

## Case Study: ProspEx Resources Ltd.

### Noise Solutions Exceeds Requirements in Harmattan

**ProspEx** In winter of 2006, [ProspEx Resources Ltd.](#), a Calgary, Alberta-based junior oil and gas company focused on exploration for natural gas in the Western Canadian Sedimentary Basin, had proposed the development of a new facility in Harmattan, Alberta.



The large facility was to include a Waukesha F3521GSI Engine with a 48" Cooler, a Hampton Engine and Cooler, a 125 HP Unit Cooler, an ALCO Heater and a 10 HP Electric ACE Cooler.

Harmattan is a populated community 80 km north of Calgary, with the closest residents only 289 meters southwest from the proposed site. This meant strict noise control regulations had to be met before ProspEx could proceed with the development, and Noise Solutions was chosen as the best industrial noise control vendor to take on the challenge. Only through Noise Solutions commitment to superior

quality, service and client satisfaction could the regulations and objectives been achieved so effectively.

The initial Noise Impact Assessment revealed that without installation of essential noise control equipment, industrial noise impacting the closest residents to the facility will reach 47.8 dBA. Noise Control Regulation Directive 038, regulated by the Alberta Energy Regulator (then the Alberta Energy and Utilities Board) allows for 50 dBA during daytime hours and 40 dBA during nighttime hours, putting the new facility significantly out of regulatory compliance.

#### Best-in-Class Noise Suppression

Noise Solutions' Sound Suppression Equipment is known for its superior quality and design, boasting the best performance in the industry. In order to meet the rigorous requirements of the project, Noise Solutions utilized only the highest-quality and superiorly designed equipment possible. Not only was Noise Solutions able to meet the required regulations, but it exceeded, attenuating noise down to 38.4 dBA during nighttime hours.

Among the many adjustments to the new facility, the engine exhaust muffler on the F3521GSI unit was replaced with Noise Solutions' renowned Zeron® Engine Exhaust Silencer, and a full Cooler Fan Silencer package was installed as well as an Engine Air Intake

Silencer, Fan Forced Ventilation, a Purge Fan Hood, and Induced Draft Ventilation. The Heater Exhaust Silencer was customized to fit the ALCO Line Heater and Exhaust Pipe, and Noise Solutions provided the 125 HP Cooler Unit with a full Cooler Silencer package and Building Ventilation.

Though the client expressed concern that the Air Inlet Silencer Elbow could cause over-heating of the equipment, as is often the case, Noise Solutions' products proved more than capable and produced only positive results. The equipment was masterfully engineered, designed and installed to ensure the required noise attenuation levels, and all noise sources and frequencies (both high and low) were successfully attenuated.

### **Exceptional Service**

Noise Solutions is dedicated to providing the highest possible standard of service to each and every customer, and the challenging ProspEx project was no exception. Noise Solutions kept up with the tight schedule despite the harsh

weather conditions that were presented. This ensured ProspEx achieved their objective on time and on budget, while effectively meeting or exceeding all necessary noise control requirements.

In just one week, the Noise Suppression Equipment was completely installed and running efficiently, without interference to the ProspEx production. Tammy Virginillo, who managed and oversaw the Harmattan development for ProspEx was pleased with the success of Noise Solutions' work and equipment on site. The balanced combination of time-efficiency, high-performing equipment, competitive prices and quality service ensure that Noise Solutions remains best-in-class in all aspects.

To call ProspEx for a Noise Solutions reference, please contact Tammy Virginillo at +403.268.3956.