

BOEM EDUCATES A TEAM OF STUDENTS ON ENERGY RESOURCES

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By: Jorge Ortiz



Allan Shareghi leads the group to natural tar seeps

Along the coast of Santa Barbara County twenty high school students from all across the country gather around in a tar pit area on Carpinteria State Beach, CA.

Allan Shareghi, Lease Management Section Chief in the Office of Strategic Resources at BOEM, begins with a brief history of “Carpinteria” and the carpentry uses of tar, the plentiful resource in the area, by the Chumash tribe. Tar is composed of a mixture of hydrocarbons which can be produced from coal, wood and petroleum. The tar pits are formed when crude oil seeps to the earth’s surface through fissures in the Earth crust; the evaporation of the oil leaves behind the black oozy substance. “The movement of tar pits depend on temperature, more visible during hot summers,” said Shareghi.

In addition Jean Thurston, Renewable Energy Program Specialist with BOEM, presented the emerging developments of wind energy. Wind energy is produced when a wind turbine converts kinetic energy from wind currents into electric power. With just a small scale wind turbine model and sand, Thurston demonstrated the environmental and economic impact wind energy has both on land and offshore, “Offshore winds

tend to blow more firm and uniformly than on land.” Isabella Duan, a student from Aragon High School in Hillsborough, CA exclaimed, “I was really fascinated by the floating turbine.” New technologies bring both advantages and exciting challenges to conquer. Ranging from conventional to alternative energy, this is spectacular evidence of humanity’s unending propensity to push beyond boundaries.



Jean Thurston demonstrates the technology behind wind turbines

As future leaders in the areas of science, technology, engineering and mathematics, the exposure to field trips like this gives students a fundamental understanding and a deeper awareness of where energy comes from. The USC/Chevron Frontiers of Energy Resources Summer Camp thanks the Bureau of Ocean Energy Management (BOEM) for their commitment to education.

