142	96	18	20	25	East to West Cloudy & Rainfall
29-Oct-14	206	102	21	23	26	South to North & Sunny
13-Nov-14	285	140	27	29	28	South to North & Sunny
28-Nov-14	265	135	25	27	27	South to North & Sunny
12-Dec-14	242	126	23	25	29	South to North & Sunny
29-Dec-14	224	112	21	23	31	East to West & Cloudy
14-Jan-15	234	115	22	24	34	West to East & Sunny
30-Jan-15	241	117	21	24	30	East to West & Sunny
13-Feb-15	252	126	23	25	32	East to West & Sunny
27-Feb-15	261	128	22	24	36	East to West & Sunny
13-Mar-15	284	131	24	26	46	East to West & Sunny
27-Mar-15	296	135	26	28	49	East to West & Sunny
<b>Brief staitic</b>	<b>SPM</b>	<b>RPM</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>PM2.5</b>	
Maximum	296.00	140.00	27.00	29.00	51.00	
Minimum	132.00	96.00	18.00	20.00	25.00	
Average	203.42	118.21	22.54	24.75	34.79	
95 percentile	284.85	135.00	26.00	28.85	48.85	
98 percentile	290.94	137.70	26.54	29.00	50.08	
<b>Standard (24 Hrs)</b>	<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>	<b>60</b>	
<b>Standard (Annual)</b>	<b>430</b>	<b>215</b>	<b>80</b>	<b>80</b>	<b>40</b>	

*All values are in µg/m<sup>3</sup>*

**Table : 57 Heavy Metal Analysis**

**Project : Talcher U/G**

OM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
27.12.14	Talcher G.M. office	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
27.12.14	Talcher colony canteen	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	7.6

**Table :58 Heavy Metal Analysis**

**Project : Nandira U/G**

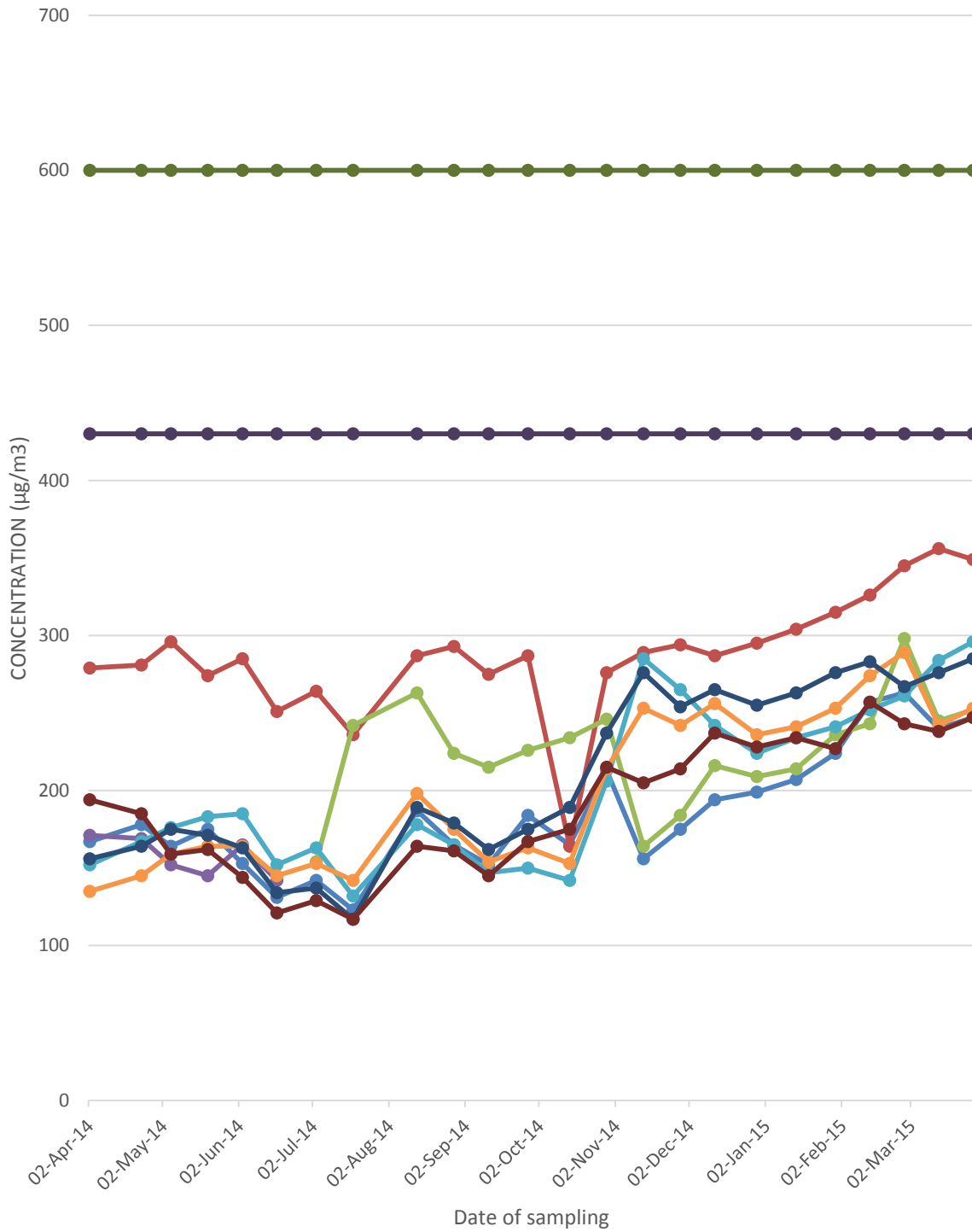
DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
23.12.14	Natedi village	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0

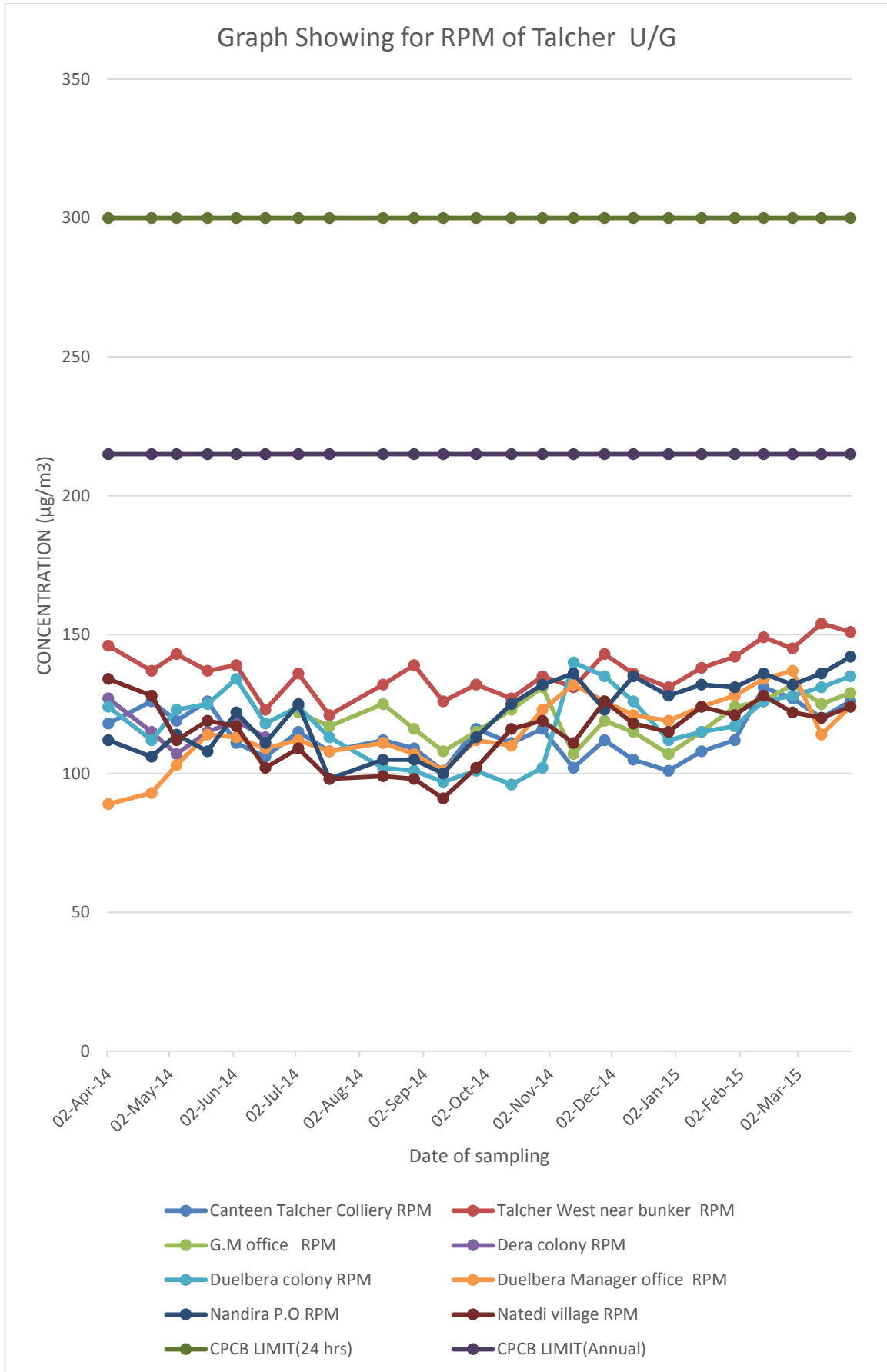
**Table :59 Heavy Metal Analysis**

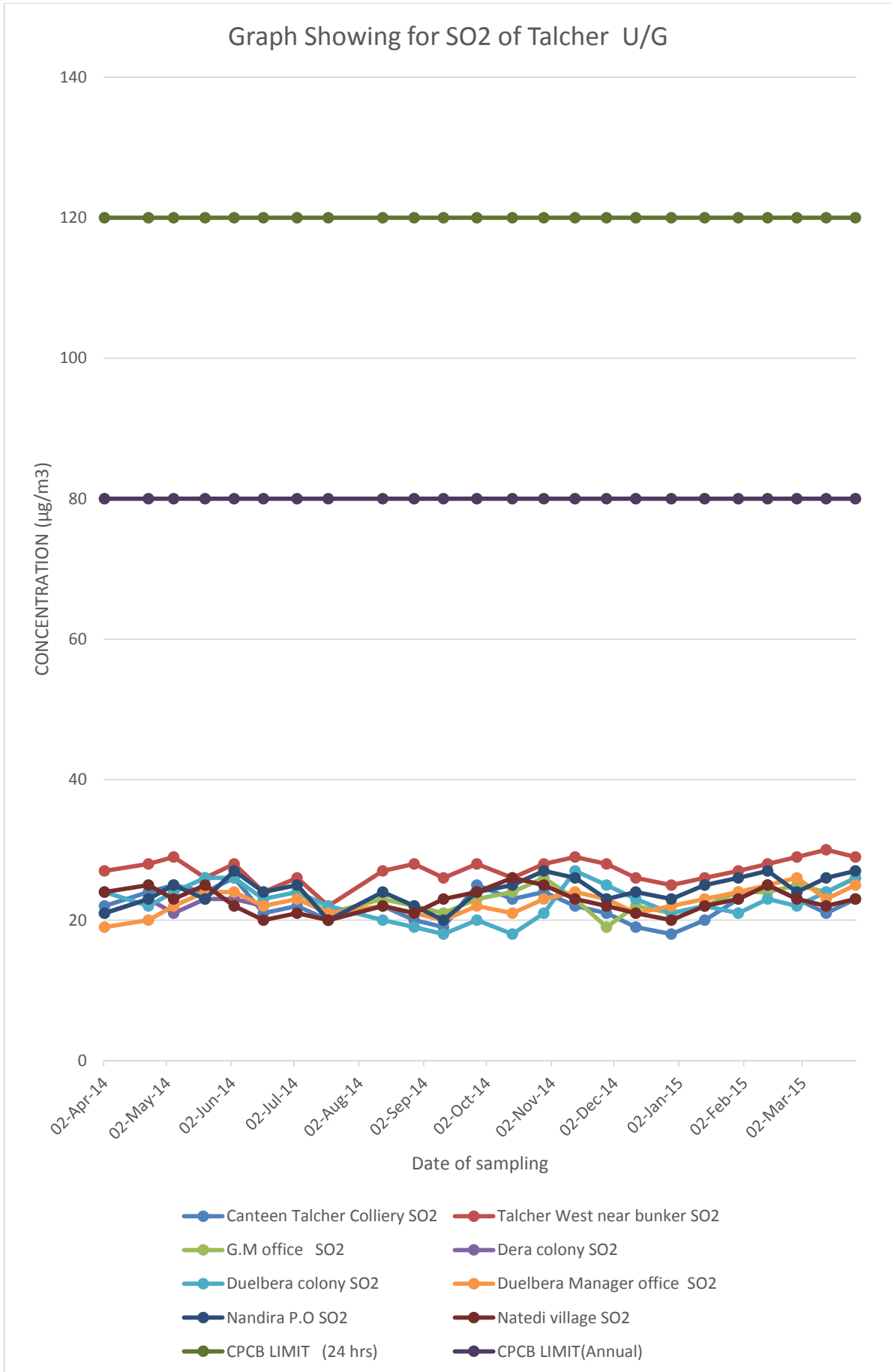
**Project : Nandira U/G**

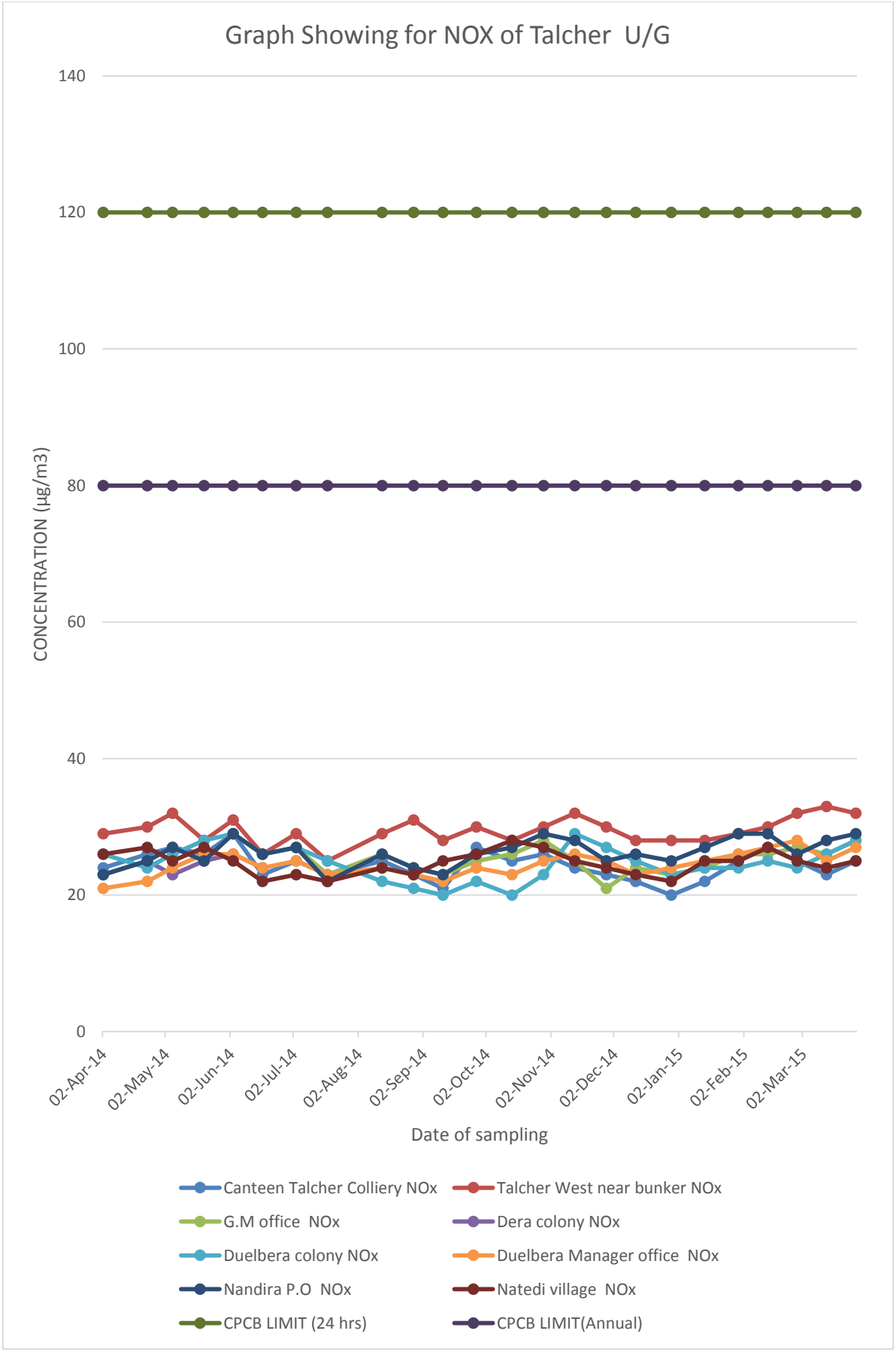
DOM	Name of Location	Pb (ug/m3)	As (ng/m3)	Ni (ng/m3)	Hg (ng/m3)	Cr (ug/m3)	Cd (ug/m3)	BaP (ng/m3)	Benzene (ug/m3)	CO (mg/m3)	Ammonia (ug/m3)
29.12.14	Deulbera colony	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0
29.12.14	Deulbera PO	<0.01	<1.0	<1.0	<1.0	<0.01	<0.01	<0.5	<0.01	<0.1	<6.0

Graph Showing for SPM of Talcher U/G

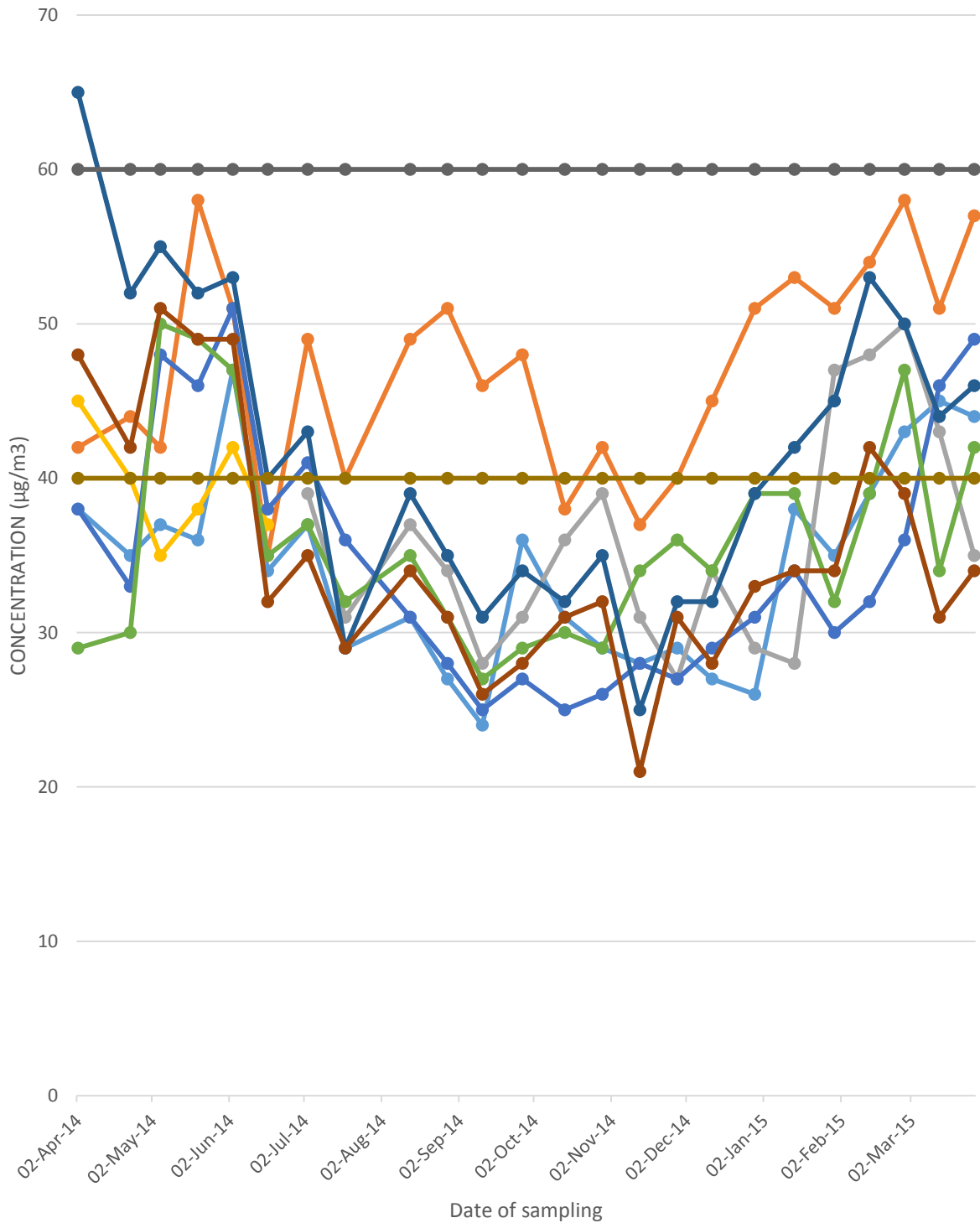








Graph Showing for PM2.5 of Talcher U/G



**Table : 60 Noise Level Data**

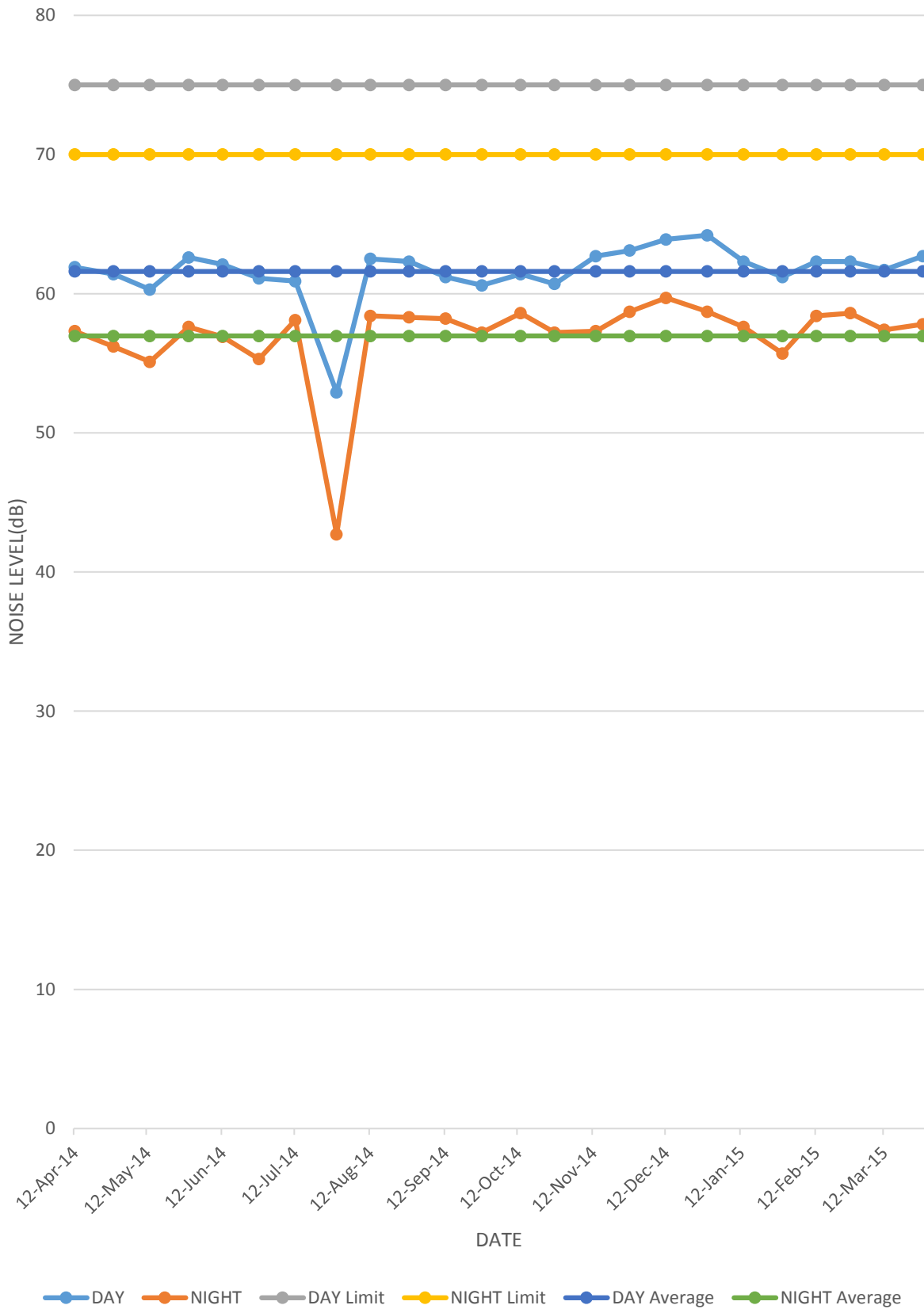
**Project: Ananta OCP**

**Monitoring Station: Field Canteen**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	61.9	57.3
28-Apr-14	61.4	56.2
13-May-14	60.3	55.1
29-May-14	62.6	57.6
12-Jun-14	62.1	56.9
27-Jun-14	61.1	55.3
12-Jul-14	60.9	58.1
29-Jul-14	52.9	42.7
12-Aug-14	62.5	58.4
28-Aug-14	62.3	58.3
12-Sep-14	61.2	58.2
27-Sep-14	60.6	57.2
13-Oct-14	61.4	58.6
27-Oct-14	60.7	57.2
13-Nov-14	62.7	57.3
27-Nov-14	63.1	58.7
12-Dec-14	63.9	59.7
29-Dec-14	64.2	58.7
13-Jan-15	62.3	57.6
29-Jan-15	61.2	55.7
12-Feb-15	62.3	58.4
26-Feb-15	62.3	58.6
12-Mar-15	61.7	57.4
28-Mar-15	62.7	57.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	64.20	59.70
<b>Minimum</b>	52.90	42.70
<b>Mean</b>	61.60	56.96
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Ananta Field Canteen

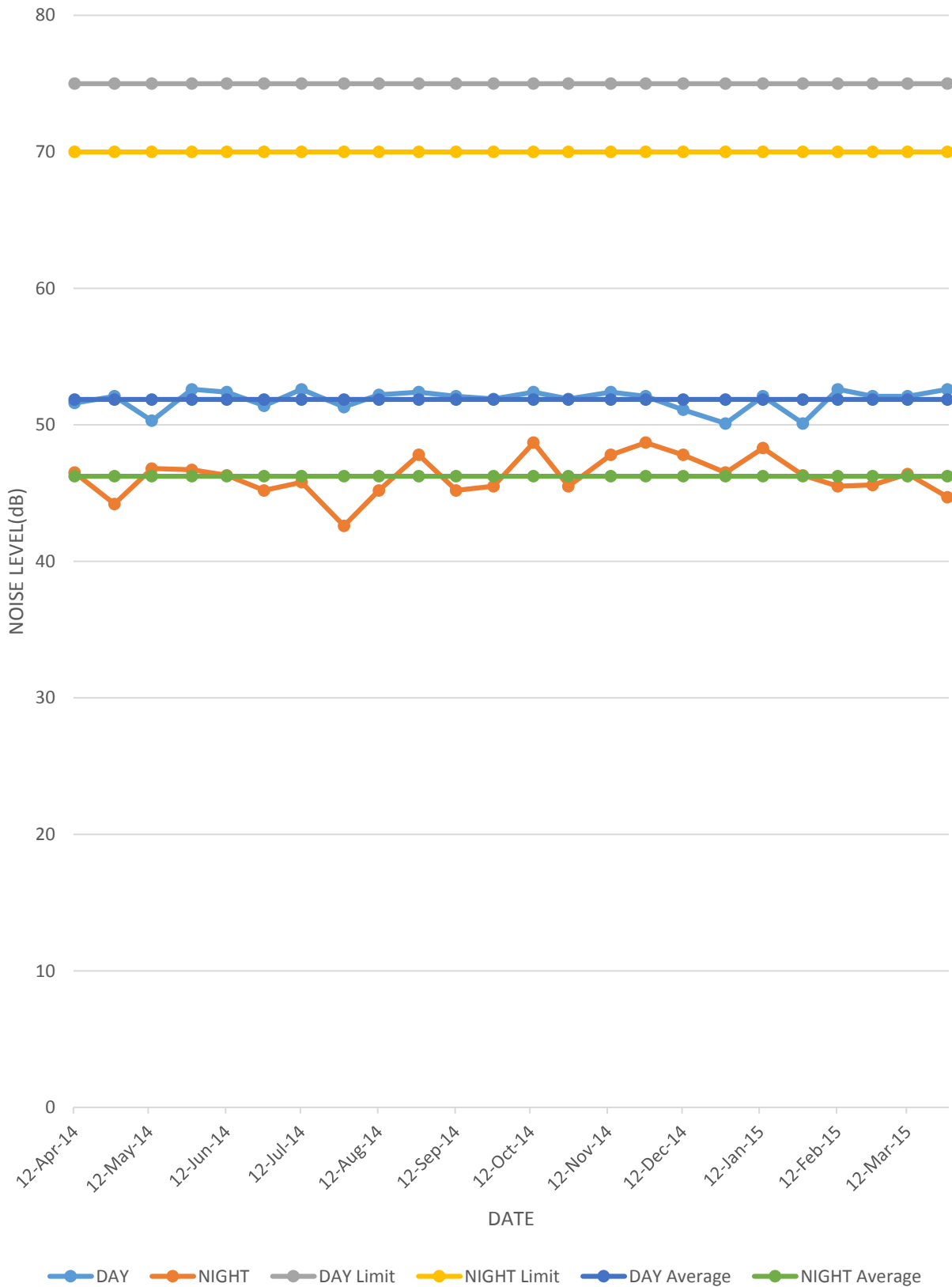


**Table :61 Noise Level Data****Project: Ananta OCP****Monitoring Station: Ananta Vihar colony**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	51.6	46.5
28-Apr-14	52.1	44.2
13-May-14	50.3	46.8
29-May-14	52.6	46.7
12-Jun-14	52.4	46.3
27-Jun-14	51.4	45.2
12-Jul-14	52.6	45.8
29-Jul-14	51.3	42.6
12-Aug-14	52.2	45.2
28-Aug-14	52.4	47.8
12-Sep-14	52.1	45.2
27-Sep-14	51.9	45.5
13-Oct-14	52.4	48.7
27-Oct-14	51.9	45.5
13-Nov-14	52.4	47.8
27-Nov-14	52.1	48.7
12-Dec-14	51.1	47.8
29-Dec-14	50.1	46.5
13-Jan-15	52.1	48.3
29-Jan-15	50.1	46.3
12-Feb-15	52.6	45.5
26-Feb-15	52.1	45.6
12-Mar-15	52.1	46.4
28-Mar-15	52.6	44.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	52.60	48.70
<b>Minimum</b>	50.10	42.60
<b>Mean</b>	51.85	46.23
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Ananta Vihar Colony



**Table : 62 Noise Level Data**

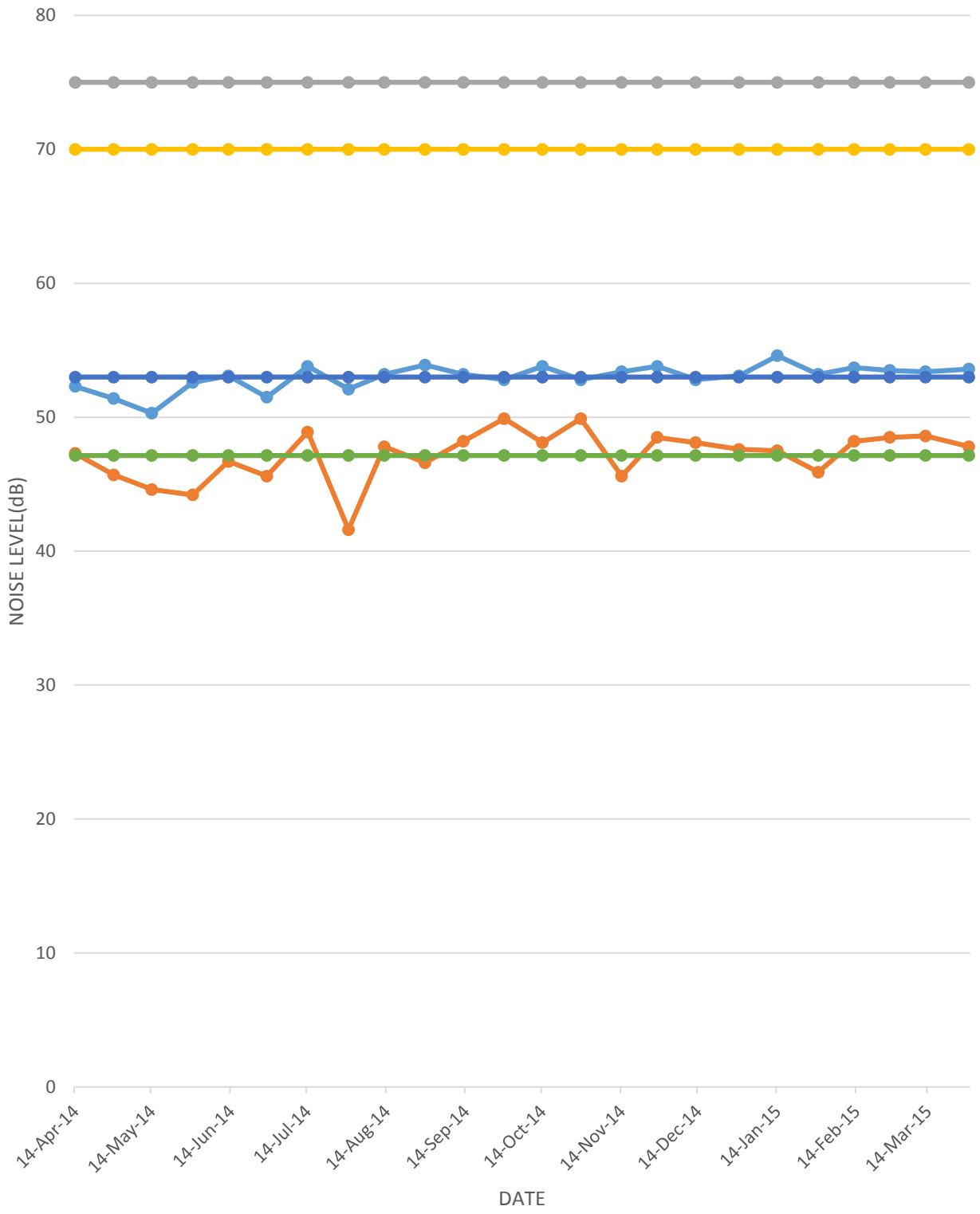
**Project: Ananta OCP**

**Monitoring Station: Hinsmul-Village Tala Sahi**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	52.3	47.3
29-Apr-14	51.4	45.7
14-May-14	50.3	44.6
30-May-14	52.6	44.2
13-Jun-14	53.1	46.7
28-Jun-14	51.5	45.6
14-Jul-14	53.8	48.9
30-Jul-14	52.1	41.6
13-Aug-14	53.2	47.8
29-Aug-14	53.9	46.6
13-Sep-14	53.2	48.2
29-Sep-14	52.8	49.9
14-Oct-14	53.8	48.1
29-Oct-14	52.8	49.9
14-Nov-14	53.4	45.6
28-Nov-14	53.8	48.5
13-Dec-14	52.8	48.1
30-Dec-14	53.1	47.6
14-Jan-15	54.6	47.5
30-Jan-15	53.2	45.9
13-Feb-15	53.7	48.2
27-Feb-15	53.5	48.5
13-Mar-15	53.4	48.6
30-Mar-15	53.6	47.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	54.60	49.90
<b>Minimum</b>	50.30	41.60
<b>Mean</b>	53.00	47.14
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Hinsmul-Village Tala Sahi



**Table : 63 Noise Level Data**

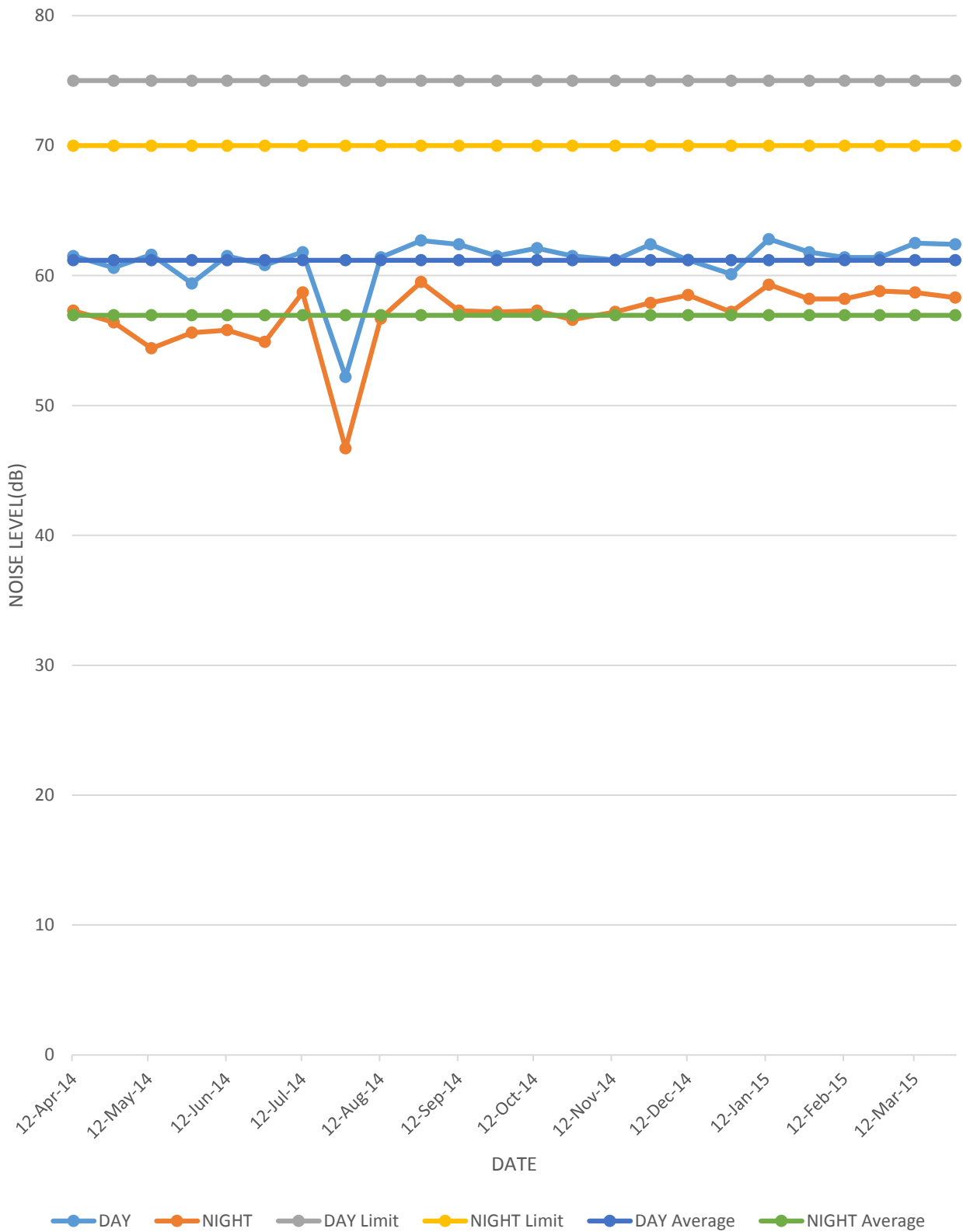
**Project: Ananta OCP**

**Monitoring Station: Mine Sub station**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	61.5	57.3
28-Apr-14	60.6	56.4
13-May-14	61.6	54.4
29-May-14	59.4	55.6
12-Jun-14	61.5	55.8
27-Jun-14	60.8	54.9
12-Jul-14	61.8	58.7
29-Jul-14	52.2	46.7
12-Aug-14	61.4	56.7
28-Aug-14	62.7	59.5
12-Sep-14	62.4	57.3
27-Sep-14	61.5	57.2
13-Oct-14	62.1	57.3
27-Oct-14	61.5	56.6
13-Nov-14	61.2	57.2
27-Nov-14	62.4	57.9
12-Dec-14	61.2	58.5
29-Dec-14	60.1	57.2
13-Jan-15	62.8	59.3
29-Jan-15	61.8	58.2
12-Feb-15	61.4	58.2
26-Feb-15	61.4	58.8
12-Mar-15	62.5	58.7
28-Mar-15	62.4	58.3
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	62.80	59.50
<b>Minimum</b>	52.20	46.70
<b>Mean</b>	61.18	56.95
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Mine Sub Station



**Table : 64 Noise level Data**

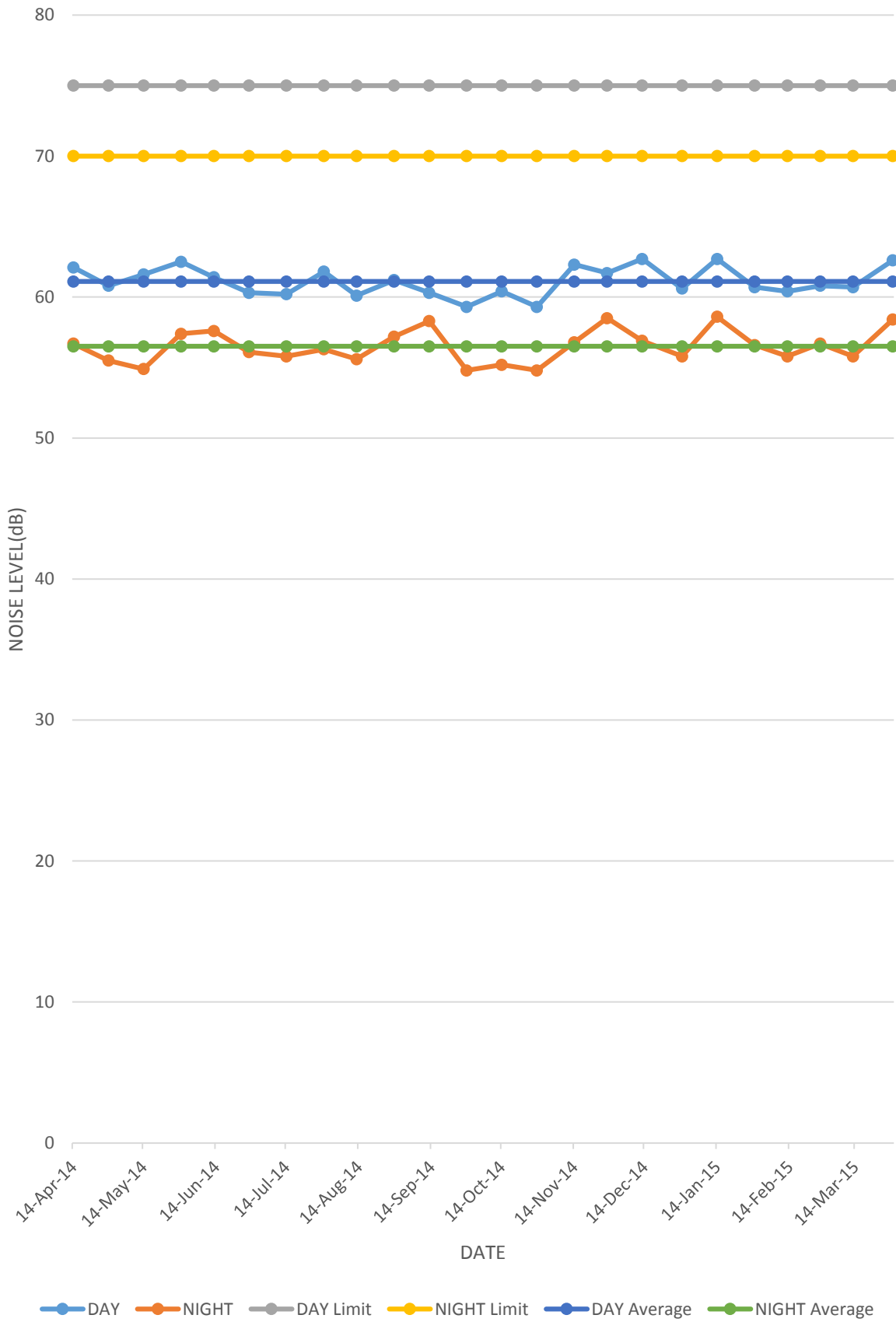
**Project: Bhubaneswari OCP**

**Monitoring Station: B.C.M.L Workshop**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	62.1	56.7
29-Apr-14	60.8	55.5
14-May-14	61.6	54.9
30-May-14	62.5	57.4
13-Jun-14	61.4	57.6
28-Jun-14	60.3	56.1
14-Jul-14	60.2	55.8
30-Jul-14	61.8	56.3
13-Aug-14	60.1	55.6
29-Aug-14	61.2	57.2
13-Sep-14	60.3	58.3
29-Sep-14	59.3	54.8
14-Oct-14	60.4	55.2
29-Oct-14	59.3	54.8
14-Nov-14	62.3	56.8
28-Nov-14	61.7	58.5
13-Dec-14	62.7	56.9
30-Dec-14	60.6	55.8
14-Jan-15	62.7	58.6
30-Jan-15	60.7	56.6
13-Feb-15	60.4	55.8
27-Feb-15	60.8	56.7
13-Mar-15	60.7	55.8
30-Mar-15	62.6	58.4
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	62.70	58.60
<b>Minimum</b>	59.30	54.80
<b>Mean</b>	61.10	56.50
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for B.C.M.L WorkShop



**Table : 65 Noise Level Data**

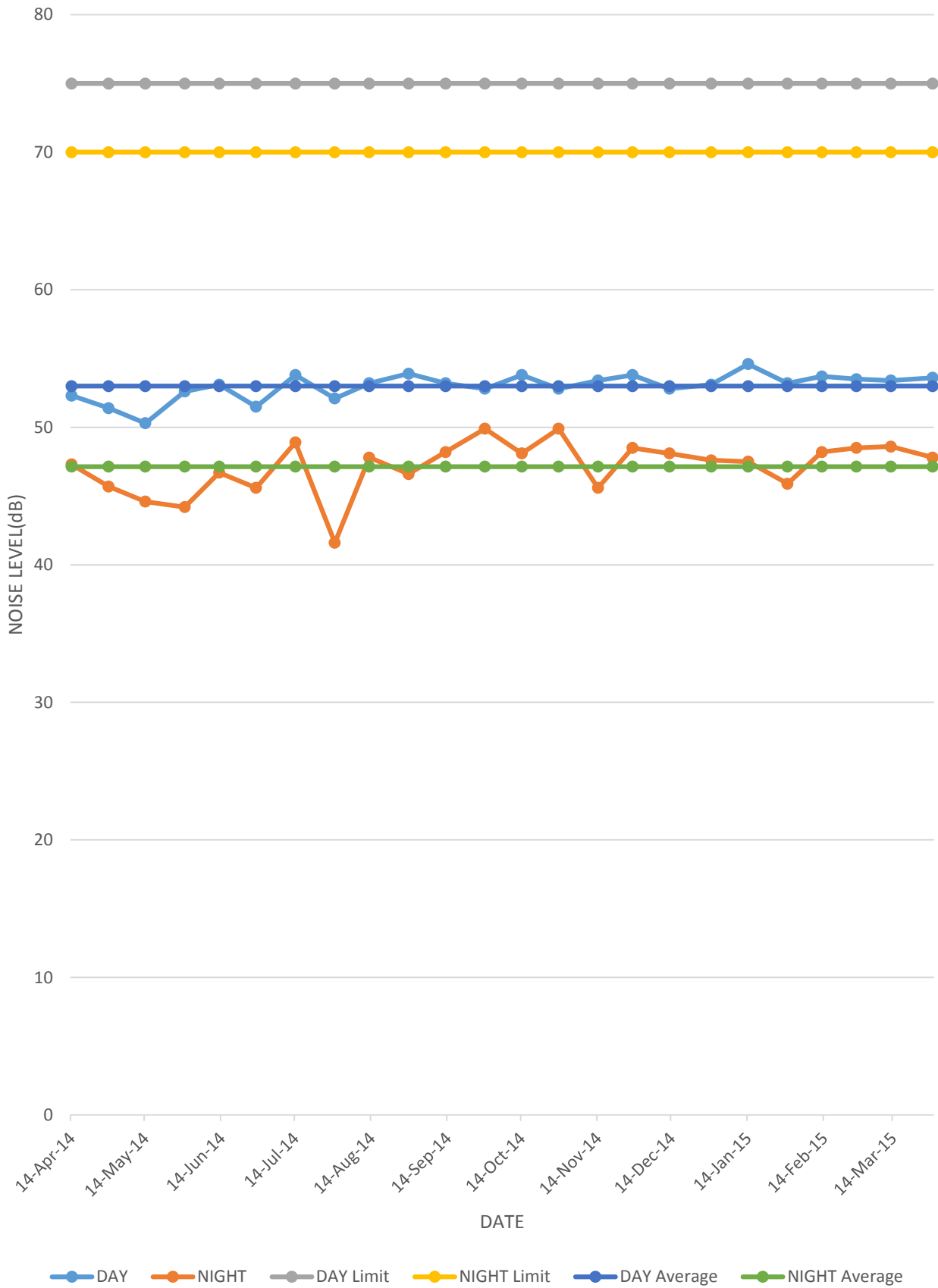
**Project: Bhubaneswari OCP**

**Monitoring Station: Hinsmul Village –Tala Sahi**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	52.3	47.3
29-Apr-14	51.4	45.7
14-May-14	50.3	44.6
30-May-14	52.6	44.2
13-Jun-14	53.1	46.7
28-Jun-14	51.5	45.6
14-Jul-14	53.8	48.9
30-Jul-14	52.1	41.6
13-Aug-14	53.2	47.8
29-Aug-14	53.9	46.6
13-Sep-14	53.2	48.2
29-Sep-14	52.8	49.9
14-Oct-14	53.8	48.1
29-Oct-14	52.8	49.9
14-Nov-14	53.4	45.6
28-Nov-14	53.8	48.5
13-Dec-14	52.8	48.1
30-Dec-14	53.1	47.6
14-Jan-15	54.6	47.5
30-Jan-15	53.2	45.9
13-Feb-15	53.7	48.2
27-Feb-15	53.5	48.5
13-Mar-15	53.4	48.6
30-Mar-15	53.6	47.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	54.60	49.90
<b>Minimum</b>	50.30	41.60
<b>Mean</b>	53.00	47.14
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Hensmul village-Tala Sahi



**Table : 66 Noise Level Data**

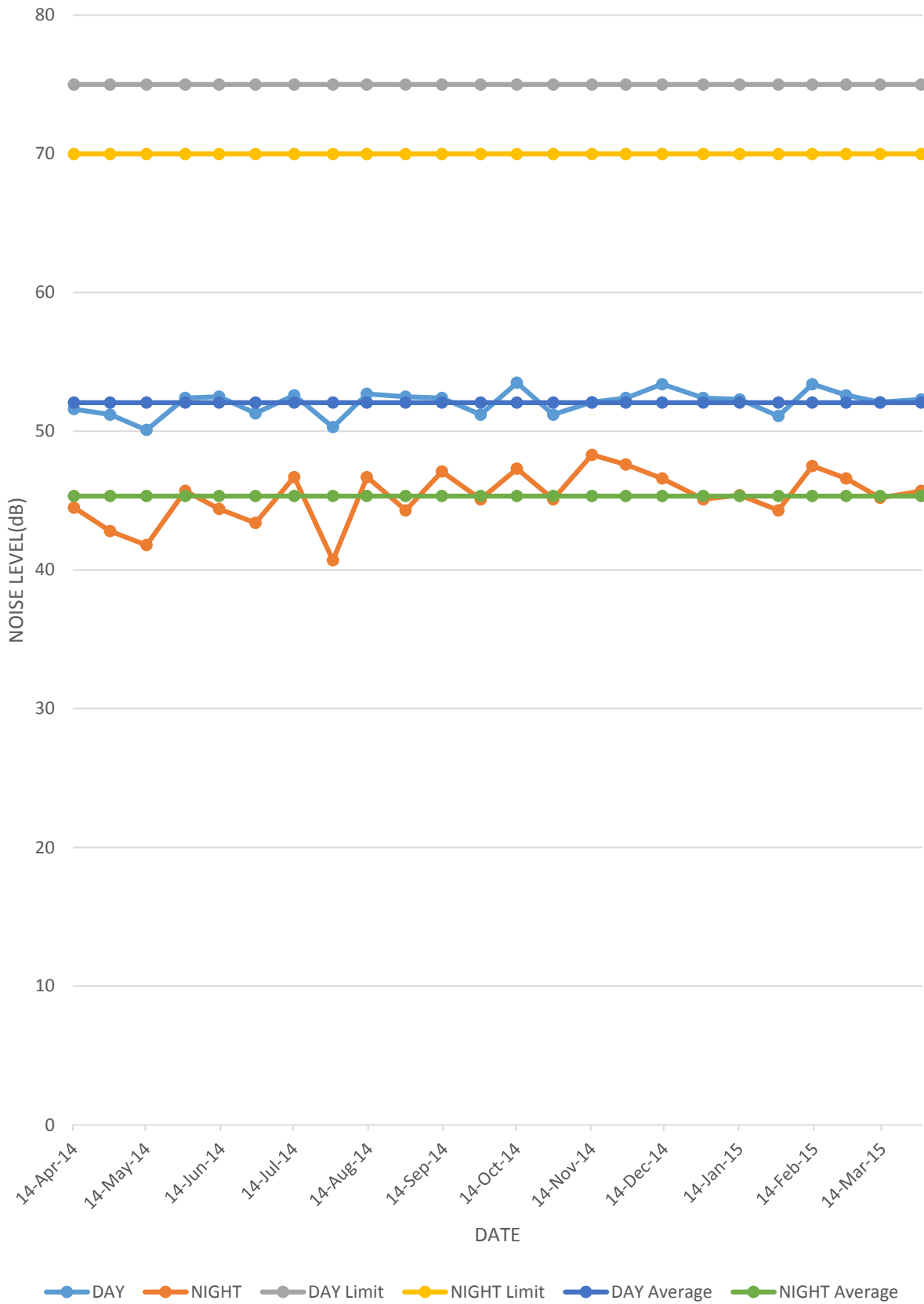
**Project: Bhubaneswari OCP**

**Monitoring Station: Nariharipur Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	51.6	44.5
29-Apr-14	51.2	42.8
14-May-14	50.1	41.8
30-May-14	52.4	45.7
13-Jun-14	52.5	44.4
28-Jun-14	51.3	43.4
14-Jul-14	52.6	46.7
30-Jul-14	50.3	40.7
13-Aug-14	52.7	46.7
29-Aug-14	52.5	44.3
13-Sep-14	52.4	47.1
29-Sep-14	51.2	45.1
14-Oct-14	53.5	47.3
29-Oct-14	51.2	45.1
14-Nov-14	52.1	48.3
28-Nov-14	52.4	47.6
13-Dec-14	53.4	46.6
30-Dec-14	52.4	45.1
14-Jan-15	52.3	45.4
30-Jan-15	51.1	44.3
13-Feb-15	53.4	47.5
27-Feb-15	52.6	46.6
13-Mar-15	52.1	45.2
30-Mar-15	52.3	45.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	53.50	48.30
<b>Minimum</b>	50.10	40.70
<b>Mean</b>	52.07	45.33
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Nariharipur Village



**Table : 67 Noise Level Data**

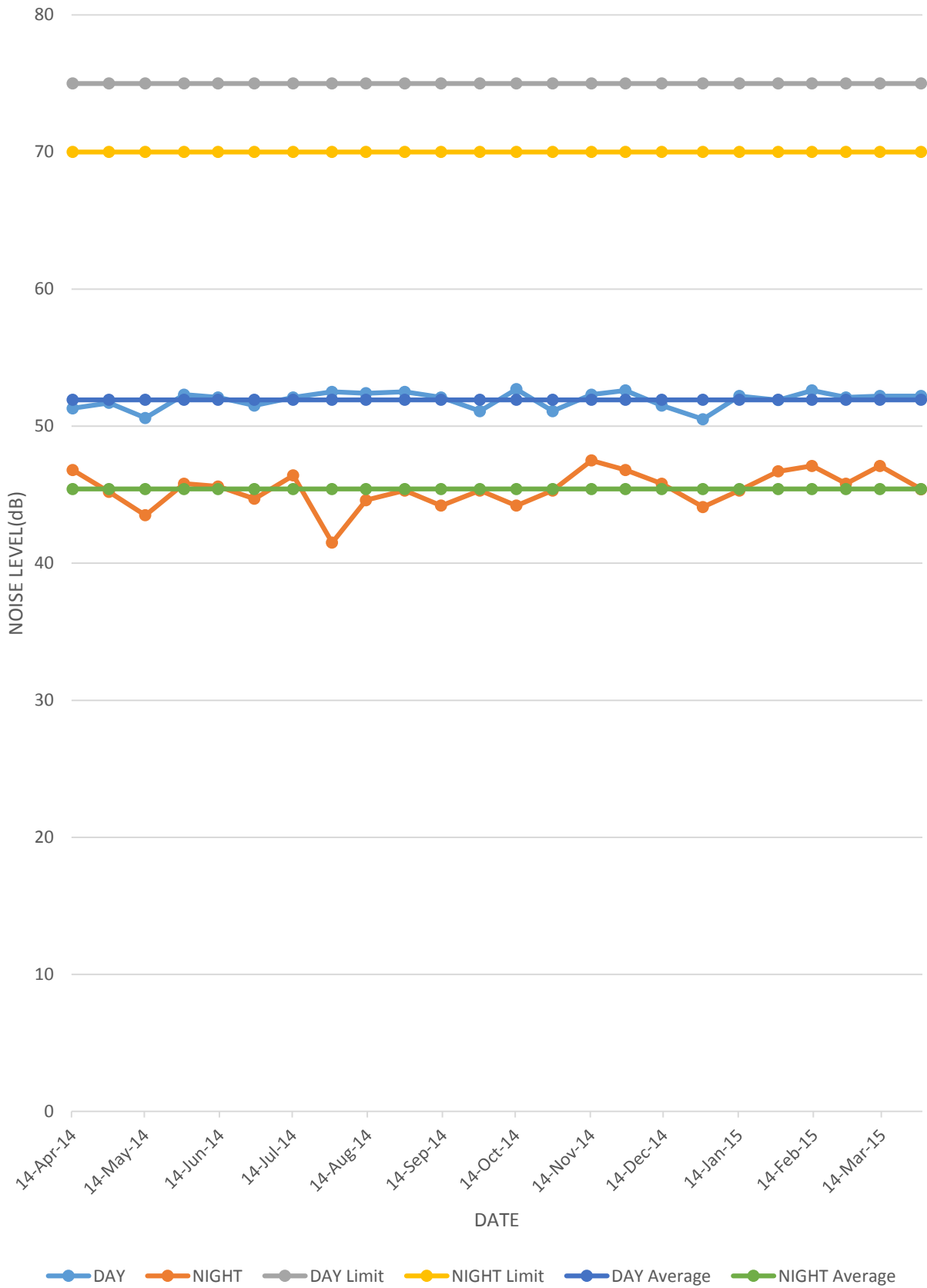
**Project: Bhubaneswari OCP**

**Monitoring Station: Raghunathpur Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	51.3	46.8
29-Apr-14	51.7	45.2
14-May-14	50.6	43.5
30-May-14	52.3	45.8
13-Jun-14	52.1	45.6
28-Jun-14	51.5	44.7
14-Jul-14	52.1	46.4
30-Jul-14	52.5	41.5
13-Aug-14	52.4	44.6
29-Aug-14	52.5	45.3
13-Sep-14	52.1	44.2
29-Sep-14	51.1	45.3
14-Oct-14	52.7	44.2
29-Oct-14	51.1	45.3
14-Nov-14	52.3	47.5
28-Nov-14	52.6	46.8
13-Dec-14	51.5	45.8
30-Dec-14	50.5	44.1
14-Jan-15	52.2	45.3
30-Jan-15	51.9	46.7
13-Feb-15	52.6	47.1
27-Feb-15	52.1	45.8
13-Mar-15	52.2	47.1
30-Mar-15	52.2	45.4
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	52.70	47.50
<b>Minimum</b>	50.50	41.50
<b>Mean</b>	51.92	45.42
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Raghunathpur Village

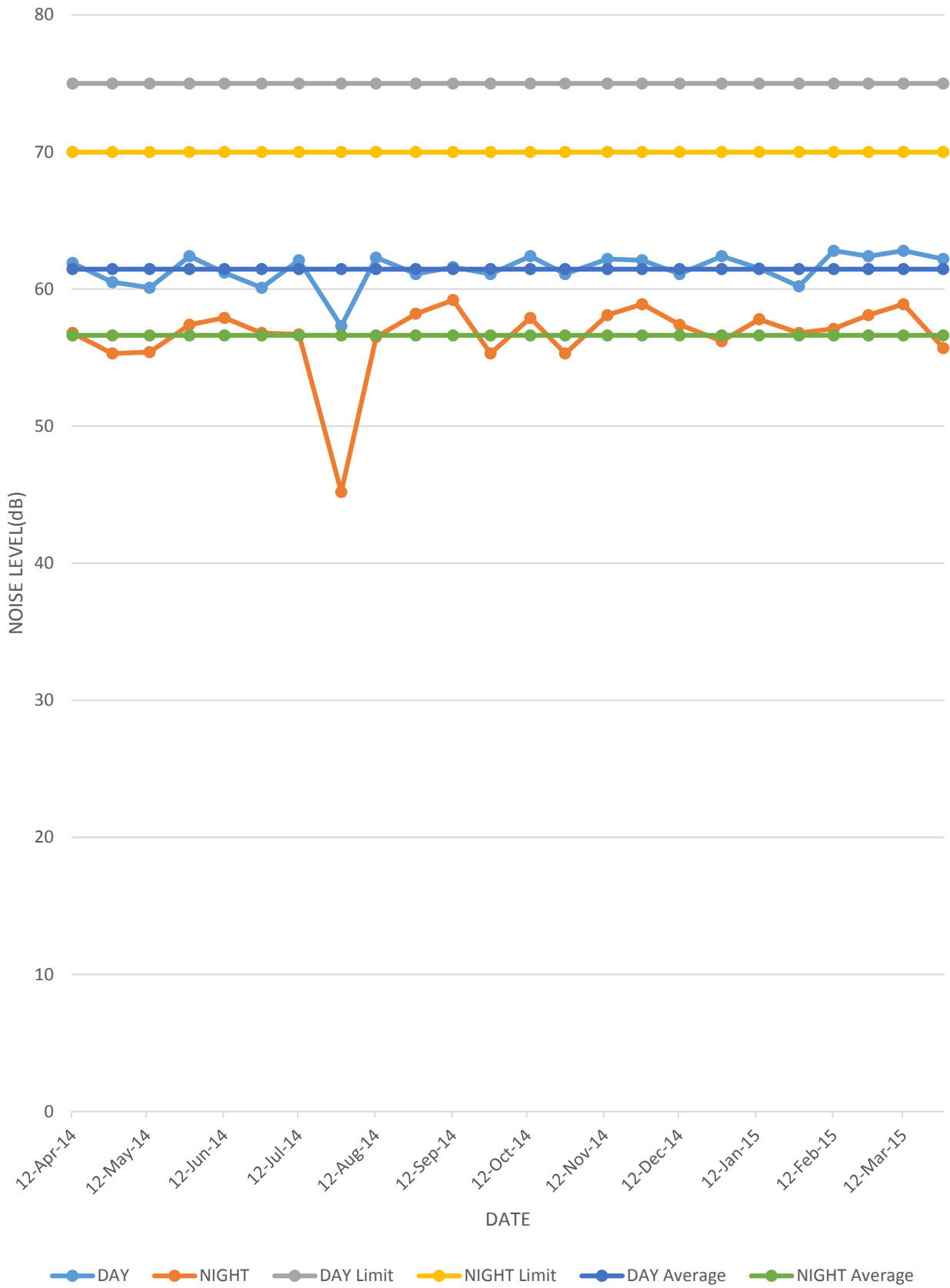


**Table : 68 Noise Level Data****Project: Jagannath OCP****Monitoring Station: Field Canteen**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	61.9	56.8
28-Apr-14	60.5	55.3
13-May-14	60.1	55.4
29-May-14	62.4	57.4
12-Jun-14	61.2	57.9
27-Jun-14	60.1	56.8
12-Jul-14	62.1	56.7
29-Jul-14	57.3	45.2
12-Aug-14	62.3	56.5
28-Aug-14	61.1	58.2
12-Sep-14	61.6	59.2
27-Sep-14	61.1	55.3
13-Oct-14	62.4	57.9
27-Oct-14	61.1	55.3
13-Nov-14	62.2	58.1
27-Nov-14	62.1	58.9
12-Dec-14	61.1	57.4
29-Dec-14	62.4	56.2
13-Jan-15	61.5	57.8
29-Jan-15	60.2	56.8
12-Feb-15	62.8	57.1
26-Feb-15	62.4	58.1
12-Mar-15	62.8	58.9
28-Mar-15	62.2	55.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	62.80	59.20
<b>Minimum</b>	57.30	45.20
<b>Mean</b>	61.45	56.62
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing Noise for Field Canteen



**Table : 69 Noise Level Data**

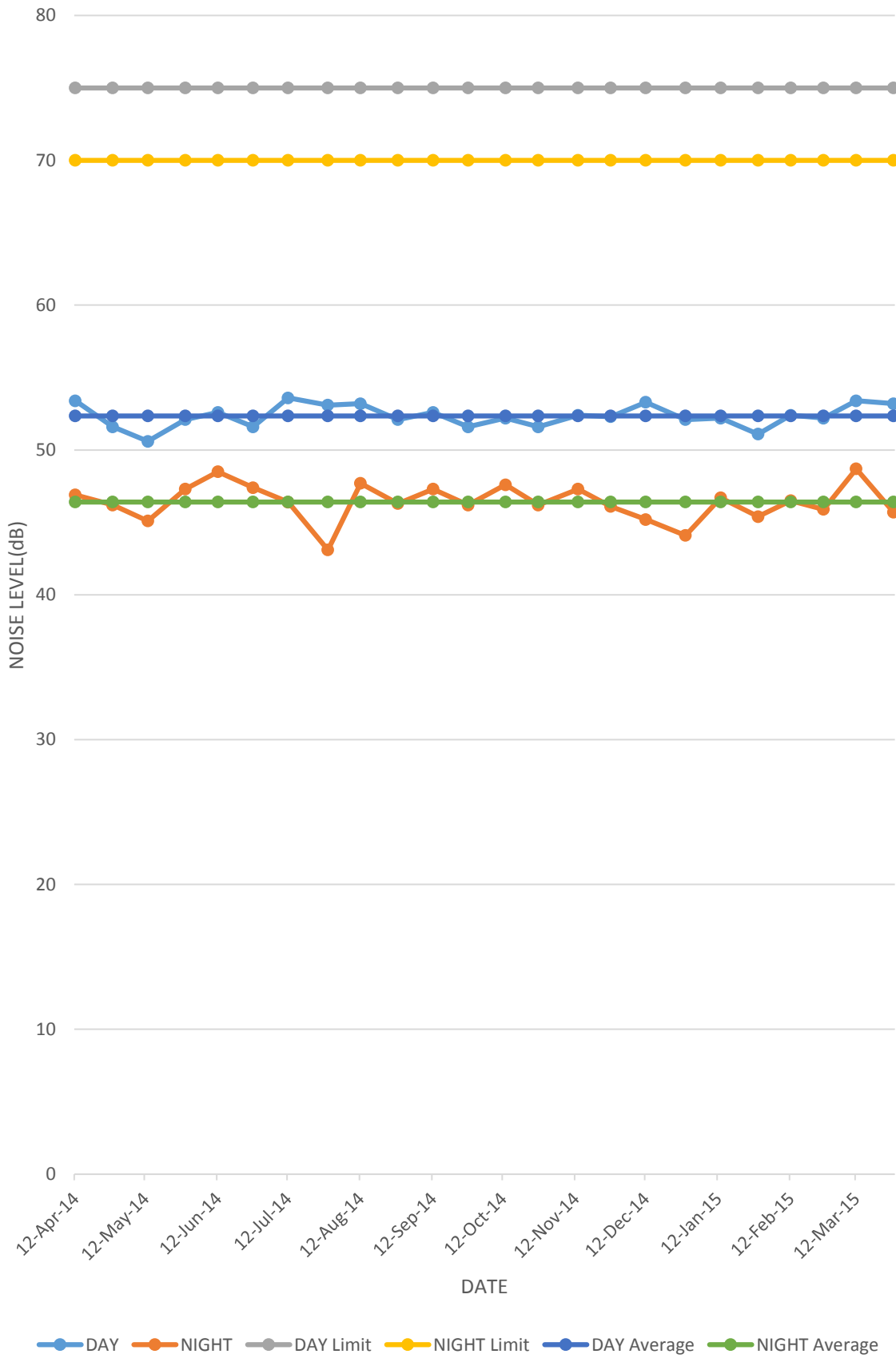
**Project: Jagannath OCP**

**Monitoring Station: Jagannath Colony**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	53.4	46.9
28-Apr-14	51.6	46.2
13-May-14	50.6	45.1
29-May-14	52.1	47.3
12-Jun-14	52.6	48.5
27-Jun-14	51.6	47.4
12-Jul-14	53.6	46.4
29-Jul-14	53.1	43.1
12-Aug-14	53.2	47.7
28-Aug-14	52.1	46.3
12-Sep-14	52.6	47.3
27-Sep-14	51.6	46.2
13-Oct-14	52.2	47.6
27-Oct-14	51.6	46.2
13-Nov-14	52.4	47.3
27-Nov-14	52.3	46.1
12-Dec-14	53.3	45.2
29-Dec-14	52.1	44.1
13-Jan-15	52.2	46.7
29-Jan-15	51.1	45.4
12-Feb-15	52.4	46.5
26-Feb-15	52.2	45.9
12-Mar-15	53.4	48.7
28-Mar-15	53.2	45.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	53.60	48.70
<b>Minimum</b>	50.60	43.10
<b>Mean</b>	52.35	46.41
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Jagannath Colony



**Table : 70 Noise Level Data**

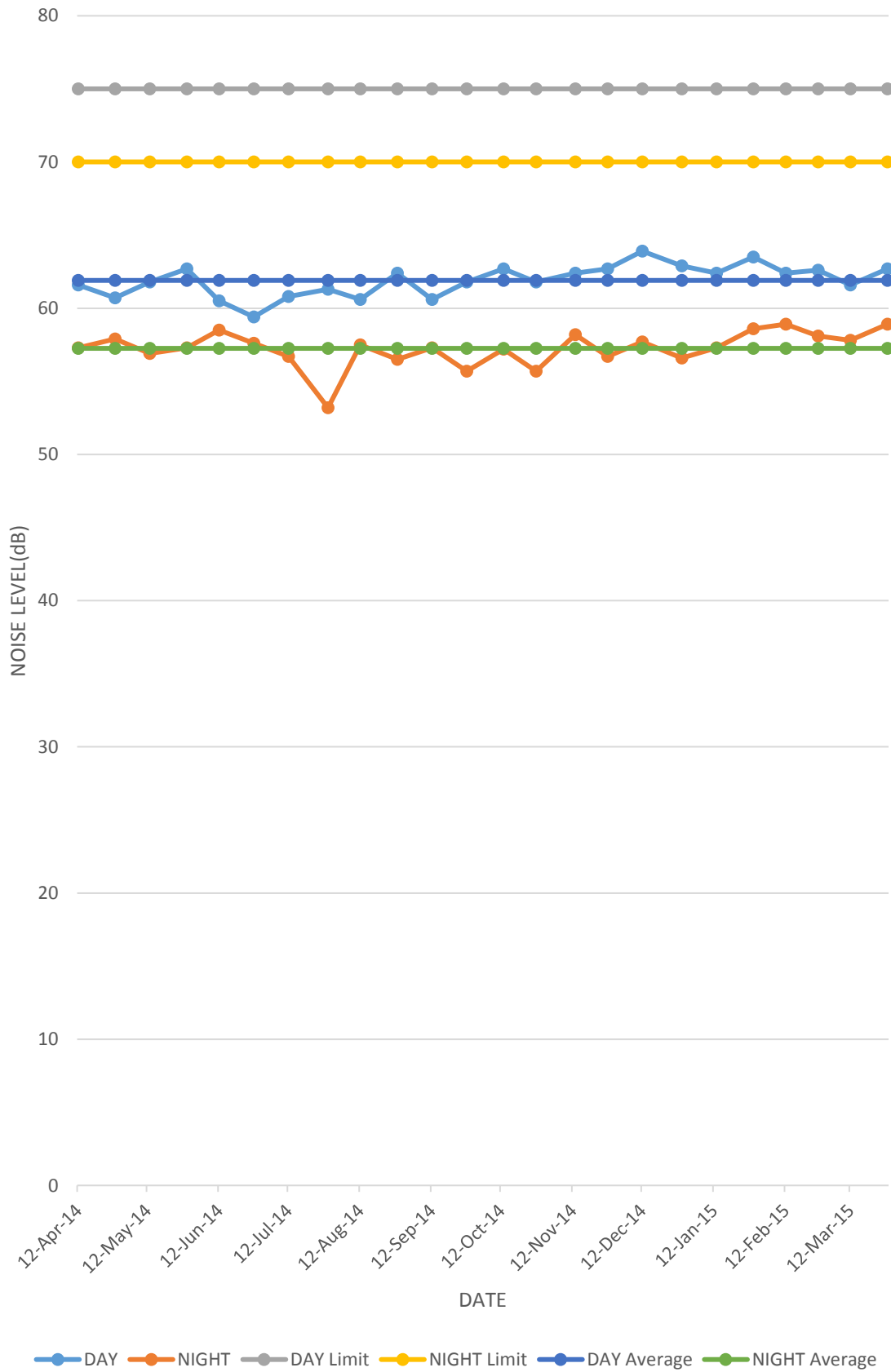
**Project: Jagannath OCP**

**Monitoring Station: Jagannath OCP-Time Office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	61.6	57.3
28-Apr-14	60.7	57.9
13-May-14	61.8	56.9
29-May-14	62.7	57.3
12-Jun-14	60.5	58.5
27-Jun-14	59.4	57.6
12-Jul-14	60.8	56.7
29-Jul-14	61.3	53.2
12-Aug-14	60.6	57.5
28-Aug-14	62.4	56.5
12-Sep-14	60.6	57.3
27-Sep-14	61.8	55.7
13-Oct-14	62.7	57.2
27-Oct-14	61.8	55.7
13-Nov-14	62.4	58.2
27-Nov-14	62.7	56.7
12-Dec-14	63.9	57.7
29-Dec-14	62.9	56.6
13-Jan-15	62.4	57.3
29-Jan-15	63.5	58.6
12-Feb-15	62.4	58.9
26-Feb-15	62.6	58.1
12-Mar-15	61.6	57.8
28-Mar-15	62.7	58.9
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	63.90	58.90
<b>Minimum</b>	59.40	53.20
<b>Mean</b>	61.91	57.25
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Jagannath OCP-Time Office



**Table : 71 Noise Level Data**

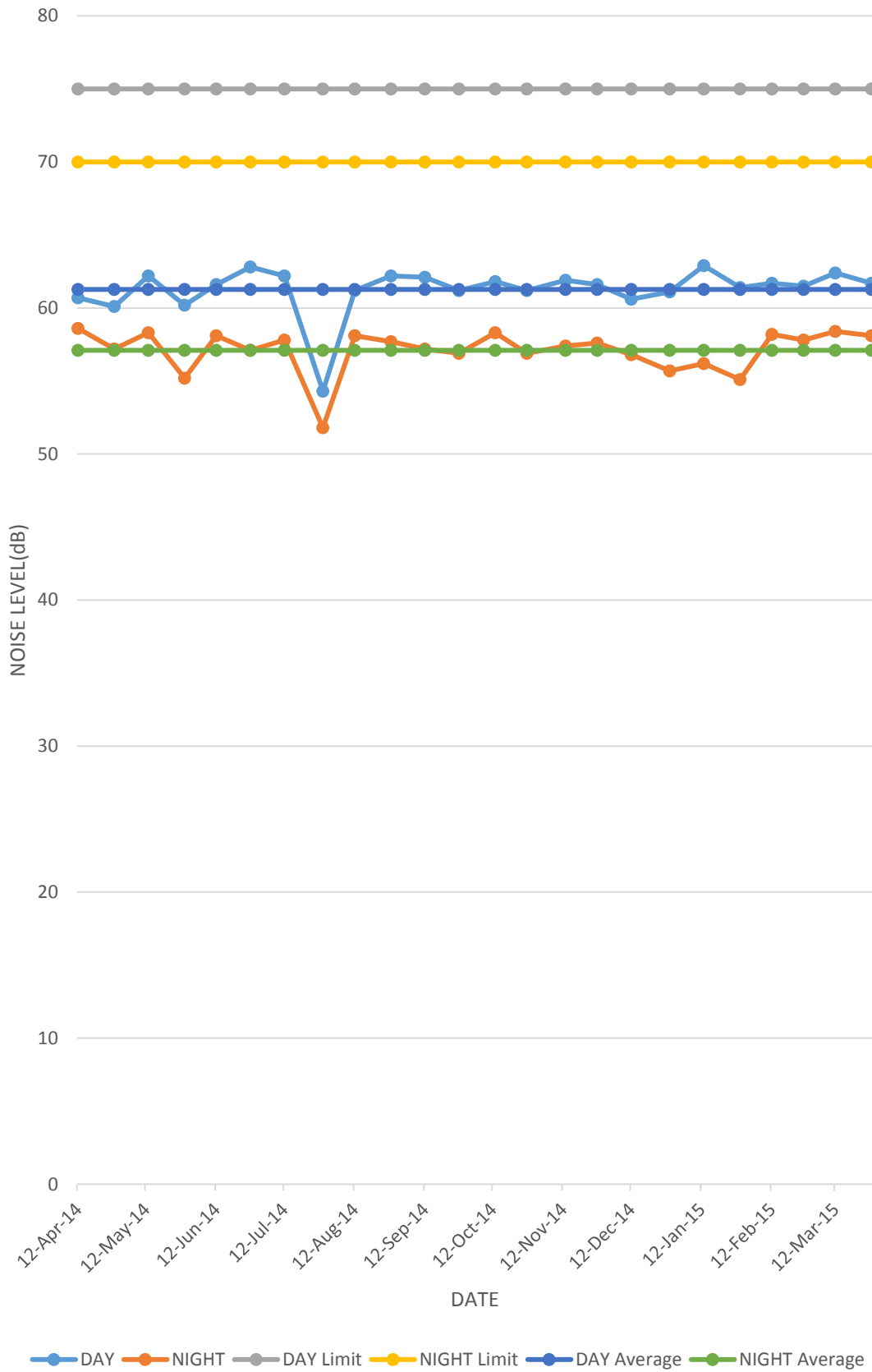
**Project: Jagannath OCP**

**Monitoring Station: Mine Substation**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	60.7	58.6
28-Apr-14	60.1	57.2
13-May-14	62.2	58.3
29-May-14	60.2	55.2
12-Jun-14	61.6	58.1
27-Jun-14	62.8	57.1
12-Jul-14	62.2	57.8
29-Jul-14	54.3	51.8
12-Aug-14	61.2	58.1
28-Aug-14	62.2	57.7
12-Sep-14	62.1	57.2
27-Sep-14	61.2	56.9
13-Oct-14	61.8	58.3
27-Oct-14	61.2	56.9
13-Nov-14	61.9	57.4
27-Nov-14	61.6	57.6
12-Dec-14	60.6	56.8
29-Dec-14	61.1	55.7
13-Jan-15	62.9	56.2
29-Jan-15	61.4	55.1
12-Feb-15	61.7	58.2
26-Feb-15	61.5	57.8
12-Mar-15	62.4	58.4
28-Mar-15	61.7	58.1
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	62.90	58.60
<b>Minimum</b>	54.30	51.80
<b>Mean</b>	61.28	57.10
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Mine Substation



**Table : 72 Noise Level Data**

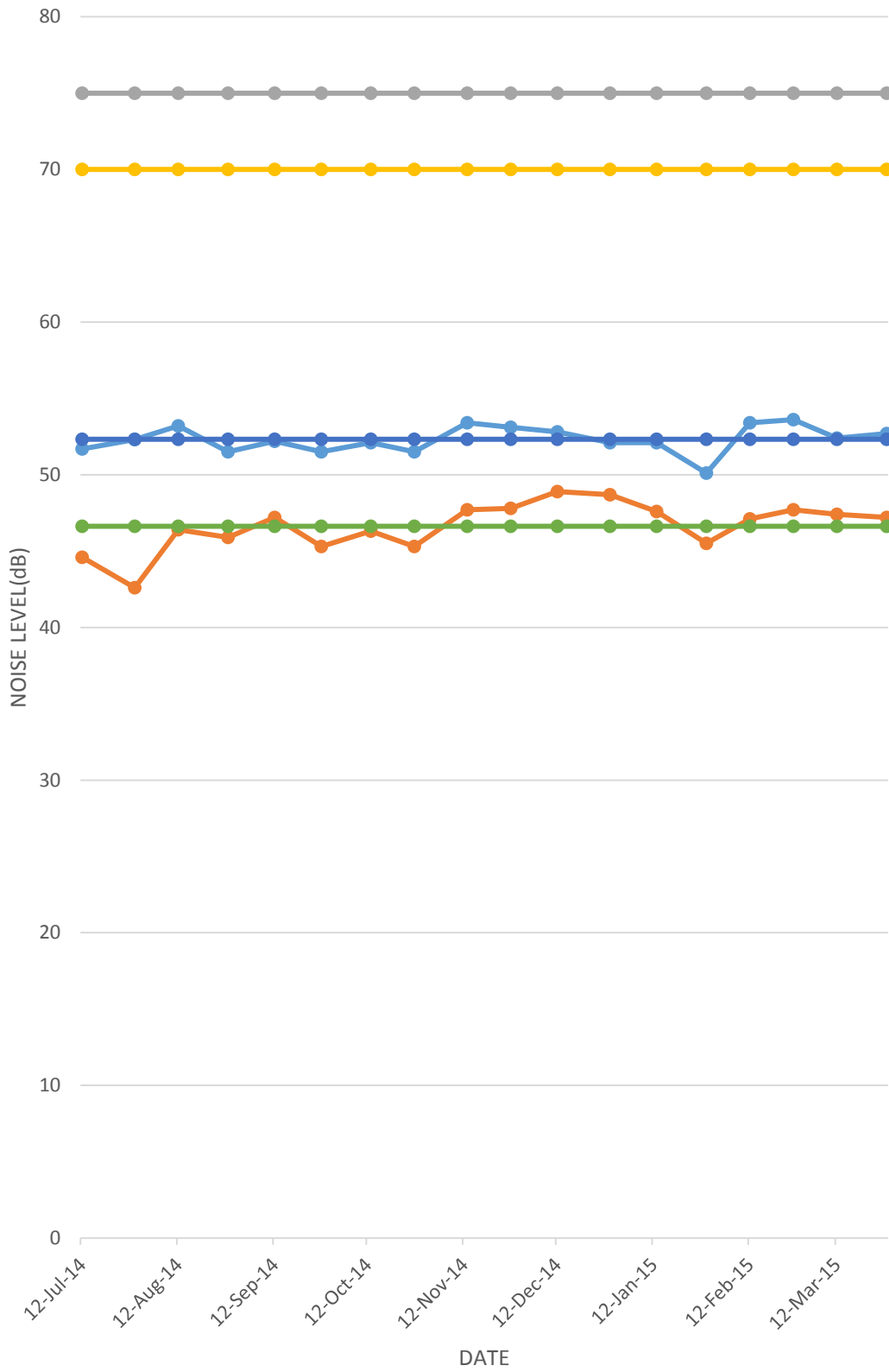
**Project: Bharatpur OCP**

**Monitoring Station: Nakeipasi village/Padmabatipur village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	53.2	47.3
28-Apr-14	51.4	46.8
13-May-14	50.4	45.9
29-May-14	52.1	47.2
12-Jun-14	53.1	45.3
27-Jun-14	51.1	44.3
12-Jul-14	51.7	44.6
29-Jul-14	52.3	42.6
12-Aug-14	53.2	46.4
28-Aug-14	51.5	45.9
12-Sep-14	52.2	47.2
27-Sep-14	51.5	45.3
13-Oct-14	52.1	46.3
27-Oct-14	51.5	45.3
13-Nov-14	53.4	47.7
27-Nov-14	53.1	47.8
12-Dec-14	52.8	48.9
29-Dec-14	52.1	48.7
13-Jan-15	52.1	47.6
29-Jan-15	50.1	45.5
12-Feb-15	53.4	47.1
26-Feb-15	53.6	47.7
12-Mar-15	52.4	47.4
28-Mar-15	52.7	47.2
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	<b>53.6</b>	<b>48.9</b>
<b>Minimum</b>	<b>50.1</b>	<b>42.6</b>
<b>Average</b>	<b>52.21</b>	<b>46.50</b>
<b>Standard</b>	<b>75</b>	<b>70</b>

*All values are in dB(A)*

Graph Showing NOISE for Padmabatipur Village



**Table : 73 Noise level Data**

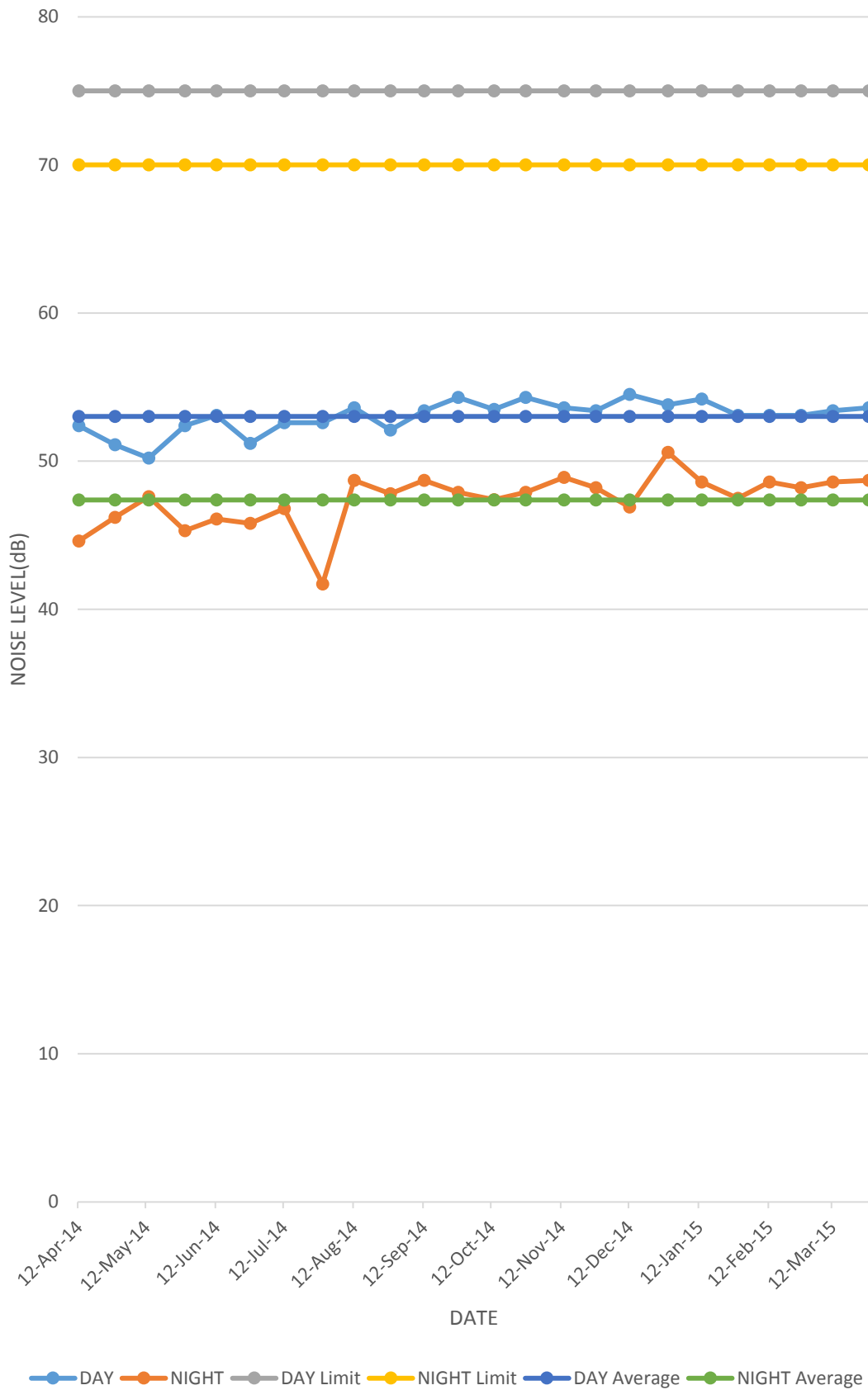
**Project: Bharatpur OCP**

**Monitoring Station: Near civil maintenance of Kalinga colony/PF**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	52.4	44.6
28-Apr-14	51.1	46.2
13-May-14	50.2	47.6
29-May-14	52.4	45.3
12-Jun-14	53.1	46.1
27-Jun-14	51.2	45.8
12-Jul-14	52.6	46.8
29-Jul-14	52.6	41.7
12-Aug-14	53.6	48.7
28-Aug-14	52.1	47.8
12-Sep-14	53.4	48.7
27-Sep-14	54.3	47.9
13-Oct-14	53.5	47.4
27-Oct-14	54.3	47.9
13-Nov-14	53.6	48.9
27-Nov-14	53.4	48.2
12-Dec-14	54.5	46.9
29-Dec-14	53.8	50.6
13-Jan-15	54.2	48.6
29-Jan-15	53.1	47.5
12-Feb-15	53.1	48.6
26-Feb-15	53.1	48.2
12-Mar-15	53.4	48.6
28-Mar-15	53.6	48.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	<b>54.5</b>	<b>50.6</b>
<b>Minimum</b>	<b>50.2</b>	<b>41.7</b>
<b>Average</b>	<b>53.03</b>	<b>47.39</b>
<b>Standard</b>	<b>75</b>	<b>70</b>

*All values are in dB(A)*

Graph Showing NOISE for Near civil maintenance office of Kalinga Colony/PF



**Table : 74 Noise Level Data**

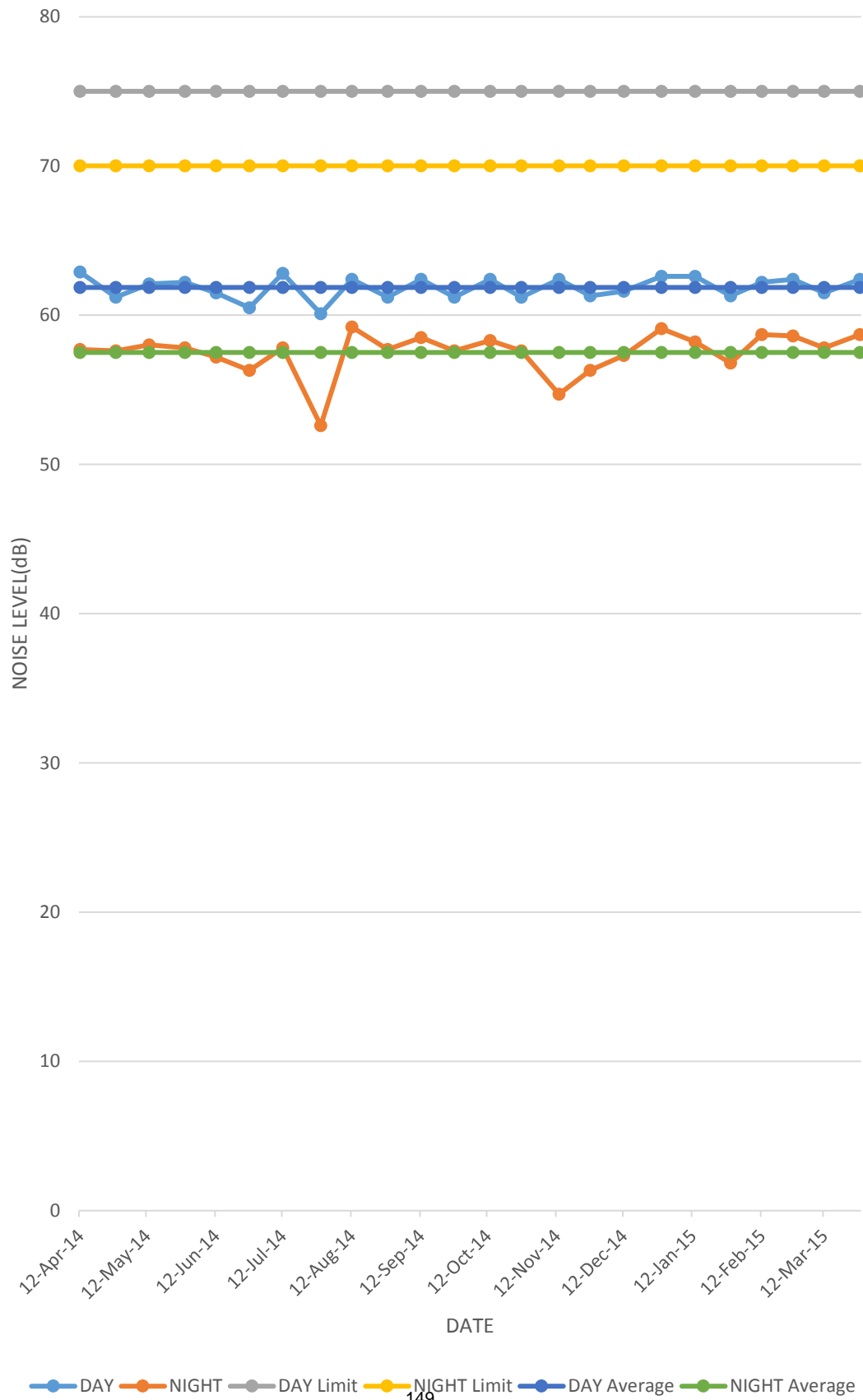
**Project: Bharatpur OCP**

**Monitoring Station: Onbackfill near reject dump yard**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	62.9	57.7
28-Apr-14	61.2	57.6
13-May-14	62.1	58
29-May-14	62.2	57.8
12-Jun-14	61.5	57.2
27-Jun-14	60.5	56.3
12-Jul-14	62.8	57.8
29-Jul-14	60.1	52.6
12-Aug-14	62.4	59.2
28-Aug-14	61.2	57.7
12-Sep-14	62.4	58.5
27-Sep-14	61.2	57.6
13-Oct-14	62.4	58.3
27-Oct-14	61.2	57.6
13-Nov-14	62.4	54.7
27-Nov-14	61.3	56.3
12-Dec-14	61.6	57.3
29-Dec-14	62.6	59.1
13-Jan-15	62.6	58.2
29-Jan-15	61.3	56.8
12-Feb-15	62.2	58.7
26-Feb-15	62.4	58.6
12-Mar-15	61.5	57.8
28-Mar-15	62.4	58.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	<b>62.9</b>	<b>59.2</b>
<b>Minimum</b>	<b>60.1</b>	<b>52.6</b>
<b>Average</b>	<b>61.85</b>	<b>57.50</b>
<b>Standard</b>	<b>75</b>	<b>70</b>

*All values are in dB(A)*

Graph Showing NOISE for On backfill near reject dump yard



**Table : 75 Noise Level Data**

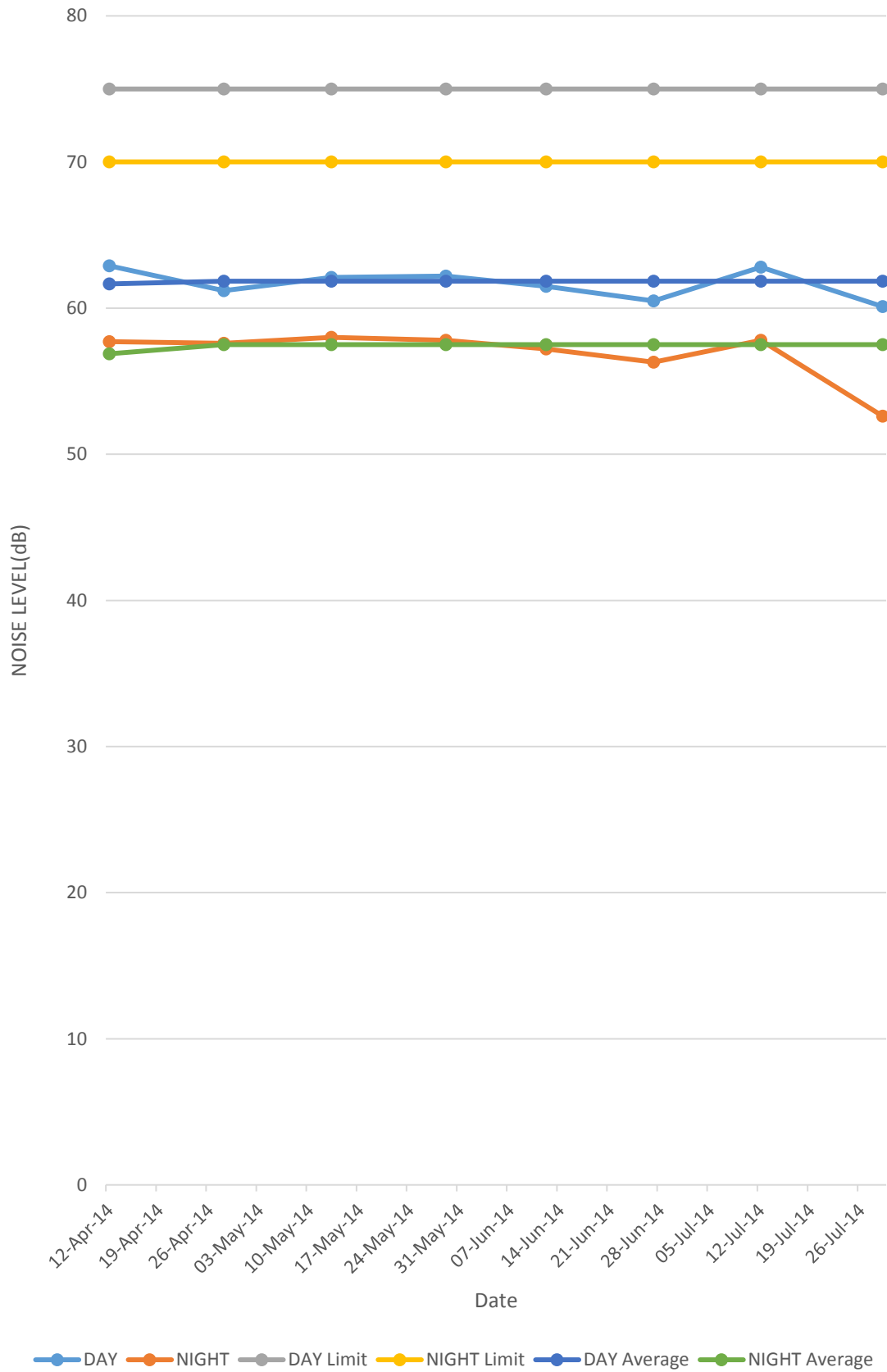
**Project: Bharatpur OCP**

**Monitoring Station: Near World Bank office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	62.9	57.7
28-Apr-14	61.2	57.6
13-May-14	62.1	58
29-May-14	62.2	57.8
12-Jun-14	61.5	57.2
27-Jun-14	60.5	56.3
12-Jul-14	62.8	57.8
29-Jul-14	60.1	52.6
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	<b>62.9</b>	<b>58</b>
<b>Minimum</b>	<b>60.1</b>	<b>52.6</b>
<b>Average</b>	<b>61.66</b>	<b>56.88</b>
<b>Standard</b>	<b>75</b>	<b>70</b>

*All values are in dB(A)*

Graph showing NOISE for Near world bank office



**Table : 76 Noise Level Data**

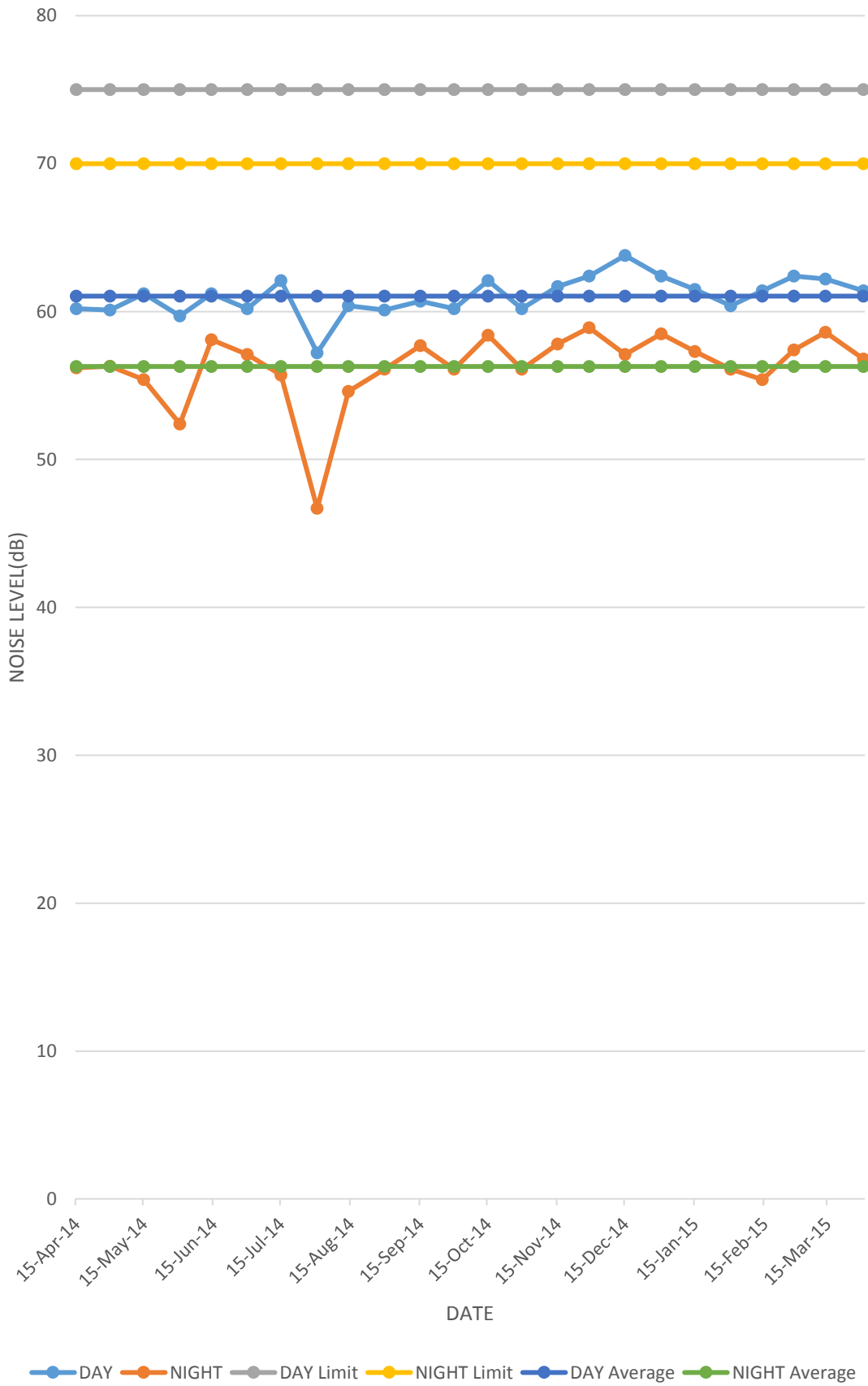
**Project: Chhendipada OCP**

**Monitoring Station: Near Mine working**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	60.2	56.2
30-Apr-14	60.1	56.3
15-May-14	61.2	55.4
31-May-14	59.7	52.4
14-Jun-14	61.2	58.1
30-Jun-14	60.2	57.1
15-Jul-14	62.1	55.7
31-Jul-14	57.2	46.7
14-Aug-14	60.4	54.6
30-Aug-14	60.1	56.1
15-Sep-14	60.7	57.7
30-Sep-14	60.2	56.1
15-Oct-14	62.1	58.4
30-Oct-14	60.2	56.1
15-Nov-14	61.7	57.8
29-Nov-14	62.4	58.9
15-Dec-14	63.8	57.1
31-Dec-14	62.4	58.5
15-Jan-15	61.5	57.3
31-Jan-15	60.4	56.1
14-Feb-15	61.4	55.4
28-Feb-15	62.4	57.4
14-Mar-15	62.2	58.6
31-Mar-15	61.4	56.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	<b>63.8</b>	<b>58.9</b>
<b>Minimum</b>	<b>57.2</b>	<b>46.7</b>
<b>Average</b>	<b>61.05</b>	<b>56.28</b>
<b>Standard</b>	<b>75</b>	<b>70</b>

*All values are in dB(A)*

Graph Showing NOISE for Near Mine Working



**Table : 77 Noise Level Data**

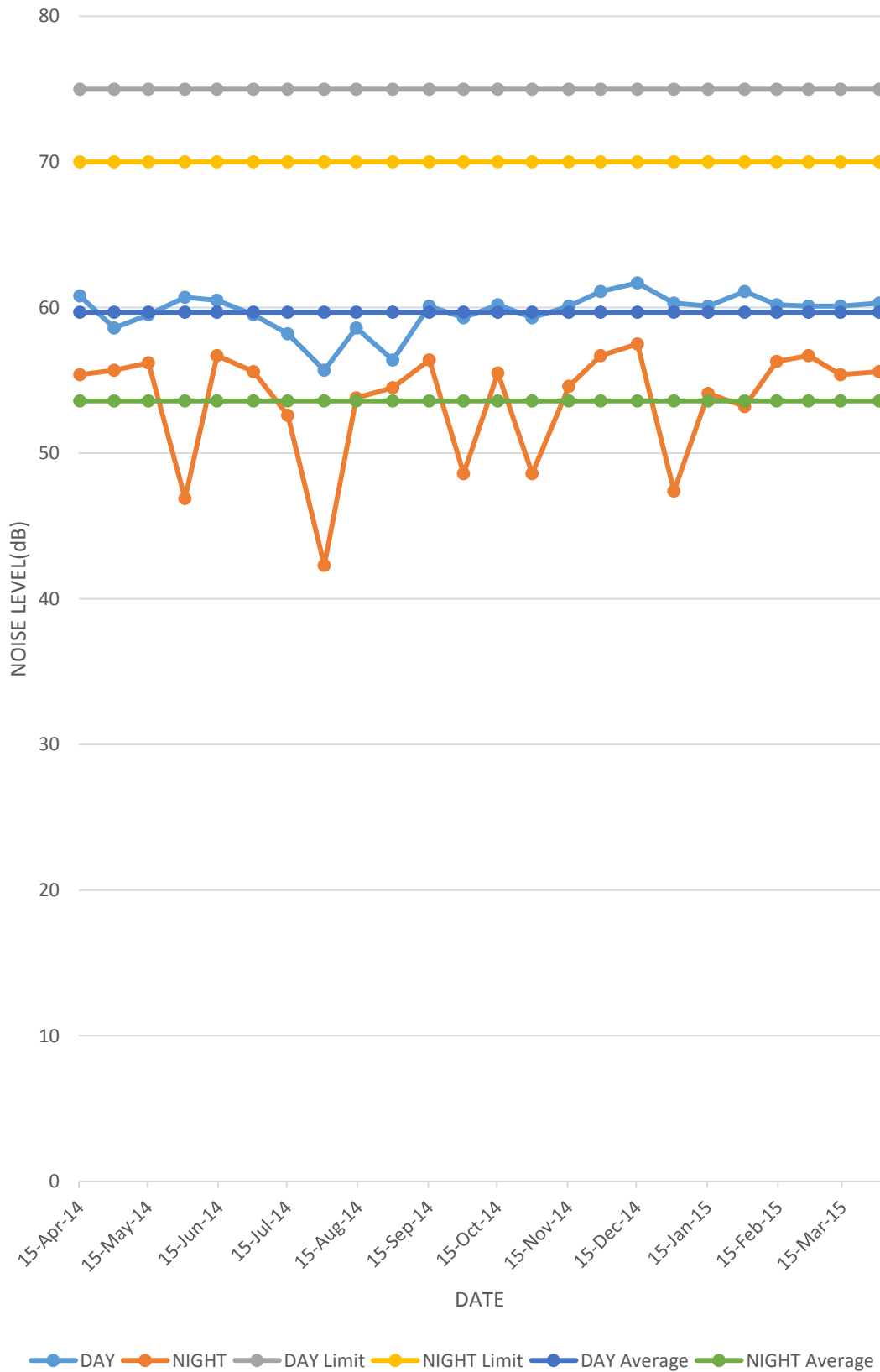
**Project: Chendipada OCP**

**Monitoring Station: Near Site office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	60.8	55.4
30-Apr-14	58.6	55.7
15-May-14	59.5	56.2
31-May-14	60.7	46.9
14-Jun-14	60.5	56.7
30-Jun-14	59.5	55.6
15-Jul-14	58.2	52.6
31-Jul-14	55.7	42.3
14-Aug-14	58.6	53.8
30-Aug-14	56.4	54.5
15-Sep-14	60.1	56.4
30-Sep-14	59.3	48.6
15-Oct-14	60.2	55.5
30-Oct-14	59.3	48.6
15-Nov-14	60.1	54.6
29-Nov-14	61.1	56.7
15-Dec-14	61.7	57.5
31-Dec-14	60.3	47.4
15-Jan-15	60.1	54.1
31-Jan-15	61.1	53.2
14-Feb-15	60.2	56.3
28-Feb-15	60.1	56.7
14-Mar-15	60.1	55.4
31-Mar-15	60.3	55.6
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	<b>61.7</b>	<b>57.5</b>
<b>Minimum</b>	<b>55.7</b>	<b>42.3</b>
<b>Average</b>	<b>59.69</b>	<b>53.60</b>
<b>Standard</b>	<b>75</b>	<b>70</b>

*All values are in dB(A)*

Graph Showing NOISE for Near Site Office



**Table : 78 Noise Level Data**

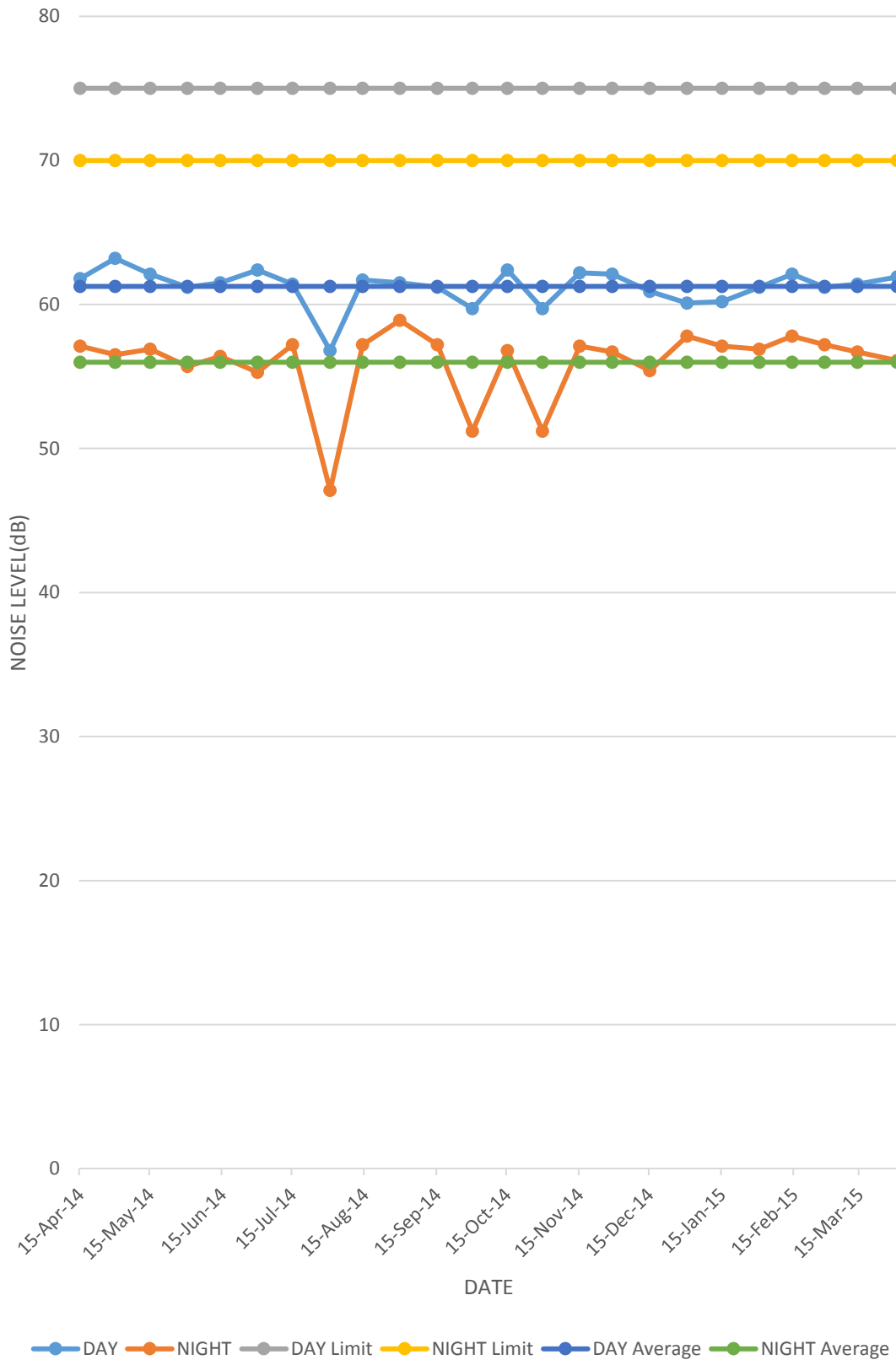
**Project: Chendipada OCP**

**Monitoring Station: Near Weigh Bridge**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	61.8	57.1
30-Apr-14	63.2	56.5
15-May-14	62.1	56.9
31-May-14	61.2	55.7
14-Jun-14	61.5	56.4
30-Jun-14	62.4	55.3
15-Jul-14	61.4	57.2
31-Jul-14	56.8	47.1
14-Aug-14	61.7	57.2
30-Aug-14	61.5	58.9
15-Sep-14	61.2	57.2
30-Sep-14	59.7	51.2
15-Oct-14	62.4	56.8
30-Oct-14	59.7	51.2
15-Nov-14	62.2	57.1
29-Nov-14	62.1	56.7
15-Dec-14	60.9	55.4
31-Dec-14	60.1	57.8
15-Jan-15	60.2	57.1
31-Jan-15	61.2	56.9
14-Feb-15	62.1	57.8
28-Feb-15	61.2	57.2
14-Mar-15	61.4	56.7
31-Mar-15	61.9	56.1
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	<b>63.2</b>	<b>58.9</b>
<b>Minimum</b>	<b>56.8</b>	<b>47.1</b>
<b>Average</b>	<b>61.25</b>	<b>55.98</b>
<b>Standard</b>	<b>75</b>	<b>70</b>

*All values are in dB(A)*

Graph Showing NOISE for Near Weigh Bridge



**Table : 79 Noise Level Data**

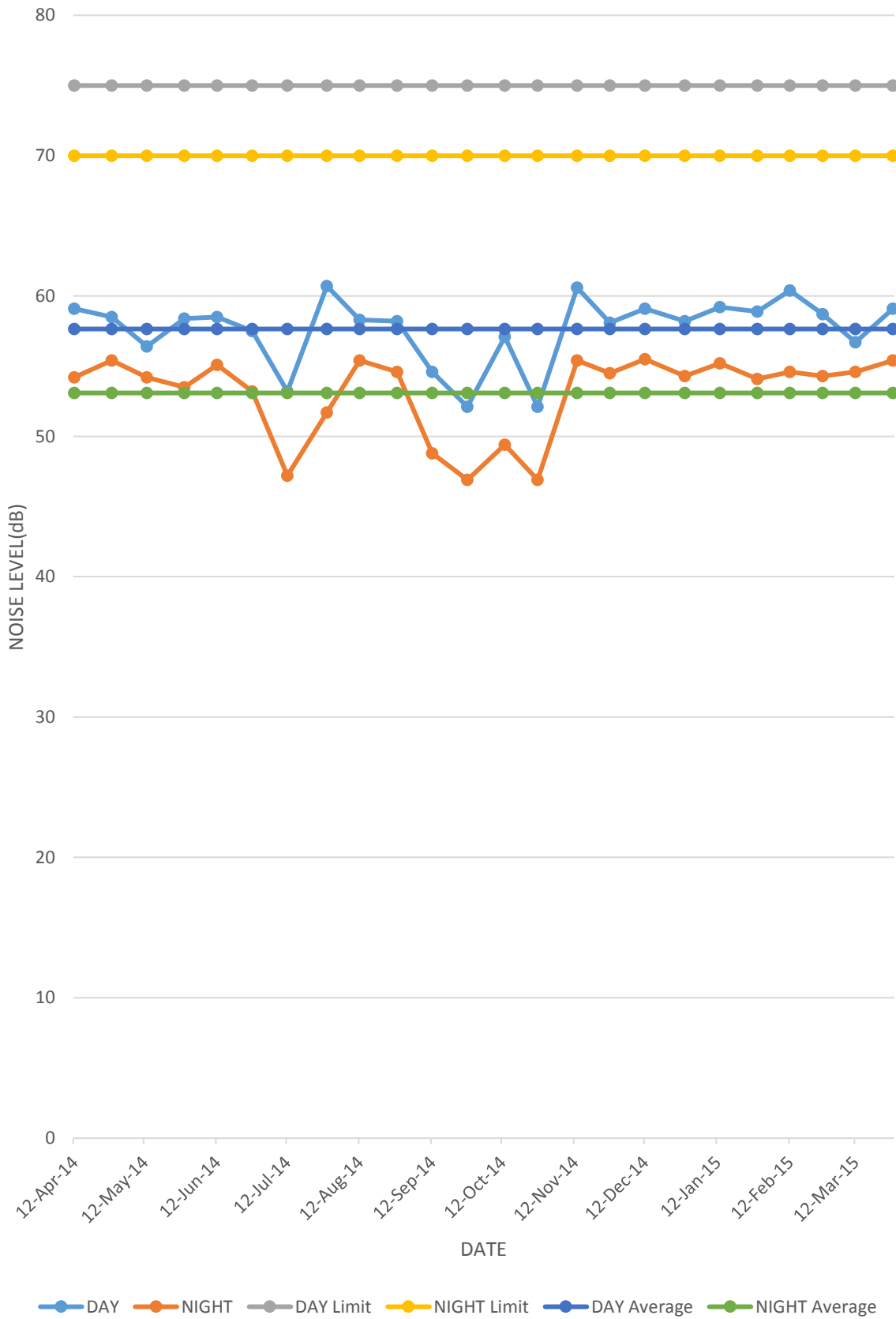
**Project: Lingaraj OCP**

**Monitoring Station: Lingaraj CGM Office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	59.1	54.2
28-Apr-14	58.5	55.4
13-May-14	56.4	54.2
29-May-14	58.4	53.5
12-Jun-14	58.5	55.1
27-Jun-14	57.5	53.2
12-Jul-14	53.2	47.2
29-Jul-14	60.7	51.7
12-Aug-14	58.3	55.4
28-Aug-14	58.2	54.6
12-Sep-14	54.6	48.8
27-Sep-14	52.1	46.9
13-Oct-14	57.1	49.4
27-Oct-14	52.1	46.9
13-Nov-14	60.6	55.4
27-Nov-14	58.1	54.5
12-Dec-14	59.1	55.5
29-Dec-14	58.2	54.3
13-Jan-15	59.2	55.2
29-Jan-15	58.9	54.1
12-Feb-15	60.4	54.6
26-Feb-15	58.7	54.3
12-Mar-15	56.7	54.6
28-Mar-15	59.1	55.4
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	60.70	55.50
<b>Minimum</b>	52.10	46.90
<b>Mean</b>	57.65	53.10
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Lingaraj CGM Office



**Table : 80 Noise Level Data**

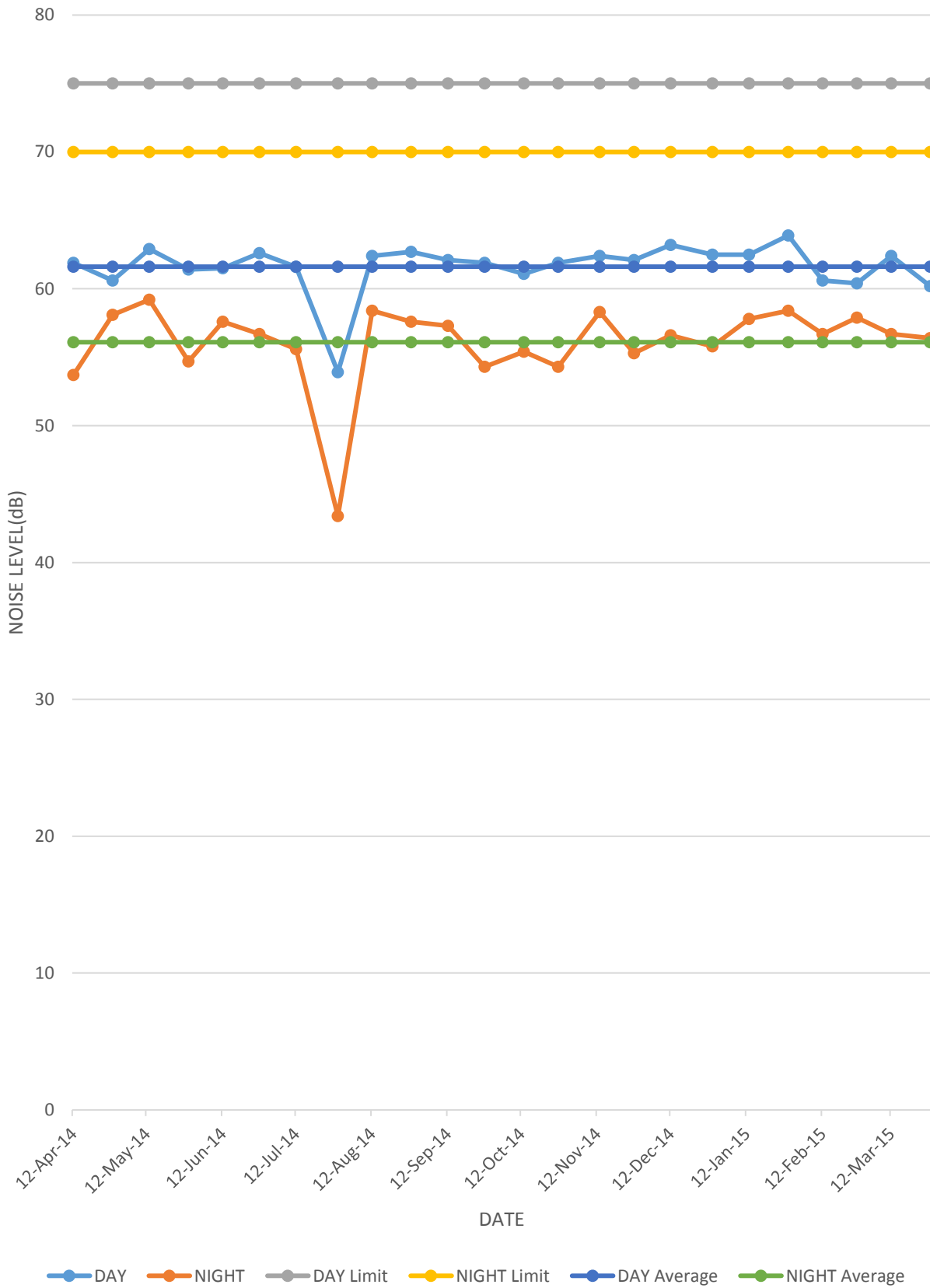
**Project: Lingaraj OCP**

**Monitoring Station: Near CT Road**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	61.9	53.7
28-Apr-14	60.6	58.1
13-May-14	62.9	59.2
29-May-14	61.4	54.7
12-Jun-14	61.5	57.6
27-Jun-14	62.6	56.7
12-Jul-14	61.6	55.6
29-Jul-14	53.9	43.4
12-Aug-14	62.4	58.4
28-Aug-14	62.7	57.6
12-Sep-14	62.1	57.3
27-Sep-14	61.9	54.3
13-Oct-14	61.1	55.4
27-Oct-14	61.9	54.3
13-Nov-14	62.4	58.3
27-Nov-14	62.1	55.3
12-Dec-14	63.2	56.6
29-Dec-14	62.5	55.8
13-Jan-15	62.5	57.8
29-Jan-15	63.9	58.4
12-Feb-15	60.6	56.7
26-Feb-15	60.4	57.9
12-Mar-15	62.4	56.7
28-Mar-15	60.2	56.4
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	63.90	59.20
<b>Minimum</b>	53.90	43.40
<b>Mean</b>	61.61	56.09
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Near CT Road (Lingaraj to Dera)

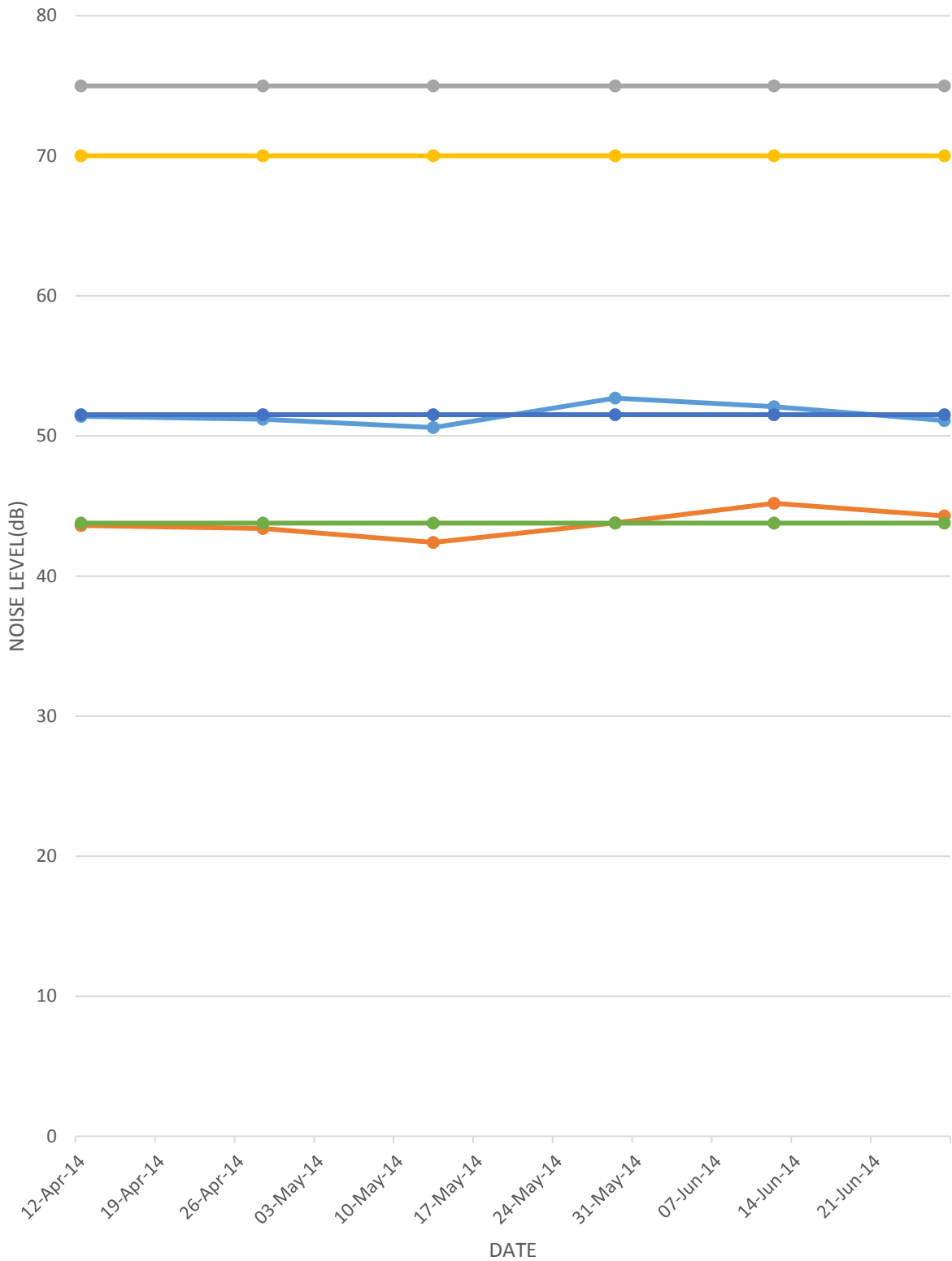


**Table : 81 Noise Level Data****Project: Lingaraj OCP****Monitoring Station: Kandhal Village/Langijoda Village**

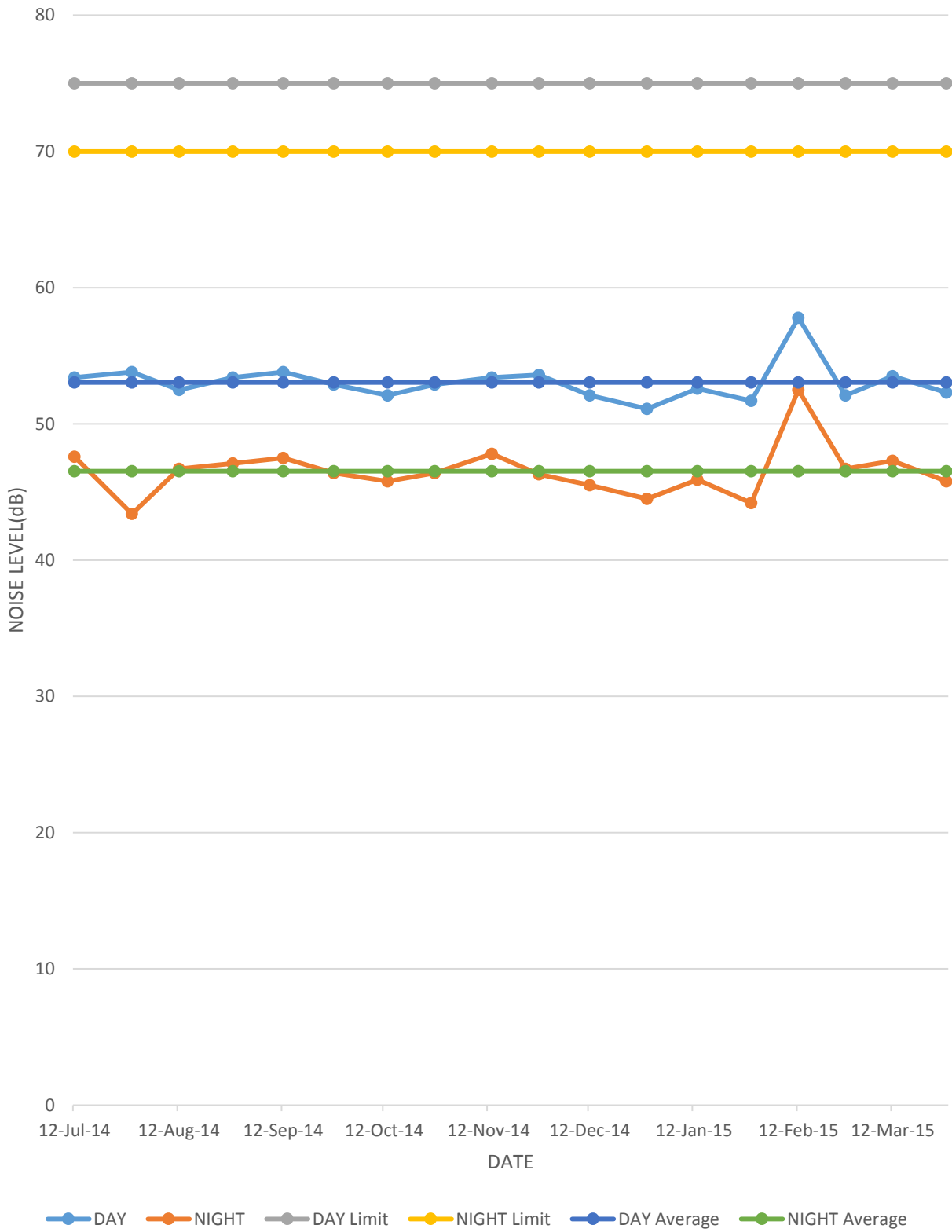
<b>DATE OF SAMPLING</b>	<b>STATION</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	Kandhal Village	51.4	43.6
28-Apr-14	Kandhal Village	51.2	43.4
13-May-14	Kandhal Village	50.6	42.4
29-May-14	Kandhal Village	52.7	43.8
12-Jun-14	Kandhal Village	52.1	45.2
27-Jun-14	Kandhal Village	51.1	44.3
12-Jul-14	Langijoda Village	53.4	47.6
29-Jul-14	Langijoda Village	53.8	43.4
12-Aug-14	Langijoda Village	52.5	46.7
28-Aug-14	Langijoda Village	53.4	47.1
12-Sep-14	Near Langijoda Village	53.8	47.5
27-Sep-14	Near Langijoda Village	52.9	46.4
13-Oct-14	Near Langijoda Village	52.1	45.8
27-Oct-14	Near Langijoda Village	52.9	46.4
13-Nov-14	Near Langijoda Village	53.4	47.8
27-Nov-14	Near Langijoda Village	53.6	46.3
12-Dec-14	Near Langijoda Village	52.1	45.5
29-Dec-14	Near Langijoda Village	51.1	44.5
13-Jan-15	Near Langijoda Village	52.6	45.9
29-Jan-15	Near Langijoda Village	51.7	44.2
12-Feb-15	Near Langijoda Village	57.8	52.5
26-Feb-15	Near Langijoda Village	52.1	46.7
12-Mar-15	Near Langijoda Village	53.5	47.3
28-Mar-15	Near Langijoda Village	52.3	45.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>	
<b>Maximum</b>	57.80	52.50	
<b>Minimum</b>	50.60	42.40	
<b>Mean</b>	52.67	45.84	
<b>Noise Standards</b>	75	70	

*All values are in dB(A)*

Graph Showing NOISE for Kandhal Village



Graph Showing NOISE for Near Langijoda Village



**Table : 82 Noise Level Data**

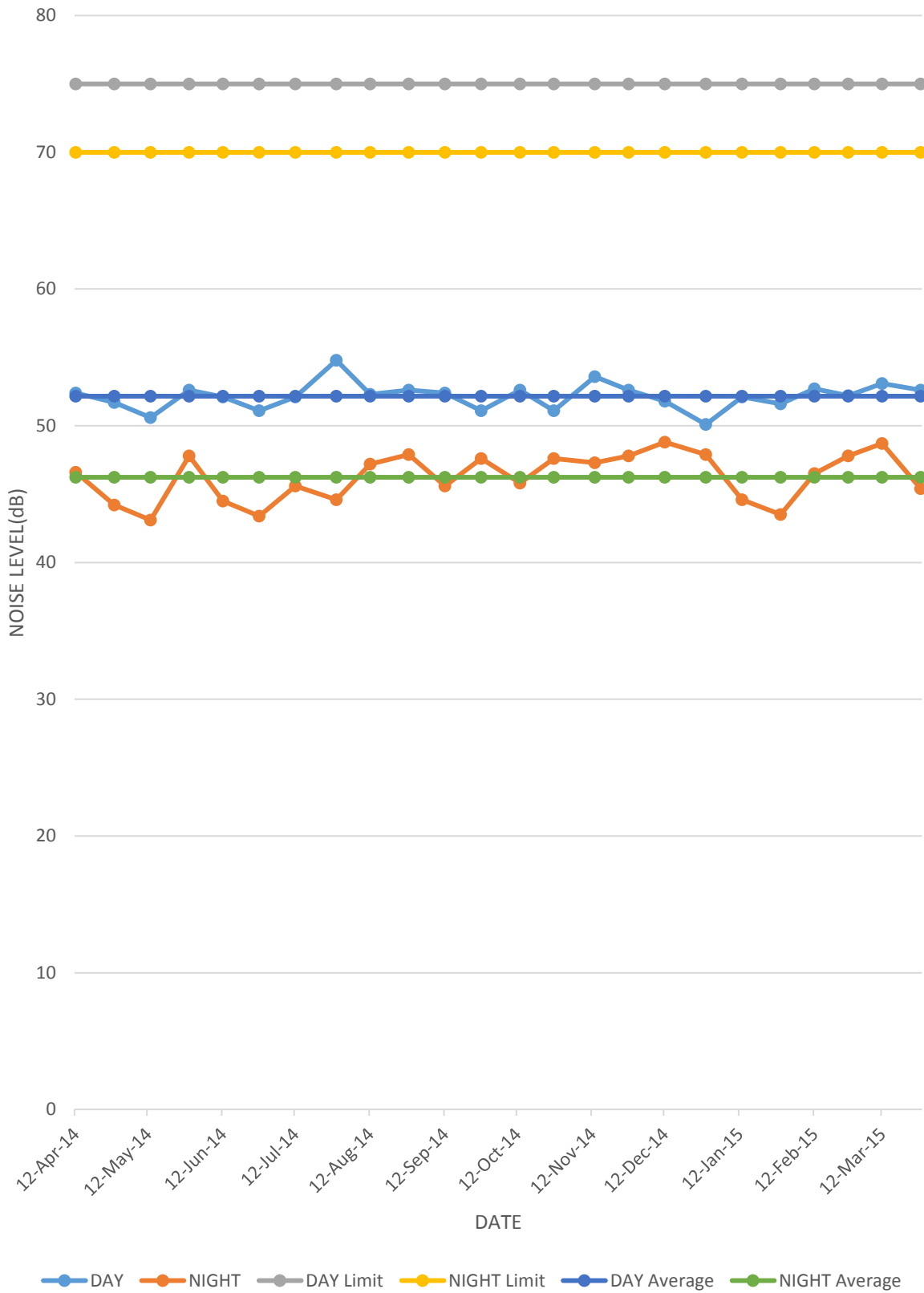
**Project: Lingaraj OCP**

**Monitoring Station: Near Radhakrishna Temple**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	52.4	46.6
28-Apr-14	51.7	44.2
13-May-14	50.6	43.1
29-May-14	52.6	47.8
12-Jun-14	52.1	44.5
27-Jun-14	51.1	43.4
12-Jul-14	52.1	45.6
29-Jul-14	54.8	44.6
12-Aug-14	52.3	47.2
28-Aug-14	52.6	47.9
12-Sep-14	52.4	45.6
27-Sep-14	51.1	47.6
13-Oct-14	52.6	45.8
27-Oct-14	51.1	47.6
13-Nov-14	53.6	47.3
27-Nov-14	52.6	47.8
12-Dec-14	51.8	48.8
29-Dec-14	50.1	47.9
13-Jan-15	52.1	44.6
29-Jan-15	51.6	43.5
12-Feb-15	52.7	46.5
26-Feb-15	52.2	47.8
12-Mar-15	53.1	48.7
28-Mar-15	52.6	45.4
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	54.80	48.80
<b>Minimum</b>	50.10	43.10
<b>Mean</b>	52.16	46.24
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Near Radhakrishna Temple



**Table : 83 Noise Level Data**

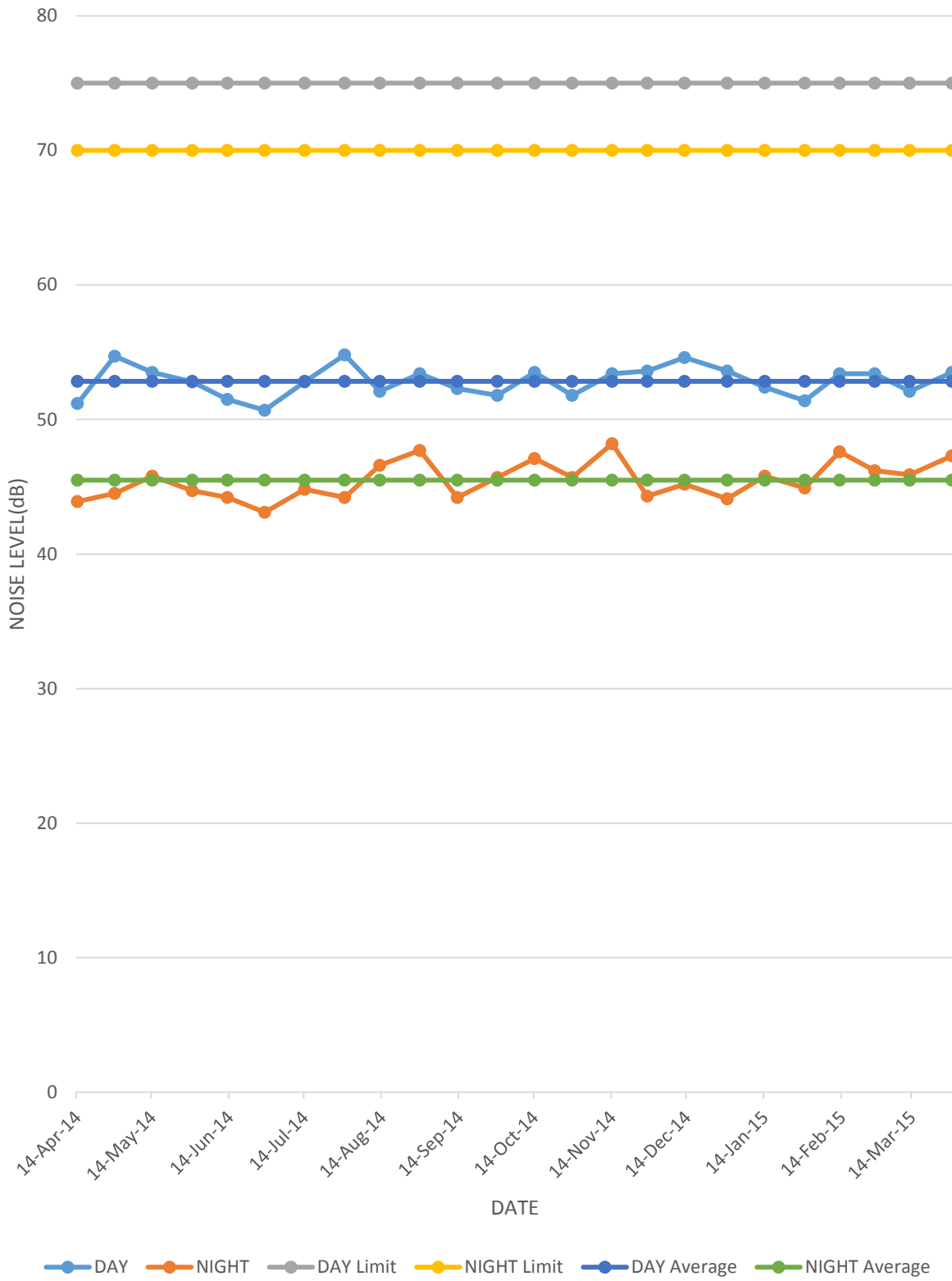
**Project: Kaniha OCP**

**Monitoring Station: Near Jarda Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	51.2	43.9
29-Apr-14	54.7	44.5
14-May-14	53.5	45.8
30-May-14	52.8	44.7
13-Jun-14	51.5	44.2
28-Jun-14	50.7	43.1
14-Jul-14	52.8	44.8
30-Jul-14	54.8	44.2
13-Aug-14	52.1	46.6
29-Aug-14	53.4	47.7
13-Sep-14	52.3	44.2
29-Sep-14	51.8	45.7
14-Oct-14	53.5	47.1
29-Oct-14	51.8	45.7
14-Nov-14	53.4	48.2
28-Nov-14	53.6	44.3
13-Dec-14	54.6	45.2
30-Dec-14	53.6	44.1
14-Jan-15	52.4	45.8
30-Jan-15	51.4	44.9
13-Feb-15	53.4	47.6
27-Feb-15	53.4	46.2
13-Mar-15	52.1	45.9
30-Mar-15	53.5	47.3
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	54.80	48.20
<b>Minimum</b>	50.70	43.10
<b>Mean</b>	52.85	45.49
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Near Jarda village



**Table : 84 Noise Quality Data**

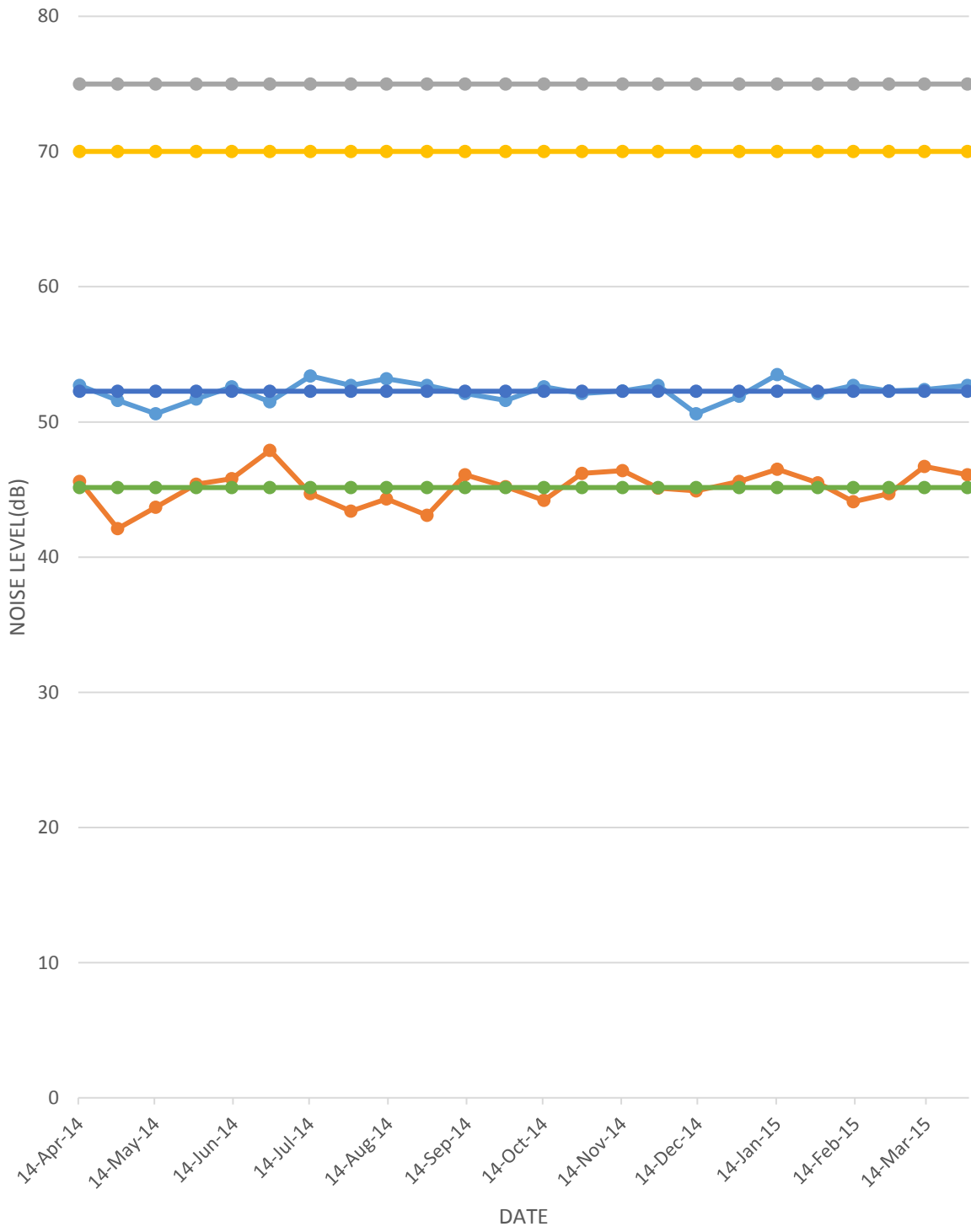
**Project: Kaniha OCP**

**Monitoring Station: Patharmunda Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	52.7	45.6
29-Apr-14	51.6	42.1
14-May-14	50.6	43.7
30-May-14	51.7	45.4
13-Jun-14	52.6	45.8
28-Jun-14	51.5	47.9
14-Jul-14	53.4	44.7
30-Jul-14	52.7	43.4
13-Aug-14	53.2	44.3
29-Aug-14	52.7	43.1
13-Sep-14	52.1	46.1
29-Sep-14	51.6	45.2
14-Oct-14	52.6	44.2
29-Oct-14	52.1	46.2
14-Nov-14	52.3	46.4
28-Nov-14	52.7	45.1
13-Dec-14	50.6	44.9
30-Dec-14	51.9	45.6
14-Jan-15	53.5	46.5
30-Jan-15	52.1	45.5
13-Feb-15	52.7	44.1
27-Feb-15	52.3	44.7
13-Mar-15	52.4	46.7
30-Mar-15	52.7	46.1
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	53.50	47.90
<b>Minimum</b>	50.60	42.10
<b>Mean</b>	52.26	45.14
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Patharmunda Village



**Table : 85 Noise Quality Data**

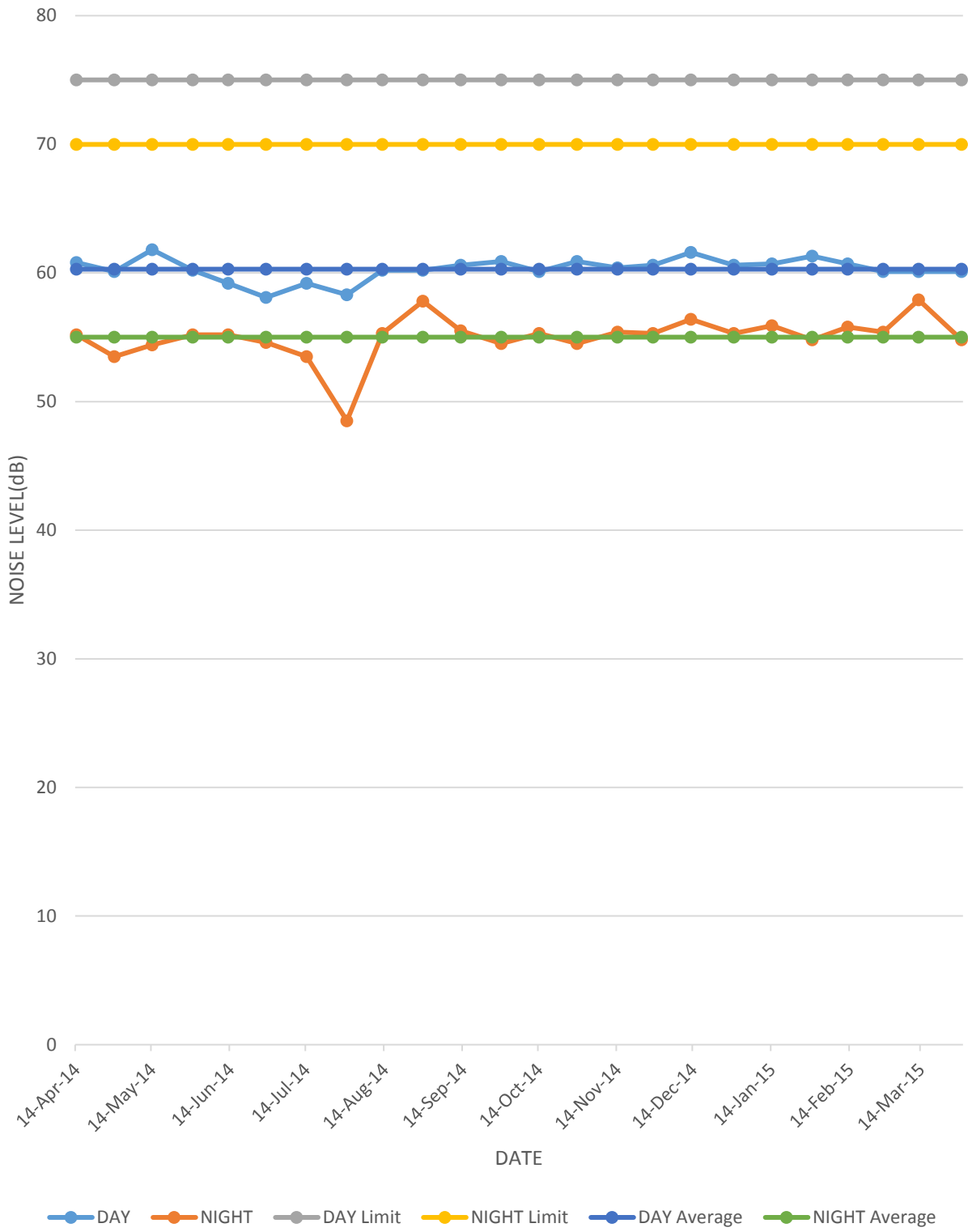
**Project: Kaniha OCP**

**Monitoring Station: Site Office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	60.8	55.2
29-Apr-14	60.1	53.5
14-May-14	61.8	54.4
30-May-14	60.2	55.2
13-Jun-14	59.2	55.2
28-Jun-14	58.1	54.6
14-Jul-14	59.2	53.5
30-Jul-14	58.3	48.5
13-Aug-14	60.2	55.3
29-Aug-14	60.2	57.8
13-Sep-14	60.6	55.5
29-Sep-14	60.9	54.5
14-Oct-14	60.1	55.3
29-Oct-14	60.9	54.5
14-Nov-14	60.4	55.4
28-Nov-14	60.6	55.3
13-Dec-14	61.6	56.4
30-Dec-14	60.6	55.3
14-Jan-15	60.7	55.9
30-Jan-15	61.3	54.8
13-Feb-15	60.7	55.8
27-Feb-15	60.1	55.4
13-Mar-15	60.1	57.9
30-Mar-15	60.1	54.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	61.80	57.90
<b>Minimum</b>	58.10	48.50
<b>Mean</b>	60.28	55.00
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Site Office



**Table : 86 Noise Quality Data**

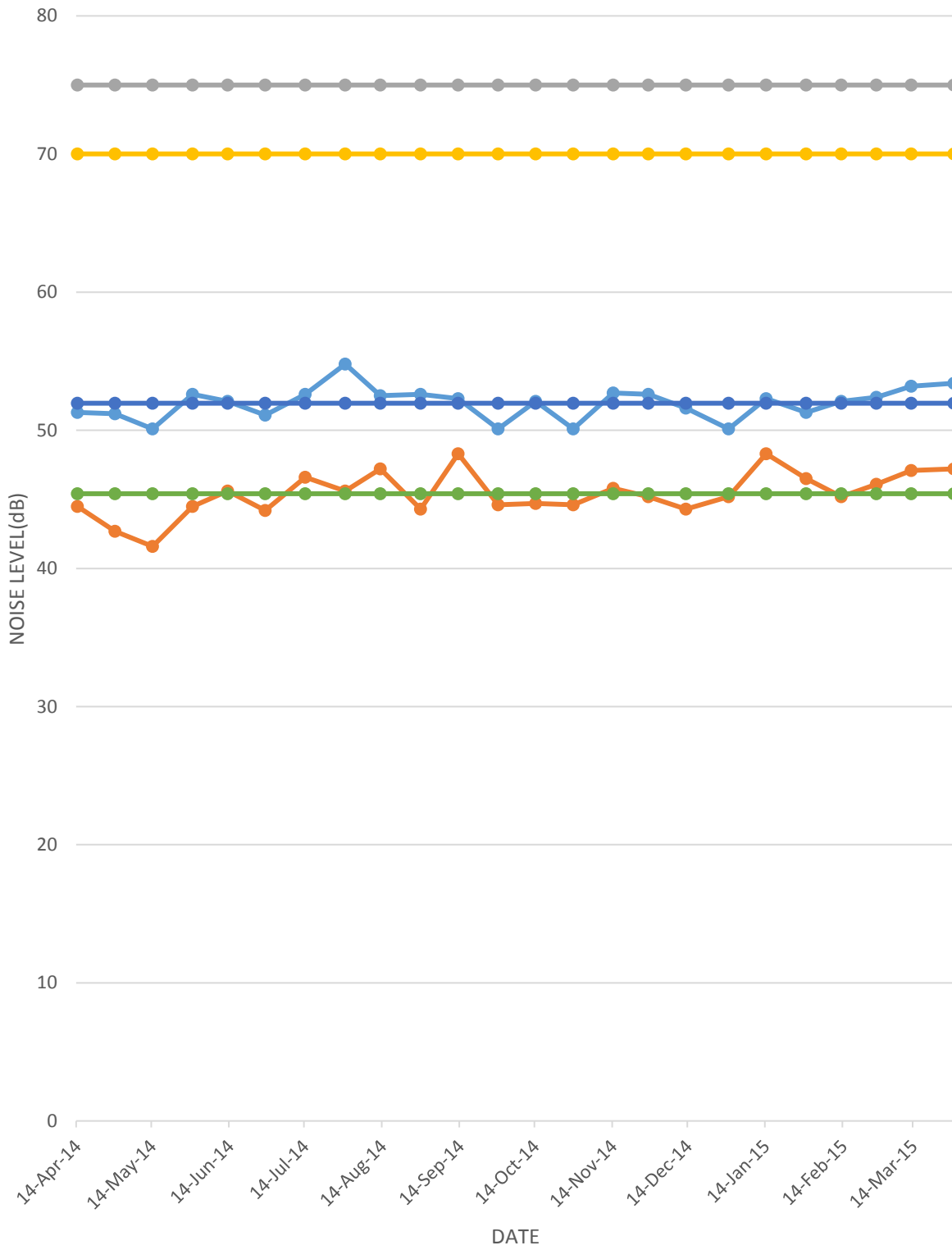
**Project: Kaniha OCP**

**Monitoring Station: Telisingha Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
14-Apr-14	51.3	44.5
29-Apr-14	51.2	42.7
14-May-14	50.1	41.6
30-May-14	52.6	44.5
13-Jun-14	52.1	45.6
28-Jun-14	51.1	44.2
14-Jul-14	52.6	46.6
30-Jul-14	54.8	45.6
13-Aug-14	52.5	47.2
29-Aug-14	52.6	44.3
13-Sep-14	52.3	48.3
29-Sep-14	50.1	44.6
14-Oct-14	52.1	44.7
29-Oct-14	50.1	44.6
14-Nov-14	52.7	45.8
28-Nov-14	52.6	45.2
13-Dec-14	51.6	44.3
30-Dec-14	50.1	45.2
14-Jan-15	52.3	48.3
30-Jan-15	51.3	46.5
13-Feb-15	52.1	45.2
27-Feb-15	52.4	46.1
13-Mar-15	53.2	47.1
30-Mar-15	53.4	47.2
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	54.80	48.30
<b>Minimum</b>	50.10	41.60
<b>Mean</b>	51.97	45.41
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Telisingha Village



**Table : 87 Noise Level Data**

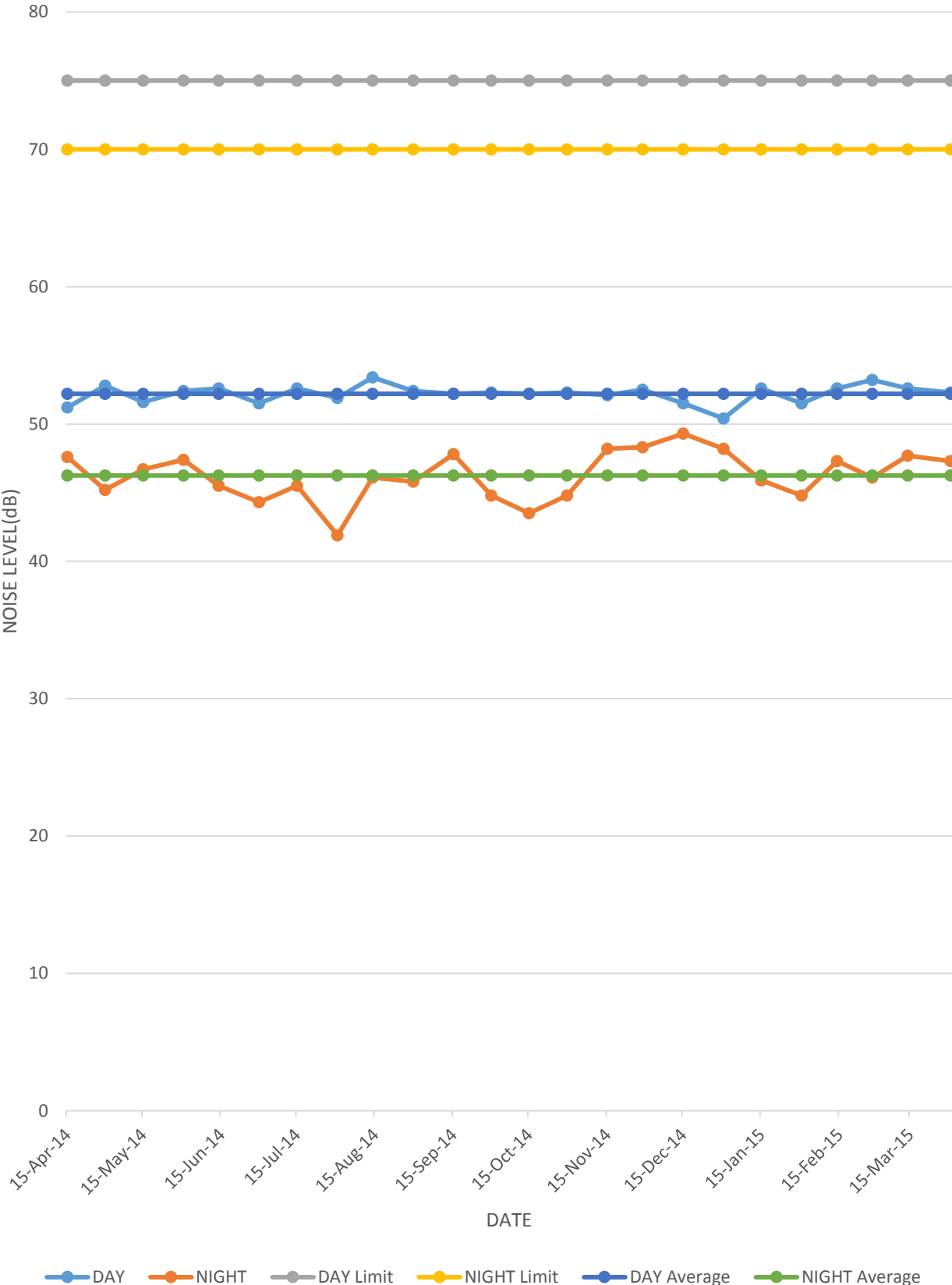
**Project: Hingula OCP**

**Monitoring Station: Bhalugadia Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	51.2	47.6
30-Apr-14	52.8	45.2
15-May-14	51.6	46.7
31-May-14	52.4	47.4
14-Jun-14	52.6	45.5
30-Jun-14	51.5	44.3
15-Jul-14	52.6	45.5
31-Jul-14	51.9	41.9
14-Aug-14	53.4	46.1
30-Aug-14	52.4	45.8
15-Sep-14	52.2	47.8
30-Sep-14	52.3	44.8
15-Oct-14	52.2	43.5
30-Oct-14	52.3	44.8
15-Nov-14	52.1	48.2
29-Nov-14	52.5	48.3
15-Dec-14	51.5	49.3
31-Dec-14	50.4	48.2
15-Jan-15	52.6	45.9
31-Jan-15	51.5	44.8
14-Feb-15	52.6	47.3
28-Feb-15	53.2	46.1
14-Mar-15	52.6	47.7
31-Mar-15	52.3	47.3
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	53.40	49.30
<b>Minimum</b>	50.40	41.90
<b>Mean</b>	52.20	46.25
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Bhalugadia Village

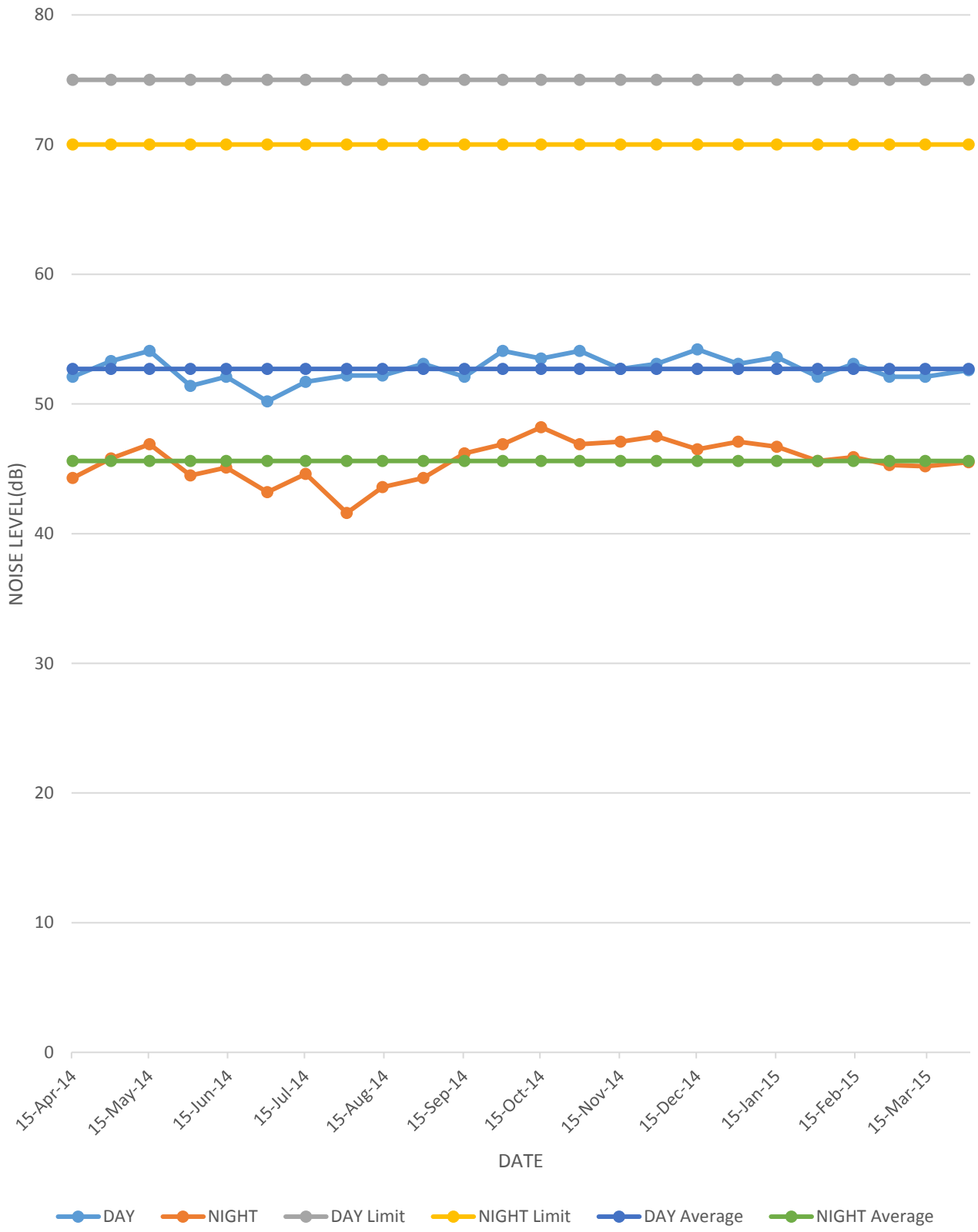


**Table : 88 Noise Level Data****Project: Hingula OCP****Monitoring Station: Gopalprasad Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	52.1	44.3
30-Apr-14	53.3	45.8
15-May-14	54.1	46.9
31-May-14	51.4	44.5
14-Jun-14	52.1	45.1
30-Jun-14	50.2	43.2
15-Jul-14	51.7	44.6
31-Jul-14	52.2	41.6
14-Aug-14	52.2	43.6
30-Aug-14	53.1	44.3
15-Sep-14	52.1	46.2
30-Sep-14	54.1	46.9
15-Oct-14	53.5	48.2
30-Oct-14	54.1	46.9
15-Nov-14	52.7	47.1
29-Nov-14	53.1	47.5
15-Dec-14	54.2	46.5
31-Dec-14	53.1	47.1
15-Jan-15	53.6	46.7
31-Jan-15	52.1	45.6
14-Feb-15	53.1	45.9
28-Feb-15	52.1	45.3
14-Mar-15	52.1	45.2
31-Mar-15	52.6	45.5
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	54.20	48.20
<b>Minimum</b>	50.20	41.60
<b>Mean</b>	52.70	45.60
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Gopalprasad Village



**Table : 89 Noise Level Data**

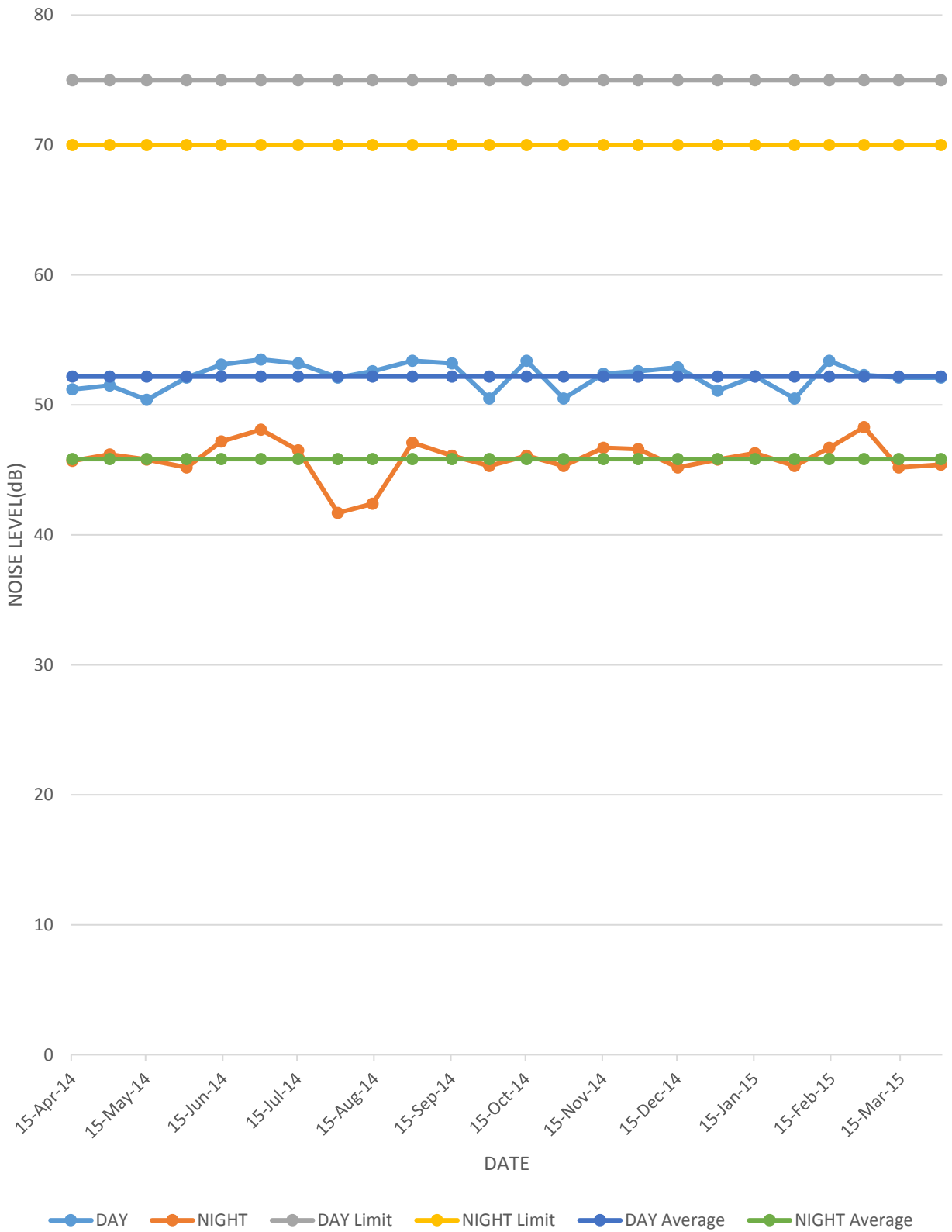
**Project: Hingula OCP**

**Monitoring Station: Malibanda Village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	51.2	45.7
30-Apr-14	51.5	46.2
15-May-14	50.4	45.8
31-May-14	52.1	45.2
14-Jun-14	53.1	47.2
30-Jun-14	53.5	48.1
15-Jul-14	53.2	46.5
31-Jul-14	52.1	41.7
14-Aug-14	52.6	42.4
30-Aug-14	53.4	47.1
15-Sep-14	53.2	46.1
30-Sep-14	50.5	45.3
15-Oct-14	53.4	46.1
30-Oct-14	50.5	45.3
15-Nov-14	52.4	46.7
29-Nov-14	52.6	46.6
15-Dec-14	52.9	45.2
31-Dec-14	51.1	45.8
15-Jan-15	52.2	46.3
31-Jan-15	50.5	45.3
14-Feb-15	53.4	46.7
28-Feb-15	52.3	48.3
14-Mar-15	52.1	45.2
31-Mar-15	52.1	45.4
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	53.50	48.30
<b>Minimum</b>	50.40	41.70
<b>Mean</b>	52.18	45.84
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Malibandha Village



**Table : 90 Noise Level Data**

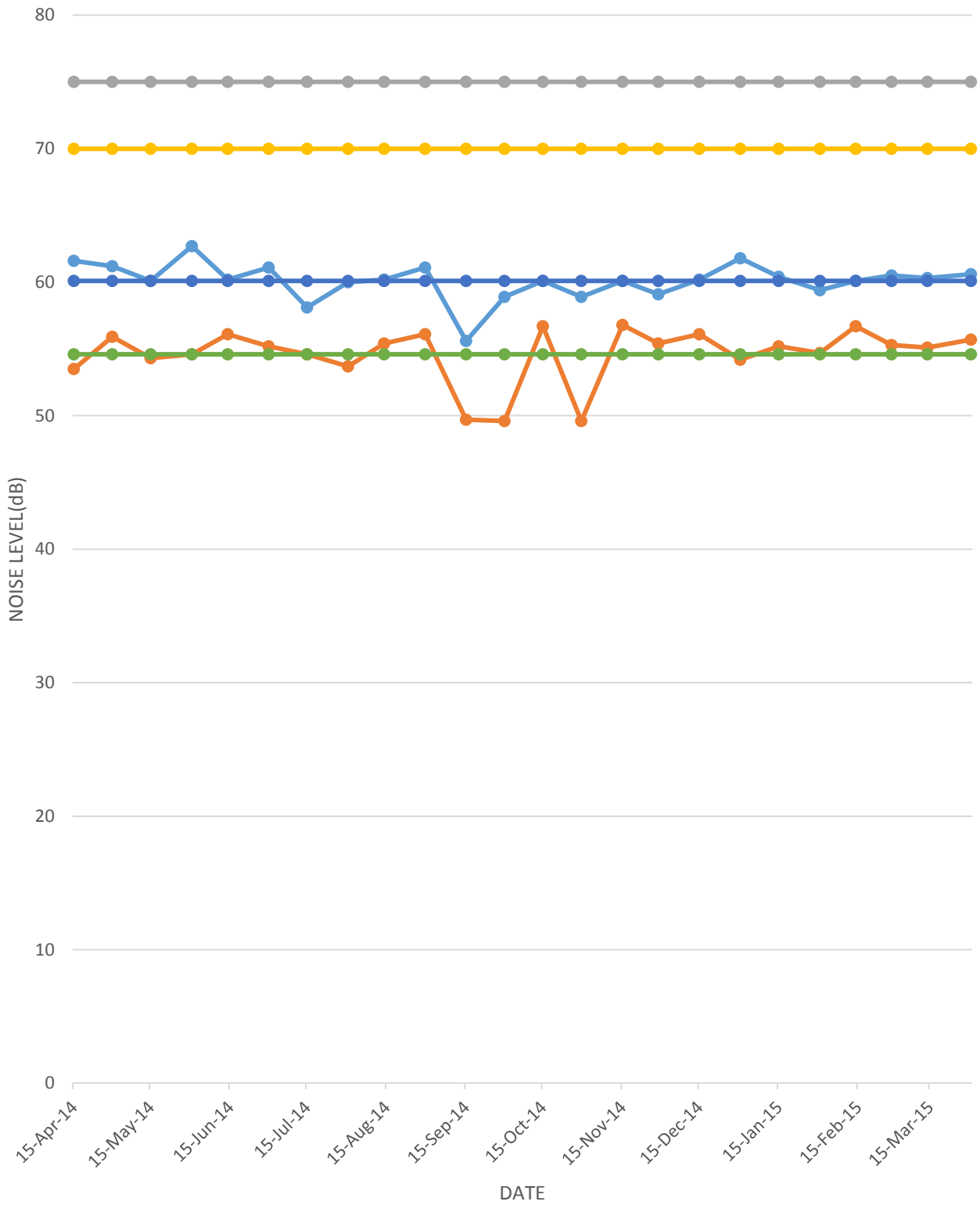
**Project: Hingula OCP**

**Monitoring Station:Project Office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	61.6	53.5
30-Apr-14	61.2	55.9
15-May-14	60.1	54.3
31-May-14	62.7	54.6
14-Jun-14	60.2	56.1
30-Jun-14	61.1	55.2
15-Jul-14	58.1	54.6
31-Jul-14	60	53.7
14-Aug-14	60.2	55.4
30-Aug-14	61.1	56.1
15-Sep-14	55.6	49.7
30-Sep-14	58.9	49.6
15-Oct-14	60.1	56.7
30-Oct-14	58.9	49.6
15-Nov-14	60.1	56.8
29-Nov-14	59.1	55.4
15-Dec-14	60.2	56.1
31-Dec-14	61.8	54.2
15-Jan-15	60.4	55.2
31-Jan-15	59.4	54.7
14-Feb-15	60.1	56.7
28-Feb-15	60.5	55.3
14-Mar-15	60.3	55.1
31-Mar-15	60.6	55.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	62.70	56.80
<b>Minimum</b>	55.60	49.60
<b>Mean</b>	60.10	54.59
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Project Office



**Table : 91 Noise Level Data**

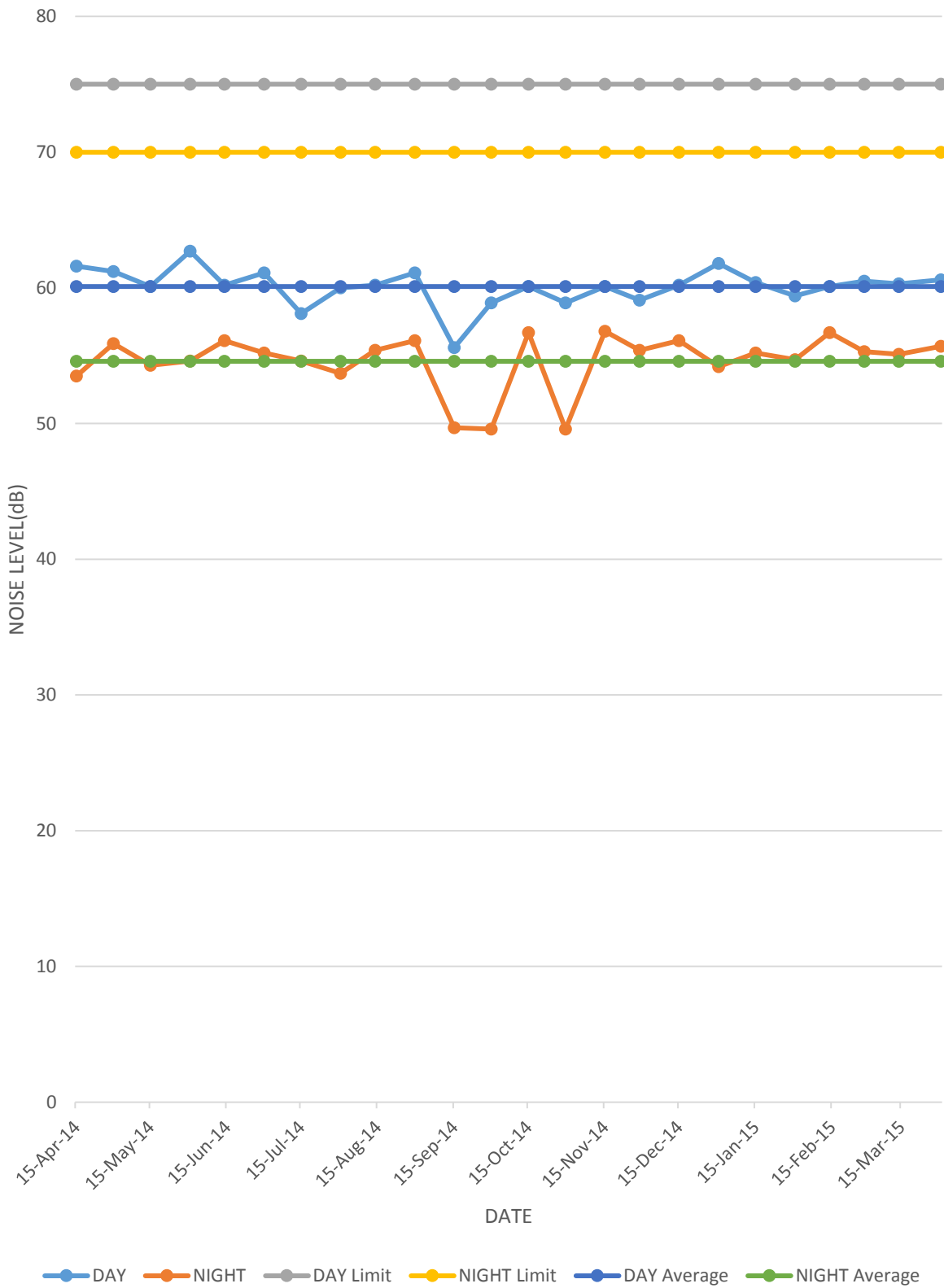
**Project: Balaram OCP**

**Monitoring Station:Project Office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
15-Apr-14	61.6	53.5
30-Apr-14	61.2	55.9
15-May-14	60.1	54.3
31-May-14	62.7	54.6
14-Jun-14	60.2	56.1
30-Jun-14	61.1	55.2
15-Jul-14	58.1	54.6
31-Jul-14	60	53.7
14-Aug-14	60.2	55.4
30-Aug-14	61.1	56.1
15-Sep-14	55.6	49.7
30-Sep-14	58.9	49.6
15-Oct-14	60.1	56.7
30-Oct-14	58.9	49.6
15-Nov-14	60.1	56.8
29-Nov-14	59.1	55.4
15-Dec-14	60.2	56.1
31-Dec-14	61.8	54.2
15-Jan-15	60.4	55.2
31-Jan-15	59.4	54.7
14-Feb-15	60.1	56.7
28-Feb-15	60.5	55.3
14-Mar-15	60.3	55.1
31-Mar-15	60.6	55.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	62.70	56.80
<b>Minimum</b>	55.60	49.60
<b>Mean</b>	60.10	54.59
<b>Noise Standards</b>	75	70

*All values are in dB (A)*

Graph Showing NOISE for Project Office

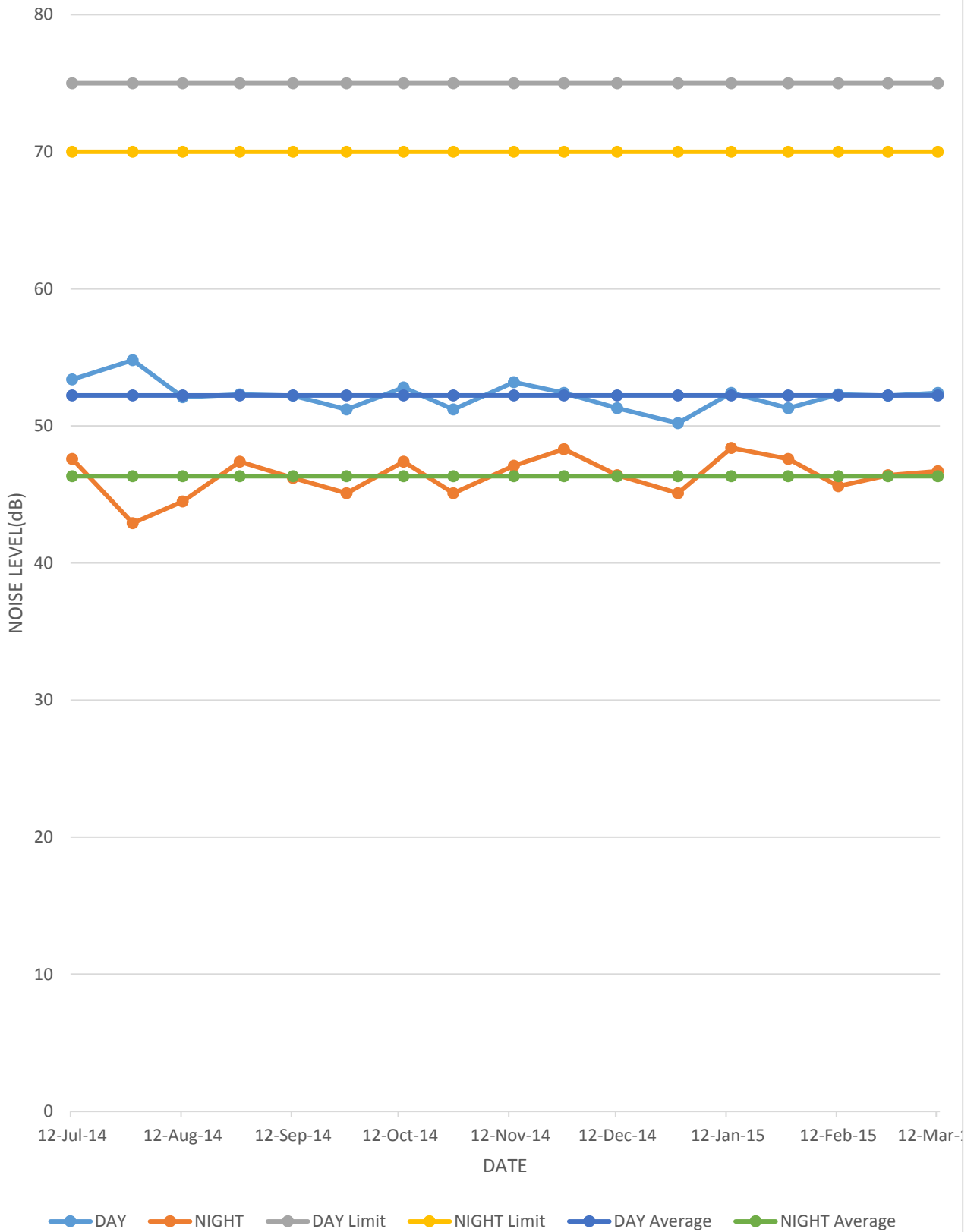


**Table : 92 Noise Level Data****Project: Balaram OCP****Monitoring Station:Nakeipasi village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Jul-14	53.4	47.6
29-Jul-14	54.8	42.9
12-Aug-14	52.1	44.5
28-Aug-14	52.3	47.4
12-Sep-14	52.2	46.2
27-Sep-14	51.2	45.1
13-Oct-14	52.8	47.4
27-Oct-14	51.2	45.1
13-Nov-14	53.2	47.1
27-Nov-14	52.4	48.3
12-Dec-14	51.3	46.4
29-Dec-14	50.2	45.1
13-Jan-15	52.4	48.4
29-Jan-15	51.3	47.6
12-Feb-15	52.3	45.6
26-Feb-15	52.2	46.4
12-Mar-15	52.4	46.7
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	54.80	48.40
<b>Minimum</b>	50.20	42.90
<b>Mean</b>	52.22	46.34
<b>Noise Standards</b>	75	70

*All Values are in dB(A)*

Graph Showing NOISE for Nakeipasi Village



**Table : 93 Noise Level Data**

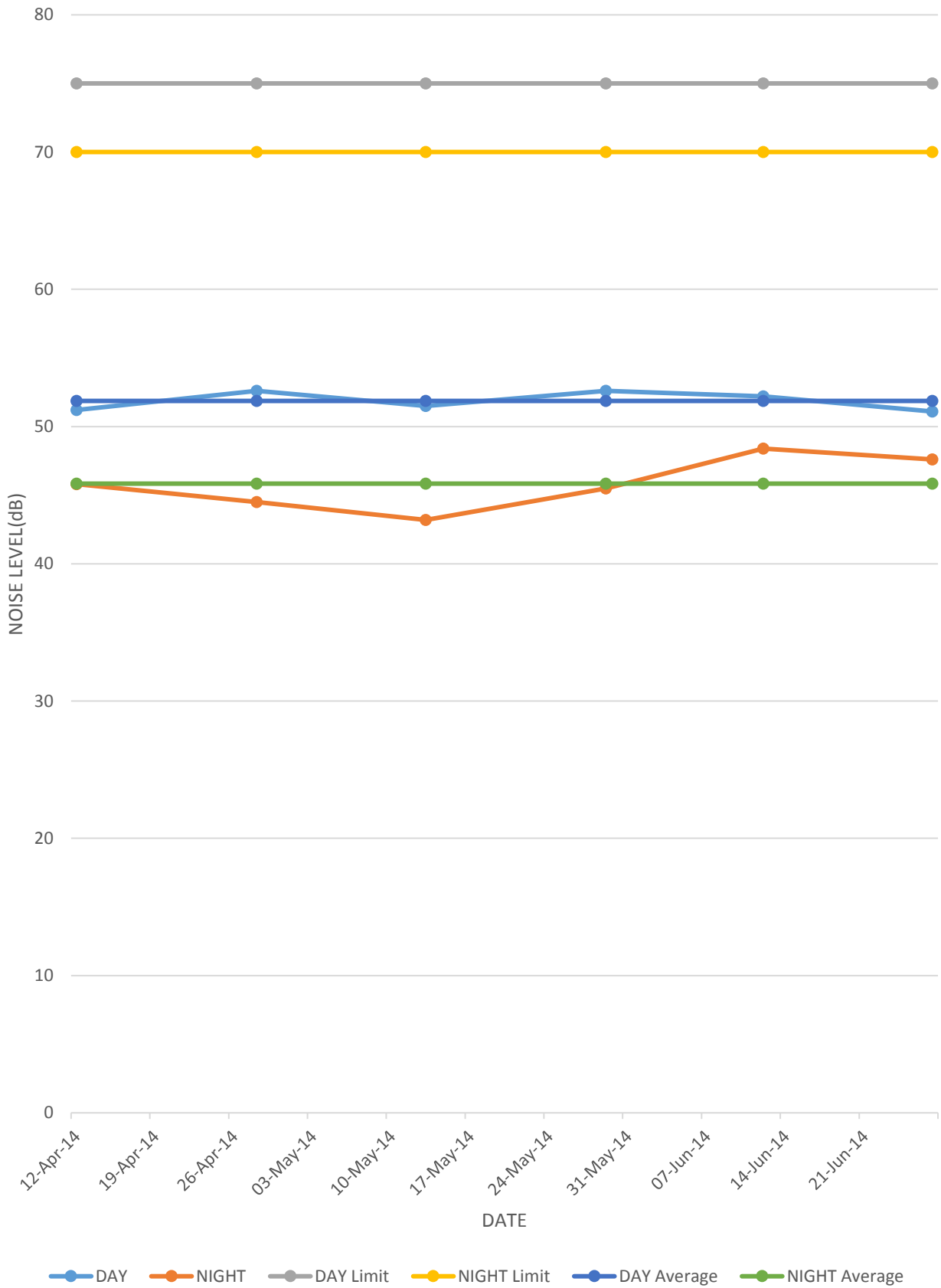
**Project: Balaram OCP**

**Monitoring Station: Danara village**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	51.2	45.8
28-Apr-14	52.6	44.5
13-May-14	51.5	43.2
29-May-14	52.6	45.5
12-Jun-14	52.2	48.4
27-Jun-14	51.1	47.6
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	52.60	48.40
<b>Minimum</b>	51.10	43.20
<b>Mean</b>	51.87	45.83
<b>Noise Standards</b>	75	70

*All Values are in dB(A)*

Graph Showing NOISE for Danara Village

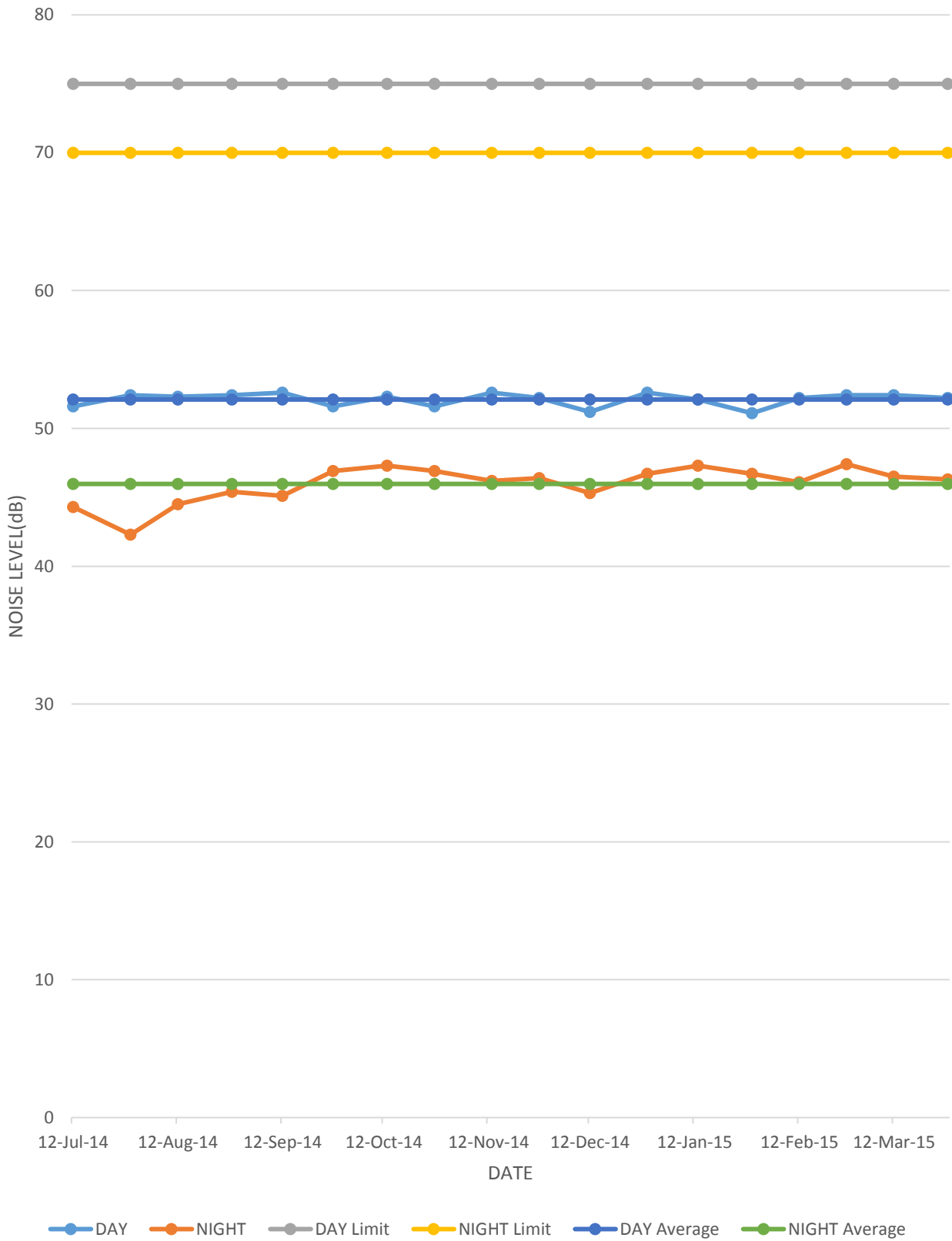


**Table : 94 Noise Level Data****Project: Balaram OCP****Monitoring Station: Solada village/Natada Village**

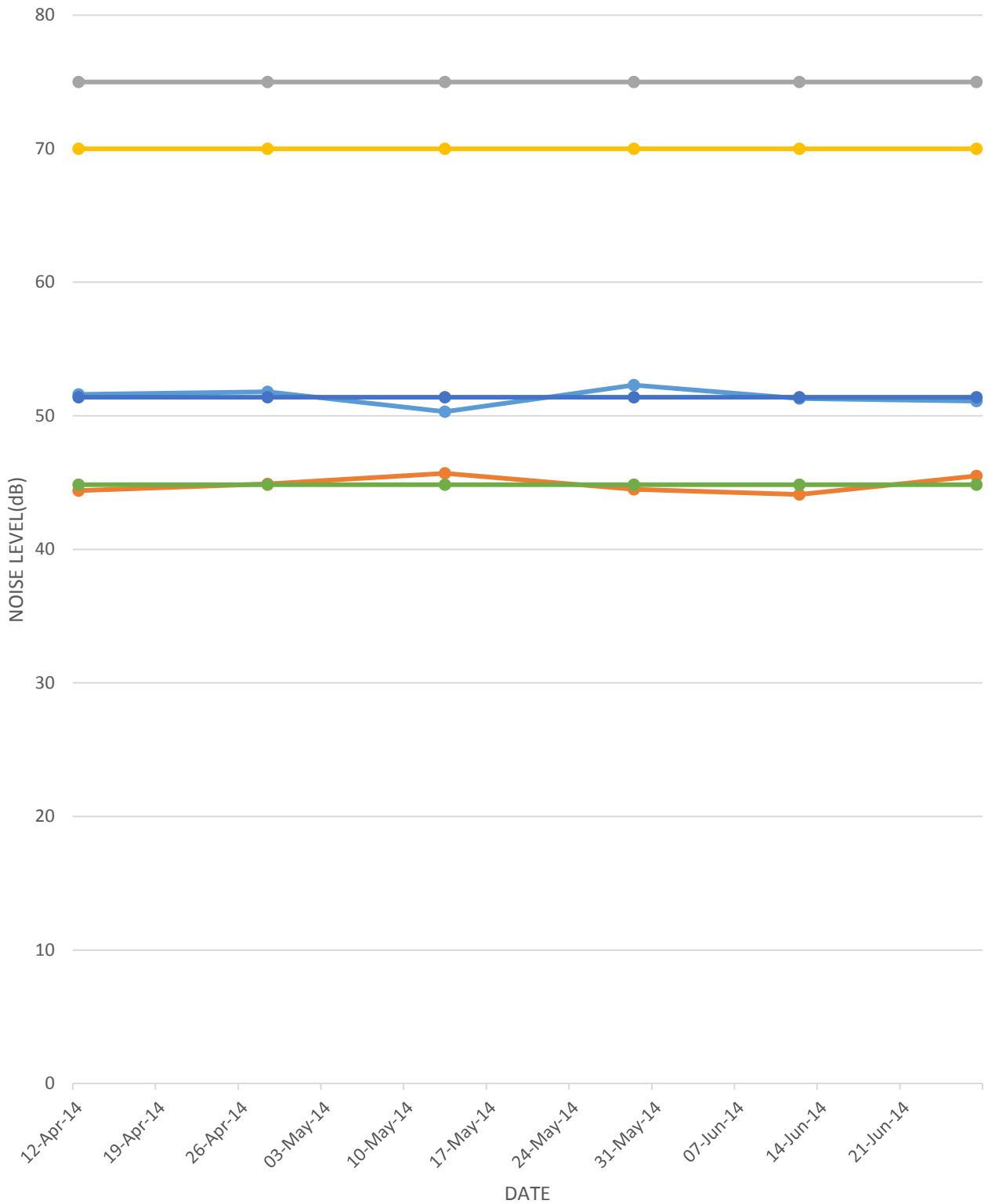
<b>DATE OF SAMPLING</b>	<b>STATION</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	Solada Village	51.6	44.4
28-Apr-14	Solada Village	51.8	44.9
13-May-14	Solada Village	50.3	45.7
29-May-14	Solada Village	52.3	44.5
12-Jun-14	Solada Village	51.3	44.1
27-Jun-14	Solada Village	51.1	45.5
12-Jul-14	Natada Village	51.6	44.3
29-Jul-14	Natada Village	52.4	42.3
12-Aug-14	Natada Village	52.3	44.5
28-Aug-14	Natada Village	52.4	45.4
12-Sep-14	Natada Village	52.6	45.1
27-Sep-14	Natada Village	51.6	46.9
13-Oct-14	Natada Village	52.3	47.3
27-Oct-14	Natada Village	51.6	46.9
13-Nov-14	Natada Village	52.6	46.2
27-Nov-14	Natada Village	52.2	46.4
12-Dec-14	Natada Village	51.2	45.3
29-Dec-14	Natada Village	52.6	46.7
13-Jan-15	Natada Village	52.1	47.3
29-Jan-15	Natada Village	51.1	46.7
12-Feb-15	Natada Village	52.2	46.1
26-Feb-15	Natada Village	52.4	47.4
12-Mar-15	Natada Village	52.4	46.5
28-Mar-15	Natada Village	52.2	46.3
	<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
	<b>Maximum</b>	52.60	47.40
	<b>Minimum</b>	51.10	42.30
	<b>Mean</b>	52.10	45.98
	<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Natada Village



Graph Showing NOISE for Solada Village



**Table : 95 Noise Level Data**

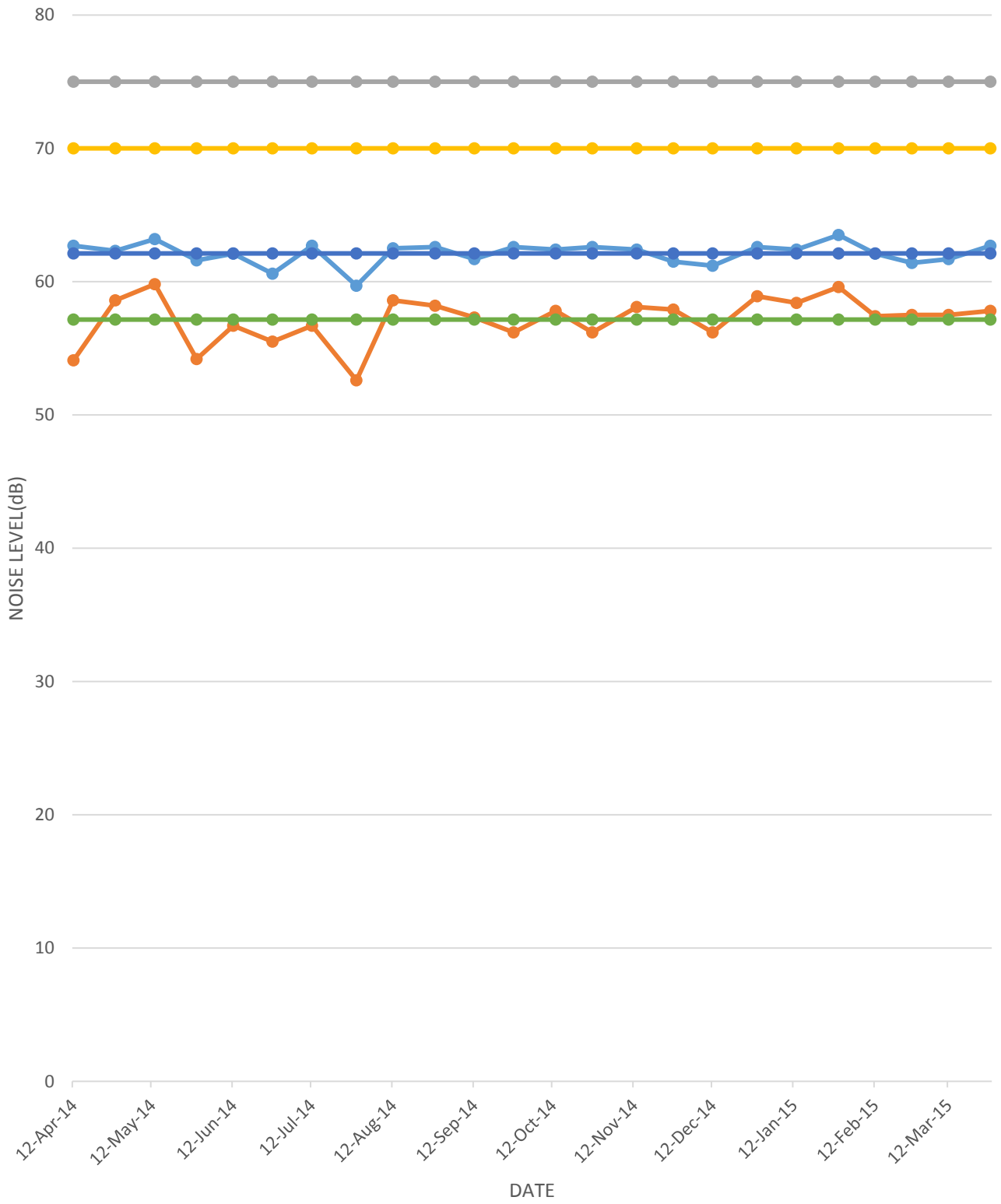
**Project: Balaram OCP**

**Monitoring Station: On backfilled area near dozer shed**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Jul-14	62.7	56.7
29-Jul-14	59.7	52.6
12-Aug-14	62.5	58.6
28-Aug-14	62.6	58.2
12-Sep-14	61.7	57.3
27-Sep-14	62.6	56.2
13-Oct-14	62.4	57.8
27-Oct-14	62.6	56.2
13-Nov-14	62.4	58.1
27-Nov-14	61.5	57.9
12-Dec-14	61.2	56.2
29-Dec-14	62.6	58.9
13-Jan-15	62.4	58.4
29-Jan-15	63.5	59.6
12-Feb-15	62.1	57.4
26-Feb-15	61.4	57.5
12-Mar-15	61.7	57.5
28-Mar-15	62.7	57.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	63.50	59.60
<b>Minimum</b>	59.70	52.60
<b>Mean</b>	62.13	57.38
<b>Noise Standards</b>	75	70

All values are in dB(A)

Graph Showing NOISE for On backfilled area near field time office



**Table : 96 Noise Level Data**

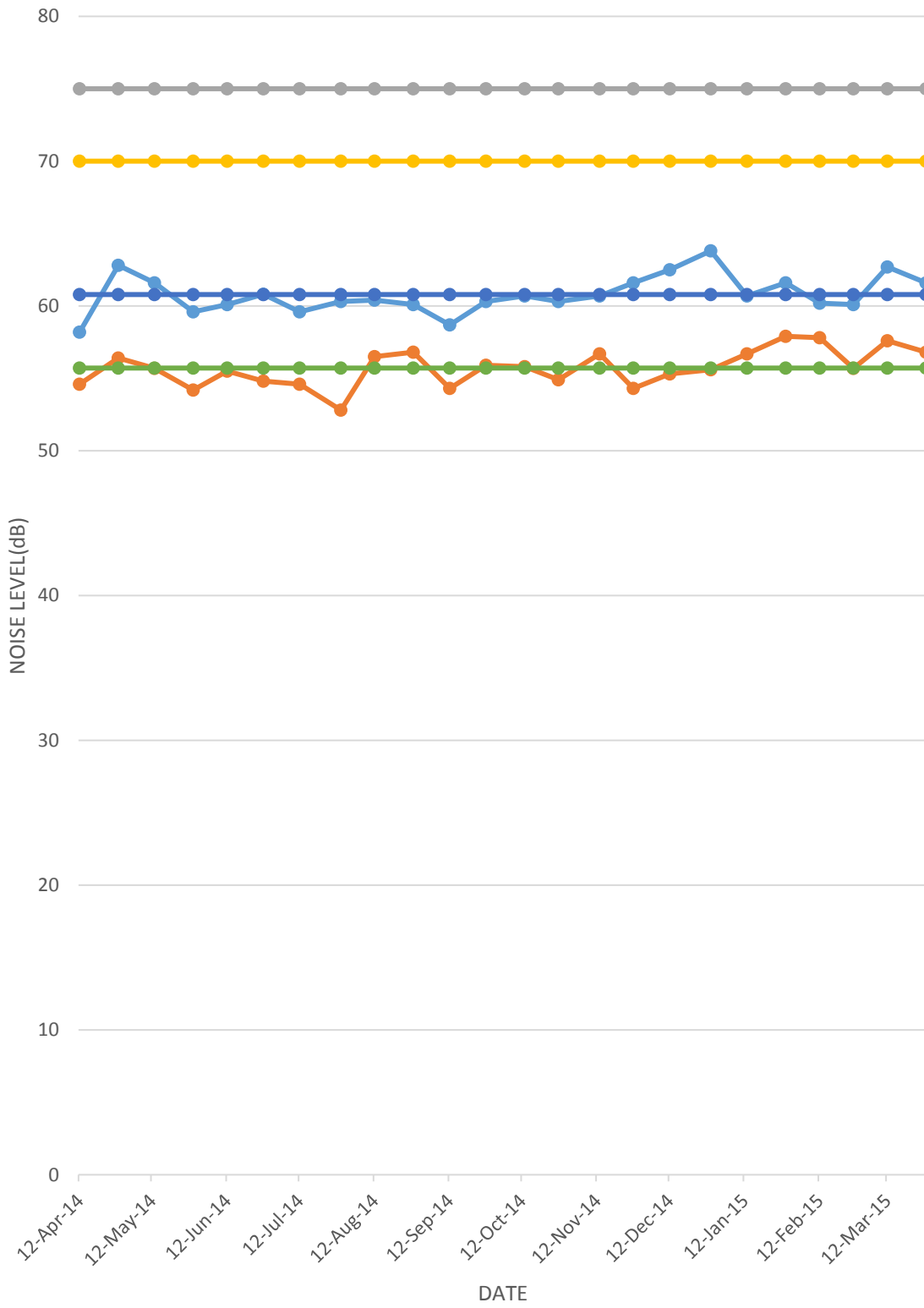
**Project : Talcher colliery**

**Monitoring Station : Canteen Talcher Colliery**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	58.2	54.6
28-Apr-14	62.8	56.4
13-May-14	61.6	55.7
29-May-14	59.6	54.2
12-Jun-14	60.1	55.5
27-Jun-14	60.8	54.8
12-Jul-14	59.6	54.6
29-Jul-14	60.3	52.8
12-Aug-14	60.4	56.5
28-Aug-14	60.1	56.8
12-Sep-14	58.7	54.3
27-Sep-14	60.3	55.9
13-Oct-14	60.7	55.8
27-Oct-14	60.3	54.9
13-Nov-14	60.7	56.7
27-Nov-14	61.6	54.3
12-Dec-14	62.5	55.3
29-Dec-14	63.8	55.6
13-Jan-15	60.7	56.7
29-Jan-15	61.6	57.9
12-Feb-15	60.2	57.8
26-Feb-15	60.1	55.7
12-Mar-15	62.7	57.6
28-Mar-15	61.6	56.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	63.80	57.90
<b>Minimum</b>	58.20	52.80
<b>Mean</b>	60.79	55.72
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for Canteen talcher Colliery



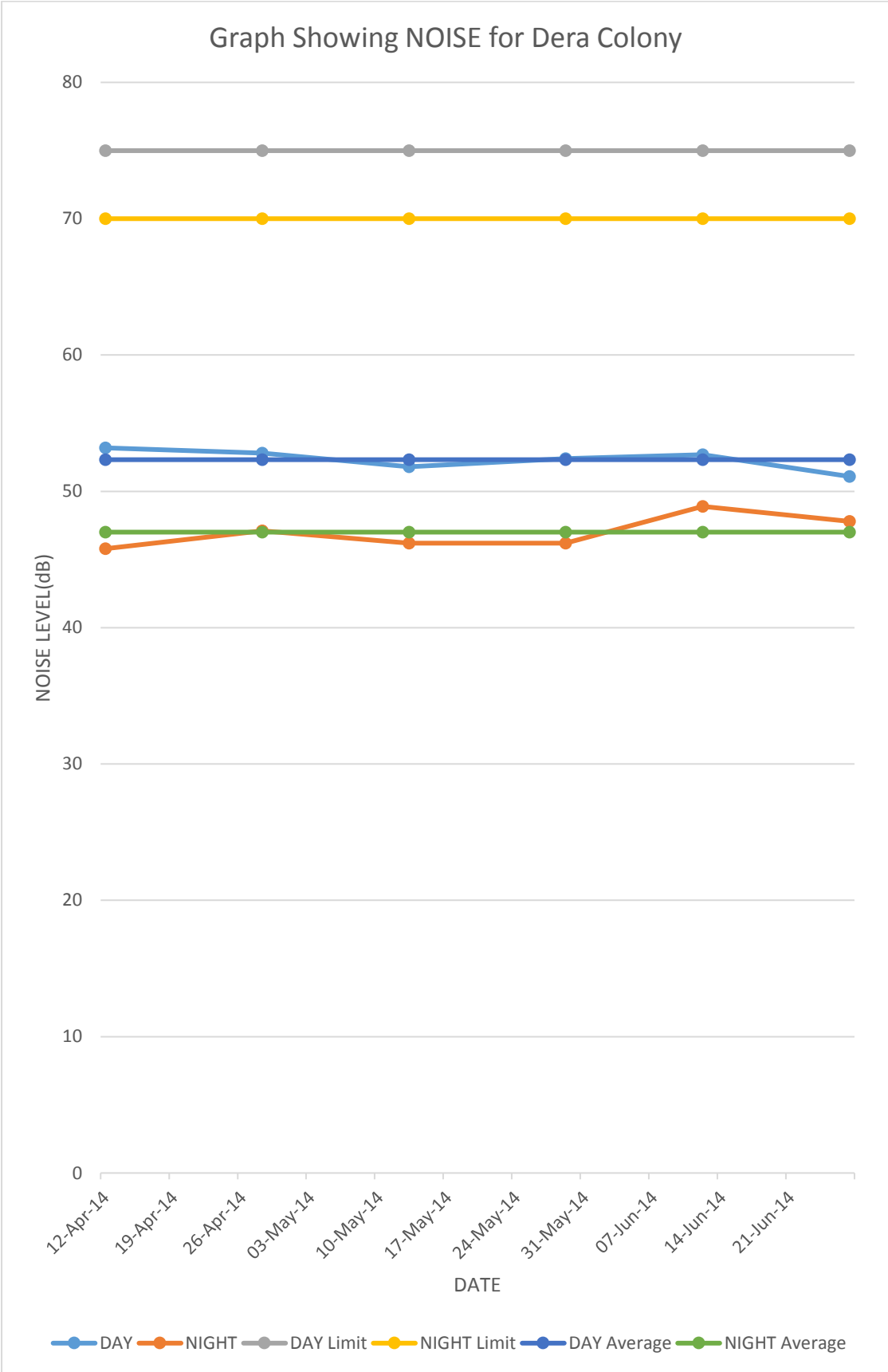
**Table : 97 Noise Level Data**

**Project : Talcher colliery**

**Monitoring Station : Dera Colony**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Apr-14	53.2	45.8
28-Apr-14	52.8	47.1
13-May-14	51.8	46.2
29-May-14	52.4	46.2
12-Jun-14	52.7	48.9
27-Jun-14	51.1	47.8
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	53.20	48.90
<b>Minimum</b>	51.10	45.80
<b>Mean</b>	52.33	47.00
<b>Noise Standards</b>	75	70

*All values are in dB(A)*



**Table : 98 Noise Level Data**

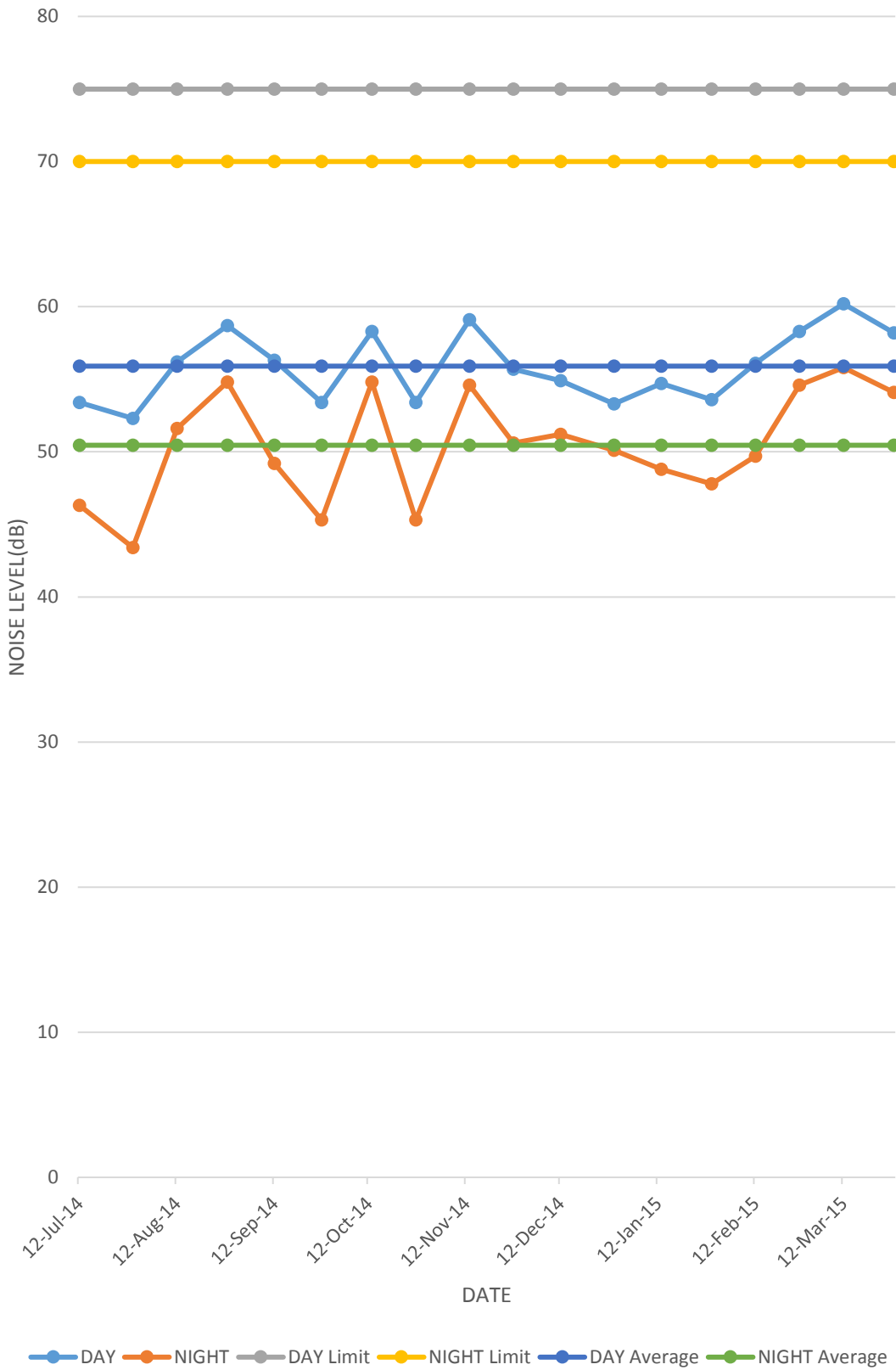
**Project : Talcher colliery**

**Monitoring Station : GM Office**

<b>DATE OF SAMPLING</b>	<b>DAY</b>	<b>NIGHT</b>
12-Jul-14	53.4	46.3
29-Jul-14	52.3	43.4
12-Aug-14	56.2	51.6
28-Aug-14	58.7	54.8
12-Sep-14	56.3	49.2
27-Sep-14	53.4	45.3
13-Oct-14	58.3	54.8
27-Oct-14	53.4	45.3
13-Nov-14	59.1	54.6
27-Nov-14	55.7	50.6
12-Dec-14	54.9	51.2
29-Dec-14	53.3	50.1
13-Jan-15	54.7	48.8
29-Jan-15	53.6	47.8
12-Feb-15	56.1	49.7
26-Feb-15	58.3	54.6
12-Mar-15	60.2	55.8
28-Mar-15	58.2	54.1
<b>Brief Statistic</b>	<b>DAY</b>	<b>NIGHT</b>
<b>Maximum</b>	60.20	55.80
<b>Minimum</b>	52.30	43.40
<b>Mean</b>	55.89	50.44
<b>Noise Standards</b>	75	70

*All values are in dB(A)*

Graph Showing NOISE for GM Office



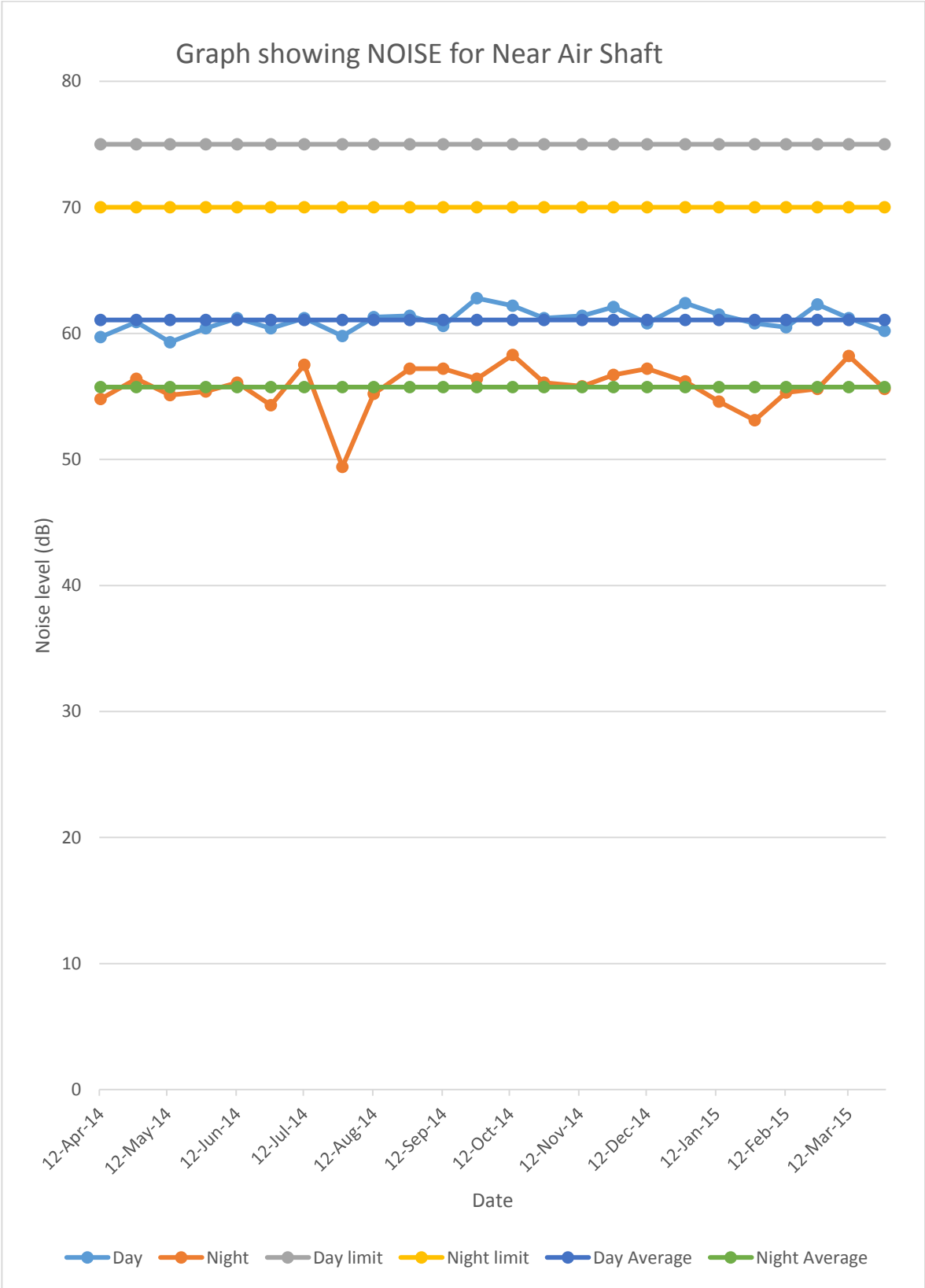
**Table : 99 Noise Level Data**

**Project : Talcher West colliery**

**Monitoring Station : Near air Shaft**

<b>Date of sampling</b>	<b>Day</b>	<b>Night</b>
12-Apr-14	59.7	54.8
28-Apr-14	60.9	56.4
13-May-14	59.3	55.1
29-May-14	60.4	55.4
12-Jun-14	61.2	56.1
27-Jun-14	60.4	54.3
12-Jul-14	61.2	57.5
29-Jul-14	59.8	49.4
12-Aug-14	61.3	55.2
28-Aug-14	61.4	57.2
12-Sep-14	60.6	57.2
27-Sep-14	62.8	56.4
13-Oct-14	62.2	58.3
27-Oct-14	61.2	56.1
13-Nov-14	61.4	55.8
27-Nov-14	62.1	56.7
12-Dec-14	60.8	57.2
29-Dec-14	62.4	56.2
13-Jan-15	61.5	54.6
29-Jan-15	60.8	53.1
12-Feb-15	60.5	55.3
26-Feb-15	62.3	55.6
12-Mar-15	61.2	58.2
28-Mar-15	60.2	55.6
<b>Brief Statistic</b>	<b>Day</b>	<b>Night</b>
<b>Maximum</b>	62.80	58.30
<b>Minimum</b>	59.30	49.40
<b>Mean</b>	61.07	55.74
<b>Noise Standards</b>	75	70

*All values are in dB(A)*



**Table : 100 Noise Level Data**

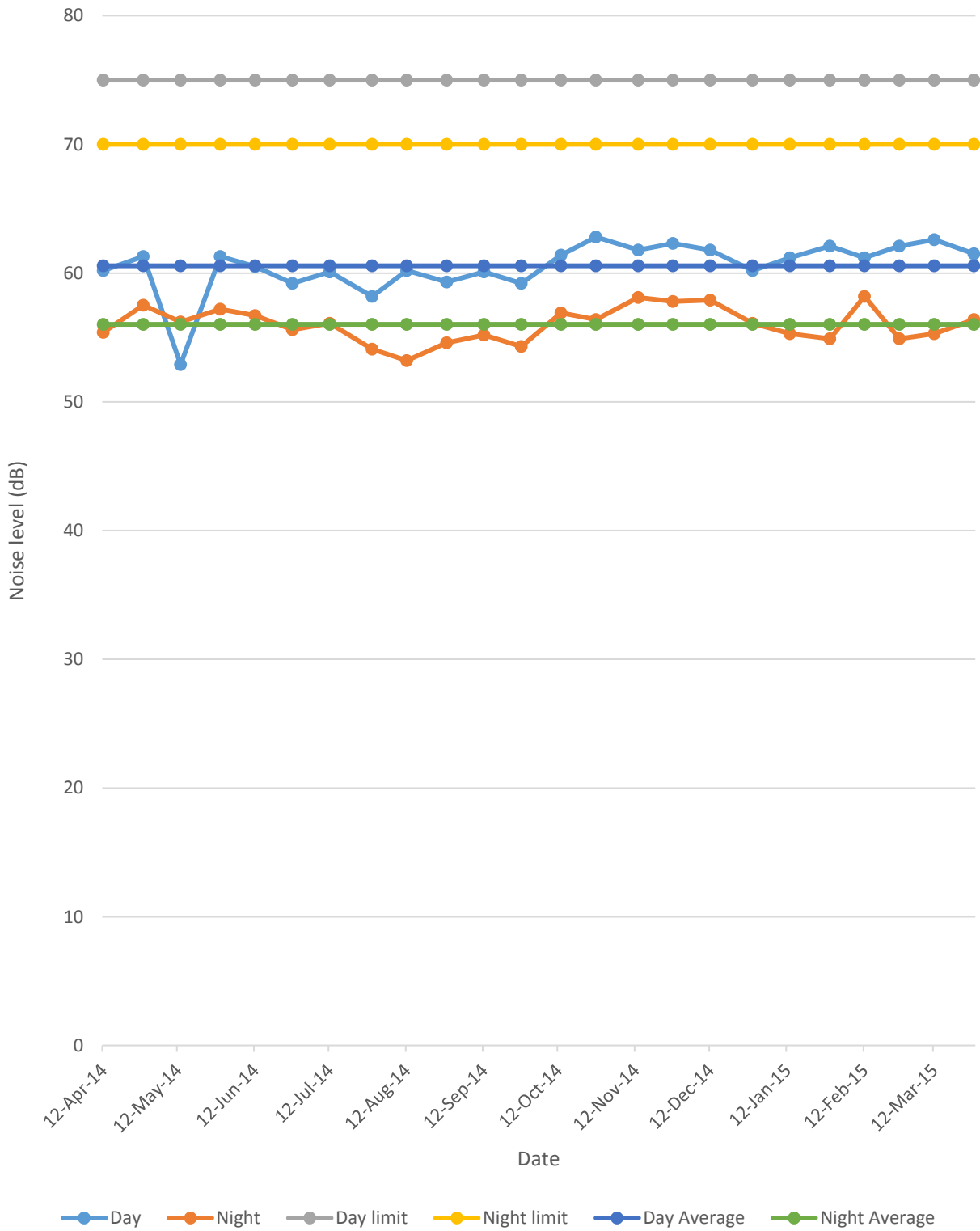
**Project : Talcher West colliery**

**Monitoring Station : Near Haulage room at Incline No.2**

<b>Date of sampling</b>	<b>Day</b>	<b>Night</b>
12-Apr-14	60.2	55.4
28-Apr-14	61.3	57.5
13-May-14	52.9	56.2
29-May-14	61.3	57.2
12-Jun-14	60.5	56.7
27-Jun-14	59.2	55.6
12-Jul-14	60.1	56.1
29-Jul-14	58.2	54.1
12-Aug-14	60.2	53.2
28-Aug-14	59.3	54.6
12-Sep-14	60.1	55.2
27-Sep-14	59.2	54.3
13-Oct-14	61.4	56.9
27-Oct-14	62.8	56.4
13-Nov-14	61.8	58.1
27-Nov-14	62.3	57.8
12-Dec-14	61.8	57.9
29-Dec-14	60.2	56.1
13-Jan-15	61.2	55.3
29-Jan-15	62.1	54.9
12-Feb-15	61.2	58.2
26-Feb-15	62.1	54.9
12-Mar-15	62.6	55.3
28-Mar-15	61.5	56.4
<b>Brief Statistic</b>	<b>Day</b>	<b>Night</b>
Maximum	62.80	58.20
Minimum	52.90	53.20
Mean	60.56	56.01
Noise Standards	75	70

*All values are in dB(A)*

Graph showing NOISE for Near haulage at incline no-2



**Table :101 Drinking Water Quality**

Project	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
<b>Monitoring Station</b>	Dera Village Tube well water	Dera Village Tube well water	Dera Village Tube well water	Dera Village Tube well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.04.14	6.5.14	5.6.2014	05.07.14	
<b>Colour(Hazen)</b>	2	2	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	3	4	4	<b>5</b>
<b>pH</b>	8.15	7.98	7.92	7.37	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	92	104	116	96	<b>200</b>
<b>Total Hardness(mg/L)</b>	140	176	192	176	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	54	40	46	36	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	328	308	332	308	<b>500</b>
<b>Calcium(mg/L)</b>	33.6	41.6	44.8	40	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	0.12	0.16	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	41	57	61	55	<b>200</b>
<b>Nitrate(mg/L)</b>	42.09	35.88	32.34	23.04	<b>45</b>
<b>Fluoride(mg/L)</b>	0.95	0.29	0.35	0.48	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	0.078	0.047	0.045	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
<b>Monitoring Station</b>	Dera Village Tube well water	Dera Village Tube well water	Dera Village Tube well water	Dera Village Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	05.08.14	8.9.2014	15.10.2014	8.11.2014	
<b>Colour(Hazen)</b>	2	3	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	4	3	4	<b>5</b>
<b>pH</b>	7.34	7.95	8.13	8.16	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	88	96	112	116	<b>200</b>
<b>Total Hardness(mg/L)</b>	168	168	184	188	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	44		42	44	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	42	NIL	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	292	nil	316	328	<b>500</b>
<b>Calcium(mg/L)</b>	40	308	43.2	44.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.28	0.05	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	53	53	61	58	<b>200</b>
<b>Nitrate(mg/L)</b>	16.83	26.14	26.14	25.25	<b>45</b>
<b>Fluoride(mg/L)</b>	0.34	0.51	0.22	0.24	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.01	<0.01	<0.01	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
<b>Monitoring Station</b>	Dera Village Tube well water	Dera Village Tube well water	Dera Village Tube well water	Dera Village Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	09.12.14	08.01.15	07.02.15	12.3.2015	
<b>Colour(Hazen)</b>	2	2	3	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	3	4	2	<b>5</b>
<b>pH</b>	8.13	8.16	7.92	7.87	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	108	112	112	116	<b>200</b>
<b>Total Hardness(mg/L)</b>	188	192	196	196	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	42	54	44	44	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	342	334	338	342	<b>500</b>
<b>Calcium(mg/L)</b>	44.8	36.4	46.4	46.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	67	67	58	74	<b>200</b>
<b>Nitrate(mg/L)</b>	23.04	27.02	27.02	25.69	<b>45</b>
<b>Fluoride(mg/L)</b>	0.27	0.27	0.31	0.35	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.04	0.02	0.02	0.05	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 102 Drinking Water Quality**

Project	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
<b>Monitoring Station</b>	Hensmul Village well water	Hensmul Village well water	Hensmul Village well water	Hensmul Village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.04.14	6.5.14	5.6.2014	05.07.14	
<b>Colour(Hazen)</b>	3	8	3	11	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	13	5	16	<b>5</b>
<b>pH</b>	8.22	7.96	7.94	7.44	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	276	244	244	236	<b>200</b>
<b>Total Hardness(mg/L)</b>	484	436	428	456	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	140	102	124	94	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.19	nil	0.17	0.19	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	786	782	746	786	<b>500</b>
<b>Calcium(mg/L)</b>	134.4	104	99.2	102.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	0.44	0.42	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	184	134	134	156	<b>200</b>
<b>Nitrate(mg/L)</b>	11.08	11.52	11.52	11.96	<b>45</b>
<b>Fluoride(mg/L)</b>	0.87	0.69	0.63	0.83	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	0.042	0.045	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
<b>Monitoring Station</b>	Hensmul Village well water	Hensmul Village well water	Hensmul Village well water	Hensmul Village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	05.08.14	8.9.2014	15.10.2014	8.11.2014	
<b>Colour(Hazen)</b>	4	16	4	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	27	5	5	<b>5</b>
<b>pH</b>	7.47	8.12	8.27	8.28	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	232	244	244	236	<b>200</b>
<b>Total Hardness(mg/L)</b>	440	448	436	432	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	112	96	106	92	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.18	nil	0.12	0.17	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	772	756	774	752	<b>500</b>
<b>Calcium(mg/L)</b>	107.2	107.2	104	104	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	132	136	136	136	<b>200</b>
<b>Nitrate(mg/L)</b>	12.85	11.96	12.85	12.4	<b>45</b>
<b>Fluoride(mg/L)</b>	0.61	0.71	0.46	0.47	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.01	<0.01	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
<b>Monitoring Station</b>	Hensmul Village well water	Hensmul Village well water	Hensmul Village well water	Hensmul Village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.12.14	08.01.15	07.02.15	12.3.2015	
<b>Colour(Hazen)</b>	4	8	4	4	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	14	5	5	<b>5</b>
<b>pH</b>	8.25	8.24	8.14	8.16	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	232	264	264	244	<b>200</b>
<b>Total Hardness(mg/L)</b>	428	448	440	420	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	94	102	106	96	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.15	0.15	0.12	0.13	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	768	772	768	746	<b>500</b>
<b>Calcium(mg/L)</b>	104	107.2	105.6	99.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	134	144	134	134	<b>200</b>
<b>Nitrate(mg/L)</b>	11.08	11.96	12.4	12.85	<b>45</b>
<b>Fluoride(mg/L)</b>	0.48	0.68	0.62	0.64	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.02	0.02	0.03		<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table :103 Drinking Water Quality**

Project	Ananta OCP	Ananta OCP	Ananta OCP	Ananta OCP	
<b>Monitoring Station</b>	Ananta Colony Tap water	Ananta Colony Tap water	Ananta Colony Tap water	Ananta Colony Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	6.5.14	06.08.14	8.11.2014	07.02.15	
<b>Colour(Hazen)</b>	6	3	8	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	11	4	12	3	<b>5</b>
<b>pH</b>	8.48	8.58	8.66	8.54	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	48	144	156	136	<b>200</b>
<b>Total Hardness(mg/L)</b>	252	248	264	240	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	58	64	56	56	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	436	432	456	416	<b>500</b>
<b>Calcium(mg/L)</b>	60.8	60.8	64	57.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	82	84	82	76	<b>200</b>
<b>Nitrate(mg/L)</b>	2.22	5.32	2.66	5.76	<b>45</b>
<b>Fluoride(mg/L)</b>	0.47	0.49	0.59	0.46	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.01	0.03	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table :104 Drinking Water Quality**

Project	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	
<b>Monitoring Station</b>	Jilinda Village well water	Jilinda Village well water	Jilinda Village well water	Jilinda Village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.04.14	6.5.14	4.6.2014	04.07.14	
<b>Colour(Hazen)</b>	4	7	3	7	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	10	5	9	<b>5</b>
<b>pH</b>	8.41	8.16	8.35	7.41	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	288	336	316	292	<b>200</b>
<b>Total Hardness(mg/L)</b>	476	536	544	552	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	214	124	142	122	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.16	0.17	0.16	0.15	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	972	926	942	956	<b>500</b>
<b>Calcium(mg/L)</b>	128	128	129.6	131	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	178	158	172	172	<b>200</b>
<b>Nitrate(mg/L)</b>	43.86	36.77	35.88	30.12	<b>45</b>
<b>Fluoride(mg/L)</b>	0.98	0.87	0.85	0.85	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	
Monitoring Station	Jilinda Village well water	Jilinda Village well water	Jilinda Village well water	Jilinda Village well water	<b>Indian Drinking Standards (IS-10500)</b>
Dt. of sampling	06.08.14	9.9.2014	15.10.2014	10.11.2014	
Colour(Hazen)	3	8	2	2	<b>5</b>
Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
Taste	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
Turbidity(NTU)	4	14	4	4	<b>5</b>
pH	7.44	8.31	8.38	8.35	<b>6.5-8.5</b>
Total Alkalinity(mg/L)	272	272	296	304	<b>200</b>
Total Hardness(mg/L)	524	516	528	556	<b>300</b>
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
Chloride(mg/L)	126	122	124	116	<b>250</b>
Residual Free chlorine(mg/L)	0.13	0.14	0.18	0.15	<b>0.2</b>
Total Dissolve Solid(mg/L)	938	956	936	948	<b>500</b>
Calcium(mg/L)	123.2	124.8	124.8	134.4	<b>75</b>
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
Manganese(mg/L)	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
Sulphate(mg/L)	168	152	156	168	<b>200</b>
Nitrate(mg/L)	74.81	34.5	29.68	27.02	<b>45</b>
Fluoride(mg/L)	0.68	0.77	0.58	0.61	<b>1.0</b>
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
Zinc(mg/L)	<0.010	<0.01	<0.01	0.02	<b>5</b>
Hexavalent Chromium(mg/L)	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<b>1</b>
Faecal col.as MPN/100ml	Nil	Nil	Nil	Nil	<b>Nil</b>
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 105 Drinking Water Quality**

Project	Bhubaneswari OCP	
<b>Monitoring Station</b>	Naraharipur Tube well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.04.14	
<b>Colour(Hazen)</b>	2	<b>5</b>
<b>Odour</b>	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	<b>5</b>
<b>pH</b>	7.86	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	84	<b>200</b>
<b>Total Hardness(mg/L)</b>	140	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	58	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	330	<b>500</b>
<b>Calcium(mg/L)</b>	27.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	35	<b>200</b>
<b>Nitrate(mg/L)</b>	40.76	<b>45</b>
<b>Fluoride(mg/L)</b>	0.69	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	
<b>Monitoring Station</b>	Naraharipur Tube well water	Naraharipur Tube well water	Naraharipur Tube well water	Naraharipur Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	6.5.14	4.6.2014	04.07.14	06.08.14	
<b>Colour(Hazen)</b>	3	3	3	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	4	5	4	<b>5</b>
<b>pH</b>	7.94	8.06	7.45	7.48	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	120	128	100	92	<b>200</b>
<b>Total Hardness(mg/L)</b>	192	192	180	172	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	0.08	<b>0.3</b>
<b>Chloride(mg/L)</b>	42	48	36	42	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	334	336	314	302	<b>500</b>
<b>Calcium(mg/L)</b>	46.4	44.8	41.6	40	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.08	0.09	0.1	0.41	<b>0.1</b>
<b>Sulphate(mg/L)</b>	62	62	59	55	<b>200</b>
<b>Nitrate(mg/L)</b>	34.1	31.45	27.47	17.73	<b>45</b>
<b>Fluoride(mg/L)</b>	0.35	0.39	0.41	0.38	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<0.005	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.05	0.06	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	
<b>Monitoring Station</b>	Naraharipur Tube well water	Naraharipur Tube well water	Naraharipur Tube well water	Naraharipur Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	9.9.2014	15.10.2014	10.11.2014	09.12.14	
<b>Colour(Hazen)</b>	3	2	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	3	2	4	<b>5</b>
<b>pH</b>	7.98	7.89	7.86	7.84	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	108	112	108	104	<b>200</b>
<b>Total Hardness(mg/L)</b>	192	196	192	192	<b>300</b>
<b>Iron(mg/L)</b>	0.07	0.07	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	42	44	42	40	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	NIL	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	328	342	334	342	<b>500</b>
<b>Calcium(mg/L)</b>	46.4	46.4	46.4	44.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.26	<0.02	0.07	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	58	63	65	60	<b>200</b>
<b>Nitrate(mg/L)</b>	28.8	24.81	24.37	22.59	<b>45</b>
<b>Fluoride(mg/L)</b>	0.47	0.24	0.23	0.25	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.01	0.04	0.03	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	
<b>Monitoring Station</b>	Naraharipur Tube well water	Naraharipur Tube well water	Naraharipur Tube well water	Project site office water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.01.15	09.02.15	9.3.2015	09.04.14	
<b>Colour(Hazen)</b>	2	2	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	3	3	3	<b>5</b>
<b>pH</b>	7.82	7.82	7.86	9.79	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	108	112	116	116	<b>200</b>
<b>Total Hardness(mg/L)</b>	196	196	204	184	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	44	44	46	28	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	342	346	356	308	<b>500</b>
<b>Calcium(mg/L)</b>	46.4	46.4	48	44.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.07	0.07	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	63	58	69	66	<b>200</b>
<b>Nitrate(mg/L)</b>	30.12	27.02	24.81	3.99	<b>45</b>
<b>Fluoride(mg/L)</b>	0.31	0.35	0.38	0.38	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.0005	<0.0005	<0.0005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	0.35	<0.0005	<0.001	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.02	0.02	0.03	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table :106 Drinking water Quality**

Project	Bhubaneswar i OCP	Bhubaneswar i OCP	Bhubanesw ari OCP	Bhubaneswari OCP	
<b>Monitoring Station</b>	Project site office water	Project site office water	Project site office water	Project site office water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	6.5.14	4.6.2014	04.07.14	06.08.14	
<b>Colour(Hazen)</b>	5	3	5	5	<b>5</b>
<b>Odour</b>	Unobjectiona ble	Unobjectiona ble	Unobjection able	Unobjectionabl e	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	6	4	7	6	<b>5</b>
<b>pH</b>	8.64	8.78	7.48	7.52	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	108	128	96	84	<b>200</b>
<b>Total Hardness(mg/L)</b>	164	184	168	156	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	36	44	34	36	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	284	324	288	274	<b>500</b>
<b>Calcium(mg/L)</b>	38.4	43.2	40	36.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.15	0.12	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	55	59	57	49	<b>200</b>
<b>Nitrate(mg/L)</b>	4.43	4.43	4.87	5.76	<b>45</b>
<b>Fluoride(mg/L)</b>	0.26	0.37	0.36	0.32	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<0.005	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<0.010	0.024	<b>5</b>
<b>Hexavelent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	Bhubaneswari OCP	
<b>Monitoring Station</b>	Project site office water	Project site office water	Project site office water	Project site office water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	9.9.2014	10.11.2014	09.12.14	09.01.15	
<b>Colour</b>	4	2	2	4	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity</b>	6	3	4	6	<b>5</b>
<b>pH</b>	8.72	8.75	8.72	8.74	<b>6.5-8.5</b>
<b>Total Alkalinity</b>	108	108	104	116	<b>200</b>
<b>Total Hardness</b>	188	176	180	184	<b>300</b>
<b>Iron</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride</b>	40	38	38	42	<b>250</b>
<b>Residual Free chlorine</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid</b>	324	306	322	316	<b>500</b>
<b>Calcium</b>	44.8	43.2	41.6	43.2	<b>75</b>
<b>Copper</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate</b>	54	55	59	57	<b>200</b>
<b>Nitrate</b>	5.32	4.87	6.2	4.43	<b>45</b>
<b>Fluoride</b>	0.45	0.23	0.26	0.27	<b>1.0</b>
<b>Selenium</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc</b>	0.05	0.03	0.05	0.02	<b>5</b>
<b>Hexavalent Chromium</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Bhubaneswari OCP	Bhubaneswari OCP	
<b>Monitoring Station</b>	Project site office water	Project site office water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.02.15	9.3.2015	
<b>Colour(Hazen)</b>	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	4	<b>5</b>
<b>pH</b>	8.65	8.62	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	96	92	<b>200</b>
<b>Total Hardness(mg/L)</b>	164	156	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	36	36	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	282	274	<b>500</b>
<b>Calcium(mg/L)</b>	38.4	36.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	52	55	<b>200</b>
<b>Nitrate(mg/L)</b>	4.43	4.87	<b>45</b>
<b>Fluoride(mg/L)</b>	0.27	0.25	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.02	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<b>0.001</b>

**Table : 107 Drinking water Quality**

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Balanda Colony Tap water	Balanda Colony Tap water	Balanda Colony Tap water	Balanda Colony Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	08.04.14	07.07.14	14.10.2014	08.01.15	
<b>Colour(Hazen)</b>	2	4	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	4	2	2	<b>5</b>
<b>pH</b>	7.38	7.38	7.35	7.35	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	92	84	84	84	<b>200</b>
<b>Total Hardness(mg/L)</b>	164	152	160	160	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	38	32	34	36	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	NIL	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	288	266	276	276	<b>500</b>
<b>Calcium(mg/L)</b>	40	36.8	38.4	38.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	62	53	51	51	<b>200</b>
<b>Nitrate(mg/L)</b>	5.76	6.2	5.76	5.76	<b>45</b>
<b>Fluoride(mg/L)</b>	0.36	0.24	0.18	0.25	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	0.041	0.07	0.03	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	<0.001	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	nil	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 108 Drinking water Quality**

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Jagannath Colony Tap water	Jagannath Colony Tap water	Jagannath Colony Tap water	Jagannath Colony Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	08.04.14	07.07.14	14.10.2014	08.01.15	
<b>Colour(Hazen)</b>	2	3	3	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	4	4	4	<b>5</b>
<b>pH</b>	7.47	7.54	7.46	7.45	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	128	116	112	132	<b>200</b>
<b>Total Hardness(mg/L)</b>	216	204	204	212	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	52	42	46	48	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	NIL	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	376	346	360	368	<b>500</b>
<b>Calcium(mg/L)</b>	51.2	48	46.4	51.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	67	61	68	72	<b>200</b>
<b>Nitrate(mg/L)</b>	6.65	7.09	6.2	6.2	<b>45</b>
<b>Fluoride(mg/L)</b>	0.35	0.46	0.29	0.31	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	0.05	0.02	<b>5</b>
<b>Hexavelent Chromium(mg/L)</b>	<0.01	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	<0.001	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	nil	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 109 Drinking water Quality**

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	08.04.14	5.5.14	5.6.2014	05.07.14	
<b>Colour(Hazen)</b>	3	7	3	8	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	13	4	11	<b>5</b>
<b>pH</b>	8.62	8.53	8.61	7.46	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	140	148	144	136	<b>200</b>
<b>Total Hardness(mg/L)</b>	236	252	240	248	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	54	56	58	52	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	418	432	416	434	<b>500</b>
<b>Calcium(mg/L)</b>	56	59.2	56	56	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	0.12	<b>0.1</b>
<b>Sulphate(mg/L)</b>	78	88	84	78	<b>200</b>
<b>Nitrate(mg/L)</b>	4.43	3.1	11.08	6.65	<b>45</b>
<b>Fluoride(mg/L)</b>	0.51	0.43	0.49	0.57	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	<0.001	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	nil	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	06.08.14	8.9.2014	14.10.2014	8.11.2014	
<b>Colour(Hazen)</b>	2	11	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	18	4	3	<b>5</b>
<b>pH</b>	7.48	8.63	8.64	8.62	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	128	148	140	144	<b>200</b>
<b>Total Hardness(mg/L)</b>	240	268	244	248	<b>300</b>
<b>Iron(mg/L)</b>	0.07	0.15	0.08	0.08	<b>0.3</b>
<b>Chloride(mg/L)</b>	60	58	56	54	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	NIL	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	422	446	424	436	<b>500</b>
<b>Calcium(mg/L)</b>	59.2	64	57.6	60.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.27	0.27	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	82	78	82	76	<b>200</b>
<b>Nitrate(mg/L)</b>	7.53	5.32	5.32	5.76	<b>45</b>
<b>Fluoride(mg/L)</b>	0.52	0.48	0.31	0.32	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.01	0.04	0.03	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	08.12.14	08.01.15	07.02.15	12.3.2015	
<b>Colour(Hazen)</b>	2	7	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	2	11	3	4	<b>5</b>
<b>pH</b>	8.56	8.57	8.52	8.56	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	144	152	136	132	<b>200</b>
<b>Total Hardness(mg/L)</b>	248	236	240	248	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	54	52	56	56	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	452	406	420	434	<b>500</b>
<b>Calcium(mg/L)</b>	60.8	56	57.6	59.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	82	78	76	88	<b>200</b>
<b>Nitrate(mg/L)</b>	7.09	4.87	4.87	6.65	<b>45</b>
<b>Fluoride(mg/L)</b>	0.31	0.39	0.38	0.35	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.03	0.03	0.03	0.09	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 110 Drinking water Quality**

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Rakas Village well water	Rakas Village well water	Rakas Village well water	Rakas Village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	08.04.14	5.5.14	5.6.2014	07.07.14	
<b>Colour(Hazen)</b>	4	3	4	4	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	5	5	5	<b>5</b>
<b>pH</b>	8.45	8.34	8.36	7.57	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	96	92	92	80	<b>200</b>
<b>Total Hardness(mg/L)</b>	152	148	148	140	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	34	34	32	28	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.18	0.18	0.14	0.14	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	262	258	258	242	<b>500</b>
<b>Calcium(mg/L)</b>	35.2	35.2	35.2	33.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	0.16	<b>0.1</b>
<b>Sulphate(mg/L)</b>	46	51	53	46	<b>200</b>
<b>Nitrate(mg/L)</b>	7.09	6.2	6.2	6.65	<b>45</b>
<b>Fluoride(mg/L)</b>	0.32	0.27	0.34	0.41	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	<0.001	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	nil	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Rakas Village well water	Rakas Village well water	Rakas Village well water	Rakas Village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	06.08.14	8.9.2014	14.10.2014	8.11.2014	
<b>Colour(Hazen)</b>	4	3	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	4	5	4	<b>5</b>
<b>pH</b>	7.53	8.37	8.38	8.42	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	80	92	96	96	<b>200</b>
<b>Total Hardness(mg/L)</b>	144	156	156	160	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	36	34	34	34	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.15	0.16	0.16	0.14	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	254	272	274	282	<b>500</b>
<b>Calcium(mg/L)</b>	33.6	36.8	36.8	40	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	46	51	47	57	<b>200</b>
<b>Nitrate(mg/L)</b>	7.09	7.09	6.65	6.65	<b>45</b>
<b>Fluoride(mg/L)</b>	0.35	0.36	0.23	0.24	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.014	<0.01	0.04	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking water Quality

Project	Jagannath OCP	Jagannath OCP	Jagannath OCP	Jagannath OCP	
<b>Monitoring Station</b>	Rakas Village well water	Rakas Village well water	Rakas Village well water	Rakas Village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	08.12.14	08.01.15	07.02.15	12.3.2015	
<b>Colour(Hazen)</b>	2	4	3	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	5	5	2	<b>5</b>
<b>pH</b>	8.39	8.41	8.34	8.27	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	92	88	84	92	<b>200</b>
<b>Total Hardness(mg/L)</b>	152	144	148	140	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	34	34	34	32	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.17	0.13	0.13	0.12	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	274	244	254	242	<b>500</b>
<b>Calcium(mg/L)</b>	35.2	35.2	35.2	33.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	53	49	47	52	<b>200</b>
<b>Nitrate(mg/L)</b>	0.2	6.65	6.2	5.32	<b>45</b>
<b>Fluoride(mg/L)</b>	0.23	0.28	0.23	0.21	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.05	0.02	0.02	0.05	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 111 Water Quality Data**

<b>Project</b>	Bharatpur OCP	Bharatpur OCP	
<b>Monitoring Station</b>	Old quarry water	Old quarry water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	6.5.14	4.6.2014	
<b>Colour(Hazen)</b>	4	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	7	4	<b>5</b>
<b>pH</b>	7.43	7.45	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	112	112	<b>200</b>
<b>Total Hardness(mg/L)</b>	204	216	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	46	52	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	348	374	<b>500</b>
<b>Calcium(mg/L)</b>	46.4	51.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	62	76	<b>200</b>
<b>Nitrate(mg/L)</b>	7.09	5.76	<b>45</b>
<b>Fluoride(mg/L)</b>	0.38	0.42	<b>1.5</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<b>0.001</b>

**Table : 112 Water Quality Data**

<b>Project</b>	Bharatpur OCP	Bharatpur OCP	Bharatpur OCP	Bharatpur OCP	
<b>Monitoring Station</b>	NS nagar Tap water	NS nagar Tap water	NS nagar Tap water	NS nagar Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	6.5.14	05.07.14	08.09.14	10.11.2014	
<b>Colour(Hazen)</b>	2	2	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	3	3	4	<b>5</b>
<b>pH</b>	7.56	7.56	7.45	7.43	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	88	84	76	80	<b>200</b>
<b>Total Hardness(mg/L)</b>	156	140	144	152	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	34	28	38	32	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	272	244	248	262	<b>500</b>
<b>Calcium(mg/L)</b>	36.8	33.6	35.2	36.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	51	48	51	61	<b>200</b>
<b>Nitrate(mg/L)</b>	5.76	5.32	7.53	7.09	<b>45</b>
<b>Fluoride(mg/L)</b>	0.31	0.27	0.32	0.31	<b>1.5</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	0.05	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Water Quality Data

Project	Bharatpur OCP	Bharatpur OCP	
<b>Monitoring Station</b>	NS nagar Tap water	NS nagar Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.01.15	12.3.2015	
<b>Colour(Hazen)</b>	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	3	<b>5</b>
<b>pH</b>	7.52	7.46	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	88	84	<b>200</b>
<b>Total Hardness(mg/L)</b>	160	164	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	36	36	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	278	286	<b>500</b>
<b>Calcium(mg/L)</b>	38.4	38.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	56	57	<b>200</b>
<b>Nitrate(mg/L)</b>	5.76	5.32	<b>45</b>
<b>Fluoride(mg/L)</b>	0.32	0.27	<b>1.5</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.0005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.02	<0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<b>0.001</b>

**Table : 113 Water Quality Data**

Project	Chhendipada OCP	Chhendipada OCP	Chhendipada OCP	Chhendipada OCP	
<b>Monitoring Station</b>	Borewell water at site office	Borewell water at site office	Borewell water at site office	Borewell water at site office	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	3.5.14	3.6.2014	02.07.14	02.08.14	
<b>Colour(Hazen)</b>	6	2	7	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	9	3	11	4	<b>5</b>
<b>pH</b>	8.35	8.38	6.77	6.78	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	236	212	164	156	<b>200</b>
<b>Total Hardness(mg/L)</b>	352	340	360	344	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	78	86	76	84	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	618	594	624	610	<b>500</b>
<b>Calcium(mg/L)</b>	84.8	83.2	86.4	83.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.77	0.67	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	114	116	108	104	<b>200</b>
<b>Nitrate(mg/L)</b>	37.21	28.35	28.35	23.92	<b>45</b>
<b>Fluoride(mg/L)</b>	0.64	0.58	0.69	0.57	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<0.005	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.053	0.45	<0.010	0.019	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Water Quality Data

Project	Chhendipara OCP	Chhendipada OCP	Chhendipada OCP	Chhendipada OCP	
<b>Monitoring Station</b>	Borewell water at site office	Borewell water at site office	Borewell water at site office	Borewell water at site office	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	15.10.2014	3.11.2014	09.12.14	05.01.15	
<b>Colour(Hazen)</b>	3	3	2	6	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	4	3	10	<b>5</b>
<b>pH</b>	8.32	8.34	8.35	8.34	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	204	112	180	204	<b>200</b>
<b>Total Hardness(mg/L)</b>	348	364	332	364	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	78	74	74	82	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	NIL	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	602	614	602	628	<b>500</b>
<b>Calcium(mg/L)</b>	83.2	86.4	78.4	86.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	102	116	96	116	<b>200</b>
<b>Nitrate(mg/L)</b>	24.81	23.04	20.82	31.9	<b>45</b>
<b>Fluoride(mg/L)</b>	0.46	0.52	0.57	0.59	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.04	0.02	<0.02	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Water Quality Data

Project	Chhendipada OCP	Chhendipara OCP	
<b>Monitoring Station</b>	Borewell water at site office	Borewell water at site office	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	05.02.15	5.3.2015	
<b>Colour(Hazen)</b>	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	2	4	<b>5</b>
<b>pH</b>	8.28	8.23	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	184	172	<b>200</b>
<b>Total Hardness(mg/L)</b>	316	312	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	72	68	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	546	538	<b>500</b>
<b>Calcium(mg/L)</b>	75.2	73.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	94	108	<b>200</b>
<b>Nitrate(mg/L)</b>	25.28	23.04	<b>45</b>
<b>Fluoride(mg/L)</b>	0.47	0.43	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.02	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<b>0.001</b>

**Table : 114 Drinking Water Quality**

<b>Project</b>	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	
<b>Monitoring Station</b>	MTK office LOCP	MTK office LOCP	MTK office tap water	Deulbera Colony tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	15.10.2014	8.4.14	5.6.2014	05.07.14	
<b>Colour(Hazen)</b>	2	3	3	6	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	4	4	9	<b>5</b>
<b>pH</b>	8.27	8.25	8.15	7.49	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	36	44	40	32	<b>200</b>
<b>Total Hardness(mg/L)</b>	60	68	56	56	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	12	14	12	12	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	NIL	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	102	118	102	102	<b>500</b>
<b>Calcium(mg/L)</b>	12.8	16	12.8	12.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	16	24	17	16	<b>200</b>
<b>Nitrate(mg/L)</b>	2.66	2.66	2.66	3.54	<b>45</b>
<b>Fluoride(mg/L)</b>	0.08	0.1	0.1	0.11	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.0005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.001	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.03	<0.010	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	<0.001	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	nil	<0.001	<0.001	<b>0.001</b>

**Table : 115 Drinking Water Quality**

<b>Project</b>	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	
<b>Monitoring Station</b>	Deulbera Colony tap water	Deulbera Colony tap water	Deulbera Well	Deulbera Village Well Water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	8.11.2014	12.3.2015	7.5.14	05.08.14	
<b>Colour(Hazen)</b>	2	2	5	4	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	2	8	5	<b>5</b>
<b>pH</b>	8.25	8.12	8.48	7.46	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	68	40	112	80	<b>200</b>
<b>Total Hardness(mg/L)</b>	64	68	156	144	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	14	14	36	36	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	0.19	0.16	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	114	118	272	256	<b>500</b>
<b>Calcium(mg/L)</b>	16	16	36.8	33.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	0.41	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	23	24	55	46	<b>200</b>
<b>Nitrate(mg/L)</b>	3.99	4.43	6.2	6.2	<b>45</b>
<b>Fluoride(mg/L)</b>	0.1	0.1	0.31	0.26	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.005	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.005	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>		0.07	0.014	<0.01	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.01	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.01	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 116 Drinking Water Quality**

<b>Project</b>	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	
<b>Monitoring Station</b>	Deulberavill well	Talaberavill well	Talabera village well water	Well from Talabera village	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	8.11.2014	4.6.2014	08.09.14	09.12.14	
<b>Colour(Hazen)</b>	3	4	5	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	5	8	4	<b>5</b>
<b>pH</b>	8.49	8.47	8.47	8.27	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	84	104	96	32	<b>200</b>
<b>Total Hardness(mg/L)</b>	144	156	160	56	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	32	38	34	12	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.16	0.15	0.15	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	242	276	276	102	<b>500</b>
<b>Calcium(mg/L)</b>	33.6	36.8	38.4	12.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	0.35	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	49	55	53	16	<b>200</b>
<b>Nitrate(mg/L)</b>	6.2	5.32	7.09	3.99	<b>45</b>
<b>Fluoride(mg/L)</b>	0.23	0.31	0.44	0.1	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.02	0.019	<0.01	0.05	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	
<b>Monitoring Station</b>	Talabera vill well	Tap water at GM office	Tap Water GM Office	Lingaraj township water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	11.3.2015	05.08.14	09.12.14	7.5.14	
<b>Colour(Hazen)</b>	2	4	3	5	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	5	4	6	<b>5</b>
<b>pH</b>	8.49	7.53	8.46	7.89	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	92	36	84	40	<b>200</b>
<b>Total Hardness(mg/L)</b>	156	64	140	68	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	34	14	32	14	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.13	nil	0.13	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	272	110	248	118	<b>500</b>
<b>Calcium(mg/L)</b>	36.8	14.4	32	16	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	55	18	47	23	<b>200</b>
<b>Nitrate(mg/L)</b>	5.32	3.99	5.76	1.77	<b>45</b>
<b>Fluoride(mg/L)</b>	0.34	0.1	0.22	0.12	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.04	0.018	0.04	<0.010	<b>5</b>
<b>Hexavelent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	Lingaraj OCP	
<b>Monitoring Station</b>	Lingaraj township water	Lingaraj township water	well from Balungakhamar village	Balungakhamar vill well	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.09.14	09.01.15	8.4.14	05.07.14	
<b>Colour(Hazen)</b>	6	6	3	5	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	8	10	5	8	<b>5</b>
<b>pH</b>	8.24	8.28	8.51	7.53	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	44	48	96	88	<b>200</b>
<b>Total Hardness(mg/L)</b>	68	72	156	156	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	14	16	30	32	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	0.16	0.18	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	118	126	268	268	<b>500</b>
<b>Calcium(mg/L)</b>	16	16	20.8	36.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	0.11	<b>0.1</b>
<b>Sulphate(mg/L)</b>	23	23	29	55	<b>200</b>
<b>Nitrate(mg/L)</b>	3.99	2.66	7.09	5.77	<b>45</b>
<b>Fluoride(mg/L)</b>	0.11	0.12	0.38	0.34	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.0005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.001	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.01	0.03	<0.010	0.024	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<0.001	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	nil	<0.001	<b>0.001</b>

**Table : 117 Drinking Water Quality**

<b>Project</b>	Lingaraj OCP	Lingaraj OCP	
<b>Monitoring Station</b>	Balungakhamar vill well	Balungakhamar vill well	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	15.10.2014	09.01.15	
<b>Colour(Hazen)</b>	3	4	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	8	<b>5</b>
<b>pH</b>	8.48	8.47	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	92	88	<b>200</b>
<b>Total Hardness(mg/L)</b>	148	148	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	32	34	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.19	0.15	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	254	256	<b>500</b>
<b>Calcium(mg/L)</b>	35.2	35.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	49	54	<b>200</b>
<b>Nitrate(mg/L)</b>	6.2	7.09	<b>45</b>
<b>Fluoride(mg/L)</b>	0.22	0.23	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.01	0.02	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<b>0.001</b>

**Table : 118 Drinking Water Quality**

Project	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
<b>Monitoring Station</b>	Kansamunda village well water	Kansamunda village well water	Kansamunda village well water	Jamunia Village	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	5.6.2014	09.09.14	3.3.2015	7.5.14	
<b>Colour(Hazen)</b>	3	6	2	6	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	8	5	8	<b>5</b>
<b>pH</b>	8.54	8.54	8.38	8.53	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	156	148	156	164	<b>200</b>
<b>Total Hardness(mg/L)</b>	264	264	280	268	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	66	58	64	62	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.16	0.17	0.12	0.16	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	458	456	486	464	<b>500</b>
<b>Calcium(mg/L)</b>	62.4	64	67.2	64	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	86	76	86	76	<b>200</b>
<b>Nitrate(mg/L)</b>	5.76	5.32	6.2	5.76	<b>45</b>
<b>Fluoride(mg/L)</b>	0.47	0.54	0.46	53	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.002	<0.002	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.002	<0.002	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.01	0.12	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.06	<0.06	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.2	<0.2	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
<b>Monitoring Station</b>	Jamunia Village well water	Jamunia village well water	Project Office Tube well water	Project Office Tube well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	05.08.14	10.11.2014	8.4.14	7.5.14	
<b>Colour(Hazen)</b>	3	4	2	4	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	5	4	5	<b>5</b>
<b>pH</b>	7.43	8.57	8.58	8.57	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	136	156	100	116	<b>200</b>
<b>Total Hardness(mg/L)</b>	256	264	160	172	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	62	58	34	38	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.14	0.16	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	448	462	276	296	<b>500</b>
<b>Calcium(mg/L)</b>	60.8	65.6	38.4	40	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	84	88	55	59	<b>200</b>
<b>Nitrate(mg/L)</b>	6.2	6.2	4.43	3.1	<b>45</b>
<b>Fluoride(mg/L)</b>	0.56	0.28	0.34	0.31	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.0005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.001	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	0.54	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<0.001	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	nil	<0.001	<b>0.001</b>

**Table : 119 Drinking Water Quality**

Project	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
<b>Monitoring Station</b>	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	5.6.2014	07.07.14	05.08.14	09.09.14	
<b>Colour(Hazen)</b>	2	4	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	5	4	5	<b>5</b>
<b>pH</b>	8.53	7.56	7.58	8.63	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	104	96	96	100	<b>200</b>
<b>Total Hardness(mg/L)</b>	160	172	176	172	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	38	36	42	40	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	276	296	308	296	<b>500</b>
<b>Calcium(mg/L)</b>	36.8	41.6	41.6	41.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	0.25	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	54	58	57	55	<b>200</b>
<b>Nitrate(mg/L)</b>	4.43	4.87	5.32	4.43	<b>45</b>
<b>Fluoride(mg/L)</b>	0.32	0.33	0.29	0.38	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<0.010	<0.01	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
<b>Monitoring Station</b>	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	Project Office Tube well water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	14.10.2014	10.11.2014	03.12.14	01.01.15	
<b>Colour(Hazen)</b>	2	2	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	3	2	4	<b>5</b>
<b>pH</b>	8.53	8.54	8.56	8.51	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	104	104	96	96	<b>200</b>
<b>Total Hardness(mg/L)</b>	168	168	172	164	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	36	36	38	36	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	NIL	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	288	294	306	284	<b>500</b>
<b>Calcium(mg/L)</b>	40	40	40	383.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	0.04	0.05	0.05	<b>0.1</b>
<b>Sulphate(mg/L)</b>	59	55	65	59	<b>200</b>
<b>Nitrate(mg/L)</b>	5.32	5.32	5.76	5.32	<b>45</b>
<b>Fluoride(mg/L)</b>	0.19	0.17	0.16	0.26	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.01	0.02	0.03	0.05	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 120 Drinking Water Quality**

Project	Kaniha OCP	Kaniha OCP	Kaniha OCP	Kaniha OCP	
<b>Monitoring Station</b>	Project Office Tube well water	Jarda village well water	Jarda village well water	Jarda village well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	3.3.2015	8.4.14	07.07.14	14.10.2014	
<b>Colour(Hazen)</b>	3	4	6	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	5	8	5	<b>5</b>
<b>pH</b>	8.63	8.53	7.47	8.56	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	92	160	144	152	<b>200</b>
<b>Total Hardness(mg/L)</b>	160	268	268	256	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	34	60	56	56	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	0.18	0.14	0.14	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	276	462	462	446	<b>500</b>
<b>Calcium(mg/L)</b>	38.4	65.6	64	60.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.05	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	61	80	82	76	<b>200</b>
<b>Nitrate(mg/L)</b>	5.32	6.2	5.76	6.65	<b>45</b>
<b>Fluoride(mg/L)</b>	0.28	0.57	0.58	0.27	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.005	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.005	<0.005	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.0005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.001	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.05	<0.010	<0.010	<0.01	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.01	<0.01	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.01	<0.01	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	<0.001	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	nil	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality

Project	Kaniha OCP	Kaniha OCP	
<b>Monitoring Station</b>	Jarda village	Jarda village	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	03.12.14	01.01.15	
<b>Colour(Hazen)</b>	3	5	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	7	<b>5</b>
<b>pH</b>	8.59	8.48	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	140	160	<b>200</b>
<b>Total Hardness(mg/L)</b>	256	272	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	56	60	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	0.12	0.12	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	454	468	<b>500</b>
<b>Calcium(mg/L)</b>	60.8	64	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	84	82	<b>200</b>
<b>Nitrate(mg/L)</b>	6.2	6.2	<b>45</b>
<b>Fluoride(mg/L)</b>	0.31	0.43	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.25	0.2	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<b>0.001</b>

**Table : 121 Drinking Water Quality Data**

<b>Project</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	
<b>Monitoring Station</b>	Mitti Quarry water	Mitti Quarry water	Mitti Quarry water	Kalinga Township tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	09.04.14	6.5.14	4.6.2014	09.04.14	
<b>Colour(Hazen)</b>	5	5	5	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	6	6	7	4	<b>5</b>
<b>pH</b>	7.38	7.39	7.42	8.57	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	144	132	136	96	<b>200</b>
<b>Total Hardness(mg/L)</b>	264	264	256	152	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	58	64	64	34	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	452	452	448	258	<b>500</b>
<b>Calcium(mg/L)</b>	65.6	62.4	60.8	30.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	80	82	78	45	<b>200</b>
<b>Nitrate(mg/L)</b>	8.42	7.53	7.09	4.43	<b>45</b>
<b>Fluoride(mg/L)</b>	0.67	0.52	0.41	0.36	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.005	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.0005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.001	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### DrinkingWater Quality Data

Project	Balram OCP	Balram OCP	Balram OCP	Balram OCP	
<b>Monitoring Station</b>	Kalinga Township tap water	Naikepasi Village tube well water	Naikeposi Village tube well water	Danara Village Bore well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	4.6.2014	06.08.14	8.11.2014	09.04.14	
<b>Colour(Hazen)</b>	2	6	5	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	10	8	4	<b>5</b>
<b>pH</b>	8.61	9.1	8.93	8.3	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	96	148	136	252	<b>200</b>
<b>Total Hardness(mg/L)</b>	164	224	236	388	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	40	54	48	224	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	284	392	408	882	<b>500</b>
<b>Calcium(mg/L)</b>	38.4	52.8	57.6	124.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.15	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	55	66	80	160	<b>200</b>
<b>Nitrate(mg/L)</b>	3.99	5.76	6.2	43.86	<b>45</b>
<b>Fluoride(mg/L)</b>	0.34	0.35	0.36	0.94	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.002	<0.002	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.0005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.001	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.046	<0.01	0.18	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.06	<0.06	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.2	<0.2	<0.01	<b>1</b>
<b>Faecal col.as MPN/100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 122 Drinking Water Quality Data**

<b>Project</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	
<b>Monitoring Station</b>	Danara Village Bore well water	Danara Village Bore well water	Danara Village bore well water	Danara Village bore well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	6.5.14	4.6.2014	06.08.14	03.09.14	
<b>Colour(Hazen)</b>	7	2	2	7	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	10	3	3	11	<b>5</b>
<b>pH</b>	8.26	8.29	8.22	8.36	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	276	288	268	252	<b>200</b>
<b>Total Hardness(mg/L)</b>	476	496	484	468	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	108	122	122	108	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	826	866	864	868	<b>500</b>
<b>Calcium(mg/L)</b>	113.6	118.4	115.2	112	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.1	0.15	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	156	164	140	134	<b>200</b>
<b>Nitrate(mg/L)</b>	40.31	33.67	21.7	33.23	<b>45</b>
<b>Fluoride(mg/L)</b>	0.79	0.87	0.69	0.85	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.046	0.046	<0.010	<0.01	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 123 Drinking Water Quality Data**

<b>Project</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	
<b>Monitoring Station</b>	Danara Village bore well water	Balram Colony Tap water	Balram Colony Tap water	Balram Colony Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	02.01.15	05.07.14	06.08.14	08.09.14	
<b>Colour(Hazen)</b>	2	3	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	5	4	4	<b>5</b>
<b>pH</b>	8.24	8.44	8.39	8.86	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	280	44	44	32	<b>200</b>
<b>Total Hardness(mg/L)</b>	504	64	60	52	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	116	14	12	12	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	874	116	104	92	<b>500</b>
<b>Calcium(mg/L)</b>	121.6	14.4	12.8	12.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	154	19	16	80	<b>200</b>
<b>Nitrate(mg/L)</b>	34.55	3.99	3.99	3.99	<b>45</b>
<b>Fluoride(mg/L)</b>	0.75	0.13	0.1	0.11	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.03	<0.010	0.15	0.16	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality Data

Project	Balram OCP	Balram OCP	Balram OCP	Balram OCP	
<b>Monitoring Station</b>	Balram Colony Tap water	Balram Township Tap water	Balram Township Tap water	Balram Colony Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	15.10.2014	8.11.2014	09.12.14	09.01.15	
<b>Colour(Hazen)</b>	2	3	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	4	3	4	<b>5</b>
<b>pH</b>	8.83	7.97	8.01	7.97	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	32	144	136	144	<b>200</b>
<b>Total Hardness(mg/L)</b>	48	248	244	256	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	8	52	54	60	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	NIL	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	86	432	438	446	<b>500</b>
<b>Calcium(mg/L)</b>	11.2	60.8	57.6	60.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	15	82	80	80	<b>200</b>
<b>Nitrate(mg/L)</b>	3.1	7.53	7.97	7.97	<b>45</b>
<b>Fluoride(mg/L)</b>	0.07	0.43	0.41	0.37	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.16	0.07	<0.02	0.06	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality Data

<b>Project</b>	<b>Balram OCP</b>	<b>Balram OCP</b>	
<b>Monitoring Station</b>	Balram Township Tap water	Balram Colony Tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	03.02.15	12.3.2015	
<b>Colour(Hazen)</b>	3	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	4	<b>5</b>
<b>pH</b>	7.95	8.24	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	144	260	<b>200</b>
<b>Total Hardness(mg/L)</b>	268	484	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	58	114	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	462	852	<b>500</b>
<b>Calcium(mg/L)</b>	64	115.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	76	164	<b>200</b>
<b>Nitrate(mg/L)</b>	8.42	27.02	<b>45</b>
<b>Fluoride(mg/L)</b>	0.35	0.68	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.05	0.05	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<b>0.001</b>

**Table : 124 Drinking Water Quality Data**

<b>Project</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	
<b>Monitoring Station</b>	Kumunda Village Bore well water	Kumunda Village Bore well water	Kumunda Village Bore well water	Kumunda Village Bore well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	05.07.14	05.08.14	03.09.14	14.10.2014	
<b>Colour(Hazen)</b>	3	2	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	4	4	4	<b>5</b>
<b>pH</b>	8.32	8.28	8.35	8.37	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	144	136	132	148	<b>200</b>
<b>Total Hardness(mg/L)</b>	248	232	236	244	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	52	56	54	54	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	NIL	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	428	412	412	428	<b>500</b>
<b>Calcium(mg/L)</b>	59.2	56	57.6	57.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	0.22	0.22	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	88	78	74	78	<b>200</b>
<b>Nitrate(mg/L)</b>	5.76	6.2	6.2	7.09	<b>45</b>
<b>Fluoride(mg/L)</b>	0.28	0.41	0.26	0.31	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	0.15	0.15	<0.01	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>		<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality Data

Project	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	
<b>Monitoring Station</b>	Kumunda Village Bore well water	Kumunda Village Well water	Kumunda Village Bore well water	Kumunda Village Bore well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	8.11.2014	08.12.14	02.01.15	03.02.15	
<b>Colour(Hazen)</b>	3	4	2	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	5	4	3	<b>5</b>
<b>pH</b>	8.39	8.31	8.28	8.23	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	144	212	148	144	<b>200</b>
<b>Total Hardness(mg/L)</b>	248	392	252	248	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	52	84	58	56	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	0.1	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	436	698	436	428	<b>500</b>
<b>Calcium(mg/L)</b>	59.2	92.8	59.2	59.2	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	82	120	76	84	<b>200</b>
<b>Nitrate(mg/L)</b>	7.53	7.53	6.2	6.65	<b>45</b>
<b>Fluoride(mg/L)</b>	0.32	0.45	0.32	0.3	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.03	<0.02	0.02	0.06	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 125 Drinking Water Quality Data**

<b>Project</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	
<b>Monitoring Station</b>	Kumunda Village Bore well water	Gopalprasad Village Bore well water	Gopal Prasad village bore well water	Gopal Prasad village tube well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	5.3.2015	05.07.14	05.08.14	03.09.14	
<b>Colour(Hazen)</b>	2	4	14	12	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	5	67	46	<b>5</b>
<b>pH</b>	8.24	8.6	9.13	8.86	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	132	176	248	236	<b>200</b>
<b>Total Hardness(mg/L)</b>	236	304	404	424	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	54	64	96	82	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	412	526	712	726	<b>500</b>
<b>Calcium(mg/L)</b>	56	72	96	100.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	0.15	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	82	96	132	122	<b>200</b>
<b>Nitrate(mg/L)</b>	7.09	4.87	8.42	8.86	<b>45</b>
<b>Fluoride(mg/L)</b>	0.36	0.35	0.58	0.54	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.05	0.047	0.014	<0.01	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 126 Drinking Water Quality Data**

<b>Project</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	
<b>Monitoring Station</b>	Gopal Village Bore well water	Gopal Prasad Bore well water	Gopal Prasad Vill Tube well water	Gopal Prasad Bore well water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	14.10.2014	8.11.2014	08.12.14	02.01.15	
<b>Colour(Hazen)</b>	3	2	12	2	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	5	4	45	3	<b>5</b>
<b>pH</b>	8.58	8.54	9.11	8.56	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	184	180	260	172	<b>200</b>
<b>Total Hardness(mg/L)</b>	312	316	404	296	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	66	66	90	68	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	NIL	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	542	554	726	518	<b>500</b>
<b>Calcium(mg/L)</b>	73.6	78.4	94.4	72	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	108	104	124	98	<b>200</b>
<b>Nitrate(mg/L)</b>	7.97	7.97	0.42	5.32	<b>45</b>
<b>Fluoride(mg/L)</b>	0.35	0.37	0.56	0.48	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.01	0.04	<0.02	0.07	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 127 Drinking Water Quality Data**

<b>Project</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	<b>Hingula OCP</b>	
<b>Monitoring Station</b>	Gopal Prasad Bore well water	Gopal Prasad Vill Tube well water	Time office tap water	Time office tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	03.02.15	5.3.2015	08.04.14	6.5.14	
<b>Colour(Hazen)</b>	2	9	3	5	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	34	4	7	<b>5</b>
<b>pH</b>	8.51	9.05	8.39	8.17	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	172	252	48	40	<b>200</b>
<b>Total Hardness(mg/L)</b>	296	408	72	60	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	66	92	14	12	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	510	714	124	102	<b>500</b>
<b>Calcium(mg/L)</b>	70.4	97.6	17.6	14.4	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	84	154	26	19	<b>200</b>
<b>Nitrate(mg/L)</b>	6.2	8.86	2.22	7.09	<b>45</b>
<b>Fluoride(mg/L)</b>	0.42	0.54	0.11	0.11	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.0005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.001	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.03	0.05	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality Data

Project	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	
<b>Monitoring Station</b>	Time Office	Time office tap water	Time office tap water	Time office tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	4.6.2014	05.07.14	05.08.14	03.09.14	
<b>Colour(Hazen)</b>	2	7	4	6	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	8	5	9	<b>5</b>
<b>pH</b>	8.5	7.45	7.41	8.31	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	266	40	36	44	<b>200</b>
<b>Total Hardness(mg/L)</b>	452	72	64	72	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	106	14	14	16	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	741	120	114	124	<b>500</b>
<b>Calcium(mg/L)</b>	101	14.4	14.4	16	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	0.15	0.16	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	141	17	17	24	<b>200</b>
<b>Nitrate(mg/L)</b>	33.67	2.66	3.1	3.54	<b>45</b>
<b>Fluoride(mg/L)</b>	0.41	0.12	0.11	0.09	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	0.046	<0.010	<0.010	<0.01	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality Data

Project	Hingula OCP	Hingula OCP	Hingula OCP	Hingula OCP	
<b>Monitoring Station</b>	Time office tap water	Time office tap water	Time office tap water	Time office tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	14.10.2014	8.11.2014	08.12.14	02.01.15	
<b>Colour(Hazen)</b>	3	2	2	7	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	3	2	8	<b>5</b>
<b>pH</b>	8.24	8.47	8.44	8.36	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	48	52	44	48	<b>200</b>
<b>Total Hardness(mg/L)</b>	80	80	76	76	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	16	18	18	18	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	NIL	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	138	144	126	132	<b>500</b>
<b>Calcium(mg/L)</b>	19.2	19.2	17.6	17.6	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	27	28	25	25	<b>200</b>
<b>Nitrate(mg/L)</b>	3.1	3.54	4.43	2.66	<b>45</b>
<b>Fluoride(mg/L)</b>	0.11	0.12	0.11	0.12	<b>1.0</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.01	0.03	0.05	0.04	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

**Table : 128 Drinking Water Quality Data**

<b>Project</b>	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	
<b>Monitoring Station</b>	Talcher Twon tap water	Talcher Twon tap water	Talcher Town tap water	Talcher Town tap water	<b>Indian Drinking Standards (IS-10500)</b>
<b>Dt. of sampling</b>	08.04.14	7.5.14	5.6.2014	05.07.14	
<b>Colour(Hazen)</b>	3	5	3	5	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	4	7	4	7	<b>5</b>
<b>pH</b>	8.26	8.18	8.27	7.52	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	40	44	44	32	<b>200</b>
<b>Total Hardness(mg/L)</b>	60	72	68	56	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
<b>Chloride(mg/L)</b>	16	14	16	12	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	104	122	98	106	<b>500</b>
<b>Calcium(mg/L)</b>	16	16	19	12.8	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	23	24	25	15	<b>200</b>
<b>Nitrate(mg/L)</b>	3.1	2.22	2.66	3.54	<b>45</b>
<b>Fluoride(mg/L)</b>	0.09	0.1	0.12	0.11	<b>1.5</b>
<b>Selenium(mg/L)</b>	<0.002	<0.005	<0.005	<0.005	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.0005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.001	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.010	<0.010	<0.010	<0.010	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.01	<0.01	<0.01	<0.01	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality Data

Project	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	
Monitoring Station	Talcher Town tap water	Talcher Town tap water	Talcher Town tap water	Talcher Town tap water	<b>Indian Drinking Standards (IS-10500)</b>
Dt. of sampling	06.08.14	09.09.14	15.10.2014	8.11.2014	
Colour(Hazen)	3	7	2	2	<b>5</b>
Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
Taste	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
Turbidity(NTU)	4	8	4	4	<b>5</b>
pH	8.57	8.21	8.28	8.31	<b>6.5-8.5</b>
Total Alkalinity(mg/L)	172	36	32	32	<b>200</b>
Total Hardness(mg/L)	292	56	52	48	<b>300</b>
Iron(mg/L)	<0.06	<0.06	<0.06	<0.06	<b>0.3</b>
Chloride(mg/L)	70	12	10	8	<b>250</b>
Residual Free chlorine(mg/L)	nil	nil	NIL	nil	<b>0.2</b>
Total Dissolve Solid(mg/L)	518	98	92	84	<b>500</b>
Calcium(mg/L)	70.4	12.8	11.2	11.2	<b>75</b>
Copper(mg/L)	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
Manganese(mg/L)	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
Sulphate(mg/L)	92	17	16	16	<b>200</b>
Nitrate(mg/L)	5.32	2.21	3.54	3.1	<b>45</b>
Fluoride(mg/L)	0.67	0.09	0.08	0.09	<b>1.5</b>
Selenium(mg/L)	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
Arsenic(mg/L)	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
Lead(mg/L)	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
Cadmium(mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
Zinc(mg/L)	<0.010	<0.01	<0.01	0.05	<b>5</b>
Hexavalent Chromium(mg/L)	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
Boron(mg/L)	<0.2	<0.2	<0.2	<0.2	<b>1</b>
Faecal col.as MPN/100ml	Nil	Nil	Nil	Nil	<b>Nil</b>
Phenolics(mg/L)	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>

### Drinking Water Quality Data

Project	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	Talcher Colliery UG	
<b>Monitoring Station</b>	Talcher Town tap water	Talcher Town tap water	Talcher Town tap water	Talcher Town tap water	<b>Indian Drinking Standards (IS- 10500)</b>
<b>Dt. of sampling</b>	09.12.14	09.01.15	09.02.15	12.3.2015	
<b>Colour(Hazen)</b>	2	3	2	3	<b>5</b>
<b>Odour</b>	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	<b>Unobjectionable</b>
<b>Taste</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Turbidity(NTU)</b>	3	6	3	4	<b>5</b>
<b>pH</b>	8.29	8.21	8.24	8.21	<b>6.5-8.5</b>
<b>Total Alkalinity(mg/L)</b>	32	40	44	40	<b>200</b>
<b>Total Hardness(mg/L)</b>	48	64	72	68	<b>300</b>
<b>Iron(mg/L)</b>	<0.06	<0.06	<0.06	0.07	<b>0.3</b>
<b>Chloride(mg/L)</b>	10	14	14	14	<b>250</b>
<b>Residual Free chlorine(mg/L)</b>	nil	nil	nil	nil	<b>0.2</b>
<b>Total Dissolve Solid(mg/L)</b>	88	110	122	116	<b>500</b>
<b>Calcium(mg/L)</b>	11.2	14.4	16	16	<b>75</b>
<b>Copper(mg/L)</b>	<0.03	<0.03	<0.03	<0.03	<b>0.05</b>
<b>Manganese(mg/L)</b>	<0.02	<0.02	<0.02	<0.02	<b>0.1</b>
<b>Sulphate(mg/L)</b>	16	19	20	23	<b>200</b>
<b>Nitrate(mg/L)</b>	2.22	2.21	3.1	4.43	<b>45</b>
<b>Fluoride(mg/L)</b>	0.08	0.1	0.11	0.1	<b>1.5</b>
<b>Selenium(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.01</b>
<b>Arsenic(mg/L)</b>	<0.002	<0.002	<0.002	<0.002	<b>0.05</b>
<b>Lead(mg/L)</b>	<0.005	<0.005	<0.005	<0.005	<b>0.05</b>
<b>Cadmium(mg/L)</b>	<0.0005	<0.0005	<0.0005	<0.0005	<b>0.01</b>
<b>Zinc(mg/L)</b>	<0.02	0.05	0.02	0.05	<b>5</b>
<b>Hexavalent Chromium(mg/L)</b>	<0.06	<0.06	<0.06	<0.06	<b>0.05</b>
<b>Boron(mg/L)</b>	<0.2	<0.2	<0.2	<0.2	<b>1</b>
<b>Faecal col.as MPN/ 100ml</b>	Nil	Nil	Nil	Nil	<b>Nil</b>
<b>Phenolics(mg/L)</b>	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>



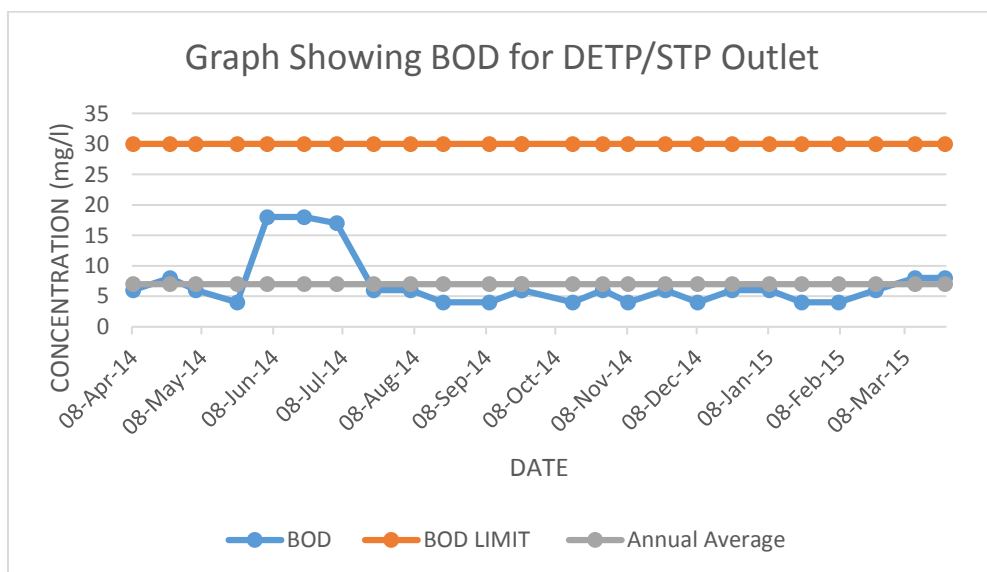
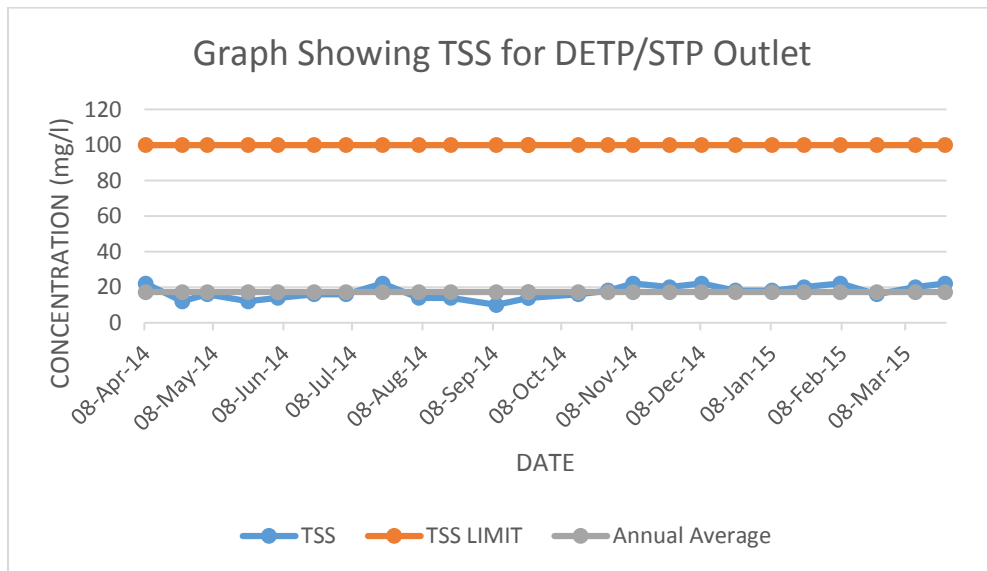
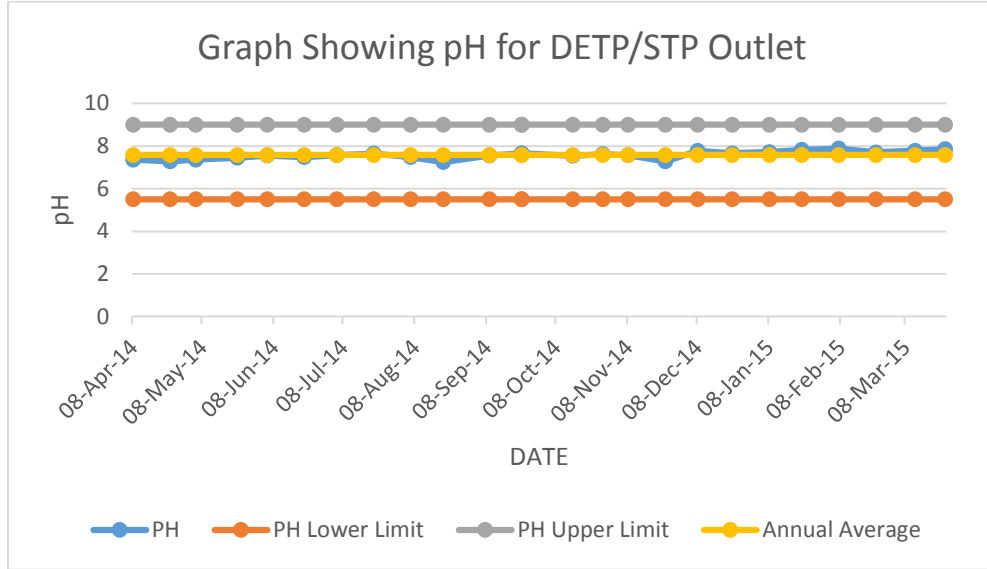
**Table : 129 Effluent Quality Data**

**Project: Ananta OCP**

**Monitoring Station: DETP/STP outlet**

<b>Date of Sampling</b>	<b>pH</b>	<b>BOD</b>	<b>TSS</b>
24-Nov-14	7.8	18	24
08-Apr-14	7.36	6	22
24-Apr-14	7.28	8	12
05-May-14	7.36	6	16
23-May-14	7.45	4	12
05-Jun-14	7.56	18	14
21-Jun-14	7.48	18	16
05-Jul-14	7.57	17	16
21-Jul-14	7.65	6	22
06-Aug-14	7.48	6	14
20-Aug-14	7.25	4	14
09-Sep-14	7.56	4	10
23-Sep-14	7.66	6	14
23-Sep-14	7.66	6	14
15-Oct-14	7.54	4	16
28-Oct-14	7.62	6	18
08-Nov-14	7.57	4	22
24-Nov-14	7.28	6	20
08-Dec-14	7.77	4	22
23-Dec-14	7.66	6	18
08-Jan-15	7.72	6	18
22-Jan-15	7.82	4	20
07-Feb-15	7.88	4	22
23-Feb-15	7.70	6	16
12-Mar-15	7.78	8	20
25-Mar-15	7.85	8	22

*Note: All values are in mg/L*



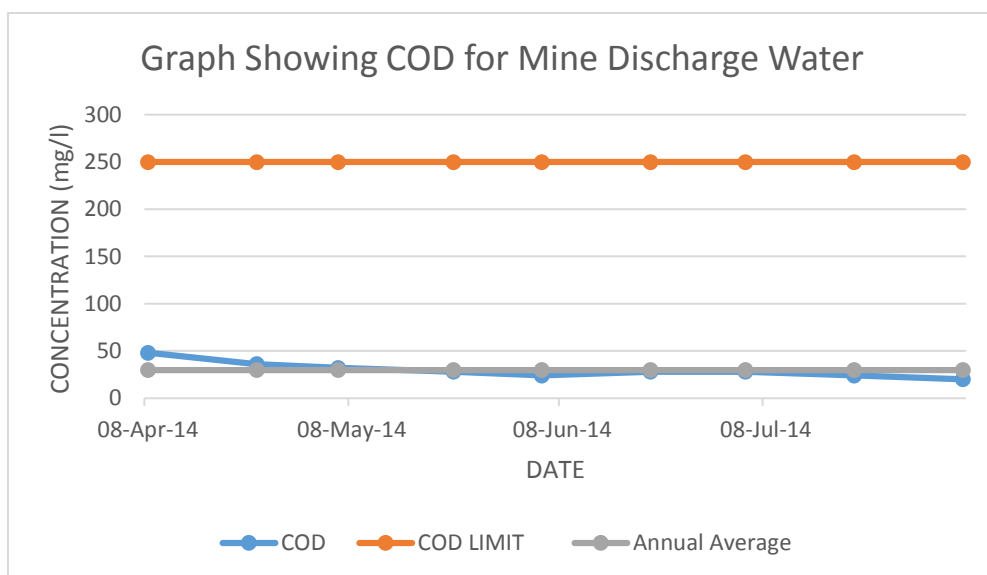
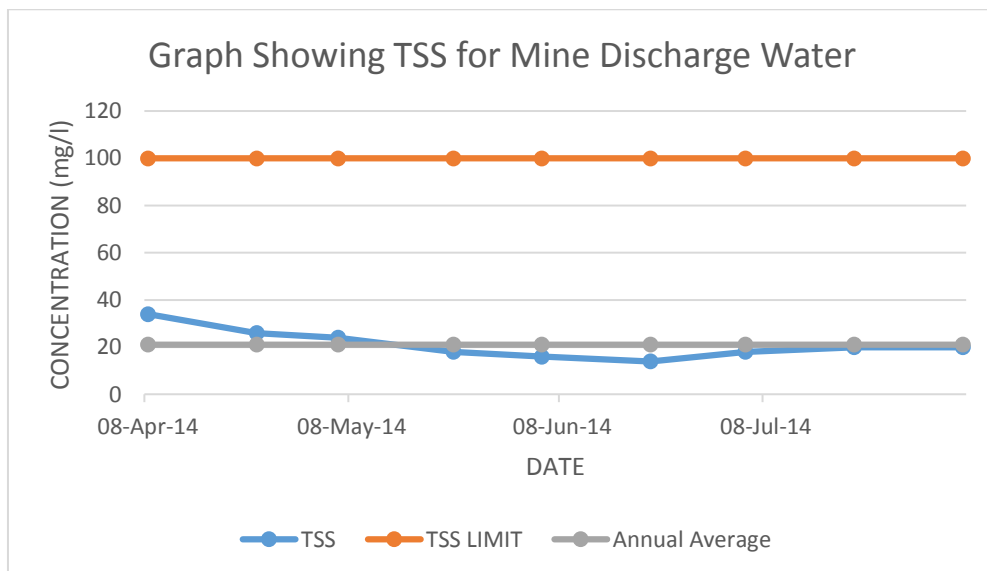
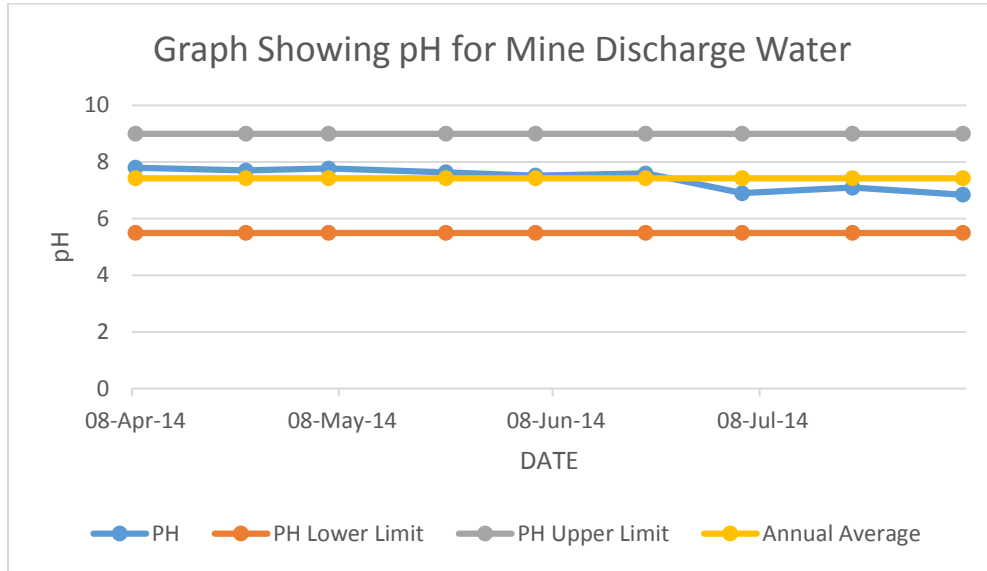
**Table : 130 Effluent Quality Data**

**Project: Ananta OCP**

**Monitoring Station: Mine Discharge water**

<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
08-Apr-14	Mine Discharge water	7.8	<2.0	34	48
24-Apr-14	Mine Discharge water	7.7	<2.0	26	36
06-May-14	Mine Discharge water	7.77	<2.0	24	32
23-May-14	Mine Discharge water	7.64	<2.0	18	28
05-Jun-14	Mine Discharge water	7.52	<2.0	16	24
21-Jun-14	Mine Discharge water	7.6	<2.0	14	28
05-Jul-14	Mine Discharge water	6.9	<2.0	18	28
21-Jul-14	Mine Discharge water	7.1	<2.0	20	24
06-Aug-14	Mine Discharge water	6.85	<2.0	20	20

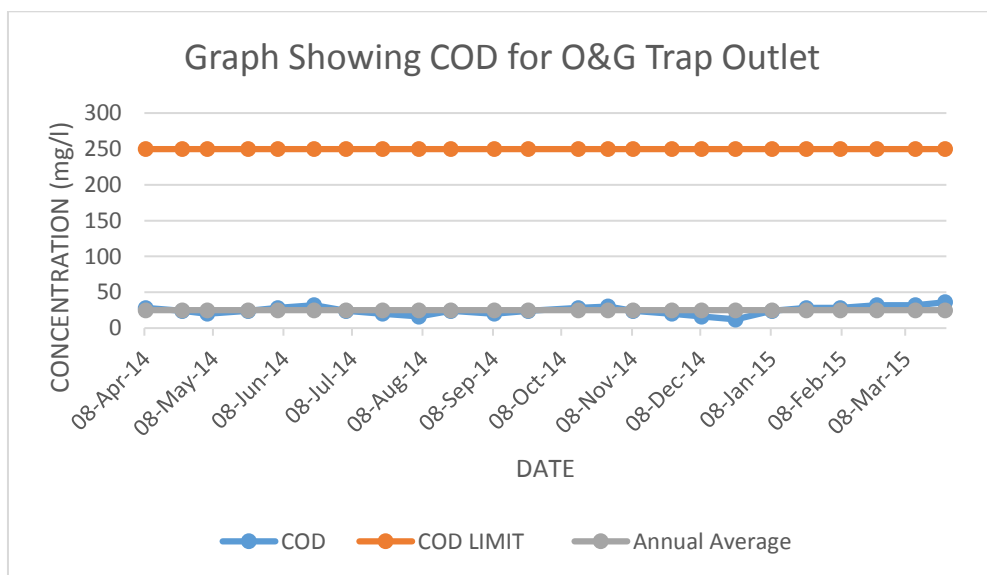
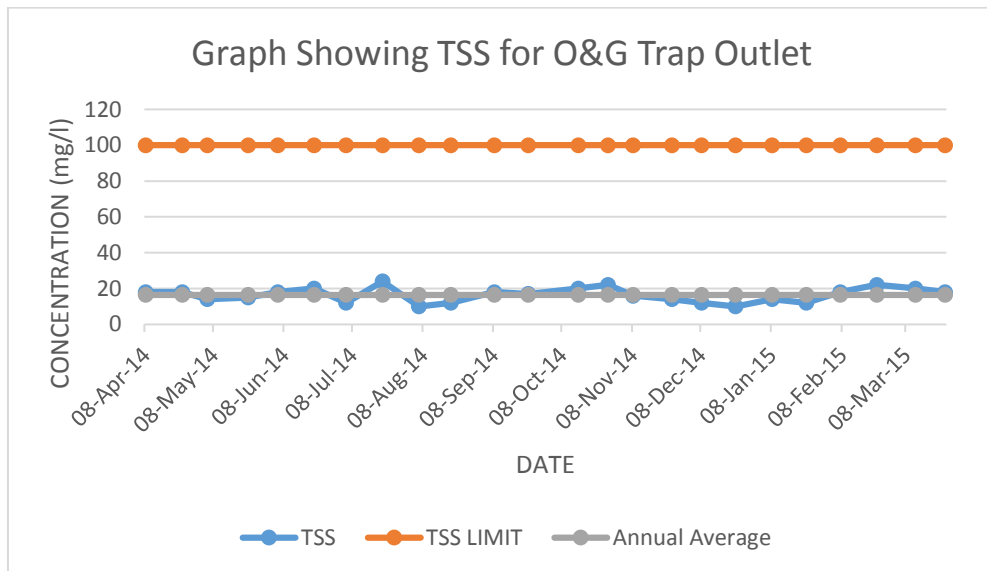
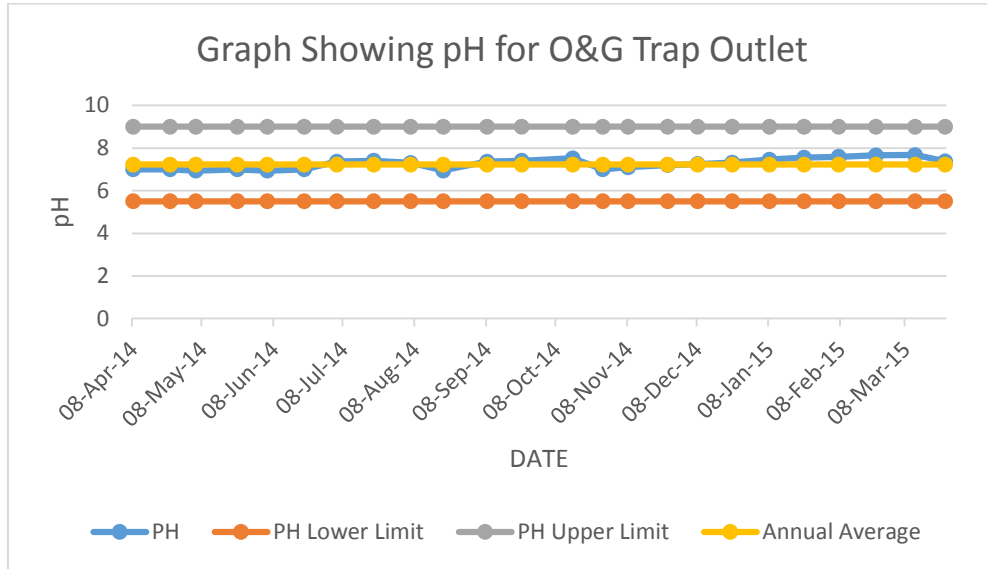
*Note: All values are in mg/L*



**Table : 131 Effluent Quality Data****Project: Ananta OCP****Monitoring Station: O & G Trap outlet**

<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
25-Nov-14	O & G Trap inlet	7.28	<2.0	18	24
08-Apr-14	O & G Trap outlet	7	<2.0	18	28
24-Apr-14	O & G Trap outlet	7	<2.0	18	24
05-May-14	O & G Trap outlet	6.94	<2.0	14	20
23-May-14	O & G Trap outlet	7.00	<2.0	15	24
05-Jun-14	O & G Trap outlet	6.94	<2.0	18	28
21-Jun-14	O & G Trap outlet	7.0	<2.0	20	32
05-Jul-14	O & G Trap outlet	7.36	<2.0	12	24
21-Jul-14	O & G Trap outlet	7.4	<2.0	24	20
06-Aug-14	O & G Trap outlet	7.3	<2.0	10	16
20-Aug-14	O & G Trap outlet	6.95	<2.0	12	24
08-Sep-14	O & G Trap outlet	7.36	<2.0	18	20
23-Sep-14	O & G Trap outlet	7.4	<2.0	17	24
15-Oct-14	O & G Trap outlet	7.52	<2.0	20	28
28-Oct-14	O & G Trap outlet	7.0	<2.0	22	30
08-Nov-14	O & G Trap outlet	7.1	<2.0	16	24
25-Nov-14	O & G Trap outlet	7.2	<2.0	14	20
08-Dec-14	O & G Trap outlet	7.25	<2.0	12	16
23-Dec-14	O & G Trap outlet	7.32	<2.0	10	12
08-Jan-15	O & G Trap outlet	7.46	<2.0	14	24
23-Jan-15	O & G Trap outlet	7.55	<2.0	12	28
07-Feb-15	O & G Trap outlet	7.59	<2.0	18	28
23-Feb-15	O & G Trap outlet	7.66	<2.0	22	32
12-Mar-15	O & G Trap outlet	7.67	<2.0	20	32
25-Mar-15	O & G Trap outlet	7.38	<2.0	18	36

*Note: All values are in mg/L*

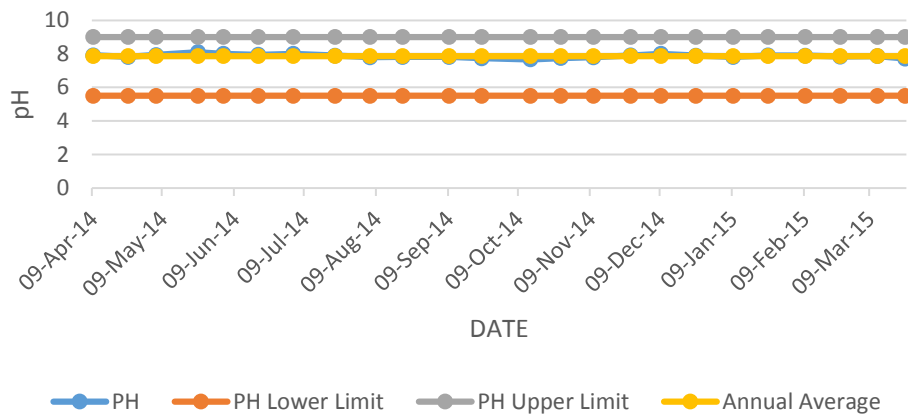


**Table : 132 Effluent Quality Data**  
**Project: Bhubaneswari OCP /Monitoring Station:Mine discharge in Bangaru Jhor**

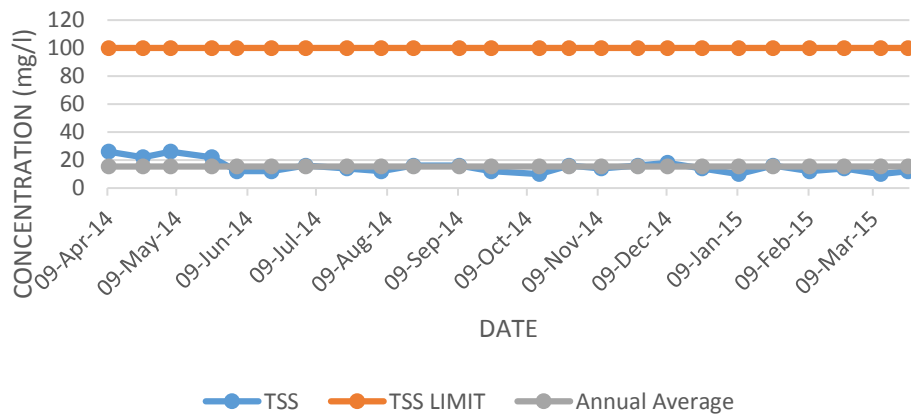
<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
09-Apr-14	Mine Discharge in BangaruJhor	7.92	<2.0	26	36
24-Apr-14	Mine Discharge in BangaruJhor	7.82	<2.0	22	32
06-May-14	Mine Discharge in BangaruJhor	7.94	<2.0	26	36
24-May-14	Mine Discharge in BangaruJhor	8.1	<2.0	22	32
04-Jun-14	Mine Discharge in BangaruJhor	8.0	<2.0	12	20
19-Jun-14	Mine Discharge in BangaruJhor	7.95	<2.0	12	16
04-Jul-14	Mine Discharge in BangaruJhor	8.0	<2.0	16	24
22-Jul-14	Mine Discharge in BangaruJhor	7.9	<2.0	14	20
06-Aug-14	Mine Discharge in BangaruJhor	7.8	<2.0	12	21
20-Aug-14	Mine Discharge in BangaruJhor	7.82	<2.0	16	28
09-Sep-14	Mine Discharge in BangaruJhor	7.82	<2.0	16	24
23-Sep-14	Mine Discharge in BangaruJhor	7.74	<2.0	12	20
14-Oct-14	Mine Discharge in BangaruJhor	7.67	<2.0	10	16
27-Oct-14	Mine Discharge in BangaruJhor	7.75	<2.0	16	24
10-Nov-14	Mine Discharge in BangaruJhor	7.8	<2.0	14	20
26-Nov-14	Mine Discharge in BangaruJhor	7.91	<2.0	16	28
09-Dec-14	Mine Discharge in BangaruJhor	8.0	<2.0	18	24
24-Dec-14	Mine Discharge in BangaruJhor	7.9	<2.0	14	20
09-Jan-15	Mine Discharge in BangaruJhor	7.82	<2.0	10	16
24-Jan-15	Mine Discharge in BangaruJhor	7.91	<2.0	16	24
09-Feb-15	Mine Discharge in BangaruJhor	7.90	<2.0	12	24
24-Feb-15	Mine Discharge in BangaruJhor	7.84	<2.0	14	20
12-Mar-15	Mine Discharge in BangaruJhor	7.87	<2.0	10	16
24-Mar-15	Mine Discharge in BangaruJhor	7.72	<2.0	12	21

*Note: All values are in mg/L*

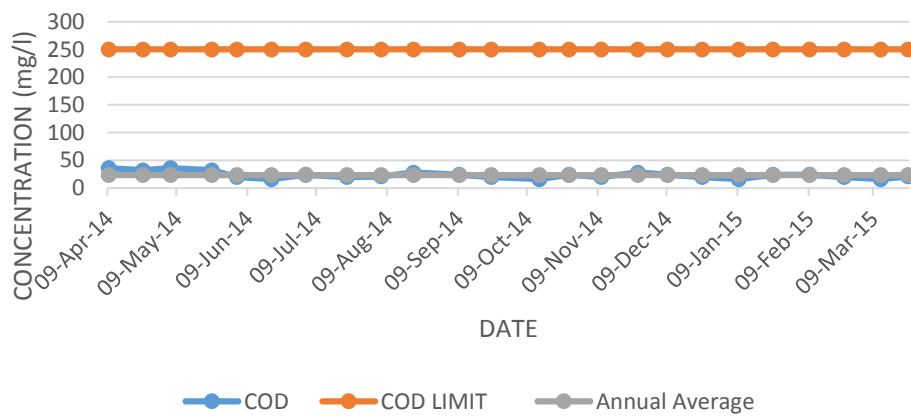
Graph Showing pH for Mine Discharge in Bangaru Jhor



Graph Showing TSS for Mine Discharge in Bangaru Jhor



Graph Showing COD for Mine Discharge in Bangaru Jhor



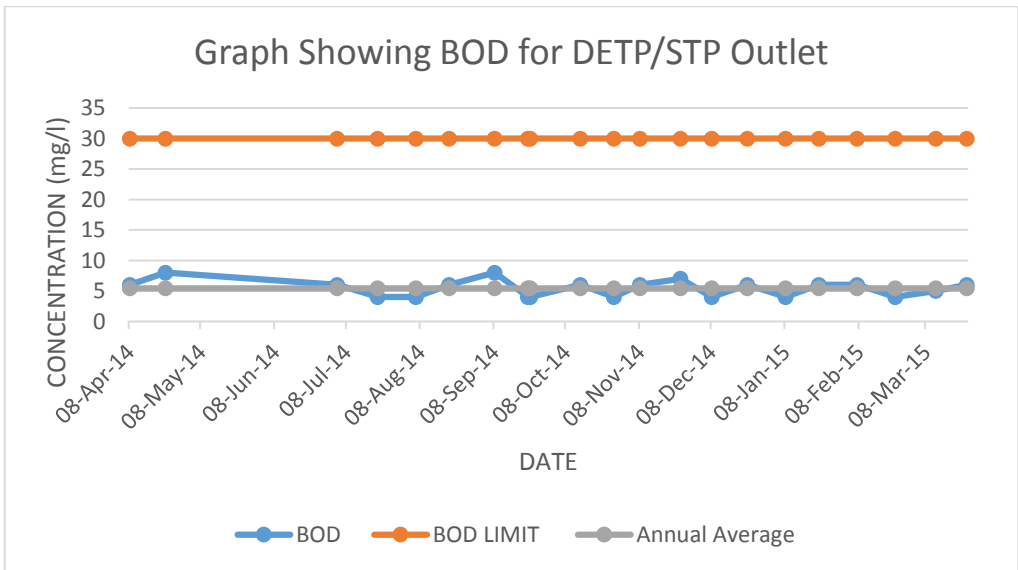
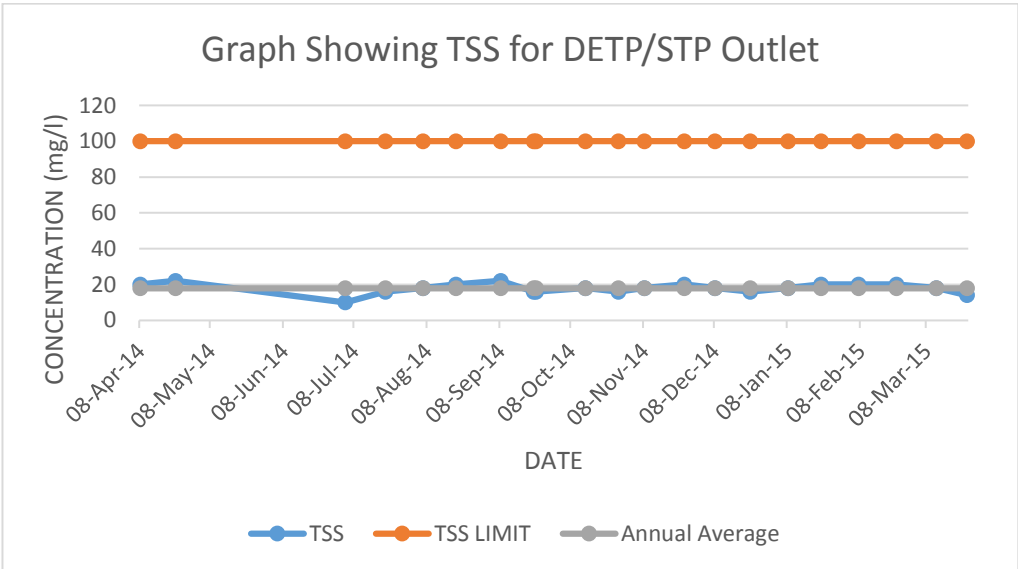
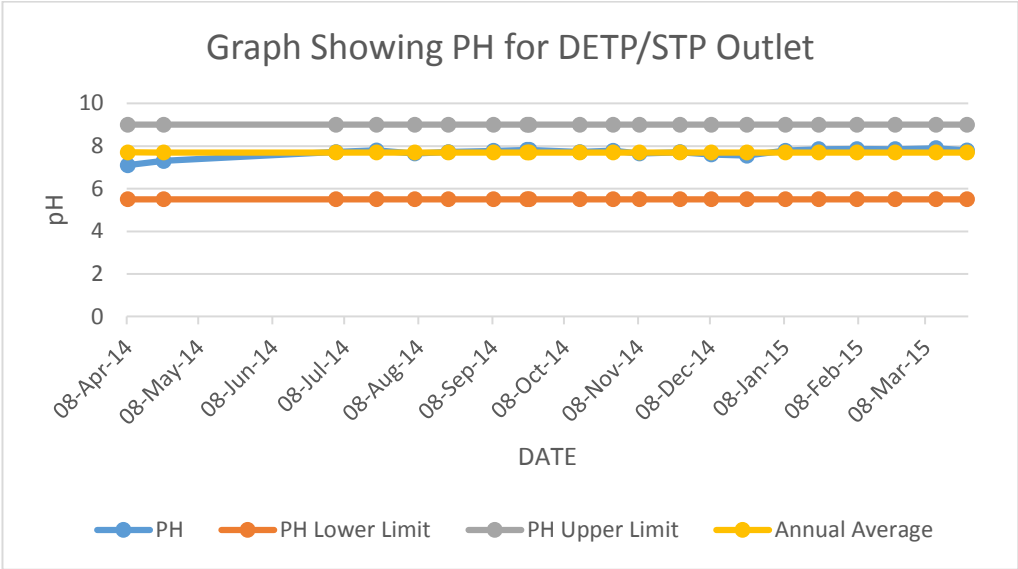
**Table : 133 Effluent Quality Data**

**Project: Jagannath OCP**

**Monitoring Station:DETP/STP outlet**

<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>BOD</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>
25-Nov-14	DETP / STP inlet	7.63	15	<2.0	24
08-Apr-14	DETP / STP outlet	7.1	6	<2.0	20
23-Apr-14	DETP / STP outlet	7.3	8	<2.0	22
04-Jul-14	DETP / STP outlet	7.72	6	<2.0	10
21-Jul-14	DETP / STP outlet	7.8	4	<2.0	16
06-Aug-14	DETP / STP outlet	7.65	4	<2.0	18
20-Aug-14	DETP / STP outlet	7.72	6	<2.0	20
08-Sep-14	DETP / STP outlet	7.77	8	<2.0	22
22-Sep-14	DETP / STP outlet	7.82	4	<2.0	16
23-Sep-14	DETP / STP outlet	7.82	4	<2.0	16
14-Oct-14	DETP / STP outlet	7.72	6	<2.0	18
28-Oct-14	DETP / STP outlet	7.78	4	<2.0	16
08-Nov-14	DETP / STP outlet	7.65	6	<2.0	18
25-Nov-14	DETP / STP outlet	7.71	7	<2.0	20
08-Dec-14	DETP / STP outlet	7.6	4	<2.0	18
23-Dec-14	DETP / STP outlet	7.55	6	<2.0	16
08-Jan-15	DETP / STP outlet	7.78	4	<2.0	18
22-Jan-15	DETP / STP outlet	7.85	6	<2.0	20
07-Feb-15	DETP / STP outlet	7.86	6	<2.0	20
23-Feb-15	DETP / STP outlet	7.85	4	<2.0	20
12-Mar-15	DETP / STP outlet	7.90	5	<2.0	18
25-Mar-15	DETP / STP outlet	7.80	6	<2.0	14

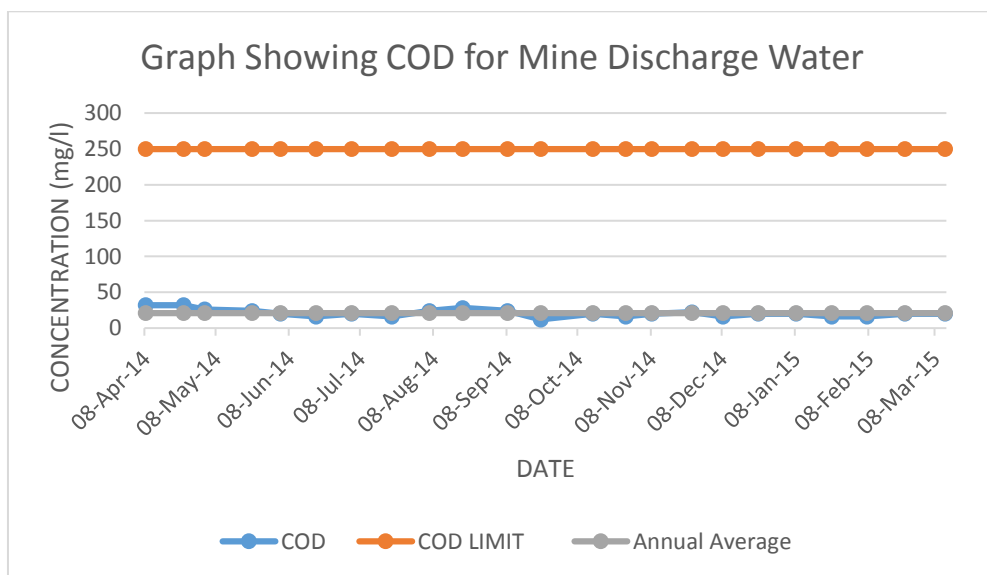
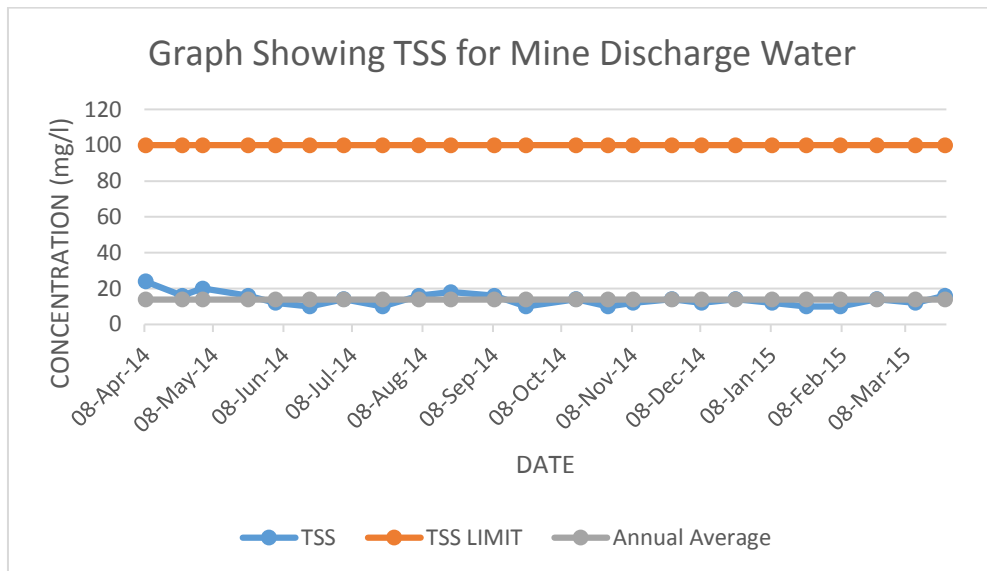
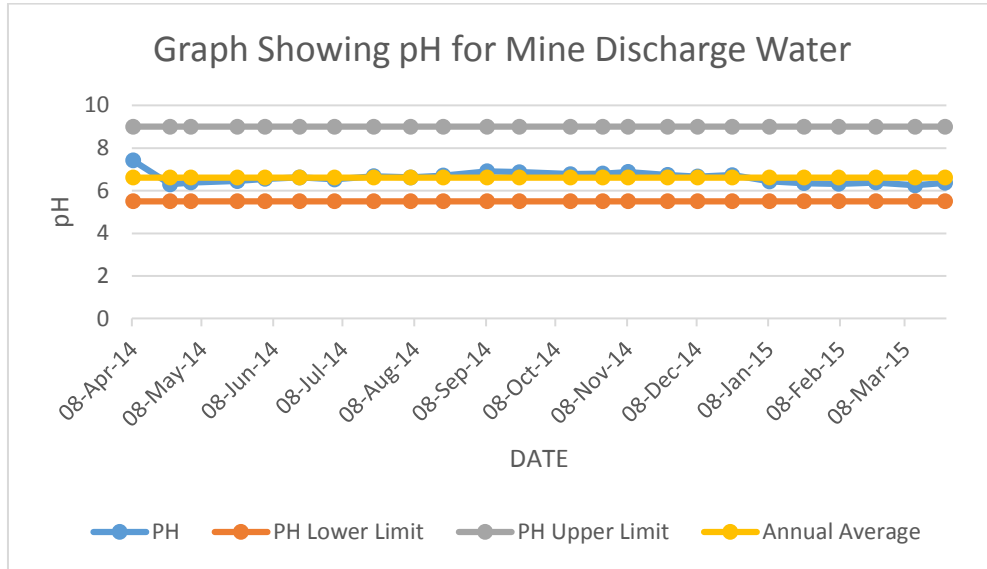
*Note: All values are in mg/L*



**Table : 134 Effluent Quality Data****Project: Jagannath OCP****Monitoring Station: Mine Discharge Water**

<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
08-Apr-14	Mine Discharge water	7.42	<2.0	24	32
24-Apr-14	Mine Discharge water	6.3	<2.0	16	32
03-May-14	Mine Discharge water	6.38	<2.0	20	26
23-May-14	Mine Discharge water	6.45	<2.0	16	24
04-Jun-14	Mine Discharge water	6.55	<2.0	12	20
19-Jun-14	Mine Discharge water	6.62	<2.0	10	16
04-Jul-14	Mine Discharge water	6.53	<2.0	14	20
21-Jul-14	Mine Discharge water	6.68	<2.0	10	16
06-Aug-14	Mine Discharge water	6.62	<2.0	16	24
20-Aug-14	Mine Discharge water	6.71	<2.0	18	28
08-Sep-14	Mine Discharge water	6.91	<2.0	16	24
22-Sep-14	Mine Discharge water	6.87	<2.0	10	12
14-Oct-14	Mine Discharge water	6.78	<2.0	14	20
28-Oct-14	Mine Discharge water	6.8	<2.0	10	16
08-Nov-14	Mine Discharge water	6.88	<2.0	12	20
25-Nov-14	Mine Discharge water	6.74	<2.0	14	22
08-Dec-14	Mine Discharge water	6.66	<2.0	12	16
23-Dec-14	Mine Discharge water	6.73	<2.0	14	20
08-Jan-15	Mine Discharge water	6.44	<2.0	12	20
23-Jan-15	Mine Discharge water	6.35	<2.0	10	16
07-Feb-15	Mine Discharge water	6.32	<2.0	10	16
23-Feb-15	Mine Discharge water	6.38	<2.0	14	20
12-Mar-15	Mine Discharge water	6.25	<2.0	12	20
25-Mar-15	Mine Discharge water	6.37	<2.0	16	24

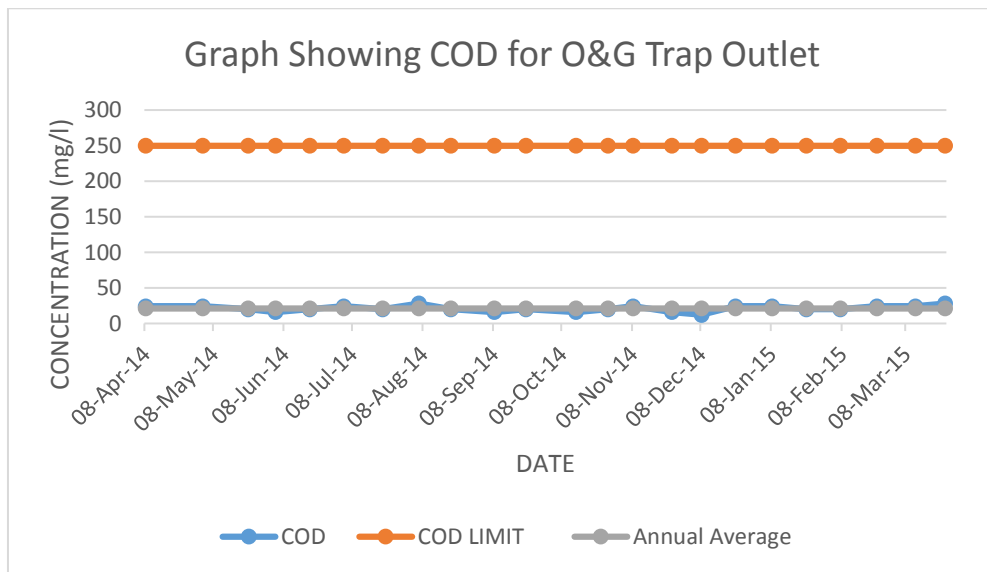
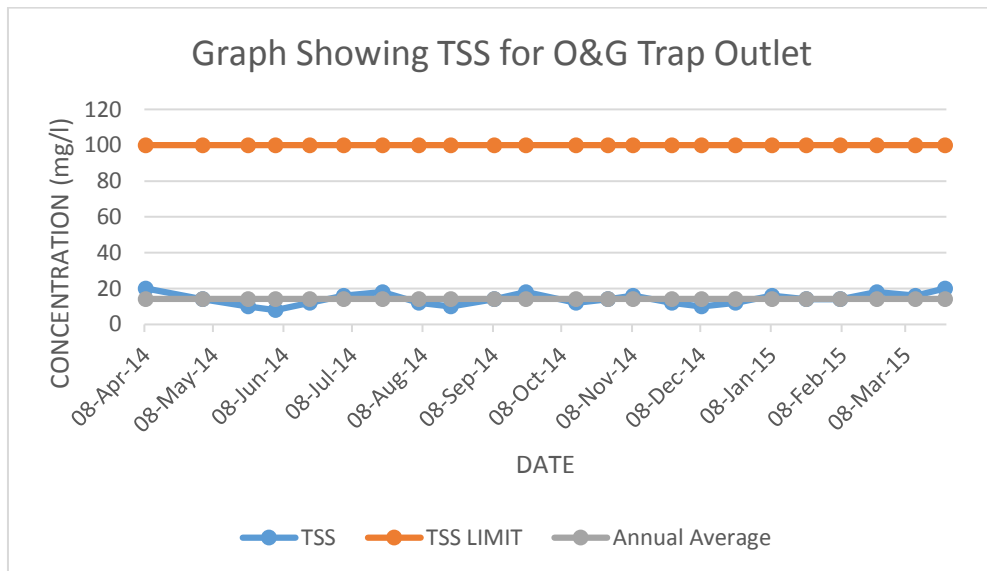
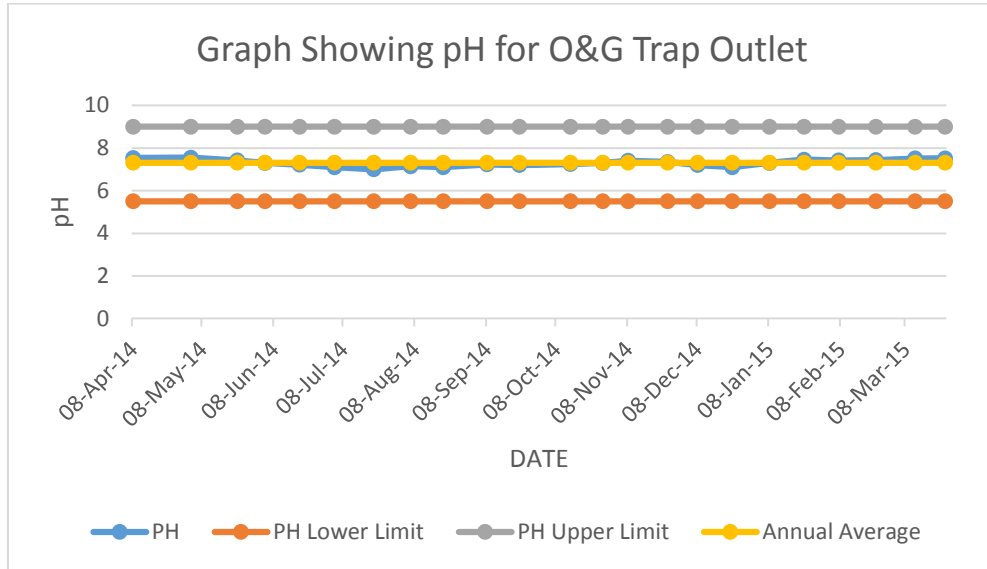
*Note: All values are in mg/L*



**Table : 135 Effluent Quality Data****Project: Jagannath OCP****Monitoring Station:O & G Trap Outlet**

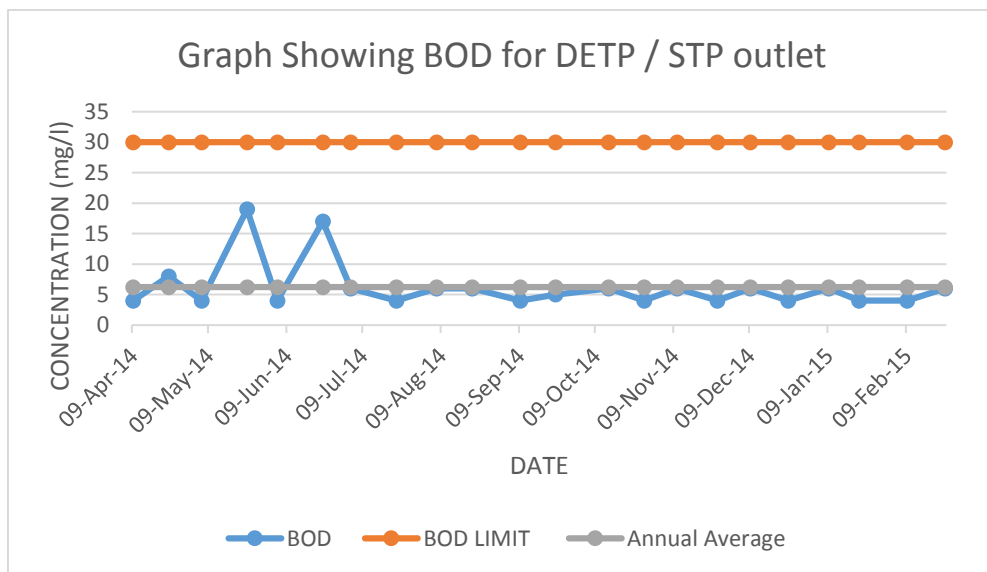
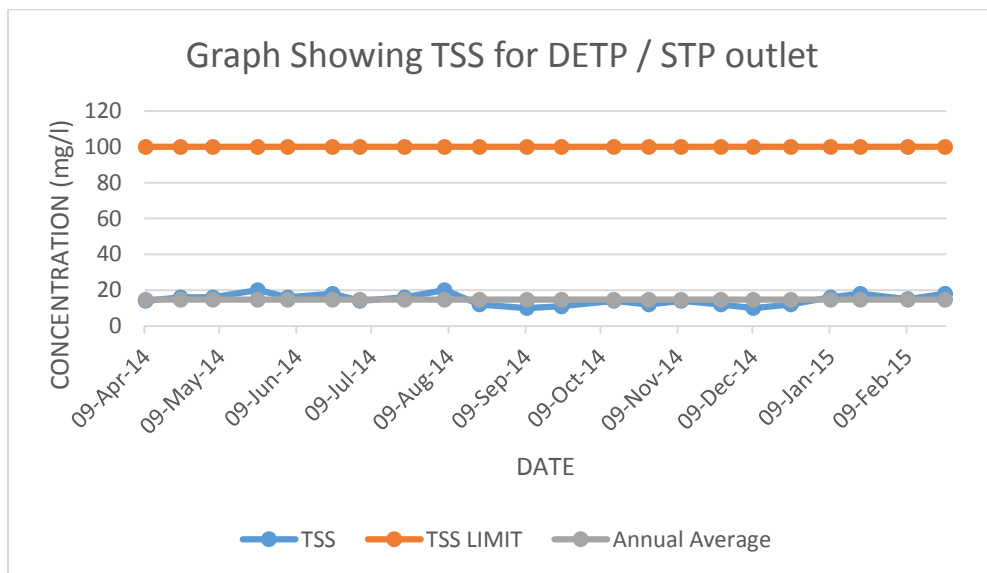
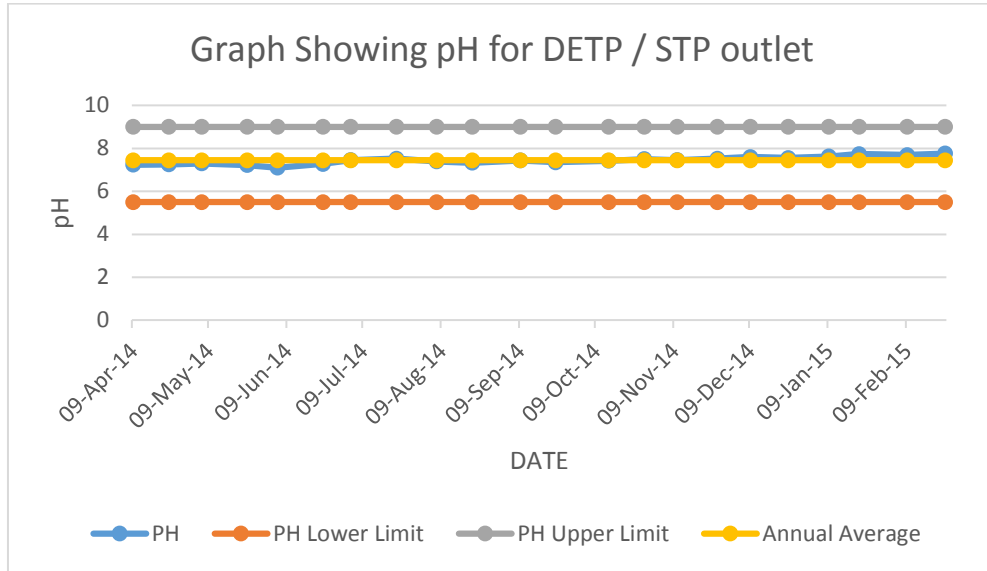
<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
25-Nov-14	O & G Trap inlet	7.24	<2.0	16	24
08-Apr-14	O & G Trap outlet	7.53	<2.0	20	24
03-May-14	O & G Trap outlet	7.55	<2.0	14	24
23-May-14	O & G Trap outlet	7.42	<2.0	10	20
04-Jun-14	O & G Trap outlet	7.3	<2.0	8	16
19-Jun-14	O & G Trap outlet	7.22	<2.0	12	20
04-Jul-14	O & G Trap outlet	7.1	<2.0	16	24
21-Jul-14	O & G Trap outlet	7	<2.0	18	20
06-Aug-14	O & G Trap outlet	7.15	<2.0	12	28
20-Aug-14	O & G Trap outlet	7.1	<2.0	10	20
08-Sep-14	O & G Trap outlet	7.23	<2.0	14	16
22-Sep-14	O & G Trap outlet	7.2	<2.0	18	20
14-Oct-14	O & G Trap outlet	7.25	<2.0	12	16
28-Oct-14	O & G Trap outlet	7.3	<2.0	14	20
08-Nov-14	O & G Trap outlet	7.4	<2.0	16	24
25-Nov-14	O & G Trap outlet	7.35	<2.0	12	16
08-Dec-14	O & G Trap outlet	7.2	<2.0	10	12
23-Dec-14	O & G Trap outlet	7.1	<2.0	12	24
08-Jan-15	O & G Trap outlet	7.3	<2.0	16	24
23-Jan-15	O & G Trap outlet	7.46	<2.0	14	20
07-Feb-15	O & G Trap outlet	7.42	<2.0	14	20
23-Feb-15	O & G Trap outlet	7.43	<2.0	18	24
12-Mar-15	O & G Trap outlet	7.51	<2.0	16	24
25-Mar-15	O & G Trap outlet	7.52	<2.0	20	28

*Note: All values are in mg/L*



**Table : 136 Effluent Quality Data****Project: Bharatpur OCP****Monitoring Station: DETP/STP outlet**

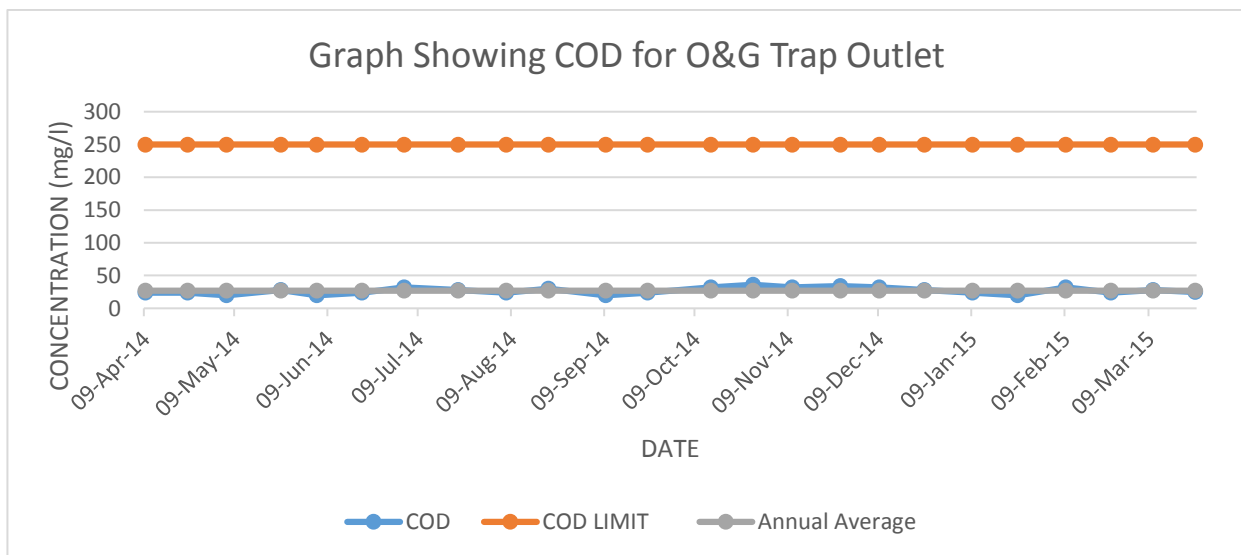
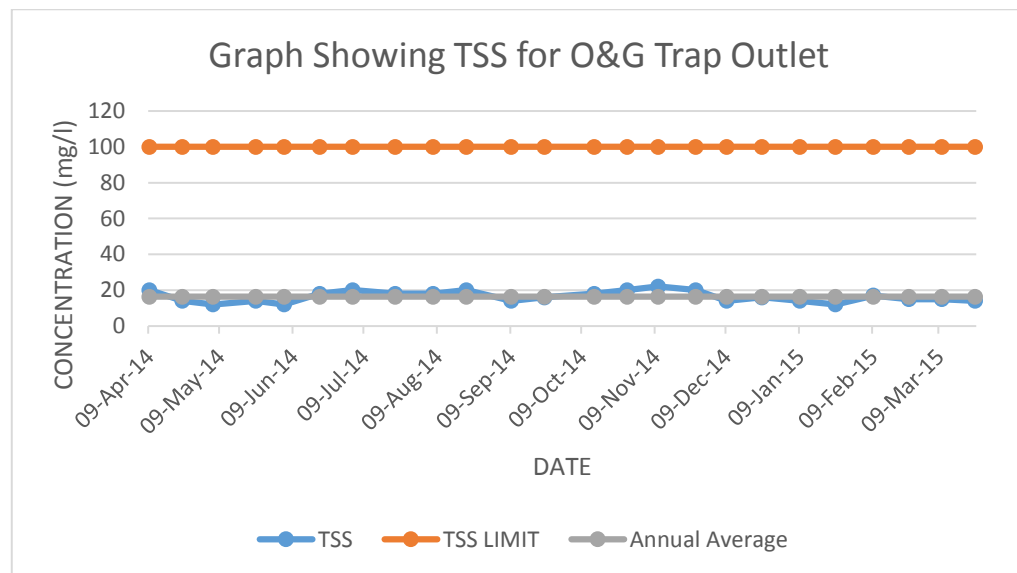
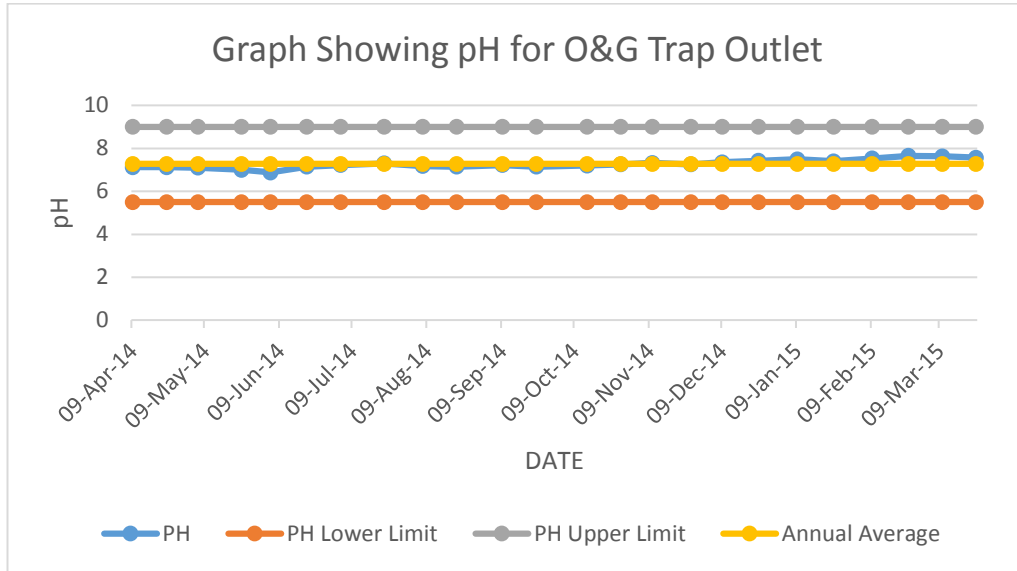
<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>BOD</b>	<b>TSS</b>
26-Nov-14	DETP / STP inlet	7.6	10	20
09-Apr-14	DETP / STP outlet	7.24	4	14
23-Apr-14	DETP / STP outlet	7.25	8	16
06-May-14	DETP / STP outlet	7.3	4	16
24-May-14	DETP / STP outlet	7.22	19	20
05-Jun-14	DETP / STP outlet	7.1	4	16
23-Jun-14	DETP / STP outlet	7.28	17	18
04-Jul-14	DETP / STP outlet	7.45	6	14
22-Jul-14	DETP / STP outlet	7.52	4	16
07-Aug-14	DETP / STP outlet	7.39	6	20
21-Aug-14	DETP / STP outlet	7.33	6	12
09-Sep-14	DETP / STP outlet	7.44	4	10
23-Sep-14	DETP / STP outlet	7.35	5	11
14-Oct-14	DETP / STP outlet	7.42	6	14
28-Oct-14	DETP / STP outlet	7.5	4	12
10-Nov-14	DETP / STP outlet	7.45	6	14
26-Nov-14	DETP / STP outlet	7.52	4	12
09-Dec-14	DETP / STP outlet	7.6	6	10
24-Dec-14	DETP / STP outlet	7.55	4	12
09-Jan-15	DETP / STP outlet	7.62	6	16
21-Jan-15	DETP / STP outlet	7.74	4	18
09-Feb-15	DETP / STP outlet	7.69	4	15
24-Feb-15	DETP / STP outlet	7.76	6	18



**Table : 137 Effluent Quality Data**  
**Project: Bharatpur OCP / Monitoring Station: O&G trap outlet**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
09-Apr-14	7.12	<2.0	20	24
23-Apr-14	7.12	<2.0	14	24
06-May-14	7.1	<2.0	12	20
24-May-14	7.00	<2.0	14	28
05-Jun-14	6.88	<2.0	12	20
20-Jun-14	7.15	<2.0	18	24
04-Jul-14	7.22	<2.0	20	32
22-Jul-14	7.3	<2.0	18	28
07-Aug-14	7.18	<2.0	18	24
21-Aug-14	7.15	<2.0	20	30
09-Sep-14	7.22	<2.0	14	20
23-Sep-14	7.15	<2.0	16	24
14-Oct-14	7.2	<2.0	18	32
28-Oct-14	7.25	<2.0	20	36
10-Nov-14	7.32	<2.0	22	32
26-Nov-14	7.25	<2.0	20	34
09-Dec-14	7.35	<2.0	14	32
24-Dec-14	7.42	<2.0	16	28
09-Jan-15	7.49	<2.0	14	24
24-Jan-15	7.4	<2.0	12	20
09-Feb-15	7.53	<2.0	17	32
24-Feb-15	7.65	<2.0	15	24
10-Mar-15	7.63	<2.0	15	28
24-Mar-15	7.57	<2.0	14	25

*All values are in mg/L*



**Table : 138 Effluent Quality Data**

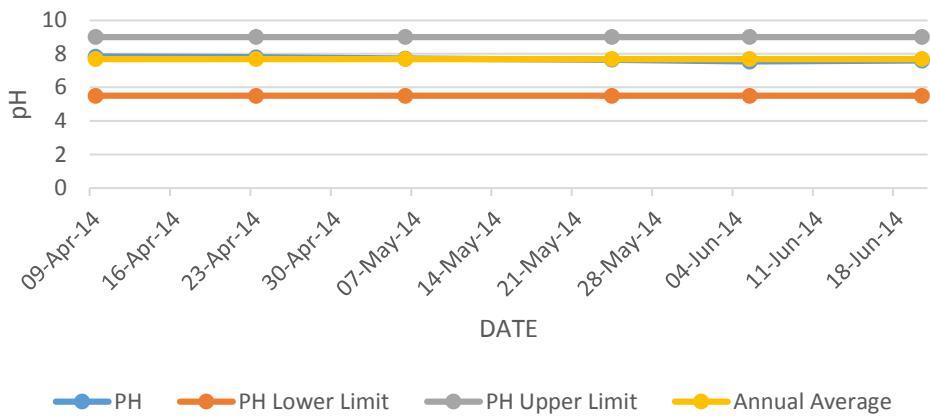
**Project: Bharatpur OCP**

Monitoring Station: Mine Discharge water at the  
point of Confluence with Bangaru Nala

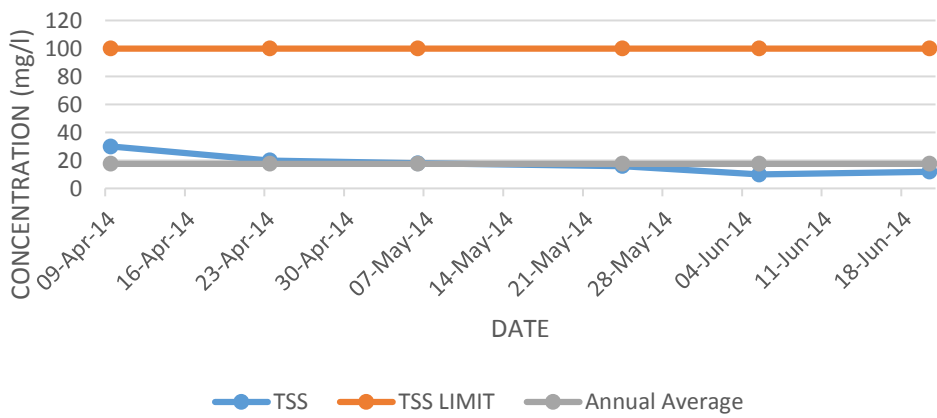
<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
09-Apr-14	Mine Discharge water at the point of Confluence with Bangaru Nala	7.84	<2.0	30	40
23-Apr-14	Mine Discharge water at the point of Confluence with Bangaru Nala	7.8	<2.0	20	32
06-May-14	Mine Discharge water at the point of Confluence with Bangaru Nala	7.72	<2.0	18	28
24-May-14	Mine Discharge water at the point of Confluence with Bangaru Nala	7.65	<2.0	16	24
05-Jun-14	Mine Discharge water at the point of Confluence with Bangaru Nala	7.54	<2.0	10	16
20-Jun-14	Mine Discharge water at the point of Confluence with Bangaru Nala	7.6	<2.0	12	20

*All values are in mg/L*

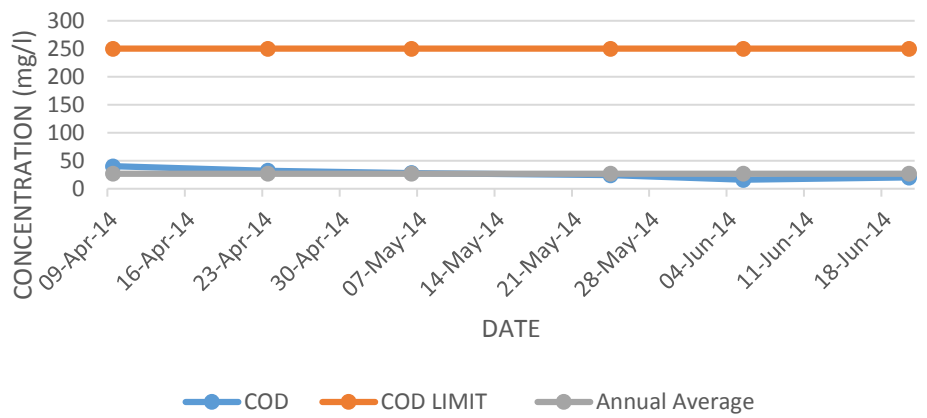
Graph Showing pH for Mine Discharge water at the point of Confluence with Bangaru Nala



Graph Showing TSS for Mine Discharge water at the point of Confluence with Bangaru Nala



Graph Showing COD for Mine Discharge water at the point of Confluence with Bangaru Nala



### Table : 139 Effluent Quality Data

Project: Chendipada OCP

Monitoring Station: Outlet of Mine Discharge water

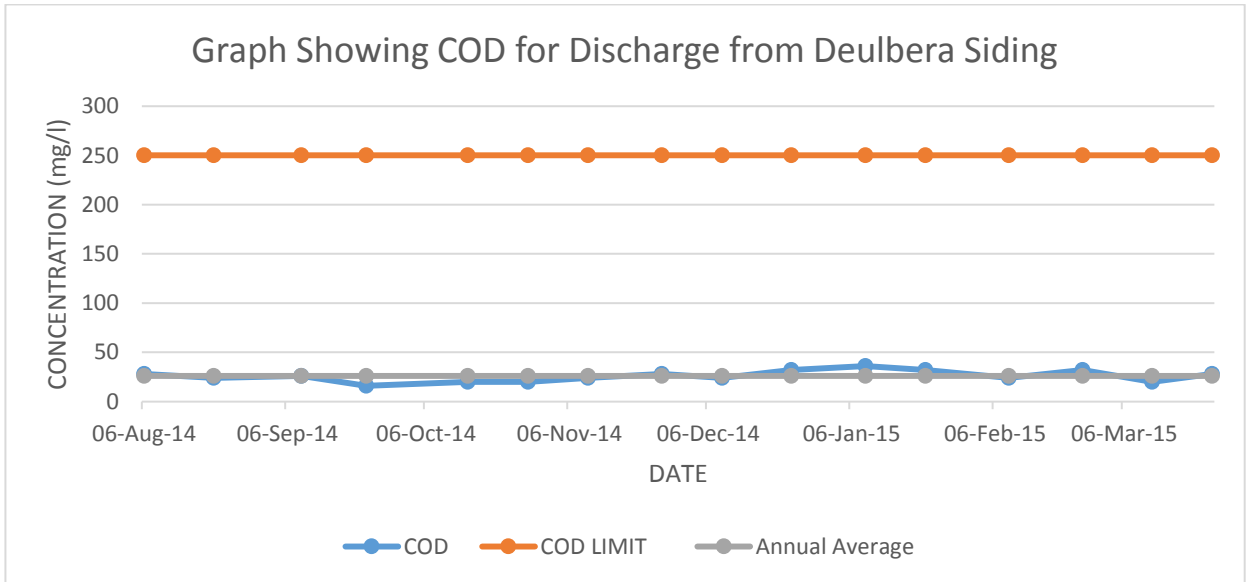
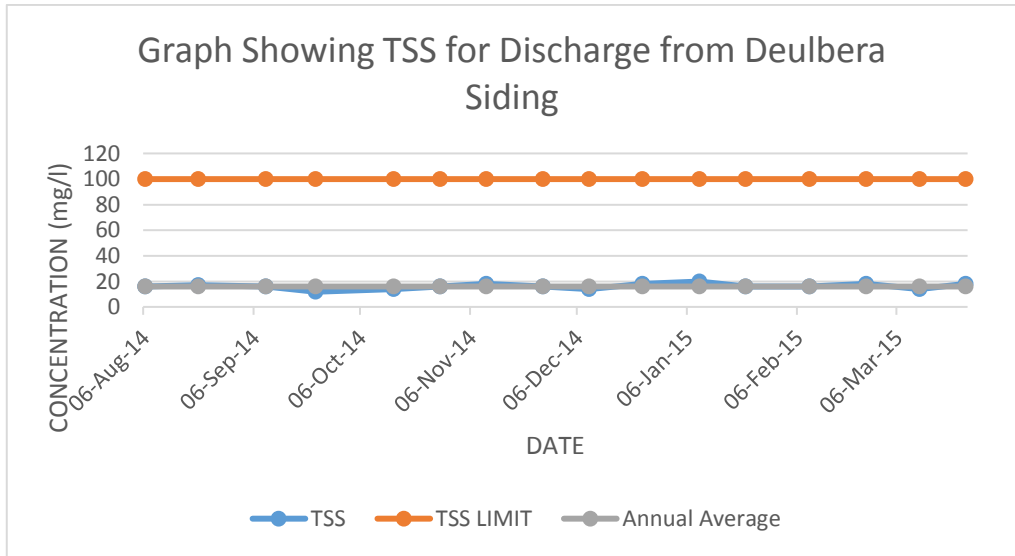
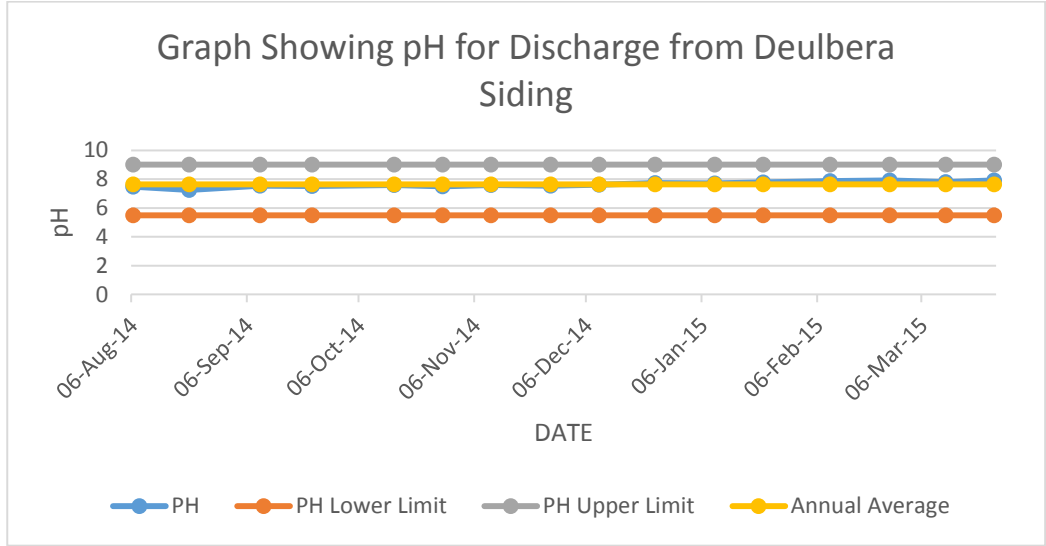
<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
03-Apr-14	Outlet of Mine Discharge water	7.56	<2.0	32	36
19-Apr-14	Outlet of Mine Discharge water	7.55	<2.0	30	40

*All values are in mg/L*

**Table : 140 Effluent Quality Data****Project: Lingaraj OCP****Monitoring Station: Discharge from Dulbera Siding**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
06-Aug-14	7.47	<2.0	16	28
21-Aug-14	7.25	<2.0	17	24
09-Sep-14	7.55	<2.0	16	26
23-Sep-14	7.52	<2.0	12	16
15-Oct-14	7.6	<2.0	14	20
28-Oct-14	7.49	<2.0	16	20
10-Nov-14	7.6	<2.0	18	24
26-Nov-14	7.55	<2.0	16	28
09-Dec-14	7.62	<2.0	14	24
24-Dec-14	7.73	<2.0	18	32
09-Jan-15	7.7	<2.0	20	36
22-Jan-15	7.78	<2.0	16	32
09-Feb-15	7.86	<2.0	16	24
25-Feb-15	7.91	<2.0	18	32
12-Mar-15	7.80	<2.0	14	20
25-Mar-15	7.92	<2.0	18	28

*All values are in mg/L*



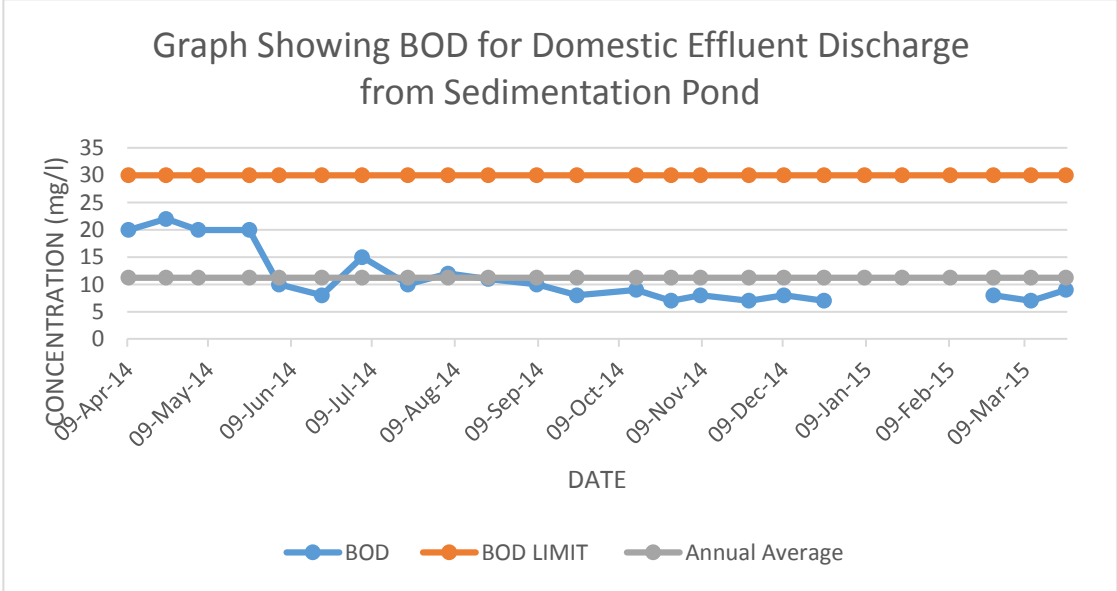
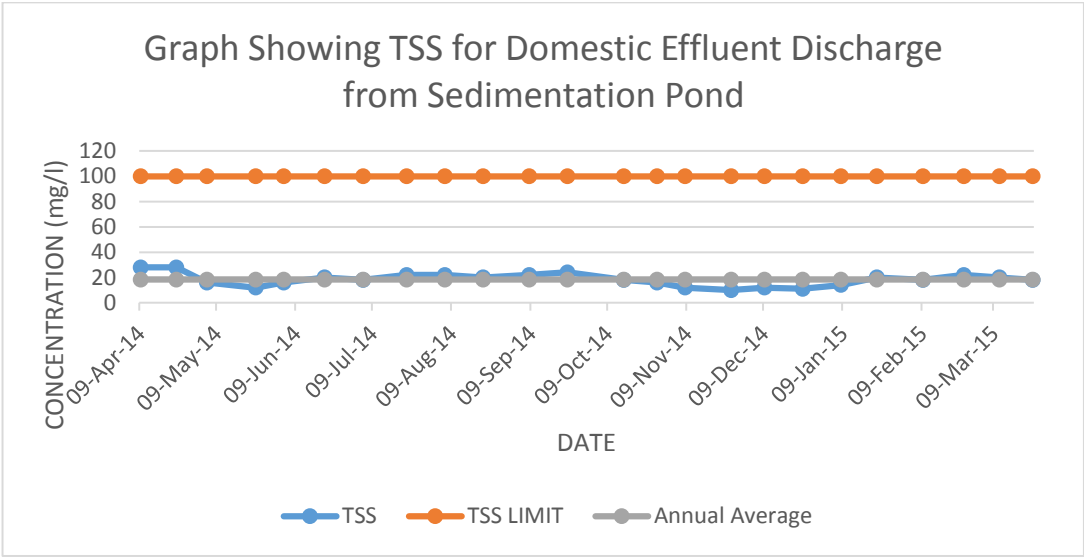
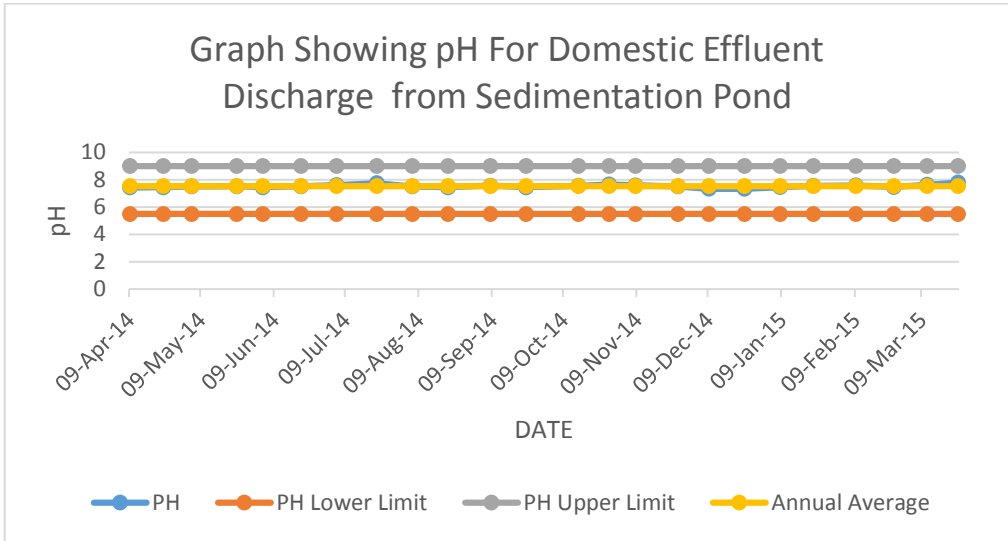
**Table : 141 Effluent Quality Data**

**Project: Lingaraj OCP**

**Monitoring Station: Domestic Effluent Discharge from sedimentation pond**

<b>Date of Sampling</b>	<b>pH</b>	<b>BOD</b>	<b>TSS</b>	<b>COD</b>
09-Apr-14	7.43	20	28	
23-Apr-14	7.45	22	28	
05-May-14	7.5	20	16	
24-May-14	7.52	20	12	
04-Jun-14	7.44	10	16	
20-Jun-14	7.52	8	20	
05-Jul-14	7.6	15	18	
22-Jul-14	7.74	10	22	
06-Aug-14	7.5	12	22	
21-Aug-14	7.44	11	20	
08-Sep-14	7.57	10	22	
23-Sep-14	7.45	8	24	
15-Oct-14	7.55	9	18	
28-Oct-14	7.65	7	16	
08-Nov-14	7.59	8	12	
26-Nov-14	7.51	7	10	
09-Dec-14	7.34	8	12	
24-Dec-14	7.34	7	11	
08-Jan-15	7.46		14	24
22-Jan-15	7.55		20	28
09-Feb-15	7.58		18	28
25-Feb-15	7.47	8	22	
11-Mar-15	7.63	7	20	
24-Mar-15	7.79	9	18	

*All values are in mg/L*



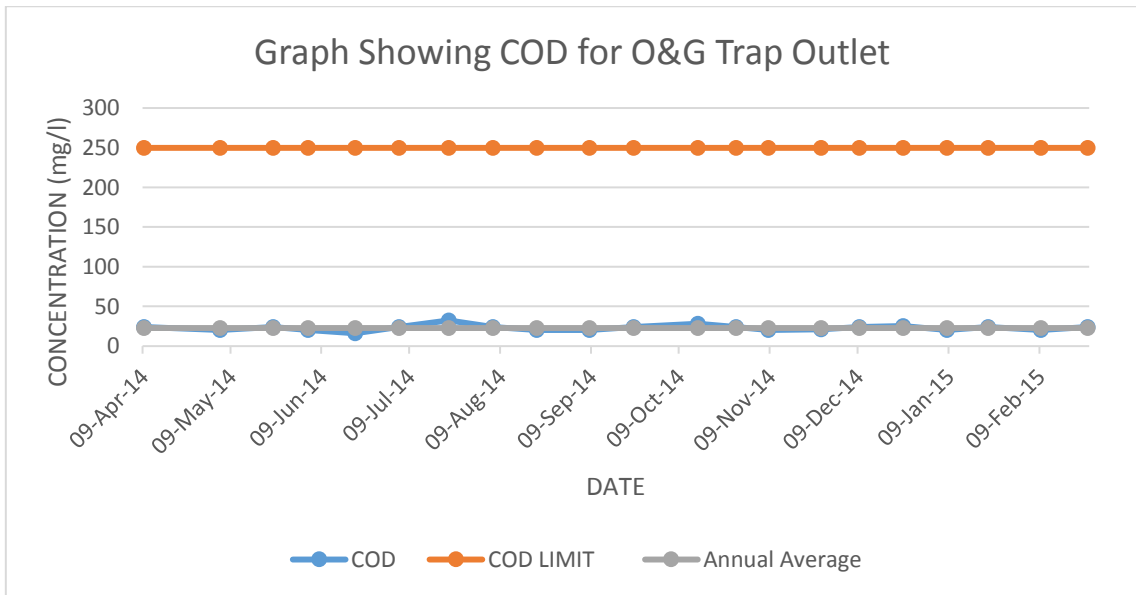
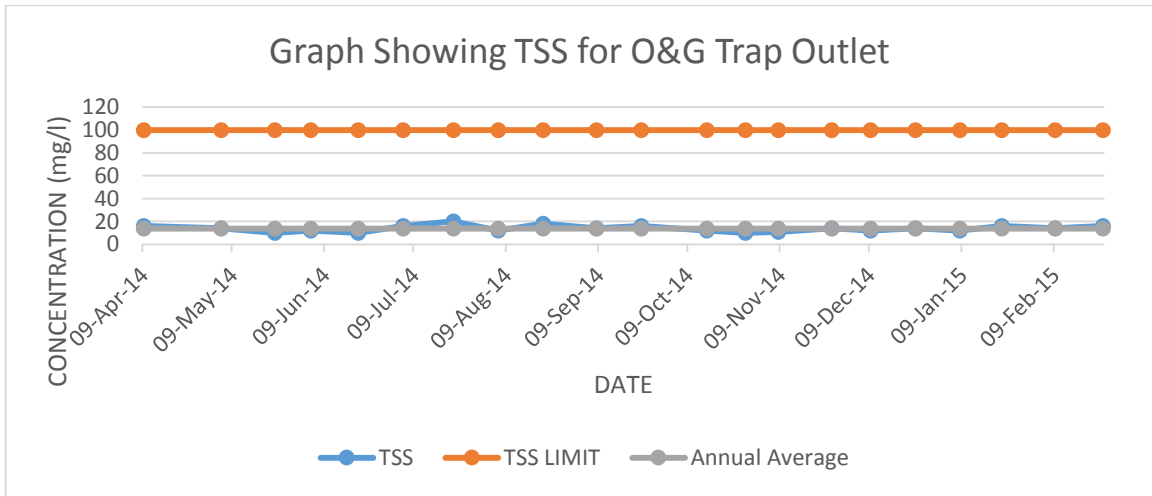
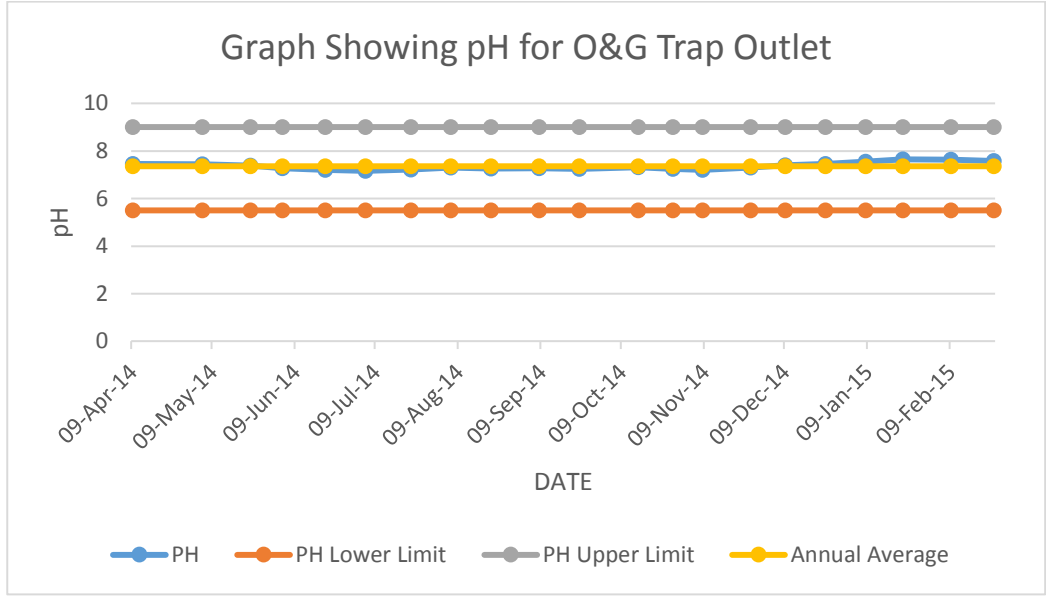
**Table : 142 Effluent Quality Data**

**Project: Lingaraj OCP**

**Monitoring Station:O& G trap Outlet**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
26-Nov-14	7.22	<2.0	16	24
09-Apr-14	7.46	<2.0	16	24
05-May-14	7.44	<2.0	14	20
23-May-14	7.38	<2.0	10	24
04-Jun-14	7.28	<2.0	12	20
20-Jun-14	7.2	<2.0	10	16
05-Jul-14	7.16	<2.0	16	24
22-Jul-14	7.22	<2.0	20	32
06-Aug-14	7.3	<2.0	12	24
21-Aug-14	7.26	<2.0	18	20
08-Sep-14	7.28	<2.0	14	20
23-Sep-14	7.25	<2.0	16	24
15-Oct-14	7.32	<2.0	12	28
28-Oct-14	7.25	<2.0	10	24
08-Nov-14	7.2	<2.0	11	20
26-Nov-14	7.3	<2.0	14	21
09-Dec-14	7.4	<2.0	12	24
24-Dec-14	7.45	<2.0	14	25
08-Jan-15	7.55	<2.0	12	20
22-Jan-15	7.65	<2.0	16	24
09-Feb-15	7.64	<2.0	14	20
25-Feb-15	7.58	<2.0	16	24

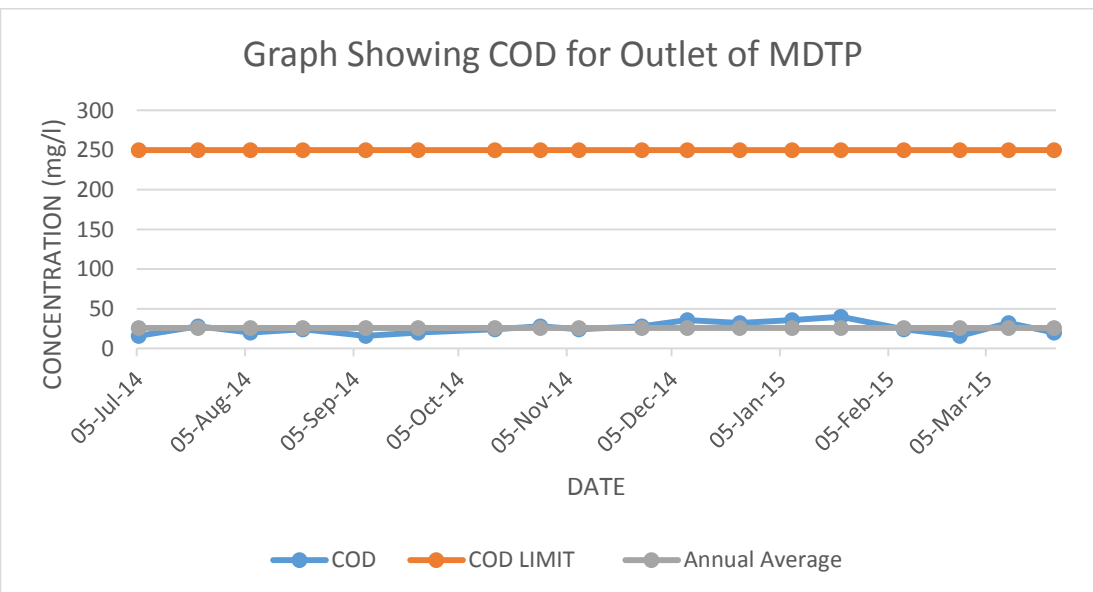
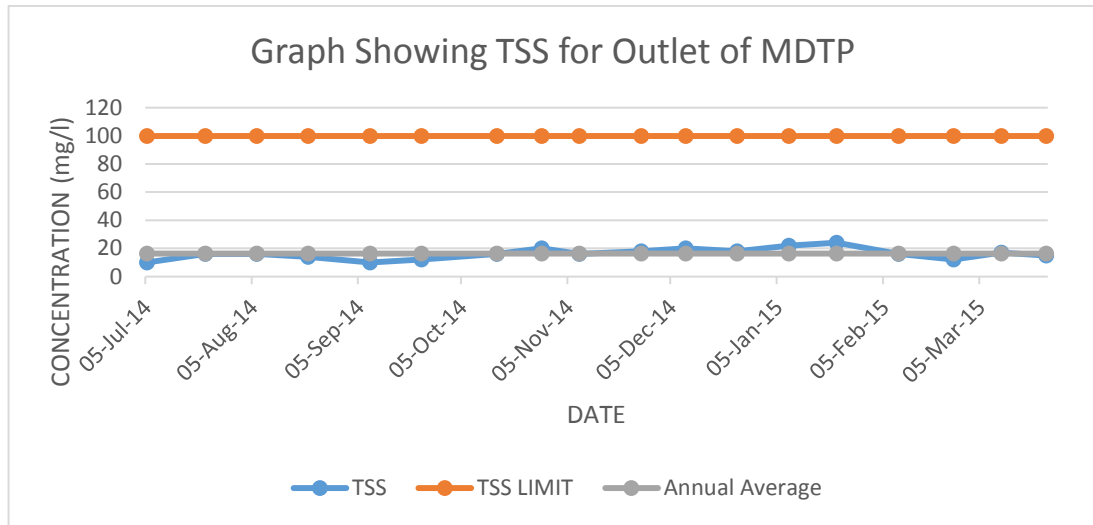
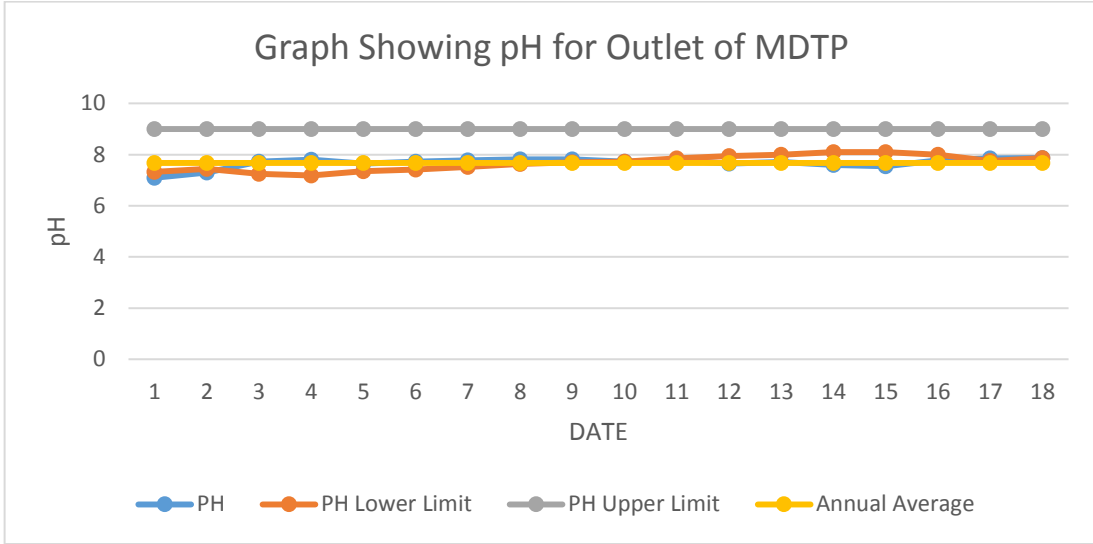
*All values are in mg/L*



**Table : 143 Effluent Quality Data****Project: Lingaraj OCP****Monitoring Station : Outlet of MDTP**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
05-Jul-14	7.32	<2.0	10	16
22-Jul-14	7.44	<2.0	16	28
06-Aug-14	7.25	<2.0	16	20
21-Aug-14	7.18	<2.0	14	24
08-Sep-14	7.35	<2.0	10	16
23-Sep-14	7.42	<2.0	12	20
15-Oct-14	7.52	<2.0	16	24
28-Oct-14	7.64	<2.0	20	28
08-Nov-14	7.7	<2.0	16	24
26-Nov-14	7.73	<2.0	18	28
09-Dec-14	7.85	<2.0	20	36
24-Dec-14	7.94	<2.0	18	32
08-Jan-15	8	<2.0	22	36
22-Jan-15	8.1	<2.0	24	40
09-Feb-15	8.1	<2.0	16	24
25-Feb-15	8.00	<2.0	12	16
11-Mar-15	7.75	<2.0	17	32
24-Mar-15	7.87	<2.0	15	20

*All values are in mg/L*



**Table : 144 Effluent Quality Data**

**Project: Lingaraj OCP**

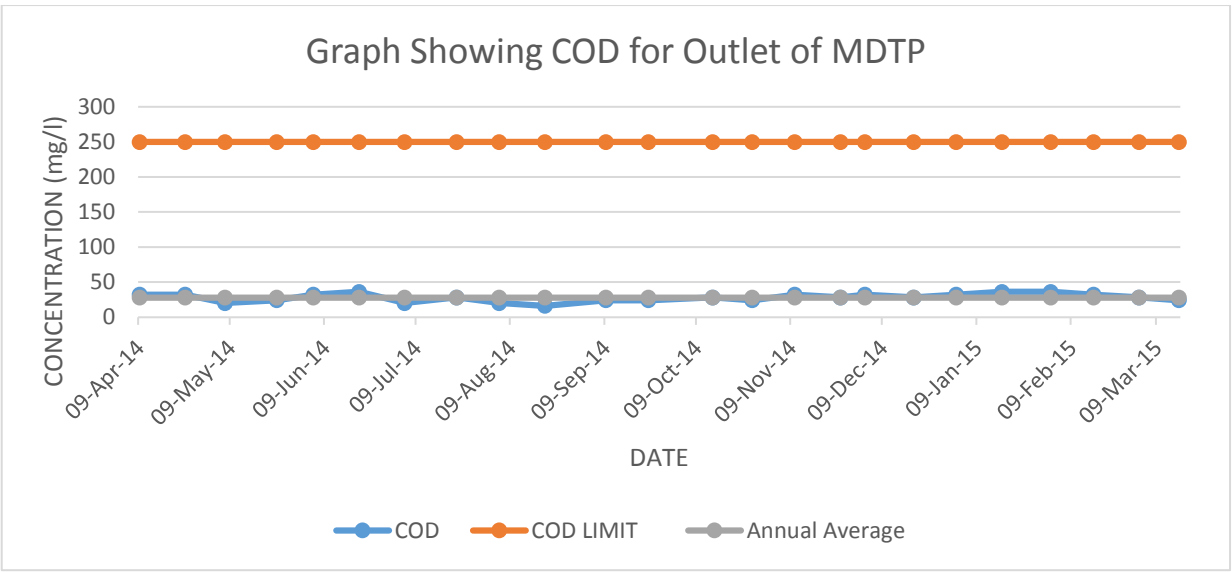
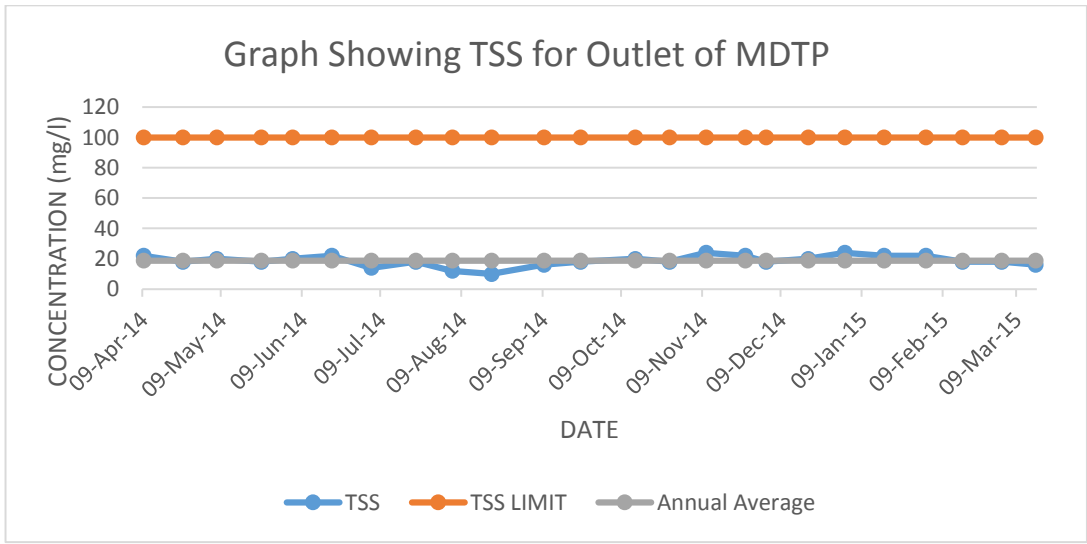
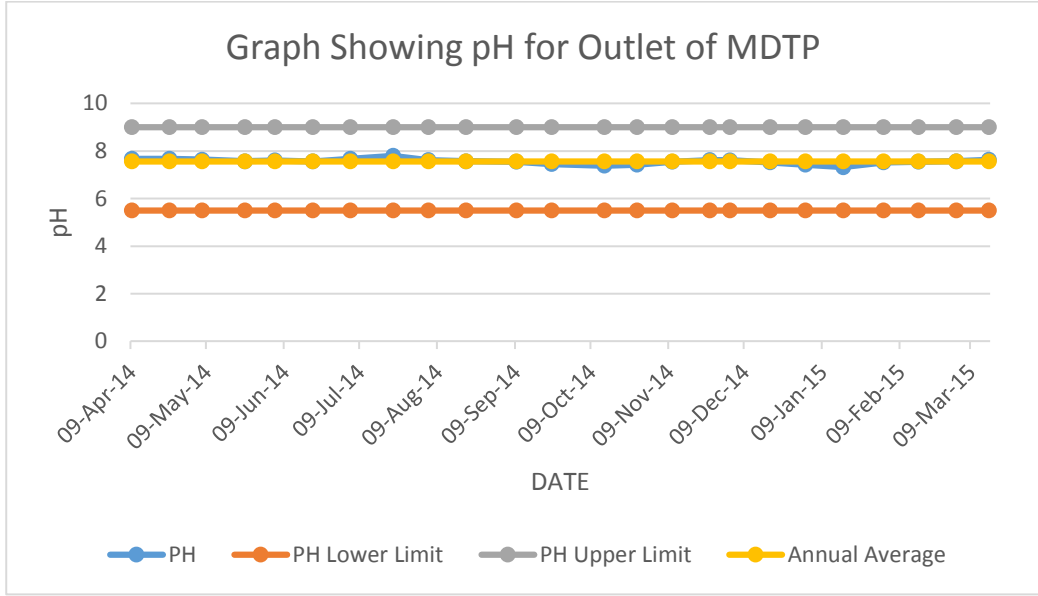
**Monitoring Station:OB Dump run off near LongijodaBasti**

<b>Date of Sampling</b>	<b>Sampling Station</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
21-Aug-14	OB Dump runoff near LongijodaBasti	7.36	<2.0	20	28

*All values are in mg/L*

**Table : 145 Effluent Quality Data****Project: Kaniha OCP****Monitoring Station:Outlet of MDTP**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
09-Apr-14	7.67	<2.0	22	32
24-Apr-14	7.67	<2.0	18	32
07-May-14	7.64	<2.0	20	20
24-May-14	7.57	<2.0	18	24
05-Jun-14	7.6	<2.0	20	32
20-Jun-14	7.56	<2.0	22	36
05-Jul-14	7.67	<2.0	14	20
22-Jul-14	7.8	<2.0	18	28
05-Aug-14	7.62	<2.0	12	20
20-Aug-14	7.57	<2.0	10	16
09-Sep-14	7.55	<2.0	16	24
23-Sep-14	7.45	<2.0	18	24
14-Oct-14	7.38	<2.0	20	28
27-Oct-14	7.42	<2.0	18	24
10-Nov-14	7.55	<2.0	24	32
25-Nov-14	7.62	<2.0	22	28
03-Dec-14	7.61	<2.0	18	32
19-Dec-14	7.52	<2.0	20	28
02-Jan-15	7.42	<2.0	24	32
17-Jan-15	7.32	<2.0	22	36
02-Feb-15	7.52	<2.0	22	36
16-Feb-15	7.55	<2.0	18	32
03-Mar-15	7.57	<2.0	18	28
16-Mar-15	7.63	<2.0	16	24

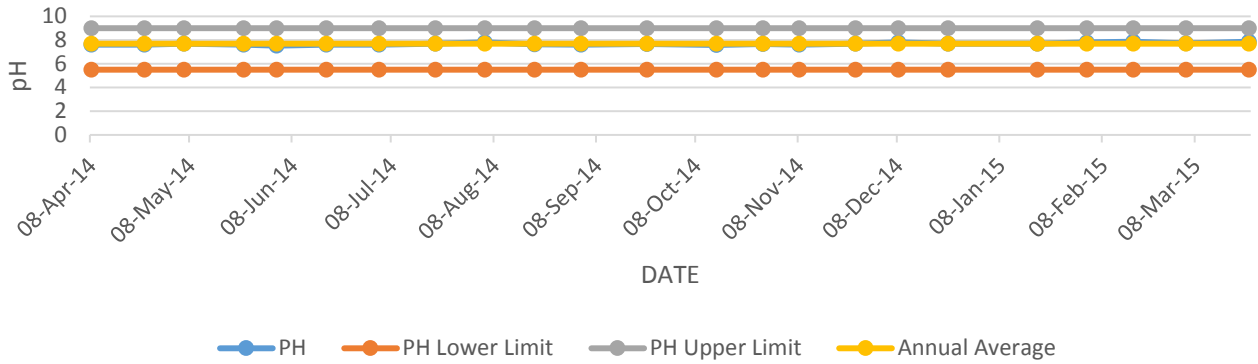


**Table : 146 Effluent Quality Data****Project: Hingula OCP****Monitoring Station: Discharge point at north of mine into singada Jhor**

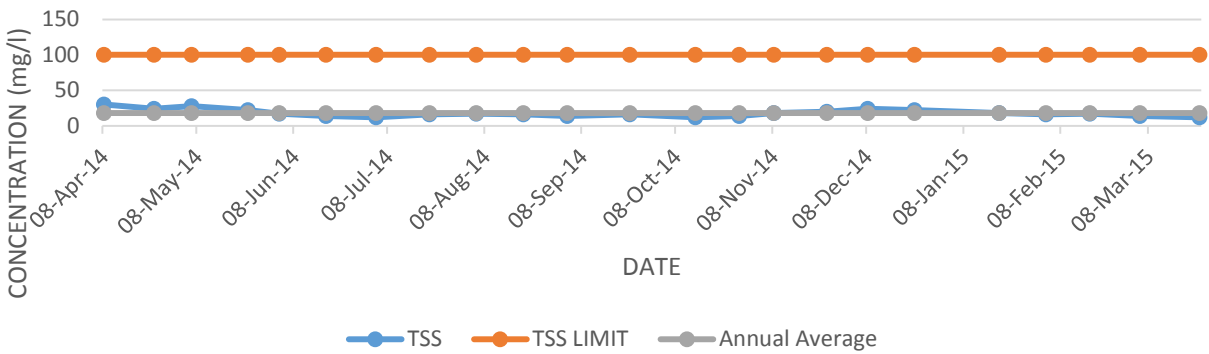
<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
03-Jun-14	7.54	<2.0	17	30
18-Jun-14	7.63	<2.0	14	20
04-Jul-14	7.63	<2.0	12	20
21-Jul-14	7.7	<2.0	16	24
05-Aug-14	7.8	<2.0	17	28
20-Aug-14	7.65	<2.0	16	28
03-Sep-14	7.62	<2.0	14	20
23-Sep-14	7.68	<2.0	16	20
14-Oct-14	7.59	<2.0	12	16
28-Oct-14	7.67	<2.0	14	20
08-Nov-14	7.62	<2.0	18	24
25-Nov-14	7.71	<2.0	20	32
08-Dec-14	7.81	<2.0	24	36
23-Dec-14	7.7	<2.0	22	32
19-Jan-15	7.7	<2.0	18	28
03-Feb-15	7.82	<2.0	16	28
17-Feb-15	7.88	<2.0	17	28
05-Mar-15	7.74	<2.0	14	24
24-Mar-15	7.87	<2.0	12	20
08-Apr-14	7.62	<2.0	30	40
24-Apr-14	7.62	<2.0	24	40
06-May-14	7.7	<2.0	28	32
24-May-14	7.63	<2.0	22	28

*All values are in mg/L except pH*

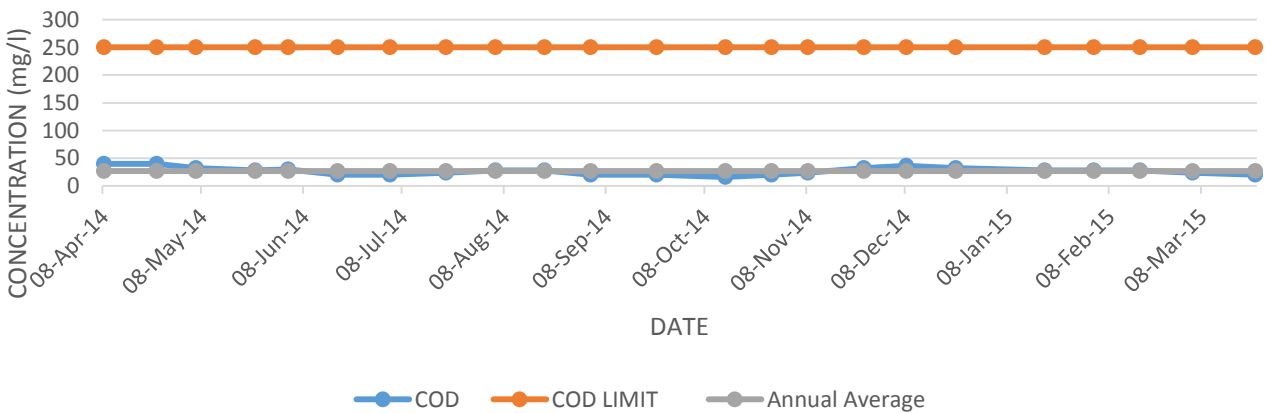
Graph Showing pH for Discharge point at north of mine into Singada Jhor



Graph Showing TSS for Discharge point at north of mine into Singada Jhor



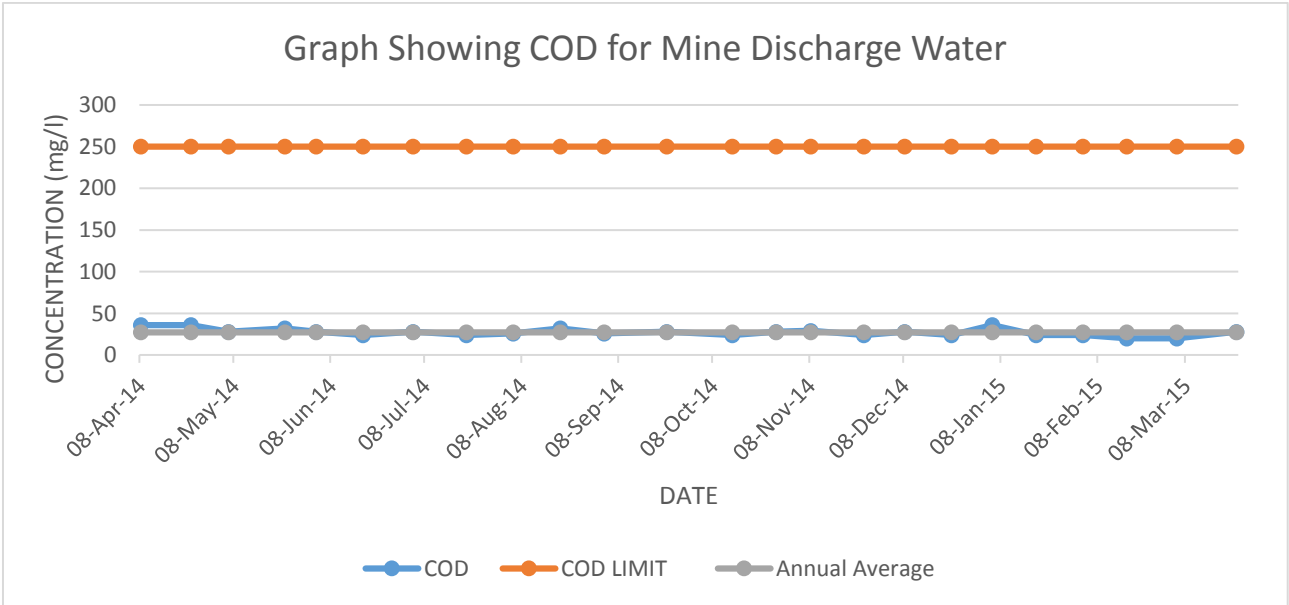
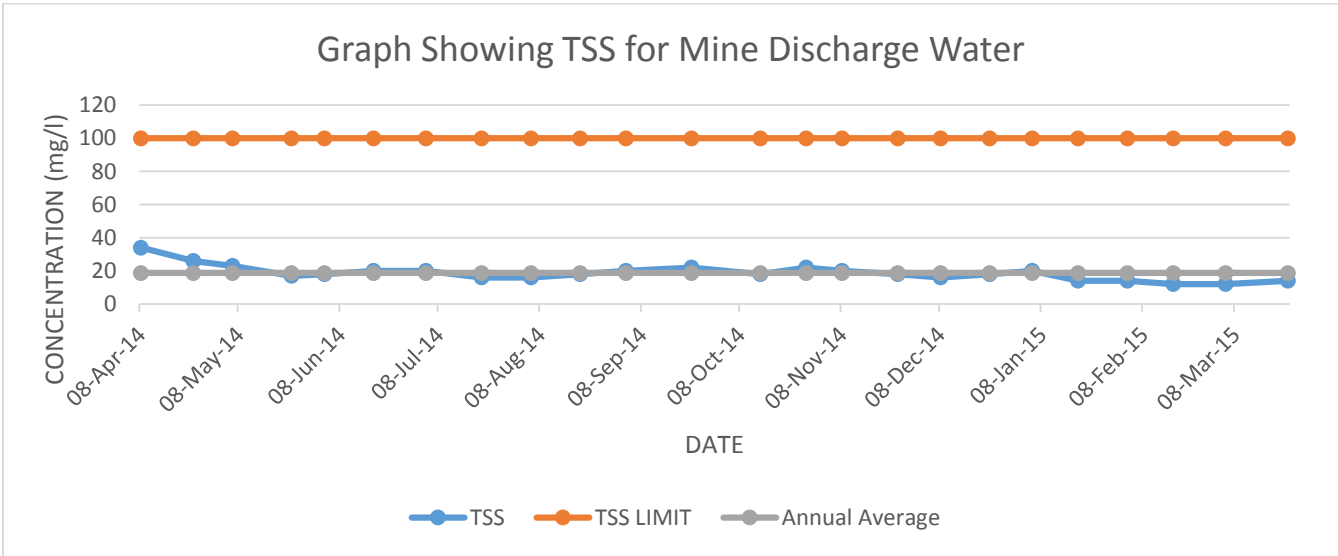
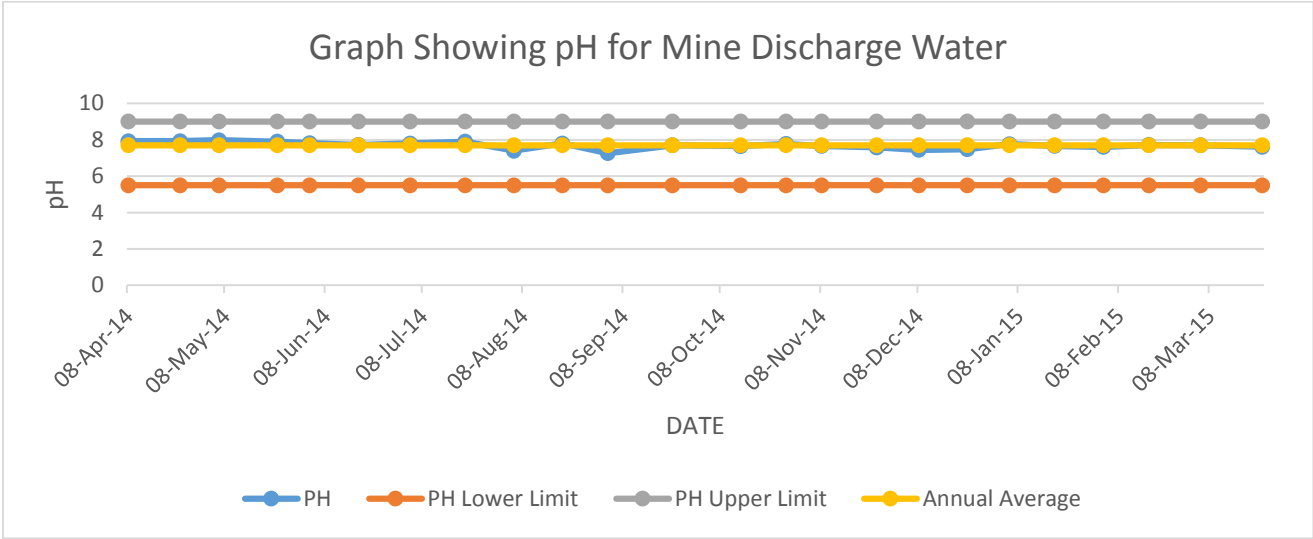
Graph Showing COD for Discharge point at north of mine into Singada Jhor



**Table : 147 Effluent Quality Data****Project: Hingula OCP****Monitoring Station: Mine Discharge Water**

<b>Date of Sampling</b>	<b>P<sub>H</sub></b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
08-Apr-14	7.92	<2.0	34	36
24-Apr-14	7.92	<2.0	26	36
06-May-14	7.98	<2.0	23	28
24-May-14	7.9	<2.0	17	32
03-Jun-14	7.82	<2.0	18	28
18-Jun-14	7.72	<2.0	20	24
04-Jul-14	7.8	<2.0	20	28
21-Jul-14	7.9	<2.0	16	24
05-Aug-14	7.4	<2.0	16	26
20-Aug-14	7.8	<2.0	18	32
03-Sep-14	7.26	<2.0	20	26
23-Sep-14	7.7	<2.0	22	28
14-Oct-14	7.65	<2.0	18	24
28-Oct-14	7.77	<2.0	22	28
08-Nov-14	7.66	<2.0	20	29
25-Nov-14	7.58	<2.0	18	24
08-Dec-14	7.44	<2.0	16	28
23-Dec-14	7.48	<2.0	18	24
05-Jan-15	7.76	<2.0	20	36
19-Jan-15	7.66	<2.0	14	24
03-Feb-15	7.61	<2.0	14	24
17-Feb-15	7.72	<2.0	12	20
05-Mar-15	7.70	<2.0	12	20
24-Mar-15	7.62	<2.0	14	28

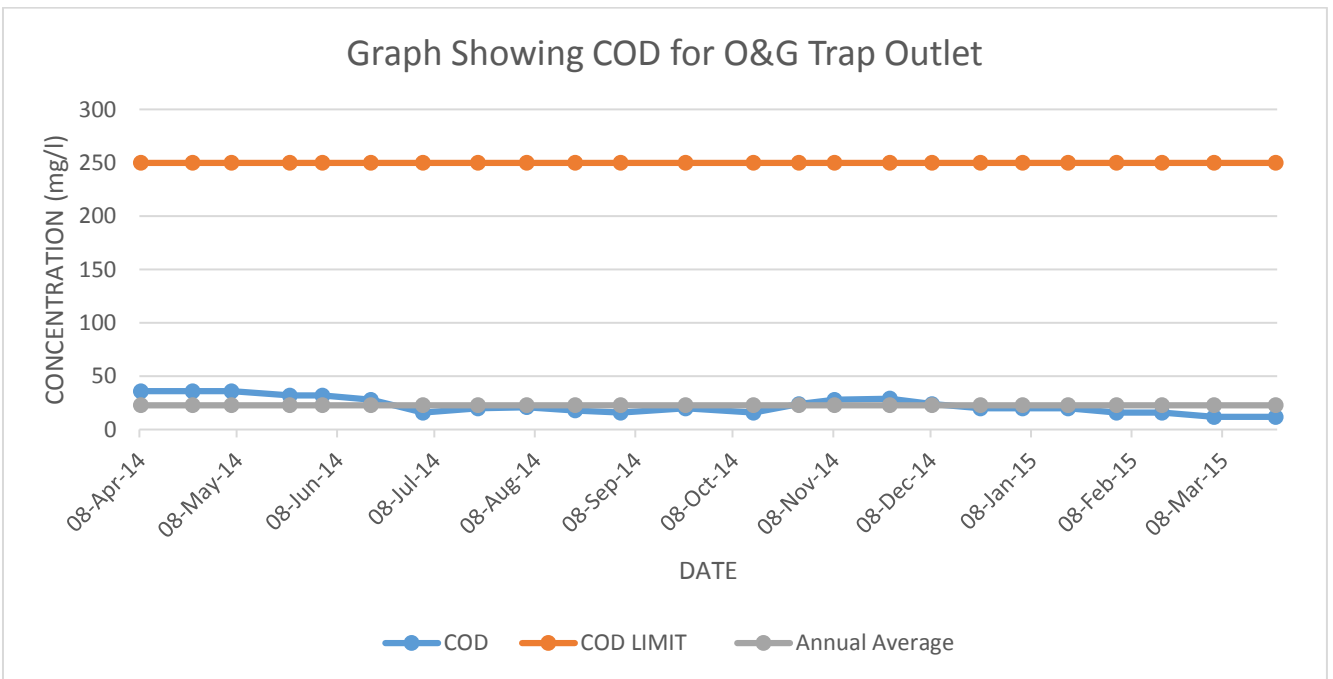
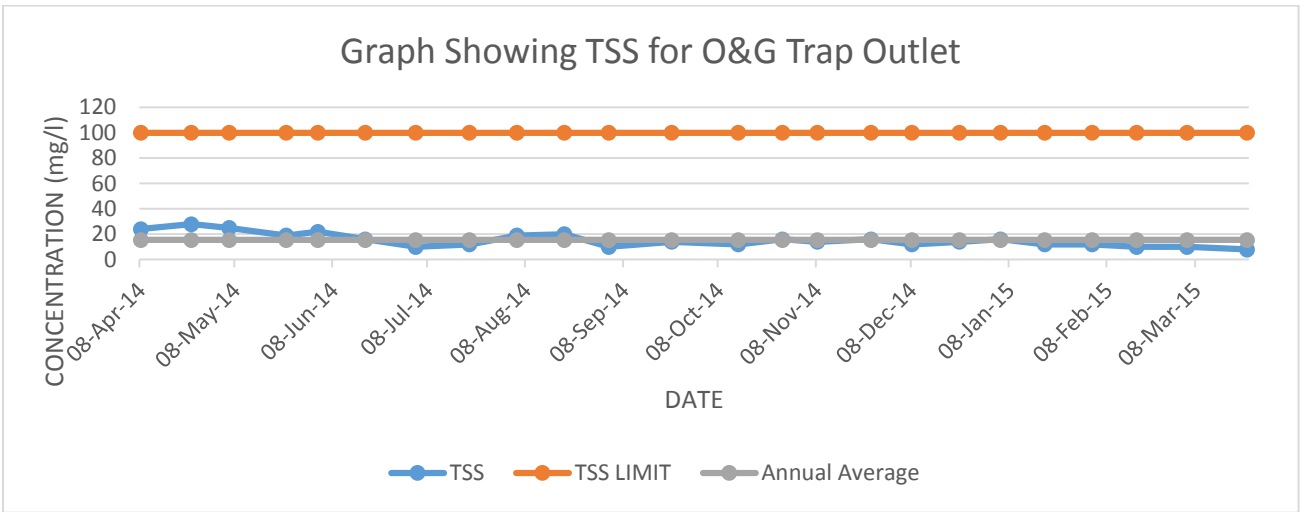
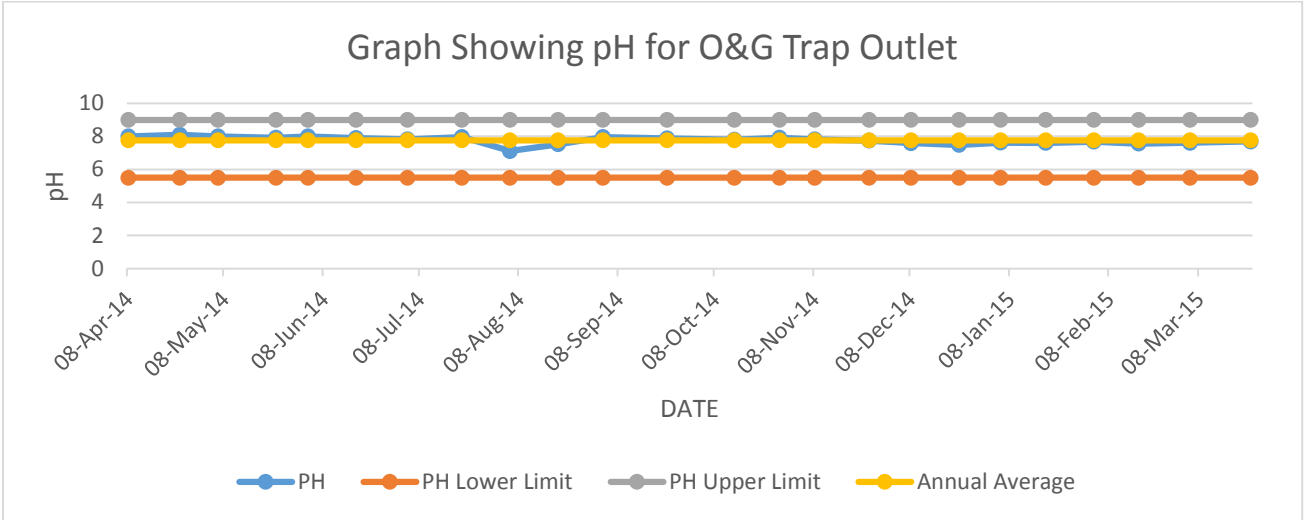
*All values are in mg/L except pH*



**Table : 148 Effluent Quality Data**  
**Project: Hingula OCP      Monitoring Station: O&G Trap outlet**

<b>Date of Sampling</b>	<b>P<sub>H</sub></b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
08-Apr-14	8	<2.0	24	36
24-Apr-14	8.1	<2.0	28	36
06-May-14	8.00	<2.0	25	36
24-May-14	7.92	<2.0	19	32
03-Jun-14	8.0	<2.0	22	32
18-Jun-14	7.9	<2.0	16	28
04-Jul-14	7.82	<2.0	10	16
21-Jul-14	7.96	<2.0	12	20
05-Aug-14	7.12	<2.0	19	21
20-Aug-14	7.52	<2.0	20	18
03-Sep-14	7.96	<2.0	10	16
23-Sep-14	7.88	<2.0	14	20
14-Oct-14	7.8	<2.0	12	16
28-Oct-14	7.92	<2.0	16	24
08-Nov-14	7.82	<2.0	14	28
25-Nov-14	7.74	<2.0	16	29
08-Dec-14	7.59	<2.0	12	24
23-Dec-14	7.48	<2.0	14	20
05-Jan-15	7.62	<2.0	16	20
19-Jan-15	7.6	<2.0	12	20
03-Feb-15	7.68	<2.0	12	16
17-Feb-15	7.56	<2.0	10	16
05-Mar-15	7.61	<2.0	10	12
24-Mar-15	7.69	<2.0	8	12

*All values are in mg/L except pH*

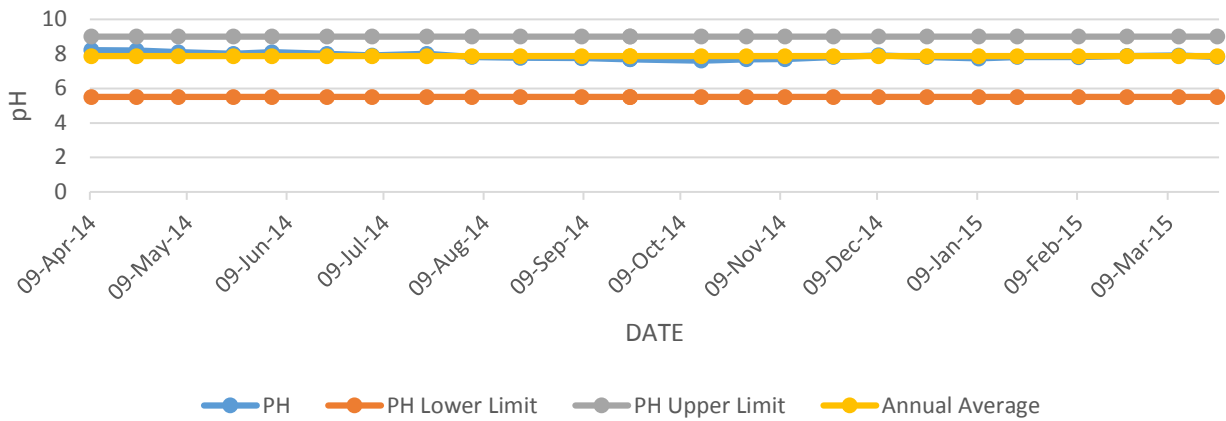


**Table : 149 Effluent Quality Data****Project: Balaram OCP****Monitoring Station: DETP/STP outlet of Balaramcolony**

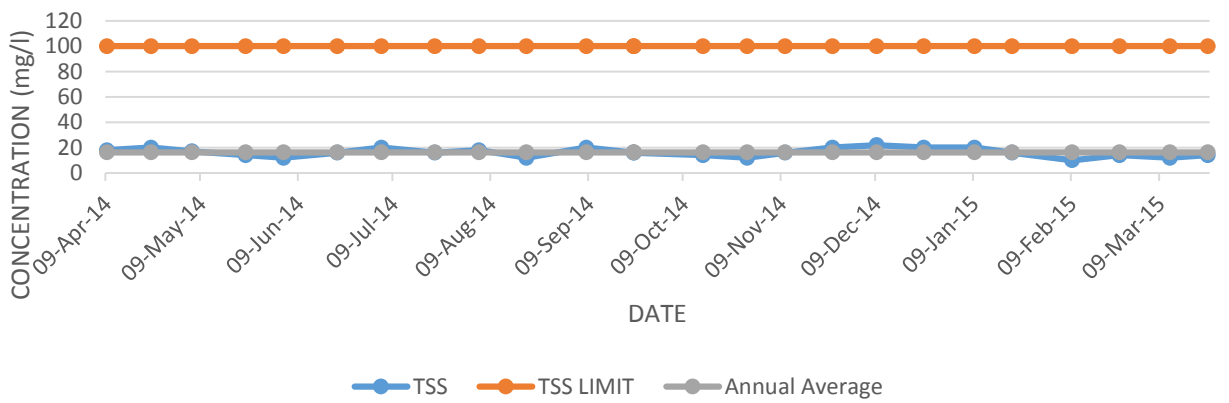
<b>Date of Sampling</b>	<b>pH</b>	<b>BOD</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>
09-Apr-14	8.22	6	<2.0	18
23-Apr-14	8.2	6	<2.0	20
06-May-14	8.1	6	<2.0	17
23-May-14	8	4	<2.0	14
04-Jun-14	8.1	30	<2.0	12
21-Jun-14	8	29	<2.0	16
05-Jul-14	7.91	27	<2.0	20
22-Jul-14	8	6	<2.0	16
05-Aug-14	7.82	7	<2.0	18
20-Aug-14	7.77	4	<2.0	12
08-Sep-14	7.75	5	<2.0	20
23-Sep-14	7.69	6	<2.0	16
23-Sep-14	7.69	6	<2.0	16
15-Oct-14	7.61	4	<2.0	14
29-Oct-14	7.69	6	<2.0	12
10-Nov-14	7.7	4	<2.0	16
25-Nov-14	7.82	6	<2.0	20
09-Dec-14	7.92	4	<2.0	22
24-Dec-14	7.82	6	<2.0	20
09-Jan-15	7.74	4	<2.0	20
21-Jan-15	7.82	6	<2.0	16
09-Feb-15	7.81	6	<2.0	10
24-Feb-15	7.88	4	<2.0	14
12-Mar-15	7.91	9	<2.0	12
24-Mar-15	7.82	6	<2.0	14

*All values are in mg/L except pH*

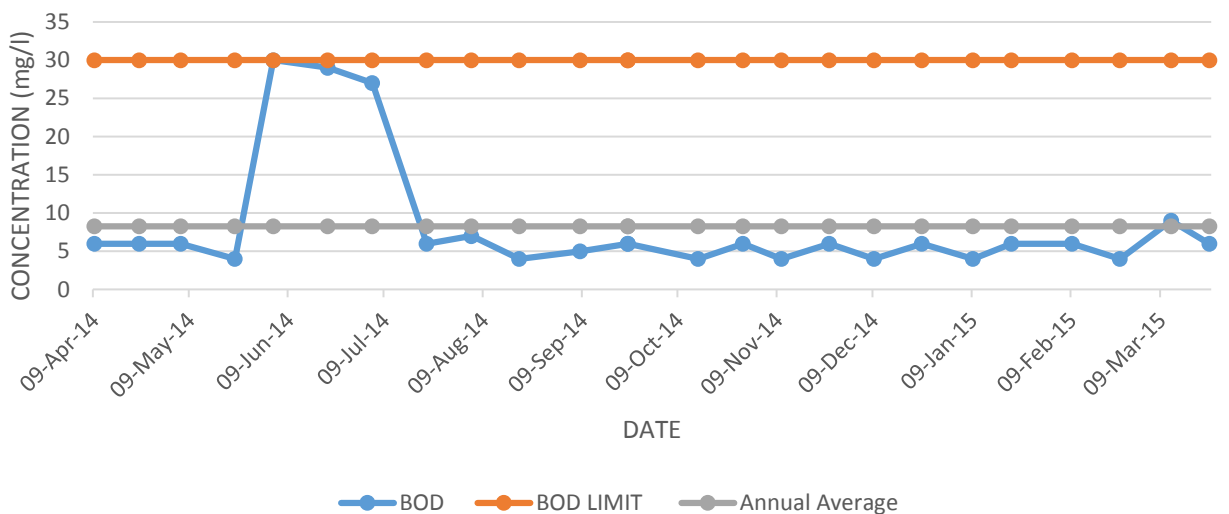
Graph Showing pH for DETP / STP outlet of Balram Colony



Graph Showing TSS for DETP / STP outlet of Balram Colony



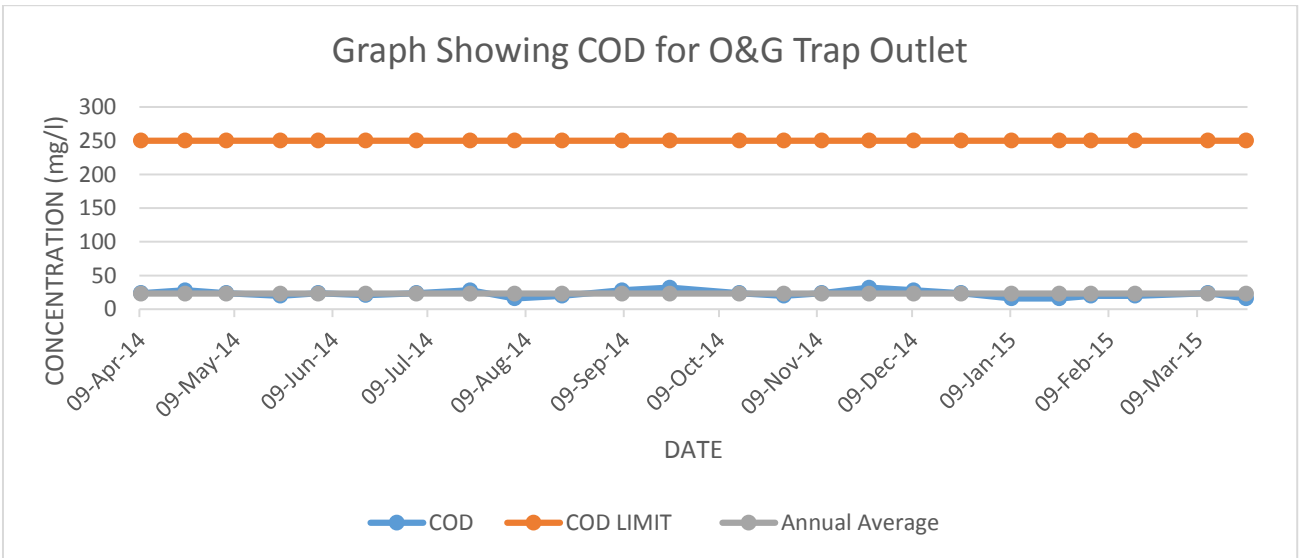
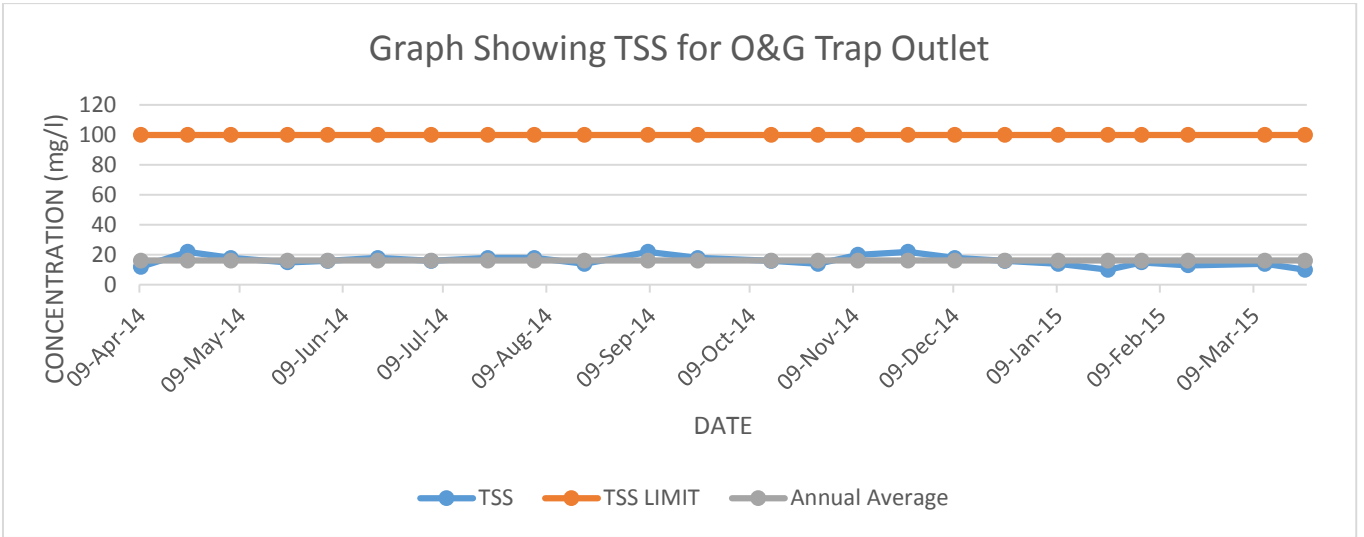
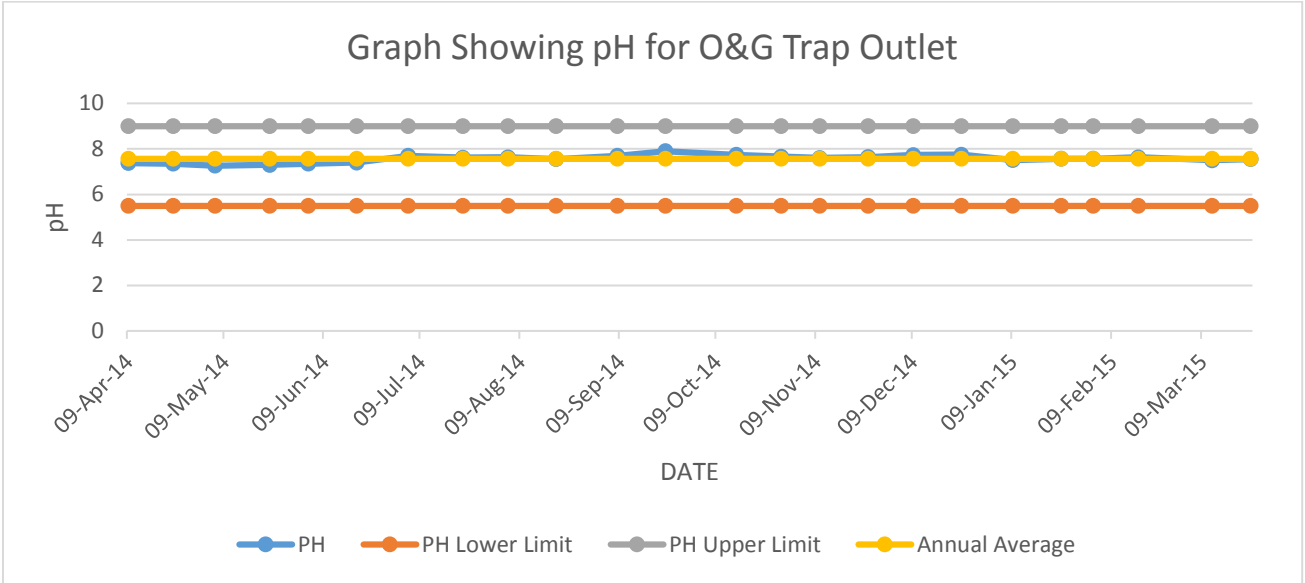
Graph Showing BOD for DETP / STP outlet of Balram Colony



**Table : 150 Effluent Quality Data****Project: Balaram OCP****Monitoring station : O & G Outlet**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
08-Apr-14	8	<2.0	24	36
24-Apr-14	8.1	<2.0	28	36
06-May-14	8	<2.0	25	36
24-May-14	7.92	<2.0	19	32
03-Jun-14	8	<2.0	22	32
18-Jun-14	7.9	<2.0	16	28
04-Jul-14	7.82	<2.0	10	16
21-Jul-14	7.96	<2.0	12	20
05-Aug-14	7.12	<2.0	19	21
20-Aug-14	7.52	<2.0	20	18
03-Sep-14	7.96	<2.0	10	16
23-Sep-14	7.88	<2.0	14	20
14-Oct-14	7.8	<2.0	12	16
28-Oct-14	7.92	<2.0	16	24
08-Nov-14	7.82	<2.0	14	28
25-Nov-14	7.74	<2.0	16	29
08-Dec-14	7.59	<2.0	12	24
23-Dec-14	7.48	<2.0	14	20
05-Jan-15	7.62	<2.0	16	20
19-Jan-15	7.6	<2.0	12	20
03-Feb-15	7.68	<2.0	12	16
17-Feb-15	7.56	<2.0	10	16
05-Mar-15	7.61	<2.0	10	12
24-Mar-15	7.69	<2.0	8	12

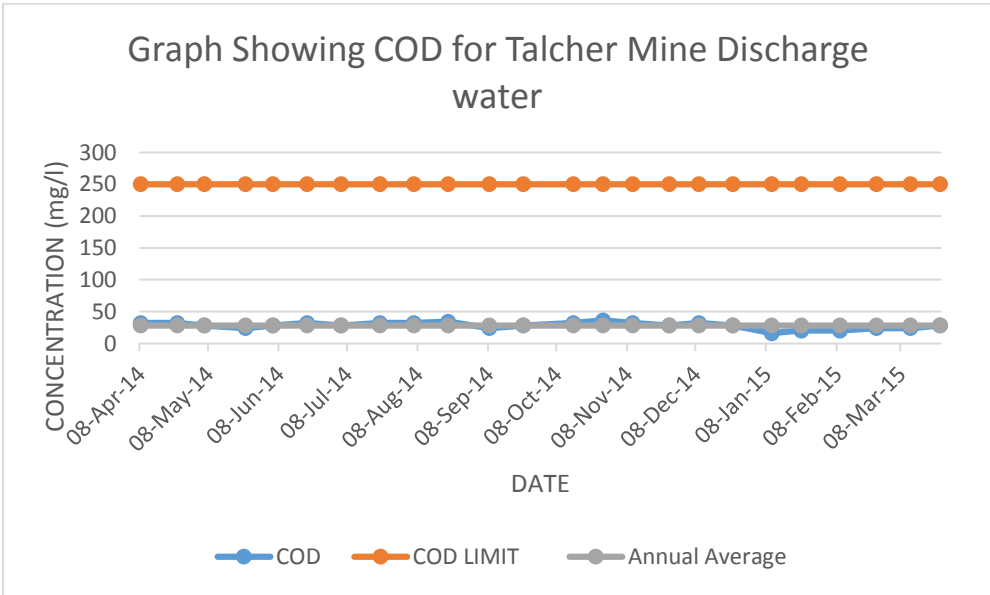
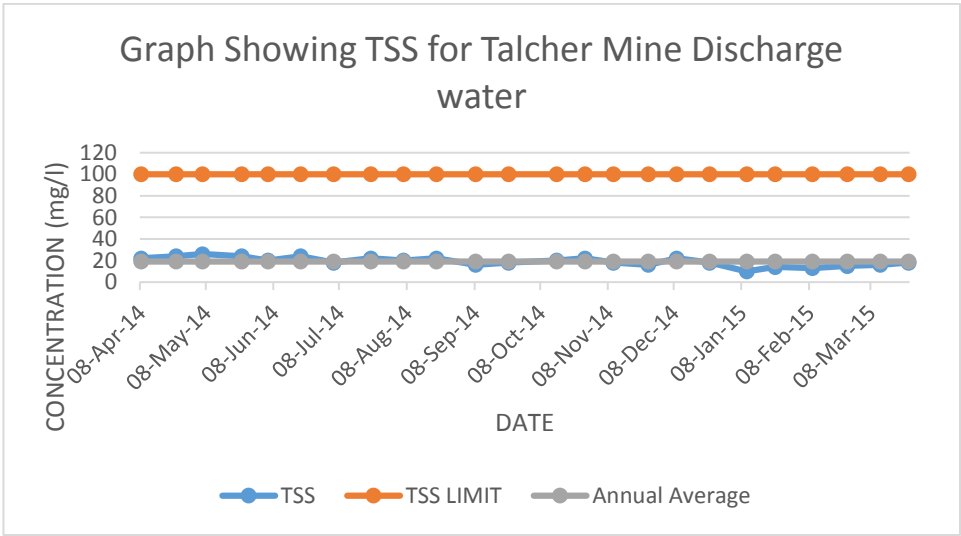
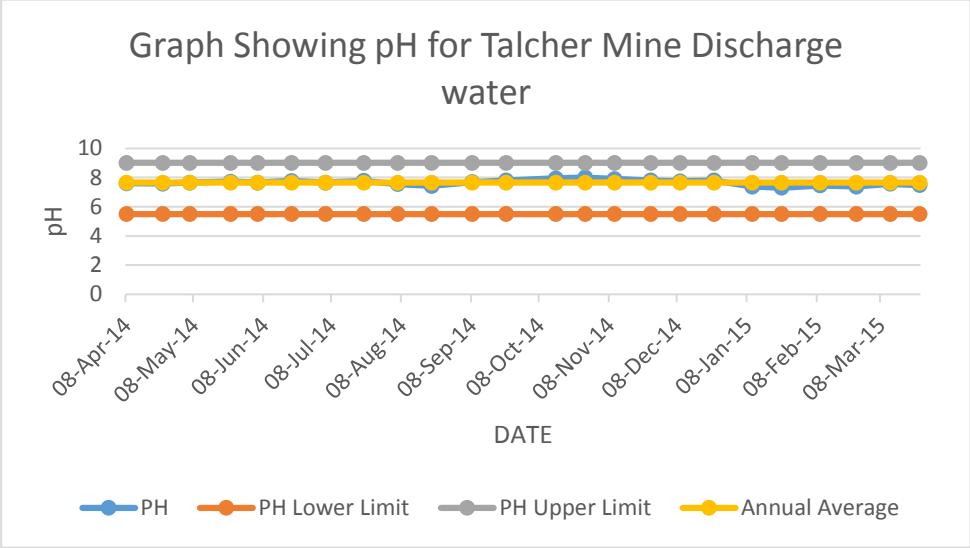
*All values are in mg/L except pH*



**Table : 151 Effluent Quality Data****Project : Talcher U/G****Monitoring Station : Mine discharge Water**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
08-Apr-14	7.6	<2.0	22	32
24-Apr-14	7.58	<2.0	24	32
06-May-14	7.65	<2.0	26	28
24-May-14	7.72	<2.0	24	24
05-Jun-14	7.65	<2.0	20	28
20-Jun-14	7.76	<2.0	24	32
05-Jul-14	7.65	<2.0	18	28
22-Jul-14	7.78	<2.0	22	32
06-Aug-14	7.55	<2.0	20	32
21-Aug-14	7.42	<2.0	22	34
08-Sep-14	7.68	<2.0	16	24
23-Sep-14	7.8	<2.0	18	28
15-Oct-14	7.94	<2.0	20	32
28-Oct-14	8	<2.0	22	36
10-Nov-14	7.9	<2.0	18	32
26-Nov-14	7.8	<2.0	16	28
09-Dec-14	7.74	<2.0	22	32
24-Dec-14	7.8	<2.0	18	28
10-Jan-15	7.38	<2.0	10	16
23-Jan-15	7.3	<2.0	14	20
09-Feb-15	7.46	<2.0	13	20
25-Feb-15	7.38	<2.0	15	24
12-Mar-15	7.57	<2.0	16	24
25-Mar-15	7.48	<2.0	18	28

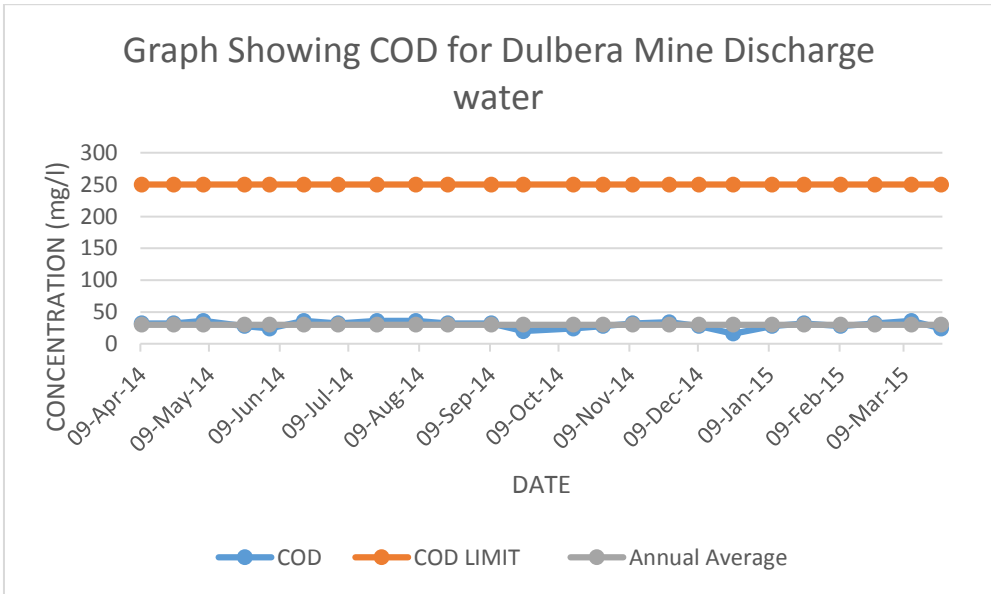
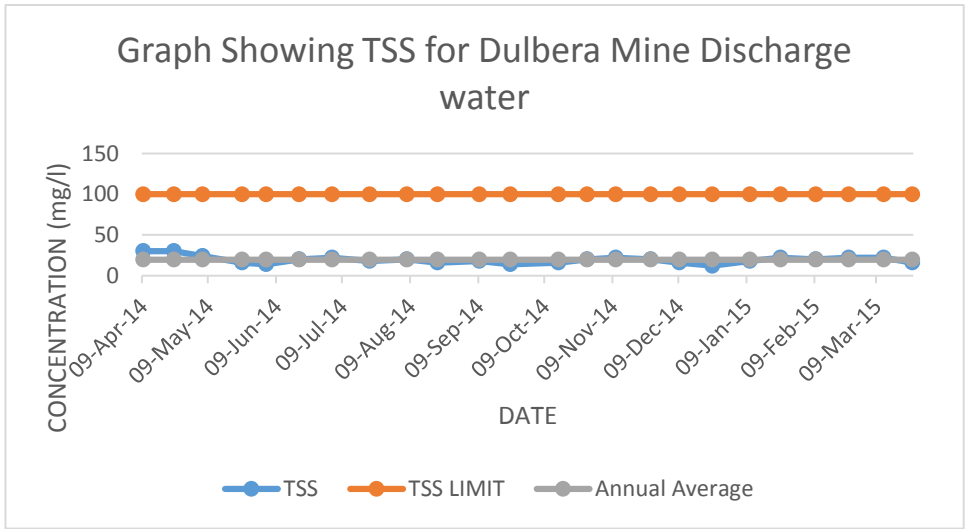
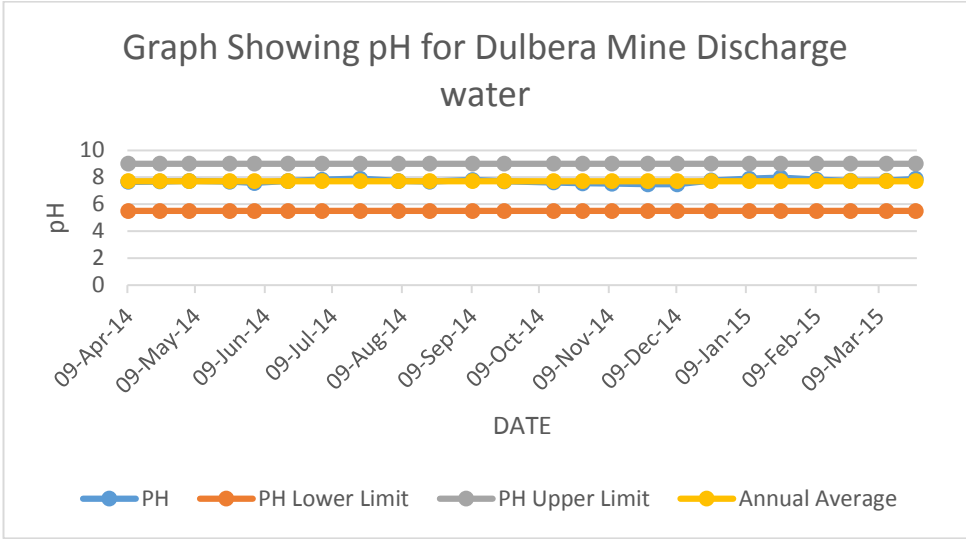
All values are in mg/L



**Table : 152 Effluent Quality Data****Project : Talcher U/G****Monitoring Station : Duelbera Colliery- Mine discharge Water**

<b>Date of Sampling</b>	<b>P<sub>H</sub></b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
09-Apr-14	7.67	<2.0	30	32
23-Apr-14	7.69	<2.0	30	32
06-May-14	7.72	<2.0	24	36
24-May-14	7.68	<2.0	16	28
04-Jun-14	7.58	<2.0	14	24
19-Jun-14	7.72	<2.0	20	36
04-Jul-14	7.82	<2.0	22	32
21-Jul-14	7.9	<2.0	18	36
07-Aug-14	7.73	<2.0	20	36
21-Aug-14	7.68	<2.0	16	32
09-Sep-14	7.8	<2.0	18	32
23-Sep-14	7.7	<2.0	14	20
15-Oct-14	7.62	<2.0	16	24
28-Oct-14	7.56	<2.0	20	28
10-Nov-14	7.53	<2.0	22	32
26-Nov-14	7.48	<2.0	20	34
09-Dec-14	7.48	<2.0	16	28
24-Dec-14	7.76	<2.0	12	16
10-Jan-15	7.9	<2.0	18	28
24-Jan-15	7.98	<2.0	22	32
09-Feb-15	7.82	<2.0	20	28
24-Feb-15	7.74	<2.0	22	32
12-Mar-15	7.75	<2.0	22	36
25-Mar-15	7.88	<2.0	16	24

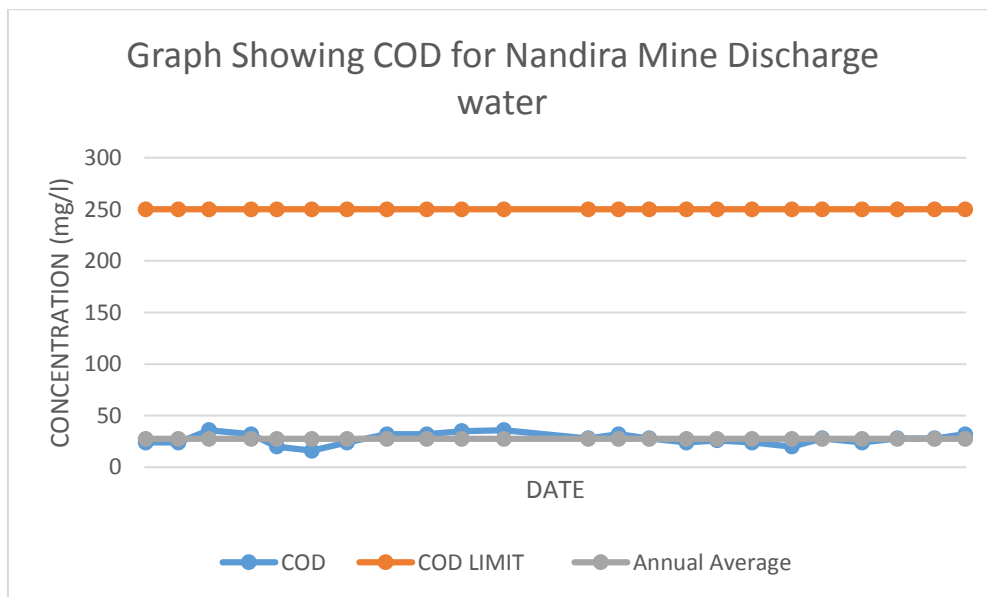
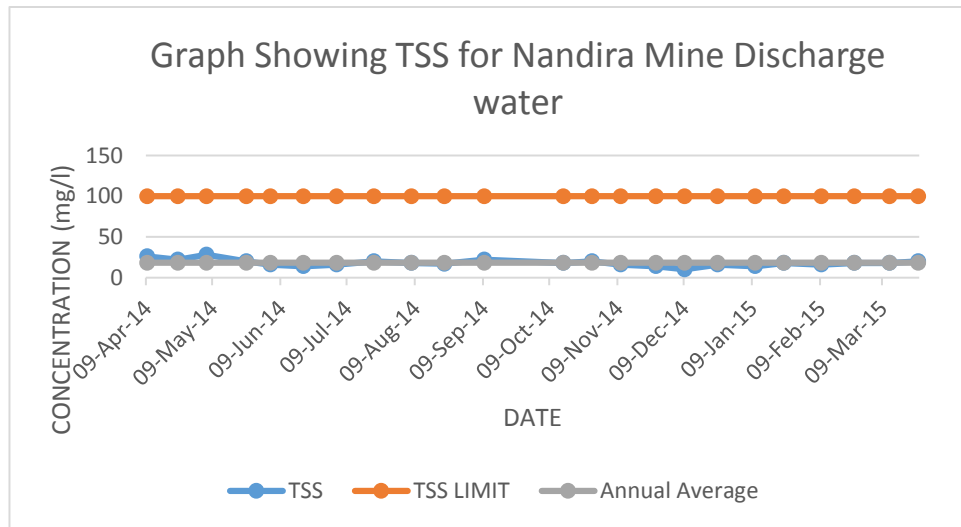
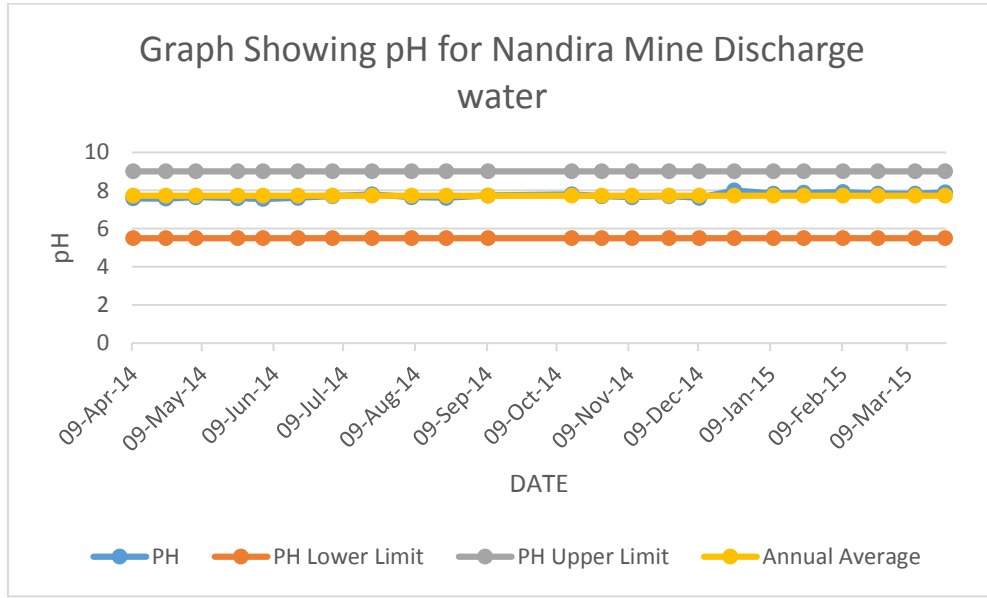
All values are in mg/L



**Table : 153 Effluent Quality Data****Project : Talcher U/G****Monitoring Station : Nandira Colliery- Mine discharge Water**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
09-Apr-14	7.59	<2.0	26	24
23-Apr-14	7.57	<2.0	22	24
06-May-14	7.65	<2.0	28	36
24-May-14	7.6	<2.0	20	32
04-Jun-14	7.56	<2.0	16	20
19-Jun-14	7.62	<2.0	14	16
04-Jul-14	7.7	<2.0	16	24
21-Jul-14	7.8	<2.0	20	32
07-Aug-14	7.65	<2.0	18	32
22-Aug-14	7.62	<2.0	17	35
09-Sep-14	7.74	<2.0	22	36
15-Oct-14	7.8	<2.0	18	28
28-Oct-14	7.7	<2.0	20	32
10-Nov-14	7.65	<2.0	16	28
26-Nov-14	7.7	<2.0	14	24
09-Dec-14	7.62	<2.0	10	26
24-Dec-14	8	<2.0	16	24
10-Jan-15	7.84	<2.0	14	20
23-Jan-15	7.88	<2.0	18	28
09-Feb-15	7.92	<2.0	16	24
24-Feb-15	7.84	<2.0	18	28
12-Mar-15	7.83	<2.0	18	28
25-Mar-15	7.9	<2.0	20	32

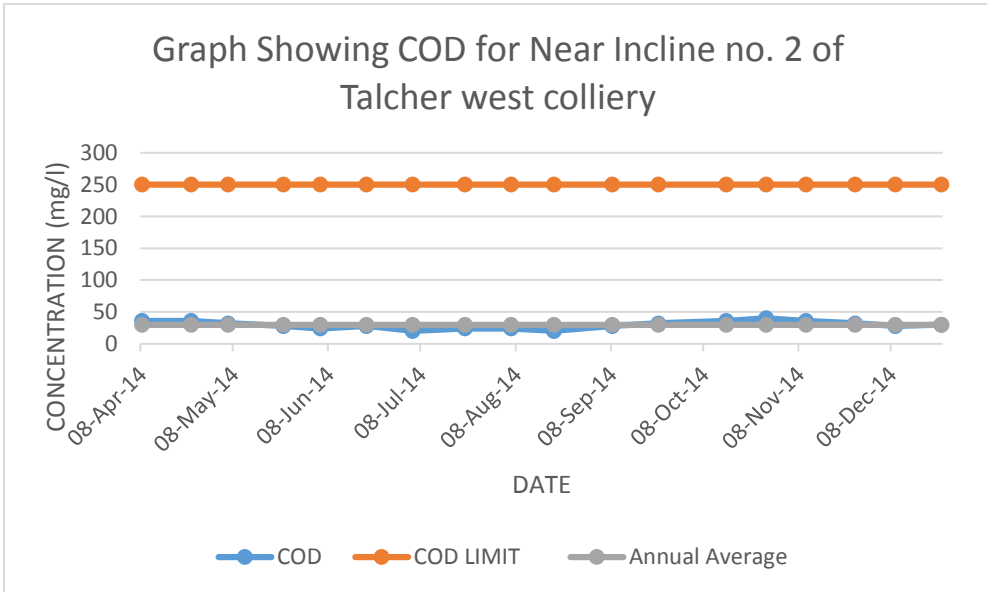
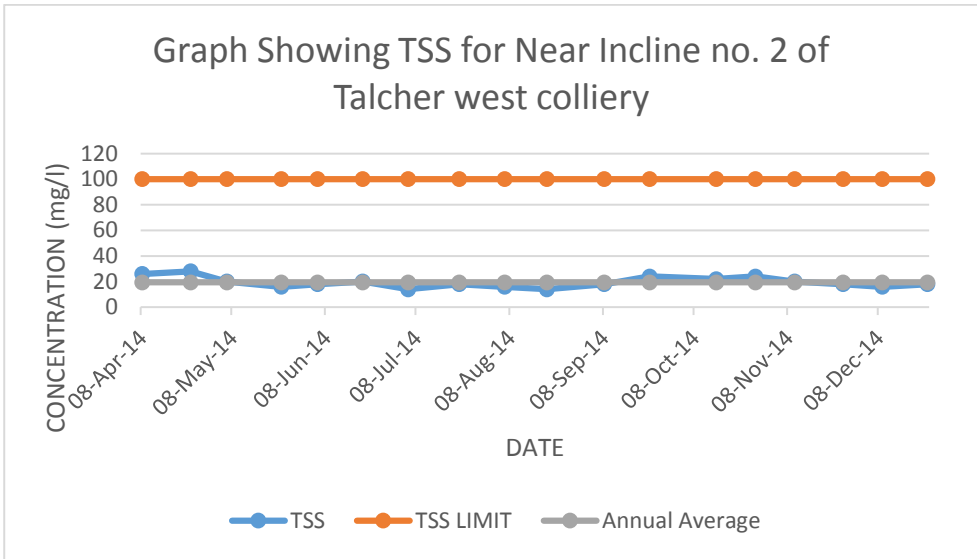
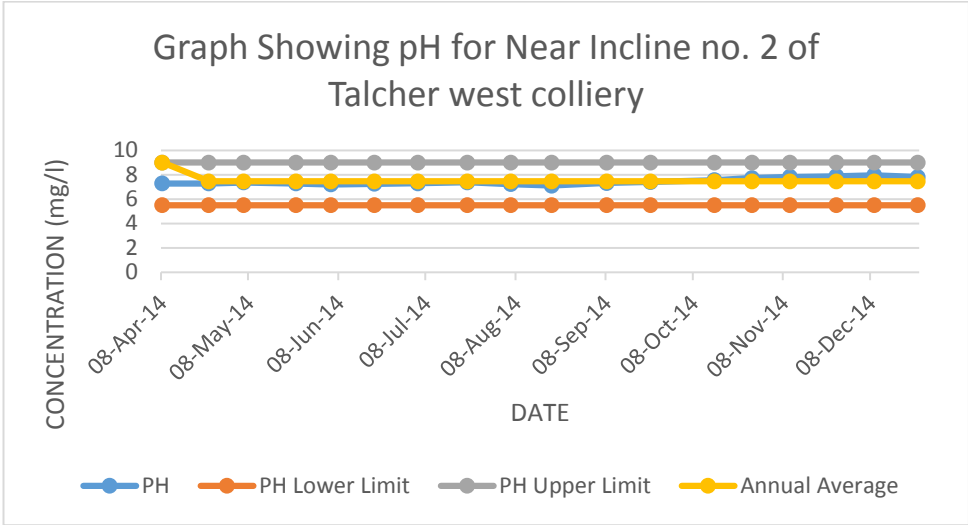
All values are in mg/L



**Table : 154 Effluent Quality Data****Project : Talcher U/G****Monitoring Station : Near Incline No.2 of Talcher West Colliery**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
08-Apr-14	7.28	<2.0	26	36
24-Apr-14	7.28	<2.0	28	36
06-May-14	7.36	<2.0	20	32
24-May-14	7.28	<2.0	16	28
05-Jun-14	7.2	<2.0	18	24
20-Jun-14	7.25	<2.0	20	28
05-Jul-14	7.3	<2.0	14	20
22-Jul-14	7.38	<2.0	18	24
06-Aug-14	7.22	<2.0	16	24
20-Aug-14	7.1	<2.0	14	20
08-Sep-14	7.32	<2.0	18	28
23-Sep-14	7.4	<2.0	24	32
15-Oct-14	7.55	<2.0	22	36
28-Oct-14	7.72	<2.0	24	40
10-Nov-14	7.82	<2.0	20	36
26-Nov-14	7.88	<2.0	18	32
09-Dec-14	7.96	<2.0	16	28
24-Dec-14	7.8	<2.0	18	30

All values are in mg/L



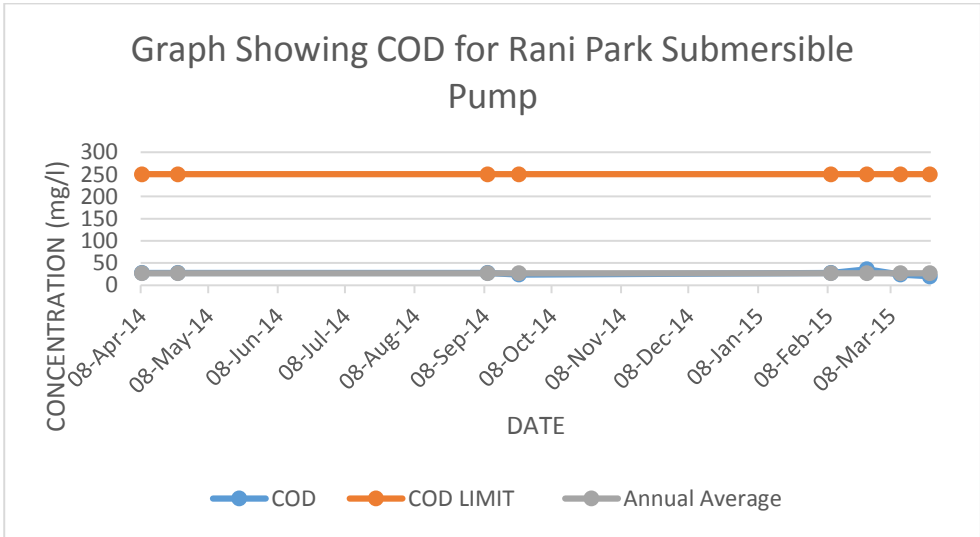
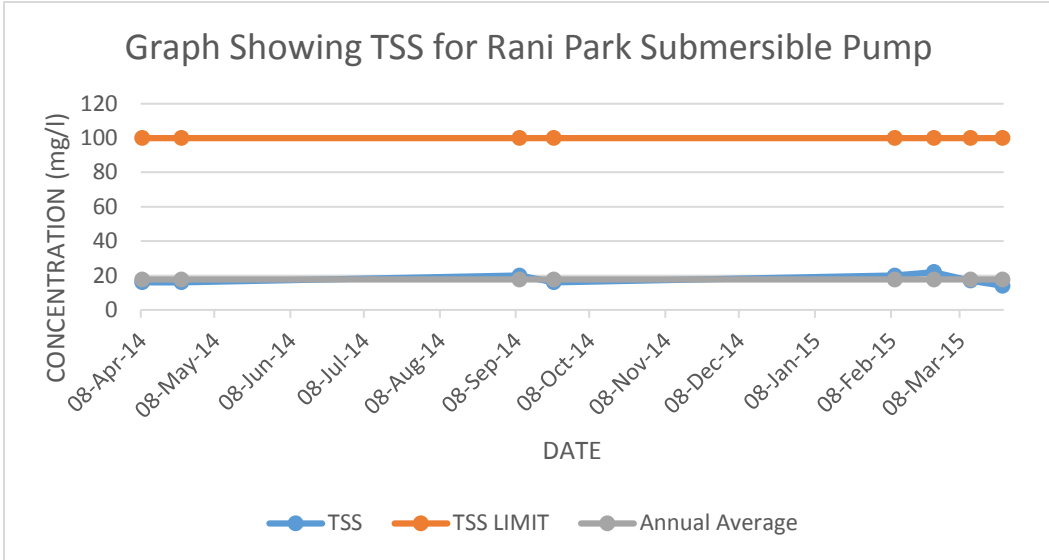
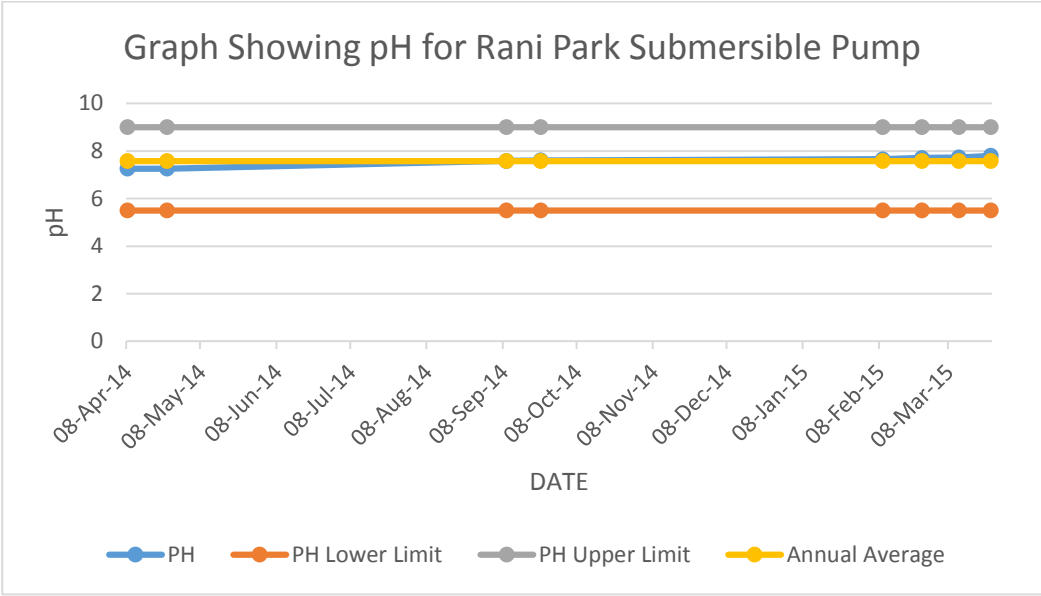
**Table : 155 Effluent Quality Data**

**Project : Talcher U/G**

**Monitoring Station : Rani Park Submersible Pump**

<b>Date of Sampling</b>	<b>pH</b>	<b>Oil &amp; Grease</b>	<b>TSS</b>	<b>COD</b>
09-Feb-15	7.65	<2.0	20	28
25-Feb-15	7.71	<2.0	22	36
12-Mar-15	7.73	<2.0	17	24
25-Mar-15	7.8	<2.0	14	20
08-Apr-14	7.26	<2.0	16	28
24-Apr-14	7.26	<2.0	16	28
09-Sep-14	7.58	<2.0	20	28
23-Sep-14	7.6	<2.0	16	24

All values are in mg/L



## Effluent Yearly 21 Parameter: Jagannath Area

Area	Jagannath	Jagannath	MoEF-Sch-VI Standards
Project	Jagannath OCP	Bhubaneswari OCP	
Sampling station	Mine Discharge water	Mine Discharge in Bangaru Jhor	
Date	26.12.2014	26.12.2014	
Color	Acceptable	Acceptable	<b>Acceptable</b>
Odour	Agreeable	Agreeable	<b>Agreeable</b>
Temp. °C	14.1	13.7	
Nitrate Nitrogen	1.8	2	<b>10</b>
Ammonia Nitrogen	0.34	0.31	<b>50</b>
Total Kjeldahl Nitrogen	0.92	0.86	<b>100</b>
BOD	14	18	<b>30</b>
Arsenic	<0.01	<0.01	<b>0.2</b>
Lead	<0.05	<0.05	<b>0.1</b>
Hexavalent Chromium	<0.01	<0.01	<b>0.1</b>
Total Chromium	<0.1	<0.1	<b>2</b>
Copper	<0.02	<0.02	<b>3</b>
Zinc	0.54	0.38	<b>5</b>
Selenium	<0.01	<0.01	<b>0.05</b>
Nickel	<0.1	<0.1	<b>3</b>
Flouride	0.42	0.62	<b>2</b>
Dis. PO <sub>4</sub>	0.24	0.16	<b>5</b>
Sulphide	0.005	0.003	<b>2</b>
Phenols	<0.001	<0.001	<b>1</b>
Manganese	<0.05	<0.05	<b>2</b>
Iron	0.14	0.14	<b>3</b>

## Effluent Yearly 21 Parameter: Bharatpur Area

<b>Area</b>	Bharatpur	<b>MoEF-Sch-VI Standards</b>
<b>Project</b>	Chhendipada OCP	
<b>Sampling station</b>	Mine Discharge water	
<b>Date</b>	17.12.2014	
<b>Color</b>	Acceptable	<b>Acceptable</b>
<b>Agreeable</b>	Agreeable	<b>Agreeable</b>
<b>Temp. °C</b>	13.9	
<b>Nitrate Nitrogen</b>	1.9	<b>10</b>
<b>Ammonia Nitrogen</b>	0.38	<b>50</b>
<b>Total Kjeldahl Nitrogen</b>	1.98	<b>100</b>
<b>BOD</b>	16	<b>30</b>
<b>Arsenic</b>	<0.01	<b>0.2</b>
<b>Lead</b>	<0.05	<b>0.1</b>
<b>Hexavalent Chromium</b>	<0.01	<b>0.1</b>
<b>Total Chromium</b>	<0.1	<b>2</b>
<b>Copper</b>	<0.02	<b>3</b>
<b>Zinc</b>	0.32	<b>5</b>
<b>Selenium</b>	<0.01	<b>0.05</b>
<b>Nickel</b>	<0.1	<b>3</b>
<b>Flouride</b>	0.44	<b>2</b>
<b>Dis. PO<sub>4</sub></b>	0.18	<b>5</b>
<b>Sulphide</b>	0.003	<b>2</b>
<b>Phenols</b>	<0.001	<b>1</b>
<b>Manganese</b>	<0.05	<b>2</b>
<b>Iron</b>	0.16	<b>3</b>

## Effluent Yearly 21 Parameter: Lingaraj Area

Area	Lingraj	Lingraj	<b>MoEF-Sch-VI Standards</b>
Project	Lingraj OCP	Lingraj OCP	
Sampling station	Outlet of MDTP	Outlet of O&G Conf. Brhamani river	
<b>Date</b>	26.12.2014	26.12.2104	
<b>Color</b>	Acceptable	Acceptable	<b>Acceptable</b>
<b>Agreeable</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Temp. °C</b>	14.4	13.8	
<b>Nitrate Nitrogen</b>	2.2	1.8	<b>10</b>
<b>Ammonia Nitrogen</b>	0.13	0.15	<b>50</b>
<b>Total Kjedadhl Nitrogen</b>	2.14	1.96	<b>100</b>
<b>BOD</b>	20	18	<b>30</b>
<b>Arsenic</b>	<0.01	<0.01	<b>0.2</b>
<b>Lead</b>	<0.05	<0.05	<b>0.1</b>
<b>Hexavalent Chromium</b>	<0.01	<0.01	<b>0.1</b>
<b>Total Chromium</b>	<0.1	<0.1	<b>2</b>
<b>Copper</b>	<0.02	<0.02	<b>3</b>
<b>Zinc</b>	0.28	0.26	<b>5</b>
<b>Selenium</b>	<0.01	<0.01	<b>0.05</b>
<b>Nickel</b>	<0.1	<0.1	<b>3</b>
<b>Flouride</b>	0.26	0.36	<b>2</b>
<b>Dis. PO<sub>4</sub></b>	0.16	0.2	<b>5</b>
<b>Sulphide</b>	0.004		<b>2</b>
<b>Phenols</b>	<0.001	<0.001	<b>1</b>
<b>Manganese</b>	<0.05	<0.05	<b>2</b>
<b>Iron</b>	0.15	0.22	<b>3</b>

## Effluent Yearly 21 Parameter: Kaniha Area

<b>Area</b>	Kaniha	<b>MoEF-Sch-VI Standards</b>
<b>Project</b>	Kaniha OCP	
<b>Sampling station</b>	Mine Discharge	
<b>Date</b>	19.12.2014	
<b>Color</b>	Acceptable	<b>Acceptable</b>
<b>Agreeable</b>	Agreeable	<b>Agreeable</b>
<b>Temp. °C</b>	13.6	
<b>Nitrate Nitrogen</b>	2	<b>10</b>
<b>Ammonia Nitrogen</b>	0.38	<b>50</b>
<b>Total Kjeldahl Nitrogen</b>	1.1	<b>100</b>
<b>BOD</b>	14	<b>30</b>
<b>Arsenic</b>	<0.01	<b>0.2</b>
<b>Lead</b>	<0.05	<b>0.1</b>
<b>Hexavalent Chromium</b>	<0.01	<b>0.1</b>
<b>Total Chromium</b>	<0.1	<b>2</b>
<b>Copper</b>	<0.02	<b>3</b>
<b>Zinc</b>	0.4	<b>5</b>
<b>Selenium</b>	<0.01	<b>0.05</b>
<b>Nickel</b>	<0.1	<b>3</b>
<b>Flouride</b>	0.68	<b>2</b>
<b>Dis. PO<sub>4</sub></b>	0.26	<b>5</b>
<b>Sulphide</b>	0.004	<b>2</b>
<b>Phenols</b>	<0.001	<b>1</b>
<b>Manganese</b>	<0.05	<b>2</b>
<b>Iron</b>	0.2	<b>3</b>

## Effluent Yearly 21 Parameter : Hingula Area

Area	Hingula	Hingula	MoEF-Sch-VI Standards
Project	Hingula OCP	Balram OCP	
Sampling station	Final Discharge point	Balram mine discharge water	
<b>Date</b>	25.12.2014	26.12.2014	
<b>Color</b>	Acceptable	Acceptable	<b>Acceptable</b>
<b>Agreeable</b>	Agreeable	Agreeable	<b>Agreeable</b>
<b>Temp. °C</b>	13.7	13.9	
<b>Nitrate Nitrogen</b>	1.8	2	<b>10</b>
<b>Ammonia Nitrogen</b>	0.25	0.45	<b>50</b>
<b>Total Kjeldahl Nitrogen</b>	2.36	1.9	<b>100</b>
<b>BOD</b>	16	0.22	<b>30</b>
<b>Arsenic</b>	<0.01	<0.01	<b>0.2</b>
<b>Lead</b>	<0.05	<0.05	<b>0.1</b>
<b>Hexavalent Chromium</b>	<0.01	<0.01	<b>0.1</b>
<b>Total Chromium</b>	<0.1	<0.1	<b>2</b>
<b>Copper</b>	<0.02	<0.02	<b>3</b>
<b>Zinc</b>	0.42	0.54	<b>5</b>
<b>Selenium</b>	<0.01	<0.01	<b>0.05</b>
<b>Nickel</b>	<0.1	<0.1	<b>3</b>
<b>Flouride</b>	0.54	0.64	<b>2</b>
<b>Dis. PO<sub>4</sub></b>	0.54	0.2	<b>5</b>
<b>Sulphide</b>	0.003	0.003	<b>2</b>
<b>Phenols</b>	<0.001	<0.001	<b>1</b>
<b>Manganese</b>	<0.05	<0.05	<b>2</b>
<b>Iron</b>	0.18	0.24	<b>3</b>

## Effluent Yearly 21 Parameter: Talcher Area

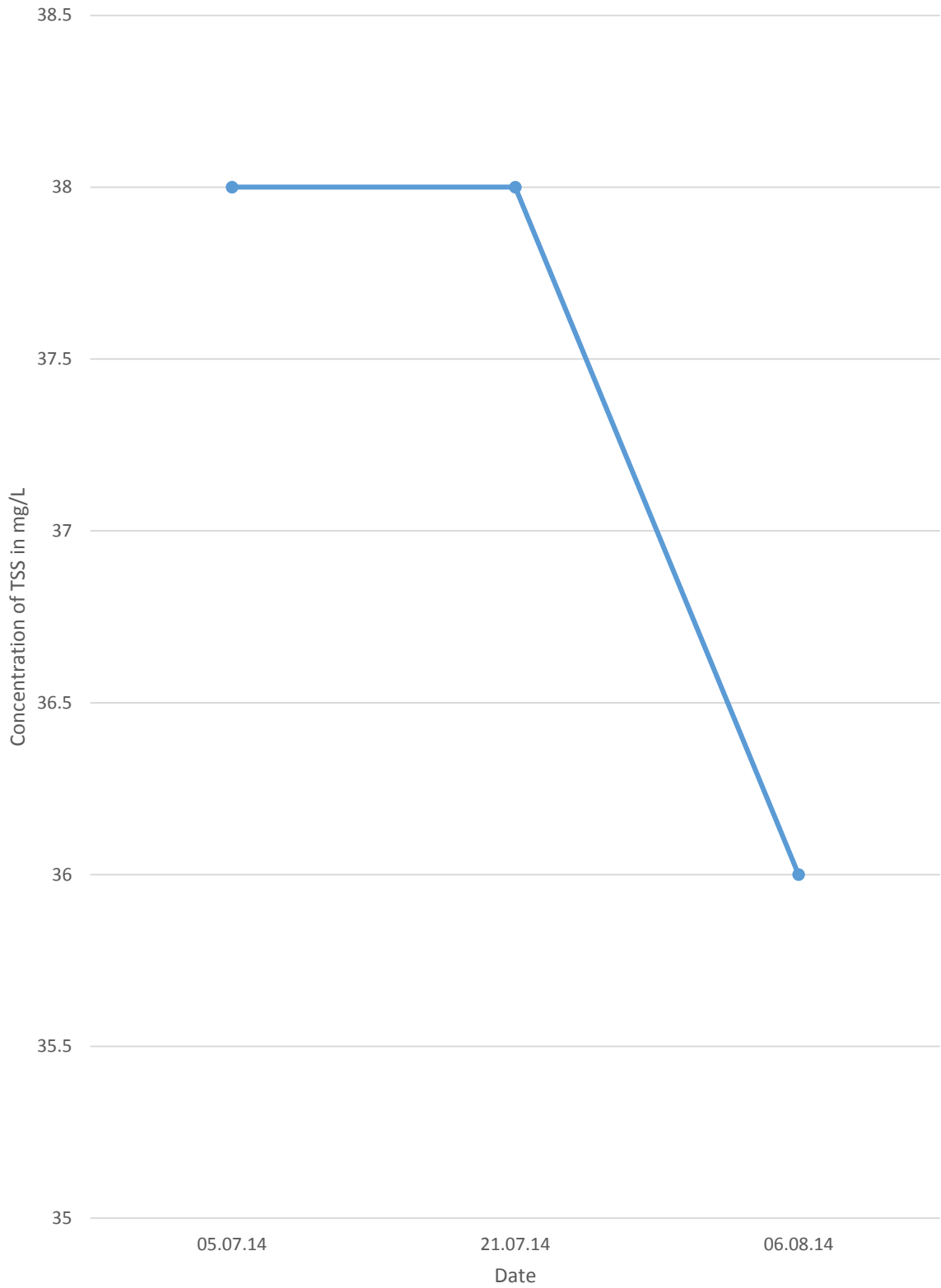
Area	Talcher	Talcher	Talcher	Talcher	<b>MoEF-Sch-VI Standards</b>
<b>Project</b>	Talcher colliery	Nandira colliery	Deulbera colliery		
<b>Sampling station</b>	Mine discharge Water	Mine discharge Water	Mine discharge Water	Handidhua mine discharge	
<b>Date</b>	26.12.2014	26.12.2014	26.12.2014	26.12.2014	
<b>Color</b>	Acceptable	Acceptable	Acceptable	Acceptable	<b>Acceptable</b>
<b>Agreeable</b>	Agreeable	Agreeable	Agreeable	Agreeable	<b>Agreeable</b>
<b>Temp. °C</b>	14	13.6	13.8	13.6	
<b>Nitrate Nitrogen</b>	1.8	2.2	2	2.2	<b>10</b>
<b>Ammonia Nitrogen</b>	0.15	0.12		0.3	<b>50</b>
<b>Total Kjeldahl Nitrogen</b>	2.1	1.72	0.15	2.05	<b>100</b>
<b>BOD</b>	12	16	2.18	18	<b>30</b>
<b>Arsenic</b>	<0.01	<0.01	12	<0.01	<b>0.2</b>
<b>Lead</b>	<0.05	<0.05	<0.05	<0.05	<b>0.1</b>
<b>Hexavalent Chromium</b>	<0.01	<0.01	<0.01	<0.01	<b>0.1</b>
<b>Total Chromium</b>	<0.1	<0.1	<0.1	<0.1	<b>2</b>
<b>Copper</b>	<0.02	<0.02	<0.02	<0.02	<b>3</b>
<b>Zinc</b>	0.44	0.38	0.38	0.62	<b>5</b>
<b>Selenium</b>	<0.01	<0.01	<0.01	<0.01	<b>0.05</b>
<b>Nickel</b>	<0.1	<0.1	<0.1	<0.1	<b>3</b>
<b>Flouride</b>	0.36	0.32	0.34	0.42	<b>2</b>
<b>Dis. PO<sub>4</sub></b>	0.17	0.22	0.16	0.26	<b>5</b>
<b>Sulphide</b>	0.004	0.005	0.004	0.003	<b>2</b>
<b>Phenols</b>	<0.001	<0.001	<0.001	<0.001	<b>1</b>
<b>Manganese</b>	<0.05	<0.05	<0.05	<0.05	<b>2</b>
<b>Iron</b>	0.2	0.16	0.17	0.22	<b>3</b>

All units are in mg/L

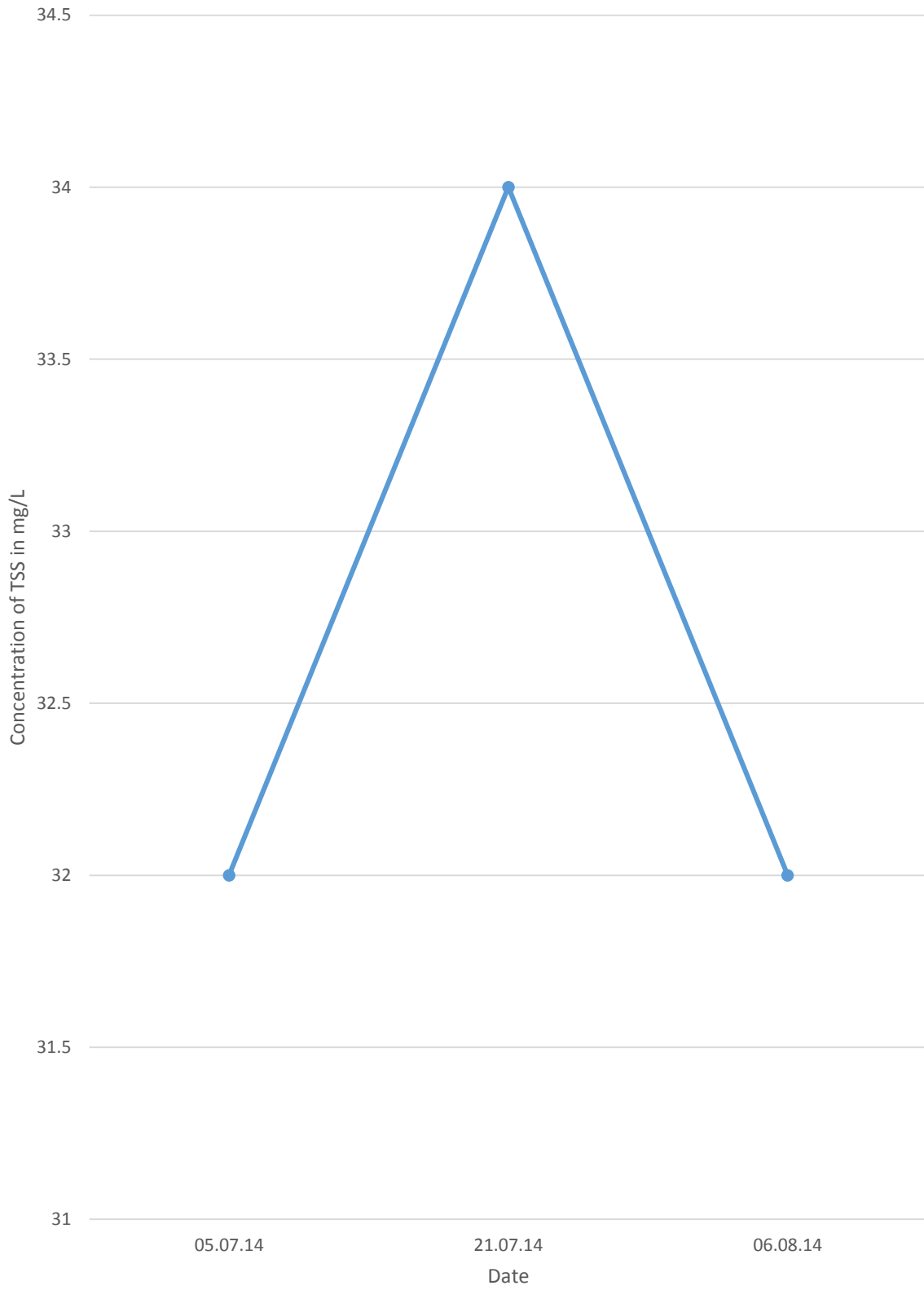
**Table : 162**  
**SILTATION STUDY AT TALCHER COALFIELD**  
**Jagannath Area**

<b>Project</b>	<b>Monitoring Station</b>	<b>Date of Sampling</b>	<b>TSS</b>
Ananta OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	05.07.14	32
Ananta OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	05.07.14	38
Ananta OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	21.07.14	34
Ananta OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	21.07.14	38
Ananta OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	06.08.14	32
Ananta OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	06.08.14	36

100m D/S of the pt. of confluence of mine disc. Water with  
Bangaru nallah

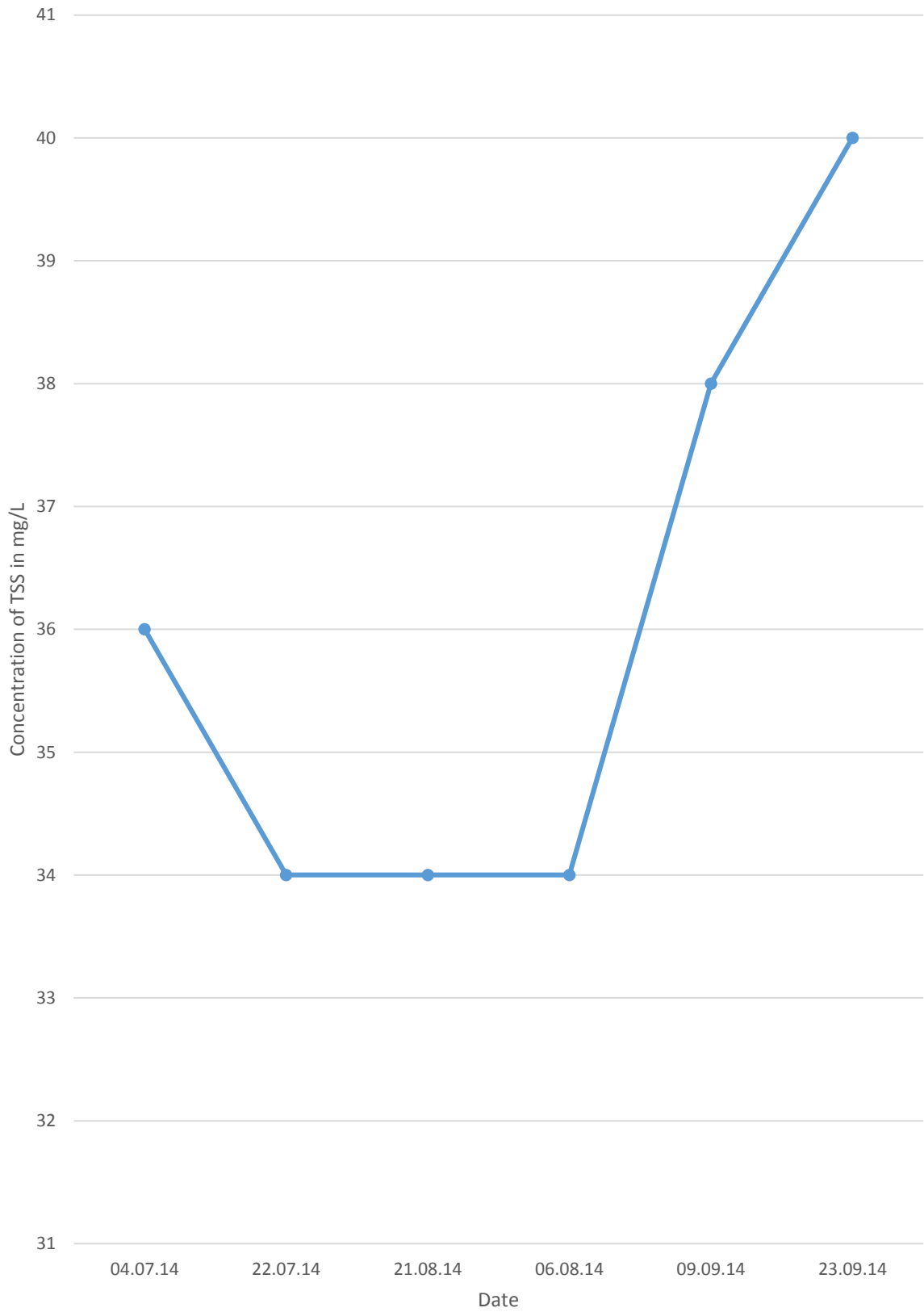


100m U/S of the pt. of confluence of mine disc. Water with  
Bangaru nallah

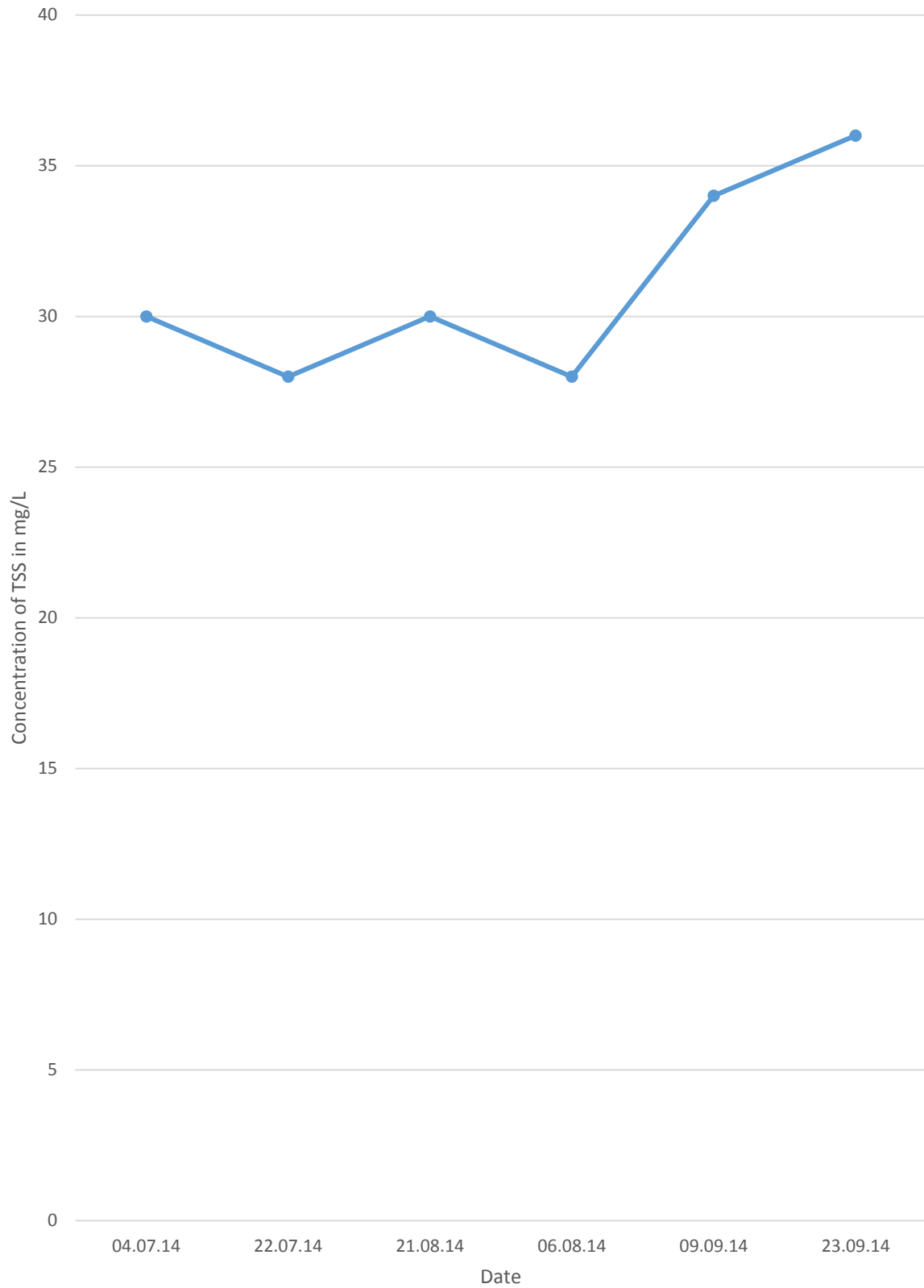


<b>Project</b>	<b>Monitoring Station</b>	<b>Date of Sampling</b>	<b>TSS</b>
Bhubaneswari OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	04.07.14	30
Bhubaneswari OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	04.07.14	36
Bhubaneswari OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	22.07.14	28
Bhubaneswari OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	22.07.14	34
Bhubaneswari OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	06.08.14	28
Bhubaneswari OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	06.08.14	34
Bhubaneswari OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	21.08.14	30
Bhubaneswari OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	21.08.14	34
Bhubaneswari OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	09.09.14	34
Bhubaneswari OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	09.09.14	38
Bhubaneswari OCP	100m U/S of the pt. of confluence of mine disc. Water with Bangarunallah	23.09.14	36
Bhubaneswari OCP	100m D/S of the pt. of confluence of mine disc. Water with Bangarunallah	23.09.14	40

100m D/S of the pt. of confluence of mine disc. Water with  
Bangaru nallah



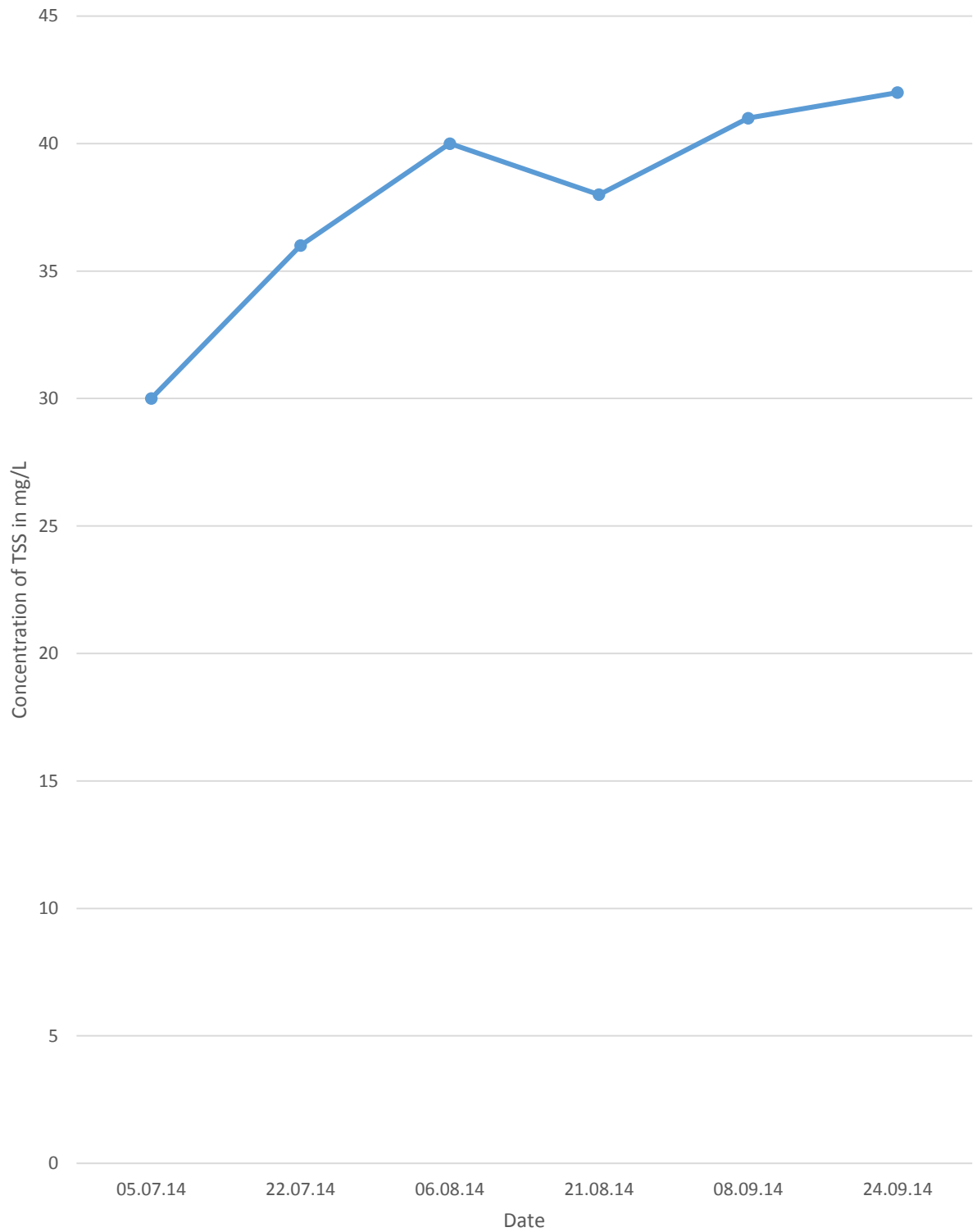
100m U/S of the pt. of confluence of mine disc. Water with  
Bangaru nallah



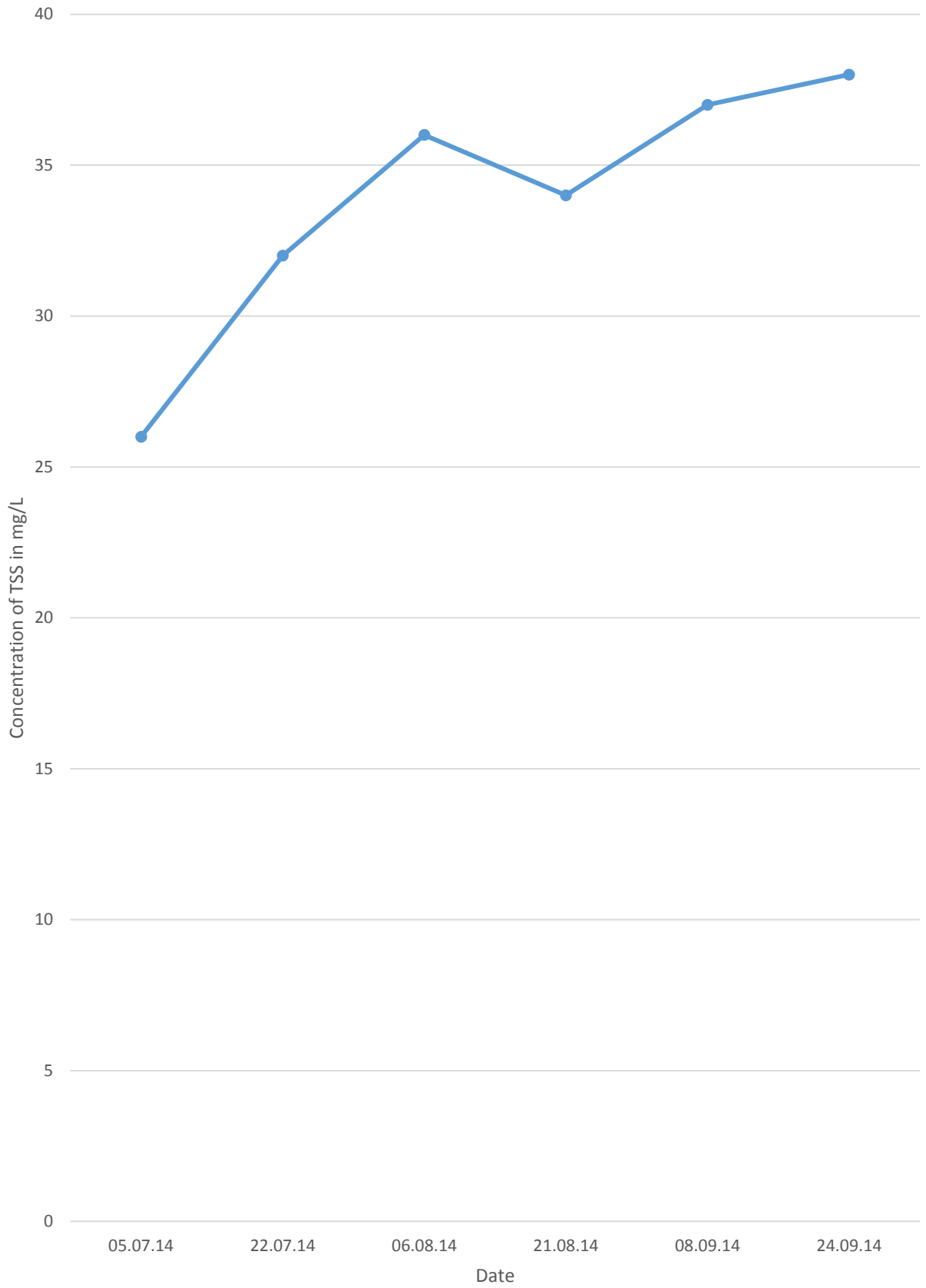
**Table : 163****SILTATION STUDY AT TALCHER COALFIELD  
Lingaraj Area**

<b>Project</b>	<b>Monitoring Station</b>	<b>Date of Sampling</b>	<b>TSS</b>
Lingaraj OCP	100m U/S of the pt. of confluence of mine disc. Water with Brahmani river	05.07.14	26
Lingaraj OCP	100m D/S of the pt. of confluence of mine disc. Water with Brahmani river	05.07.14	30
Lingaraj OCP	100m U/S of the pt. of confluence of mine disc. Water with Brahmani river	22.07.14	32
Lingaraj OCP	100m D/S of the pt. of confluence of mine disc. Water with Brahmani river	22.07.14	36
Lingaraj OCP	100m U/S of the pt. of confluence of mine disc. Water with Brahmani river	06.08.14	36
Lingaraj OCP	100m D/S of the pt. of confluence of mine disc. Water with Brahmani river	06.08.14	40
Lingaraj OCP	100m U/S of the pt. of confluence of mine disc. Water with Brahmani river	21.08.14	34
Lingaraj OCP	100m D/S of the pt. of confluence of mine disc. Water with Brahmani river	21.08.14	38
Lingaraj OCP	100m U/S of the pt. of confluence of mine disc. Water with Brahmani river	08.09.14	37
Lingaraj OCP	100m D/S of the pt. of confluence of mine disc. Water with Brahmani river	08.09.14	41
Lingaraj OCP	100m U/S of the pt. of confluence of mine disc. Water with Brahmani river	24.09.14	38
Lingaraj OCP	100m D/S of the pt. of confluence of mine disc. Water with Brahmani river	24.09.14	42

100m D/S of the pt. of confluence of mine disc. Water with  
Brahmani river



100m U/S of the pt. of confluence of mine disc. Water with  
Brahmani river

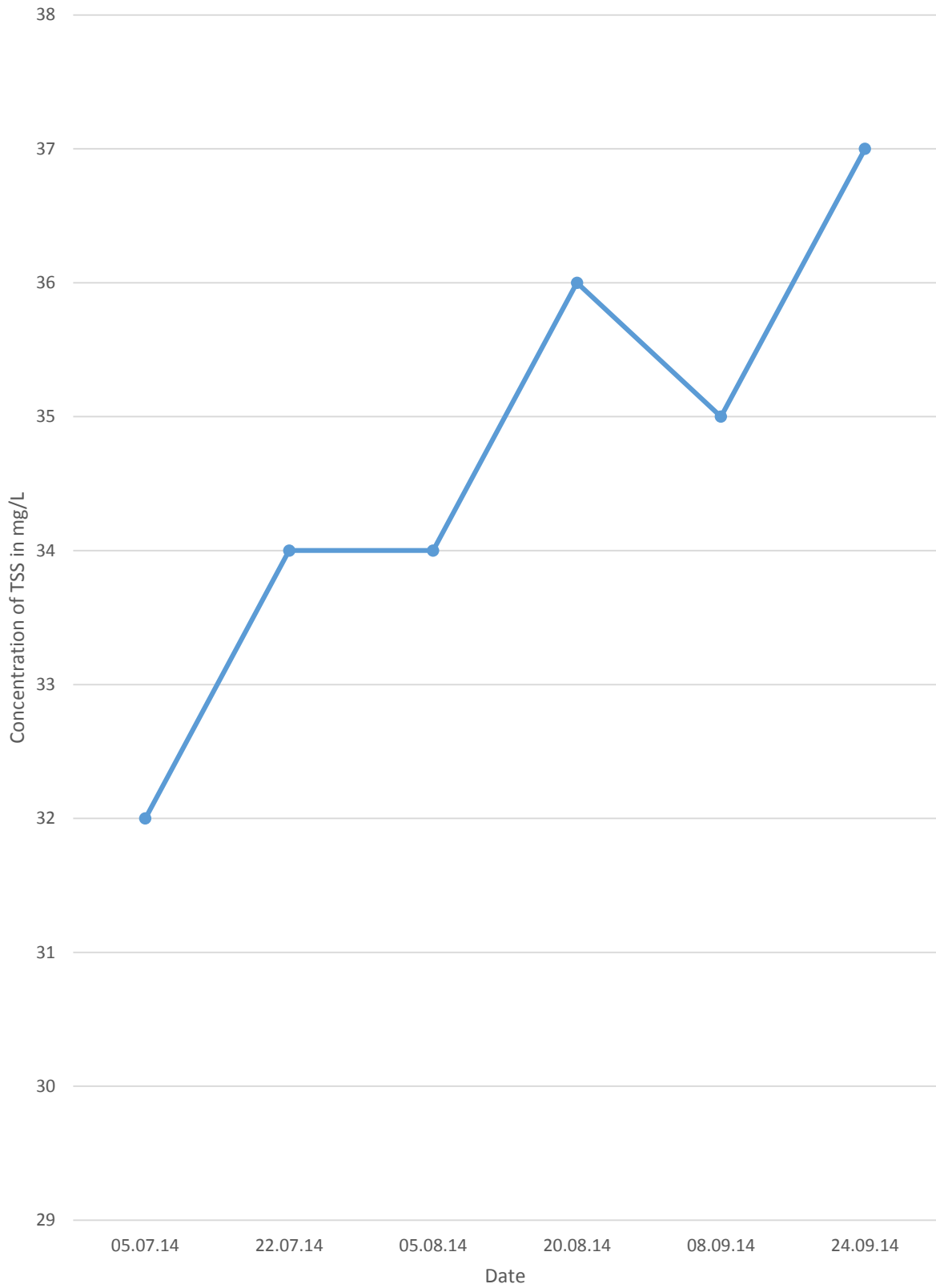


**Table : 164**

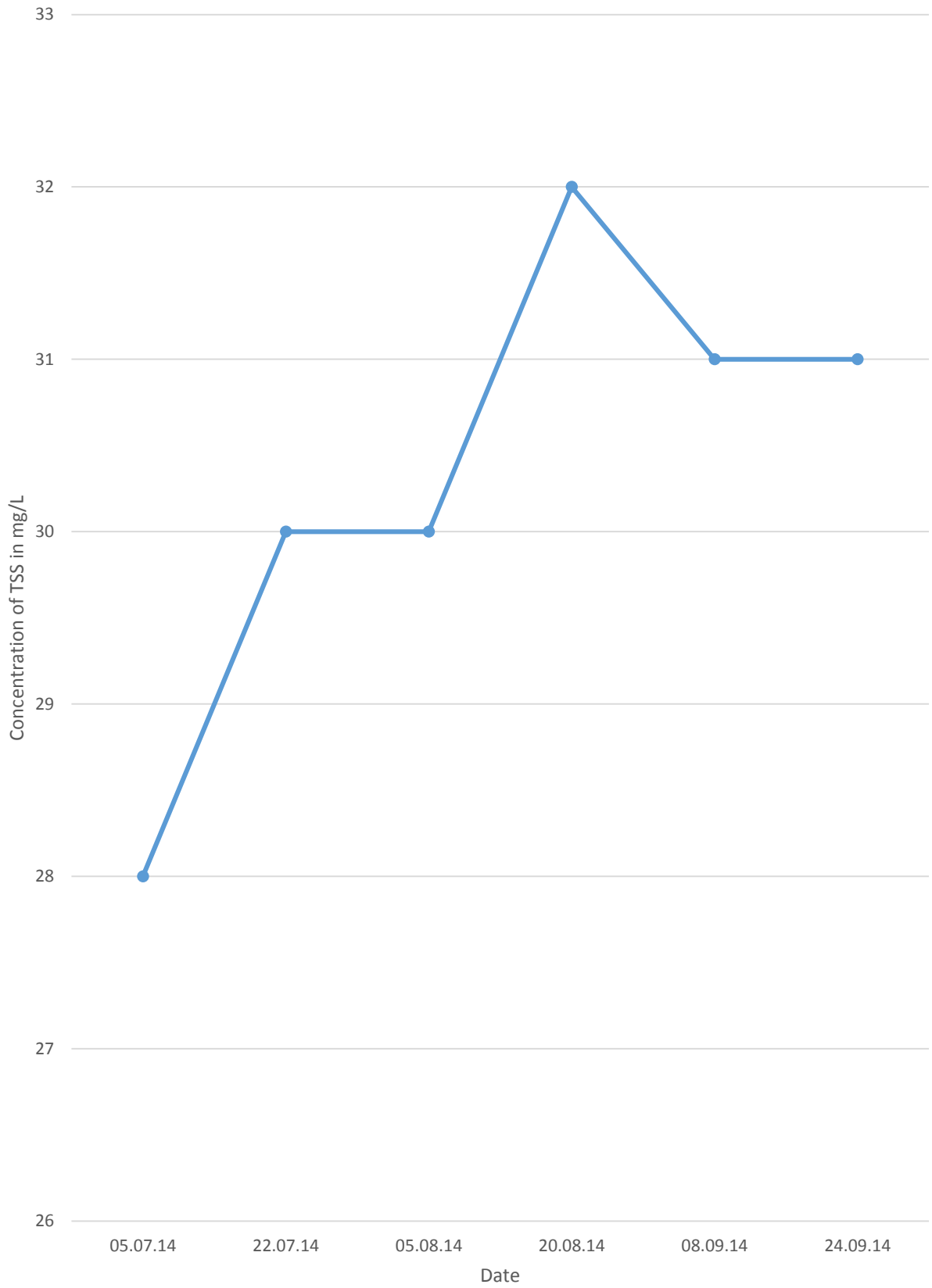
**SILTATION STUDY AT TALCHER COALFIELD  
Hingula Area**

<b>Project</b>	<b>Monitoring Station</b>	<b>Date of Sampling</b>	<b>TSS</b>
Balaram OCP	100m U/S of the pt. of confluence of Mitty quarry water with Bangarunallah	05.07.14	28
Balaram OCP	100m D/S of the pt. of confluence of Mitty quarry water with Bangarunallah	05.07.14	32
Balaram OCP	100m U/S of the pt. of confluence of Mitty quarry water with Bangarunallah	22.07.14	30
Balaram OCP	100m D/S of the pt. of confluence of Mitty quarry water with Bangarunallah	22.07.14	34
Balaram OCP	100m U/S of the pt. of confluence of Mitty quarry water with Bangarunallah	05.08.14	30
Balaram OCP	100m D/S of the pt. of confluence of Mitty quarry water with Bangarunallah	05.08.14	34
Balaram OCP	100m U/S of the pt. of confluence of Mitty quarry water with Bangarunallah	20.08.14	32
Balaram OCP	100m D/S of the pt. of confluence of Mitty quarry water with Bangarunallah	20.08.14	36
Balaram OCP	100m U/S of the pt. of confluence of Mitty quarry water with Bangarunallah	08.09.14	31
Balaram OCP	100m D/S of the pt. of confluence of Mitty quarry water with Bangarunallah	08.09.14	35
Balaram OCP	100m U/S of the pt. of confluence of Mitty quarry water with Bangarunallah	24.09.14	31
Balaram OCP	100m D/S of the pt. of confluence of Mitty quarry water with Bangarunallah	24.09.14	37

100m D/S of the pt. of confluence of Mitty quarry water with Bangarunallah

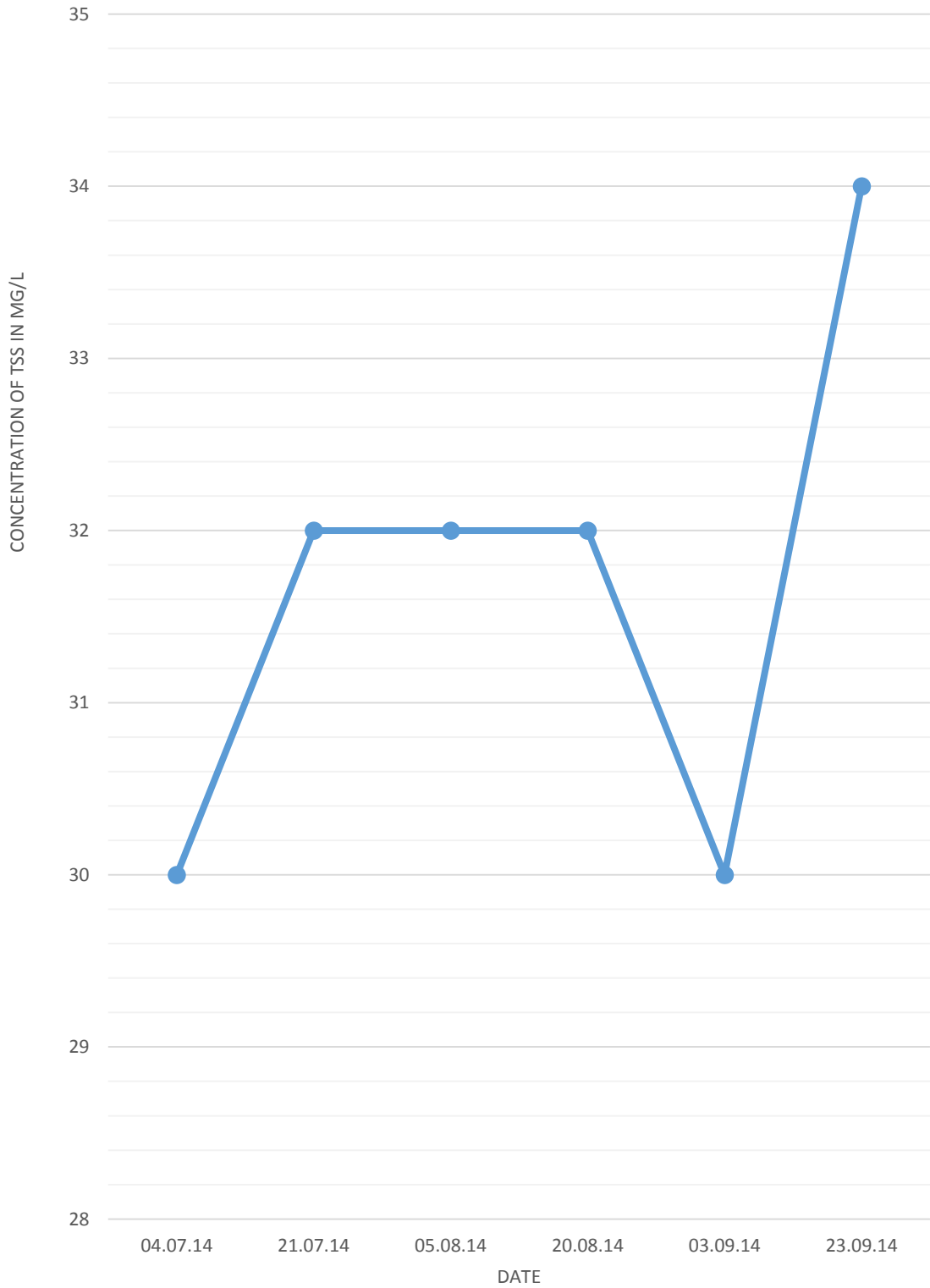


100m U/S of the pt. of confluence of Mitty quarry water with Bangarunallah

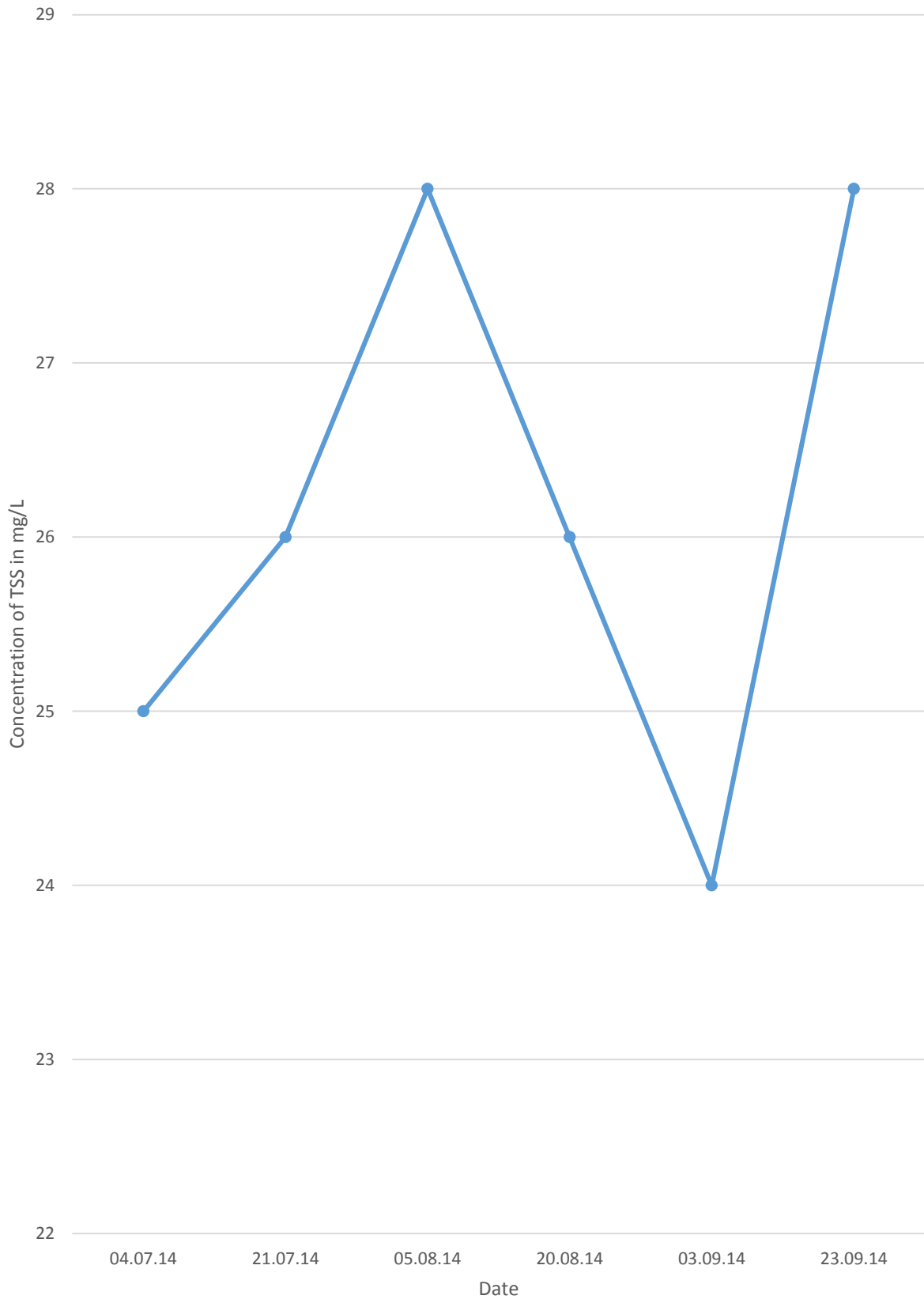


<b>Project</b>	<b>Monitoring Station</b>	<b>Date of Sampling</b>	<b>TSS</b>
Hingula OCP	100m U/S of the pt. of confluence of mine disc. Water with SingadaJhar	04.07.14	25
Hingula OCP	100m D/S of the pt. of confluence of mine disc. Water with SingadaJhar	04.07.14	30
Hingula OCP	100m U/S of the pt. of confluence of mine disc. Water with SingadaJhar	21.07.14	26
Hingula OCP	100m D/S of the pt. of confluence of mine disc. Water with SingadaJhar	21.07.14	32
Hingula OCP	100m U/S of the pt. of confluence of mine disc. Water with SingadaJhar	05.08.14	28
Hingula OCP	100m D/S of the pt. of confluence of mine disc. Water with SingadaJhar	05.08.14	32
Hingula OCP	100m U/S of the pt. of confluence of mine disc. Water with SingadaJhar	20.08.14	26
Hingula OCP	100m D/S of the pt. of confluence of mine disc. Water with SingadaJhar	20.08.14	32
Hingula OCP	100m U/S of the pt. of confluence of mine disc. Water with SingadaJhar	03.09.14	24
Hingula OCP	100m D/S of the pt. of confluence of mine disc. Water with SingadaJhar	03.09.14	30
Hingula OCP	100m U/S of the pt. of confluence of mine disc. Water with SingadaJhar	23.09.14	28
Hingula OCP	100m D/S of the pt. of confluence of mine disc. Water with SingadaJhar	23.09.14	34

# 100m D/S of the pt. of confluence of mine disc. Water with Singada Jhor



100m U/S of the pt. of confluence of mine disc. Water with  
Singada Jhor



**Table : 156 Ground water Level Data**

Date of sampling	Project	Name of the Station	Water level
12-May-14	Ananta OCP	Dera village well	3.56
13-Aug-14	Ananta OCP	Dera village well	1.6
12-Nov-14	Ananta OCP	Dera village well	2.56
14-Jan-15	Ananta OCP	Dera village well	2.22
12-May-14	Ananta OCP	Hensamul village well	5.27
13-Aug-14	Ananta OCP	Hensamul village well	0.36
12-Nov-14	Ananta OCP	Hensamul village well	2.68
14-Jan-15	Ananta OCP	Hensamul village well	2.01
12-May-14	Bhubaneswari OCP	Jilinda village well	closed
13-Aug-14	Bhubaneswari OCP	Jilinda village well	1.37
12-Nov-14	Bhubaneswari OCP	Jilinda village well	2.92
14-Jan-15	Bhubaneswari OCP	Jilinda village well	0
12-May-14	Bhubaneswari OCP	Naraharipur village well	3.2
13-Aug-14	Bhubaneswari OCP	Naraharipur village well	1.4
12-Nov-14	Bhubaneswari OCP	Naraharipur village well	3.44
14-Jan-15	Bhubaneswari OCP	Naraharipur village well	2.86
12-May-14	Jagannath OCP	Rakas village well	4.45
13-Aug-14	Jagannath OCP	Rakas village well	4.11
12-Nov-14	Jagannath OCP	Rakas village well	3.23
14-Jan-15	Jagannath OCP	Rakas village well	2.5

*Note: All values are in Meter*

**Table : 157 Ground water Level Data**

Date of sampling	Project	Name of the Station	Water level
12-May-14	Chhendipada OCP	Open well nearest to the mine	4.11
13-Aug-14	Chhendipada OCP	Open well nearest to the mine	1.83
12-Nov-14	Chhendipada OCP	Open well nearest to the mine	4.39
14-Jan-15	Chhendipada OCP	Open well nearest to the mine	3.99

*All values are in meters*

**Table : 158 Ground water Level Data**

<b>Date of sampling</b>	<b>Project</b>	<b>Name of the Station</b>	<b>Water level</b>
12-May-14	Lingaraj OCP	BalugaonKhamar village well	5
13-Aug-14	Lingaraj OCP	BalugaonKhamar village well	0.73
12-Nov-14	Lingaraj OCP	BalugaonKhamar village well	2.22
14-Jan-15	Lingaraj OCP	BalugaonKhamar village well	1.89
12-May-14	Lingaraj OCP	Deulbera colony well	2.65
13-Aug-14	Lingaraj OCP	Deulbera colony well	1.43
12-Nov-14	Lingaraj OCP	Deulbera colony well	2.59
14-Jan-15	Lingaraj OCP	Deulbera colony well	4.36
12-May-14	Lingaraj OCP	Talabeda Village Well	4.45
13-Aug-14	Lingaraj OCP	Talabeda Village Well	1.09
12-Nov-14	Lingaraj OCP	Talabeda Village Well	3.53
14-Jan-15	Lingaraj OCP	Talabeda Village Well	2.86

*All values are in meters*

**Table : 159 Ground water Level Data**

<b>Date of sampling</b>	<b>Project</b>	<b>Name of the Station</b>	<b>Water level</b>
12-May-14	Kaniha OCP	Jamunia village well	4.08
13-Aug-14	Kaniha OCP	Jamunia village well	1.31
12-Nov-14	Kaniha OCP	Jamunia village well	2.62
14-Jan-15	Kaniha OCP	Jamunia village well	1.95
12-May-14	Kaniha OCP	Jarada village well	3.29
13-Aug-14	Kaniha OCP	Jarada village well	1.06
12-Nov-14	Kaniha OCP	Jarada village well	3.23
14-Jan-15	Kaniha OCP	Jarada village well	2.59
12-May-14	Kaniha OCP	Kansamunda village well	3.53
13-Aug-14	Kaniha OCP	Kansamunda village well	1.37
12-Nov-14	Kaniha OCP	Kansamunda village well	2.98
14-Jan-15	Kaniha OCP	Kansamunda village well	2.56

All values are in meters

**Table : 160 Ground water Level Data**

<b>Date of sampling</b>	<b>Project</b>	<b>Name of the Station</b>	<b>Water level</b>
12-May-14	Balaram OCP	Nakaiposi village well	5.7
12-May-14	Balaram OCP	Danara village well	4.69
13-Aug-14	Balaram OCP	Nakaiposi village well	2.04
13-Aug-14	Balaram OCP	Danara village well	1.15
12-Nov-14	Balaram OCP	Nakaiposi village well	4.14
12-Nov-14	Balaram OCP	Danara village well	3.72
14-Jan-15	Balaram OCP	Nakaiposi village well	3.23

All values are in meters

**Table : 161 Ground Water Level**

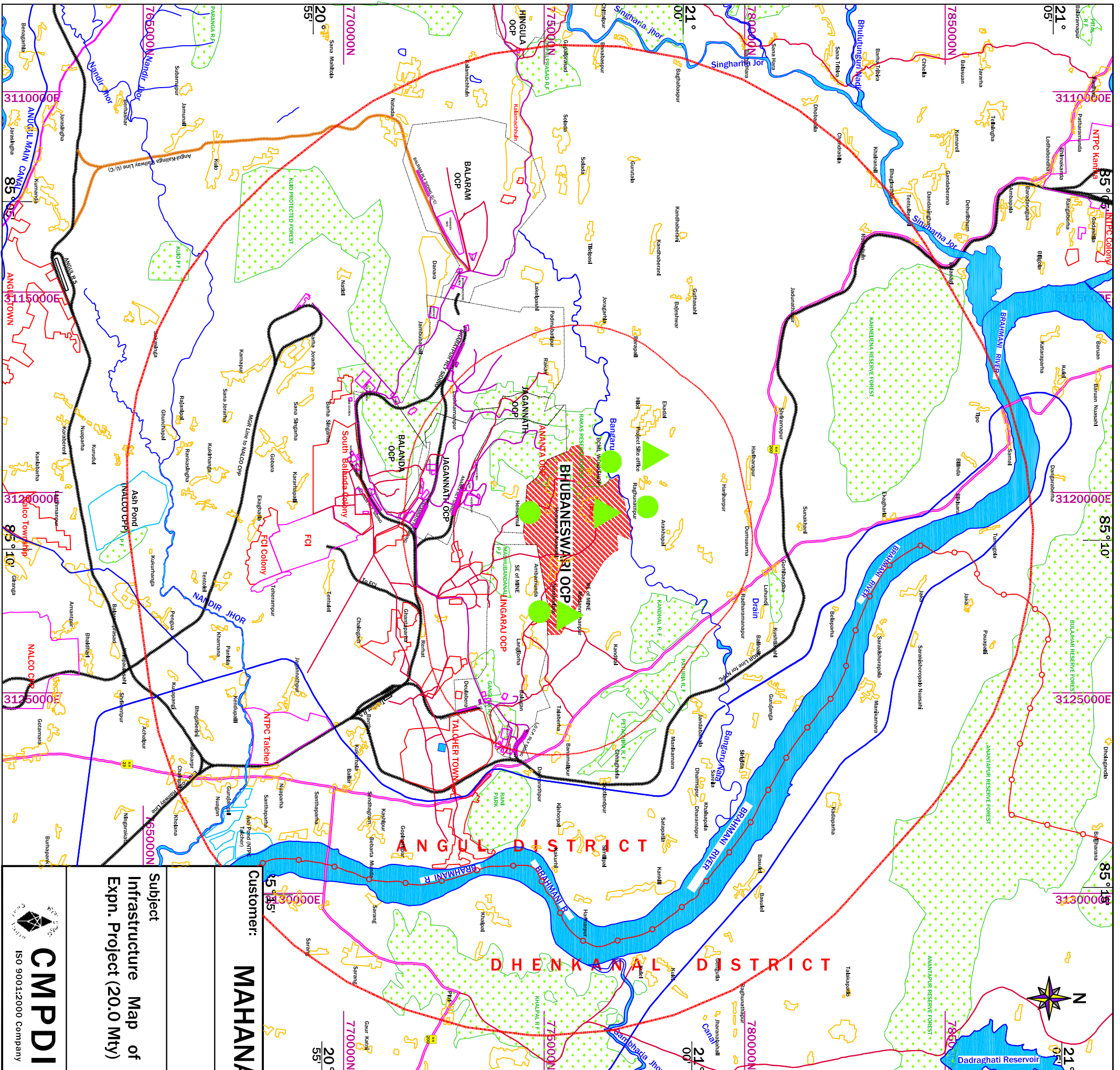
<b>Date of sampling</b>	<b>Project</b>	<b>Name of the Station</b>	<b>Water level</b>
14-Jan-15	Balaram OCP	Danara village well	3.41
12-May-14	Hingula OCP	Kusumpal village well	4.69
13-Aug-14	Hingula OCP	Kusumpal village well	2.22
12-Nov-14	Hingula OCP	Kusumpal village well	2.8
14-Jan-15	Hingula OCP	Kusumpal village well	2.59

All values are in meters

**Table : 161 Ground water Level Data**

<b>Date of sampling</b>	<b>Project</b>	<b>Name of the Station</b>	<b>Water level</b>
12-May-14	Talcher Area	Deulbera colony well	2.65
13-Aug-14	Talcher Area	Deulbera colony well	1.43
12-Nov-14	Talcher Area	Deulbera colony well	2.59
14-Jan-15	Talcher Area	Deulbera colony well	4.36
12-May-14	Talcher Area	Naraharipur village well	3.2
13-Aug-14	Talcher Area	Naraharipur village well	1.4
12-Nov-14	Talcher Area	Naraharipur village well	3.44
14-Jan-15	Talcher Area	Naraharipur village well	2.86
12-May-14	Talcher Area	Natedi village well	4.36
13-Aug-14	Talcher Area	Natedi village well	1.31
12-Nov-14	Talcher Area	Natedi village well	2.92
14-Jan-15	Talcher Area	Natedi village well	2.5

*All values are in meters*



- ### Air and Noise Monitoring Station
- Raghunathpur Village
  - BCML Workshop
  - Hensmul Village Talasahi
  - Naraharipur Village
  - ▲ Drinking Water Monitoring Station
  - ▲ Jilinda Village Well Water
  - ▲ Naraharipur Village Tubewell water
  - ▲ Project Site Office water

### INDEX

- River/ Nallah/ Jhor/ Pond
- National Highway
- State Highway/MDR
- Railway line
- 10Km Buffer Zone Boundary
- 3Km Buffer Zone Boundary
- Mine Leasehold Boundary
- Forest Boundary
- State/District Boundary

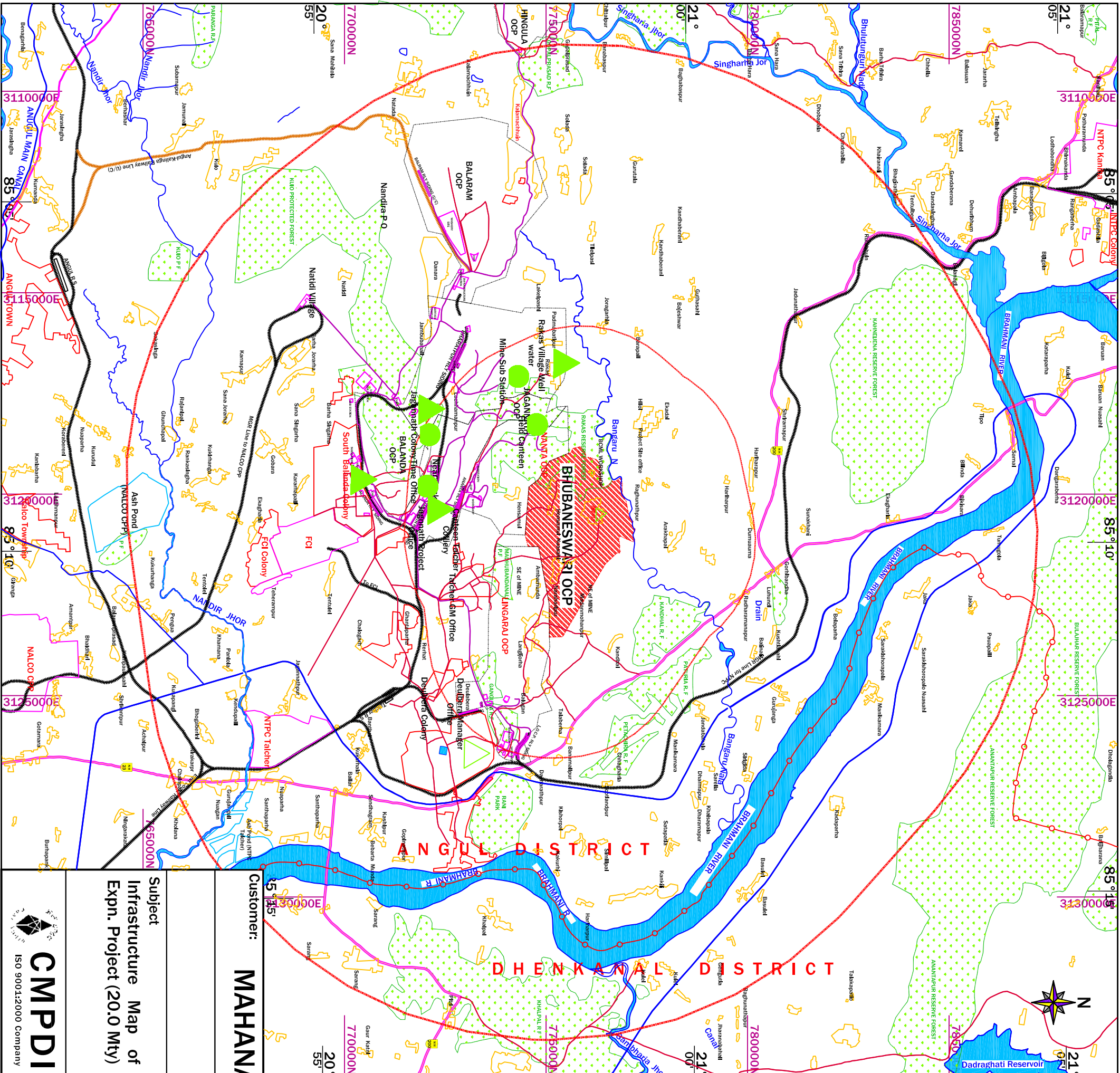
Note: Forest Boundaries Are Taken From  
Survey of India Toposheets

**PLATE NO. IV**

<b>CUSTOMER:</b>		<b>MAHANADI COALFIELDS LIMITED</b>	
<b>SUBJECT:</b>		<b>Infrastructure Map of Bhubaneswari OC Expn. Project (20.0 Mty)</b>	
<b>Activity</b>	<b>Name</b>	<b>Desig.</b>	<b>Signature</b>
Processed	T. K. Das	SE (G.V.)	
Processed	A. K. Samantaray	SE(Env.)	
Checked	S. P. Mohanty	HOD (GMT)	
Approved	S. R. Singh	RD (R-VII)	
<b>Scale</b>		<b>Sheet 1 of 1</b>	
		<b>REV.No. 0</b>	
<b>Drg.No.</b>	<b>R7</b>	<b>GMT</b>	<b>300097</b>
<b>Job No.</b>		<b>706082</b>	

CMPDI

ISO 9001:2000 Company



- Air & Noise Monitoring Station**
- Jagannath Time Office
  - Mine Sub Station
  - Field Canteen
  - Jagannath Colony
  - ▲ Drinking Water Station
  - ▲ Jagannath Colony
  - ▲ Rakas Village
  - ▲ Balanda Colony
  - ▲ Project Office

**INDEX**

- River/ Nallah/ Jhor/ Pond
- National Highway
- State Highway/MDR
- Railway line
- 10km Buffer Zone Boundary
- 3km Buffer Zone Boundary
- Mine Leasehold Boundary
- Forest Boundary
- State/District Boundary

**Job No. 750001**

**Customer: MAHANADI COALFIELDS LIMITED**

**Subject: Infrastructure Map of Bhubaneswar OC Expn. Project (20.0 Mt)**

**PLATE NO. IV**

Note: Forest Boundaries Are Taken From Survey of India Toposheets

Activity	Name	Desig.	Signature	Date
Processed	T. K. Das	SE (Civ.)		07.12.2009
Processed	A. K. Samantaryay	SE(Env.)		07.12.2009
Checked	S. P. Mohanty	HOD (GMT)		07.12.2009
Approved	S. R. Singh	RD (RI-VII)		07.12.2009

**Scale**

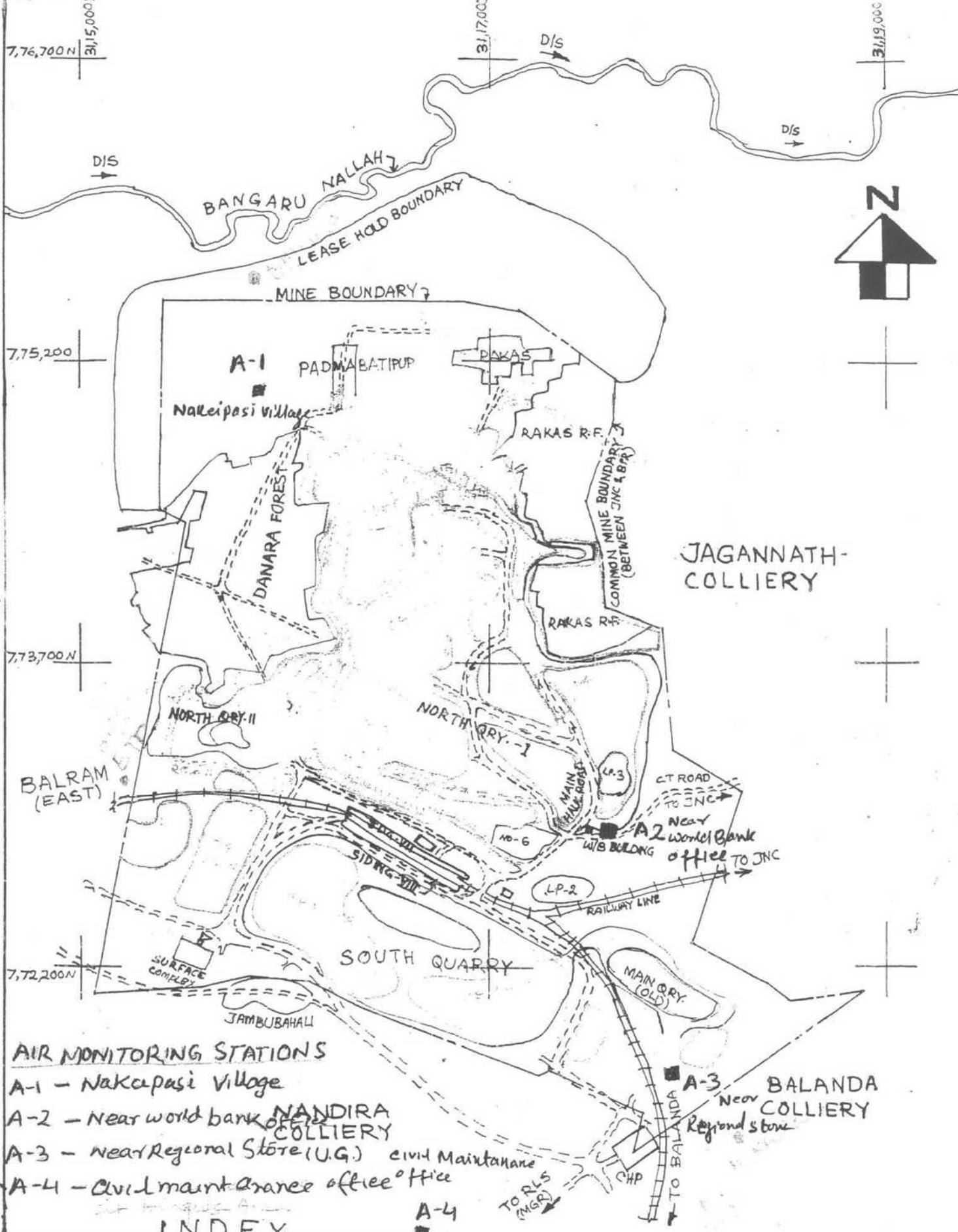
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**Dwg.No. R7 GMT 300097**

**Sheet 1 of 1**

**REV.No. 0**

**CMPDI**  
ISO 9001:2000 Company



**AIR MONITORING STATIONS**

- A-1 - Nakapasi Village
- A-2 - Near world bank office
- A-3 - Near Regional Store (U.G.)
- A-4 - Civil maintenance office

**INDEX**

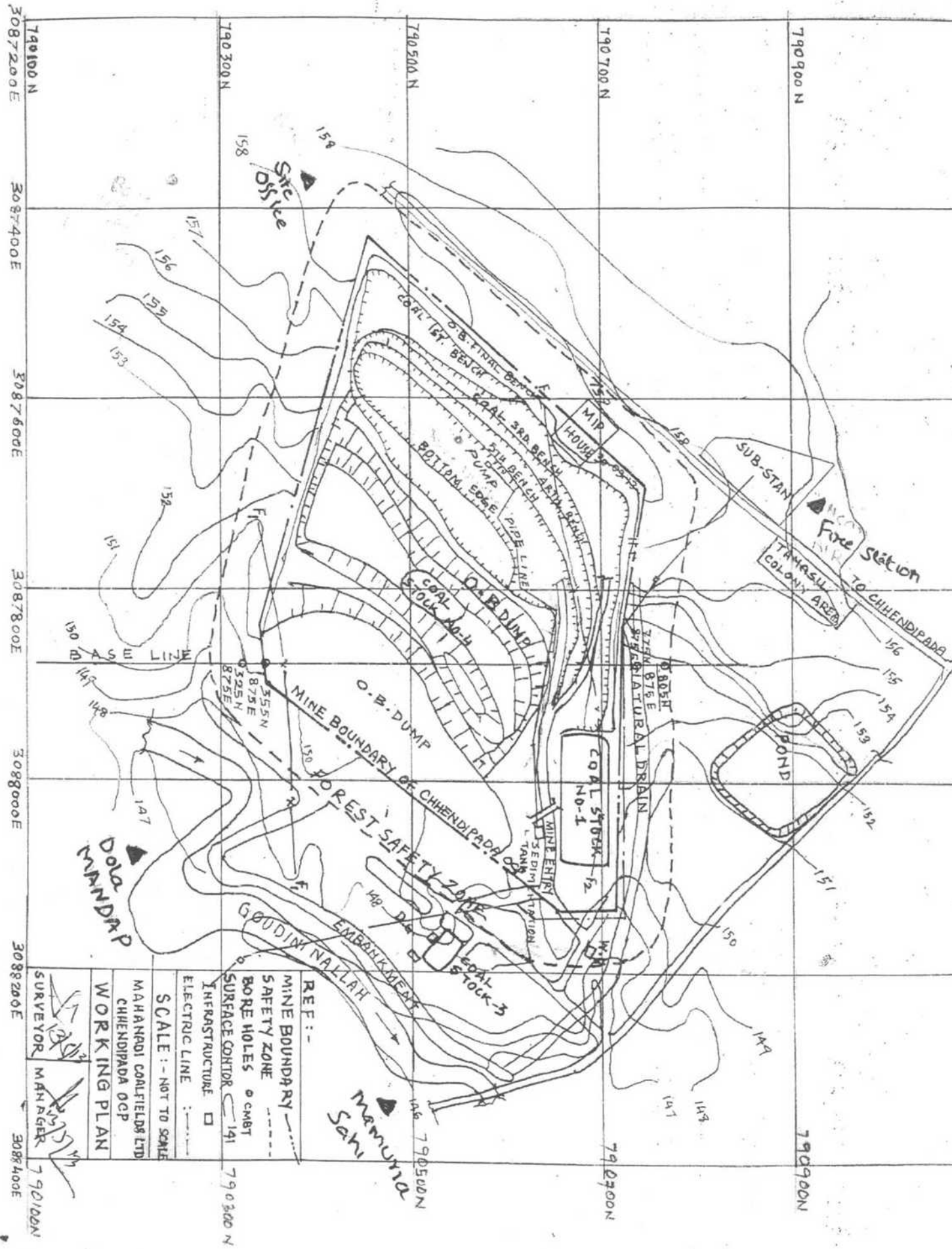
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② OB WORKING LINE -	—
③ COAL WORKING LINE -	—
④ ROAD	---
⑤ OB DUMPING/BACK FILLING -	—
⑥ FOREST	—
⑦ WATER BODIES	—

MCLTD.  
BHARATPUR OPEN CAST PROJECT  
BHARATPUR AREA

**MINE PLAN**  
(NOT TO SCALE)

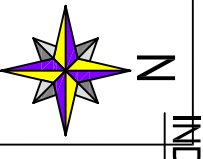
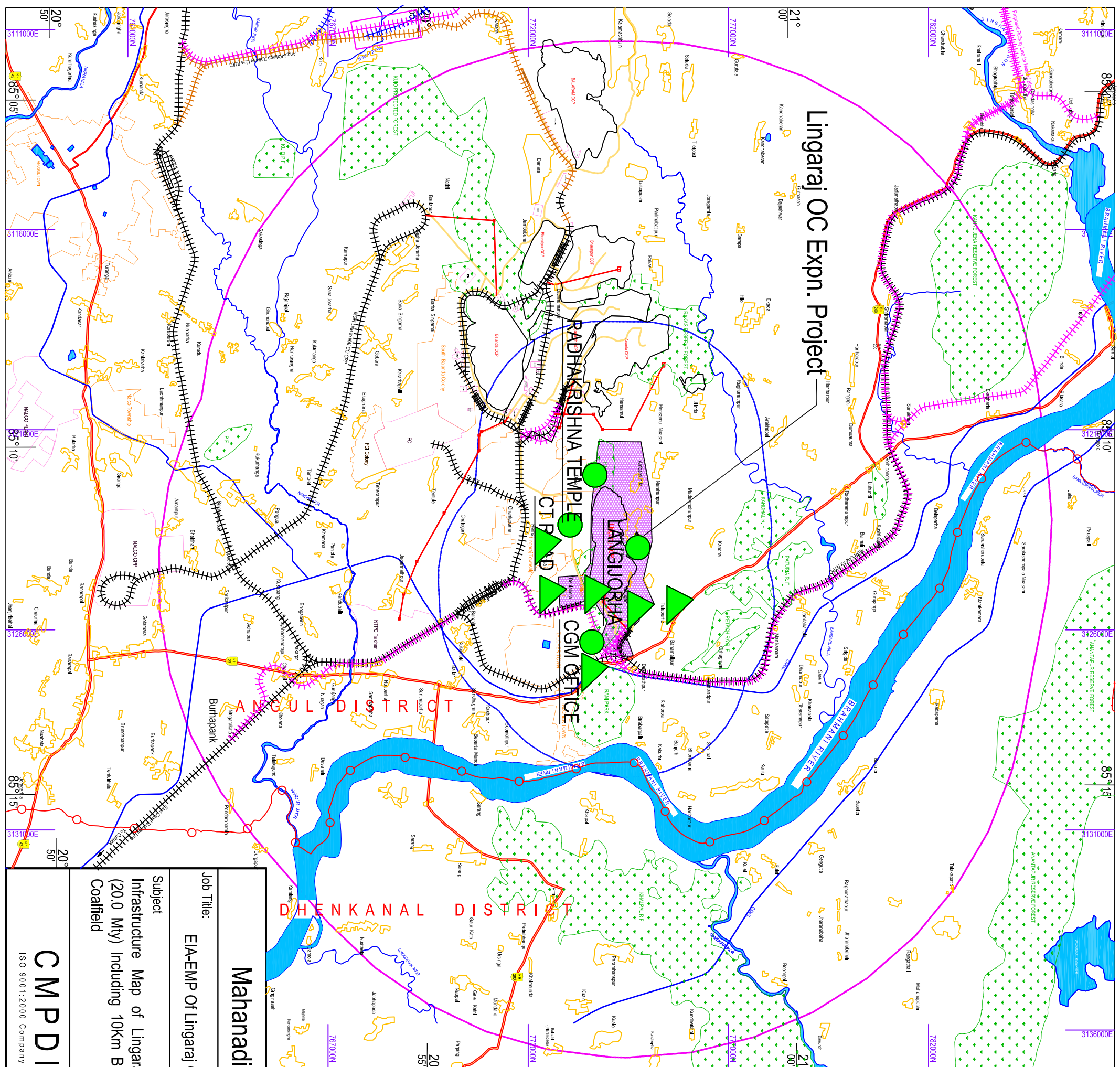
343  
**SURVEYOR**

Date 12/11/13  
**MANAGER**



SURVEYOR		MANAGER	
MAHANADI COALFIELDS LTD		CHHENDIPADA OGP	
WORKING PLAN			
SCALE :- NOT TO SCALE			
ELECTRIC LINE :-			
SURFACE CONTOUR 141			
INFRASTRUCTURE □			
BORE HOLES ○ CBMT			
SAFETY ZONE ---			
MINE BOUNDARY - - -			
REF :-			

- Air Monitoring Station
1. Site office
  2. Fire Station
  3. Mamunda Saki
  4. Dola mandap



- AIR & NOISE MONITORING STATION**
- Lingaraj CGM Office
  - Near Radhakrishna Temple
  - Near CT Road (Lingaraj to Dera)
  - Near Longjiora Village

- Drinking Water MONITORING STATION**
- ▲ Bangaru khamar/Deulbera/Talabera
  - ▲ MTK Office/Lingaraj Township/CGM Office
  - ▲ Deulbera Tap Water

- INDEX**
- National Highway
  - State Highway/MDR
  - Other Road
  - Railway Line (Existing & Proposed)
  - Forest Boundary
  - 10km Buffer Boundary
  - 3km Buffer Boundary
  - Mine Lease Boundary
  - State/District Boundary

Note: Forest Boundaries Are Taken From Survey of India Toposheets

**Mahanadi Coalfields Limited**

Job Title: EIA-EMP Of Lingaraj OCP Expansion (20 MTY Peak)

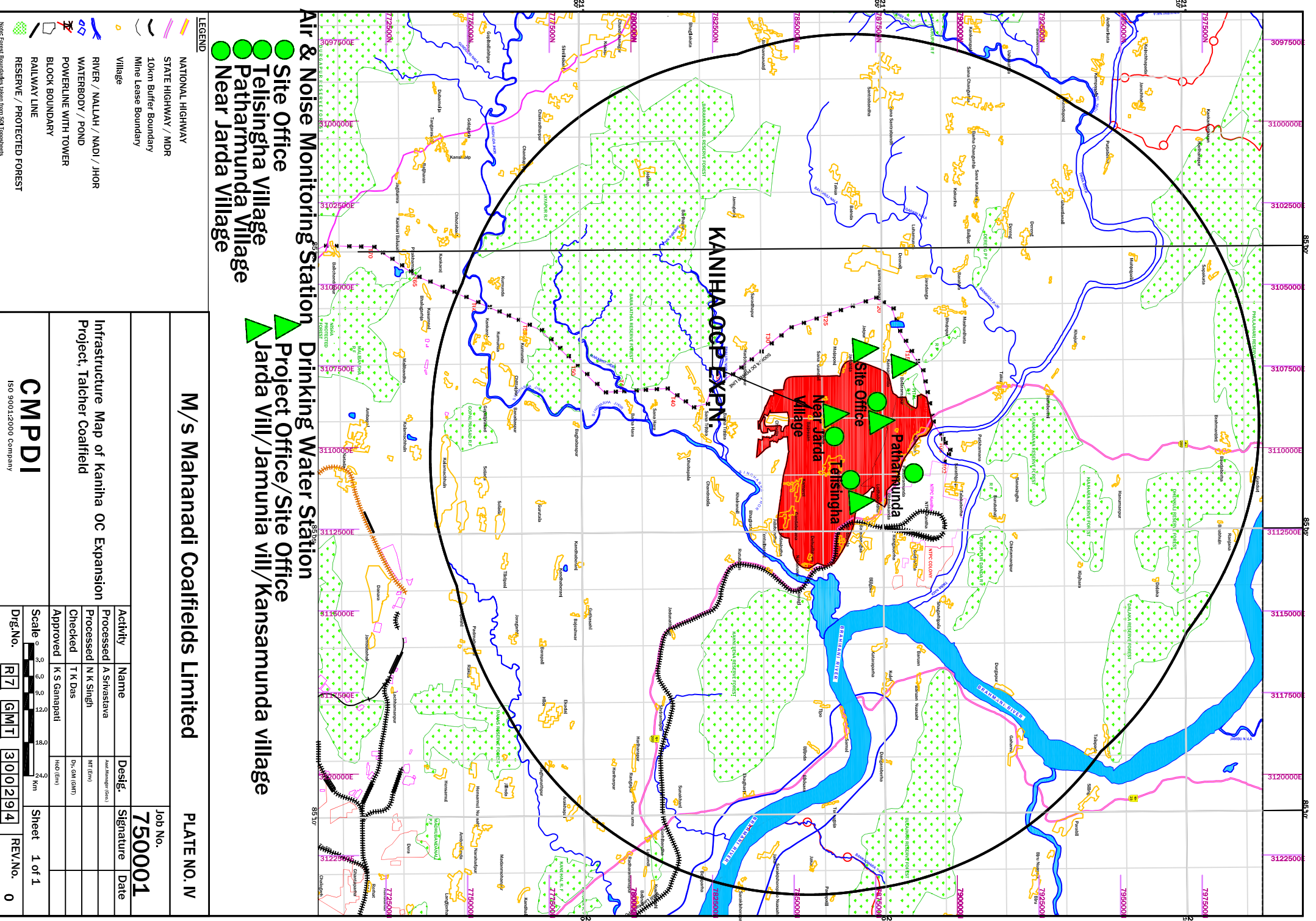
Subject: Infrastructure Map of Lingaraj OCP Expansion (20.0 Mty) Including 10km Buffer Zone, Talcher Coalfield

Activity	Name	Desig.	Signature	Date
Processed	A. Mondal	Asst.Mgr. (Geo)		14.06.2013
Processed	B. G. Ray	Asst.Mgr. (Geo)		14.06.2013
Checked	T. K. Das	HOD (GEO/MAT/S)		14.06.2013
Approved	D. Bhattacharjee	P.O. (P/M)		14.06.2013

**CMPDI**

ISO 9001:2000 Company

Scale	0 0.5 1.0 1.5 2.0 3.0 4.0 5.0 km	Sheet	1 of 1
Dwg.No.	R7	GIMT	300281
REV.No.			0



**Air & Noise Monitoring Station**  
 ● Site Office  
 ● Telsingha Village  
 ● Patharmunda Village  
 ● Near Jarida Village

**Drinking Water Station**  
 ▲ Project Office/Site Office  
 ▲ Jarida Vill/Jamunia vill/Kansamunda village

**M/s Mahanadi Coalfields Limited**

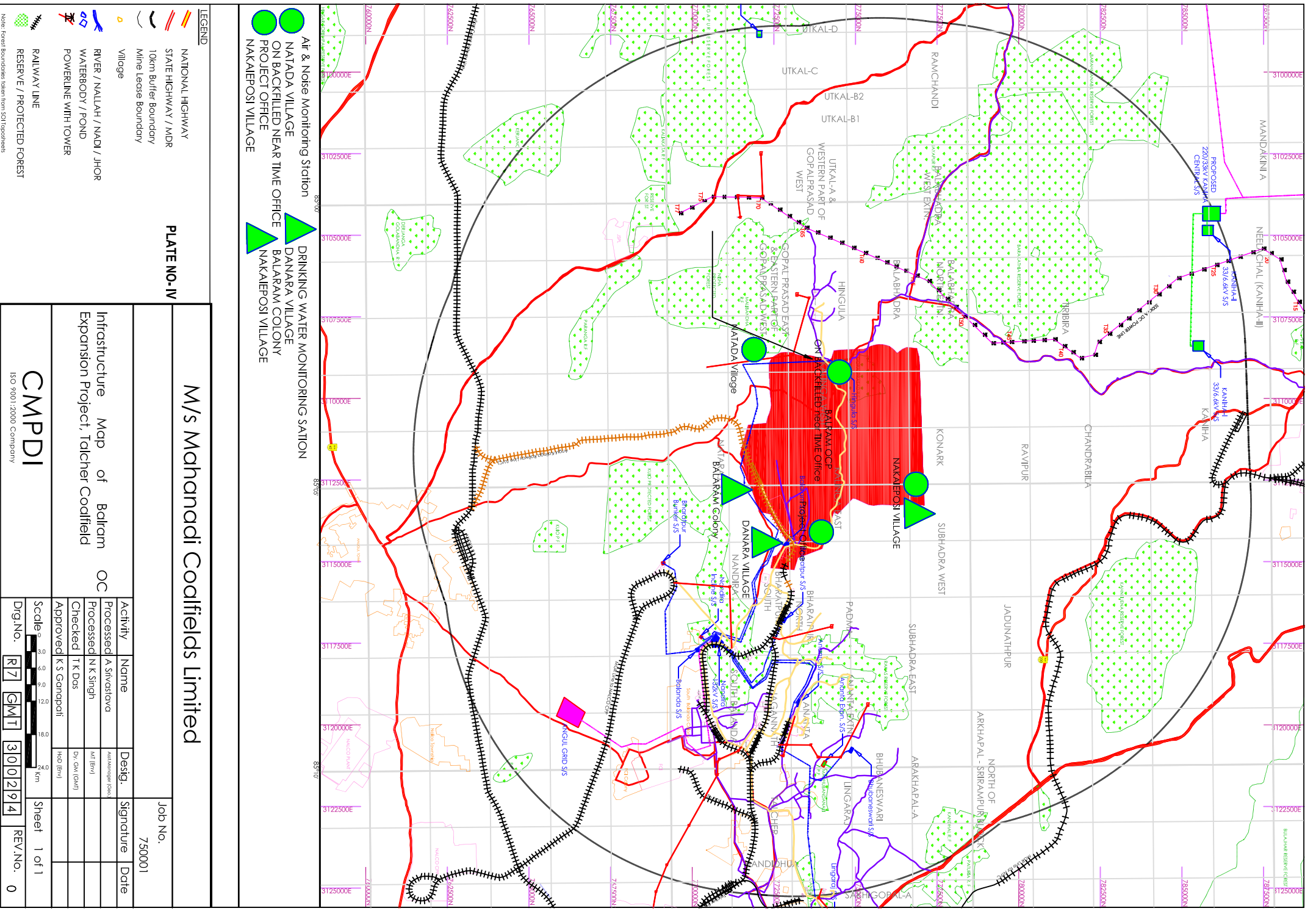
**PLATE NO. IV**

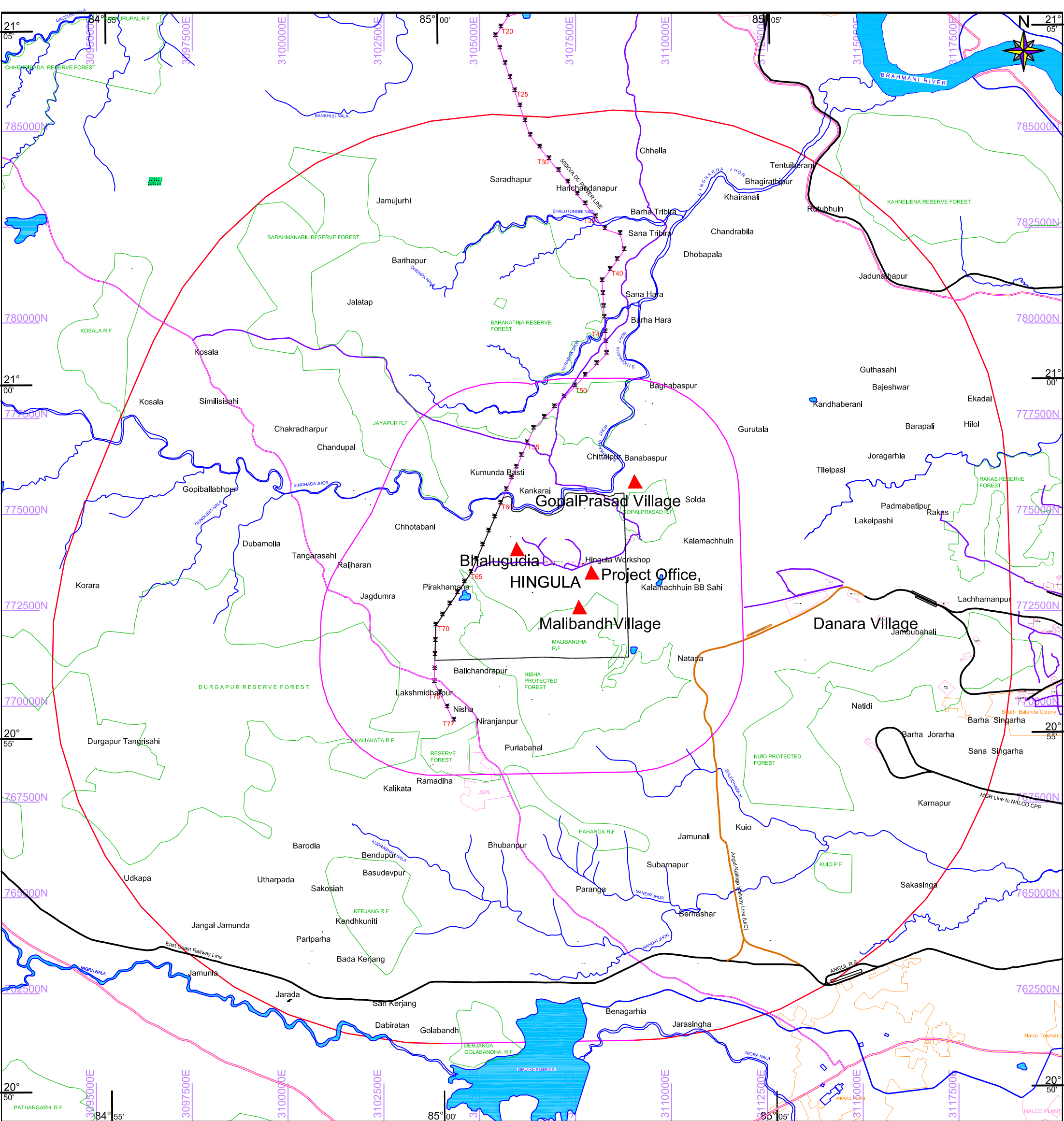
Activity	Name	Desig.	Signature	Date
Processed	A. Srinivastava	Asst. Manager (Gen)		
Checked	N.K. Singh	Asst. Engr		
Checked	T.K. Das	Dy. Asst. Engr		
Approved	K.S. Ganapati	Asst. Engr		

**Infrastructure Map of Kanihia OC Expansion**  
 Project, Talcher Coalfield

**CMPDI**  
 ISO 9001:2000 Company

Dwg.No.	R7	GMIT	300294	REV.No.	0
Scale	1:18,000		Sheet	1 of 1	





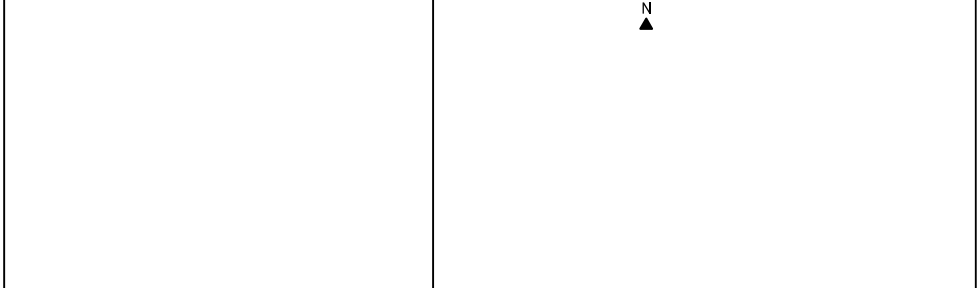
**AIR MONITORING STATIONS** ▲

- Malibandha Village
- Project Office
- Bhalugadia Village
- Gopalprasad Village

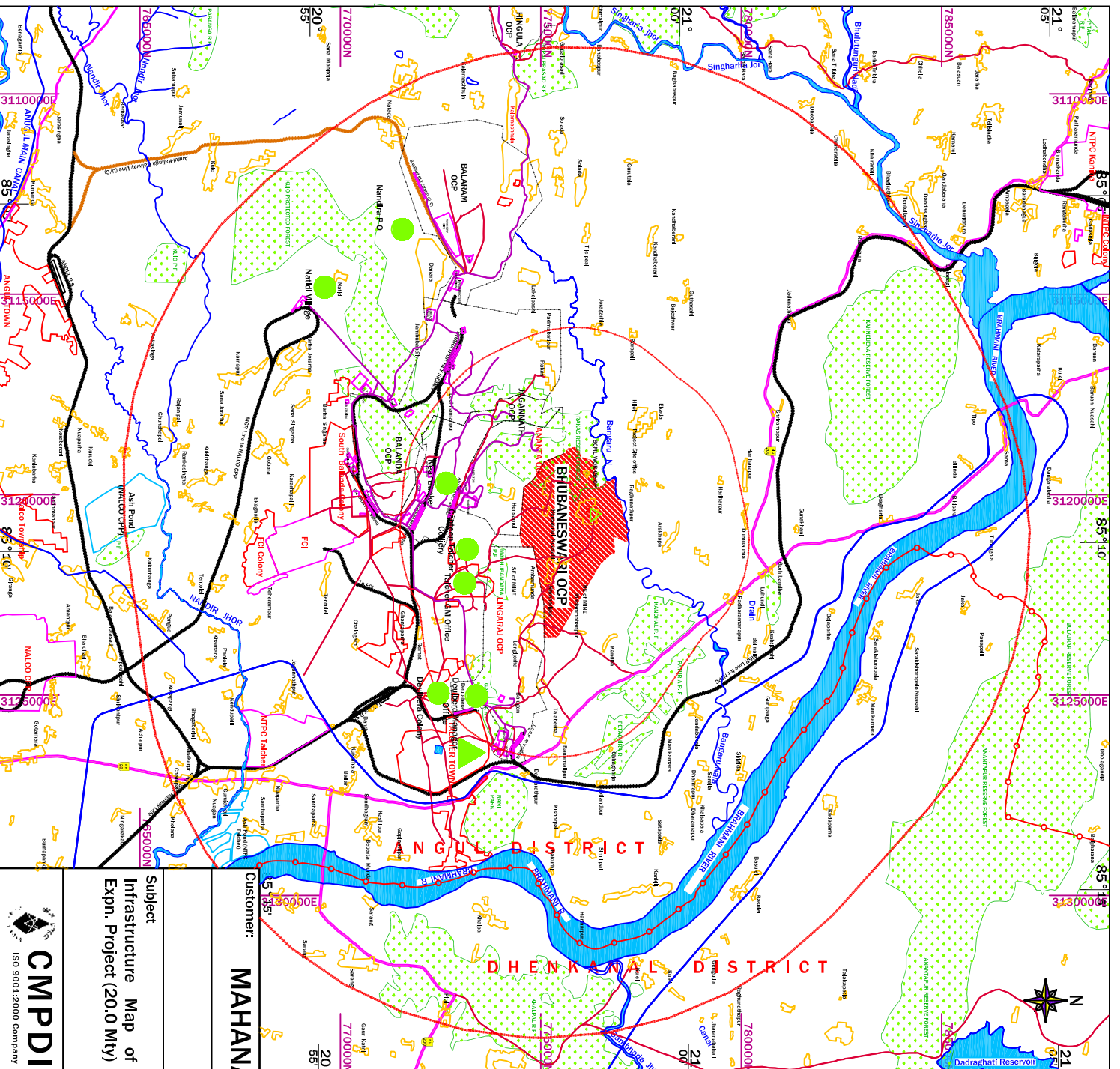
**INDEX**

- National Highway
- State Highway/MDR
- Other Road
- Railway Line
- Forest Boundary
- 10km Buffer Boundary
- 3km Buffer Boundary
- Block Boundary
- River/ Nallah/ Jhor/ Pond

Note: Forest Boundaries Are Taken From Survey of India Toposheets



Customer: **M/s Mahanadi Coalfields Limited**



### Air Monitoring Station

- GM OFFICE talcher
- Canteen Talcher Colliery
- PO NANDIRA
- Natidi Village
- Managers Office Deulbera
- Deulbera Colony
- Near Bunker Talcher West
- ▲ Drinking Water Station
- ▶ Talcher Town Tap Water

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Note: Forest Boundaries Are Taken From Survey of India Toposheets

Customer: **MAHANADI COALFIELDS LIMITED**

Subject: **Infrastructure Map of Bhubaneswari OC Expn. Project (20.0 Mty)**

Activity	Name	Desig.	Signature	Date
Processed	T. K. Das	SE (GM.)	<i>[Signature]</i>	07.12.2009
Processed	A. K. Samantaryay	SE(EN.)	<i>[Signature]</i>	07.12.2009
Checked	S. P. Mohanty	HdD (GMT)	<i>[Signature]</i>	07.12.2009
Approved	S. R. Singh	RD (R-I/VI)	<i>[Signature]</i>	07.12.2009

Job No. **750001**



**CMPDI**  
ISO 9001:2000 Company

Scale	Dwg.No.	REV.No.
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		<b>REV.No. 0</b>
		Sheet <b>1 of 1</b>