



## BP's Northern Alberta NGL System

# The Kemp River Pipeline System

**The 126-mile (79-kilometre) Kemp River System transports and acts as a batching system for Natural Gas Liquids (NGLs), condensate and condensate/oil from BP Canada's upstream Chinchaga facility to its BP Oil Americas operations at Kemp River.**

**The NGLs, by-products of processed natural gas, come from five different pipeline companies in the area. The six-inch (15.2 centimetre) pipeline was installed in 1978.**

**The Kemp River facility stores the NGLs and transports them to a nearby facility where the NGLs are sold and trucked elsewhere.**

**NGLs (butane and propane) are used as feedstock in the petrochemical industry and as an energy source.**

### A Safe Approach

BP works hard to safely maintain the Kemp River System. Our safety effort began before pipeline installation when we selected high quality, strength-tested steel pipe. After installation and before putting the pipelines into operation, we tested the pipes at a higher pressure than would normally exist in the lines. This told us the pipelines were safe to operate. To minimize impact to agricultural activity and to maximize safety, we installed our pipelines approximately 36-inches (.9-metre) underground.

### Pipeline Maintenance and Monitoring

We have a regular inspection program that ensures the integrity of the Kemp River System. This includes cathodic protection, a method that uses weak electric current to help prevent corrosion on the pipeline. We also use sophisticated electronic tools called "smart pigs" that travel inside the pipe. They detect dents and metal loss on the pipeline.

We regularly patrol the system with low-flying aircraft. Our experienced pilots look for signs of leaks or construction activity along the right-of-way that may accidentally cause a leak.

BP monitors the Kemp River system on a 24-hour basis from a computer-assisted control system located at BP's Chinchaga facility. Trained operators watch the system continually. They identify possible problems in the system by looking for abnormal changes in line pressure or flow.

Should a leak occur, we send maintenance crews to the leak site. Once we ensure we can protect the safety of our neighbours, employees and contractors, we repair the leak and any damage to adjacent property.

### Pipeline Markers

To ensure everyone knows the location of the Kemp River System, we place pipeline markers at high traffic areas such as road and railway crossings. We place them near but not necessarily on top of the pipeline or lines. It is important to remember that markers may not tell you the exact location, route, depth or number of pipelines.

**WARNING**  
**HIGH PRESSURE**  
**FLAMMABLE LIQUIDS**  
**PIPELINE**



**KEMP RIVER**  
**PIPELINE SYSTEM**  
BEFORE EXCAVATING OR IN CASE OF  
EMERGENCY CALL  
**1-780-836-3364 EXT. 25**

*Pipeline Marker*

**HIGH PRESSURE**  
**NGLs**

## Check Before You Dig

If you plan any operations on or near the Kemp River System:

1. Identify the precise work location and visit the site. Check records or look for evidence of a pipeline.
2. Call Alberta One-Call @ 1.800.242.3447 two working days prior to the dig. They will locate the line.
3. Call BP and ask us about how to safely do the work and any guidelines we may have.
4. Be on site with us when we locate the line.
5. Hand-expose the pipeline before excavation within 10 feet (three metres) of the pipe.
6. Notify BP one working day before backfilling over the pipe and contact us immediately if you contact the pipe or its coating.

Call us if you plan to grade or bulldoze, use explosives, bore, or dig with machines near the Kemp River Pipeline System. We will locate the affected line so your work can proceed safely. The 24-hour emergency number in Chinchaga is 1.780.836.3364. ext. 25.

## Leak Detection

### *If you smell...*

- An unusual odour, it may be NGLs or other hydrocarbons.

### *If you see...*

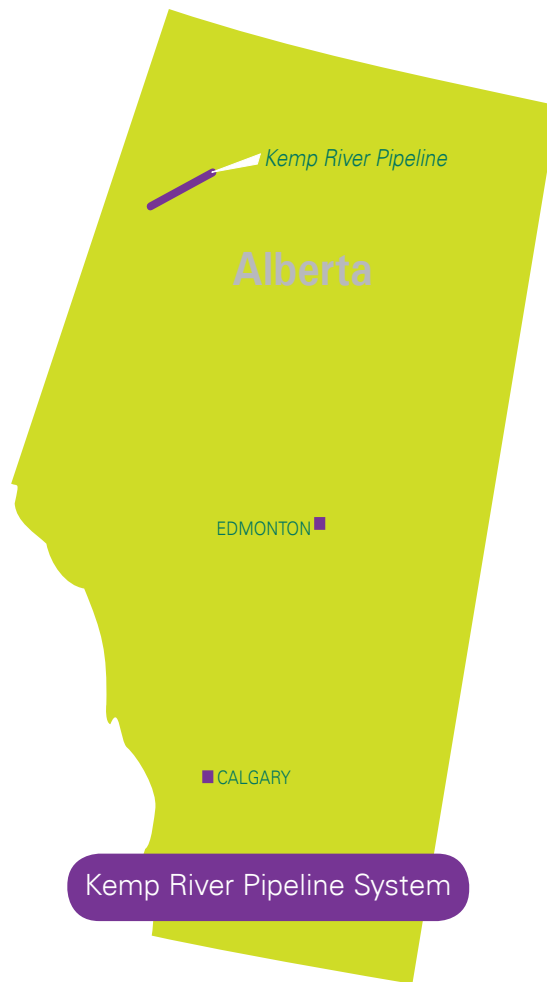
- A vapour cloud or frosted ground along a pipeline, it may be an NGL leak.
- A wet patch of yellowish liquid (like the colour of ginger ale), it may be condensate.
- Obvious damage, fire or an explosion, it may be a pipeline break.

### *If you hear...*

- A loud hissing or roaring noise, it may mean there is a break in the pipeline.

## What to Do if You Encounter a Leak

- Your first goal is to protect yourself and the safety of those around you.
- Shut off any equipment operating on or near the pipeline.
- Extinguish any tobacco products or any ignited material in the area.
- Shut off cell phones until out of the danger area.
- Walk out of the area immediately and alert others in the immediate area.
- If possible, move to an area that is .5 mile (800 metres) uphill and upwind from the leak.
- As soon as you are safe, call the local police or fire department.
- Call BP collect at our 24-hour emergency number at 1.780.836.3364 ext. 25. Give your name and location and describe the leak.



### *The Kemp River Pipeline System contact numbers:*

**24-Hour Emergency Number**  
**BP Chinchaga**  
1-780-836-3364 ext. 25

### **Key Contacts**

**Jeff Heck — Senior Pipeline Operator**  
1-780-836-5859