BOSCH
Invented for life

Polar Bears in View

Customer story

Intelligent video surveillance for the Oooguruk drillsite in Alaska

Caelus Natural Resources Alaska, LLC is producing oil from a six-acre man-made gravel pad, the Oooguruk drillsite (ODS), which is several hundred miles north of the Arctic Circle. The situation: ODS is in the migratory path of apex predators, polar bears. Use of an innovative video system now ensures safety for both humans and animals – 24/7 under extreme conditions.

The Oooguruk development project run by Caelus Natural Resources Alaska, LLC is located on a six-acre man-made offshore gravel island in Harrison Bay in Alaska's North Slope region. Over 30 million barrels of oil have been produced from Oooguruk since 2008. Conditions are extreme–temperatures can drop to minus 40 degrees Fahrenheit, the sun sets for two months every year and there are polar bears–the world's largest land carnivore.

To prevent unwanted encounters between humans and bears, an innovative security solution is required on ODS. The system is designed to detect approaching animals as early as possible. Simultaneously, it must function reliably and efficiently in the Arctic's tough environment.

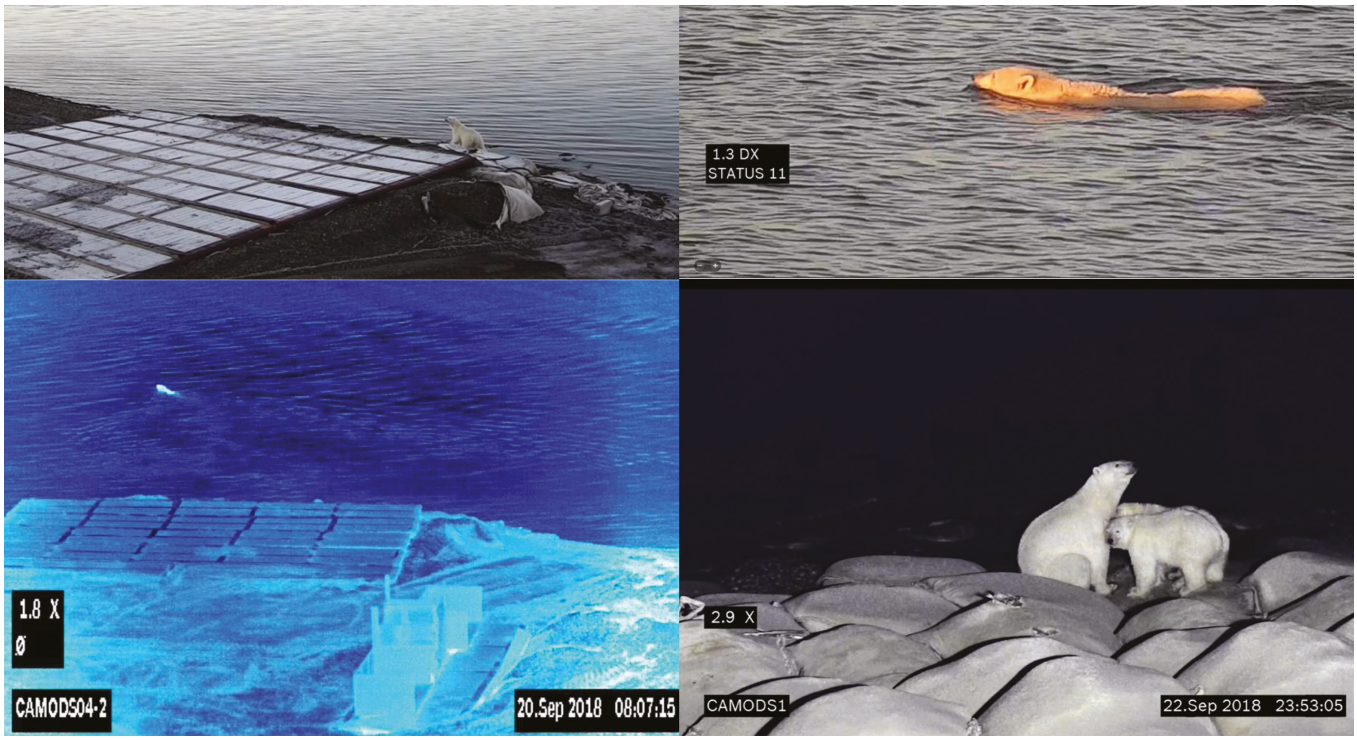
"Our ultimate goal is the protection of personnel and the polar bears, and we want to do that in the way that has the least impact on the polar bears."

John Hellén, Healt, Safety and Environmental Manager,
Caelus Natural Resources Alaska, LLC

Bosch solved the exceptional challenge using the MIC IP fusion 9000i camera. It combines a robust design with Intelligent Video Analytics and was developed specifically for use in extreme conditions. Eleven of the cameras have already been installed on ODS, with five more at the planning stage. After receiving specific training, the company's electricians and IT staff installed the system themselves in the shortest possible time.

The cameras defy the extreme cold by means of a deicing function and motor-powered silicone wipers. Bosch starlight technology enables clear images even in low light and the thermal imager delivers images in total darkness. With built-in Intelligent Video Analytics shared by both the optical and thermal imagers, the system can detect polar bears even when they are swimming or far off in the distance.

More information: **boschsecurity.com**



"Within two weeks of installing the cameras, we recorded two events of polar bears on ODS. The images were crystal clear. We even have one camera installed 100 feet from the ground, and the resolution is shockingly good."

Dale Hoffmann,former Land Manager
Caelus Natural Resources Alaska, LLC

As soon as a polar bear appears in the vicinity of the island, the Bosch cameras' tracking function is automatically triggered and personnel are notified. The necessary personnel safety measures can then be implemented quickly and efficiently. An alarm brings employees inside, and staff trained by the U.S. Fish and Wildlife Service monitor the polar bear and use a gradually accelerating deterrence plan to cause the bear to go away without harming it.

Installing the intelligent system means there is greater safety for both humans and animals. "We no longer need to rely on someone watching the cameras to see the polar bears," says John Hellén, Health and Safety Manager, Caelus Natural Resources Alaska, LLC.

The role is now performed by the Bosch technology– regardless of the time, light or weather conditions.