











Figure 2: Variation of heavy metal along the profile

Table 6: Element concentrations of well water samples in both Dry and Wet period

Parameter	W1		W2		W3		W4		Period
	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	
	Period	Period	Period	Period	Period	Period	Period	Period	
pH	5.19	6.8	5.69	6.1	6.78	6.96	6.52	6.78	
Electrical	0.1	0.25	0.26	0.36	0.7	0.82	0.3	0.69	
Conductivity (mS/m)									
Sulphate (ppm)	7	4	24	10	49	4	49	8	
Nitrate (ppm)	2.5	2.1	4.6	4.3	1.3	0.7	3.2	0.4	
Phosphate(ppm)	0.24	0.13	0.23	0.18	0.11	0.09	0.13	0.05	
Zn(ppm)	0.22	0.12	0.13	0.11	0.12	0.18	0.14	0.06	
Cu(ppm)	0	0.01	0.02	0.01	0.03	0	0.04	0.02	
Fe(ppm)	0.29	0.11	0.24	0.22	0.54	0.52	0.58	0.53	
Mn(ppm)	0	0	0.05	0	0.39	0.12	2.85	1.5	
Cr(ppm)	0.05	0.02	0.05	0.03	0.1	0	0.06	0.12	
Ni(ppm)	0.06	0.02	0.04	0.02	0.09	0.15	0.02	0.02	
Co(ppm)	0	0	0.09	0.09	0	0	0.04	0	

#### 4. Conclusions

Ahmedabad leachate from the landfill is most likely in methanogenic phase, pH was 7.9. Most of the parameters (including NO<sub>3</sub><sup>-</sup>, Ni, Cu, Fe, CO) in Ahmedabad landfill leachate he may be cleansed of the issue of sewage exceeded the requirements of the seed for an act, even if the final destination is determined by the local and international standards. A1 and A2 are contaminated with Cu, Cr, Ni, Mn, Fe, Co and the EC. A3 infection of Cr, Ni, Co, Mn, Fe and the EC. A4 contaminated with Mn, Fe, Co. A5 Fe infection.

And he measured the parameters of the borehole is more than the sum of the concentrations is most closely linked to the landfill. Improve the quality of groundwater borehole increased distance from the dump. Or for any other reason for this is that there is a high concentration of pollutants, has a significant impact on the quality of the leachate can be concluded that the groundwater close to the area, Ahmedabad landfill. Samples collected drought shows a lower concentration of elements and nutrients than samples collected after the rainy season. Because of the rain, flooded the leaching of the material.

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