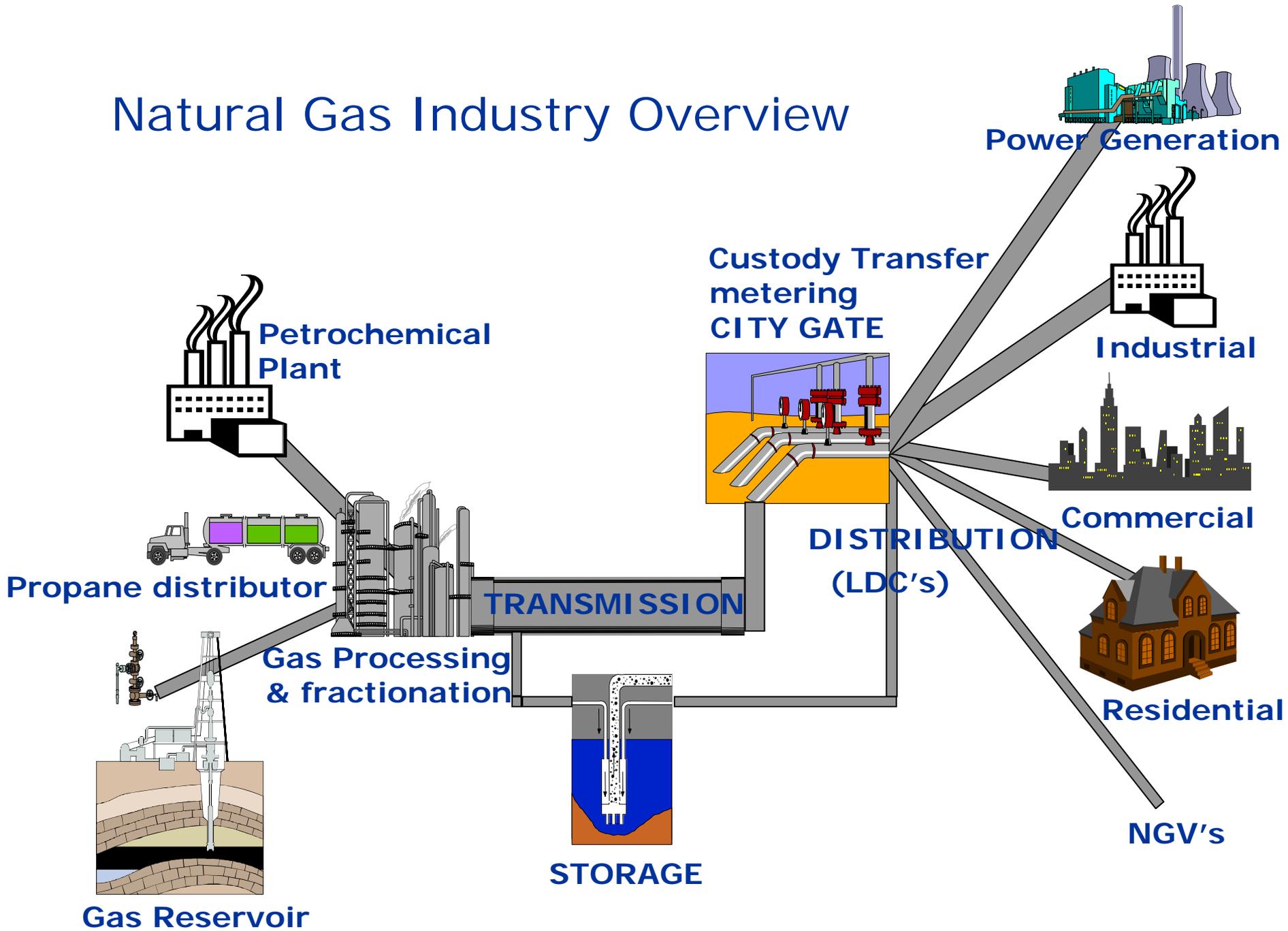


# Public Safety and Pipeline Awareness Overview

Steve McNulty  
3/18/08

# Natural Gas Industry Overview



# Western U.S. Transmission Pipelines



# GTN System Overview



## Capacity (MDth/d)

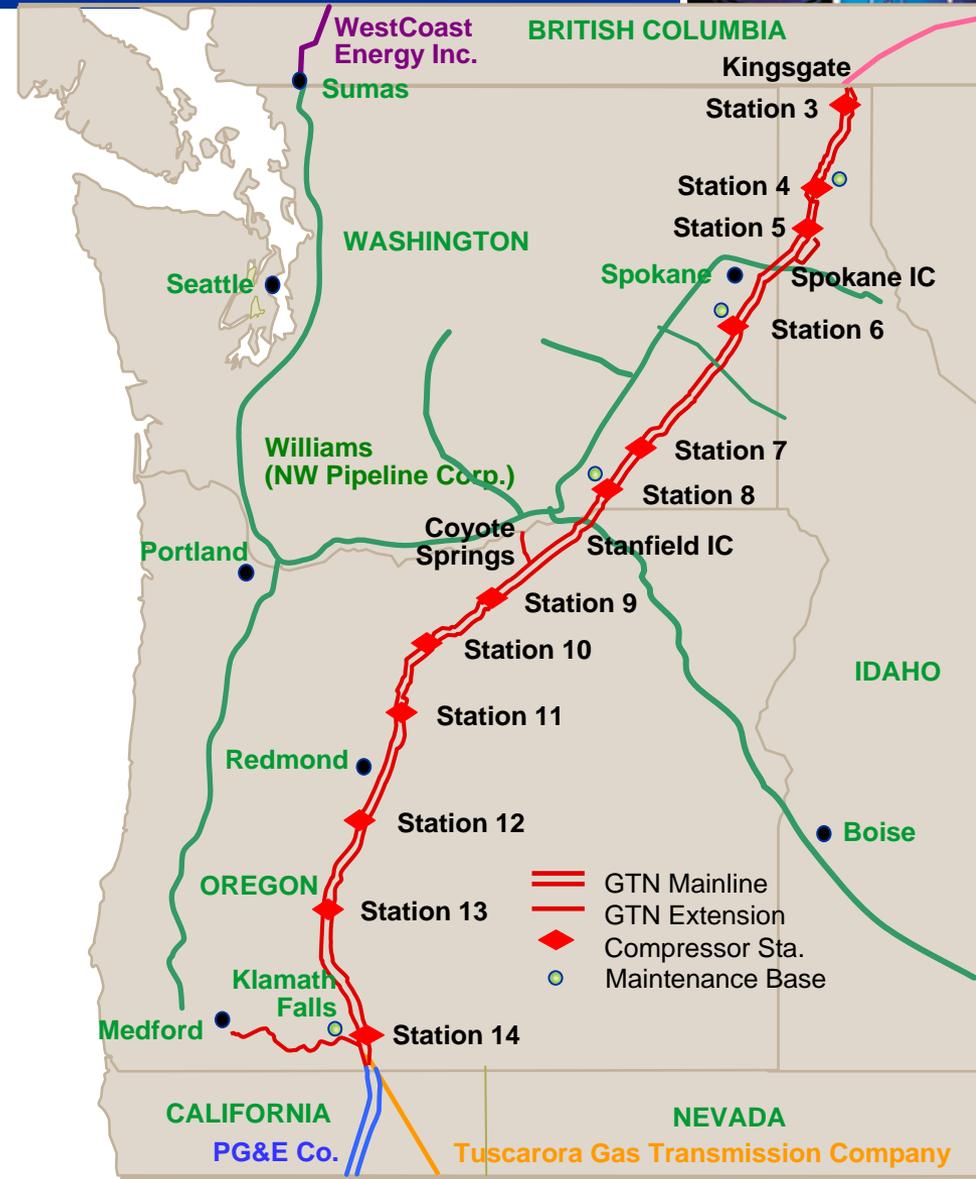
Kingsgate (Receipt)	2,894
Pacific Northwest (Delivery)	1,220
Malin/Tuscarora (Delivery)	2,191

## Pipe

610 miles of 42-inch mainline  
 639 miles of 36-inch mainline  
 23 miles of 16-inch extension  
 84 miles of 12-inch extension

## Compression

12 mainline compressor stations  
 29 mainline compressor units  
 519,820 total system horsepower









# Dig Safely/Call Before You Dig



- Washington – 1.800.424.5555
- North Idaho
  - Bonner/Boundary County  
1.800.626.4950
  - Kootenai County  
1.800.428.4950
- Oregon – 1.800.332.2344
- **New National One Call Number 811**

Note: Sometimes the number is difficult to find in the phone book, because it's listed many different ways

## Dig Safely/Call Before You Dig (cont.)



- Report any contact or excavation damage to underground facility owner, so it can be repaired or replaced
- Damage prevention to underground facilities is a joint responsibility – utility owner, landowner, contractor, etc.

# Color Code for Marking Underground Utility Lines – Dig Safely



**Red**

**Electric**

**Purple**

**Reclaimed Water, Irrigation & Slurry Lines**

**Yellow**

**Gas-Oil**

**Orange**

**Communication CATV**

**Blue**

**Water**

**Green**

**Sewer**

**Pink**

**Temporary Survey Marking**

**White**

**Proposed Excavation**

**Call Your Local  
Underground  
Utility  
One-Call Number  
Before You Dig**





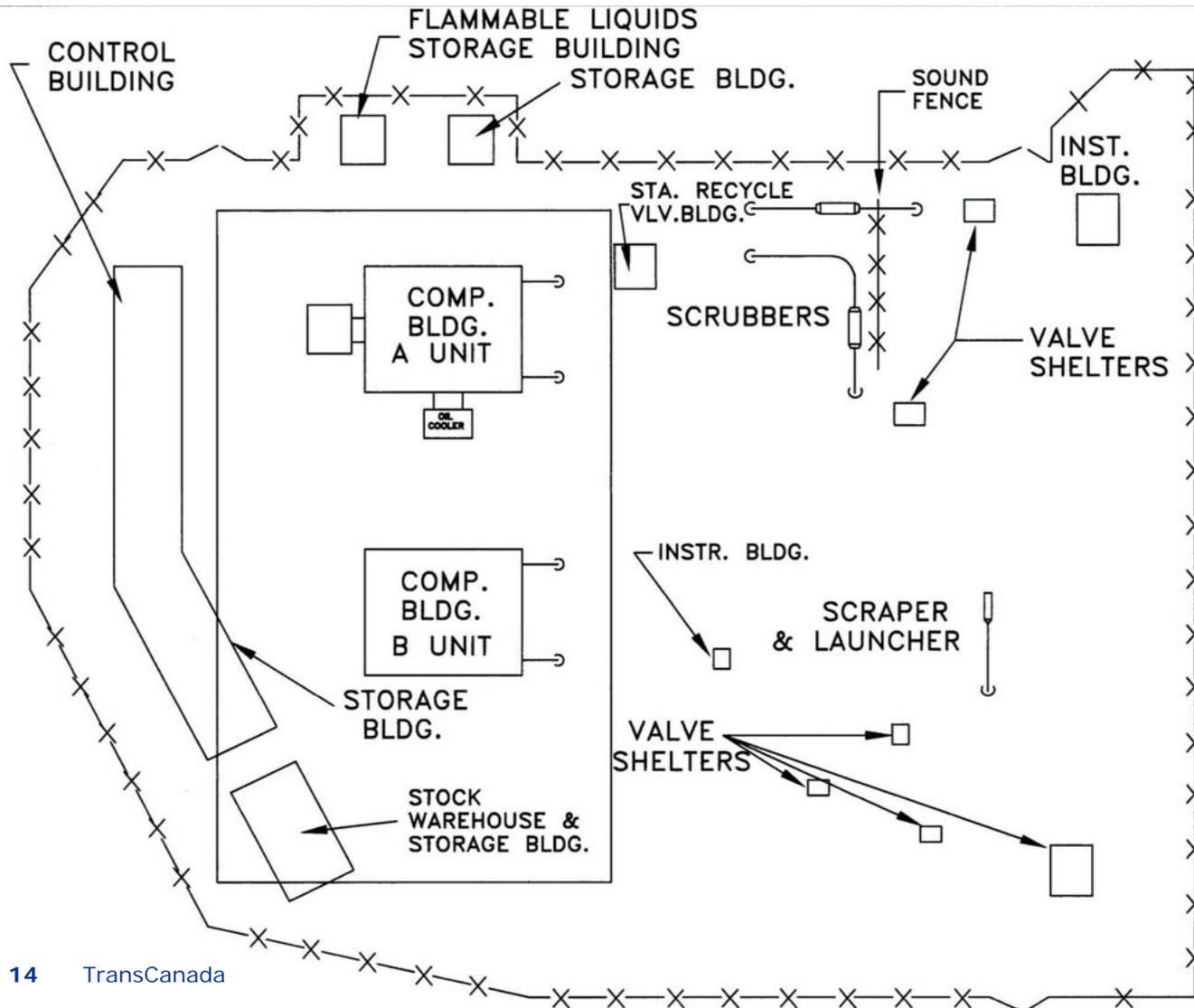


# Integrity Management Plans



- Identification of High Consequence Areas HCA's
- Public Outreach IPA
- Identify and Evaluate Threats
- Pipeline Integrity Assessments
- Continual Evaluation & Assessment
- Prevention & Mitigation Measures
- Performance Measures/Enhanced O&M Practices
- Management of Change/Quality Assurance

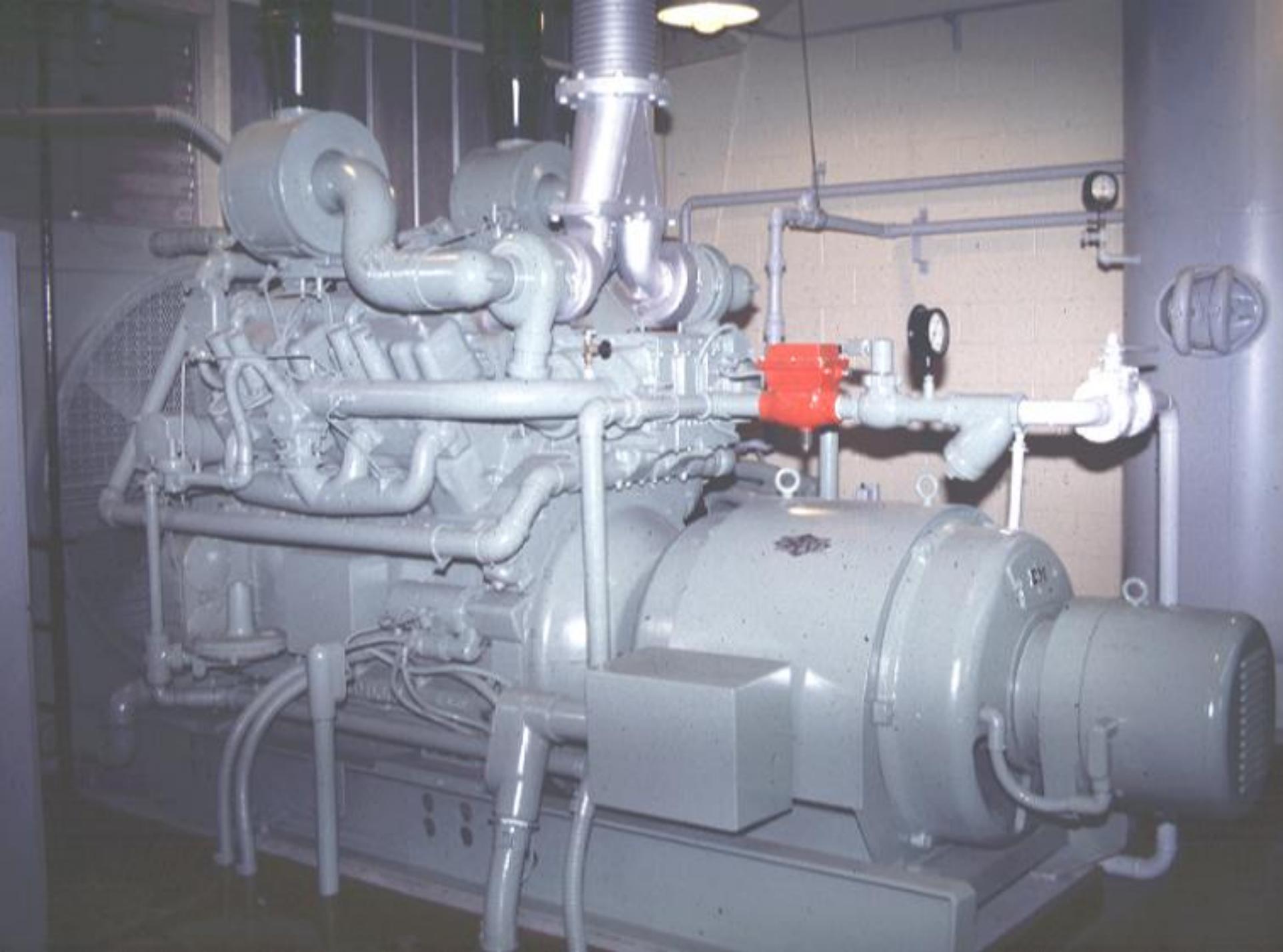
# Typical Compressor Station

















# Properties of Natural Gas/Methane



- Gaseous (not liquid)
- Lighter than air
- 4-15% LEL – UEL (Lower/Upper Explosive Limit)

## Visual Indication of a Gas Leak



- Blowing dust and debris, indicative of venting gas
- Bubbles and unusual turbulence in water (i.e., river crossing)
- Suspect holes, erosion or signs of ground movement around the pipeline
- Dead vegetation over the pipeline

## In the Event of a Gas Leak...



- Priorities: life, the environment, property and restoration of service
- Notify facility owner and local Emergency Response Personnel
  - Local emergency response personnel will assist with evacuation, ignition prevention, establishing a perimeter, crowd control, media, etc.
  - Facility owner should be notified immediately, so they can render the situation safe, activate isolation valves, properly vent, prevent ignition, perform repairs and restore service

## In Case of Fire:



- Don't try to extinguish the fire
- Don't use water on the burning gas at the point of the fire
- Do spray water on nearby buildings or other combustible material to help prevent the fire from spreading

## In Case of Gas Inside a Building...



If you detect escaping gas inside a building:

- Do not attempt to locate the gas leak(s)
- Do not remain in a building or area where there is a strong gas odor
- Do not turn lights on or off, or unplug electrical appliances when there is a strong gas odor
- Do not use telephones in the area of a strong gas odor
- Do not use elevators
- Do not position or operate vehicles and powered equipment where leaking gas may be present
- Leave the area and call the gas company

Emergency?



Call 1-800-447-8066  
24-hours

## The Moyie River and GTN



- The GTN system crosses the Moyie River eight times.
- The 1992 expansion required GTN to cut through the river, disturbing the sedimentation and increasing turbidity of the river.
- This expansion project created an opportunity for GTN to enhance the river and demonstrate the company's respect for the area's natural resources.

# Moyie River Enhancement Plan and Results



- With the help of the U.S. Forest Service and Geomax engineering 35 rock structures were tailor-made for each crossing.
- The fish structures improve fish habitat, accelerate stream scouring, and enhance the depositional regime.
- For five years following the construction (1993-1997), GTN monitored the impact of our enhancement efforts.
- Results showed a 400% increase of the fish population.



# Moyie River crossing with rock structures

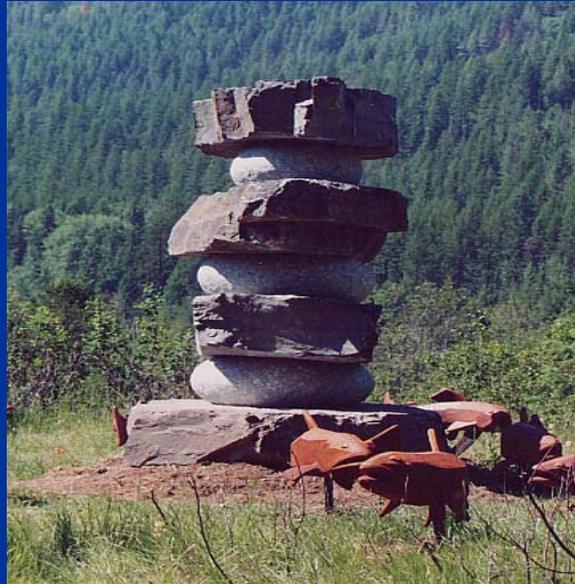




## **Joseph P. Kearney Environmental Excellence and Stewardship Award Finalist**



John Cassady, Gas Transmission Northwest for the  
development and creation of the  
Moyie River Recreation Site



**Kaniksu Passage at the Moyie River Recreation Site  
Near Moyie Springs, Idaho  
Unveiled June 29, 2001**

# Kaniksu Passage



Funk's sculpture was selected because it:



- incorporates the entire picnic site;
- includes images of species indigenous to the river;
- materials can withstand the area's natural elements.
- Kaniksu Passage is the first sculpture in a national forest.



# Impacts on the Community



The recreation site has given residents and visitors a place to enjoy the natural beauty, eat a peaceful lunch, or walk down to the river.

In a letter to Bob Howard, Jean Mace, a resident of northern Idaho and a frequent visitor of the recreation site, described it as, "One of Boundary County's hidden treasures."



Jeffrey Funk is acknowledged for his great creativity and talent in sculpting Kaniksu Passage.



Guests enjoy the picnic facilities and the beautiful surroundings.



# Questions?