

OM ENGINEERING C O L L E G E

"A VISIT TO TADKESWAR COAL MINE"



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ACKNOWLEDGEMENT

We are gladly thankful to Head of the Department Prof. H. H. GAJERA(Civil Engineering) for providing such great opportunities to learn something new and innovative and our faculties who gave us a great guidance regarding training and instructed us the importance of training in civil field. So we decided to take visit of **Tadkeshwar Lignite Coal Mine** village Tadkeshwar located in Mandavi Taluka of Surat District.

GENERAL INFORMATION

Tadkeshwar Lignite Mine is located in Tadkeshwar Village near Mandvi taluka of surat district, Gujarat in India. Tadkeshwar coal Mine is a site for lignite coal mining which was started in 2005-06 commissioning under the Gujarat Mineral Development Corporation Ltd. (GMDC)

Tadkeshwar Lignite Mine producing of average Lignite about 33.90 million tonnes in a year.

PURPOSE OF VISIT

Our main purpose for this visit is to be familiar with real time environment of site and to get practical knowledge of various geological formation, minerals & types of coal.

From the visit of coal mine, students get the knowledge about different types of minerals, rocks & get information about the different layers of earth which is very useful for their subjective study.

WHAT WE LEARN?

On 2^{nd} April 2016, we reached Lignite Coal Mine at Tadkeshwar village .

At starting we get the overall information about coal mine by Senior Manager of site Mr. M.M.Umriya. Tadkeshwar Lignite Mine was started in year of 2006 under the commissioning agency of GMDC. This lignite mine contains about 964.44 Hectare total area & 6.82 km2 area for the exploration.



The picture shows the exploration of earth layers & loading & unloading of excavated earth to the dumping site.



The mine has total 48.92 million tonnes Geological reserves out of which 33.90 million tonnes is can be mine which is excavated through Opencast Mining using Hydraulic excavators and dumper combination along with ancillary equipment such as Dozer, Water Sprinkler, Motor Grader etc.



The mine had geological formation from top to bottom as,

- 1. Ferruginous
- 2. Sandstone
- з. Sandy Clay
- 4. Grey Clay
- 5. Carbonaceous Clay
- 6. Lignite
- 7. Carbonaceous Clay

- 8. Lenses of Sandstone
- 9. Carbonaceous Clay
- 10.Lignite
- 11.Grey Clay

The Lignite extracted from this mine is used in Thermal Power Plants, Textile Industries, Paint Industries, Soda Ash industries, Roof and Tiles Industries, etc as a fuel.

CONCLUSION

From this visit, we get the information and knowledge about the geological features of coal mine and its method of extraction . We got very clear idea about properties of freshly extracted Lignite and its various uses.

Thank You



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