



PipeWATCH™

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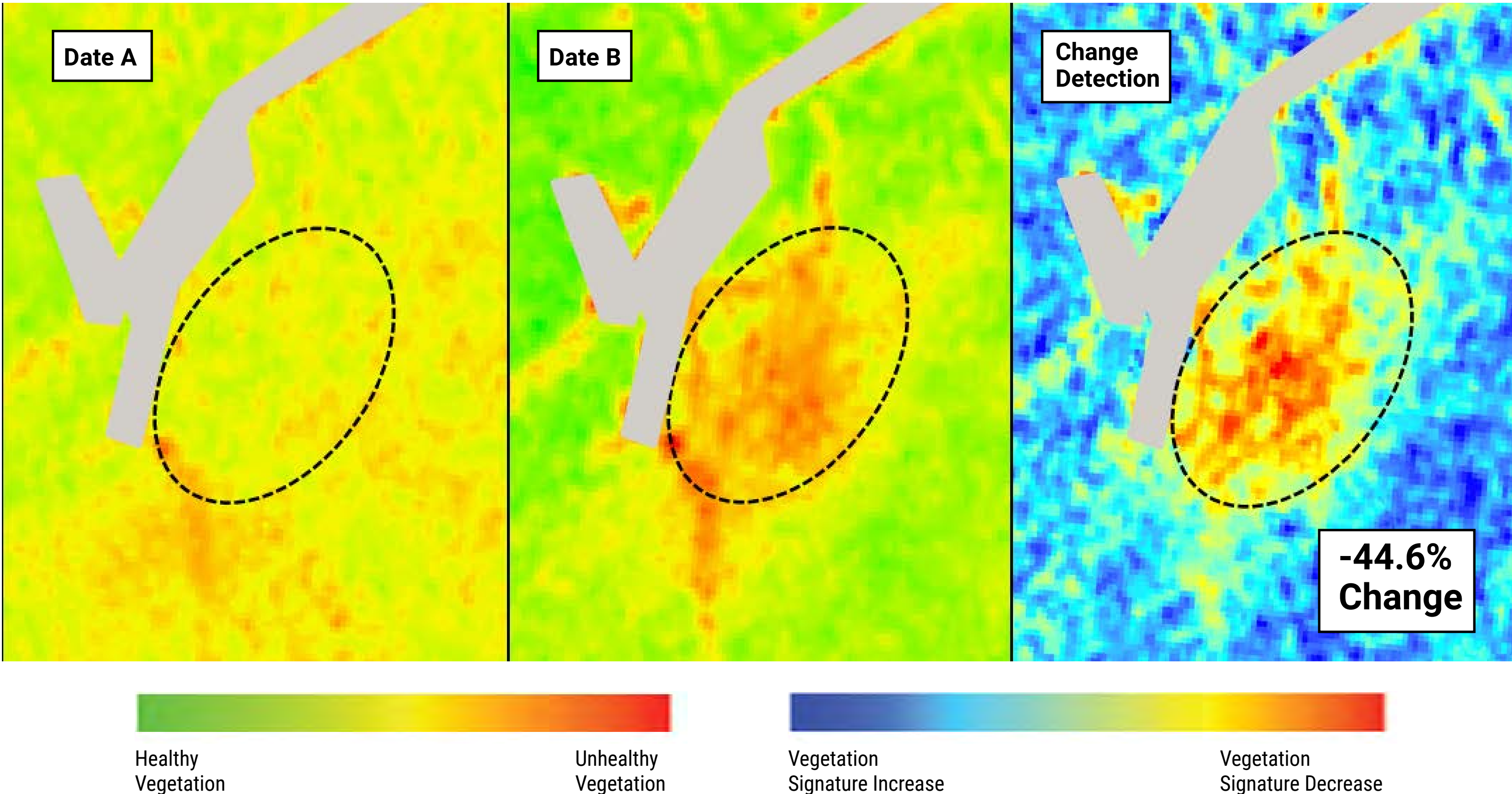
**PIPELINE LEAK DETECTION
MONITORING USING
HIGH RESOLUTION, HIGH
FREQUENCY SATELLITE
IMAGERY**

Stantec's PipeWATCH™ is a technique for pipeline leak detection using state-of-the-art satellite imagery that is more efficient and less expensive than traditional air surveillance methods..

PIPEWATCH™ IN ACTION

PipeWATCH™ identified a release event that occurred between Date A and Date B based on vegetation signature change detection. This event was successfully detected by PipeWATCH™ five days prior to the pipeline operator's knowledge.

100%
coverage of your pipeline
network with PipeWATCH™



WHAT DOES PipeWATCH™ DO?

PipeWATCH™ utilizes high resolution satellite images collected daily allowing for thousands of kilometers of pipeline networks to be inspected instantly. Through careful examination of vegetation photosynthesis absorption and reflection rates, PipeWATCH™ generates highly sensitive health signatures of pipeline right-of-way vegetation. The method detects vegetative health degradation caused by contamination from a release event.

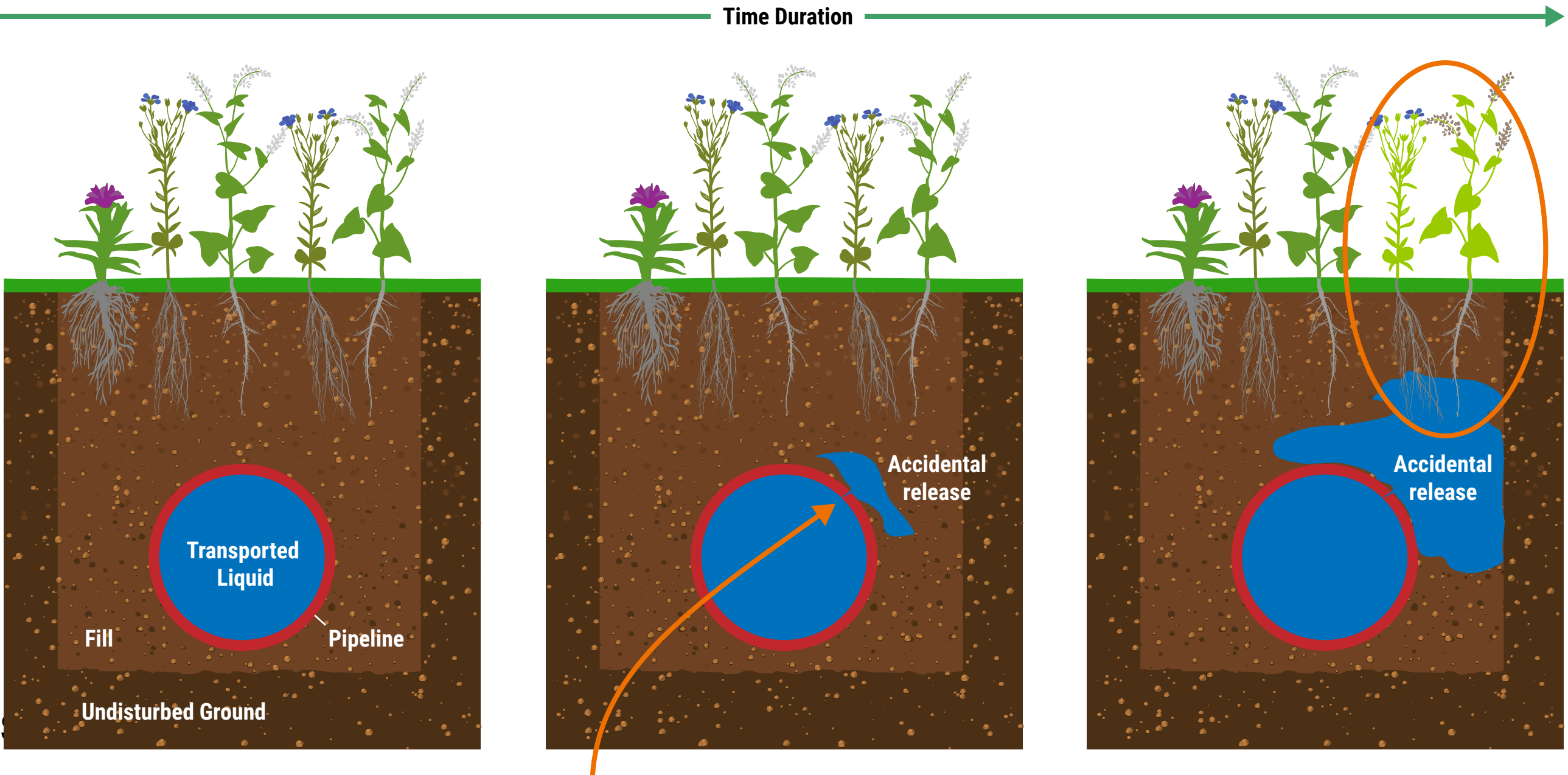
Daily satellite-based vegetation signatures are compared from one day to the next to accurately identify problem locations. This permanent and growing satellite database delineates release events in a highly reliable and timely manner.

DID YOU KNOW?

PipeWATCH™ innovation augments how pipeline companies monitor vast stretches of infrastructure resulting in time and budget efficiencies while reducing risk to employees and the environment.

It is a win-win.

SUBSURFACE LEAK DETECTION



Cross section view of subsurface pipeline with shrubs/grass on surface and underground roots

Subsurface pin-hole leak undetected by pressure sensors slowly releasing liquid over time

Vegetation quickly reveals impacts from liquid release through leaf stress. Leak detection occurs prior to visual or other engineered measures

Early detection of events allows clients to mitigate the situation, quickly minimizing environmental/infrastructure damage, loss of production, and clean-up/rehabilitation costs.

PipeWATCH™ ADVANTAGES

- Daily monitoring throughout the growing season
- Vegetation indices more sensitive to releases than human eye
- Subsurface leak detection capability
- Imagery is multi-use: integrity management, external encroachment, vegetation clearing



RELATED ITEMS

[Satellite Image Assessment for Potential Contamination at Sites](#)

CONTACT US

Ask our PipeWATCH™ experts:

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