

## PRIMROSE UPDATE

Reporting Period August 25 - 31, 2013



Canadian Natural

### Operations Update

As a result of our active clean-up efforts approximately 9,000 barrels of bitumen emulsion have been recovered to-date, and we are focusing on a reduced impact area of 13.5 hectares, a 35% reduction since our original report. The rate of bitumen emulsion seepage in all four locations now totals less than 20 barrels per day.

As we clean up each site, we are focused on minimizing the environmental impact on the surrounding areas. We have designated decontamination areas and dispose of all used personal protection equipment, absorbent materials, vegetation and soil off-site at specially designed waste management facilities.

### Environmental Update

We are on the lookout for migrating birds at this time of year, and are pleased to observe birds altering their course as they near our bird deterrent systems. We built an aluminum scaffold structure over the fissure at the water body site so birds cannot land. In addition to the wildlife monitoring sweeps, we have trail cameras with remote and infrared motion sensors, in order to detect any animal activity.

Unfortunately some animal fatalities have occurred and three beavers, seventeen birds and two small mammals are being cared for at a Wildlife Rehabilitation Centre, prior to being returned to their natural environment.

### Investigation

We are working diligently with the Alberta Energy Regulator and Alberta Environment and Sustainable Resource Development to investigate and remediate the affected locations and investigate the cause.

Canadian Natural believes the cause of the bitumen emulsion seepage is mechanical failures of wellbores in the vicinity of the controlled areas. We are in the process of identifying and investigating these wellbores. We are drilling hydrogeological and delineation wells adjacent to the affected locations to aid in the investigation.

### For More Information, please:

Visit our website at [www.CNRL.com](http://www.CNRL.com)

For media, contact 403-514-7777 or [IR@cnrl.com](mailto:IR@cnrl.com)

*Exposed Fissure at 2-22*

