

SOLID WASTE CHARACTERIZATION REPORT

FOR

Work of Characterization of Legacy Waste by taking Boreholes at Deonar Dumping Ground

Location – Deonar Dumping Ground, Mumbai

Brihanmumbai Municipal
Corporation

Submitted to

N.M. CONSULTANT - SKW SOIL AND SURVEYS

Submitted by

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1. Introduction:

Dumping grounds often contain a diverse array of waste materials, ranging from organic to inorganic, and varying widely in size, density, and composition. Sieving and characterization of dumping ground waste are essential steps in understanding its physical properties, composition, and potential environmental impacts. This methodology outlines the systematic approach for sieving and characterizing of Deonar Municipal Solid Waste Dumping Ground.

The Deonar dumping ground, operational since 1927, spans approximately 120 hectares and has accumulated around 2 crore cubic meters of waste. The site is encircled by a 6.5 km perimeter, with 2.5 km adjacent to residential areas (landward side) and 4 km bordering non-residential areas (creek side). Each day, about 800 to 1,000 metric tons of waste are deposited at the site in a controlled manner. The Brihanmumbai Municipal Corporation (BMC) plans to bio-mine the accumulated legacy waste. To facilitate this, sampling and testing of the legacy waste distributed over 100 hectares of the site are required. The maximum height of the waste in this area reaches up to 40 meters.

2. Project Background

The Municipal Corporation of Greater Mumbai (MCGM) invited tenders for the Characterization of Legacy Waste by conducting borehole investigations at the Deonar Dumping Ground. Following a thorough scrutiny process, the contract was awarded to N.M. Consultants and Engineers Private Limited in joint venture with SKW Soil and Surveys Private Limited to undertake this project.

N.M. Consultants and Engineers Private Limited specializes in the planning and design of engineering and architectural systems for multi-storied complexes as well as single-component structures. SKW Soil and Surveys Private Limited specializes in both onshore and offshore geotechnical investigation and survey work.

2.1 Objectives:

The primary objectives of this methodology are to:

Identify Random Sampling Locations: Determine and establish various random sampling locations within the site using Google Maps to ensure a representative assessment of the legacy waste.

Classify Waste Types and Proportions: Drill boreholes at the identified locations at 10-meter intervals to classify the waste and determine its types and proportions.

Prepare Waste Characteristics Assessment Report: Develop a comprehensive report detailing the Physical waste characteristics and composition of the waste based on the findings.

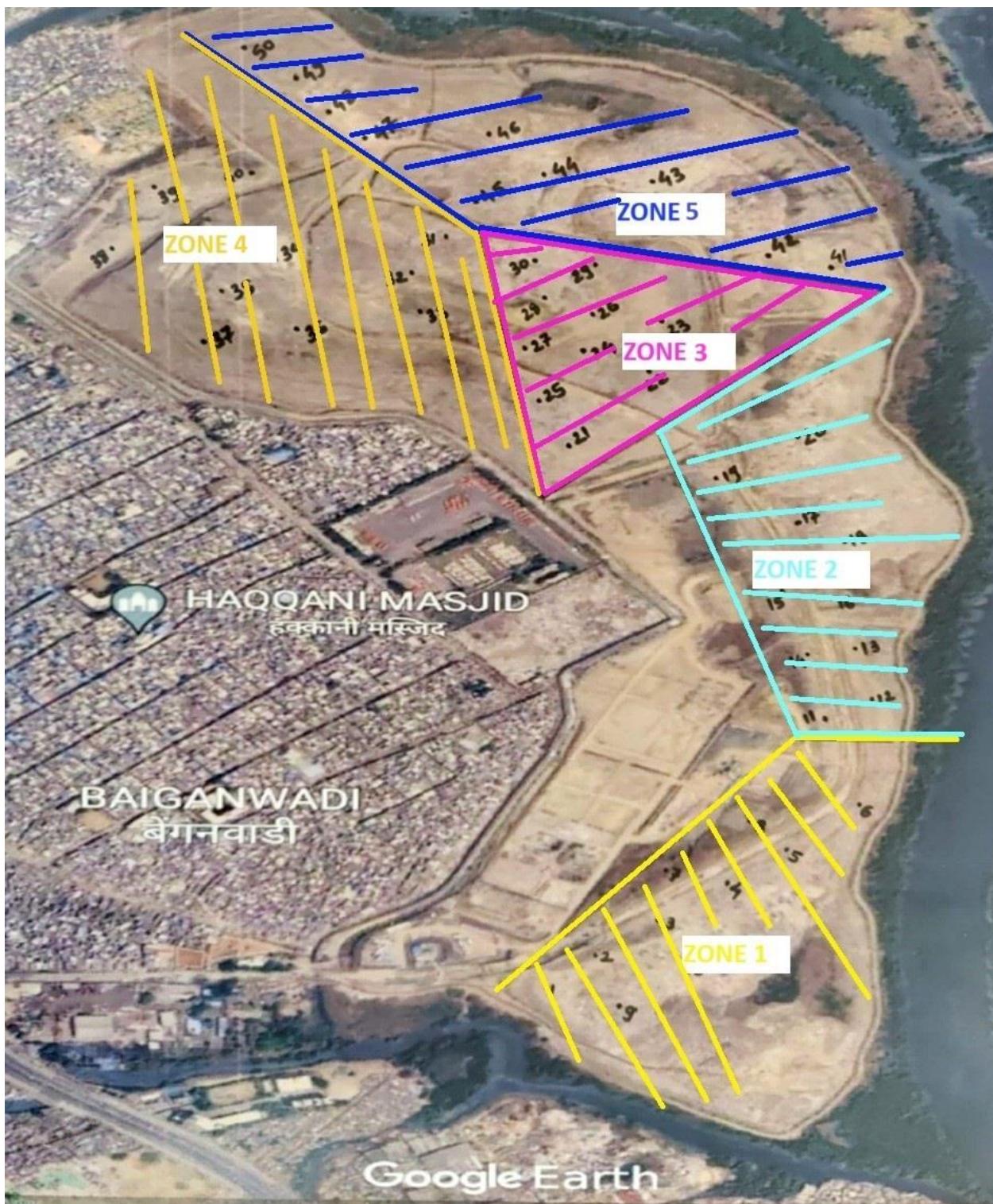
Conduct Laboratory Analysis of Waste Samples: Perform detailed analysis of the waste samples in a laboratory setting to determine the chemical properties.

Prepare Waste Sample Analysis Report: Create a report summarizing the results of the laboratory analysis, including interpretations and recommendations based on the findings.



2.2. Materials & Methodology:

This study was conducted in Mumbai, which is the capital of Maharashtra, a state in India. The dumpsite in Mumbai is located at an old waste dump yard at Deonar site. The site was divided into five zones. The GPS Coordinates are provided by MCGM.



2.3 Method of Sample Collection:

The sampling locations were identified and provided by MCGM, and boreholes were drilled at these locations to collect waste samples at specified intervals.

Co-ordinates from Google map					
1	19.0605058	72.9334698	31	19.0715974	72.9266540
2	19.0611751	72.9338292	32	19.0709171	72.9267288
3	19.0620512	72.9340485	33	19.0701794	72.9269467
4	19.0628334	72.9344773	34	19.0703965	72.9251000
5	19.0636624	72.9347767	35	19.0696955	72.9249270
6	19.0647395	72.9352196	36	19.0693270	72.9258805
7	19.0627808	72.9337521	37	19.0686872	72.9250380
8	19.0638861	72.9341880	38	19.0696502	72.9232835
9	19.0604650	72.9337307	39	19.0710362	72.9233348
10	19.0615202	72.9347596	40	19.0715946	72.9241713
11	19.0656635	72.9343332	41	19.0726301	72.9308503
12	19.0662060	72.9346141	42	19.0727359	72.9299598
13	19.0671256	72.9338608	43	19.0734587	72.9282422
14	19.0667996	72.9334732	44	19.0730113	72.9270476
15	19.0675455	72.9327497	45	19.0721938	72.9266402
16	19.0678022	72.9333179	46	19.0733123	72.9261578
17	19.0688631	72.9323145	47	19.0727657	72.9249421
18	19.0687395	72.9329984	48	19.0729158	72.9243718
19	19.0693077	72.9311910	49	19.0733320	72.9236003
20	19.0701493	72.9316449	50	19.0734273	72.9229867
21	19.0688422	72.9296923			
22	19.0703084	72.9297291			
23	19.0713360	72.9293161			
24	19.0704497	72.9286286			
25	19.0693787	72.9289429			
26	19.0710242	72.9286140			
27	19.0701778	72.9282704			
28	19.0710793	72.9280943			
29	19.0720318	72.9282979			
30	19.0717749	72.9297316			

Zone number	Boreholes number	Sampling taken from different levels (in mtrs)	Total Sample
1-5	1	3	$10 \times 5 \times 2 = 100$ samples
	2	6	
	3	9	
	4	12	
	5	15	
	6	18	
	7	21	
	8	24	
	9	27	
	10	30	

2.4 Collection of Sample

The sampling methodology was carried out in accordance with the scope of work outlined in the tender document issued by the Municipal Corporation of Greater Mumbai (MCGM).

Physical Characterization:

In the realm of physical waste characterization, the coning and quartering method and sieving analysis are two essential techniques employed to ensure accurate representation and classification of waste materials. The coning and quartering method is used to reduce the sample size in a systematic manner, while sieving analysis helps determine the particle size distribution of the waste. Together, these methods provide a comprehensive understanding of waste characteristics, crucial for effective waste management and treatment strategies.

3. Coning and Quartering Method

1. Purpose:

The coning and quartering method is used to reduce the size of a waste sample in a way that preserves its representativeness. This technique is particularly useful when dealing with large quantities of waste that need to be reduced to a manageable size for analysis.

2. Procedure:

2.1 Preparation:

Pour the solid waste onto a clean, flat surface to create a conical pile.

2.2 Forming the Cone:

Shape the waste into a cone with a well-defined peak and broad base.

2.3 Flattening:

Flatten the conical pile into a cake-like form using a smooth tool or by gently pressing.

2.4 Dividing the Sample:

Divide the flattened sample into four equal quarters.

2.5 Discarding Quarters:

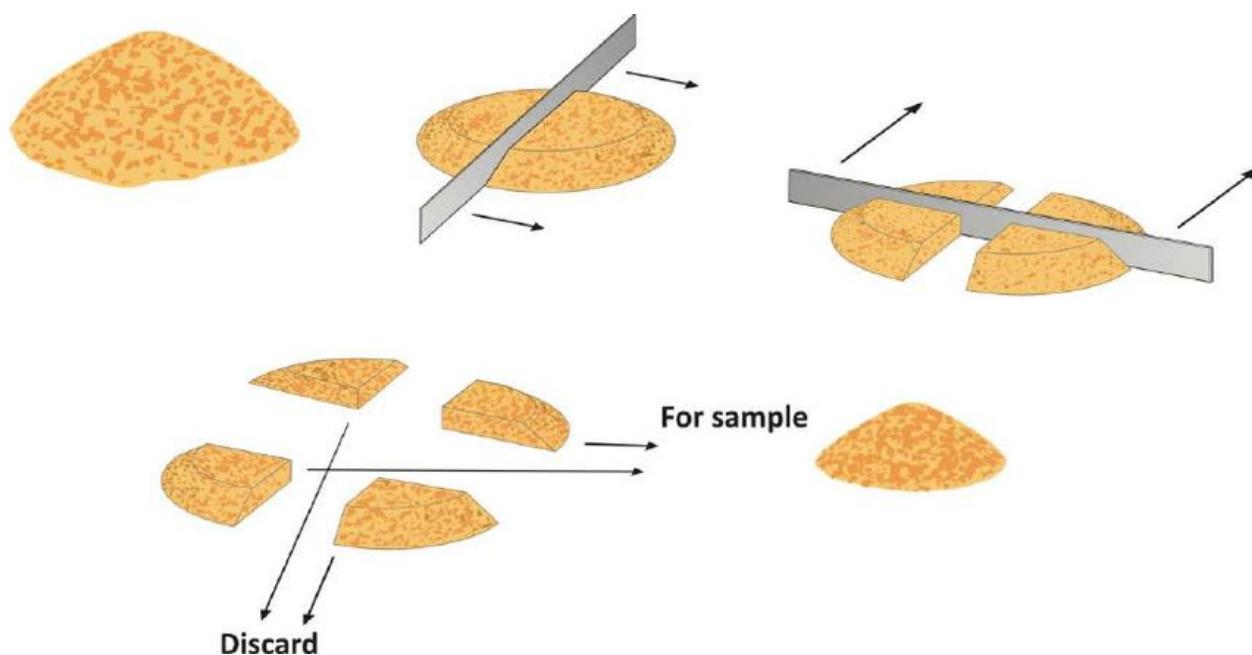
Discard two quarters that are opposite each other.

2.6 Combining Remaining Quarters:

Combine the two adjacent quarters to form the reduced sample.

2.7 Repetition:

Repeat the process if further reduction is needed until the sample reaches the desired size.



2.8 Final Sample Preparation:

Ensure the reduced sample is well-mixed and representative of the original waste.



One



Two



Three



Four



Five



Six

4. Physical Waste Characterization Method

4.1. Sieving Procedure:

1. Introduction

The sieving process was conducted to analyze the particle size distribution of the waste sample. This procedure was essential for determining the mass fraction of various particle sizes, which is crucial for understanding the material's composition.

2. Procedure Summary

The sieving process was performed according to the standard procedure. The following steps were completed:

1. Preparation of Sieves:

Sieves were stacked in descending order of mesh size, with the coarsest sieve placed at the top and the finest sieve at the bottom.

2. Sample Loading:

A representative portion of the waste sample was placed onto the top sieve. The sample was evenly distributed to ensure accurate separation of particle sizes.

3. Sieving Process:

The sieving process was initiated by manually shaking the stacked sieves for a specified duration. This step ensured effective separation of the particles according to their size.

4. Weighing of Material:

After completing the sieve process, the material retained on each sieve was weighed. This measurement allowed for the determination of the mass fraction of each particle size fraction.

The results from the sieve process were recorded, including the mass of material retained on each sieve. This data was used to analyze the particle size distribution of the waste sample.

4.2 Sieve Sizes

S.No	Size
1	200 mm
2	100 – 100 mm
3	100 – 50 mm
4	50 – 20 mm
5	20 mm – 10 mm
6	<10 mm

4.3. Characterization of Sieved Fractions:

Each sieved fraction was carefully inspected to identify and categorize the different types of waste materials. The following steps were undertaken:

1. Visual Inspection:

- Each fraction was examined visually under appropriate lighting conditions to detect and categorize the materials present.
- The fractions were spread out on clean surfaces to facilitate thorough inspection.

2. Identification of Materials:

- **Plastics:** Identified by their distinct colors, shapes, and textures. Common plastic items were noted and recorded.
- **Glass:** Recognized by its transparency and reflective properties. Pieces of glass were separated from other materials.
- **Metals:** Identified by their metallic luster and often distinct shapes (e.g., cans, metal fragments).
- **Organic Matter:** Recognized by its natural and decomposing appearance. Organic materials like food scraps or plant matter were noted.

3. Findings

The visual examination of each sieved fraction revealed the following:

- **Fraction 1 (Coarse Sieve):**

- Presence of large plastic fragments and cloths.
- Notable pieces of glass and metal.
- Limited organic matter observed.

- **Fraction 2 (Intermediate Sieve):**

- Mix of medium-sized plastic pieces and metal fragments.
- Several small glass pieces.
- Stones
- Some organic matter present.

- **Fraction 3 (Fine Sieve):**

- Small plastic particles and fragments.
- Fine soil & Clay.
- Minor glass shards.
- Organic matter was more prevalent, including decomposed materials.





Characterization Report – ZONE 1

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected	>200 mm (kg)	%	200 -100 mm (kg)	%	100-50 mm (kg)	%	50-20mm (kg)	%	20-10mm (kg)	%	<10mm (kg)	%	Total
1	14.5.24	I	1	3 metre	19.0605058 72.9334698	51.19	0	0%	4.205	8%	6.225	12%	9.385	18%	7.04	14%	24.335	48%	51.19
2	15.5.24	I	2	6 metre	19.0611751 72.9338292	51.97	0	0%	0.82	2%	4.595	9%	10.205	20%	8.275	16%	28.08	54%	51.975
3	15.5.24	I	2	16 metre	19.0611751 72.9338292	54.88	0	0%	1.085	2%	4.5	8%	10.29	19%	6.845	12%	32.285	59%	55.005
4	16.5.24	I	1	13 metre	19.0605058 72.9334698	51.82	0	0%	0.065	0%	4.935	10%	28.17	54%	6.79	13%	11.96	23%	51.92
5	17.5.24	I	3	9 metre	19.0620612 72.9340485	53.10	0	0%	0.387	1%	3.74	7%	8.945	17%	6.985	13%	33.15	62%	53.207
6	17.5.24	I	3	19 metre	19.0620612 72.9340485	57.73	0	0%	0.01	0%	1.935	3%	20.32	35%	10.395	18%	25.1	43%	57.76
7	17.5.24	I	4	12 metre	19.0628334 72.9344773	52.03	0	0%	0.025	0%	0.065	0%	7.881	15%	10	19%	34.475	66%	52.446
8	18.5.24	I	4	22 metre	19.0628334 72.9344773	52.21	0	0%	0.03	0%	0.78	1%	12.405	24%	17.815	34%	21.47	41%	52.5
9	18.5.24	I	5	15 metre	19.0636624 72.9347767	50.64	0	0%	0.4	1%	2.15	4%	11.165	22%	10.17	20%	26.935	53%	50.82
10	18.5.24	I	5	25 metre	19.0636624 72.9347767	56.11	0	0%	0.185	0%	0.805	1%	23.005	41%	13.865	25%	20.345	36%	58.205
11	21.5.24	I	6	18 Metre	19.0647395 72.9352196	54.73	0	0%	1.025	2%	4.155	8%	12.64	23%	8.485	16%	28.1	51%	54.405
12	21.5.24	I	6	28 Metre	19.0647395 72.9352196	58.08	0	0%	0	0%	0.765	1%	3.825	7%	5.325	9%	48.335	83%	58.25
13	21.5.24	I	9	27 Metre	19.0604650 72.9337307	50.08	0	0%	0.03	0%	0.105	0%	5.51	11%	8.46	17%	36.14	72%	50.245
14	21.5.24	I	9	37 Metre	19.0604650 72.9337307	57	0	0%	0	0%	0.375	1%	23.325	41%	12.15	21%	21.19	37%	57.04
15	21.5.24	I	10	30 Metre	19.0615202 72.9347596	50.06	0	0%	0.36	1%	2.945	6%	8.975	18%	6.48	13%	31.46	63%	50.22
16	22.5.24	I	10	40 Metre	19.0615202 72.9347596	57.11	0	0%	1.06	2%	14.665	26%	28.12	49%	5.035	9%	8.145	14%	57.025
17	23.06.24	I	7	21 Metre	19.0627808 72.9337521	50.75	0	0%	2.325	5%	4.45	9%	19.955	39%	9.54	19%	14.48	29%	50.75
18	23.06.24	I	7	31 Metre	19.0627808 72.9337521	51.955	0	0%	2.55	5%	4.93	9%	20.065	39%	10.22	20%	14.19	27%	51.955
19	23.06.24	I	8	24 Metre	19.0638861 72.9341880	52.945	0	0%	2.795	5%	5.48	10%	22.7	43%	6.87	13%	15.1	29%	52.945
20	23.06.24	I	8	34 Metre	19.0638861 72.9341880	52.625	0	0%	2.77	5%	5.565	11%	21.86	42%	8.17	16%	14.26	27%	52.625

Characterization Report – ZONE 2

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected	>200 mm (kg)	%	200-100 mm (kg)	%	100-50 mm (kg)	%	50-20mm (kg)	%	20-10mm (kg)	%	<10mm (kg)	%	Total
1	22.5.24	II	12	06 Metre	19.066206 72.9346141	56.43	0	0%	1.155	2%	3.65	6%	9.91	18%	6.3	11%	35.245	62%	56.26
2	22.5.24	II	12	16 Metre	19.066206 72.9346141	58.51	0	0%	0.36	1%	16.64	28%	22.34	38%	4.27	7%	14.915	25%	58.525
3	22.5.24	II	13	09 Metre	19.0671256 72.9338608	54.86	0	0%	0.55	1%	4.17	8%	8.095	15%	6.255	11%	35.88	65%	54.95
4	22.5.24	II	13	19 Metre	19.0671256 72.9338608	56.545	0	0%	0.045	0%	8.95	16%	19.755	35%	10.33	18%	17.52	31%	56.6
5	28.5.24	II	11	03 Metre	19.0671256 72.9343323	55.98	0	0%	1.2	2%	4.78	9%	8.645	15%	6.22	11%	30.35	54%	51.195
6	17.06.24	II	20	30 Metre	19.0701493 72.9316449	54.075	1.18	2%	3.075	6%	4.955	9%	11.56	21%	7.365	14%	25.94	48%	54.075
7	17.06.24	II	20	40 Metre	19.0701493 72.9316449	54.54	0	0%	1.31	2%	5.945	11%	13.04	24%	8.86	16%	25.385	47%	54.54
8	22.06.24	II	17	21 Metre	19.0688631 72.9323145	53.52	1.065	2%	3.515	7%	7.36	14%	13.865	26%	7.485	14%	20.23	38%	53.52
9	24.06.24	II	18	24 Metre	19.0687395 72.9329984	56.615	0	0%	4.955	9%	6.19	11%	23.415	41%	8.71	15%	13.345	24%	56.615
10	24.06.24	II	18	34 Metre	19.0687395 72.9329984	50.13	0	0%	2.305	5%	6.045	12%	21.47	43%	6.42	13%	13.89	28%	50.13
11	24.06.24	II	11	13 Metre	19.0656639 72.9343332	55.885	0	0%	0	0%	1.785	3%	16.98	30%	13.54	24%	23.58	42%	55.885
12	25.06.24	II	15	15 Metre	19.0675455 72.9327497	56.1	0	0%	0	0%	8.99	16%	21.565	38%	9.37	17%	16.175	29%	56.1
13	26.06.24	II	17	31 Metre	19.0688631 72.9323145	53.985	0.76	1%	3.59	7%	7.565	14%	13.955	26%	7.785	14%	20.33	38%	53.985
14	26.06.24	II	15	25 Metre	19.0675455 72.9327497	54.97	0	0%	0	0%	12.305	22%	18.42	34%	8.805	16%	15.44	28%	54.97
15	26.06.24	II	14	12 Metre	19.0667996 72.9334732	55.035	0	0%	0	0%	11.875	22%	19.185	35%	8.885	16%	15.09	27%	55.035
16	26.06.24	II	14	22 Metre	19.0667996 72.9334732	54.195	0	0%	0.1	0%	11.63	21%	17.88	33%	9.565	18%	15.02	28%	54.195
17	27.06.24	II	16	18 Metre	19.0678022 72.9333179	54.96	0	0%	0.165	0%	11.845	22%	18.07	33%	10.765	20%	14.115	26%	54.96
18	27.06.24	II	16	28 Metre	19.0678022 72.9333179	54.265	0	0%	1.51	3%	13.83	25%	17.545	32%	6.405	12%	14.975	28%	54.265
19	27.06.24	II	19	27 Metre	19.0693077 72.9311910	51.185	0	0%	0.1	0%	3.66	7%	9.345	18%	15.555	30%	22.525	44%	51.185
20	27.06.24	II	19	37 Metre	19.0693077 72.9311910	50.24	0	0%	0.025	0%	3.77	8%	9.365	19%	15.49	31%	21.39	43%	50.04

Characterization Report – ZONE 3

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected	>200 mm (kg)	%	200-100 mm (kg)	%	100-50 mm (kg)	%	50-20mm (kg)	%	20-10mm (kg)	%	<10mm (kg)	%	Total
1	28.5.24	III	21	03 Metre	19.0688422 72.9296923	54.51	0	0%	0.025	0%	2.895	5%	10.065	18%	10.89	20%	30.635	56%	54.51
2	28.5.24	III	22	06 Metre	19.0703084 72.9297291	75.66	3.61	5%	10.83	14%	5.875	8%	11.84	16%	8.04	11%	35.485	47%	75.68
3	10.06.24	III	28	34 Metre	19.0710793 72.9280943	73.74	0.65	1%	3.595	5%	10.04	14%	21.355	29%	28.37	38%	9.73	13%	73.74
4	15.06.24	III	30	30 Metre	19.0717749 72.9277316	56.09	0	0%	1.82	3%	2.705	5%	12.69	23%	8.98	16%	29.895	53%	56.09
5	15.06.24	III	30	40 Metre	19.0717749 72.9277316	55.08	0	0%	0.635	1%	3.645	7%	11.24	20%	9.865	18%	29.695	54%	55.08
6	17.06.24	III	25	15 metre	19.0693787 72.9289429	54.23	0.48	1%	2.125	4%	3.575	7%	11.68	22%	7.975	15%	28.395	52%	54.23
7	17.06.24	III	25	25 metre	19.0693787 72.92789429	53.955	0	0%	1.235	2%	13.745	25%	17.485	32%	6.28	12%	15.21	28%	53.955
8	18.06.24	III	23	19 metre	19.0713360 72.9293161	55.32	1.265	2%	5.87	11%	5.595	10%	10.535	19%	8.445	15%	23.61	43%	55.32
9	18.06.24	III	23	09 Metre	19.0713360 72.9293161	53.625	0.18	0%	2	4%	4.685	9%	14.13	26%	8.085	15%	24.545	46%	53.625
10	19.06.24	III	22	16 Metre	19.0703084 72.9297291	57.66	0.93	2%	7.75	13%	7.66	13%	11.35	20%	6.975	12%	22.495	39%	57.16
11	19.06.24	III	26	18 Metre	19.0710242 72.9286140	53.05	0.535	1%	4.81	9%	5.4	10%	11.45	22%	8.12	15%	22.735	43%	53.05
12	19.06.24	III	26	28 Metre	19.0710242 72.9286140	52.78	0	0%	1.93	4%	4.435	8%	11.705	22%	8.92	17%	25.79	49%	52.78
13	19.06.24	III	29	37 Metre	19.0720318 72.9282979	55.42	0	0%	1.67	3%	4.025	7%	11.58	21%	8.6	16%	29.545	53%	55.42
14	19.06.24	III	29	27 Metre	19.0720318 72.9282979	58.64	0	0%	1.94	3%	4.715	8%	10.865	19%	8.415	14%	32.705	56%	58.64
15	20.06.24	III	24	22 Metre	19.0704497 72.9288286	57.28	0.545	1%	2.85	5%	3.81	7%	13.825	24%	9.89	17%	26.36	46%	57.28
16	21.06.24	III	24	12 Metre	19.0704497 72.9288286	54.825	1.36	2%	3.745	7%	6.58	12%	16.8	31%	6.375	12%	19.965	36%	54.825
17	21.06.24	III	28	24 Metre	19.0710793 72.9280943	54.135	0.465	1%	2.815	5%	9.555	18%	13.21	24%	7.08	13%	21.01	39%	54.135
18	21.06.24	III	27	21 Metre	19.0710778 72.9282704	54.745	0.78	1%	3.07	6%	8.155	15%	11.785	22%	6.665	12%	24.29	44%	54.745
19	22.06.24	III	27	31 Metre	19.0700728 72.9282704	52.83	0.945	2%	3.48	7%	4.62	9%	10.71	20%	8.645	16%	24.43	46%	52.83
20	25.06.24	III	21	13 Metre	19.0710362 72.9233348	52.225	0	0%	0.78	1%	15.295	29%	24.085	46%	4.09	8%	7.975	15%	52.225

Characterization Report – ZONE 4

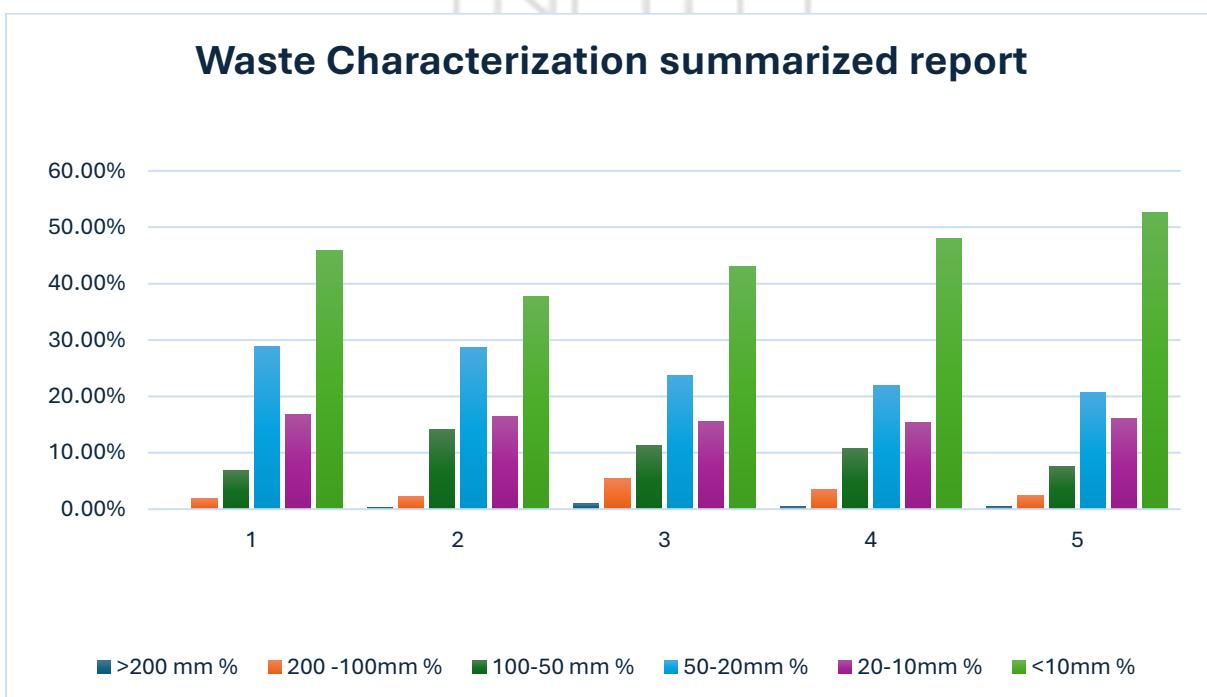
S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected	>200 mm (kg)	%	200-100 mm (kg)	%	100-50 mm (kg)	%	50-20mm (kg)	%	20-10mm (kg)	%	<10mm (kg)	%	Total
1	29.5.24	IV	31	03 Metre	19.0715974 72.9266540	54.935	1.45	3%	5.765	10%	5.66	10%	10.3	19%	6.52	12%	25.225	46%	54.92
2	29.5.24	IV	32	06 Metre	19.0709171 72.9267288	63.67	1.3	2%	7.38	12%	7.655	12%	13.185	21%	7.39	12%	26.76	42%	63.67
3	06.6.24	IV	31	13 Metre	19.0715974 72.9266540	57.48	0	0%	1.925	3%	11.465	20%	12.445	22%	6.385	11%	25.26	44%	57.48
4	07.6.24	IV	34	12 Metre	19.0703915 72.9251000	56.27	0	0%	1.83	3%	11.31	20%	12.405	22%	7.365	13%	23.36	42%	56.27
5	07.6.24	IV	34	22 Metre	19.0703965 72.9251000	51.06	0	0%	0.885	2%	1.89	4%	9.69	19%	8.995	18%	29.6	58%	51.06
6	07.6.24	IV	35	15 Metre	19.0696955 72.9249270	60.63	0	0%	3.64	6%	4.335	7%	11.435	19%	8.045	13%	33.175	55%	60.63
7	08.06.24	IV	35	25 Metre	19.0696955 72.9249270	56.155	0	0%	0.03	0%	3.02	5%	10.84	19%	7.765	14%	34.5	61%	56.155
8	10.06.24	IV	32	16 Metre	19.0709171 72.9272881	52.73	0	0%	1.49	3%	8.995	17%	14.665	28%	7.49	14%	20.095	38%	52.735
9	16.06.24	IV	40	40 Metre	19.0715946 72.9241713	56.775	0	0%	0.25	0%	2.375	4%	12.455	22%	11.39	20%	30.305	53%	56.775
10	16.06.24	IV	40	30 Metre	19.0715946 72.9241713	58.22	0	0%	1.09	2%	4.67	8%	11.17	19%	11.86	20%	29.43	51%	58.22
11	18.06.24	IV	33	09 Metre	19.0701794 72.9269467	53.54	0	0%	0.97	2%	6.73	13%	10.595	20%	6.835	13%	28.41	53%	53.54
12	18.06.24	IV	33	19 Metre	19.0701794 72.9269467	55.685	0.98	2%	2.48	4%	4.535	8%	11.595	21%	8.37	15%	27.725	50%	55.685
13	19.06.24	IV	36	18 Metre	19.0693270 72.9258805	57.7	0	0%	0.33	1%	4.76	8%	12.21	21%	10.515	18%	29.885	52%	57.7
14	20.06.24	IV	36	28 Metre	19.0693270 72.9258805	53.25	0	0%	0.135	0%	1.91	4%	10.715	20%	9.72	18%	30.77	58%	53.25
15	22.06.24	IV	37	31 Metre	19.0686872 72.9250380	56.515	0.385	1%	3.32	6%	7.18	13%	13.435	24%	9.395	17%	22.8	40%	56.515
16	22.06.24	IV	39	27 Metre	19.0710362 72.9233348	55.74	0	0%	2.35	4%	5.535	10%	9.905	18%	9.195	16%	28.755	52%	55.74
17	24.06.24	IV	37	21 Metre	19.0686872 72.9250380	52.665	0	0%	1.585	3%	7.38	14%	11.02	21%	7.145	14%	25.535	48%	52.665
18	25.06.24	IV	38	24 Metre	19.0696502 72.9232835	57.65	0	0%	0.2	0%	6.785	12%	18.16	32%	9.675	17%	22.83	40%	57.65
19	25.06.24	IV	39	37 Metre	19.0688422 72.9296923	60.205	1.075	2%	4.105	7%	9.555	16%	13.11	22%	8.815	15%	23.545	39%	60.205
20	26.06.24	IV	38	34 Metre	19.0696502 72.9232835	55.7	0	0%	0.18	0%	6.355	11%	17.48	31%	9.385	17%	22.3	40%	55.7

Characterization Report – ZONE 5

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected	>200 mm (kg)	%	200-100 mm (kg)	%	100-50 mm (kg)	%	50-20mm (kg)	%	20-10mm (kg)	%	<10mm (kg)	%	Total
1	29.5.24	V	41	03 Metre	19.0726301 72.9308503	64.665	0	0%	0.02	0%	2.86	4%	11.625	18%	8.73	14%	41.43	64%	64.665
2	04.6.24	V	47	21 Metre	19.0727567 72.9249421	69.885	0	0%	0.32	0%	3.09	4%	12.68	18%	12.695	18%	41.1	59%	69.885
3	04.6.24	V	47	31 Metre	19.0727567 72.9249421	51.05	0	0%	1.47	3%	1.8	4%	9.605	19%	7.695	15%	30.49	60%	51.06
4	05.6.24	V	48	24 Metre	19.0727567 72.9243718	53.43	0	0%	0.07	0%	1.755	3%	8.21	15%	7.315	14%	36.08	68%	53.43
5	05.6.24	V	48	34 Metre	19.0727567 72.9243718	55.865	0	0%	0.025	0%	1.985	4%	8.925	16%	7.495	13%	37.255	67%	55.685
6	05.6.24	V	49	34 Metre	19.0734273 72.9229867	59.465	0	0%	0.215	0%	2.265	4%	13.335	22%	8.355	14%	35.3	59%	59.47
7	06.6.24	V	50	40 Metre	19.0734273 72.9229867	55.980	0.7	1%	5.865	10%	2.855	5%	8.985	16%	7.33	13%	30.235	54%	55.97
8	06.6.24	V	50	30 Metre	19.0734273 72.9229867	52.55	0	0%	0.595	1%	3.94	7%	11.295	21%	5.85	11%	30.47	58%	52.15
9	08.06.24	V	49	27 Metre	19.0733320 72.9236003	57.055	0.35	1%	2.035	4%	4.74	8%	10.49	18%	7.72	14%	31.72	56%	57.055
10	15.06.24	V	42	06 Metre	19.0727359 72.9299598	53.975	0.28	1%	0.775	1%	3.3	6%	9.52	18%	8.265	15%	31.83	59%	53.97
11	15.06.24	V	42	16 Metre	19.0727359 72.9299598	53.585	0	0%	0.485	1%	3.605	7%	9.12	17%	8.4	16%	31.98	60%	53.59
12	16.06.24	V	44	22 Metre	19.0730113 72.9270476	52.8	0	0%	0.37	1%	2.89	5%	13.45	25%	9.46	18%	26.63	50%	52.8
13	16.06.24	V	44	12 Metre	19.0730113 72.9270476	55.12	0.25	0%	1.47	3%	7.14	13%	14.355	26%	9.92	18%	21.985	40%	55.12
14	18.06.24	V	41	13 Metre	19.0726301 72.9308503	58.595	0	0%	2.095	4%	7.56	13%	12.48	21%	9.345	16%	27.115	46%	58.595
15	20.06.24	V	46	28 Metre	19.0733123 72.9261578	54.43	0.12	0%	1.625	3%	4.885	9%	11.425	21%	8.745	16%	27.63	51%	54.43
16	20.06.24	V	46	18 Metre	19.0733123 72.9261578	52.255	0.61	1%	2.15	4%	6.205	12%	11.545	22%	9.205	18%	22.54	43%	52.255
17	20.06.24	V	43	09 Metre	19.0734587 72.9282422	60.28	1.08	2%	2.365	4%	7.005	12%	17.205	29%	11.67	19%	20.955	35%	60.28
18	20.06.24	V	43	19 Metre	19.0734587 72.9282422	56.73	0	0%	1.45	3%	1.835	3%	15.055	27%	9.365	17%	29.025	51%	56.73
19	24.06.24	V	45	15 Metre	19.0721938 72.9266402	59.28	0	0%	0.525	1%	9.525	16%	12.16	21%	17.12	29%	19.95	34%	59.28
20	24.06.24	V	45	25 Metre	19.0721938 72.9266402	60.9	1.425	2%	4.22	7%	7.23	12%	13.705	23%	9.29	15%	25.03	41%	60.9

5. Summarized Characterization report of five zones

Summarized all 5 zones						
Sieve Sizes	I	II	III	IV	V	Ave %
>200 mm %	0.00%	0.28%	0.96%	0.45%	0.42%	0.42%
200 -100mm %	1.92%	2.20%	5.37%	3.46%	2.49%	3.09%
100-50 mm %	6.85%	14.20%	11.27%	10.81%	7.59%	10.14%
50-20mm %	28.81%	28.72%	23.77%	21.91%	20.66%	24.78%
20-10mm %	16.81%	16.45%	15.61%	15.31%	16.11%	16.06%
<10mm %	45.94%	37.70%	42.97%	48.06%	52.68%	45.47%
Total %	100%	100%	100%	100%	100%	100%



6. Categories of waste - Reports

S.No	Category	Type of Wastes
1	Inert	Sand, Soil, Earth, Stones, Bricks, Concrete
2	Dry Waste	Polyethene bag, Textile, PVC/Plastic, Paper, Rubber, Leather, Thermocol, Coconut shell, Straw, Hay, Stalk, Wooden, discarded shoes, cardboard, cloths, jute bags
3	Wet/Green waste	Mix vegetable waste & In moist muddy form, Kitchen waste, Raw meat, Bones, vegetables peel
4	Miscellaneous	Metals, Dead animal, Human hair, Glass, Ceramic
5	Hazardous Waste	Battery, painting waste, vehicle filters, acid bottles, pesticides
6	Sanitary Waste	-
7	Soiled Material	Mixture of Sand & Soil, small particles of glass & Plastics which pass less than 10mm sieve.



Categories of waste Report – ZONE 1

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected in Kg	Categories of Wastes (Zone I)														
							Inert (Kg)	%	Dry (Kg)	%	Wet (Kg)	%	Misc (Kg)	%	Hazardous (Kg)	%	Sanitary Waste (Kg)	%	Soiled Material (Kg)	%	Total
1	14.5.24	I	1	3 metre	19.0605058 72.9334698	51.19	14.63	29%	3.96	8%	0	0%	0.11	0%	0	0%	0	0%	32.49	63%	51.19
2	15.5.24	I	2	6 metre	19.0611751 72.9338292	51.97	15.55	30%	4.885	9%	0	0%	0.635	1%	0	0%	0	0%	30.9	59%	51.97
3	15.5.24	I	2	16 metre	19.0611751 72.9338292	54.88	15.24	28%	4.81	9%	0	0%	0.45	1%	0	0%	0	0%	34.38	63%	54.88
4	16.5.24	I	1	13 metre	19.0605058 72.9334698	51.82	13.04	25%	0.27	1%	0	0%	0.085	0%	0	0%	0	0%	38.43	74%	51.82
5	17.5.24	I	3	9 metre	19.0620612 72.9340485	53.10	15.06	28%	3.17	6%	0	0%	0.265	0%	0	0%	0	0%	34.605	65%	53.10
6	17.5.24	I	3	19 metre	19.0620612 72.9340485	57.73	29.26	51%	0.925	2%	0	0%	0.39	1%	0	0%	0	0%	27.155	47%	57.73
7	17.5.24	I	4	12 metre	19.0628334 72.9344773	52.03	16.93	33%	0.355	1%	0	0%	0.12	0%	0	0%	0	0%	34.62	67%	52.03
8	18.5.24	I	4	22 metre	19.0628334 72.9344773	52.21	29.8	57%	0.415	1%	0	0%	0.14	0%	0	0%	0	0%	21.85	42%	52.21
9	18.5.24	I	5	15 metre	19.0636624 72.9347767	50.64	19.01	38%	2.63	5%	0	0%	0.56	1%	0	0%	0	0%	28.435	56%	50.64
10	18.5.24	I	5	25 metre	19.0636624 72.9347767	56.11	33.83	60%	1.245	2%	0	0%	0.04	0%	0	0%	0	0%	21	37%	56.11
11	21.5.24	I	6	18 Metre	19.0647395 72.9352196	54.73	20.27	37%	5.22	10%	0	0%	0.71	1%	0	0%	0	0%	28.53	52%	54.73
12	21.5.24	I	6	28 Metre	19.0647395 72.9352196	58.08	9.12	16%	0.11	0%	0	0%	0.04	0%	0	0%	0	0%	48.82	84%	58.08
13	21.5.24	I	9	27 Metre	19.0604650 72.9337307	50.08	12.53	25%	0.53	1%	0	0%	0.05	0%	0	0%	0	0%	36.97	74%	50.08
14	21.5.24	I	9	37 Metre	19.0604650 72.9337307	57	35.67	63%	0.085	0%	0	0%	0	0%	0	0%	0	0%	21.32	37%	57.08
15	21.5.24	I	10	30 Metre	19.0615202 72.9347596	50.06	13.475	27%	4.075	8%	0	0%	0.43	1%	0	0%	0	0%	32.08	64%	50.06
16	22.5.24	I	10	40 Metre	19.0615202 72.9347596	57.11	47.01	82%	1.46	3%	0	0%	0.195	0%	0	0%	0	0%	8.44	15%	57.11
17	23.06.24	I	7	21 Metre	19.0627808 72.9337521	50.75	34.24	67%	0.51	1%	0	0%	0	0%	0	0%	0	0%	16	32%	50.75
18	23.06.24	I	7	31 Metre	19.0627808 72.9337521	51.955	35.605	69%	0.58	1%	0	0%	0.09	0%	0	0%	0	0%	15.66	30%	51.935
19	23.06.24	I	8	24 Metre	19.0638861 72.9341880	52.945	36.005	68%	0.485	1%	0	0%	0.175	0%	0	0%	0	0%	16.28	31%	52.945
20	23.06.24	I	8	34 Metre	19.0638861 72.9341880	52.625	35.745	68%	0.615	1%	0	0%	0.15	0%	0	0%	0	0%	16.115	31%	52.625

Categories of waste Report – ZONE 2

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected in Kg	Categories of Wastes (Zone II)														
							Inert (Kg)	%	Dry (Kg)	%	Wet (Kg)	%	Misc (Kg)	%	Hazardous (Kg)	%	Sanitary Waste (Kg)	%	Soiled Material (Kg)	%	Total
1	22.5.24	II	12	06 Metre	19.066206 72.9346141	56.43	7.685	14%	10.1	18%	0	0%	0.555	1%	0	0%	0	0%	38.085	67%	56.43
2	22.5.24	II	12	16 Metre	19.066206 72.9346141	58.51	40.89	70%	1.935	3%	0	0%	0.13	0%	0	0%	0	0%	15.555	27%	58.51
3	22.5.24	II	13	09 Metre	19.0671256 72.9338608	54.86	13.815	25%	4.51	8%	0	0%	0.815	1%	0	0%	0	0%	35.72	65%	54.86
4	22.5.24	II	13	19 Metre	19.0671256 72.9338608	56.545	37.87	67%	0.85	2%	0	0%	0.15	0%	0	0%	0	0%	17.675	31%	56.545
5	28.5.24	II	11	03 Metre	19.0671256 72.9343323	55.98	13.825	25%	7.88	14%	0	0%	2.655	5%	0	0%	0	0%	31.62	56%	55.98
6	17.06.24	II	20	30 Metre	19.0701493 72.9316449	54.075	12.505	23%	12.885	24%	0	0%	0.27	0%	0	0%	0	0%	28.415	53%	54.075
7	17.06.24	II	20	40 Metre	19.0701493 72.9316449	54.54	23.895	44%	3.085	6%	0	0%	0.3	1%	0	0%	0	0%	27.26	50%	54.54
8	22.06.24	II	17	21 Metre	19.0688631 72.9323145	53.52	21.9	41%	11.165	21%	0	0%	0.2	0%	0	0%	0	0%	20.255	38%	53.52
9	24.06.24	II	18	24 Metre	19.0687395 72.9329984	56.615	37.345	66%	0.87	2%	0	0%	0	0%	0	0%	0	0%	18.4	33%	56.615
10	24.06.24	II	18	34 Metre	19.0687395 72.9329984	50.13	33.505	67%	0.705	1%	0	0%	0.105	0%	0	0%	0	0%	15.815	32%	50.13
11	24.06.24	II	11	13 Metre	19.0656639 72.9343332	55.885	31.845	57%	0.16	0%	0	0%	0	0%	0	0%	0	0%	23.88	43%	55.885
12	25.06.24	II	15	15 Metre	19.0675455 72.9327497	56.1	40.835	73%	0.49	1%	0	0%	0.21	0%	0	0%	0	0%	14.565	26%	56.1
13	26.06.24	II	17	31 Metre	19.0688631 72.9323145	53.985	23.245	43%	9.865	18%	0	0%	0.415	1%	0	0%	0	0%	20.46	38%	53.985
14	26.06.24	II	15	25 Metre	19.0675455 72.9327497	54.97	38.55	70%	0.38	1%	0	0%	0.155	0%	0	0%	0	0%	15.885	29%	54.97
15	26.06.24	II	14	12 Metre	19.0667996 72.9334732	55.035	37.92	69%	0.41	1%	0	0%	0.22	0%	0	0%	0	0%	16.485	30%	55.035
16	26.06.24	II	14	22 Metre	19.0667996 72.9334732	54.195	37.4	69%	0.665	1%	0	0%	0.265	0%	0	0%	0	0%	15.865	29%	54.195
17	27.06.24	II	16	18 Metre	19.0678022 72.9333179	54.96	36.89	67%	0.685	1%	0	0%	0.105	0%	0	0%	0	0%	17.28	31%	54.96
18	27.06.24	II	16	28 Metre	19.0678022 72.9333179	54.265	36.865	68%	0.515	1%	0	0%	0.22	0%	0	0%	0	0%	16.665	31%	54.265
19	27.06.24	II	19	27 Metre	19.0693077 72.9311910	51.185	26.335	51%	2.68	5%	0	0%	0.185	0%	0	0%	0	0%	21.985	43%	51.185
20	27.06.24	II	19	37 Metre	19.0693077 72.9311910	50.24	23.67	47%	2.48	5%	0	0%	0.225	0%	0	0%	0	0%	23.865	48%	50.24

Categories of waste Report – ZONE 3

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected in Kg	Categories of Wastes (Zone III)														
							Inert (Kg)	%	Dry (Kg)	%	Wet (Kg)	%	Misc (Kg)	%	Hazardous (Kg)	%	Sanitary Waste (Kg)	%	Soiled Material (Kg)	%	Total
1	28.5.24	III	21	03 Metre	19.0688422 72.9296923	54.51	23.64	43%	0	0%	0	0%	0	0%	0	0%	0	0%	30.87	57%	54.51
2	28.5.24	III	22	06 Metre	19.0703084 72.9297291	75.66	21.41	28%	14.735	19%	0	0%	1.14	2%	0	0%	0	0%	38.375	51%	75.66
3	10.06.24	III	28	34 Metre	19.0710793 72.9280943	73.74	44.63	61%	7.575	10%	0	0%	0.21	0%	0	0%	0	0%	21.325	29%	73.74
4	15.06.24	III	30	30 Metre	19.0717749 72.9277316	56.09	15.27	27%	8.805	16%	0	0%	0.205	0%	0	0%	0	0%	31.81	57%	56.09
5	15.06.24	III	30	40 Metre	19.0717749 72.9277316	55.08	16.15	29%	7.39	13%	0	0%	0.36	1%	0	0%	0	0%	31.18	57%	55.08
6	17.06.24	III	25	15 metre	19.0693787 72.9289429	54.23	21.645	40%	3.82	7%	0	0%	0.37	1%	0	0%	0	0%	28.395	52%	54.23
7	17.06.24	III	25	25 metre	19.0693787 72.92789429	53.955	37.67	70%	0.79	1%	0	0%	0.255	0%	0	0%	0	0%	15.24	28%	53.955
8	18.06.24	III	23	19 metre	19.0713360 72.9293161	55.32	16.31	29%	13.17	24%	0	0%	0.53	1%	0	0%	0	0%	25.31	46%	55.32
9	18.06.24	III	23	09 Metre	19.0713360 72.9293161	53.625	22.045	41%	4.915	9%	0	0%	0.925	2%	0	0%	0	0%	25.74	48%	53.625
10	19.06.24	III	22	16 Metre	19.0703084 72.9297291	57.66	23.205	40%	9.175	16%	0	0%	0.285	0%	0	0%	0	0%	24.995	43%	57.66
11	19.06.24	III	26	18 Metre	19.0710242 92.9286140	53.05	17.36	33%	9.58	18%	0	0%	0.29	1%	0	0%	0	0%	25.82	49%	53.05
12	19.06.24	III	26	28 Metre	19.0710242 72.9286140	52.78	16.005	30%	9.93	19%	0	0%	0.235	0%	0	0%	0	0%	26.61	50%	52.78
13	19.06.24	III	29	37 Metre	19.0720318 72.9282979	55.42	16.33	29%	9.23	17%	0	0%	0.36	1%	0	0%	0	0%	29.5	53%	55.42
14	19.06.24	III	29	27 Metre	19.0720318 72.9282979	58.64	17.575	30%	6.845	12%	0	0%	0.425	1%	0	0%	0	0%	33.795	58%	58.64
15	20.06.24	III	24	22 Metre	19.0704497 72.9288286	57.28	23.835	42%	6.12	11%	0	0%	0.46	1%	0	0%	0	0%	26.865	47%	57.28
16	21.06.24	III	24	12 Metre	19.0704497 72.9288286	54.825	27.945	51%	4.875	9%	0	0%	0.385	1%	0	0%	0	0%	21.62	39%	54.825
17	21.06.24	III	28	24 Metre	19.0710793 72.9280943	54.135	24.995	46%	6.185	11%	0	0%	0.42	1%	0	0%	0	0%	22.535	42%	54.135
18	21.06.24	III	27	21 Metre	19.0710778 72.9282704	54.745	19.94	36%	8.995	16%	0	0%	0.435	1%	0	0%	0	0%	25.375	46%	54.745
19	22.06.24	III	27	31 Metre	19.0700728 72.9282704	52.83	22.02	42%	4.65	9%	0	0%	0.66	1%	0	0%	0	0%	25.5	48%	52.83
20	25.06.24	III	21	13 Metre	19.0710362 72.9233348	52.225	43.75	84%	0.46	1%	0	0%	0	0%	0	0%	0	0%	8.015	15%	52.225

Categories of waste Report – ZONE 4

S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected in Kg	Categories of Wastes (Zone IV)														
							Inert (Kg)	%	Dry (Kg)	%	Wet (Kg)	%	Misc (Kg)	%	Hazardous (Kg)	%	Sanitary Waste (Kg)	%	Soiled Material (Kg)	%	Total
1	29.5.24	IV	31	03 Metre	19.0715974 72.9266540	54.935	15.54	28%	11.5	21%	0	0%	1.635	3%	0	0%	0	0%	26.26	48%	54.935
2	29.5.24	IV	32	06 Metre	19.0709171 72.9267288	63.67	19.225	30%	13.585	21%	0	0%	1.975	3%	0	0%	0	0%	28.890	45%	63.675
3	06.6.24	IV	31	13 Metre	19.0715974 72.9266540	57.48	24.005	42%	6.88	12%	0	0%	0.145	0%	0	0%	0	0%	26.45	46%	57.48
4	07.6.24	IV	34	12 Metre	19.0703915 72.9251000	56.27	20.665	37%	8.28	15%	0	0%	0.385	1%	0	0%	0	0%	26.94	48%	56.27
5	07.6.24	IV	34	22 Metre	19.0703965 72.9251000	51.06	17.1	33%	2.775	5%	0	0%	0.135	0%	0	0%	0	0%	31.05	61%	51.06
6	07.6.24	IV	35	15 Metre	19.0696955 72.9249270	60.63	21.885	36%	3.83	6%	0	0%	0.415	1%	0	0%	0	0%	34.5	57%	60.63
7	08.06.24	IV	35	25 Metre	19.0696955 72.9249270	56.155	13.76	25%	6.08	11%	0	0%	0.32	1%	0	0%	0	0%	35.995	64%	56.155
8	10.06.24	IV	32	16 Metre	19.0709171 72.9272881	52.73	6.59	12%	20.5	39%	0	0%	0.915	2%	0	0%	0	0%	24.725	47%	52.73
9	16.06.24	IV	40	40 Metre	19.0715946 72.9241713	56.775	20.265	36%	5.565	10%	0	0%	0.58	1%	0	0%	0	0%	30.365	53%	56.775
10	16.06.24	IV	40	30 Metre	19.0715946 72.9241713	58.22	21.645	37%	4.645	8%	0	0%	0.44	1%	0	0%	0	0%	31.49	54%	58.22
11	18.06.24	IV	33	09 Metre	19.0701794 72.9269467	53.54	18.605	35%	5.975	11%	0	0%	0.65	1%	0	0%	0	0%	28.31	53%	53.54
12	18.06.24	IV	33	19 Metre	19.0701794 72.9269467	55.685	18.86	34%	8.475	15%	0	0%	0.555	1%	0	0%	0	0%	27.795	50%	55.685
13	19.06.24	IV	36	18 Metre	19.0693270 72.9258805	57.7	16.46	29%	8.485	15%	0	0%	0.485	1%	0	0%	0	0%	32.27	56%	57.7
14	20.06.24	IV	36	28 Metre	19.0693270 72.9258805	53.25	18.4	35%	3.715	7%	0	0%	0.265	0%	0	0%	0	0%	30.87	58%	53.25
15	22.06.24	IV	37	31 Metre	19.0686872 72.9250380	56.515	22.49	40%	8.585	15%	0	0%	0.37	1%	0	0%	0	0%	25.07	44%	56.515
16	22.06.24	IV	39	27 Metre	19.0710362 72.9233348	55.74	30.585	55%	3.8	7%	0	0%	0.875	2%	0	0%	0	0%	20.48	37%	55.74
17	24.06.24	IV	37	21 Metre	19.0686872 72.9250380	52.665	19.175	36%	6.95	13%	0	0%	0.255	0%	0	0%	0	0%	26.285	50%	52.665
18	25.06.24	IV	38	24 Metre	19.0696502 72.9232835	57.65	27.93	48%	3.5	6%	0	0%	0.355	1%	0	0%	0	0%	25.865	45%	57.65
19	25.06.24	IV	39	37 Metre	19.0688422 72.9296923	60.205	27.6	46%	8.74	15%	0	0%	0.345	1%	0	0%	0	0%	23.52	39%	60.205
20	26.06.24	IV	38	34 Metre	19.0696502 72.9232835	55.7	29.13	52%	3.48	6%	0	0%	0.285	1%	0	0%	0	0%	22.805	41%	55.7

Categories of waste Report – ZONE 5

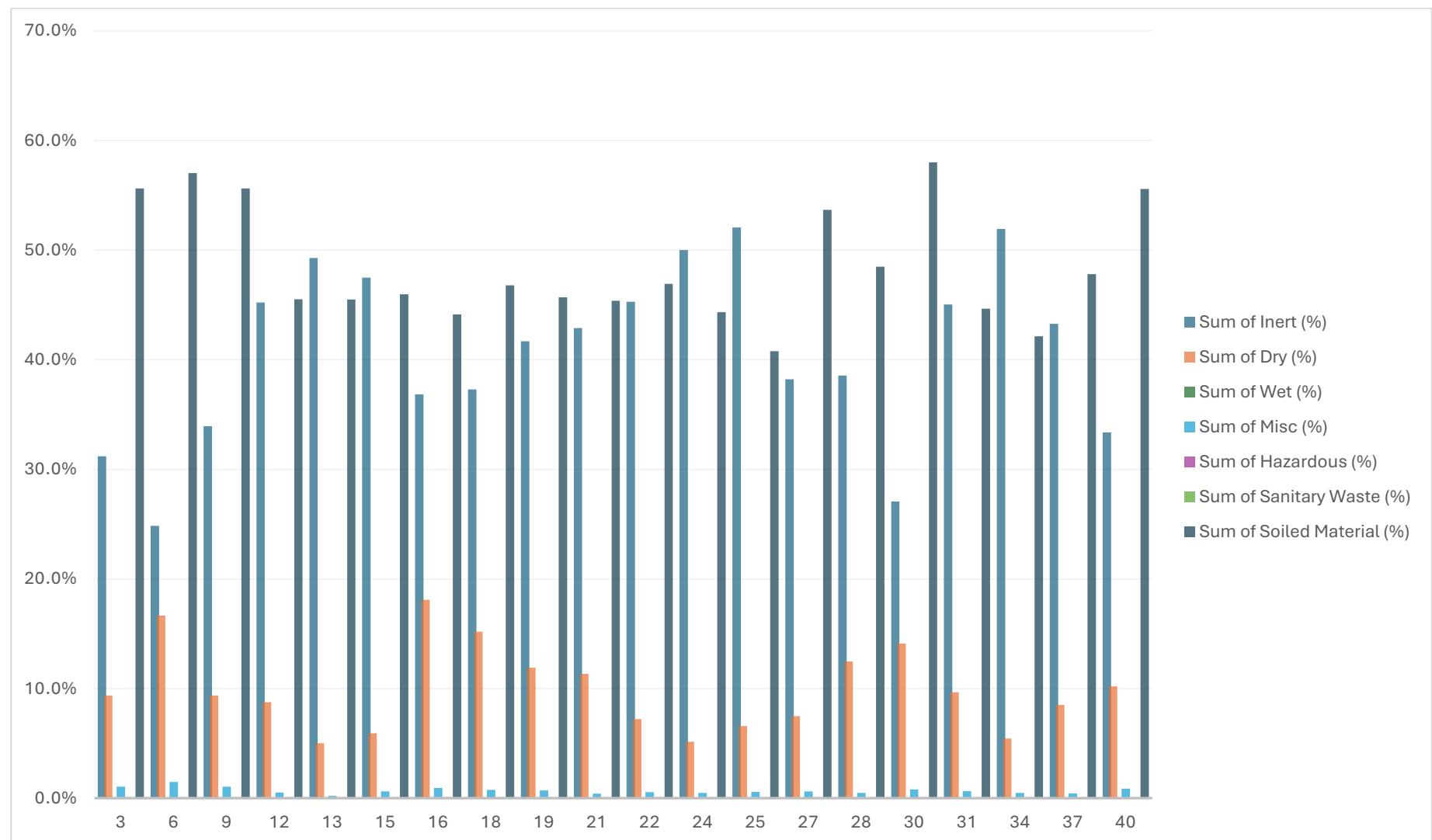
S.No	Date	Zone	Borehole Number	Bore Hole Depth in Metre	GPS Location	Qty of Sample Collected in Kg	Categories of Wastes (Zone V)														
							Inert (Kg)	%	Dry (Kg)	%	Wet (Kg)	%	Misc (Kg)	%	Hazardous (Kg)	%	Sanitary Waste (Kg)	%	Soiled Material (Kg)	%	Total
1	29.5.24	V	41	03 Metre	19.0726301 72.9308503	64.665	20.100	31%	1.140	2%	0	0%	1.060	2%	0	0%	0	0%	42.360	66%	64.66
2	04.6.24	V	47	21 Metre	19.0727567 72.9249421	69.885	23.245	33%	3.59	5%	0	0%	0.260	0%	0	0%	0	0%	42.790	61%	69.885
3	04.6.24	V	47	31 Metre	19.0727567 72.9249421	51.05	16.400	32%	2.49	5%	0	0%	0.165	0%	0	0%	0	0%	31.995	63%	51.05
4	05.6.24	V	48	24 Metre	19.0727567 72.9243718	53.43	13.92	26%	3.515	7%	0	0%	0.35	1%	0	0%	0	0%	35.645	67%	53.43
5	05.6.24	V	48	34 Metre	19.0727567 72.9243718	55.865	15.675	28%	2.160	4%	0	0%	0.51	1%	0	0%	0	0%	37.520	67%	55.865
6	05.6.24	V	49	34 Metre	19.0734273 72.9229867	59.465	18.640	31%	3.750	6%	0	0%	0.290	0%	0	0%	0	0%	36.785	62%	59.465
7	06.6.24	V	50	40 Metre	19.0734273 72.9229867	55.980	13.775	25%	6.665	12%	0	0%	0.690	1%	0	0%	0	0%	34.850	62%	55.98
8	06.6.24	V	50	30 Metre	19.0734273 72.9229867	52.55	10.99	21%	7.83	15%	0	0%	0.81	2%	0	0%	0	0%	32.925	63%	52.555
9	08.06.24	V	49	27 Metre	19.0733320 72.9236003	57.055	16.99	30%	7.21	13%	0	0%	0.175	0%	0	0%	0	0%	32.68	57%	57.055
10	15.06.24	V	42	06 Metre	19.0727359 72.9299598	53.975	11.970	22%	8.195	15%	0	0%	0.290	1%	0	0%	0	0%	33.520	62%	53.975
11	15.06.24	V	42	16 Metre	19.0727359 72.9299598	53.585	13.25	25%	7.645	14%	0	0%	0.695	1%	0	0%	0	0%	31.995	60%	53.585
12	16.06.24	V	44	22 Metre	19.0730113 72.9270476	52.8	19.585	37%	6.095	12%	0	0%	0.345	1%	0	0%	0	0%	26.775	51%	52.8
13	16.06.24	V	44	12 Metre	19.0730113 72.9270476	55.12	20.4	37%	10.33	19%	0	0%	0.25	0%	0	0%	0	0%	24.14	44%	55.12
14	18.06.24	V	41	13 Metre	19.0726301 72.9308503	58.595	22.695	39%	6.66	11%	0	0%	0.37	1%	0	0%	0	0%	28.87	49%	58.595
15	20.06.24	V	46	28 Metre	19.0733123 72.9261578	54.43	11.655	21%	12.62	23%	0	0%	0.295	1%	0	0%	0	0%	29.86	55%	54.43
16	20.06.24	V	46	18 Metre	19.0733123 72.9261578	52.255	10.99	21%	16.915	32%	0	0%	0.435	1%	0	0%	0	0%	23.915	46%	52.255
17	20.06.24	V	43	09 Metre	19.0734587 72.9282422	60.28	26.22	43%	10.71	18%	0	0%	0.415	1%	0	0%	0	0%	22.935	38%	60.28
18	20.06.24	V	43	19 Metre	19.0734587 72.9282422	56.73	15.585	27%	9.835	17%	0	0%	0.355	1%	0	0%	0	0%	30.955	55%	56.73
19	24.06.24	V	45	15 Metre	19.0721938 72.9266402	59.28	30.27	51%	6.055	10%	0	0%	0.115	0%	0	0%	0	0%	22.84	39%	59.28
20	24.06.24	V	45	25 Metre	19.0721938 72.9266402	60.9	21.685	36%	10.78	18%	0	0%	0.87	1%	0	0%	0	0%	27.565	45%	60.9

Depth wise average percentage breakups

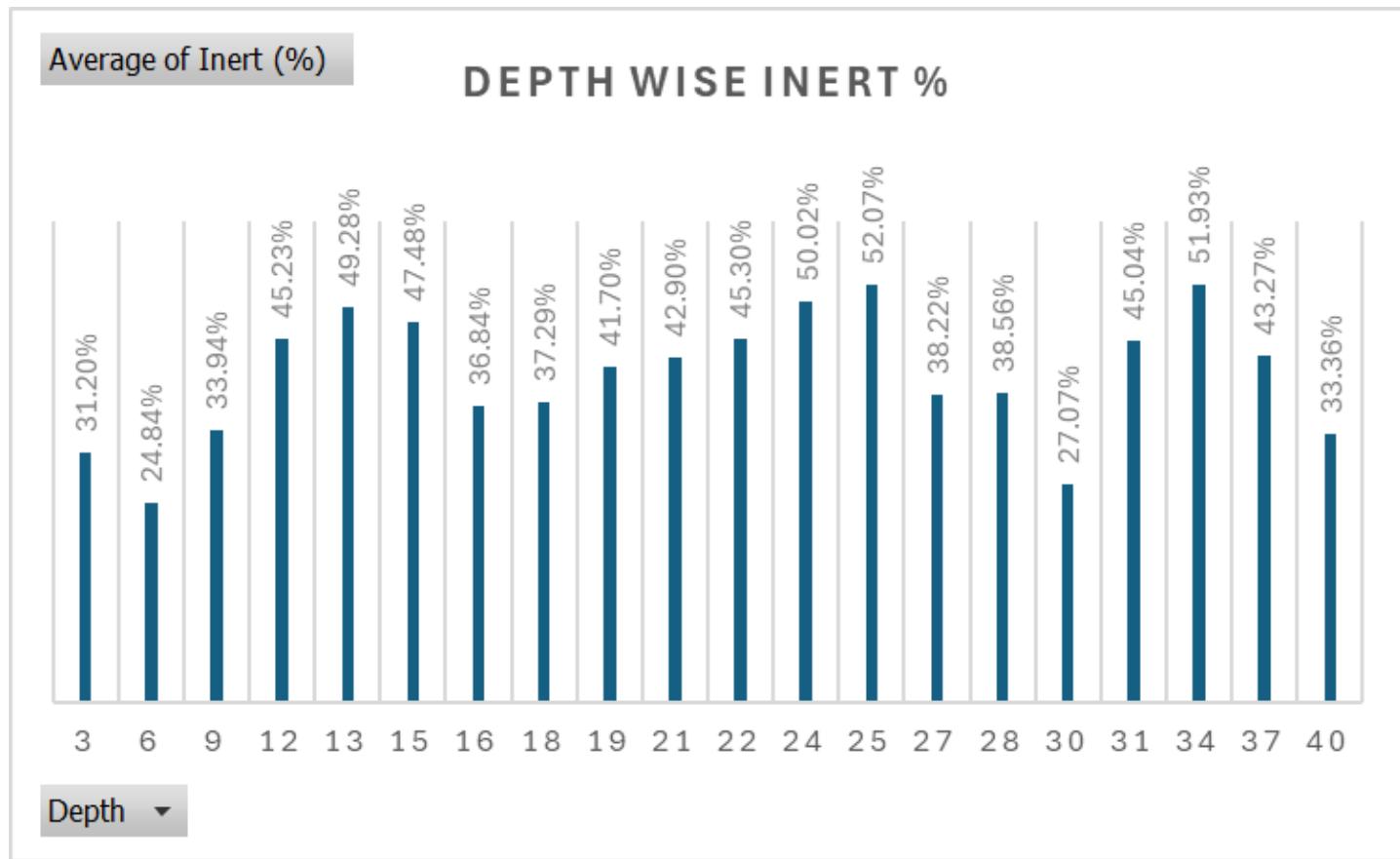
Depth in Metres	Inert (%)	Dry (%)	Wet (%)	Misc (%)	Hazardous (%)	Sanitary Waste (%)	Soiled Material (%)
3	31.20%	9.37%	0.00%	1.06%	0.00%	0.00%	55.64%
6	24.84%	16.66%	0.00%	1.47%	0.00%	0.00%	57.03%
9	33.94%	9.37%	0.00%	1.06%	0.00%	0.00%	55.64%
12	45.23%	8.75%	0.00%	0.49%	0.00%	0.00%	45.52%
13	49.28%	5.00%	0.00%	0.21%	0.00%	0.00%	45.50%
15	47.48%	5.93%	0.00%	0.61%	0.00%	0.00%	45.98%
16	36.84%	18.09%	0.00%	0.94%	0.00%	0.00%	44.13%
18	37.29%	15.18%	0.00%	0.74%	0.00%	0.00%	46.79%
19	41.70%	11.89%	0.00%	0.70%	0.00%	0.00%	45.71%
21	42.90%	11.33%	0.00%	0.40%	0.00%	0.00%	45.37%
22	45.30%	7.22%	0.00%	0.55%	0.00%	0.00%	46.92%
24	50.02%	5.16%	0.00%	0.48%	0.00%	0.00%	44.35%
25	52.07%	6.58%	0.00%	0.56%	0.00%	0.00%	40.79%
27	38.22%	7.48%	0.00%	0.61%	0.00%	0.00%	53.69%
28	38.56%	12.48%	0.00%	0.47%	0.00%	0.00%	48.49%
30	27.07%	14.11%	0.00%	0.80%	0.00%	0.00%	58.02%
31	45.04%	9.65%	0.00%	0.63%	0.00%	0.00%	44.67%
34	51.93%	5.45%	0.00%	0.48%	0.00%	0.00%	42.14%
37	43.27%	8.51%	0.00%	0.43%	0.00%	0.00%	47.81%
40	33.36%	10.20%	0.00%	0.86%	0.00%	0.00%	55.58%
Total Average %	40.78%	9.92%	0.00%	0.68%	0.00%	0.00%	48.49%

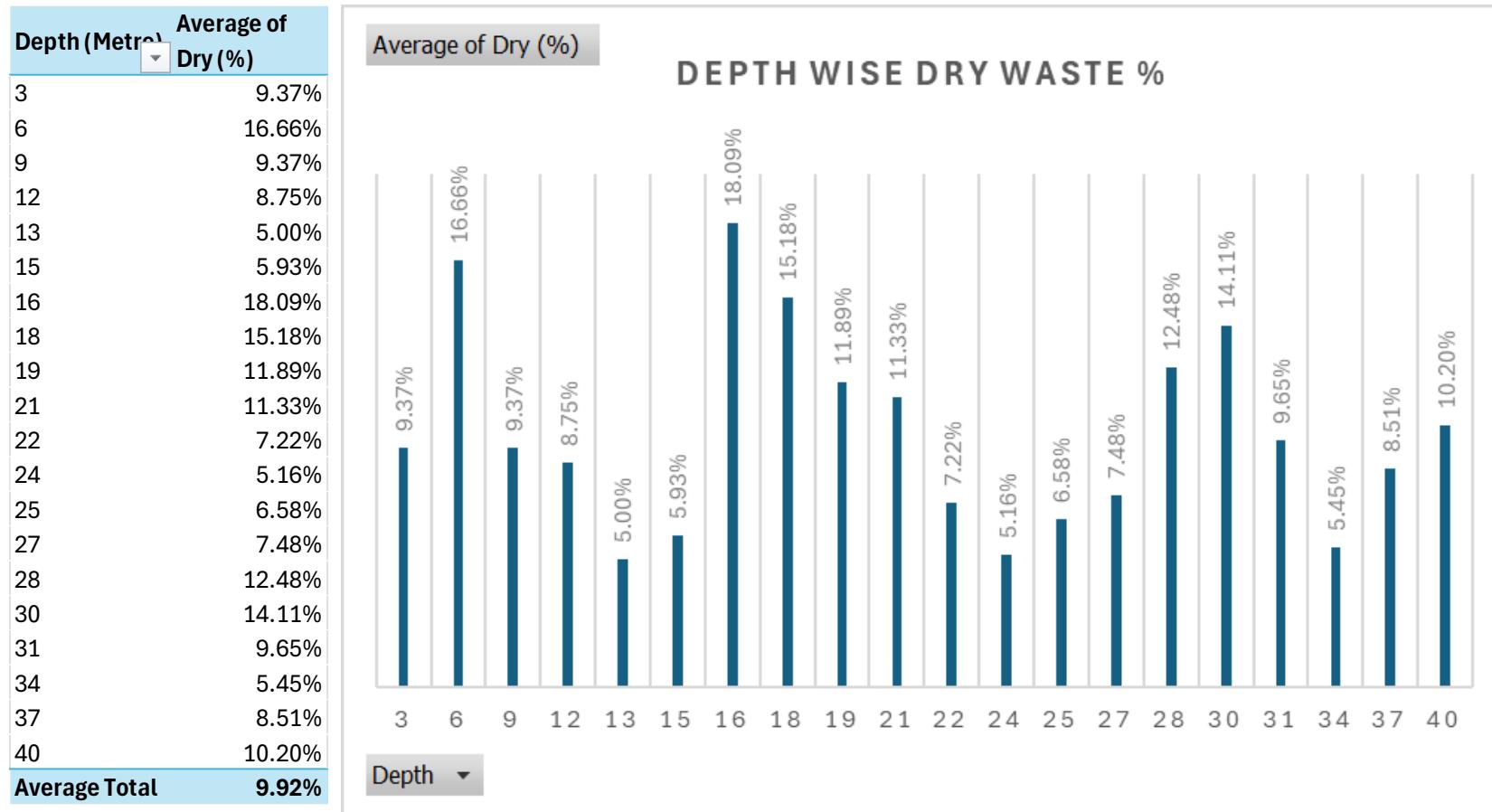
Two samples were drawn from each depth for physical characterization and chemical analysis. A total of 10 samples were collected from each depth across all five zones.

Depth wise average percentage

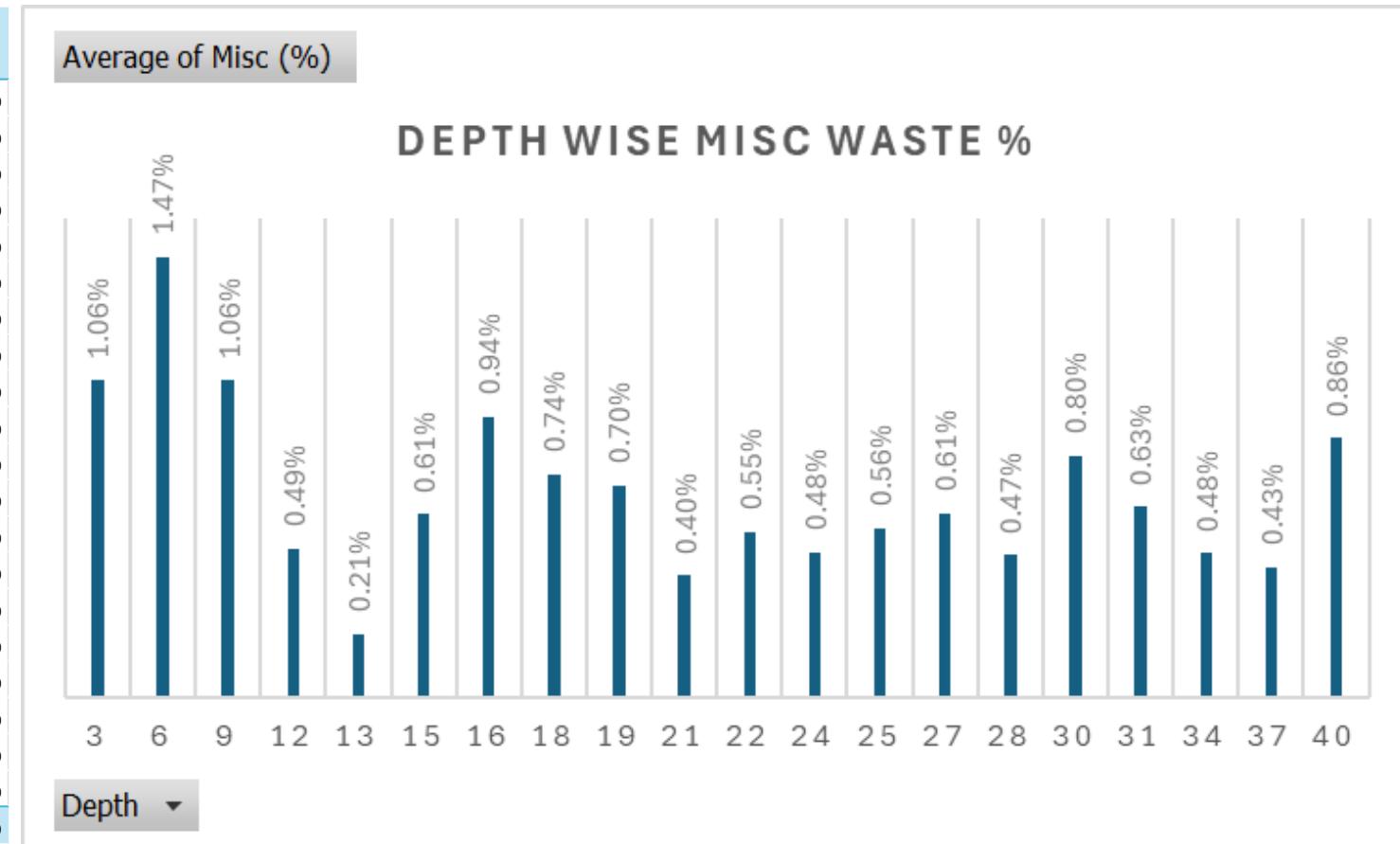


Depth (Metres)	Average of Inert (%)
3	31.20%
6	24.84%
9	33.94%
12	45.23%
13	49.28%
15	47.48%
16	36.84%
18	37.29%
19	41.70%
21	42.90%
22	45.30%
24	50.02%
25	52.07%
27	38.22%
28	38.56%
30	27.07%
31	45.04%
34	51.93%
37	43.27%
40	33.36%
Average Total	40.78%

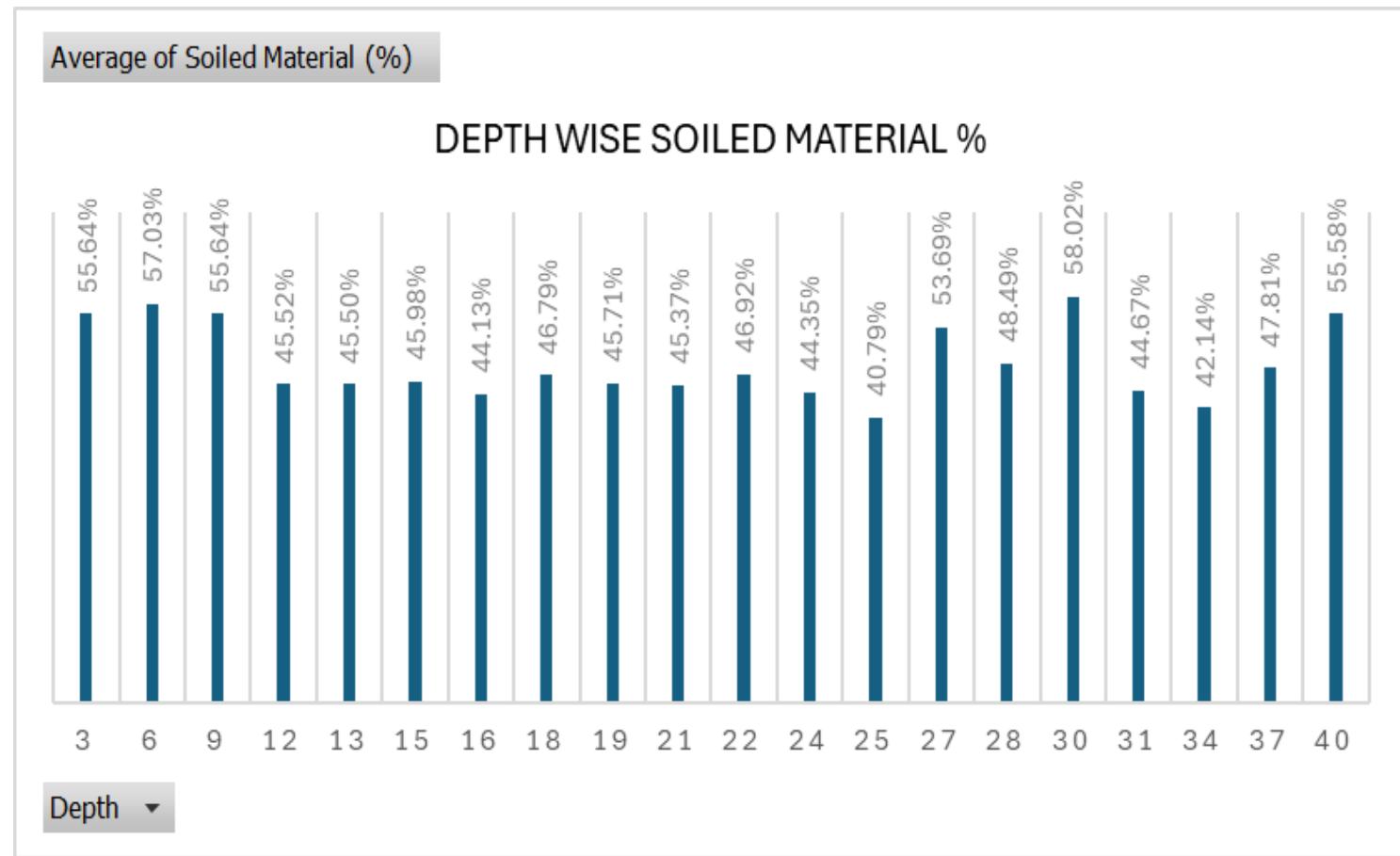




Depth (Metres)	Average of Misc (%)
3	1.06%
6	1.47%
9	1.06%
12	0.49%
13	0.21%
15	0.61%
16	0.94%
18	0.74%
19	0.70%
21	0.40%
22	0.55%
24	0.48%
25	0.56%
27	0.61%
28	0.47%
30	0.80%
31	0.63%
34	0.48%
37	0.43%
40	0.86%
Average Total	0.68%

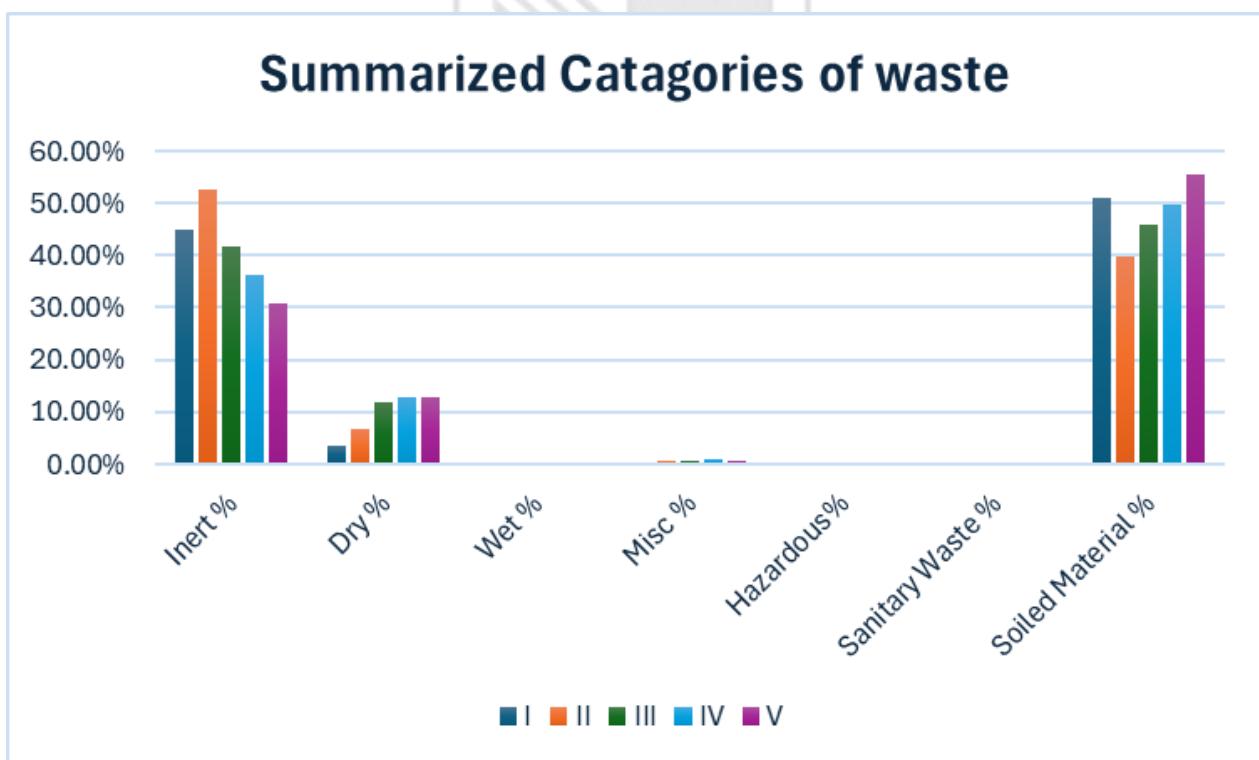


Row Labels	Average of Soiled Material (%)
3	55.64%
6	57.03%
9	55.64%
12	45.52%
13	45.50%
15	45.98%
16	44.13%
18	46.79%
19	45.71%
21	45.37%
22	46.92%
24	44.35%
25	40.79%
27	53.69%
28	48.49%
30	58.02%
31	44.67%
34	42.14%
37	47.81%
40	55.58%
Average Total	48.49%



7. Summarized waste categories report of five zones

Summarized Catagories of waste								
Zones	Inert %	Dry %	Wet %	Misc %	Hazardous%	Sanitary Waste %	Soiled Material %	Total
I	44.97%	3.44%	0.00%	0.44%	0.00%	0.00%	51.16%	100%
II	52.78%	6.64%	0.00%	0.65%	0.00%	0.00%	39.93%	100%
III	41.62%	11.93%	0.00%	0.69%	0.00%	0.00%	45.76%	100%
IV	36.29%	12.91%	0.00%	1.00%	0.00%	0.00%	49.80%	100%
V	30.85%	12.88%	0.00%	0.77%	0.00%	0.00%	55.50%	100%
Average	41.30%	9.56%	0.00%	0.71%	0.00%	0.00%	48.43%	100%



8. Site Photos – Borehole Photos



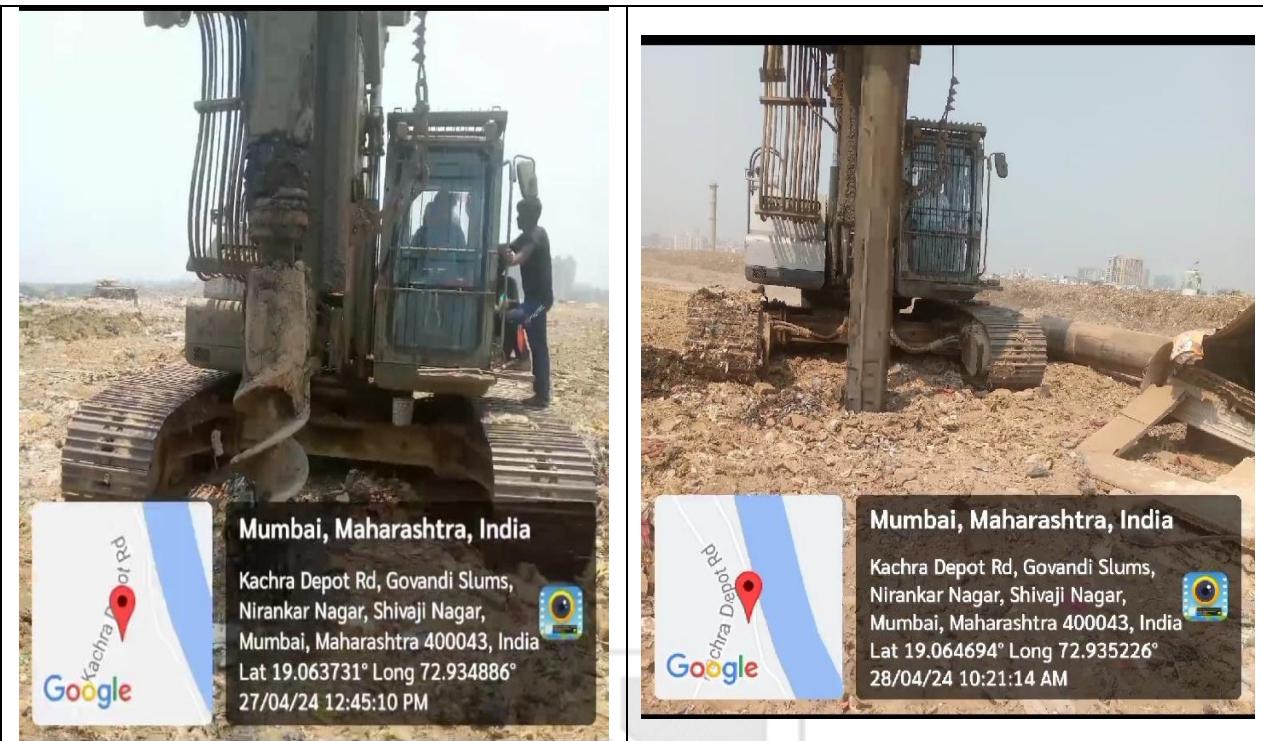
Location 1

Location 2



Location 3

Location 4



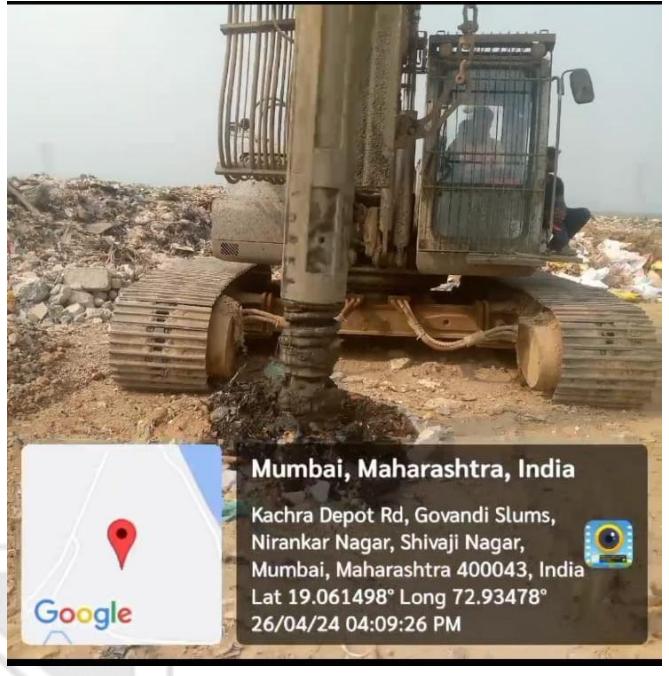
Location 5



Location 6



Location 7	Location 8
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	 <p>Mumbai, Maharashtra, India Kachra Depot Rd, Govandi Slums, Nirankar Nagar, Shivaji Nagar, Mumbai, Maharashtra 400043, India Lat 19.061498° Long 72.93478° 26/04/24 04:09:26 PM</p>
Location 9	Location 10

NETEL



NETEL



Location 13

Location 14



Location 15

Location 16

 A photograph showing a yellow excavator with its arm extended, digging into a large pile of brown and grey trash. A worker wearing a hard hat and safety vest stands near the machine. In the background, more trash and some industrial structures are visible under a clear blue sky. <p>Mumbai, Maharashtra, India Kachra Depot Rd, Mumbai, Maharashtra 400043, India Lat 19.06903° Long 72.932224° 05/06/24 10:36:40 AM</p>	 A photograph of the same or a similar excavator at a different angle, showing its bucket digging into trash. The ground is covered in a thick layer of debris. A small figure of a person is visible near the machine. <p>Mumbai, Maharashtra, India Kachra Depot Rd, Govandi Slums, Nirankar Nagar, Shivaji Nagar, Mumbai, Maharashtra 400043, India Lat 19.066824° Long 72.933738° 05/06/24 03:51:45 PM</p>
<p>Location 17</p>  A photograph of an excavator with its arm raised, digging into a pile of trash. The machine is heavily coated in dark, sticky residue from the waste it has been handling. The background shows more trash and some industrial structures. <p>Mumbai, Maharashtra, India Shop No 1, Line No D, Rd Number 4, Nirankar Nagar, Shivaji Nagar, Mumbai, Maharashtra 400043, India Lat 19.068545° Long 72.930174° 05/06/24 07:11:46 PM</p>	<p>Location 18</p>  A photograph of an excavator with its arm raised, digging into a pile of trash. The machine is heavily coated in dark, sticky residue from the waste it has been handling. The background shows more trash and some industrial structures. <p>Mumbai, Maharashtra, India Kachra Depot Rd, Mumbai, Maharashtra 400043, India Lat 19.0701° Long 72.931682° 06/06/24 05:07:16 PM</p>
<p>Location 19</p>	<p>Location 20</p>



Location 21



Mumbai, Maharashtra, India

3WCH+GWW, Kachra Depot Rd, Vikhroli,
Mumbai, Maharashtra 400043, India
Lat 19.071493° Long 72.930168°
06/06/24 03:14:39 AM



Location 22



Mumbai, Maharashtra, India

05, Rd Number 12, Govandi Slums, Govandi
West, Baiganwadi, Shivaji Nagar, Mumbai,
Maharashtra 400043, India
Lat 19.064506° Long 72.928783°
05/06/24 12:47:26 PM

Location 23

Location 24



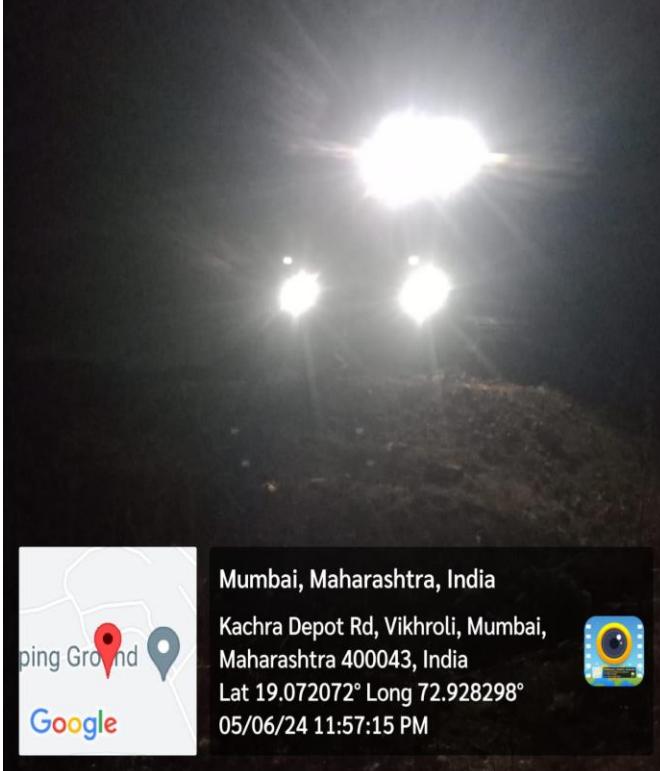
Location 25

Location 26

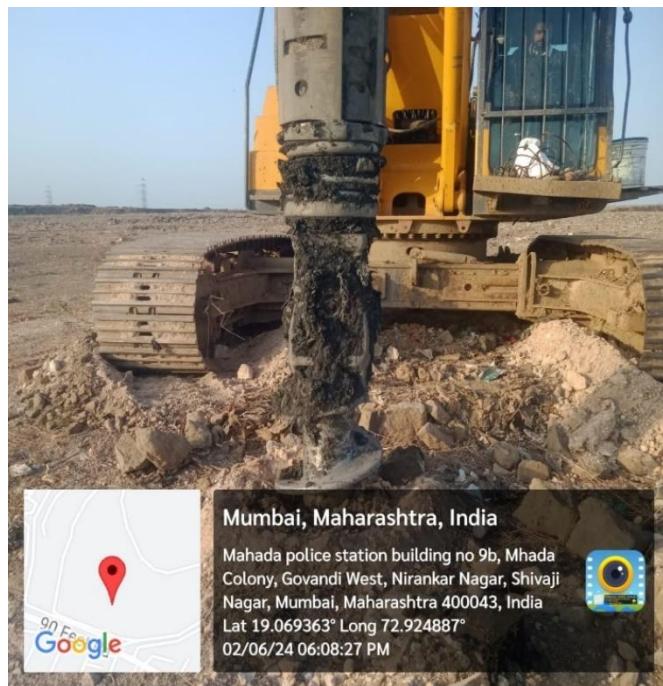


Location 27

Location 28

	 <p>Mumbai, Maharashtra, India 3WCH+GWW, Kachra Depot Rd, Vikhroli, Mumbai, Maharashtra 400043, India Lat 19.070998° Long 72.928658° 06/06/24 04:47:59 PM</p>
Location 29	Location 30
 <p>Mumbai, Maharashtra, India Mahada police station building no 9b, Mhada Colony, Govandi West, Nirankar Nagar, Shivaji Nagar, Mumbai, Maharashtra 400043, India Lat 19.069565° Long 72.925572° 02/06/24 07:46:14 PM</p>	 <p>Mumbai, Maharashtra, India Mahada police station building no 9b, Mhada Colony, Govandi West, Nirankar Nagar, Shivaji Nagar, Mumbai, Maharashtra 400043, India Lat 19.069565° Long 72.925572° 02/06/24 11:29:10 PM</p>
Location 31	Location 32

 <p>Mumbai, Maharashtra, India 5, Rd Number 10, Kamalabai Nagar, Govandi West, Baiganwadi, Govandi East, Mumbai, Maharashtra 400043, India Lat 19.064385° Long 72.927022° 08/06/24 07:17:55 PM</p>	 <p>Mumbai, Maharashtra, India 3WC9+W5R, Akruti Rising City, Mumbai, Maharashtra 400075, India Lat 19.072057° Long 72.918342° 02/06/24 04:37:38 PM</p>
Location 33	Location 34



Mumbai, Maharashtra, India

Mahada police station building no 9b, Mhada Colony, Govandi West, Nirankar Nagar, Shivaji Nagar, Mumbai, Maharashtra 400043, India
Lat 19.069363° Long 72.924887°
02/06/24 06:08:27 PM



Mumbai, Maharashtra, India

3W8H+36G, Rd Number 10, Shastri Nagar, Govandi West, Baiganwadi, Shivaji Nagar, Mumbai, Maharashtra 400043, India
Lat 19.065264° Long 72.928154°
06/06/24 11:38:37 PM



Location 35

Location 36

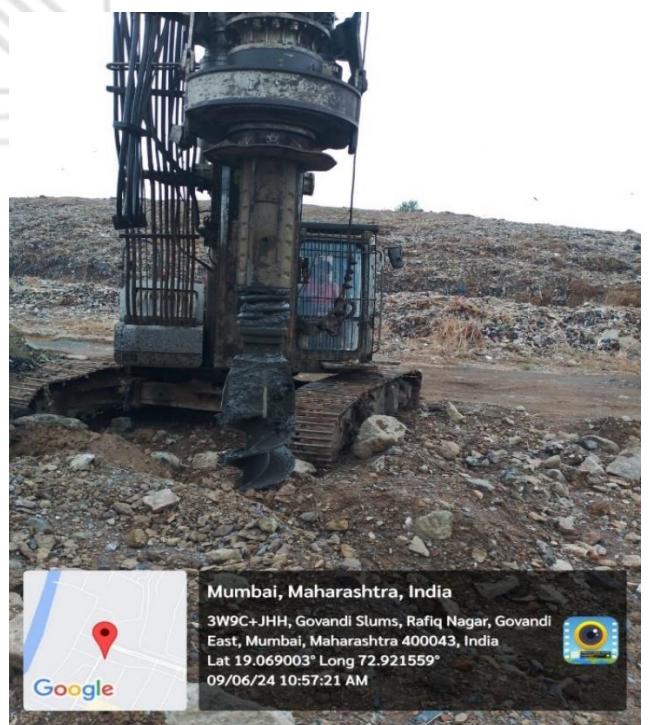


Mumbai, Maharashtra, India

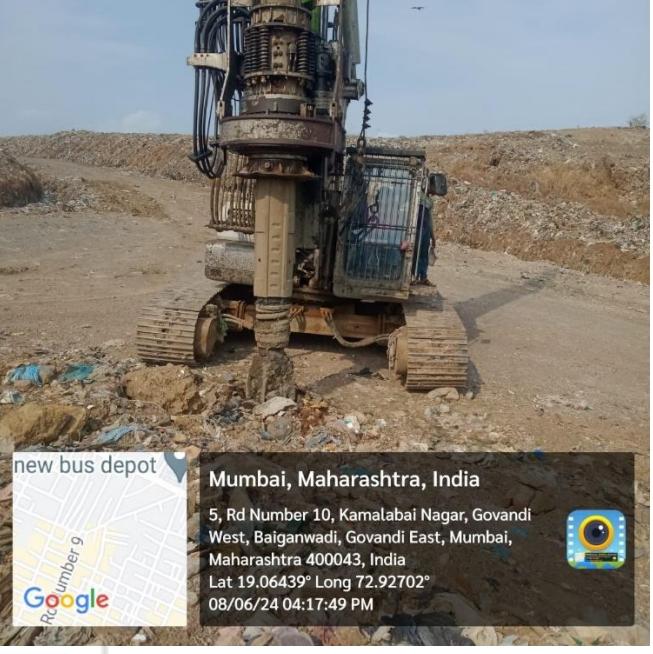
3W9C+JHH, Govandi Slums, Rafiq Nagar, Govandi East, Mumbai, Maharashtra 400043, India
Lat 19.069003° Long 72.921559°
09/06/24 10:57:21 AM



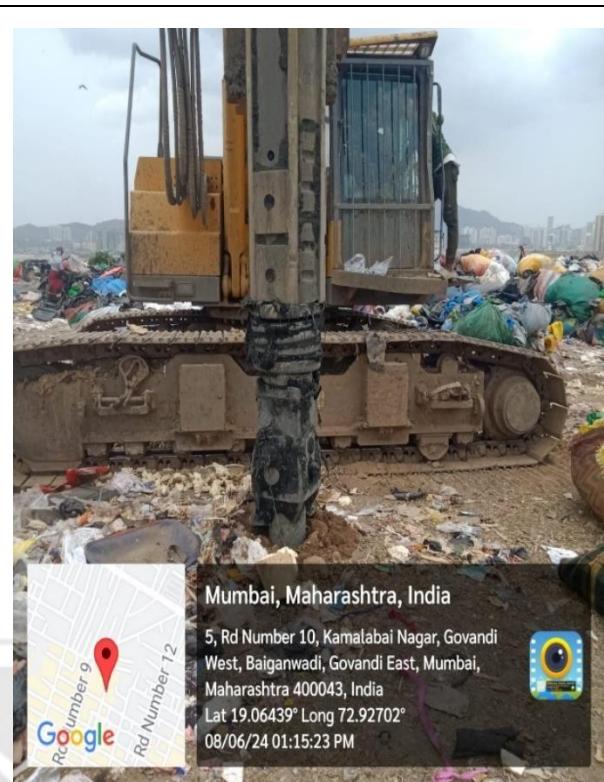
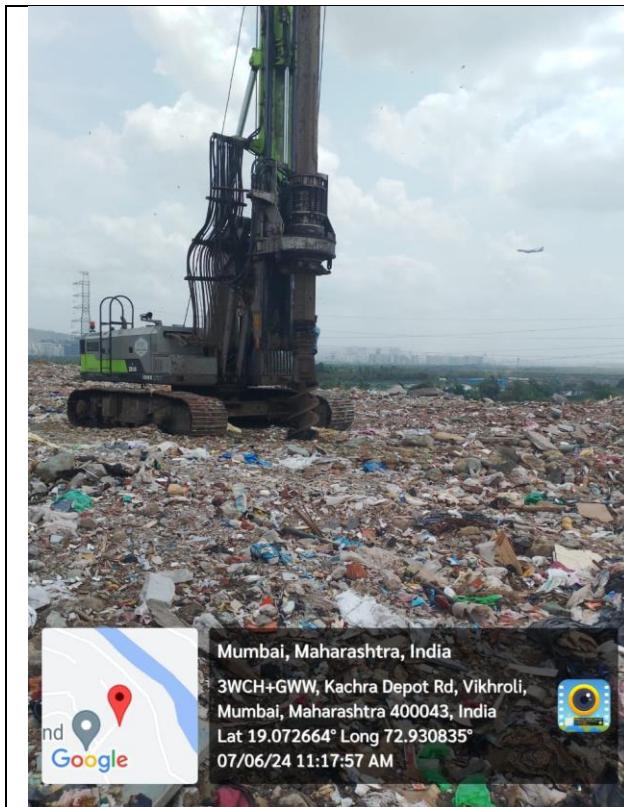
Location 37



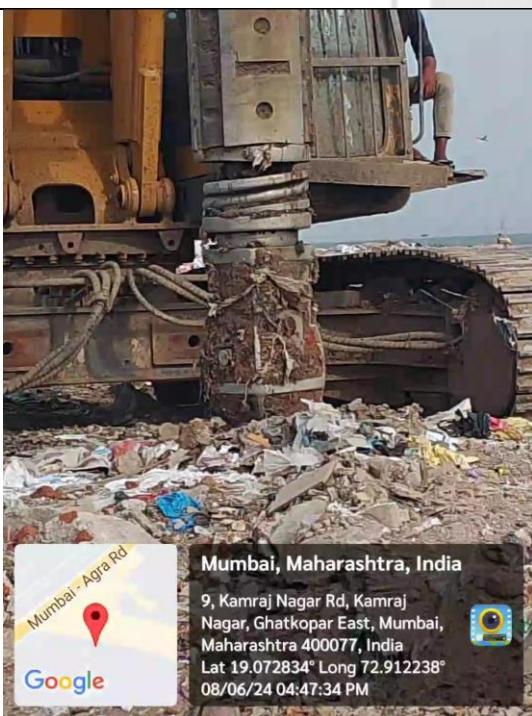
Location 38

	
Location 39	Location 40





Location 41



Location 42

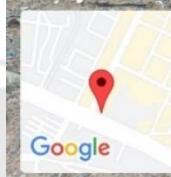


Location 43

Location 44



Mumbai, Maharashtra, India
Kachra Depot Rd, Vikhroli, Mumbai,
Maharashtra 400043, India
Lat 19.072167° Long 72.926508°
07/06/24 06:44:57 PM



Mumbai, Maharashtra, India
Kachra Depot Rd, Vikhroli, Mumbai,
Maharashtra 400043, India
Lat 19.073371° Long 72.926013°
08/06/24 11:38:37 AM



Location 45

Location 46



Mumbai, Maharashtra, India
Kachra Depot Rd, Vikhroli, Mumbai,
Maharashtra 400043, India
Lat 19.073341° Long 72.926548°
01/06/24 08:07:45 PM



Mumbai, Maharashtra, India
3WVF+7RM, Pirojshanagar, Vikhroli,
Mumbai, Maharashtra 400079, India
Lat 19.092941° Long 72.924463°
31/05/24 06:53:57 PM



Location 47

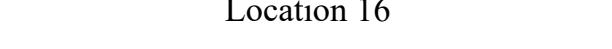
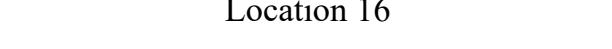
Location 48



9. Sample Collection Photos:

	
Location 1	Location 1
	
Location 2	Location 3
	
Location 4	Location 5

<p style="text-align: center;">Location 6</p>	<p style="text-align: center;">Location 7</p>
<p style="text-align: center;">Location 8</p>	<p style="text-align: center;">Location 9: Sample 1</p>
<p style="text-align: center;">Location 9: Sample 2</p>	<p style="text-align: center;">Location 10</p>

	
Location 11 	Location 12 
	
Location 13 	Location 14 
Location 15 	Location 16 

	
Location 17	Location 18
	
Location 19	Location 20
	
Location 21: Sample 1	Location 21: Sample 2

	
Location 22: Sample 1	Location 22: Sample2
	
Location 23	Location 24
	
Location 25	Location 26



Location 22: Sample 1

Location 22: Sample2



Location 23

Location 24



Location 25

Location 26

	
Location 27	Location 28
	
Location 29	Location 30
	
Location 31 & 32	Location 33

ZONE - 3
LOCATION - 27
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 21/6/14
TIME - 6:00 AM
DEPTH - 21 mts.

ZONE - 3
LOCATION - 27
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 21/6/14
TIME - 6:00 AM
DEPTH - 21 mts.

ZONE - 3
LOCATION - 27
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 21/6/14
TIME - 6:25 PM
DEPTH - 27 mts.

ZONE - 3
LOCATION - 27
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 21/6/14
TIME - 6:25 PM
DEPTH - 27 mts.

ZONE - 3
LOCATION - 27
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 21/6/14
TIME - 6:25 PM
DEPTH - 27 mts.

ZONE - 3
LOCATION - 27
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 21/6/14
TIME - 6:25 PM
DEPTH - 27 mts.

ZONE - 3
LOCATION - 28
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 6/6/14
TIME - 9:10 AM
DEPTH - 21 mts.

ZONE - 3
LOCATION - 28
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 6/6/14
TIME - 9:30 AM
DEPTH - 21 mts.

ZONE - 3
LOCATION - 30
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 9/6/14
TIME - 6:35 AM
DEPTH - 30 mts.

ZONE - 3
LOCATION - 30
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 9/6/14
TIME - 7:45 AM
DEPTH - 40 mts.

ZONE - 4
LOCATION - 35
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 10/6/14
TIME - 8:00 AM
DEPTH - 100 mts.

ZONE - 4
LOCATION - 35
CO-ORDINATES A - 19.0701948
B - 72.9242691
DATE - 10/6/14
TIME - 8:00 AM
DEPTH - 100 mts.

Location 31 & 32

Location 33

	
Location 34 	Location 35 
Location 36 	Location 37 
Location 38 	Location 39 

	 <p>ZONE - 4 LOCATION - 40 CO-ORDINATES A - 19.07.2359 B - 72.43.0000 DATE - 10/6/24 TIME - 8:30 AM DEPTH - 0.50 mtr</p> <p>ZONE - 4 LOCATION - 40 CO-ORDINATES A - 19.07.2359 B - 72.43.0000 DATE - 10/6/24 TIME - 8:30 AM DEPTH - 0.50 mtr</p>	Location 40	Location 41: Sample 1
	 <p>ZONE - 5 LOCATION - 41 CO-ORDINATES A - 19.07.2359 B - 72.43.0000 DATE - 10/6/24 TIME - 12:15 PM DEPTH - 1.3 mtr</p>	Location 41: Sample 2	Location 42
	 <p>ZONE - 5 LOCATION - 42 CO-ORDINATES A - 19.07.2359 B - 72.43.0000 DATE - 10/6/24 TIME - 8:00 PM DEPTH - 1.60 mtr</p> <p>ZONE - 5 LOCATION - 42 CO-ORDINATES A - 19.07.2359 B - 72.43.0000 DATE - 10/6/24 TIME - 8:00 PM DEPTH - 1.60 mtr</p>	Location 43	Location 44

56 | Page - Characterization of Legacy Waste by taking Boreholes at Deonar Dumping Ground

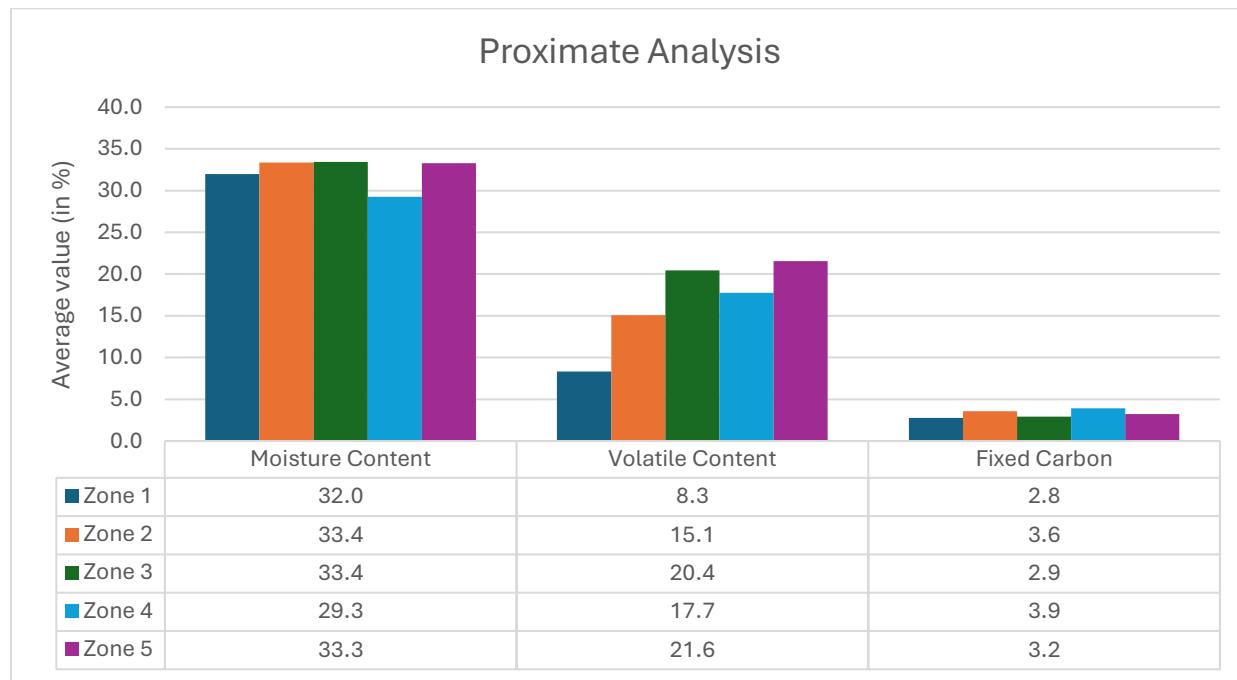
	
<p>Location 45</p>	<p>Location 46</p>
	
<p>Location 47</p>	<p>Location 48</p>
	
<p>Location 49</p>	<p>Location 50</p>

10. Analytical Reports

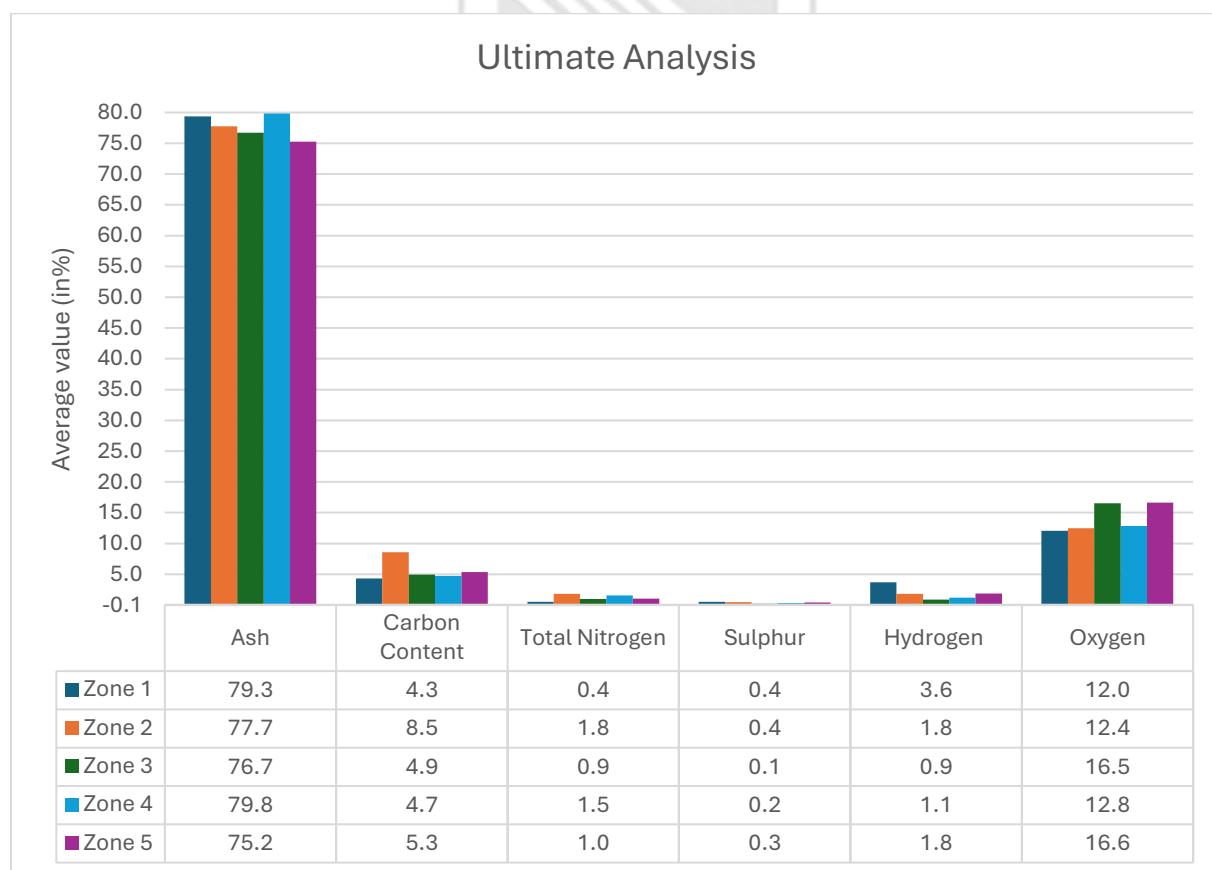
Refer Annexure I – for detailed analytical reports

Sr. No	Parameter	Unit	Method
1	Bulk Density	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	mg/kg	
12	Chromium	mg/kg	
13	Zinc	mg/kg	
14	Copper	mg/kg	
15	Mercury	mg/kg	
16	Selenium	mg/kg	EPA 3050B & By ICP
17	Arsenic	mg/kg	
18	Gross Calorific Value	kcal/kg	IS 1350 (II)
19	Net Calorific Value	kcal/kg	IS 1350 (II)
20	Loss of Ignition	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	%	APHA
22	Silica	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	%	Net reference
24	Ash	%	Net reference
25	Carbon Content	%	
26	Total Nitrogen (N)	%	
27	Sulphur	%	
28	Hydrogen	%	
29	Oxygen	%	By Calculation

10.1 Proximate analysis



10.2 Ultimate Analysis



10.3 Other Parameters

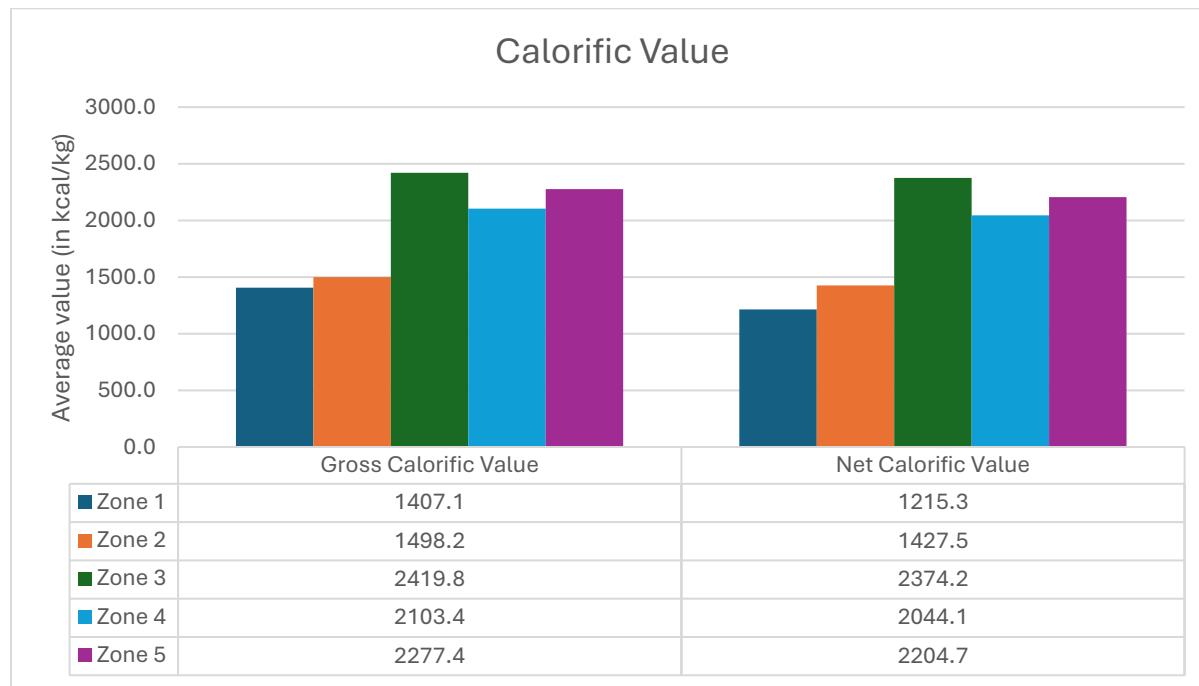


Figure 1: Calorific value of the samples from the five zones.

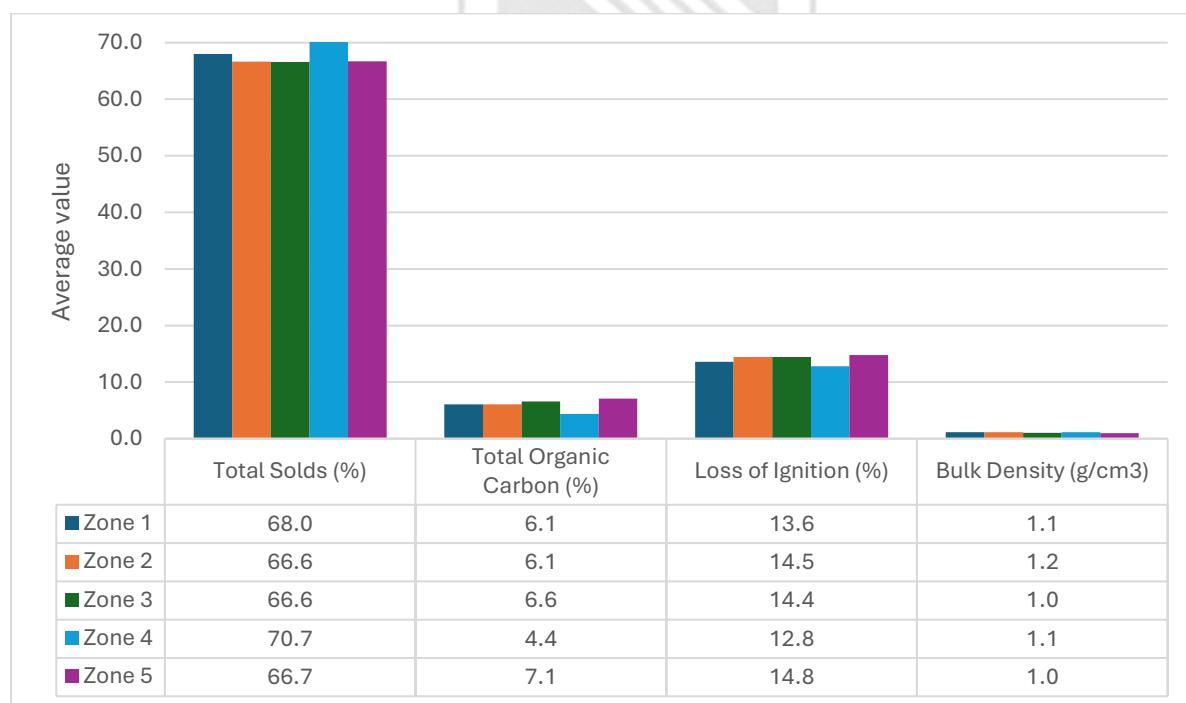


Figure 2: Total solids, total organic carbon, loss of ignition and bulk density of the samples from the five zones.

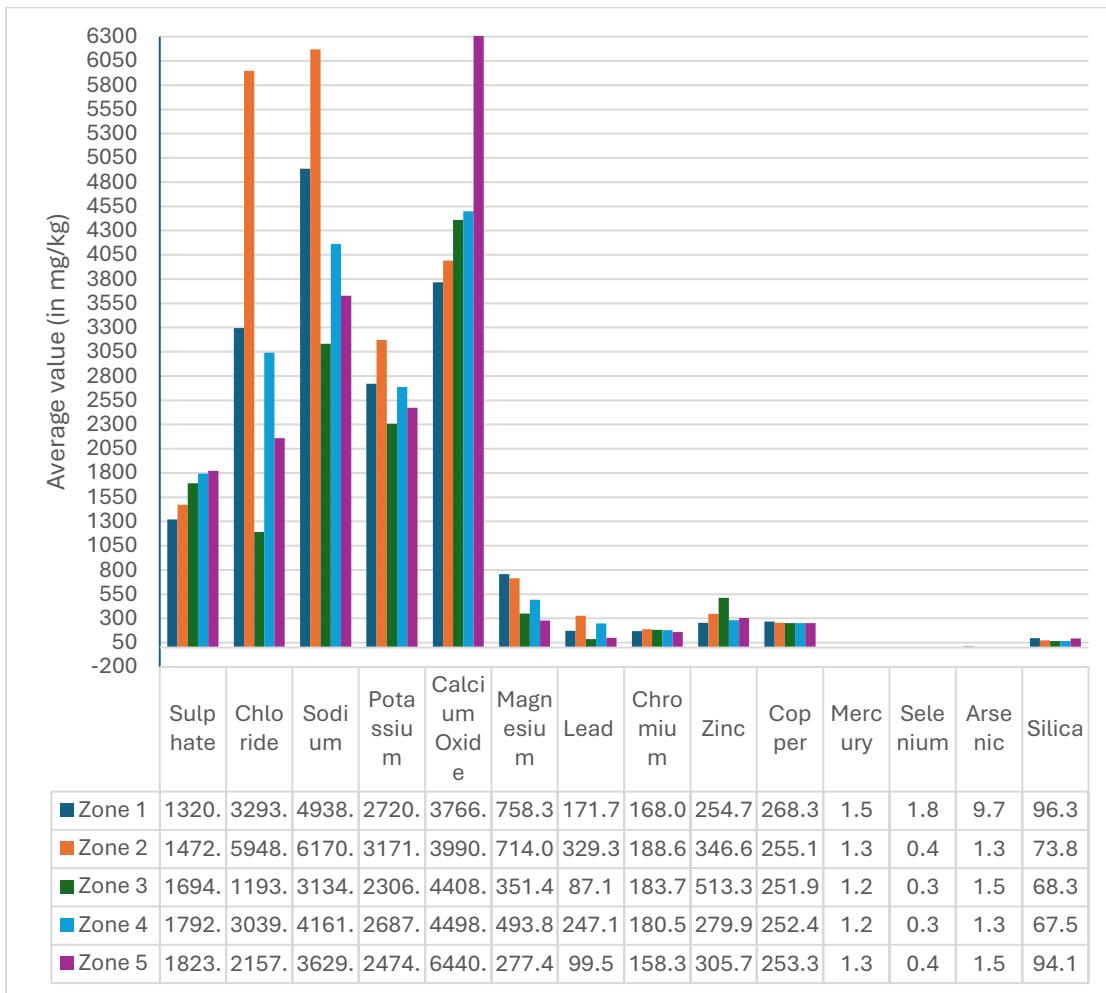


Figure 3: Various elements and compounds found in samples from the five zones.

11. Discussion:

The Physical Characterization chart presents an analysis of legacy waste at a dumping ground, categorizing the waste into seven distinct types: Inert, Dry, Wet, Miscellaneous, Hazardous, Sanitary, and Soiled Material. The findings reveal significant insights into the composition and potential challenges associated with waste management at the site.

11.1 Overview and Discussion: Physical Characterization

1. Inert Waste:

Inert waste, comprising 30% to 50% of the total waste, is the most prevalent category. This type of waste, often including construction debris, stones, and other non-biodegradable materials, poses challenges for disposal and management due to its bulk and low degradation rate.

2. Significant Soiled Material:

Soiled materials account for 40% to 55% of the waste. This category typically includes Mixture of Sand & Soil, small particles of glass & Plastics which is less than 10mm size with substances or organic matter, making them difficult to recycle or process.

3. Dry Waste:

The average total dry content across all depths is 9.92%. This suggests that, on average, less than 10% of the total material sampled at these depths is dry waste. However, there is noticeable variability between different depths.

Highest Dry Content:

At a depth of 6 meters, the dry content is the highest at 16.66%.

Other notable high values are found at depths of 16 meters (18.09%), 30 meters (14.11%), and 27 meters (12.48%).

Lowest Dry Content:

The lowest dry content is observed at 13 meters, with only 5.00%.

Other low points include 24 meters (5.16%) and 34 meters (5.45%).

11.2 Overview and Discussion: Chemical Analysis

The bar chart provided represents the proximate analysis of legacy waste from a dumping ground, with data on Moisture Content, Volatile Content, and Fixed Carbon across five different zones.

1. Moisture Content

- The moisture content is relatively high across all zones, ranging from 29.3% to 33.4%.
- Zone 2 has the highest moisture content at 33.4%, while Zone 4 has the lowest at 29.3%.
- High moisture content can complicate waste processing, particularly in Biomining and incineration, as more energy is required to evaporate the water.

2. Volatile Content:

- Volatile content varies significantly among the zones, with Zone 1 having the lowest at 8.3% and Zone 5 the highest at 21.6%.
- Zones 2, 3, 4, and 5 exhibit higher volatile content compared to Zone 1, indicating a higher proportion of organic material or substances that can vaporize during combustion.

- This variability might affect the calorific value and emission profiles during waste treatment processes.

3. Fixed Carbon:

Fixed carbon is the amount of solid carbon left in the waste after volatile substances, like gases and moisture, are removed through heating.

- Fixed carbon content is relatively low across all zones, with values ranging from 2.8% to 3.9%.

- Zone 4 shows the highest fixed carbon content at 3.9%, suggesting a slightly higher amount of residual carbon post-volatilization and combustion.

- The low fixed carbon levels suggest that the waste material might not be significantly rich in non-volatile carbon-based substances, which would impact the efficiency of waste-to-energy conversion processes.

4. Ash Content:

- The ash content is significantly high across all zones, with values ranging from 75.2% to 79.8%.

- Zone 4 has the highest ash content at 79.8%, while Zone 5 has the lowest at 75.2%.

- High ash content indicates a large amount of inorganic material, suggesting that the waste has a substantial non-combustible fraction, which could reduce its potential for energy recovery.

5. Carbon Content:

Carbon content refers to the total amount of carbon (both organic and inorganic) present in the waste. It is a broader measure that includes all forms of carbon, not just the fixed carbon remaining after combustion.

- The carbon content varies between zones, with Zone 2 having the highest value at 8.5% and Zone 1 the lowest at 4.3%.

- Carbon content is crucial for determining the energy potential of waste through processes like combustion or gasification. The relatively low carbon content across zones suggests limited energy potential.

6. Total Nitrogen:

- The total nitrogen content is relatively low across all zones, ranging from 0.4% to 1.8%.

- Zone 2 has the highest nitrogen content at 1.8%, which could imply a higher proportion of organic waste that contains proteins or other nitrogenous compounds.

- Nitrogen is an essential factor to consider in waste processing because it can contribute to the formation of nitrogen oxides (NOx) during combustion, which are harmful pollutants.

7. Sulphur Content:

- Sulphur content is very low across all zones, ranging from 0.2% to 0.4%.

- Zone 1 and Zone 3 show slightly higher sulphur levels, which could affect the formation of sulphur oxides (SOx) during combustion, contributing to acid rain and other environmental issues.

8. Hydrogen Content:

- Hydrogen content is also quite low, ranging from 0.9% to 3.6%.

- Zone 1 has the highest hydrogen content at 3.6%, which is still relatively low but indicates the presence of organic matter or other hydrogen-containing compounds.

9. Oxygen Content:

- Oxygen content varies considerably, with Zone 5 having the highest value at 16.6% and Zone 1 the lowest at 12.0%.

- Higher oxygen content typically correlates with a higher proportion of organic matter in the waste, which could affect the combustion process by increasing the ease of ignition and burning efficiency.

Calorific value is a measure of the energy released when a substance is burned. It's a crucial factor in determining the suitability of waste for energy generation.

10. Net Calorific Value

The data shows both gross and net calorific values. Gross calorific value includes the heat released from the condensation of water vapor produced during combustion. Net calorific value subtracts this latent heat, providing a more realistic value for energy production.

Zone Variations: There are significant variations in calorific values between different zones. Zones 3 and 4 exhibit the highest values, suggesting they might be more suitable for energy recovery.

Average Values: The average net calorific values are 2105.6 kcal/kg and 2032.5 kcal/kg, respectively. These values can be compared to industry standards or other waste types to assess their energy potential.

Total Solids: The percentage of total solids in all zones is relatively high, ranging from 66.6% to 70.7%. This indicates a significant amount of solid material in the waste samples.

Total Organic Carbon: There is some variation in total organic carbon content across the zones. Zone 5 has the highest percentage (7.1%), while Zone 4 has the lowest (4.4%). Organic carbon is a key component that contributes to the energy content of the waste.

Loss of Ignition: Loss of ignition is a measure of the volatile matter in the waste. It's generally high in all zones, ranging from 12.8% to 14.8%. This suggests that a significant portion of the waste is combustible.

11. Bulk Density

The bulk density of the waste is relatively consistent across the zones, with values ranging from 1.0 g/cm³ to 1.2 g/cm³. Bulk density is important for handling and storage of waste.

12. Sulphate Content:

- Sulphate levels range from 1320 mg/kg in Zone 1 to 1823 mg/kg in Zone 5.

- Higher sulphate levels may contribute to the acidity of leachate, which can impact groundwater quality.

13. Chloride Content:

- Chloride levels vary significantly, with Zone 2 having the highest concentration at 5948 mg/kg, and Zone 5 the lowest at 2157 mg/kg.

- High chloride content can be an indicator of industrial or municipal waste, and it poses a risk to both soil and water bodies by increasing salinity.

14. Sodium and Potassium Content:

- Sodium content is notably high across all zones, with Zone 2 showing the highest concentration at 6170 mg/kg.

- Potassium levels are highest in Zone 2 (3171 mg/kg) and lowest in Zone 5 (2474 mg/kg).

- Elevated sodium and potassium levels suggest the presence of organic and inorganic salts, which can affect soil structure and fertility.

15. Calcium Oxide and Magnesium Content:

- Calcium oxide is present in significant amounts, particularly in Zone 5 with 6440 mg/kg.

- Magnesium levels are much lower, ranging from 329.3 mg/kg in Zone 2 to 99.5 mg/kg in Zone 5.

- High calcium oxide content may indicate the presence of construction debris or lime, which can alter the pH of the waste material and surrounding environment.

16. Silica Content:

- Silica content varies from 67.5 mg/kg in Zone 4 to 96.3 mg/kg in Zone 1.

- Silica is a major component of many wastes, particularly those containing sand, glass, or other silicate materials.

Leachate Analysis

The Solid Waste Management Rules, 2016, under Schedule II, provide the standards for leachate quality that should be met when managing landfill sites, particularly concerning the treatment and disposal of leachate.

1. Biochemical Oxygen Demand (BOD):

- Report: 390 mg/l

2. Chemical Oxygen Demand (COD):

- Report: 1002 mg/l

3. Total Suspended Solids (TSS):

- Report: 260 mg/l

4. Ammoniacal Nitrogen:

- Report: 53.2 mg/l

5. Heavy Metals (Cd, Pb, Hg, etc.):

- Cadmium (Cd): 0.01 mg/l (Exceeds safe limits, typically <0.01 mg/l)

- Lead (Pb): 0.14 mg/l (Higher than acceptable limits, typically <0.1 mg/l)

- Mercury (Hg): <0.0005 mg/l (Within limits, typically <0.001 mg/l)

6. Total Dissolved Solids (TDS):

- Report: 6550 mg/l

ANNEXURE I – Analytical Reports

ZONE 1



TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NILOT/04/24/160
		Sample Code	: NILOT/04/24/160
Sampling Date	: 23.04.2024	Sample Receive Date:	: 23.04.2024
Analysis Start Date	: 24.04.2024	Analysis End Date	: 30.04.2024
Reporting Date	: 30.04.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone 1 - Location 1- (Coordinates A-19.06 B 72.93) (1:00pm depth - 3m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.7	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	37.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	3.9	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	11.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2136.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1295.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	1789.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1141.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	2873.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	447.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	36.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	66.9	mg/kg	
13	Zinc	172.7	mg/kg	
14	Copper	685.9	mg/kg	

page 1 of 2

A Neterwala Group Company

CIN : U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: NM CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/04/24/160
		Sample Code	: NIL/OT/04/24/160
Sampling Date	: 23.04.2024	Sample Receive Date	: 23.04.2024
Analysis Start Date	: 24.04.2024	Analysis End Date	: 30.04.2024
Reporting Date	: 30.04.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone 1 - Location 1- (Coordinates : A-19.06 B 72.93)(1:00pm depth - 3m)	Sampling Done By	: Netel (India) Limited
15	Mercury	1.3	mg/kg
16	Selenium	0.3	mg/kg
17	Arsenic	1.5	mg/kg
18	Gross Calorific Value	1680.9	kcal/kg
19	Net Calorific Value	1357.6	kcal/kg
20	Loss of Ignition	28.3	%
21	Fixed Carbon	4.7	%
22	Silica	104.4	mg/kg
23	Total Solids	62.2	%
24	Ash	72.0	%
25	Carbon Content	7.6	%
26	Total Nitrogen (N)	0.4	%
27	Sulphur	0.3	%
28	Hydrogen	6.1	%
29	Oxygen	13.7	%
			By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi

Technical Manager

Authorised by

Shraddha Kere

Quality Manager



End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soild waste	Test Report No.	Nil/OT/04/24/161
Sampling Date	23.04.2024	Sample Code	Nil/OT/04/24/161
Analysis Start Date	24.04.2024	Analysis End Date	30.04.2024
Reporting Date	30.04.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 1 - Location 1- (Coordinates A-19.06 B 72.93) (1.30pm depth 13m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	37.2	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	9.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	494.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	658.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2002.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2149.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3084.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1409.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	71.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	176.0	mg/kg	
13	Zinc	244.1	mg/kg	
14	Copper	193.6	mg/kg	

page 1 of 2

A Netenwala Group Company

CIN : U74999MH2010PLC142218

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

Phone : 72080978 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NLOT/04/24/161
		Sample Code	NLOT/04/24/161
Sampling Date	23.04.2024	Sample Receive Date	23.04.2024
Analysis Start Date	24.04.2024	Analysis End Date	30.04.2024
Reporting Date	30.04.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone 1 - Location 1- (Coordinates A-19.06 B 72.93) (1:30pm depth 13m)	Sampling Done By	Netel (India) Limited
15	Mercury	1.5	mg/kg
16	Selenium	0.5	mg/kg
17	Arsenic	163.0	mg/kg
18	Gross Calorific Value	2030.5	kcal/kg
19	Net Calorific Value	1713.6	kcal/kg
20	Loss of Ignition	17.7	%
21	Fixed Carbon	7.7	%
22	Silica	107.6	mg/kg
23	Total Solids	62.8	%
24	Ash	70.1	%
25	Carbon Content	9.8	%
26	Total Nitrogen [N]	0.7	%
27	Sulphur	0.5	%
28	Hydrogen	6.0	%
29	Oxygen	13.0	%
			By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/196
		Sample Code	NILOT/04/24/196
Sampling Date	25.04.2024	Sample Receive Date:	25.04.2024
Analysis Start Date	26.04.2024	Analysis End Date	03.05.2024
Reporting Date	03.05.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-01/Location-2(Co-ordinate A 19.06 B-72.93) (11.35 AM 08m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	48.0	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	6.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	11.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2075.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2093.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4624.7	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2194.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3473.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	687.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	56.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	155.8	mg/kg	
13	Zinc	226.3	mg/kg	
14	Copper	156.6	mg/kg	

Page 1 of 2

A Netiwala Group Company

CIN : U74999MH2013PLC142226

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

Phone : 72080976 92 / 93 / 94 / 95 + Website : www.netel-india.com + E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/04/24/196
		Sample Code	NIL/OT/04/24/196
Sampling Date	25.04.2024	Sample Receive Date	25.04.2024
Analysis Start Date	26.04.2024	Analysis End Date	03.05.2024
Reporting Date	03.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-01/Location-2(Co-ordinate A: 19.06 S-72.93) (11.35 AM 06m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.0	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	1929.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1575.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	14.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.4	%	APHA
22	Silica	110.0	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	52.0	%	Net reference
24	Ash	75.6	%	Net reference
25	Carbon Content	6.6	%	
26	Total Nitrogen (N)	0.3	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.2	%	
28	Hydrogen	6.7	%	
29	Oxygen	10.7	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste		Test Report No. : NILOT/04/24/197
			Sample Code : NILOT/04/24/197
Sampling Date	25.04.2024	Sample Receive Date : 25.04.2024	
Analysis Start Date	26.04.2024	Analysis End Date : 03.05.2024	
Reporting Date	03.05.2024	Sample Qty & Pckg : Plastic Zip lock bag	
Sampling Location	Zone 1 - Location -2 (Co-ordinate A-19.06 B-72.93) (3.30 pm depth 16m)	Sampling Done By : Netel (India) Limited	

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	37.0	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	9.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6.0	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1180.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	5355.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	6457.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	4621.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	2952.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	690.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	152.2	mg/kg	
12	Chromium	155.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	456.3	mg/kg	
14	Copper	455.5	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/197	
		Sample Code	NILOT/04/24/197	
Sampling Date	25.04.2024	Sample Receive Date	25.04.2024	
Analysis Start Date	26.04.2024	Analysis End Date	03.05.2024	
Reporting Date	03.05.2024	Sample Qty & Pckg	Plastic Ziplock bag	
Sampling Location	Zone 1 - Location -2 (Co-ordinate A-19.06 B-72.93) (3.30 pm depth 16m)	Sampling Done By	Netel (India) Limited	
15	Mercury	1.1	mg/kg	
16	Selenium	0.6	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.5	mg/kg	
18	Gross Calorific Value	1521.4	kcal/kg	IS 1350 (II)
19	Net Calorific Value	1278.7	kcal/kg	IS 1350 (II)
20	Loss of Ignition	18.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	6.4	%	APHA
22	Silica	95.4	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture, GOI 2011
23	Total Solids	63.0	%	Net reference
24	Ash	70.7	%	Net reference
25	Carbon Content	9.5	%	
25	Total Nitrogen (N)	0.8	%	Lab SOP NO: 027 Issue No. 04
27	Sulphur	0.8	%	
28	Hydrogen	4.6	%	
29	Oxygen	13.7	%	By Calculation

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Reviewed by

Neelima Dalvi

Technical Manager

Authorised by

Shraddha Kere

Quality Manager



End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NILOT/04/24/208
		Sample Code	: NILOT/04/24/208
Sampling Date	: 25.04.2024	Sample Receive Date	: 26.04.2024
Analysis Start Date	: 27.04.2024	Analysis End Date	: 04.05.2024
Reporting Date	: 04.05.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone 1 - Location-3(Co-ordinate A-19.06 B-72.93) (4.10 PM depth 9m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	34.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	1.9	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1093.8	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	607.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2504.7	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1636.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4013.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	802.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	2177.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	213.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	762.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	1510.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

page 1 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/208
		Sample Code	NILOT/04/24/208
Sampling Date	25.04.2024	Sample Receive Date:	26.04.2024
Analysis Start Date	27.04.2024	Analysis End Date	04.05.2024
Reporting Date	04.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 1 - Location-3(Co-ordinate A-19.06 B-72.93) (4.10 PM depth 9m)	Sampling Done By	Netel (India) Limited

15	Mercury	2.5	mg/kg	EPA 3050B & By ICP
16	Selenium	1.0	mg/kg	
17	Arsenic	2.9	mg/kg	
18	Gross Calorific Value	1857.1	kcal/kg	IS 1350 (II)
19	Net Calorific Value	1638.7	kcal/kg	IS 1350 (II)
20	Loss of Ignition	15.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.8	%	APHA
22	Silica	111.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	65.4	%	Net reference
24	Ash	74.0	%	Net reference
25	Carbon Content	7.2	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	0.6	%	
28	Hydrogen	4.1	%	
29	Oxygen	13.9	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/209
		Sample Code	NILOT/04/24/209
Sampling Date	25.04.2024	Sample Receive Date	26.04.2024
Analysis Start Date	27.04.2024	Analysis End Date	04.05.2024
Reporting Date	04.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 1 - Location-3(Co-ordinate A-19.06 B-72.93) (7.30 PM depth 19m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	1.5	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1205.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1320.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4726.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3405.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4199.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	812.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	44.6	mg/kg	
12	Chromium	170.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	304.7	mg/kg	
14	Copper	201.7	mg/kg	

page 1 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	NM CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/04/24/209
		Sample Code	NI/OT/04/24/209
Sampling Date	25.04.2024	Sample Receive Date	26.04.2024
Analysis Start Date	27.04.2024	Analysis End Date	04.05.2024
Reporting Date	04.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 1 - Location-3(Co-ordinate A-19.06 B-72.93) (7.30 PM depth 19m)	Sampling Done By	Netel (India) Limited
15	Mercury	0.7	mg/kg
16	Selenium	0.3	mg/kg
17	Arsenic	0.7	mg/kg
18	Gross Calorific Value	1388.4	kcal/kg
19	Net Calorific Value	1096.9	kcal/kg
20	Loss of Ignition	14.2	%
21	Fixed Carbon	2.4	%
22	Silica	76.1	mg/kg
23	Total Solids	63.8	%
24	Ash	78.9	%
25	Carbon Content	3.9	%
26	Total Nitrogen (N)	0.2	%
27	Sulphur	0.4	%
28	Hydrogen	5.5	%
29	Oxygen	11.1	%
			By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/04/24/210
		Sample Code	Nil/OT/04/24/210
Sampling Date	26.04.2024	Sample Receive Date	26.04.2024
Analysis Start Date	27.04.2024	Analysis End Date	04.05.2024
Reporting Date	04.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-4(Co-ordinate A-19.06 B-72.93) (10.45 AM 12m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	29.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	1.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	328.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	922.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	1412.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2455.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4341.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	523.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	19.8	mg/kg	
12	Chromium	236.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	131.2	mg/kg	
14	Copper	154.3	mg/kg	

page 1 of 2

A Netewala Group Company

CIN : U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

Phone : 72080976 92 / 93 / 94 / 95 + Website : www.netel-india.com • E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground			
Main Client	Brihanmumbai Municipal Corporation			
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS			
Laboratory	Netel India Limited			
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/210	
		Sample Code	NILOT/04/24/210	
Sampling Date	26.04.2024	Sample Receive Date:	26.04.2024	
Analysis Start Date	27.04.2024	Analysis End Date	04.05.2024	
Reporting Date	04.05.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone-1 Location-4(Co-ordinate A-19.06 B-72.93) (10.45 AM 12m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.3	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.6	mg/kg	
18	Gross Calorific Value	659.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	480.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	8.6	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	0.3	%	APHA
22	Silica	106.5	mg/kg	Lab SOP no. NL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	70.7	%	Net reference
24	Ash	87.5	%	Net reference
25	Carbon Content	0.6	%	
26	Total Nitrogen (N)	0.1	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	<0.1	%	
28	Hydrogen	3.4	%	
29	Oxygen	8.4	%	By Calculation

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kore
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/04/211
		Sample Code	NI/OT/04/211
Sampling Date	26.04.2024	Sample Receive Date	26.04.2024
Analysis Start Date	27.04.2024	Analysis End Date	04.05.2024
Reporting Date	04.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-4(Co-ordinate A-19.06 B-72.93) (3.10PM 22m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	33.0	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	2.9	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	884.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1219.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	5839.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3205.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4068.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	639.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	24.5	mg/kg	
12	Chromium	201.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	98.4	mg/kg	
14	Copper	131.7	mg/kg	

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A Neterwala Group Company

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Scild waste	Test Report No.	: NILOT/04/24/211
		Sample Code	: NILOT/04/24/211
Sampling Date	: 26.04.2024	Sample Receive Date	: 26.04.2024
Analysis Start Date	: 27.04.2024	Analysis End Date	: 04.05.2024
Reporting Date	: 04.05.2024	Sample Qty &Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-1 Location-4(Co-ordinate A-19.06 B-72.93) (3.10PM 22m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.5	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.6	mg/kg	
18	Gross Calorific Value	912.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	687.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	7.7	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	0.9	%	APHA
22	Silica	324.4	mg/kg	Lab Sop no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	67.0	%	Net reference
24	Ash	86.1	%	Net reference
25	Carbon Content	1.4	%	
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	0.1	%	
28	Hydrogen	4.3	%	
29	Oxygen	8.0	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/04/24/214
		Sample Code	NIL/OT/04/24/214
Sampling Date	27.04.2024	Sample Receive Date	29.04.2024
Analysis Start Date	29.04.2024	Analysis End Date	06.05.2024
Reporting Date	06.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-05 (Co-ordinate A-19.06 B-72.93) (5.30PM 15m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.8	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	41.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	7.0	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	11.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2074.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1509.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4099.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3825.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4292.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	344.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	105.7	mg/kg	
12	Chromium	119.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	928.3	mg/kg	
14	Copper	386.4	mg/kg	

page 1 of 2

A Neterwala Group Company

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Registered office : Liberty Building, 3rd Floor, Sir Vilhaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/214
		Sample Code	NILOT/04/24/214
Sampling Date	27.04.2024	Sample Receive Date	29.04.2024
Analysis Start Date	29.04.2024	Analysis End Date	06.05.2024
Reporting Date	06.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-05 (Co-ordinate A-19.06 B-72.93) (5.30PM 15m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.3	mg/kg	
16	Selenium	0.8	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.5	mg/kg	
18	Gross Calorific Value	2263.3	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1944.7	Kcal/Kg	IS 1350 (I)
20	Loss of Ignition	22.2	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	8.5	%	APHA
22	Silica	71.1	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture, GOI 2011
23	Total Solids	58.9	%	Net reference
24	Ash	66.0	%	Net reference
25	Carbon Content	13.0	%	
26	Total Nitrogen (N)	0.6	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.4	%	
28	Hydrogen	6.0	%	
29	Oxygen	14.0	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/215
		Sample Code	NILOT/04/24/215
Sampling Date	27.04.2024	Sample Receive Date	29.04.2024
Analysis Start Date	29.04.2024	Analysis End Date	06.05.2024
Reporting Date	06.05.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-05 (Co-ordinate A-19.06 B-72.93) (10.35PM 25m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	32.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	11.7	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	361.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1907.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	6685.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3042.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4027.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	575.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	15.1	mg/kg	
12	Chromium	163.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	109.5	mg/kg	
14	Copper	90.1	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	Nil/OT/04/24/215
		Sample Code	Nil/OT/04/24/215
Sampling Date	27.04.2024	Sample Receive Date	29.04.2024
Analysis Start Date	29.04.2024	Analysis End Date	06.05.2024
Reporting Date	06.05.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-05 (Co-ordinate A-19.06 B-72.93) (10.35PM 25m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.1	mg/kg	
16	Selenium	1.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.3	mg/kg	
18	Gross Calorific Value	505.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	267.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	12.7	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.4	%	APHA
22	Silica	78.8	mg/kg	Lab Sop no. Nil/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	57.5	%	Net reference
24	Ash	81.4	%	Net reference
25	Carbon Content	0.7	%	
26	Total Nitrogen (N)	<0.1	%	
27	Sulphur	0.1	%	
28	Hydrogen	4.5	%	
29	Oxygen	13.3	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIJOT/04/24/237
		Sample Code	NIJOT/04/24/237
Sampling Date	28.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	30.04.2024	Analysis End Date	07.05.2024
Reporting Date	07.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location -6(Co-ordinate A-19.06.8-72.93) (10.45 am 18Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	27.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	6.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.0	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	960.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	5590.7	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	8205.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3995.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3710.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	908.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	173.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	158.6	mg/kg	
13	Zinc	252.6	mg/kg	
14	Copper	264.5	mg/kg	

page 1 of 2

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/237
		Sample Code	NILOT/04/24/237
Sampling Date	28.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	30.04.2024	Analysis End Date	07.05.2024
Reporting Date	07.05.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-1 Location -8(Co-ordinate A-19.06.8-72.93)(10.45 am 18Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.9	mg/kg	
16	Selenium	0.9	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.9	mg/kg	
18	Gross Calorific Value	1488.2	Kcal/Kg	IS 1360 (II)
19	Net Calorific Value	1196.2	Kcal/Kg	IS 1360 (II)
20	Loss of ignition	12.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	20	%	APHA
22	Silica	154.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	72.3	%	Net reference
24	Ash	80.8	%	Net reference
25	Carbon Content	3.9	%	
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	0.4	%	
28	Hydrogen	5.5	%	
29	Oxygen	9.2	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shroddha Koro
Quality Manager



TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NIL/OT/04/24/238
		Sample Code	NIL/OT/04/24/238
Sampling Date	28.04.2024	Sample Receive Date:	30.04.2024
Analysis Start Date	30.04.2024	Analysis End Date	07.05.2024
Reporting Date	07.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location -6(Co-ordinate A-19.06,B-72.93) (5.10pm 28Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.4	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	6.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	2.1	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	1.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	384.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2429.8	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	8135.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1912.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	1758.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	521.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	7.4	mg/kg	
12	Chromium	73.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	75.6	mg/kg	
14	Copper	57.3	mg/kg	

page 1 of 2

A Neterwala Group Company

CIN : UT4999MH2003PLC142218

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

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Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/238
		Sample Code	NILOT/04/24/238
Sampling Date	28.04.2024	Sample Receive Date:	30.04.2024
Analysis Start Date	30.04.2024	Analysis End Date	07.05.2024
Reporting Date	07.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location -6(Co-ordinate A-19.08,B-72.93) (6.10pm 28Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.0	mg/kg	
16	Selenium	0.9	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.2	mg/kg	
18	Gross Calorific Value	701.0	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	649.0	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	4.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.4	%	APHA
22	Silica	84.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	93.1	%	Net reference
24	Ash	94.1	%	Net reference
25	Carbon Content	0.6	%	
26	Total Nitrogen (N)	<0.1	%	
27	Sulphur	<0.1	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	1.0	%	
29	Oxygen	4.3	%	By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/228
		Sample Code	: NIL/OT/06/24/228
Sampling Date	: 11.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-01, Location-01 (co-ordinates-A-19.0627806/B-72.9337521)(time-12.55pm/depth-21m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	29.9	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	16.0	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1057.3	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	906.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	1842.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1620.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4902.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	350.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	186.5	mg/kg	
12	Chromium	193.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	367.2	mg/kg	
14	Copper	305.9	mg/kg	

page 1 of 2

A Neterwala Group Company

CIN: U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihamumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/228
		Sample Code	Nil/OT/06/24/228
Sampling Date	11.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-01/Location -07(co-ordinates-A-19.0627808/B-72.9337521)(time-12.55pm/depth-21m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.3	mg/kg
16	Selenium	0.3	mg/kg
17	Arsenic	2.1	mg/kg
18	Gross Calorific Value	2351.3	Kcal/Kg
19	Net Calorific Value	2317.4	Kcal/Kg
20	Loss of Ignition	11.6	%
21	Fixed Carbon	1.6	%
22	Silica	41.3	mg/kg
23	Total Solids	70.1	%
24	Ash	82.4	%
25	Carbon Content	3.0	%
26	Total Nitrogen (N)	0.6	%
27	Sulphur	0.2	%
28	Hydrogen	0.6	%
29	Oxygen	13.2	%
			By Calculation

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- Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIU/OT/06/24/229
		Sample Code	NIU/OT/06/24/229
Sampling Date	11.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-UV/Location -U/(co-ordinates-A-19.0627808/B-72.9337521)(time-02.00pm/depth-31m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	30.0	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	19.1	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	971.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1560.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3757.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2254.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3582.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1062.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	52.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	195.0	mg/kg	
13	Zinc	95.9	mg/kg	
14	Copper	115.7	mg/kg	

page 1 of 2

A Neterwala Group Company

CIN : U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/06/24/229
Sampling Date	11.06.2024	Sample Code	: NIL/OT/06/24/229
Analysis Start Date	15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-07/Location-07/(co-ordinates-A-19.0627808/B-72.9337521)(lime-02.00pm/depth-31m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	1472.4	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1471.9	Kcal/Kg	IS 1350 (III)
20	Loss of Ignition	11.9	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	0.0	%	APHA
22	Silica	41.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	70.0	%	Net reference
24	Ash	80.9	%	Net reference
25	Carbon Content	0.0	%	
26	Total Nitrogen (N)	1.0	%	
27	Sulphur	0.0	%	
28	Hydrogen	0.0	%	
29	Oxygen	18.2	%	By Calculation

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



"End of Report"

CIN : U74999MH2003PLC142228

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/06/24/226
		Sample Code	NI/OT/06/24/226
Sampling Date	11.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-01/Location -08/Coordinates-A-19.0638861/B-72.9341880/(time-11.00am/depth-24m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.11	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	43.77	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	23.44	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6.82	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	954.20	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1005.40	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2049.80	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2325.90	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4157.83	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	593.98	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	229.90	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	163.30	mg/kg	
13	Zinc	424.00	mg/kg	
14	Copper	258.70	mg/kg	

page 1 of 2

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/226
		Sample Code	NILOT/06/24/226
Sampling Date	11.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-01/Location -08/coordinates-A-19.0638861/B-72.9341880/(time-11.00am/depth-24m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.80	mg/kg	
16	Selenium	0.39	mg/kg	EPA 3050B & By ICP
17	Arsenic	3.10	mg/kg	
18	Gross Calorific Value	1384.10	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1337.46	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	19.67	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.95	%	APHA
22	Silica	53.00	mg/kg	Lab Sop no. NI/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	56.23	%	Net reference
24	Ash	75.65	%	Net reference
25	Carbon Content	2.00	%	
26	Total Nitrogen (N)	0.79	%	
27	Sulphur	0.00	%	
28	Hydrogen	0.88	%	
29	Oxygen	20.68	%	By Calculation

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Reviewed by

Neelima Dalvi

Technical Manager

Authorised by

Shraddha Kere

Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NIU/OT/06/24/227
		Sample Code	NIU/OT/06/24/227
Sampling Date	11.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-01/Location -01(coordinates-A-19.0636881/B-72.9337521)(time-11.35am/depth-34m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.4	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	27.9	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	17.1	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	206.3	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	652.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	518.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1956.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3038.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1302.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	23.4	mg/kg	
12	Chromium	264.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	57.7	mg/kg	
14	Copper	96.9	mg/kg	

page 1 of 2

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/227
		Sample Code	Nil/OT/06/24/227
Sampling Date	11.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-01, Location-05(Co-ordinates-A-19.0638861/B-72.9337521)(time-11.35am/depth-34m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	
16	Selenium	25.0	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	1306.2	Kcal/Kg	IS 1350 (I)
19	Net Calorific Value	1230.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	11.7	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	5.2	%	APHA
22	Silica	119.0	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	72.1	%	Net reference
24	Ash	77.7	%	Net reference
25	Carbon Content	9.5	%	
26	Total Nitrogen (N)	1.3	%	
27	Sulphur	0.0	%	
28	Hydrogen	1.4	%	
29	Oxygen	10.1	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/04/24/194
		Sample Code	Nil/OT/04/24/194
Sampling Date	24.04.2024	Sample Receive Date	24.04.2024
Analysis Start Date	25.04.2024	Analysis End Date	02.05.2024
Reporting Date	02.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 1 - Location-9 (Co-ordinate A : 19.06 B-72.93) (7.30 PM depth 27m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	39.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	9.0	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	2.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	3823.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	17536.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	15756.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	4859.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4021.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1264.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	24.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	182.4	mg/kg	
13	Zinc	131.7	mg/kg	
14	Copper	65.8	mg/kg	

page 1 of 2

A Neterwala Group Company

CIN : UT4999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vitthalas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground			
Main Client : Brihamumbai Municipal Corporation			
Contractor Name : N.M.CONULTANT-SKW SOIL AND SURVEYS			
Laboratory : Netel India Limited			
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/04/24/194
		Sample Code	: NIL/OT/04/24/194
Sampling Date	: 24.04.2024	Sample Receive Date	: 24.04.2024
Analysis Start Date	: 25.04.2024	Analysis End Date	: 02.05.2024
Reporting Date	: 02.05.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone 1 - Location-9 (Co-ordinate A 19.06 B-72.93) (7.30 PM depth 27m)	Sampling Done By	: Netel (India) Limited
15	Mercury	1.0	mg/kg
16	Selenium	0.3	mg/kg
17	Arsenic	1.1	mg/kg
18	Gross Calorific Value	933.0	kcal/kg
19	Net Calorific Value	691.9	kcal/kg
20	Loss of Ignition	16.6	%
21	Fixed Carbon	1.7	%
22	Silica	61.7	mg/kg
23	Total Solids	60.6	%
24	Ash	79.0	%
25	Carbon Content	2.3	%
26	Total Nitrogen (N)	0.2	%
27	Sulphur	0.4	%
28	Hydrogen	4.6	%
29	Oxygen	13.5	%
By Calculation			

Note :

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3. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIUOT/04/24/195
		Sample Code	NIUOT/04/24/195
Sampling Date	24.04.2024	Sample Receive Date:	24.04.2024
Analysis Start Date	25.04.2024	Analysis End Date	02.05.2024
Reporting Date	02.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 1 - Location-9 (Co-ordinate A : 19.06 B-72.93) (9.30 PM depth 37m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.6	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	14.2	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	3.9	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	0.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	833.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	4625.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	11532.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1455.7	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	2663.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	799.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	11.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	68.4	mg/kg	
13	Zinc	54.4	mg/kg	
14	Copper	47.8	mg/kg	

page 1 of 2

A Neterwala Group Company

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NILOT/04/24/195
		Sample Code	: NILOT/04/24/195
Sampling Date	: 24.04.2024	Sample Receive Date:	24.04.2024
Analysis Start Date	: 25.04.2024	Analysis End Date	: 02.05.2024
Reporting Date	: 02.05.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone 1 - Location-9 (Co-ordinate A : 19.06 B-72.93) (9.30 PM depth 37m)	Sampling Done By	: Netel (India) Limited

15	Mercury	0.8	mg/kg	EPA 3050B & By ICP
16	Selenium	0.2	mg/kg	
17	Arsenic	0.9	mg/kg	
18	Gross Calorific Value	1494.9	kcal/kg	IS 1350 (II)
19	Net Calorific Value	1413.8	kcal/kg	IS 1350 (II)
20	Loss of Ignition	5.4	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	0.5	%	APHA
22	Silica	47.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	85.8	%	Net reference
24	Ash	90.6	%	Net reference
25	Carbon Content	0.7	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.1	%	
27	Sulphur	<0.1	%	
28	Hydrogen	1.5	%	
29	Oxygen	7.0	%	By Calculation

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



"End of Report"

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NILOT/04/24/212
		Sample Code	: NILOT/04/24/212
Sampling Date	: 26.04.2024	Sample Receive Date:	: 29.04.2024
Analysis Start Date	: 29.04.2024	Analysis End Date	: 06.05.2024
Reporting Date	: 06.05.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-1 Location-10 (Co-ordinate A-19.06 B-72.93) (7.45AM 30m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	7.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2475.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	5380.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	5671.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3139.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	5416.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	580.4	mg/kg	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	11.8	mg/kg	
12	Chromium	141.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	103.2	mg/kg	
14	Copper	78.2	mg/kg	

page 1 of 2

A Netenwala Group Company

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/04/24/212
		Sample Code	Nil/OT/04/24/212
Sampling Date	26.04.2024	Sample Receive Date	29.04.2024
Analysis Start Date	29.04.2024	Analysis End Date	06.05.2024
Reporting Date	06.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-10 (Co-ordinate A-19.06 B-72.93) (7.45AM 30m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.5	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.7	mg/kg	
18	Gross Calorific Value	1406.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1126.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	9.8	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.6	%	APHA
22	Silica	47.8	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	63.5	%	Net reference
24	Ash	81.7	%	Net reference
25	Carbon Content	2.1	%	
26	Total Nitrogen (N)	0.1	%	
27	Sulphur	0.4	%	
28	Hydrogen	5.3	%	
29	Oxygen	10.4	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

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A Netewala Group Company

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Netel (India) Limited

TEST REPORT

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M.CONULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type : Dumping Solid waste	Test Report No. : NIL/OT/04/24/213			
	Sample Code : NIL/OT/04/24/213			
Sampling Date : 26.04.2024	Sample Receive Date : 29.04.2024			
Analysis Start Date : 29.04.2024	Analysis End Date : 06.05.2024			
Reporting Date : 06.05.2024	Sample Qty & Pckg : Plastic Zip lock bag			
Sampling Location : Zone-1 Location-10 (Co-ordinate A-19.06 B-72.93) (11.30PM 40m)	Sampling Done By : Netel (India) Limited			
Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	16.7	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	6.5	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.7	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2904.6	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	9291.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	1164.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3009.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4753.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	848.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	11.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	261.3	mg/kg	
13	Zinc	98.9	mg/kg	
14	Copper	70.1	mg/kg	

page 1 of 2

A Neterwala Group Company

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIIL/OT/04/24/213
		Sample Code	NIIL/OT/04/24/213
Sampling Date	26.04.2024	Sample Receive Date	29.04.2024
Analysis Start Date	29.04.2024	Analysis End Date	06.05.2024
Reporting Date	06.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-1 Location-10 (Co-ordinate A-19.06 B-72.93) (11.30PM 40m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.8	mg/kg	
16	Selenium	1.0	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.8	mg/kg	
18	Gross Calorific Value	855.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	828.7	Kcal/Kg	IS 1350 (III)
20	Loss of Ignition	8.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.0	%	APHA
22	Silica	89.9	mg/kg	Lab SOP no. NIIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	83.3	%	Not reference
24	Ash	81.5	%	Not reference
25	Carbon Content	1.6	%	
26	Total Nitrogen (N)	0.2	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	3.1	%	
28	Hydrogen	0.5	%	
29	Oxygen	13.3	%	By Calculation

Note :

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- Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager



ZONE 2



TEST REPORT

Netel (India) Limited

Project Name		Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client		Bhiarmumbai Municipal Corporation		
Contractor Name		N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory		Netel India Limited		
Sample Type	Compost	Test Report No.	NIL/OT/05/24/176	
Sampling Date	23.05.2024	Sample Code	NIL/OT/05/24/176	
Analysis Start Date	27.05.2024	Analysis End Date	04.06.2024	
Reporting Date	04.06.2024	Sample Qty & Pkg	Plastic Zip lock bag	
Sampling Location	Zone-02/Location-11(co-ordinates-A-19 0626639/B-72.934332)(time-9:45am/depth-03m)	Sampling Not Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	18.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	14.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.7	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2977.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	19.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	1020.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	995.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	6560.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	351.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	43.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	48.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	211.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	190.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SGN SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	NIJOT/05/24/176
		Sample Code	NIJOT/05/24/176
Sampling Date	23.05.2024	Sample Receive Date	27.05.2024
Analysis Start Date	27.05.2024	Analysis End Date	04.06.2024
Reporting Date	04.06.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-02 Location-11(co-ordinates-A-19.0626639/B-72.9343332)(time-9:45am/depth-03m)	Sampling Not Done By	Netel (India) Limited

Sl. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	
16	Selenium	0.8	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.0	mg/kg	
18	Gross Calorific Value	1360.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1238.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	10.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.5	%	APHA
22	Silica	79.9	mg/kg	Lab Sop no. NIL/SDP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	81.6	%	Net reference
24	Ash	81.1	%	Net reference
25	Carbon Content	7.3	%	
26	Total Nitrogen (N)	0.6	%	
27	Sulphur	0.5	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	2.3	%	
29	Oxygen	8.3	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



"End of Report"

page 2 of 2

A Netewala Group Company

CIN : U74999MH2003PLC142228

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground			
Main Client	Brihanmumbai Municipal Corporation			
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS			
Laboratory	Netel India Limited			
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/218	
		Sample Code	: NIL/OT/06/24/218	
Sampling Date	: 10.06.2024	Sample Receive Date	: 15.06.2024	
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024	
Reporting Date	: 26.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag	
Sampling Location	Zone-02/Location -11(co-ordinates- A-19.0656639/B-72.9343332)(time 07.55pm/depth-13m)	Sampling Done By	: Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.33	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	20.9	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	10.7	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	1.06	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	500.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	754.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2054.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	631.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	5924.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1154.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	11.5	mg/kg	
12	Chromium	162.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	78.7	mg/kg	
14	Copper	94.9	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/218
		Sample Code	NILOT/06/24/218
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -11(co-ordinates- A-19.0656639/B-72.9343332)(time- 07.55pm/depth-13m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.06	mg/kg
16	Selenium	0.23	mg/kg
17	Arsenic	0.87	mg/kg
18	Gross Calorific Value	1080.20	Kcal/Kg
19	Net Calorific Value	1047.67	Kcal/Kg
20	Loss of Ignition	9.26	%
21	Fixed Carbon	0.42	%
22	Silica	105.80	mg/kg
23	Total Solids	79.10	%
24	Ash	88.88	%
25	Carbon Content	0.88	%
26	Total Nitrogen (N)	2.24	%
27	Sulphur	0.00	%
28	Hydrogen	0.61	%
29	Oxygen	7.39	%
Method			
15	EPA 3050B & By ICP		
16	IS 1350 (II)		
17	IS 1350 (II)		
20	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011		
21	APHA		
22	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011		
23	Net reference		
24	Net reference		
25			
26			
27	Lab SOP NO. 027 Issue No. 04		
28			
29	By Calculation		

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

Page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	NM CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/240
		Sample Code	NILOT/04/24/240
Sampling Date	30.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	02.05.2024	Analysis End Date	08.05.2024
Reporting Date	08.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-2 Location -12(Co-ordinate A-19.06,B-72.93) (11.30 am 6Meter)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
1	Bulk Density	0.6	g/cm ³
2	Moisture Content	32.3	%
3	Volatile Content	4.3	%
4	Total Organic Carbon	8.2	%
5	Sulphate	2253.1	mg/kg
6	Chloride	732.3	mg/kg
7	Sodium	2162.5	mg/kg
8	Potassium	732.3	mg/kg
9	Calcium Oxide	2558.5	mg/kg
10	Magnesium	519.4	mg/kg
11	Lead	159.2	mg/kg
12	Chromium	128.8	mg/kg
13	Zinc	585.3	mg/kg
14	Copper	279.9	mg/kg

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	Nil/OT/04/24/240
		Sample Code	Nil/OT/04/24/240
Sampling Date	30.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	02.05.2024	Analysis End Date	08.05.2024
Reporting Date	08.05.2024	Sample Crt & Pkg	Plastic Zip lock bag
Sampling Location	Zone-2 Location -12(Co-ordinate A-19.06,B-72.93) (11.30 am 6 Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	
16	Selenium	0.6	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.9	mg/kg	
18	Gross Calorific Value	2339.6	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2037.0	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	18.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	11.6	%	APHA
22	Silica	88.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	67.7	%	Net reference
24	Ash	62.9	%	Net reference
25	Carbon Content	18.8	%	
26	Total Nitrogen (N)	0.5	%	
27	Sulphur	0.2	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	5.7	%	
29	Oxygen	11.9	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

Page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/04/24/241
		Sample Code	: NIL/OT/04/24/241
Sampling Date	: 30.04.2024	Sample Receive Date	: 30.04.2024
Analysis Start Date	: 02.05.2024	Analysis End Date	: 08.05.2024
Reporting Date	: 08.05.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-2 Location -12(Co-ordinate A : 19.06,B-72.90) (12.20pm 10 Meter)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	41.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	0.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	10.9	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	618.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	4390.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4849.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	868.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3510.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	925.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	134.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	142.9	mg/kg	
13	Zinc	473.1	mg/kg	
14	Copper	255.9	mg/kg	

page 1 of 2

A Neterwala Group Company

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Registered office : Liberty Building, 3rd Floor, Sir Vilhaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/241
		Sample Code	NILOT/04/24/241
Sampling Date	30.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	02.05.2024	Analysis End Date	08.05.2024
Reporting Date	08.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-2 Location -12(Co-ordinate A-19.06,B-72.53) (12.20pm 16Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	
16	Selenium	0.9	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	402.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	168.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	12.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.7	%	APHA
22	Silica	58.9	mg/kg	Lab SOP no. NIUSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	58.7	%	Net reference
24	Ash	82.1	%	Net reference
25	Carbon Content	1.3	%	
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	<0.1	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	4.5	%	
29	Oxygen	12.0	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/04/24/242
		Sample Code	NILOT/04/24/242
Sampling Date	30.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	02.05.2024	Analysis End Date	08.05.2024
Reporting Date	08.05.2024	Sample City & Pckg	Plastic Zip lock bag
Sampling Location	Zone-2 Location -13(Co-ordinate A-19.05, B-72.93) (3.00pm 9Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	37.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	4.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1395.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1613.9	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4647.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2916.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	2822.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	518.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	46.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	70.6	mg/kg	
13	Zinc	575.6	mg/kg	
14	Copper	310.2	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NUOT/04/24/242
		Sample Code	NUOT/04/24/242
Sampling Date	30.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	02.05.2024	Analysis End Date	08.05.2024
Reporting Date	08.05.2024	Sample City & Pckg	Plastic Ziplock bag
Sampling Location	Zone-2 Location -13(Co-ordinate A-19.06, B-72.93) (3.00pm 9 Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.7	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.73	mg/kg	
18	Gross Calorific Value	1457.1	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1203.0	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	14.8	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	7.5	%	APHA
22	Silica	92.6	mg/kg	Lab Sop no. NILSCP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	62.4	%	Net reference
24	Ash	73.8	%	Net reference
25	Carbon Content	11.4	%	
26	Total Nitrogen (N)	0.5	%	
27	Sulphur	0.2	%	Lab SCP NO. 027 Issue No. 04
28	Hydrogen	4.7	%	
29	Oxygen	9.4	%	By Calculation

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Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

Page 2 of 2

A Netewala Group Company

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	: NIL/OT/04/24/243
		Sample Code	: NIL/OT/04/24/243
Sampling Date	: 30.04.2024	Sample Receive Date	: 30.04.2024
Analysis Start Date	: 02.05.2024	Analysis End Date	: 08.05.2024
Reporting Date	: 08.05.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-2 Location -13(Co-ordinate A : 19.06,B-72.93) (3.50pm 19Meter)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	35.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	0.3	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	8.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	779.6	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	13144.9	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	13105.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	4822.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4050.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	925.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	22.2	mg/kg	
12	Chromium	135.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	200.1	mg/kg	
14	Copper	131.5	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/04/24/243
		Sample Code	NILOT/04/24/243
Sampling Date	30.04.2024	Sample Receive Date	30.04.2024
Analysis Start Date	02.05.2024	Analysis End Date	08.05.2024
Reporting Date	08.05.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-2 Location -13(Co-ordinate A-19.06,B-72.93) (3.50pm 19Meter)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.4	mg/kg	
18	Gross Calorific Value	900.1	Kcal/Kg	IS 1350 (III)
19	Net Calorific Value	816.3	Kcal/Kg	IS 1350 (III)
20	Loss of Ignition	18.4	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.6	%	APHA
22	Silica	43.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	64.6	%	Net reference
24	Ash	74.6	%	Net reference
25	Carbon Content	7.4	%	
26	Total Nitrogen (N)	0.6	%	
27	Sulphur	0.3	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	1.6	%	
29	Oxygen	15.5	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/214
		Sample Code	NILOT/06/24/214
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02 Location -14 (co-ordinates- A-19.0667996 E-72.9334732) (time- 07.15pm) / depth-22m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	19.5	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2398.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	7515.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4196.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3239.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3519.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	928.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	212.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	370.6	mg/kg	
13	Zinc	374.5	mg/kg	
14	Copper	628.7	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihamumbai Municipal Corporation		
Contractor Name	: N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/214
		Sample Code	: NIL/OT/06/24/214
Sampling Date	: 10.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pckg	: Plastic Ziplock bag
Sampling Location	Zone-02 Location -14(co-ordinates- A-19.0667996/B-72.9334732 (time- 07.15pm/depth-22m)	Sampling Done By	: Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	2.1	mg/kg
15	Selenium	0.3	mg/kg
17	Arsenic	2.1	mg/kg
18	Gross Calorific Value	3088.3	Kcal/Kg
19	Net Calorific Value	3032.7	Kcal/Kg
20	Loss of Ignition	15.5	%
21	Fixed Carbon	28	%
22	Silica	43.7	mg/kg
23	Total Solids	63.1	%
24	Ash	77.7	%
25	Carbon Content	49	%
26	Total Nitrogen (N)	1	%
27	Sulphur	0.9	%
28	Hydrogen	1.1	%
29	Oxygen	14.5	%
			Method
			EPA 3050B & By ICP
			IS 1350 (II)
			IS 1350 (III)
			Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
			APHA
			Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
			Net reference
			Net reference
			Lab SOP NO. 027 Issue No. 04
			By Calculation

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4. Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Bhau Mumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIU/OT/06/24/207
		Sample Code	NIU/OT/06/24/207
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -15(co-ordinates- A-19.0575155(B-72.9327417)(time- 04.55pm/depth-15m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	39.4	%	Lab Sop no. NILSOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	18.3	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.2	%	Lab Sop no. NILSOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2581.2	mg/kg	Lab Sop no. NILSOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	6277	mg/kg	Lab Sop no. NILSOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3818.6	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3674.4	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3154.4	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	563.3	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	103.9	mg/kg	Lab Sop no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	249.4	mg/kg	Lab Sop no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	246.0	mg/kg	
14	Copper	180.8	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/06/24/207
		Sample Code	: NIL/OT/06/24/207
Sampling Date	: 10.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-02 Location -15(co-ordinates- A-19.0675155,B-72.9327417)(time- 04.55pm depth-15m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.9	mg/kg	EPA 3050B & By ICP
16	Selenium	0.4	mg/kg	
17	Arsenic	1.6	mg/kg	
18	Gross Calorific Value	653	Kcal/Kg	
19	Net Calorific Value	600.5	Kcal/Kg	
20	Loss of Ignition	15.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.8	%	APHA
22	Silica	121.6	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	60.6	%	Net reference
24	Ash	77.9	%	Net reference
25	Carbon Content	6	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	1.3	%	
27	Sulphur	0.5	%	
28	Hydrogen	1	%	
29	Oxygen	13.3	%	By Calculation

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4. Method Reference: "The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi

Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/06/24/223
		Sample Code	: NIL/OT/06/24/223
Sampling Date	: 10.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-02/Location -15(co-ordinates- A-19.0675455/B-72.9327497)(time- 05.45pm/depth-25m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.0	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	18.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.26	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	3079.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	10804.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	7285.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	6730.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3559.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	586.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	57.0	mg/kg	
12	Chromium	257.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	173.9	mg/kg	
14	Copper	166.1	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/223
		Sample Code	NIL/OT/06/24/223
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location-15(oo-coordinates-A-19.0675455/B-72.9327497)(time-05.45pm/depth-25m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.23	mg/kg	
16	Selenium	0.18	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.11	mg/kg	
18	Gross Calorific Value	1053.93	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1012.06	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	12.83	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.57	%	APHA
22	Silica	44.20	mg/kg	Lab SOP no. NIL/SCP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	64.01	%	Net reference
24	Ash	79.83	%	Net reference
25	Carbon Content	2.54	%	
26	Total Nitrogen (N)	1.08	%	
27	Sulphur	1.02	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	0.79	%	
29	Oxygen	14.74	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

Page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/130
		Sample Code	NILOT/06/24/130
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -16(co-ordinates- A-19.06780/B-72.93331)(time- 07.30pm/depth-18m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	28.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	22.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1446.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	976.8	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3555.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2077.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4078.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	349.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	148.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	247.5	mg/kg	
13	Zinc	742.3	mg/kg	
14	Copper	427.6	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/06/24/130
		Sample Code	NI/OT/06/24/130
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Cty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -16(co-ordinates- A-19.06780/B-72.93331)(time- 07.30pm/depth-18m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	2	mg/kg	
18	Gross Calorific Value	2225.8	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1952.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	13.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	5.2	%	APHA
22	Silica	114.6	mg/kg	Lab SOP no. NI/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	71.4	%	Net reference
24	Ash	72.6	%	Net reference
25	Carbon Content	58.8	%	
26	Total Nitrogen (N)	13.1	%	
27	Sulphur	1.1	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	5	%	
29	Oxygen	0	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



"End of Report"

page 2 of 2



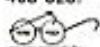


TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIU/OT/06/24/131
		Sample Code	NIU/OT/06/24/131
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Pastic Zip lock bag
Sampling Location	Zone-02/Location -16(co-ordinates- A-19.0678022/B-72.9333199)(time- 08.20pm/depth-28m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
1	Bulk Density	1.2	g/cm ³
2	Moisture Content	32	%
3	Volatile Content	21.1	%
4	Total Organic Carbon	6.9	%
5	Sulphate	1000.8	mg/kg
6	Chloride	1076	mg/kg
7	Sodium	3564.6	mg/kg
8	Potassium	2139.6	mg/kg
9	Calcium Oxide	4458.7	mg/kg
10	Magnesium	291.5	mg/kg
11	Lead	145	mg/kg
12	Chromium	291.4	mg/kg
13	Zinc	767.3	mg/kg
14	Copper	399.9	mg/kg

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/05/24/131
		Sample Code	NILOT/05/24/131
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -16(co-ordinates- A-19.0678022/B-72.9333199)(time- 08.20pm/depth-28m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.1	mg/kg	
16	Selenium	0.5	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.2	mg/kg	
18	Gross Calorific Value	2948.4	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2889.5	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	13.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	5.5	%	APHA
22	Silica	79.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	68	%	Net reference
24	Ash	73.4	%	Net reference
25	Carbon Content	9.9	%	
26	Total Nitrogen (N)	2.4	%	
27	Sulphur	0	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	1.1	%	
29	Oxygen	13.2	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/042
		Sample Code	NILOT/06/24/042
Sampling Date	05.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -17(co-ordinates-A-19.0688631/B-72.9323145)(time-01.45pm/depth-21m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.4	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	33.1	%	Lab Sop no. NILSOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	19.8	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.9	%	Lab Sop no. NILSOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	793.9	mg/kg	Lab Sop no. NILSOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	12636.1	mg/kg	Lab Sop no. NILSOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	11443.8	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	6253.7	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3575.4	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	943.0	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	54.1	mg/kg	
12	Chromium	134	mg/kg	Lab Sop no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	134.5	mg/kg	
14	Copper	90.2	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKV SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/042
		Sample Code	NIL/OT/06/24/042
Sampling Date	05.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -17(co-ordinates- A-19.0688631/B-72.9323145)(time- 01.45pm/depth-21m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.5	mg/kg	
18	Gross Calorific Value	942.1	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	897.5	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	15.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.1	%	APHA
22	Silica	51.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	66.9	%	Net reference
24	Ash	79.1	%	Net reference
25	Carbon Content	1.8	%	
26	Total Nitrogen (N)	1.3	%	
27	Sulphur	0	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	0.8	%	
29	Oxygen	16.9	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

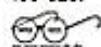


Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SCIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/06/24/041
		Sample Code	: NIL/OT/06/24/041
Sampling Date	: 05.06.2024	Sample Receive Date	: 06.06.2024
Analysis Start Date	: 06.06.2024	Analysis End Date	: 18.06.2024
Reporting Date	: 19.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-02 Location -17 (co-ordinates- A-19.0688631/B-72.9323145)(time- 12.35pm/depth-31m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	24.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	14	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.1	%	Lab Sop no. NIL/SCP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	544.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	968	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4718.6	mg/kg	Lab Sop no. NIL/SCP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	48	mg/kg	Lab Sop no. NIL/SCP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4969.8	mg/kg	Lab Sop no. NIL/SCP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	236.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	38.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	119.3	mg/kg	
13	Zinc	187.6	mg/kg	
14	Copper	137.6	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/041
		Sample Code	NILOT/06/24/041
Sampling Date	05.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -17(co-ordinates- A-19.068831/B-72.9323145)(time- 12.35pm/depth-31m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	EPA 3050B & By ICP
16	Selenium	0.2	mg/kg	
17	Arsenic	0.8	mg/kg	
18	Gross Calorific Value	1658.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1617.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	9.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.9	%	APHA
22	Silica	97.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	75.4	%	Net reference
24	Ash	84.1	%	Net reference
25	Carbon Content	2.2	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	1.3	%	
27	Sulphur	0	%	
28	Hydrogen	0.8	%	
29	Oxygen	11.6	%	By Calculation

Note :

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3. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shradha Kere
Quality Manager

"End of Report"

page 2 of 2

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: NM CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/043
		Sample Code	: NIL/OT/06/24/043
Sampling Date	: 05.06.2024	Sample Receive Date	: 06.06.2024
Analysis Start Date	: 06.06.2024	Analysis End Date	: 18.06.2024
Reporting Date	: 19.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-02 Location-16 (co-ordinates- A-19.0687395/B-72.9329984) (time- 04.40pm/depth-24m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	38	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	17.1	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.4	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	892.6	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	11951	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	13457.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	6587.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4148.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	948.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	46.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	163.3	mg/kg	
13	Zinc	140.1	mg/kg	
14	Copper	106.6	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/043
		Sample Code	NILOT/06/24/043
Sampling Date	05.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -18(co-ordinates- A-19.0687395/B-72.9329984)(time- 04.40pm/depth-24m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	758.8	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	716.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	12.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.8	%	APHA
22	Silica	44.4	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	62.0	%	Net reference
24	Ash	81.1	%	Net reference
25	Carbon Content	2.8	%	
26	Total Nitrogen (N)	1.4	%	
27	Sulphur	0	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	0.8	%	
29	Oxygen	14.2	%	By Calculation

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- Method Reference: The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

page 2 of 2

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TEST REPORT

Netel (India) Limited

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/044	
Sampling Date	05.06.2024	Sample Code	NILOT/06/24/044	
Analysis Start Date	06.06.2024	Sample Receive Date	06.06.2024	
Reporting Date	19.06.2024	Analysis End Date	18.06.2024	
		Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone-02/Location -18(co-ordinates- A-19.0687395/B-72.9329984)(time- 06.00pm/depth-34m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.7	%	Lab Sop no. NILSOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	21.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	8.5	%	Lab Sop no. NILSOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1198.7	mg/kg	Lab Sop no. NILSOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	9746.1	mg/kg	Lab Sop no. NILSOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	8839.7	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	4459.8	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3289.7	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	704.9	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	140.4	mp/kg	Lab Sop no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	189.0	mp/kg	Lab Sop no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	644.3	mp/kg	
14	Copper	273.5	mp/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/044
		Sample Code	Nil/OT/06/24/044
Sampling Date	05.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-D2/Location -18/co-ordinates- A-19.0587395/B-72.9329984)(time- 06.00pm/depth-34m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.6	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.8	mg/kg	
18	Gross Calorific Value	2401.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2359.8	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	17	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.9	%	APHA
22	Silica	68.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	63.3	%	Net reference
24	Ash	74.9	%	Net reference
25	Carbon Content	7.2	%	
26	Total Nitrogen (N)	1.4	%	
27	Sulphur	0	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	0.8	%	
29	Oxygen	15.7	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

page 2 of 2

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





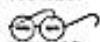
TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihamumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIUOT/06/24/137
		Sample Code	NIUOT/06/24/137
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-02(Location -19(co-ordinates- A-19.0693077/B-72.9311910)(time- 01.40pm/depth-27m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	31.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	20.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2151.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	13664	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	10968	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	4217.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3291.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1528	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	21.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	187.4	mg/kg	
13	Zinc	37.1	mg/kg	
14	Copper	102.8	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIU/OT/06/24/137
		Sample Code	NIU/OT/06/24/137
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -19/Co-ordinates- A-19.0693077/B-72.9311910(tme- 01.40pm/depth-27m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	
16	Selenium	0.1	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	767.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	714.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	15.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.6	%	APHA
22	Silica	<10	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	68.6	%	Net reference
24	Ash	78.2	%	Net reference
25	Carbon Content	3.0	%	
26	Total Nitrogen (N)	1.2	%	
27	Sulphur	2.4	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	1.0	%	
29	Oxygen	14.1	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

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Quality Manager



End of Report

page 2 of 2

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/05/24/138
		Sample Code	Nil/OT/05/24/138
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -19(co-ordinates- A-19.0693077/B-72.9311910)(time- 03.25pm/depth-37m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
1	Bulk Density	1.4	g/cm³
2	Moisture Content	33.8	%
3	Volatile Content	16	%
4	Total Organic Carbon	4.6	%
5	Sulphate	1945.3	mg/kg
6	Chloride	13687	mg/kg
7	Sodium	13306.7	mg/kg
8	Potassium	5373	mg/kg
9	Calcium Oxide	3589.5	mg/kg
10	Magnesium	1420	mg/kg
11	Lead	17.9	mg/kg
12	Chromium	192.0	mg/kg
13	Zinc	84.8	mg/kg
14	Copper	448.0	mg/kg

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/138
		Sample Code	NIL/OT/06/24/138
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -19(co-ordinates- A-19.0693077/B-72.9311910)(time- 03.25pm/depth-37m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	0.8	mg/kg
16	Selenium	0.1	mg/kg
17	Arsenic	10	mg/kg
18	Gross Calorific Value	371.1	Kcal/Kg
19	Net Calorific Value	774.5	Kcal/Kg
20	Loss of Ignition	14.2	%
21	Fixed Carbon	1.4	%
22	Silica	28.8	mg/kg
23	Total Solids	66.2	%
24	Ash	62.6	%
25	Carbon Content	2.9	%
26	Total Nitrogen (N)	2.1	%
27	Sulphur	0.5	%
28	Hydrogen	0.8	%
29	Oxygen	11.2	%
			Method
			EPA 3050B & By ICP
			IS 1350 (II)
			Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
			APHA
			Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
			Net reference
			Net reference
			Lab SOP NO. 027 Issue No. 04
			By Calculation

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Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/140
		Sample Code	: NIL/OT/06/24/140
Sampling Date	: 07.06.2024	Sample Receive Date	: 12.06.2024
Analysis Start Date	: 12.06.2024	Analysis End Date	: 24.06.2024
Reporting Date	: 24.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-02/Location -20(co-ordinates- : A-19.0701493/B-72.93164)(time- 06.45pm/depth-30m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	44.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	28.3	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	10.6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	614.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	3812.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4579.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2448.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4320.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	578.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	4914	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	302	mg/kg	
13	Zinc	651.4	mg/kg	
14	Copper	431.5	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKIN SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/140
		Sample Code	Nil/OT/06/24/140
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -20(co-ordinates- A-19.0701493/B-72.93164)(Bme-06.45pm/depth-30m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	3.6	mg/kg	
16	Selenium	1.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	4.4	mg/kg	
18	Gross Calorific Value	2471.4	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2415.3	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	25.7	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	7	%	APHA
22	Silica	84.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	55.9	%	Net reference
24	Ash	64.7	%	Net reference
25	Carbon Content	12.4	%	
26	Total Nitrogen (N)	2.0	%	
27	Sulphur	0	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	1.1	%	
29	Oxygen	19.4	%	By Calculation

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4. Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/06/24/142
		Sample Code	NI/OT/06/24/142
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -20(co-ordinates- A-19.0701493/B-72.9316449)(time- 08.00pm/depth-40m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	23.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	14	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	0.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	867.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	684.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2241.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2109.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4676.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	235.8	mg/kg	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	43.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	142.1	mg/kg	
13	Zinc	115.6	mg/kg	
14	Copper	137.5	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/142
		Sample Code	NIL/OT/06/24/142
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-02/Location -20(co-ordinates- A-19.0701493/B-72.9316449)(time- 08.00pm/depth-40m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.0	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	1313.4	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1313.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	9.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.9	%	APHA
22	Silica	71.6	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	76.5	%	Net reference
24	Ash	84.1	%	Net reference
25	Carbon Content	3.7	%	
26	Total Nitrogen (N)	0.5	%	
27	Sulphur	0	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	0	%	
29	Oxygen	11.7	%	By Calculation

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4. Method Reference: The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shradha Kere
Quality Manager



End of Report

page 2 of 2



ZONE 3



TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Compost	Test Report No.	: NIL/OT/05/24/175
		Sample Code	: NIL/OT/05/24/175
Sampling Date	: 23.05.2024	Sample Receive Date	: 27.05.2024
Analysis Start Date	: 27.05.2024	Analysis End Date	: 04.06.2024
Reporting Date	: 04.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-03(Location -21(coordinates-A-19.0688422/B-72.9297291)(time-11:20/depth-03m))	Sampling Not Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M. M. Saxena
2	Moisture Content	26.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	10.9	%	Environmental Analysis - Water, Soil and Air by M. M. Saxena
4	Total Organic Carbon	0.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	531.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	29.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3388.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1801.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	6570.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	821.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	34.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	163.5	mg/kg	
13	Zinc	114.4	mg/kg	
14	Copper	127.8	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M.CONULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type : Compost	Test Report No. : NIL/OT/05/24/175	Sample Code : NIL/OT/05/24/175		
Sampling Date : 23.05.2024	Sample Receive Date : 27.05.2024			
Analysis Start Date : 27.05.2024	Analysis End Date : 04.06.2024			
Reporting Date : 04.06.2024	Sample Qty & Pkg : Plastic Ziplock bag			
Sampling Location : Zone-03/Location -21(coordinates-A-19.0688422/B-72.9297291)(time-11.20/depth-03m)	Sampling Not Done By : Netel (India) Limited			
Sr. No.	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	1464.1	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1319.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	6.6	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	0.7	%	APHA
22	Silica	131.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Minstry of Agriculture GOI 2011
23	Total Solids	73.5	%	Net reference
24	Ash	88.4	%	Net reference
25	Carbon Content	1.3	%	
26	Total Nitrogen (N)	0.1	%	
27	Sulphur	0.2	%	Lab SOP NO. 027 Issue No. 04
28	Hydrogen	2.7	%	
29	Oxygen	7.3	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/L/OT/06/24/222
		Sample Code	NI/L/OT/06/24/222
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -21(coordinates-A-19.0688422B-72.9296923)(time-05.00pm/depth-13m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	31.6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	18.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1629.6	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1157.8	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2237.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1659.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4551.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	229.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	40.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	155.2	mg/kg	
13	Zinc	156.8	mg/kg	
14	Copper	133.1	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/222
		Sample Code	: NIL/OT/06/24/222
Sampling Date	: 10.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-03/Location -21(coordinates-A-19.0638422/B-72.9296923)(time-05.00pm/depth-13m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.4	mg/kg	EPA 3050B & By ICP
16	Selenium	0.2	mg/kg	
17	Arsenic	1.7	mg/kg	
18	Gross Calorific Value	1168.8	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1131.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	10.9	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.1	%	APHA
22	Silica	69.3	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	68.4	%	Net reference
24	Ash	78.5	%	Net reference
25	Carbon Content	5.8	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	3.2	%	
27	Sulphur	0	%	
28	Hydrogen	0.7	%	
29	Oxygen	11.8	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	NIL/OT/05/24/178
		Sample Code	NIL/OT/05/24/178
Sampling Date	23.05.2024	Sample Receive Date	27.05.2024
Analysis Start Date	27.05.2024	Analysis End Date	04.06.2024
Reporting Date	04.06.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-03(Location-22(Co-ordinates-A-19.0703084/B-72.9297291)(time-4:00pm/depth-06m)	Sampling Not Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.8	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	32.2	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	22.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	8.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	4993.6	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	39.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2066.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2228.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4663.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	235.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	153.1	mg/kg	
12	Chromium	112.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	545.8	mg/kg	
14	Copper	318.8	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihamumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	NILOT/05/24/178
Sampling Date	23.05.2024	Sample Code	NILOT/05/24/178
Analysis Start Date	27.05.2024	Analysis End Date	04.06.2024
Reporting Date	04.06.2024	Sample City & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location-22(Co-ordinates-A-19.0703084/B-72.9297291)(time-4:00pm/depth-06m)	Sampling Not Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.5	mg/kg
16	Selenium	0.5	mg/kg
17	Arsenic	1.7	mg/kg
18	Gross Calorific Value	3692.4	Kcal/Kg
19	Net Calorific Value	3444.9	Kcal/Kg
20	Loss of Ignition	19.7	%
21	Fixed Carbon	7.0	%
22	Silica	57.4	mg/kg
23	Total Solids	67.8	%
24	Ash	70.4	%
25	Carbon Content	11.7	%
26	Total Nitrogen (N)	0.7	%
27	Sulphur	0.8	%
28	Hydrogen	4.7	%
29	Oxygen	11.8	%
			Method
			EPA 3050B & By ICP
			IS 1350 (II)
			IS 1350 (II)
			Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
			APHA
			Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
			Net reference
			Net reference
			Lab SOP NO. 027 Issue No. 04
			By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIU/OT/06/24/045
		Sample Code	NIU/OT/06/24/045
Sampling Date	06.06.2024	Sample Receive Date:	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -22(coordinates-A-19.0703064/B-72.92972911)(time-03.05am/depth-16m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.7	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	34.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	27.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2092.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	925.9	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3542.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2175.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3539.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	350.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	57.4	mg/kg	
12	Chromium	130.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	2300.0	mg/kg	
14	Copper	337.6	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/045
		Sample Code	NILOT/06/24/045
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03 Location -22{co-ordinates-A-19.0703084/B-72.92972911}(time-03.05am/depth-16m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.8	mg/kg	EPA 3050B & By ICP
16	Selenium	0.4	mg/kg	
17	Arsenic	1.4	mg/kg	
18	Gross Calorific Value	2150.5	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2100.1	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	20.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.5	%	APHA
22	Silica	71.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	65.5	%	Net reference
24	Ash	69.3	%	Net reference
25	Carbon Content	5.9	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.9	%	
27	Sulphur	0.2	%	
28	Hydrogen	1.0	%	
29	Oxygen	22.7	%	By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019); Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihamumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/046
		Sample Code	: NIL/OT/06/24/046
Sampling Date	: 06.06.2024	Sample Receive Date	: 06.06.2024
Analysis Start Date	: 06.06.2024	Analysis End Date	: 18.06.2024
Reporting Date	: 19.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-03/Location -23(coordinates-A-19.0713360/B-72.9293161)(time-04.00am/depth-09m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	27.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	21.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1313.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	876.9	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2967	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2295.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4083.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	116.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	78.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	158.2	mg/kg	
13	Zinc	414	mg/kg	
14	Copper	342	mg/kg	

page 1 of 2

A Netiwala Group Company

CIN : U74399MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

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Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client	Brihanmumbai Municipal Corporation				
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory	Netel India Limited				
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/048	Sample Code	Nil/OT/06/24/048
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024	Analysis Start Date	18.06.2024
Analysis End Date	18.06.2024	Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -23(coordinates-A-19.0713360,B-72.9293161)(time-04.00am/depth-09m)	Sampling Done By	Netel (India) Limited		
Sr. No	Parameter	Result	Unit	Method	
15	Mercury	1.3	mg/kg	EPA 3050B & By ICP	
16	Selenium	0.2	mg/kg		
17	Arsenic	1.0	mg/kg	IS 1350 (II)	
18	Gross Calorific Value	2659.7	Kcal/Kg		
19	Net Calorific Value	2631.7	Kcal/Kg	IS 1350 (II)	
20	Loss of Ignition	15.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011	
21	Fixed Carbon	2.8	%	APHA	
22	Silica	85	mg/kg	Lab SOP no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011	
23	Total Solids	72.4	%	Net reference	
24	Ash	75.8	%	Net reference	
25	Carbon Content	4.0	%	Lab SOP NO. 027 Issue No. 04	
26	Total Nitrogen (N)	0.7	%		
27	Sulphur	0	%		
28	Hydrogen	0.5	%	By Calculation	
29	Oxygen	18.9	%		

Note :

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- The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
- Method Reference: The Fertiliser (Control) Order, 1985 (as amended up to: Feb. 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground			
Main Client	Brihanmumbai Municipal Corporation			
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS			
Laboratory	Netel India Limited			
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/047	
		Sample Code	NIL/OT/06/24/047	
Sampling Date	06.06.2024	Sample Receive Date:	06.06.2024	
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024	
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone-03/Location -23(coordinates-A-19.0713360/B-72.9293161)(time-04.55am/depth-19m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	28.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	21.5	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1959.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	756.9	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3510.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2751.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4374.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	234.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	107.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	208.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	561.4	mg/kg	
14	Copper	360.2	mg/kg	

page 1 of 2

A Netenwala Group Company

CIN : U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/047
Sampling Date	06.06.2024	Sample Code	Nil/OT/06/24/047
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -23(coordinates-A-19 0713360/B-72 9293161)(time-04.55am/depth-19m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.3	mg/kg
16	Selenium	0.6	mg/kg
17	Arsenic	1.9	mg/kg
18	Gross Calorific Value	2476.0	Kcal/Kg
19	Net Calorific Value	2439.5	Kcal/Kg
20	Loss of Ignition	15.9	%
21	Fixed Carbon	4.2	%
22	Silica	60.4	mg/kg
23	Total Solids	71.7	%
24	Ash	74.3	%
25	Carbon Content	6.6	%
26	Total Nitrogen (N)	1.4	%
27	Sulphur	0	%
28	Hydrogen	0.7	%
29	Oxygen	17.1	%
			By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/054
		Sample Code	NIL/OT/06/24/054
Sampling Date	06.06.2024	Sample Receive Date:	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty &Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -24(co-ordinates-A-19.0704497/B-72.9278286)(time-02.00pm/depth-12m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	34.2	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	24.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	10.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	717.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1707.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2859.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2108.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3838.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	352.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	60.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	151.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	435.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	263.3	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M.CONULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/054	
		Sample Code	Nil/OT/06/24/054	
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024	
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024	
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone-03/Location -24(coordinates-A-19.0704497/B-72.9278286)(time-02:00pm/depth-12m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.9	mg/kg	
18	Gross Calorific Value	3231.3	Kcal/Kg	IS 1350 (III)
19	Net Calorific Value	3230.3	Kcal/Kg	IS 1350 (III)
20	Loss of Ignition	19.9	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.3	%	APHA
22	Silica	56.1	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	65.8	%	Net reference
24	Ash	75.1	%	Net reference
25	Carbon Content	0.5	%	
26	Total Nitrogen (N)	0	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0	%	
28	Hydrogen	0	%	
29	Oxygen	24.3	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/056
		Sample Code	: NIL/OT/06/24/056
Sampling Date	: 00.01.1900	Sample Receive Date	: 06.06.2024
Analysis Start Date	: 06.06.2024	Analysis End Date	: 18.06.2024
Reporting Date	: 19.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-03/Location -24(coordinates-A-19.0704497/B-72.9278266)(time-03.00pm/depth-22m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.8	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	42.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	20	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	475.8	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1117	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2707.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2125	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	2967.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	237.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	53.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	163	mg/kg	
13	Zinc	344	mg/kg	
14	Copper	174.7	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/056
		Sample Code	NILOT/06/24/056
Sampling Date	00.01.1900	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -24(co-ordinates-A-19.0704497/B-72.9278286)(time-03.00pm/depth-22m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.8	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.7	mg/kg	
18	Gross Calorific Value	1459.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1459.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	12.7	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.9	%	APHA
22	Silica	67.5	mg/kg	Lab SOP no. NIU/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	57.2	%	Net reference
24	Ash	79.1	%	Net reference
25	Carbon Content	1.3	%	
26	Total Nitrogen (N)	0	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0	%	
28	Hydrogen	0	%	
29	Oxygen	19.5	%	By Calculation

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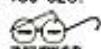
Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/134
		Sample Code	NILOT/06/24/134
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -25(coordinates-A-19.0693787/B-72.9289429)(time-4.00am/depth-15m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	26.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	12.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	495.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	929	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3206.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1608.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	5447.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	700.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	28.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	166.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	225.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	120.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/134
		Sample Code	NILOT/06/24/134
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -25(coordinates-A-19.0693787/B-72.9289429)(time-4.00am/depth-15m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.4	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.9	mg/kg	
18	Gross Calorific Value	773.6	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	739.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	10.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.1	%	APHA
22	Silica	39.8	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	73.9	%	Net reference
24	Ash	86.5	%	Net reference
25	Carbon Content	1.9	%	
26	Total Nitrogen (N)	1.0	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.3	%	
28	Hydrogen	0.6	%	
29	Oxygen	9.7	%	By Calculation

Note :

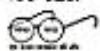
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4. Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/135
		Sample Code	NIL/OT/06/24/135
Sampling Date	07.06.2024	Sample Receive Date:	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -25(coordinates:A-19.0693787/B-72.9289429)(time-7.05am/depth-25m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	26.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	12.7	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	2.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1083.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1073.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3442.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1976.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4112.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	470	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	81.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	338.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	219.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	159.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

page 1 of 2

A Netewala Group Company

CIN : U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

Phone : 72080976 92 / 93 / 94 / 95 + Website : www.netel-india.com E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/135
Sampling Date	07.06.2024	Sample Code	NILOT/06/24/135
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -25/coordinates-A-19.0693787/B-72.9289429/(time-7.05am/depth-25m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.2	mg/kg
16	Selenium	0.1	mg/kg
17	Arsenic	1.3	mg/kg
18	Gross Calorific Value	1709.1	Kcal/Kg
19	Net Calorific Value	1676.2	Kcal/Kg
20	Loss of Ignition	7.5	%
21	Fixed Carbon	2.1	%
22	Silica	36.2	mg/kg
23	Total Solids	73.4	%
24	Ash	85.2	%
25	Carbon Content	3.8	%
26	Total Nitrogen (N)	2.0	%
27	Sulphur	0	%
28	Hydrogen	0.6	%
29	Oxygen	8.4	%
			By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIU/OT/06/24/052
		Sample Code	NIU/OT/06/24/052
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -26(coordinates-A-19.0710242B-72.9286140)(time-01.00pm/depth-18m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.8	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	41.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	20.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	11.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	497.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2534.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3775.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2393.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3833	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	234.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	132.2	mg/kg	
12	Chromium	169.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	468.8	mg/kg	
14	Copper	282.5	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIJOT/06/24/052
Sampling Date	06.06.2024	Sample Code	: NIJOT/06/24/052
Analysis Start Date	06.06.2024	Analysis End Date	: 18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-03/Location -26(coordinates-A-19.0710242/B-72.9286140)(time-01.00pm/depth-18m)	Sampling Done By	: Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.7	mg/kg
16	Selenium	0.3	mg/kg
17	Arsenic	1.9	mg/kg
18	Gross Calorific Value	3072.6	Kcal/Kg
19	Net Calorific Value	3020.7	Kcal/Kg
20	Loss of Ignition	18.7	%
21	Fixed Carbon	5.4	%
22	Silica	67.5	mg/kg
23	Total Solids	58.9	%
24	Ash	74.4	%
25	Carbon Content	8.2	%
26	Total Nitrogen (N)	1.4	%
27	Sulphur	0.2	%
28	Hydrogen	1.0	%
29	Oxygen	14.9	%
By Calculation			

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soild waste	Test Report No.	NILOT/06/24/055
		Sample Code	NILOT/06/24/055
Sampling Date	00.01.1900	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03,Location -26(coordinates-A-19.0710242/B-72.9286140)(time-02.05pm/depth-28m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.6	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	53.9	%	Lab Sop no. NILSOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	27.7	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.4	%	Lab Sop no. NILSOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	687.4	mg/kg	Lab Sop no. NILSOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2885.7	mg/kg	Lab Sop no. NILSOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3451.3	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2307.2	mg/kg	Lab Sop no. NILSOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3872	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	237.1	mg/kg	Lab Sop no. NILSOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	90.5	mg/kg	
12	Chromium	145	mg/kg	Lab Sop no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	732	mg/kg	
14	Copper	238.8	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/055
		Sample Code	Nil/OT/06/24/055
Sampling Date	00.01.1900	Sample Receive Date	06.05.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -26(coordinates-A-19.0710242/B-72.9288140)(time-02.05pm/depth-28m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	2957.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2956.8	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	23.7	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.4	%	APHA
22	Silica	96.6	mg/kg	Lab Sop no. Nil/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	45.1	%	Not reference
24	Ash	71.9	%	Not reference
25	Carbon Content	0.7	%	
26	Total Nitrogen (N)	0	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0	%	
28	Hydrogen	0	%	
29	Oxygen	27.4	%	By Calculation

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- Method Reference: The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





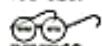
TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/129
		Sample Code	NILOT/06/24/129
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -27(coordinates-A-19.0701778/B-72.9282704)(time-06.00pm/depth-21m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	39.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	21.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1514.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1654.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3951.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3154.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3776	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	578	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	103.1	mg/kg	
12	Chromium	217.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	527.2	mg/kg	
14	Copper	285.6	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/129	
Sampling Date	: 07.06.2024	Sample Code	: NIL/OT/06/24/129	
Analysis Start Date	: 12.06.2024	Sample Receive Date	: 12.06.2024	
Reporting Date	: 24.06.2024	Analysis End Date	: 24.06.2024	
Sampling Location	: Zone-03/Location -27(coordinates-A-19.0701778/B-72.9282704)(time-06.00pm/depth-21m)	Sample Qty & Pckg	: Plastic Zip lock bag	
Sampling Done By	: Netel (India) Limited			
Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3060B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	2350.6	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2348.5	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	15.2	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.7	%	APHA
22	Silica	70.2	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	60.5	%	Net reference
24	Ash	76.7	%	Net reference
25	Carbon Content	2.8	%	
26	Total Nitrogen (N)	0	%	
27	Sulphur	0	%	
28	Hydrogen	0	%	
29	Oxygen	20.5	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/L/OT/06/24/048
		Sample Code	NI/L/OT/06/24/048
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -27/(co-ordinates-A-19.0701778/B-72.92827041)(time-06.45am/depth-31m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	40.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	18.7	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.0	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1575.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1894.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4176.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2858.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3832.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	352	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	73.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	152.8	mg/kg	
13	Zinc	436.3	mg/kg	
14	Copper	205.3	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/048
		Sample Code	NILOT/06/24/048
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -27(co-ordinates-A-19.070177&B-72.92827041)(lat-06.45am/depth-31m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3060B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	2843.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2804.1	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	11.9	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	5.3	%	APHA
22	Silica	65.1	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	59.6	%	Net reference
24	Ash	76.0	%	Net reference
25	Carbon Content	7.9	%	
26	Total Nitrogen (N)	1.2	%	
27	Sulphur	0.2	%	
28	Hydrogen	0.8	%	
29	Oxygen	14.0	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name		Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client		Brihanmumbai Municipal Corporation		
Contractor Name		N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory		Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/049	
		Sample Code	NILOT/06/24/049	
Sampling Date	06.06.2024	Sample Receive Date:	06.06.2024	
Analysis Start Date	06.06.2024	Analysis End Date	16.06.2024	
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone-03/Location -26(co-ordinates-A-19.0710793/B-72.9280493)(time-08.10am/depth-24m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	27.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	19.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2076.6	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1221.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3237.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2490.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3691.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	175.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	105.7	mg/kg	
12	Chromium	209.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	469.0	mg/kg	
14	Copper	261.2	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIUOT/06/24/049
Sampling Date	06.06.2024	Sample Code	NIUOT/06/24/049
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -28(coordinates-A-19.0710793/B-72.9280493)(time-08.10am/depth-24m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.4	mg/kg
16	Selenium	0.4	mg/kg
17	Arsenic	1.7	mg/kg
18	Gross Calorific Value	2647.7	Kcal/Kg
19	Net Calorific Value	2620.2	Kcal/Kg
20	Loss of Ignition	12.9	%
21	Fixed Carbon	3.1	%
22	Silica	82.1	mg/kg
23	Total Solids	72.7	%
24	Ash	77.5	%
25	Carbon Content	5.5	%
26	Total Nitrogen (N)	1.3	%
27	Sulphur	0	%
28	Hydrogen	0.5	%
29	Oxygen	15.2	%
			By Calculation

Note :

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- Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager

A Netwala Group Company

End of Report

CIN : U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vilhadas Thackersey Marg. (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/050
		Sample Code	: NIL/OT/06/24/050
Sampling Date	: 06.06.2024	Sample Receive Date:	: 06.06.2024
Analysis Start Date	: 06.06.2024	Analysis End Date	: 18.06.2024
Reporting Date	: 19.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-D3/Location -28(coordinates-A-19.0710793B-72.9280493)(time-09:30am/depth-34m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	38.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	15.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1447.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1802.8	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3839.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2942	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3972.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	176.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	91.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	178	mg/kg	
13	Zinc	434	mg/kg	
14	Copper	223.5	mg/kg	

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Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/050
		Sample Code	NIL/OT/06/24/050
Sampling Date	08.06.2024	Sample Receive Date	08.06.2024
Analysis Start Date	08.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03.Location -28(co-ordinates-A-19.0710793/B-72.9280493)(time-09.30am/depth-34m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.0	mg/kg
16	Selenium	0.3	mg/kg
17	Arsenic	1.5	mg/kg
18	Gross Calorific Value	3990.1	Kcal/Kg
19	Net Calorific Value	3941.9	Kcal/Kg
20	Loss of Ignition	9.8	%
21	Fixed Carbon	3.2	%
22	Silica	77.0	mg/kg
23	Total Solids	61.2	%
24	Ash	81.6	%
25	Carbon Content	5.8	%
26	Total Nitrogen (N)	1.0	%
27	Sulphur	0	%
28	Hydrogen	0.9	%
29	Oxygen	10.8	%
			By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) Order, 1955 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/051
		Sample Code	NILO/OT/06/24/051
Sampling Date	06.06.2024	Sample Receive Date:	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -29(coordinates-A-19.0720318/B-72.9282979)(time-12.25pm/depth-27m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	28.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	24.3	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	3606.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	682.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2448	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2204.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	5185.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	350.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	101.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	187.3	mg/kg	
13	Zinc	490.0	mg/kg	
14	Copper	307.3	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soild waste	Test Report No.	NILOT/06/24/051
		Sample Code	NILOT/06/24/051
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -29(coordinates-A-19.0720318/B-72.9282979)(time-12.25pm/depth-27m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.3	mg/kg
16	Selenium	0.3	mg/kg
17	Arsenic	1.7	mg/kg
18	Gross Calorific Value	707.9	Kcal/Kg
19	Net Calorific Value	687.8	Kcal/Kg
20	Loss of Ignition	15.0	%
21	Fixed Carbon	2.9	%
22	Silica	54.8	mg/kg
23	Total Solids	71.7	%
24	Ash	72.8	%
25	Carbon Content	5.3	%
26	Total Nitrogen (N)	0.9	%
27	Sulphur	0	%
28	Hydrogen	0.4	%
29	Oxygen	20.8	%
			By Calculation

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi

Technical Manager



Authorised by

Shraddha Kere

Quality Manager

A Neterwala Group Company

"End of Report"

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/053
		Sample Code	NILOT/06/24/053
Sampling Date	06.06.2024	Sample Receive Date	06.06.2024
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024
Reporting Date	19.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -29/coordinates-A-19.0720318/B-72.9282979/(time-2.00pm/depth-37m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	30.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	20.8	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.7	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	3467.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	828.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2458.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2334.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	6496.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	232	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	121.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	245.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	631	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	285.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

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A Netewala Group Company

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Netel (India) Limited

TEST REPORT

Project Name		Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client		Brihanmumbai Municipal Corporation		
Contractor Name		N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory		Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/053	
Sampling Date	06.06.2024	Sample Code	NILOT/06/24/053	
Analysis Start Date	06.06.2024	Analysis End Date	18.06.2024	
Reporting Date	19.06.2024	Sample Qty & Pckg	Pasta Zip lock bag	
Sampling Location	Zone-03/Location -29(coordinates-A-19.0720318/B-72.9282979)(time-2.00pm/depth-37m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	3483.3	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3483.3	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	13.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.5	%	APHA
22	Silica	<10	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	69.4	%	Net reference
24	Ash	78.7	%	Net reference
25	Carbon Content	1.0	%	
26	Total Nitrogen (N)	0	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0	%	
28	Hydrogen	0	%	
29	Oxygen	20.3	%	By Calculation

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Reviewed by

Neelima Dalvi

Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/139
		Sample Code	Nil/OT/06/24/139
Sampling Date	07.06.2024	Sample Receive Date:	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -30(coordinates-A-19.0717749/B-72.9277316)(time-06.35pm/depth-30m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	29.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	23.3	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	10	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2636	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	879	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2948.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2541.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	5260.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	474.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	130.6	mg/kg	
12	Chromium	259.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	448.0	mg/kg	
14	Copper	371.1	mg/kg	

page 1 of 2

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/139
		Sample Code	Nil/OT/06/24/139
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -30(coordinates-A-19.0717749/B-72.9277316)(time-06.35pm/depth-30m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.0	mg/kg	EPA 3050B & By ICP
16	Selenium	0.3	mg/kg	
17	Arsenic	2.5	mg/kg	
18	Gross Calorific Value	3252.5	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3195.3	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	16.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	5.6	%	APHA
22	Silica	39.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	70.7	%	Net reference
24	Ash	71.1	%	Net reference
25	Carbon Content	10.4	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	1.5	%	
27	Sulphur	0.6	%	
28	Hydrogen	1.1	%	
29	Oxygen	15.4	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/141
		Sample Code	: NIL/OT/06/24/141
Sampling Date	: 07.06.2024	Sample Receive Date:	: 12.06.2024
Analysis Start Date	: 12.06.2024	Analysis End Date	: 24.06.2024
Reporting Date	: 24.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone-03/Location -30(coordinates-A-19.0717749/B-72.9277316)(time-07.40pm/depth-40m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	28.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	25.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1095.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	877.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2454	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2176.7	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4109	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	469.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	95.5	mg/kg	
12	Chromium	161.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	313.0	mg/kg	
14	Copper	218.9	mg/kg	

page 1 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NU/OT/06/24/141
		Sample Code	NU/OT/06/24/141
Sampling Date	07.06.2024	Sample Receive Date:	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-03/Location -30(coordinates-A-19.0717749/B-72.9277316)(time-07.40pm/depth-40m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.6	mg/kg	
18	Gross Calorific Value	2305	Kcal/Kg	IS 1350 (III)
19	Net Calorific Value	2251.3	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	13	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.4	%	APHA
22	Silica	69.8	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	71.6	%	Net reference
24	Ash	70.0	%	Net reference
25	Carbon Content	8.1	%	
26	Total Nitrogen (N)	1.7	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.3	%	
28	Hydrogen	0.9	%	
29	Oxygen	19.0	%	By Calculation

Note :

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3. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
4. Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019); Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager



ZONE 4



Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	: Compost	Test Report No.	: NIL/OT/05/24/177
		Sample Code	: NIL/OT/05/24/177
Sampling Date	: 23.05.2024	Sample Receive Date	: 27.05.2024
Analysis Start Date	: 27.05.2024	Analysis End Date	: 04.06.2024
Reporting Date	: 04.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-04/Location-31(Co-ordinates : A-19.0715975/B-72.9266540)(time 11.00am/depth-03m)	Sampling Not Done By : Netel (India) Limited	

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	21.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	19.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	4943.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	39.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	1803.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1386.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	7400.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	117.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	3558.0	mg/kg	
12	Chromium	140.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	287.8	mg/kg	
14	Copper	314.5	mg/kg	

Netewala Group Company

CIN : UT4999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	NI/OT/05/24/177
		Sample Code	NI/OT/05/24/177
Sampling Date	23.05.2024	Sample Receive Date	27.05.2024
Analysis Start Date	27.05.2024	Analysis End Date	04.06.2024
Reporting Date	04.06.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone-04/Location-31(Co-ordinates-A-19.0715975/B-72.9266540)(time-11:00am/depth-03m)	Sampling Not Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.8	mg/kg	EPA 3050B & By ICP
16	Selenium	0.8	mg/kg	
17	Arsenic	1.6	mg/kg	
18	Gross Calorific Value	3446.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3325.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	16.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	2.1	%	APHA
22	Silica	84.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	78.2	%	Net reference
24	Ash	78.7	%	Net reference
25	Carbon Content	3.7	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.3	%	
27	Sulphur	0.6	%	
28	Hydrogen	2.3	%	
29	Oxygen	14.4	%	By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report





Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/030
		Sample Code	: NIL/OT/06/24/030
Sampling Date	: 02.06.2024	Sample Receive Date	: 04.06.2024
Analysis Start Date	: 04.06.2024	Analysis End Date	: 13.06.2024
Reporting Date	: 14.06.2024	Sample Qty &Pckg	: Plastic Zip lock bag
Sampling Location	Zone 04/Location-31(coordinatesA-19.0715974/B-72.9266840)time-8.13pm/Depth-13mtr	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	38.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	20.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1414.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2100.8	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4443.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2690.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4664.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	117.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	55.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	133.8	mg/kg	
13	Zinc	236.7	mg/kg	
14	Copper	210.8	mg/kg	

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CIN : U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/030	
		Sample Code	: NIL/OT/06/24/030	
Sampling Date	: 02.06.2024	Sample Receive Date	: 04.06.2024	
Analysis Start Date	: 04.06.2024	Analysis End Date	: 13.06.2024	
Reporting Date	: 14.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag	
Sampling Location	: Zone 04/Location-31(coordinatesA-19.0715974/B-72.9265640)time-8.13pm/Depth-13mtr	Sampling Done By	: Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	EPA 3050B & By ICP
16	Selenium	<0.25	mg/kg	
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	2314.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2203.1	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	14.9	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	25	%	APHA
22	Silica	109	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	61.9	%	Not reference
24	Ash	76.9	%	Not reference
25	Carbon Content	3.5	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.5	%	
27	Sulphur	0	%	
28	Hydrogen	2.1	%	
29	Oxygen	17.0	%	By Calculation

Note :

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4. Method Reference* The Fertiliser (Control) Order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	NILOT/05/24/179
		Sample Code	NILOT/05/24/179
Sampling Date	23.05.2024	Sample Receive Date	27.05.2024
Analysis Start Date	27.05.2024	Analysis End Date	04.06.2024
Reporting Date	04.06.2024	Sample Qty & Pkg	Plastic Ziplock bag
Sampling Location	Zone-04/Location-32(Co-ordinates-A-19.0709171/B-72.9267268)(time-5:20pm/depth-06 m)	Sampling Not Done By	Netel (India) Limited

Sr. No.	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	19.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	17.7	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	1.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	4675.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	58.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2051.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1617.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	5757.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	235.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	69.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	49.8	mg/kg	
13	Zinc	395.6	mg/kg	
14	Copper	76.0	mp/kg	

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CIN : U74999MH2003PLC142228

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TEST REPORT

Netel (India) Limited

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	Compost	Test Report No.	NILOT/05/24/179	
		Sample Code	NILOT/05/24/179	
Sampling Date	23.05.2024	Sample Receive Date	27.05.2024	
Analysis Start Date	27.05.2024	Analysis End Date	04.06.2024	
Reporting Date	04.06.2024	Sample Qty & Pkg	Plastic Zip lock bag	
Sampling Location	Zone-04/Location-32(Co-ordinates-A-19.0709171/B-72.9267288)(time-5.20pm/depth-06 m)	Sampling Not Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	EPA 3050B & By ICP
16	Selenium	0.6	mg/kg	
17	Arsenic	1.4	mg/kg	
18	Gross Calorific Value	1578.3	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1478.2	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	14.2	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	2.5	%	APHA
22	Silica	80.8	mg/kg	Lab SOP no. NILSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	80.2	%	Net reference
24	Ash	86.3	%	Net reference
25	Carbon Content	4.6	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	1.0	%	
28	Hydrogen	1.9	%	
29	Oxygen	6.0	%	By Calculation

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- Method Reference: * The Fertiliser (Control) Order, 1965 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Davi
Technical Manager



End of Report

Authorised by

Shradha Kere
Quality Manager





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/023
		Sample Code	NILOT/06/24/023
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 04/Location-32(coordinatesA-19.0709171/B-72.9267288)time-12.20pm/Depth-16mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.8	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	54.2	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	25	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	12.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1412.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	6225.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3027.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3364.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4983.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	118.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	115.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	192.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	700.9	mg/kg	
14	Copper	295.1	mg/kg	

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CIN : U74999MH2003PLC142228

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground			
Main Client	Brihanmumbai Municipal Corporation			
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS			
Laboratory	Netel India Limited			
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/023	
		Sample Code	NIL/OT/06/24/023	
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024	
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024	
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone 04/Location-32(coordinates A-19.0709171/B-72.9267288)time-12.20pm/Depth-16mtr	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.5	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.0	mg/kg	
18	Gross Calorific Value	3437.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3413.5	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	23.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.9	%	APHA
22	Silica	105.6	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	45.6	%	Not reference
24	Ash	70.1	%	Not reference
25	Carbon Content	7.1	%	
26	Total Nitrogen (N)	0.3	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0	%	
28	Hydrogen	0.5	%	
29	Oxygen	22.0	%	By Calculation

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4. Method Reference.* The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NIU/OT/06/24/216
		Sample Code	NIU/OT/06/24/216
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -33(co-ordinates- A-19.071794/B-72.9269467)(time-07.50pm/depth-09m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.0	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	34.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	24.5	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1803.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1252.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2056.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1863.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4343.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	232.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	137.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	196.7	mg/kg	
13	Zinc	598.9	mg/kg	
14	Copper	1734.0	mg/kg	

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CIN : U74999MH2013PLC142228

page 1 of 2

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/216
Sampling Date	10.06.2024	Sample Code	Nil/OT/06/24/216
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -33(co-ordinates-A-19.071794/B-72.9269467)(time-07.50pm/depth-09m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	2006.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1886.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	16.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.2	%	APHA
22	Silica	74.4	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	65.5	%	Net reference
24	Ash	72.3	%	Net reference
25	Carbon Content	6.0	%	
26	Total Nitrogen (N)	2.3	%	
27	Sulphur	0	%	
28	Hydrogen	2.3	%	
29	Oxygen	17.3	%	By Calculation

Note :

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- Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb 2019); Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shradha Kere
Quality Manager

End of Report

A Neterwala Group Company

CIN : UT4999MH2003PLC142228

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soild waste	Test Report No.	NIL/OT/06/24/220
		Sample Code	NIL/OT/06/24/220
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -33(co-ordinates- A-19.0701794/B-72.9269467)(time- 08.20pm/depth-19m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	32.7	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	24.0	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1359.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1105.0	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2108.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1942.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4037.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	230.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	99.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	163.9	mg/kg	
13	Zinc	315.9	mg/kg	
14	Copper	290.9	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/220
Sampling Date	10.06.2024	Sample Code	NILOT/06/24/220
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Ziplock bag
Sampling Location	Zone-04/Location -33[co-ordinates A-19.0701794/B-72.9269467](time-08.20pm/depth-19m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	EPA 3050B & By ICP
16	Selenium	0.2	mg/kg	
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	3544.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3500.2	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	19.9	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	4.2	%	APHA
22	Silica	42.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	67.3	%	Net reference
24	Ash	71.8	%	Net reference
25	Carbon Content	7.9	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	1.7	%	
27	Sulphur	0.3	%	
28	Hydrogen	0.8	%	
29	Oxygen	17.4	%	By Calculation

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- Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/026
		Sample Code	NILOT/06/24/026
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 04/Location-34(coordinates A-19.0703965/B-72.9251000)/time-5.10pm/Depth-12mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	17.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	17.1	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	2.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1404.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1075.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4462.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2134.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4647.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	117.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	120.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	127.1	mg/kg	
13	Zinc	405.6	mg/kg	
14	Copper	27.4	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Bhau Mumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIUOT/06/24/026
		Sample Code	NIUOT/06/24/026
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 04/Location-34(coordinatesA-19.0703965/B-72.9251000)time-5.10pm/Depth-12mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	
16	Selenium	0.6	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.6	mg/kg	
18	Gross Calorific Value	1311.0	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1264.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	10.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.6	%	APHA
22	Silica	106.1	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	82.9	%	Net reference
24	Ash	79.3	%	Net reference
25	Carbon Content	5.3	%	
26	Total Nitrogen (N)	0.1	%	
27	Sulphur	0	%	
28	Hydrogen	0.9	%	
29	Oxygen	14.4	%	By Calculation

Note :

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4. Method Reference : The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shradha Kere
Quality Manager

End of Report

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Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/027
		Sample Code	: NIL/OT/06/24/027
Sampling Date	: 02.06.2024	Sample Receive Date	: 04.06.2024
Analysis Start Date	: 04.06.2024	Analysis End Date	: 13.06.2024
Reporting Date	: 14.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	: Zone 04/Location-34(coordinatesA-19.0703965/B-72.9251000);time-5 55pm/Depth-22mtr	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	24.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	15	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1157.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1365.5	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4273.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1731	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4906.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	116.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	73.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	162.1	mg/kg	
13	Zinc	323.5	mg/kg	
14	Copper	192	mg/kg	

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CIN : U74999MH2003PLC142228

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TEST REPORT

Netel (India) Limited

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : NM CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/027	
		Sample Code	NILOT/06/24/027	
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024	
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024	
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone 04/Location-34(coordinates A-19.0703965/B-72.9251000)time-5.55pm/Depth-22mtr	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.6	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	1777.5	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1746.2	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	7.6	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	1.8	%	APHA
22	Silica	114.3	mg/kg	Lab Sop no. NIUSOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	75.4	%	Net reference
24	Ash	83.2	%	Net reference
25	Carbon Content	3.2	%	
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	0	%	
28	Hydrogen	0.6	%	
29	Oxygen	12.8	%	By Calculation

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4. Method Reference: The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

A Netenwala Group Company

CIN : U74995MH2009PLC4222E

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NIU/OT/06/24/028
		Sample Code	NIU/OT/06/24/028
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 04/Location-35(coordinatesA-19.0696955/B-72.9249270)/time-6.45pm/Depth-15mlr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	23.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	15.1	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.7	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1415.8	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1466.7	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4144.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1721.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4672.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	117.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	75.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	118.5	mg/kg	
13	Zinc	363.3	mg/kg	
14	Copper	195.5	mg/kg	

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CIN : U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/028
		Sample Code	NILOT/06/24/028
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 04/Location-35(coordinates A-19 0696955/B-72.9249270)/time-6.45pm/Depth-15mtr	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
15	Mercury	1.4	mg/kg
16	Selenium	0.5	mg/kg
17	Arsenic	1.3	mg/kg
18	Gross Calorific Value	1931.1	Kcal/Kg
19	Net Calorific Value	1889.3	Kcal/Kg
20	Loss of Ignition	10.2	%
21	Fixed Carbon	2.3	%
22	Silica	113.6	mg/kg
23	Total Solids	76.7	%
24	Ash	82.6	%
25	Carbon Content	3.6	%
26	Total Nitrogen (N)	3.6	%
27	Sulphur	0.1	%
28	Hydrogen	0.8	%
29	Oxygen	12.6	%
Method			
15	EPA 3050B & By ICP		
16	IS 1350 (II)		
17	IS 1350 (II)		
20	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011		
21	APHA		
22	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011		
23	Net reference		
24	Net reference		
25	Lab SOP NO. 027 Issue No. 04		
26			
27			
28			
29	By Calculation		

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Reviewed by

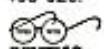
Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/06/24/029
		Sample Code	: NIL/OT/06/24/029
Sampling Date	: 02.06.2024	Sample Receive Date	: 04.06.2024
Analysis Start Date	: 04.06.2024	Analysis End Date	: 13.06.2024
Reporting Date	: 14.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone 04/Location-35(co-ordinatesA-19.0696955/B-72.9249270)lmo-7.30pm/Depth-25mlr	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	23.7	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	21.8	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1416.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1612.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4344.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2574.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4559.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	<100	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	162.3	mg/kg	
12	Chromium	96.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	266.5	mg/kg	
14	Copper	238.1	mg/kg	

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/029
		Sample Code	NILOT/06/24/029
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pkg	Plastic Zip lock bag
Sampling Location	Zone 04/Location-35(coordinates A-19.0696955/B-72.9249270)/time-7.30pm/Depth-25mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.5	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	0.9	mg/kg	
18	Gross Calorific Value	4003.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3918.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	12.8	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.0	%	APHA
22	Silica	75.3	mg/kg	Lab SOP no. N/L/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	76.3	%	Net reference
24	Ash	77.2	%	Net reference
25	Carbon Content	1.9	%	
26	Total Nitrogen (N)	3.6	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.2	%	
28	Hydrogen	1.6	%	
29	Oxygen	15.5	%	By Calculation

Note :

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3. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi

Technical Manager



End of Report

Authorised by

Shraddha Kere

Quality Manager





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/132
		Sample Code	Nil/OT/06/24/132
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -36(co-ordinates-A-19.0693270/B-72.9256805)(time-1.10am/depth-18m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	34.2	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	16.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1774.3	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1368.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	11018.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	7461.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3275	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1403.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	30.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	207.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	204.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	126	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/132
		Sample Code	Nil/OT/06/24/132
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -36(co-ordinates-A-19.0693270/B-72.9258805)(time-1.10am/depth-18m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	EPA 3050B & By ICP
16	Selenium	0.1	mg/kg	
17	Arsenic	1.6	mg/kg	
18	Gross Calorific Value	855.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	813.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	13.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.8	%	APHA
22	Silica	27.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	65.8	%	Net reference
24	Ash	80.0	%	Net reference
25	Carbon Content	6.2	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	2.1	%	
27	Sulphur	0	%	
28	Hydrogen	0.8	%	
29	Oxygen	10.9	%	By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/133
		Sample Code	NILOT/06/24/133
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04, Location -36 (co-ordinates A-19.0693270(B-72.9258805)(time- 2.25am/depth-28m)	Sampling Done By	Netel (India) Limited

Sr. No.	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	23.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	11.9	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	3.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1024	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	5238.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	5383.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2826.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4120	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	353.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	44.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	177.5	mg/kg	
13	Zinc	263.3	mg/kg	
14	Copper	124.5	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/133
		Sample Code	NILOT/06/24/133
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -36(co-ordinates : A-19 0693270/B-72 9258805)(lime 2.25am/depth-28m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	808.2	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	761.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	9.9	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.0	%	APHA
22	Silica	66.6	mg/kg	Lab Sop no: NIL/SCP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	76.9	%	Net reference
24	Ash	84.1	%	Net reference
25	Carbon Content	7.2	%	
26	Total Nitrogen (N)	1.7	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	1.1	%	
28	Hydrogen	0.9	%	
29	Oxygen	5.1	%	By Calculation

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- Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb 2019; Schedule-IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shradha Kere
Quality Manager

End of Report

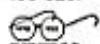
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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/203
		Sample Code	NILOT/06/24/203
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -37(co-ordinates- A-19.0688672/B-72.9250380)(time- 12:00pm/depth-21m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	29.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	11.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	1.4	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1182.8	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	4271.7	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3703.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2468.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4145.4	mg/kg	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	710.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	36.4	mg/kg	
12	Chromium	216.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	93	mg/kg	
14	Copper	131.9	mg/kg	

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIU/OT/06/24/203
		Sample Code	NIU/OT/06/24/203
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -37(co-ordinates- A-19.0686872/B-72.9250380)(time- 12.00pm/depth-21m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	1195	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1164.3	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	6.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.8	%	APHA
22	Silica	<10	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	70.6	%	Net reference
24	Ash	87.0	%	Net reference
25	Carbon Content	2.9	%	
26	Total Nitrogen (N)	1.8	%	
27	Sulphur	0	%	
28	Hydrogen	0.6	%	
29	Oxygen	7.8	%	By Calculation

Note :

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4. Method Reference: The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/201
		Sample Code	NIL/OT/06/24/201
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -37(oo-ordinates-A-19.0686877/B-72.9250380)(time-01.00am/depth-31m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	23.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	10.8	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	1.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	779.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2735.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3121.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2126.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3880.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	712.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	37.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	234	mg/kg	
13	Zinc	128.4	mg/kg	
14	Copper	135.7	mg/kg	

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CIN : U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/201
		Sample Code	: NIL/OT/06/24/201
Sampling Date	: 10.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pckg	: Plastic Ziplock bag
Sampling Location	Zone-04/Location -37(co-ordinates : A-19.068677/B-72.9250380)(time- 01.00am/depth-31m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	
16	Selenium	0.1	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	1532.5	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1488.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	9.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	2.0	%	APHA
22	Silica	11.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	76.6	%	Net reference
24	Ash	87.2	%	Net reference
25	Carbon Content	3.2	%	
26	Total Nitrogen (N)	1.3	%	
27	Sulphur	0	%	
28	Hydrogen	0.8	%	
29	Oxygen	7.6	%	By Calculation

Note :

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3. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

A Neterwala Group Company

CIN : U74999MH2019PLC742228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg. (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/205
		Sample Code	Nil/OT/06/24/205
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -38(co-ordinates-A-19.0696502/B-72.9232835)(time-12.25pm/depth-24m)	Sampling Done By	Netel (India) Limited
Sr. No	Parameter	Result	Unit
1	Bulk Density	1.3	g/cm ³
2	Moisture Content	21.7	%
3	Volatile Content	12.7	%
4	Total Organic Carbon	1.3	%
5	Sulphate	1310.2	mg/kg
6	Chloride	2783.1	mg/kg
7	Sodium	3779.3	mg/kg
8	Potassium	2135.2	mg/kg
9	Calcium Oxide	4391.1	mg/kg
10	Magnesium	588.1	mg/kg
11	Lead	54.3	mg/kg
12	Chromium	193.8	mg/kg
13	Zinc	151.2	mg/kg
14	Copper	125.5	mg/kg

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CIN : U74999MH2003PLC152228

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Netel (India) Limited

TEST REPORT

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground	
Main Client : Brihanmumbai Municipal Corporation	
Contractor Name : NM CONSULTANT-SKW SOIL AND SURVEYS	
Laboratory : Netel India Limited	
Sample Type : Dumping Solid waste	Test Report No. : NIL/OT/06/24/205
	Sample Code : NIL/OT/06/24/205
Sampling Date : 10.06.2024	Sample Receive Date : 15.06.2024
Analysis Start Date : 15.06.2024	Analysis End Date : 26.06.2024
Reporting Date : 26.06.2024	Sample Qty & Pckg : Plastic Zip lock bag
Sampling Location : Zone-04/Location -38(co-ordinates- A-19.0696502/B-72.9232835)(time- 12.25pm/depth-24m)	Sampling Done By : Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	2605.4	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2578.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	5.8	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.0	%	APHA
22	Silica	24.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	78.3	%	Net reference
24	Ash	84.3	%	Net reference
25	Carbon Content	4.9	%	
26	Total Nitrogen (N)	2.1	%	
27	Sulphur	0	%	
28	Hydrogen	0.5	%	
29	Oxygen	8.2	%	By Calculation

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4. Method Reference: The Fertiliser (Control) Order, 1985 (as amended up to: Feb 2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

A Netwewala Group Company

CIN: UT4999MR2017PLC42228

Office & Laboratory : W-406, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701.

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/215
		Sample Code	NILOT/06/24/215
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -39(co-ordinates- A-19.0710362/B-72.9233348)(time- 07.25pm/depth-27m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M. M. Saxena
2	Moisture Content	33.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	21.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1318.8	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1453.8	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2323.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2182.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3746.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	573.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	79.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	245.2	mg/kg	
13	Zinc	259.6	mg/kg	
14	Copper	274.1	mg/kg	

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CIN : U74999MH2003PLC142228

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TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Soil waste	Test Report No.	: NIL/OT/06/24/215
		Sample Code	: NIL/OT/06/24/215
Sampling Date	: 10.06.2024	Sample Receive Date:	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-04/Location -39(co-ordinates-A-19.0710362/B-72.9233348)(time-07.25pm/depth-27m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.6	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	1554	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1508.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	14.8	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	5.7	%	APHA
22	Silica	35.4	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	66.7	%	Net reference
24	Ash	72.9	%	Net reference
25	Carbon Content	9.7	%	
26	Total Nitrogen (N)	1.9	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.3	%	
28	Hydrogen	0.9	%	
29	Oxygen	14.3	%	By Calculation

Note 3

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 4. Method Reference: * The Fertiliser (Control) order, 1995 (as amended up to: Feb.2019; Schedule -IV, PART-D)

Reviewed by

Neelima Dalvi
Technical Manager

Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

Quality Manager





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NILOT/06/24/217
		Sample Code	NILOT/06/24/217
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -39(co-ordinates- A-19.0710362/B-72.9233348)(time 07.50pm/depth-37m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	39.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	22.9	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	1.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2175.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	8297.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	5722.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3947.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3009.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1524.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	28.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	247.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	138.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	132.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

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CIN : U74999MH2003PLC142228

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/217
		Sample Code	NILOT/06/24/217
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -39(co-ordinates- A-19.0710362/B-72.9233345)(time 07.50pm/depth-37m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.0	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	1053.3	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	998.2	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	18.4	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0.9	%	APHA
22	Silica	19.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	60.9	%	Net reference
24	Ash	76.2	%	Net reference
25	Carbon Content	1.6	%	
26	Total Nitrogen (N)	1.1	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.0	%	
28	Hydrogen	1.0	%	
29	Oxygen	20.0	%	By Calculation

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shradha Kore
Quality Manager



End of Report

A Neterwala Group Company

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/DT/06/24/209
Sampling Date	10.06.2024	Sample Code	Nil/DT/06/24/209
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -40(co-ordinates- A-19.071584/B-72.9241713)(time- 05.45pm/depth-30m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	28.7	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	22.7	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.4	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	150.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1052.7	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2212.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1923.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4922.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	351.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	101.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	234.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	301.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	211.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

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CIN : U74999MH2003PLC142228

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/209
		Sample Code	NIL/OT/06/24/209
Sampling Date	10.06.2024	Sample Receive Date:	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -40(co-ordinates-A-19.071594/B-72.9241713)(time-05.45pm/depth-30m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.7	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.0	mg/kg	
18	Gross Calorific Value	4702.8	Kcal/Kg	IS 1350 (III)
19	Net Calorific Value	4646.1	Kcal/Kg	IS 1350 (III)
20	Loss of Ignition	13.4	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.2	%	APHA
22	Silica	55.9	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	71.3	%	Net reference
24	Ash	74.1	%	Net reference
25	Carbon Content	5.7	%	
26	Total Nitrogen (N)	2.6	%	
27	Sulphur	0.4	%	
28	Hydrogen	1.1	%	
29	Oxygen	16.1	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/211
		Sample Code	NIL/OT/06/24/211
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -40(co-ordinates- A-19.0715946/B-72.9241713)(time 06.20pm/depth-40m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.3	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	14.7	%	Environmental Analysis - Water, Soil and Air by M. M. Saxena
4	Total Organic Carbon	3.4	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	3905.8	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	12062.9	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	8945.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	5329.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3544.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	1051.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	27.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	247.2	mg/kg	
13	Zinc	70.2	mg/kg	
14	Copper	105.4	mg/kg	

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CIN : U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/211
		Sample Code	NILOT/06/24/211
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-04/Location -40(co-ordinates- A-19.0715946/B-72.9241713)(time- 06.20pm/depth-40m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1	mg/kg	
18	Gross Calorific Value	1256.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1191.8	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	10.3	%	Manual of Soil testing in India, Minsry of Agriculture, GOI, 2011
21	Fixed Carbon	1.9	%	APHA
22	Silica	66.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	63.5	%	Net reference
24	Ash	83.4	%	Net reference
25	Carbon Content	3.1	%	
26	Total Nitrogen (N)	1.4	%	
27	Sulphur	0.9	%	
28	Hydrogen	1.2	%	
29	Oxygen	10	%	By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager



ZONE 5



Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Compost	Test Report No.	: NILJOT/05/24/188
		Sample Code	: NILJOT/05/24/188
Sampling Date	: 27.05.2024	Sample Receive Date	: 30.05.2024
Analysis Start Date	: 30.05.2024	Analysis End Date	: 06.06.2024
Reporting Date	: 06.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-5/location-41(Co ordinates A- : 11.0726301/B-72.9308503)(time- 3:40pm/depth-03m)	Sampling Not Done By : Netel (India) Limited	
Sr. No	Parameter	Result	Unit
1	Bulk Density	1.3	g/cm ³
2	Moisture Content	17.8	%
3	Volatile Content	11.0	%
4	Total Organic Carbon	2.0	%
5	Sulphate	5417.6	mg/kg
6	Chloride	365.1	mg/kg
7	Sodium	3261.7	mg/kg
8	Potassium	1404.2	mg/kg
9	Calcium Oxide	5729.4	mg/kg
10	Magnesium	116.9	mg/kg
11	Lead	33.9	mg/kg
12	Chromium	46.3	mg/kg
13	Zinc	120.8	mg/kg
14	Copper	55.1	mg/kg

A Neterwala Group Company

CIN : U74999MH2003PLC142228

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Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	: NIL/OT/05/24/198
		Sample Code	: NIL/OT/05/24/198
Sampling Date	27.05.2024	Sample Receive Date	: 30.05.2024
Analysis Start Date	30.05.2024	Analysis End Date	: 06.06.2024
Reporting Date	06.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-5/Location-41(Co ordinates A-11.0726301/B-72.9308503)(time-3:40pm/depth-03m)	Sampling Not Done By : Netel (India) Limited	

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.5	mg/kg	
16	Selenium	0.9	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.3	mg/kg	
18	Gross Calorific Value	1381.3	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1213.3	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	5.5	%	Manual of Soil testing in India, Minsry of Agriculture, GOI, 2011
21	Fixed Carbon	2.3	%	APHA
22	Silica	95.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	82.1	%	Net reference
24	Ash	86.7	%	Net reference
25	Carbon Content	3.9	%	
26	Total Nitrogen (N)	0.3	%	
27	Sulphur	0.4	%	
28	Hydrogen	3.2	%	
29	Oxygen	5.5	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIJ/OT/06/24/136
		Sample Code	NIJ/OT/06/24/136
Sampling Date	07.06.2024	Sample Receive Date	12.06.2024
Analysis Start Date	12.06.2024	Analysis End Date	24.06.2024
Reporting Date	24.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -41(co-ordinates- A-19.072630/B-72.9308503)(time- 12.15pm/depth-13m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.5	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	37.8	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	38.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	16.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	2678.5	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	3455.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4423	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3666.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4096.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	468.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	48.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	168.5	mg/kg	
13	Zinc	354.9	mg/kg	
14	Copper	381.7	mg/kg	

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Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	: NIL/OT/06/24/136
Sampling Date	: 07.06.2024	Sample Code	: NIL/OT/06/24/136
Analysis Start Date	: 12.06.2024	Analysis End Date	: 24.06.2024
Reporting Date	: 24.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-05/Location -41(co-ordinates- A-19.072630/B-72.9308503)[time-12.15pm/depth-13m]	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	EPA 3050B & By ICP
16	Selenium	0.3	mg/kg	
17	Arsenic	1.4	mg/kg	
18	Gross Calorific Value	3289.3	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3213.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	26.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	8.3	%	APHA
22	Silica	114.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	62.2	%	Net reference
24	Ash	53.1	%	Net reference
25	Carbon Content	12.7	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	2.3	%	
27	Sulphur	1.0	%	
28	Hydrogen	1.4	%	
29	Oxygen	29.5	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	: NIL/OT/05/24/199
		Sample Code	: NIL/OT/05/24/199
Sampling Date	27.05.2024	Sample Receive Date	: 30.05.2024
Analysis Start Date	30.05.2024	Analysis End Date	: 06.06.2024
Reporting Date	06.06.2024	Sample Qty & Pkg	: Plastic Zip lock bag
Sampling Location	Zone-5/Location 42(Co ordinates A-19.0727359/B-72.9299598)(time-5:10pm/depth-06m)	Sampling Not Done By : Netel (India) Limited	

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	27.3	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	9.5	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	2.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1962.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1904.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4260.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1906.7	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	6335.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	118.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	29.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	50.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	99.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	51.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

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CIN : U74999MH2001PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Compost	Test Report No.	NILOT/05/24/199
		Sample Code	NILOT/05/24/199
Sampling Date	27.05.2024	Sample Receive Date	30.05.2024
Analysis Start Date	30.05.2024	Analysis End Date	06.06.2024
Reporting Date	06.06.2024	Sample Qty & Pckg	Plastic Ziplock bag
Sampling Location	Zone-5/Location 42/(Co ordinates A-19.0727359/B-72.9299598)(time-5:10pm/depth-06m)	Sampling Not Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.4	mg/kg	EPA 3050B & By ICP
16	Selenium	0.6	mg/kg	
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	1525.0	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1341.1	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	5.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	1.8	%	APHA
22	Silica	100.3	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	72.7	%	Net reference
24	Ash	88.7	%	Net reference
25	Carbon Content	2.1	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.1	%	
27	Sulphur	0.3	%	
28	Hydrogen	3.5	%	
29	Oxygen	5.3	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/06/24/221
		Sample Code	NI/OT/06/24/221
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -42(co-ordinates- A-19.0727359/B-72.9268598)(time- 02.00pm/depth-16m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	39.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing In India, Ministry of Agriculture GOI 2011
3	Volatile Content	27.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	808.6	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	3138.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2468.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1949.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4126.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	235.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	47.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	108.6	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	173.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	148.3	mg/kg	

Netwewala Group Company

CIN : U74999MH2003PLC462228

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/221
Sampling Date	10.06.2024	Sample Code	Nil/OT/06/24/221
Analysis Start Date	15.06.2024	Sample Receive Date	15.06.2024
Reporting Date	26.06.2024	Analysis End Date	26.06.2024
Sampling Location	Zone-05/Location -42(co-ordinates- A-19.0727359/B-72.9268598)(time- 02.00pm/depth-16m)	Sample Qty & Pkg	Plastic Zip lock bag
		Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.6	mg/kg	EPA 3050B & By ICP
16	Selenium	0.2	mg/kg	
17	Arsenic	2.2	mg/kg	
18	Gross Calorific Value	2525.7	Kcal/Kg	
19	Net Calorific Value	2481.2	Kcal/Kg	IS 1350 (III)
20	Loss of Ignition	26.0	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	6.6	%	APHA
22	Silica	<10	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	60.1	%	Net reference
24	Ash	66.0	%	Net reference
25	Carbon Content	10.2	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	1.2	%	
27	Sulphur	0.5	%	
28	Hydrogen	0.8	%	
29	Oxygen	21.2	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground	
Main Client : Brihanmumbai Municipal Corporation	
Contractor Name : N.M.CONULTANT-SKW SOIL AND SURVEYS	
Laboratory : Netel India Limited	
Sample Type : Dumping Solid waste	Test Report No. : NIL/OT/06/24/208
	Sample Code : NIL/OT/06/24/208
Sampling Date : 10.06.2024	Sample Receive Date: 15.06.2024
Analysis Start Date : 15.06.2024	Analysis End Date : 26.06.2024
Reporting Date : 26.06.2024	Sample Qty & Pckg : Plastic Zip lock bag
Sampling Location : Zone-05/Location -43(co-ordinates- A-19.0734587/B-72.9282422)(time- 05.15pm/depth-09m)	Sampling Done By : Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.7	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	43.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	25.3	%	Environmental Analysis - Water, Soil and Air by M. M. Saxena
4	Total Organic Carbon	12.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	885.3	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2756.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3356	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2082.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4455.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	336.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	43.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	181.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	98.9	mg/kg	
14	Copper	123	mg/kg	

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 Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/208
Sampling Date	10.06.2024	Sample Code	Nil/OT/06/24/208
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -43 (co-ordinates A-19.0734587/B-72.9282422)(time 05.15pm/depth-09m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.1	mg/kg	EPA 3050B & By ICP
16	Selenium	0.2	mg/kg	
17	Arsenic	1.5	mg/kg	
18	Gross Calorific Value	2196.4	Kcal/Kg	IS 1350 (III)
19	Net Calorific Value	2165.7	Kcal/Kg	IS 1350 (ii)
20	Loss of Ignition	13.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.2	%	APHA
22	Silica	70.8	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	56.4	%	Net reference
24	Ash	70.5	%	Net reference
25	Carbon Content	6.8	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	2.4	%	
27	Sulphur	0	%	
28	Hydrogen	0.6	%	
29	Oxygen	19.8	%	By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/210
		Sample Code	Nil/OT/06/24/210
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -43(co-ordinates-A-19.0734587/B-72.9282422)(time-06.05pm/depth-19m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.8	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	55.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	25.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	11.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	754.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2456.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3041.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2217.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3017.3	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	352.7	mg/kg	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	60.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	151	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	205.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
14	Copper	215.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011

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Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/210
Sampling Date	10.06.2024	Sample Code	Nil/OT/06/24/210
Analysis Start Date	15.06.2024	Sample Receive Date	15.06.2024
Reporting Date	26.06.2024	Analysis End Date	26.06.2024
Sampling Location	Zone-05, Location -43 (co-ordinates - A-19.0734587/B-72.9282422) (time - 06.05pm/depth-19m)	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Done By	Netel (India) Limited		

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	EPA 3050B & By ICP
16	Selenium	0.2	mg/kg	
17	Arsenic	1.9	mg/kg	
18	Gross Calorific Value	2771.6	Kcal/Kg	
19	Net Calorific Value	2732.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	20.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.3	%	APHA
22	Silica	97.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	44.9	%	Not reference
24	Ash	71.5	%	Not reference
25	Carbon Content	5.7	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	2.8	%	
27	Sulphur	0.6	%	
28	Hydrogen	0.7	%	
29	Oxygen	18.7	%	By Calculation

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- Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



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Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Netel India Limited		
Sample Type	: Dumping Solid waste	Test Report No.	: NIL/OT/06/24/224
		Sample Code	: NIL/OT/06/24/224
Sampling Date	: 10.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	: 15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	: 26.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-05/Location-44(co-ordinates- A-19.0730113/B-72.9270474)(lime- 05.55pm/depth-12m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	20.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6.4	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1541.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1859.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2099.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2031.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3573.8	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	353.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	154.6	mg/kg	
12	Chromium	280.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	219.9	mg/kg	
14	Copper	402.9	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soild waste	Test Report No.	Nil/OT/06/24/224
Sampling Date	10.06.2024	Sample Code	Nil/OT/06/24/224
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -44 (co-ordinates- A-19.0730113/B-72.9270474)(time- 05.55pm/depth-12m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.9	mg/kg	
16	Selenium	0.6	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.3	mg/kg	
18	Gross Calorific Value	1654.8	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1609.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	13.8	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	4.8	%	APHA
22	Silica	89.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	63.6	%	Net reference
24	Ash	75.0	%	Net reference
25	Carbon Content	7.8	%	
26	Total Nitrogen (N)	1.6	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.4	%	
28	Hydrogen	0.9	%	
29	Oxygen	14.4	%	By Calculation

Note :

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Reviewed by

Neelima Dalvi
Technical Manager

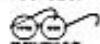


Authorised by

Shraddha Kere
Quality Manager

End of Report

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/212
		Sample Code	Nil/OT/06/24/212
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -44(co-ordinates-A-19.0730113/B-72.9270476)(time-06.35pm/depth-22m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	45.7	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	23	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	336.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2007.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2856.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2387.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	2662.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	456.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	75.2	mg/kg	
12	Chromium	179.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	217.3	mg/kg	
14	Copper	231.3	mg/kg	

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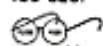
CIN : U74999MH2003PLC142228

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name : Characterization of Legacy Waste at Deonar Dumping Ground				
Main Client : Brihanmumbai Municipal Corporation				
Contractor Name : N.M CONSULTANT-SKW SOIL AND SURVEYS				
Laboratory : Netel India Limited				
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/212	
		Sample Code	NILOT/06/24/212	
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024	
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024	
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone-05/Location -44(co-ordinates- A-19.0730113/B-72.9270476)(time- 06.35pm/depth-22m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.6	mg/kg	EPA 3050B & By ICP
16	Selenium	0.3	mg/kg	
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	3135.8	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3080.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	17.4	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	4.3	%	APHA
22	Silica	85.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture, GOI 2011
23	Total Solids	54.3	%	Net reference
24	Ash	72.7	%	Net reference
25	Carbon Content	7.6	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	1.5	%	
27	Sulphur	0.4	%	
28	Hydrogen	1	%	
29	Oxygen	16.8	%	By Calculation

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb.2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/213
		Sample Code	Nil/OT/06/24/213
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -45[co-ordinates : A-19.0721938/B-72.9266402](time : 07.15pm/depth-15m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	28.9	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	20.9	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.9	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1648.7	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1304.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3045.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2054.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4216.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	564.7	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	64.0	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	190.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	199.3	mg/kg	
14	Copper	179.4	mg/kg	

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CIN : UT4999MH2013PLC142228

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NILOT/06/24/213
		Sample Code	: NILOT/06/24/213
Sampling Date	10.06.2024	Sample Receive Date:	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-05/Location -45(co-ordinates-A-19.0721938/B-72.9266402)(time-07.15pm/depth-15m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	
16	Selenium	0.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.5	mg/kg	
18	Gross Calorific Value	2334.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2334.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	13.3	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	0	%	APHA
22	Silica	33	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	71.1	%	Net reference
24	Ash	79.2	%	Net reference
25	Carbon Content	0	%	
26	Total Nitrogen (N)	0.9	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0	%	
28	Hydrogen	0	%	
29	Oxygen	19.8	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

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Quality Manager

End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name		Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client		Brihanmumbai Municipal Corporation		
Contractor Name		N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory		Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/219	
Sampling Date	10.06.2024	Sample Code	NIL/OT/06/24/219	
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024	
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag	
Sampling Location	Zone-05/Location -45(co-ordinates- A-19.0721938/B-72.9266402)(time 08.00pm/depth-25m)	Sampling Done By	Netel (India) Limited	
Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	31.5	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	26.6	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	7.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1477.0	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1705.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2653.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1724.0	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3822.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	468.0	mg/kg	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	53.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	198.5	mg/kg	
13	Zinc	176.7	mg/kg	
14	Copper	233.0	mg/kg	

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Registered office : Liberty Building, 3rd Floor, Sir Vitthaldas Thackersey Marg. (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/06/24/219
		Sample Code	: NIL/OT/06/24/219
Sampling Date	10.06.2024	Sample Receive Date	: 15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	: 26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone-05/Location -45(co-ordinates- A-19.0721938/B-72.9266402)(time- 08:00pm/dept(h-25m)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	1380.0	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1340.3	Kcal/Kg	IS 1350 (III)
20	Loss of Ignition	15.0	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	2.7	%	APHA
22	Silica	41.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	68.5	%	Net reference
24	Ash	70.7	%	Net reference
25	Carbon Content	5.2	%	
26	Total Nitrogen (N)	2.1	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.0	%	
28	Hydrogen	0.8	%	
29	Oxygen	21.2	%	
				By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

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Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/204
		Sample Code	NIL/OT/06/24/204
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -46(co-ordinates- A-19.0733123/B-72.9261576)(time- 12.20pm/depth-18m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.8	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.9	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	29	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	11.4	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	5871	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1458.2	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	3134.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2312.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4641.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	468	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	200.3	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	25.8	mg/kg	
13	Zinc	558.3	mg/kg	
14	Copper	504.1	mg/kg	





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NI/OT/06/24/204
		Sample Code	NI/OT/06/24/204
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05, Location -46 (co-ordinates- A-19.0733123/B-72.9261578) (time- 12.20pm/depth-18m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	2.0	mg/kg	
16	Selenium	1.2	mg/kg	EPA 3050B & By ICP
17	Arsenic	2.6	mg/kg	
18	Gross Calorific Value	3209.8	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3155.7	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	19.7	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	2.5	%	APHA
22	Silica	83.2	mg/kg	Lab Sop no. NI/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	63.1	%	Net reference
24	Ash	68.5	%	Net reference
25	Carbon Content	4.5	%	
26	Total Nitrogen (N)	1.4	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.5	%	
28	Hydrogen	1.0	%	
29	Oxygen	24	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/206
		Sample Code	NILOT/06/24/206
Sampling Date	10.06.2024	Sample Receive Date:	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -46(co-ordinates : A-19.0733123/B-72.9261578)(time- 01:25pm/depth-28m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	29.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	22	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	5.8	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	3204.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1305.3	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2432.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2044.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4573.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	345.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	123.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	184.7	mg/kg	
13	Zinc	376.7	mg/kg	
14	Copper	335.9	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/06/24/206
		Sample Code	NI/OT/06/24/206
Sampling Date	10.06.2024	Sample Receive Date	15.06.2024
Analysis Start Date	15.06.2024	Analysis End Date	26.06.2024
Reporting Date	26.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone-05/Location -46/(co-ordinates-A-19.0733123/B-72.9261578)(time-01:25pm/depth-28m)	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.9	mg/kg	
18	Gross Calorific Value	3427.6	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3387.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	19.2	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	2.5	%	APHA
22	Silica	76.3	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	70.6	%	Net reference
24	Ash	75.5	%	Net reference
25	Carbon Content	5.5	%	
26	Total Nitrogen (N)	1.7	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0.3	%	
28	Hydrogen	0.8	%	
29	Oxygen	16.3	%	By Calculation

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Reviewed by

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Technical Manager



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Quality Manager

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/06/24/021
		Sample Code	: NIL/OT/06/24/021
Sampling Date	: 01.06.2024	Sample Receive Date	: 04.06.2024
Analysis Start Date	: 04.06.2024	Analysis End Date	: 13.06.2024
Reporting Date	: 14.06.2024	Sample Qty & Pckg	: Plastic Zip lock bag
Sampling Location	Zone 05/Location-47(co-ordinatesA-19.0727657/B-72.9249421)time-09.20pm/Depth-21mtr	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	22.7	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	14.2	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	2.4	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1417.9	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2200.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4126.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2112.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	5790.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	118.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	114.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	194.8	mg/kg	
13	Zinc	416.5	mg/kg	
14	Copper	239.7	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/021
		Sample Code	Nil/OT/06/24/021
Sampling Date	01.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-47 (co-ordinates A-19.0727657/B-72.9249421) time-09.20pm/Depth-	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	EPA 3050B & By ICP
16	Selenium	0.3	mg/kg	
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	1633.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1560.2	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	9.0	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	2.1	%	APHA
22	Silica	102.6	mg/kg	Lab Sop no. N.I.D/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	77.3	%	Net reference
24	Ash	83.7	%	Net reference
25	Carbon Content	3.7	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	0.1	%	
28	Hydrogen	2.0	%	
29	Oxygen	10.6	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shradhha Kere
Quality Manager

End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/022
		Sample Code	NILOT/06/24/022
Sampling Date	01.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-47(coordinates A-19.0727657/B-72.9249421)/time-10.00pm/Depth-31mlr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.2	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	24.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	14.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	2.6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1343.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	1661.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4101.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	1919.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4983.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	118.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	96.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	162.8	mg/kg	
13	Zinc	325.8	mg/kg	
14	Copper	222.1	mg/kg	

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CIN : U74999MH2003PLC142228

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihamumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soild waste	Test Report No.	: NIL/OT/06/24/022
		Sample Code	: NIL/OT/06/24/022
Sampling Date	: 01.06.2024	Sample Receive Date:	: 04.06.2024
Analysis Start Date	: 04.06.2024	Analysis End Date	: 13.06.2024
Reporting Date	: 14.06.2024	Sample Qty &Pckg	: Plastic Zip lock bag
Sampling Location	Zone 05/Location-47 (co-ordinatesA-19.0727657/B-72.9249421)time-10.00pm/Depth-	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.8	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.1	mg/kg	
18	Gross Calorific Value	884.3	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	780.4	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	8.1	%	Manual of Soil testing in India, Minstry of Agriculture, GOI, 2011
21	Fixed Carbon	2.0	%	APHA
22	Silica	117.4	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	75.9	%	Net reference
24	Ash	63.6	%	Net reference
25	Carbon Content	3.5	%	
26	Total Nitrogen (N)	0.1	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	2.0	%	
28	Hydrogen	10.6	%	
29	Oxygen	5.3	%	By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



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Shraddha Kere
Quality Manager

End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	NM CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/018
		Sample Code	NILOT/06/24/018
Sampling Date	31.05.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 5/Location-48(co-ordinatesA-19.0728168/B-72.9243718)time-8.25pm/Depth-24mlr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.06	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	27.9	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	21.4	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.1	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1414.4	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2195.1	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4701.3	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	5545.4	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	44406.2	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	118.0	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	96.2	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	213.5	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
13	Zinc	391.2	mg/kg	
14	Copper	256.1	mg/kg	

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CIN : U74999MH2003PLC142228

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Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com

Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Soil waste	Test Report No.	NIL/OT/06/24/018
		Sample Code	NIL/OT/06/24/018
Sampling Date	31.05.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 5 Location-4B[co-ordinates A-19.0728168/B-72.9243718]time-8.25pm/Depth-24mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	
16	Selenium	0.4	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.2	mg/kg	
18	Gross Calorific Value	1410.9	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1315.5	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	14.6	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.2	%	APHA
22	Silica	116	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	72.1	%	Net reference
24	Ash	75.4	%	Net reference
25	Carbon Content	5.52	%	
26	Total Nitrogen (N)	0.2	%	
27	Sulphur	0.1	%	
28	Hydrogen	1.8	%	
29	Oxygen	17	%	By Calculation

Note :

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3. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019; Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere

Quality Manager



End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/031
		Sample Code	NILOT/06/24/031
Sampling Date	31.05.2024	Sample Receive Date:	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty &Pckg	Plastic Zip lock bag
Sampling Location	Zone 5/Location-4B(co-ordinatesA-19.07281888-72.9243718)time-09.10pm/Depth-34mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	27.6	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	22.3	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.3	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1042.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	3123.7	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	5851.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3049.1	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4931.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	117.4	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	150.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	108.1	mg/kg	
13	Zinc	546.2	mg/kg	
14	Copper	318.7	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/031
		Sample Code	NILOT/06/24/031
Sampling Date	31.05.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 5/Location-43(co-ordinates A-19.07281888-72.9243718)time-09.10pm/Depth-34mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	0.9	mg/kg	EPA 3050B & By ICP
16	Selenium	0.3	mg/kg	
17	Arsenic	0.8	mg/kg	
18	Gross Calorific Value	3441.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	3360.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	11.2	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	2.8	%	APHA
22	Silica	121.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	72.4	%	Net reference
24	Ash	74.9	%	Net reference
25	Carbon Content	4	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.3	%	
27	Sulphur	0.1	%	
28	Hydrogen	1.5	%	
29	Oxygen	19.2	%	By Calculation

Note :

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4. Method Reference: * The Fertiliser (Control) Order, 1985 (as amended up to: Feb 2019, Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/019
		Sample Code	Nil/OT/06/24/019
Sampling Date	01.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-49(coordinatesA-19.0733320/B-72.9236003)time-7.15pm/Depth-27mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	30.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	19.8	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	4.6	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1102.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2806.4	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	2867.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	3075.7	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	3599.5	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	<100	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	119.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	219.9	mg/kg	
13	Zinc	377.6	mg/kg	
14	Copper	287.6	mg/kg	

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Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	Nil/OT/06/24/019
		Sample Code	Nil/OT/06/24/019
Sampling Date	01.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-49(co-ordinatesA-19.0733320/B-72.9236003)time-7.15pm/Depth-	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.3	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.8	mg/kg	
18	Gross Calorific Value	2868	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2763.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	11.4	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	2.4	%	APHA
22	Silica	108.3	mg/kg	Lab Sop no. N/L/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	69.9	%	Net reference
24	Ash	77.8	%	Net reference
25	Carbon Content	3.1	%	
26	Total Nitrogen (N)	0.1	%	
27	Sulphur	0.0	%	
28	Hydrogen	2.0	%	
29	Oxygen	16.9	%	By Calculation

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4. Method Reference: * The Fertiliser (Control) order, 1985 (as amended up to: Feb 2019); Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

page 2 of 2





TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIUOT/06/24/020
		Sample Code	NIUOT/06/24/020
Sampling Date	01.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-49(coordinatesA-19.0733320/B-72.9236003)time-8.00pm/Depth-37mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	31.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	17.7	%	Environmental Analysis - Water, Soil and Air by M. M. Saxena
4	Total Organic Carbon	4.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1107.1	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2564.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4849.7	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2634.8	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4502.9	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	<100	mg/kg	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	115.7	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	143.5	mg/kg	
13	Zinc	375.1	mg/kg	
14	Copper	246.2	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/020
		Sample Code	NILOT/06/24/020
Sampling Date	01.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-49(co-ordinatesA-19.0733320/B-72.9236003)time-8.00pm/Depth-	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.0	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.5	mg/kg	
18	Gross Calorific Value	2539.7	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2521.1	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	11.5	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.0	%	APHA
22	Silica	103.6	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	68.9	%	Net reference
24	Ash	79.3	%	Net reference
25	Carbon Content	4.2	%	
26	Total Nitrogen (N)	0	%	Lab SOP NO. 027 Issue No. 04
27	Sulphur	0	%	
28	Hydrogen	0.4	%	
29	Oxygen	16	%	
				By Calculation

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Reviewed by

Neelima Dalvi
Technical Manager



End of Report

Authorised by

Shraddha Kere
Quality Manager

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NIL/OT/06/24/024
		Sample Code	NIL/OT/06/24/024
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-50(coordinatesA-19.0734273/B-72.9229867);time-12.57pm/Depth-30mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	0.9	g/cm ³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	36.1	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	22.8	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.2	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1100.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2834	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4661.9	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2765.5	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4642	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	117	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	132.1	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	194.1	mg/kg	
13	Zinc	389.6	mg/kg	
14	Copper	247.8	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/06/24/024
		Sample Code	NI/OT/06/24/024
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-50[co-ordinatesA-19.0734273/B-72.9229867]time-12.57pm/Depth-	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.5	mg/kg	EPA 3050B & By ICP
16	Selenium	0.4	mg/kg	
17	Arsenic	1.5	mg/kg	
18	Gross Calorific Value	1150.6	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	1006.9	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	18.1	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	3.7	%	APHA
22	Silica	119.1	mg/kg	Lab Sop no. NI/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	63.9	%	Net reference
24	Ash	73.5	%	Net reference
25	Carbon Content	6.6	%	Lab SOP NO. 027 Issue No. 04
26	Total Nitrogen (N)	0.5	%	
27	Sulphur	0.1	%	
28	Hydrogen	2.7	%	
29	Oxygen	16.6	%	By Calculation

Note :

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Reviewed by

Neelima Dalvi

Technical Manager



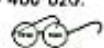
Authorised by

Shraddha Kere

Quality Manager

End of Report

page 2 of 2





Netel (India) Limited

TEST REPORT

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M.CONULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NILOT/06/24/025
		Sample Code	NILOT/06/24/025
Sampling Date	02.06.2024	Sample Receive Date	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-50(ordinatesA-19.0734273/B-72.9229867)time-1.30pm/Depth-40mtr	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Bulk Density	1.1	g/cm³	Environmental Analysis - Water, Soil and Air by M.M. Saxena
2	Moisture Content	35.4	%	Lab Sop no. NIL/SOP/06, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
3	Volatile Content	19.8	%	Environmental Analysis - Water, Soil and Air by M.M. Saxena
4	Total Organic Carbon	9.5	%	Lab Sop no. NIL/SOP/05, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
5	Sulphate	1359.2	mg/kg	Lab Sop no. NIL/SOP/04, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
6	Chloride	2054.6	mg/kg	Lab Sop no. NIL/SOP/03, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
7	Sodium	4396.2	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
8	Potassium	2597.6	mg/kg	Lab Sop no. NIL/SOP/10, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
9	Calcium Oxide	4705.1	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
10	Magnesium	118.6	mg/kg	Lab Sop no. NIL/SOP/08, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
11	Lead	230.9	mg/kg	Lab Sop no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
12	Chromium	163.5	mg/kg	
13	Zinc	491.5	mg/kg	
14	Copper	385.8	mg/kg	

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TEST REPORT

Netel (India) Limited

Project Name	Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	Brihanmumbai Municipal Corporation		
Contractor Name	N.M CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	Netel India Limited		
Sample Type	Dumping Solid waste	Test Report No.	NI/OT/06/24/025
		Sample Code	NI/OT/06/24/025
Sampling Date	02.06.2024	Sample Receive Date:	04.06.2024
Analysis Start Date	04.06.2024	Analysis End Date	13.06.2024
Reporting Date	14.06.2024	Sample Qty & Pckg	Plastic Zip lock bag
Sampling Location	Zone 05/Location-50 (co-ordinates A-19.0734273/B-72.9229867) (time-1:30pm/Depth-	Sampling Done By	Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
15	Mercury	1.2	mg/kg	
16	Selenium	0.3	mg/kg	EPA 3050B & By ICP
17	Arsenic	1.0	mg/kg	
18	Gross Calorific Value	2787.4	Kcal/Kg	IS 1350 (II)
19	Net Calorific Value	2728.6	Kcal/Kg	IS 1350 (II)
20	Loss of Ignition	15.7	%	Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011
21	Fixed Carbon	25	%	APHA
22	Silica	112.3	mg/kg	Lab SOP no. NIL/SOP/15, Based on Manual of Soil testing in India, Ministry of Agriculture GOI 2011
23	Total Solids	64.6	%	Net reference
24	Ash	77.7	%	Net reference
25	Carbon Content	3.8	%	
26	Total Nitrogen (N)	0.3	%	
27	Sulphur	0	%	
28	Hydrogen	1.1	%	
29	Oxygen	17	%	By Calculation

Note :

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- The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
- Method Reference : The Fertiliser (Control) Order, 1965 (as amended up to: Feb.2019); Schedule -IV, PART-D

Reviewed by

Neelima Dalvi
Technical Manager

Authorised by

Shraddha Kere
Quality Manager



End of Report

page 2 of 2



Leachate Analysis



Netel (India) Limited

TEST REPORT

Project Name	: Characterization of Legacy Waste at Deonar Dumping Ground		
Main Client	: Brihanmumbai Municipal Corporation		
Contractor Name	: N.M.CONSULTANT-SKW SOIL AND SURVEYS		
Laboratory	: Leachate Waste		
Sample Type	Dumping Solid waste	Test Report No.	: NIL/OT/05/24/181
		Sample Code	: NIL/OT/05/24/181
Sampling Date	: 25.05.2024	Sample Receive Date	: 27.05.2024
Analysis Start Date	: 27.05.2024	Analysis End Date	: 04.06.2024
Reporting Date	: 04.06.2024	Sample Qty & Pkg	: Plastic bottle(2ltr)
Sampling Location	: Zone -04(Liquid sample)	Sampling Done By	: Netel (India) Limited

Sr. No	Parameter	Result	Unit	Method
1	Dissolved Solids (TDS)	6550	mg/l	APHA 2540-C, 24th Ed 2023
2	Suspended Solids (TSS)	50	mg/l	IS 3025 (Part 21): 2022
3	Chemical Oxygen Demand(COD)	1002	mg/l	APHA 5220-B, 24th Ed 2023
4	Biochemical Oxygen Demand (BOD)	390	mg/l	IS 3025 (Part 44): 2023
5	Chloride(Cl)	2812.9	mg/l	APHA 4500-Cl-B, 24th Ed:2023
6	Fluoride(F)	2.8	mg/l	APHA 4500-F-D,24th Ed 2023
7	Ammonical Nitrogen	532	mg/l	IS 3025(Part 34):1988 (RA 2019)
8	Phenolic compound	1.5	mg/l	APHA 5530-B 24th Ed 2023
9	Cadmium(Cd)	0.01	mg/l	APHA 3111 B 24th Ed 2023
10	Silver(Ag)	<0.01	mg/l	APHA 3111 B 24th Ed 2023
11	Lead(Pb)	0.14	mg/l	APHA 3111 B 24th Ed 2023
12	Zinc(Zn)	0.05	mg/l	APHA 3111 B 24th Ed 2023
13	Copper(Cu)	<0.04	mg/l	APHA 3111 B 24th Ed 2023
14	Nickel(Ni)	0.14	mg/l	APHA 3111 B 24th Ed 2023
15	Chromium(Cr)	<0.01	mg/l	APHA 3111 B 24th Ed 2023
16	Arsenic(As)	<0.01	mg/l	IS 3025 (Part 37)
17	Cynide(CN)	<0.005	mg/l	APHA 4500-CN 24th Ed 2023
18	Mercury(Hg)	<0.001	mg/l	APHA 3111 B 24th Ed 2023
19	Total Kjeldhal Nitrogen (TKN)	571.2	mg/l	APHA 4500(N)-C 24th Ed 2023

Note :

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Reviewed by

Neelima Dalvi
Technical Manager



Authorised by

Shraddha Kere
Quality Manager

End of Report

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