

August 3, 2011



## Proper Notification Procedures and Pipeline Safety

On Feb. 8, 2011 a pipeline carrying crude oil from northeast British Columbia to Kamloops was punctured when it was struck by a water well drilling rig approximately 30 kilometres west of Kamloops. The resulting leak released approximately 2.75 cubic metres of crude oil to the surrounding soils. An additional 73 cubic metres of crude oil was recovered from the site using vacuum trucks to collect the escaping oil at the point of release from the punctured pipeline. The spill was confined by the existing site topography to an area of approximately 1,300 square metres. No oil was released to surface waters and there is no evidence of subsurface or groundwater contamination. The site has undergone restoration and the follow up is ongoing. In total, 683 tonnes of impacted soils have been removed from the site and disposed of in a secure landfill.

### Investigation

The 323.9-millimetre diameter pipeline, installed in 1961, was operating at 800 kilopascals (kpa) at the time of the incident. The pipe condition at the location of the line strike is shown in Figure 1.



Figure 1: A knife inserted into the hole in the pipeline, created by a drill bit. The primary cause of the incident was failure to have the pipeline located by calling BC One Call prior to drilling.

Operating conditions did not contribute to the failure. Through investigation at the time of the incident and subsequent, the BC Oil and Gas Commission (Commission) determined that the primary cause of the incident was failure to have the pipeline located prior to drilling/excavation.

Additional factors contributing to the incident include the following:

- BC One Call was not contacted prior to the drilling activity, and as such underground facility owners (including the crude oil pipeline operator and a high-pressure natural gas transmission operator) were not aware of the activity and did not have the opportunity to mark the location of their pipelines.

## Recommendation

Whenever any ground disturbance is planned, BC One Call should be contacted at least three full business days in advance of the activity. As of Oct. 4, 2011 all pipeline operators regulated by the Commission are required to be members of BC One Call and are obligated to respond to any request made to BC One Call free of charge. If the planned activity poses a threat to a pipeline, the pipeline operator will visit the planned activity location, mark the location of its facilities and explain any precautions or special requirements necessary for the safety of the pipeline.

The Pipeline and Liquefied Natural Gas Facility Regulations in British Columbia require all pipeline permit holders to have a damage prevention program. To assist permit holders in the development of these programs, the Commission worked with the British Columbia Common Ground Alliance to develop a Recommended Practice for Damage Prevention Programs. The document sets out the key elements of any damage prevention program including:

- Program Planning and Development.
- Public Awareness Programs.
- Hazard Management – Identification, Risk Analysis and Mitigation.
- Surveillance and Monitoring.
- Crossings.
- Program Evaluation and Audit.

For more information on BC One Call and the BC Common Ground Alliance, call or visit:

- BC One Call: 1-800-474-6886 ([www.bconecall.bc.ca](http://www.bconecall.bc.ca))
- BC Common Ground Alliance: 1-800-995-8823 ([www.commongroundbc.ca](http://www.commongroundbc.ca))

The Commission issues Safety Advisories to inform industry of safety related practices, processes or observations by the Commission regarding management of operational activities associated with resource development.

### **If you have any questions regarding this Safety Advisory, please contact:**

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