

## Remote leak detection for onshore pipe line

**Region:** North America  
**Industry:** Onshore pipe line  
**Products:** EJX530B (Wireless Pressure Transmitter)  
 YTA510 (Wireless Temperature Transmitter)  
 YFGW710 (Field Wireless Integrated Gateway)



### Requirements

Remote leak detection for pipe line was needed to meet new environmental statute.

However cabling earthwork is strictly restricted to protect land environment.



### Benefits

- Improved safety by monitoring oil leak.
- Reduced environmental burden by avoiding land pollution.
- Improved company image to be law abiding.

### Challenge

- Strictly limited earthwork based on regulation.
- Long distance communication up to 2 km without repeater.

### Solution

Introduction of wireless pressure transmitters and temperature transmitters.

Built large scale star network using high gain antenna based on Yokogawa plant-wide field wireless system.

### Equipment List

EJX530B (Wireless Pressure Transmitter) x 33  
 YTA510 (Wireless Temperature Transmitter) x 17  
 YFGW710 (Field Wireless Integrated Gateway) x 10  
 High gain antenna (6 dBi, 9 dBi)  
 Remote antenna cable (3 m, 13 m)



### Conclusion

The company became consistent with new law by monitoring oil leak and reducing environmental burden.

Facilities and personnel safety was improved by monitoring oil leakage.

Risk of land pollution was reduced.

The company reputation was improved with enhanced environmental compliance.

The long range communication capability of Yokogawa's plant-wide field wireless system enabled this application.



EJX series Wireless Pressure Transmitter