

An aerial photograph of a long pipeline stretching across a landscape. The pipeline is supported by a series of blue metal structures. The pipeline is a light blue color and runs from the top left towards the bottom right. The background is a mix of green and brown, suggesting a natural environment.

# TAPS Sustainability

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Tom Barrett, President  
*Alyeska Pipeline Service Company*

# How is TAPS doing?

## What does that mean?

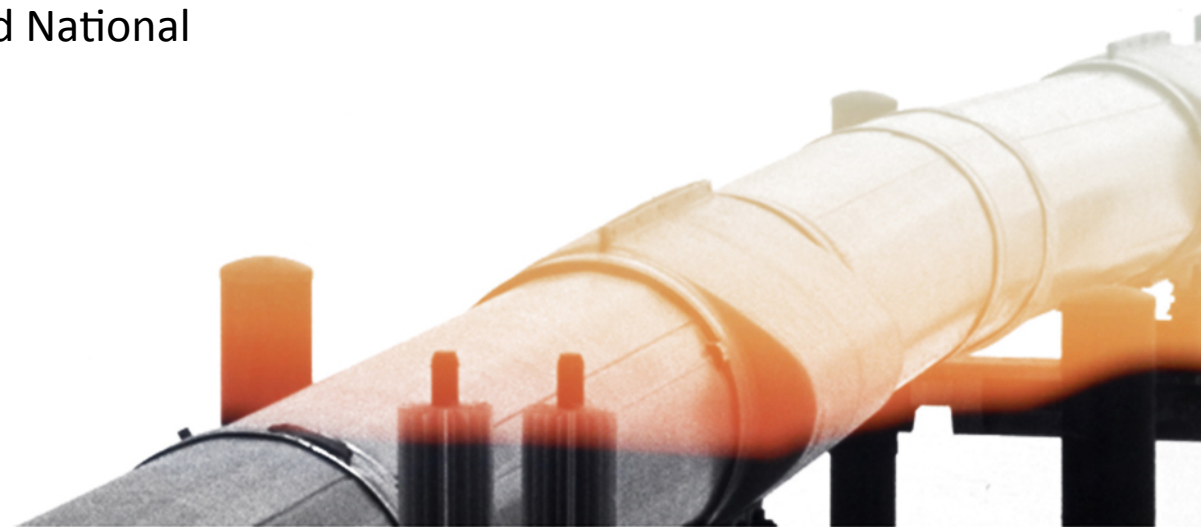
- How many barrels of oil did we move?
- How long can TAPS keep operating?
- Will floods, fires or other incidents force a shutdown?

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**Our ability to move oil safely, reliably and efficiently matters far beyond our fence lines.**

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- Key component of Alaska and National energy infrastructure
- Critical to Alaska's economy



# Safe Operations

## 2015 was the safest year ever on TAPS, earned by:

- A “speak up, step up” culture
- Emphasis on operational and professional discipline
- Focused employees committed to safety

## By the numbers:

- 5.8 million hours worked with four OSHA recordables
- All-time low recordable incident rate of 0.14
- Zero lost-time injuries

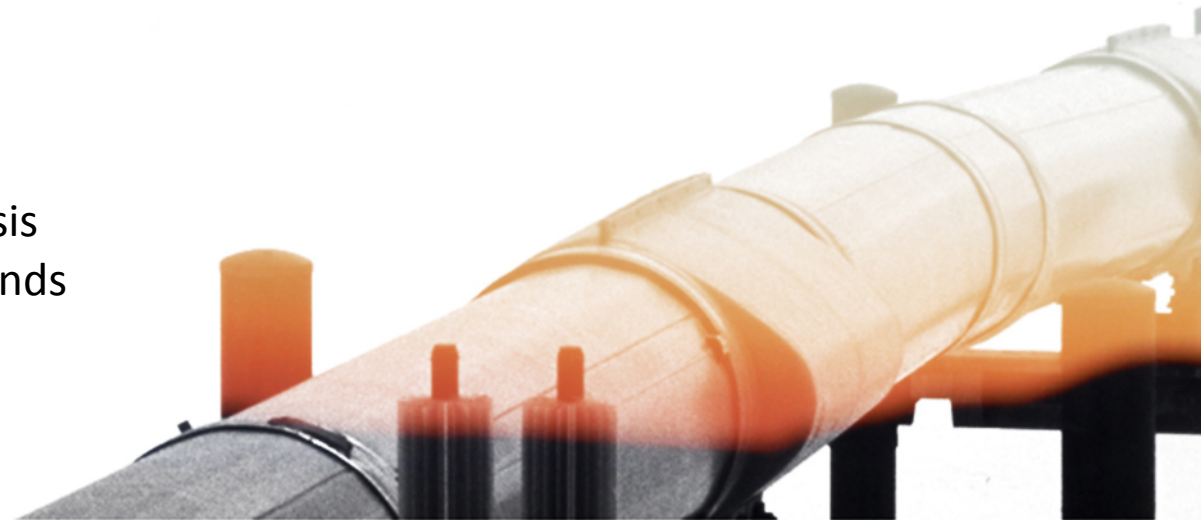
## In 2016:

- Relentless attention to safety
- Emphasis on predictive analysis
- Identify and stay ahead of trends

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These achievements are notable given that many tasks take place in high-risk environments and harsh conditions.

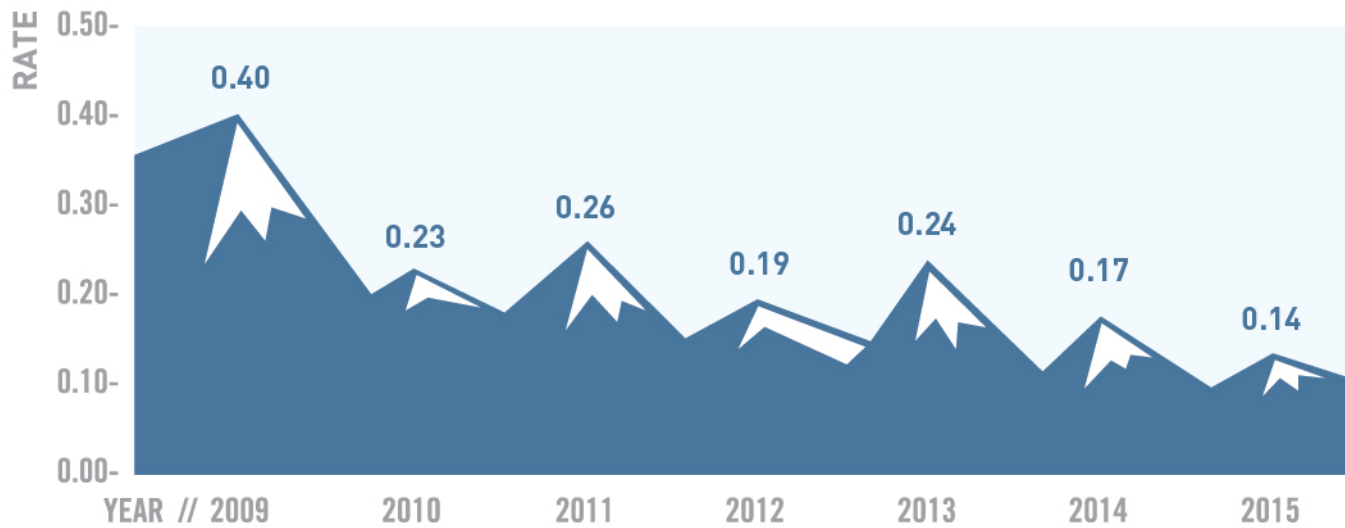
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# Pride in Performance



OCCUPATIONAL SAFETY - Recordable Incidents



# Consistently High Reliability

## 2015 highlights:

- Moved 185 million barrels – 508,000 barrels a day
- Reliability: 99.5 percent
- Loaded 236 tankers

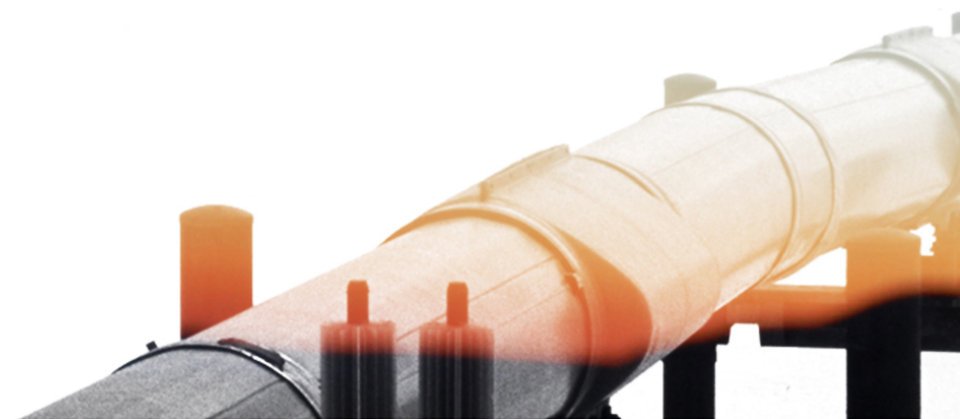
## Ongoing system renewal:

- Electrification and automation at Pump Station 1
- 10,600-pound, 17-foot “smart pig” run
- Industrial wastewater and ballast water treatment system repairs
- Adding heat to manage declining throughput
- Completed testing of all 176 mainline valves, replacing one
- Two major shutdowns
- Berth overhauled

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The people who  
did this made it  
look easy.  
It wasn't.

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# Environmental Stewardship

## Extreme Alaska:

- Successfully managed major flooding conditions of the “Sag” River
- Helped protect TAPS from some of Alaska’s worst wildfires on record

## Emergency preparedness:

- Staged 180 readiness and response drills along the pipeline and in Prince William Sound
- Trained 1,800 people from 444 vessels in spill response tactics
- Assisted agencies with two third-party tanker rollover spills on the Dalton Highway

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Alyeska’s people have an unwavering commitment to protecting Alaska’s environment.

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# Strong Business Performance

- Sought companywide efficiencies
- Managed contracts tightly
- Maintaining commitments to safety and the environment

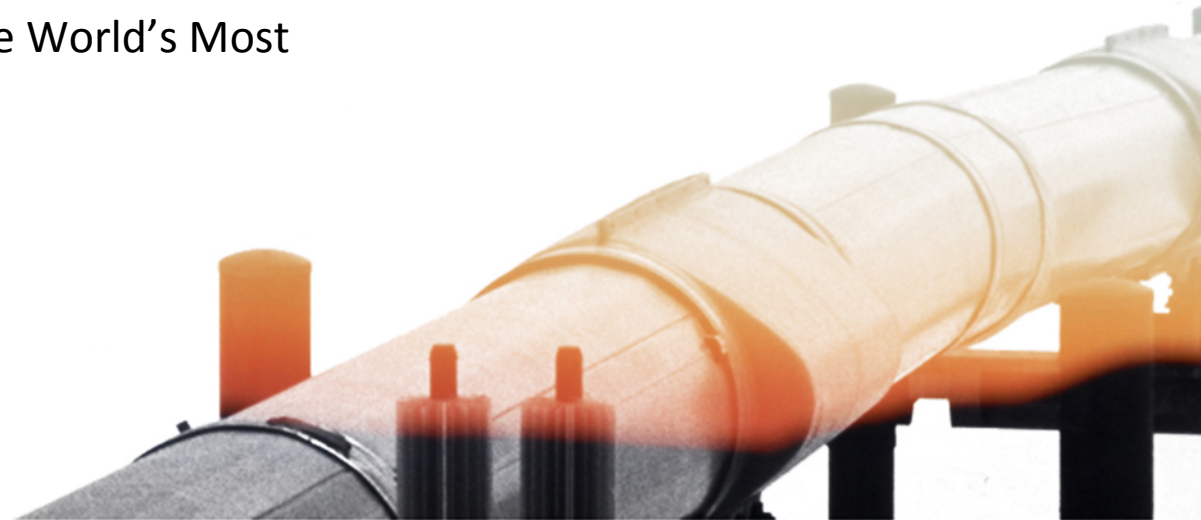
## Successful results:

- Large Operator Environmental Performance Award from the American Petroleum Institute
- 2015 Alaska Ocean Leadership Award for Stewardship and Sustainability from the Alaska SeaLife Center
- This month, named one of the World's Most Ethical Companies by the Ethisphere® Institute for the fifth year in a row
- Governor's Safety Award

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Our employees and contractors willingly took on current financial challenges related to this difficult economic environment.

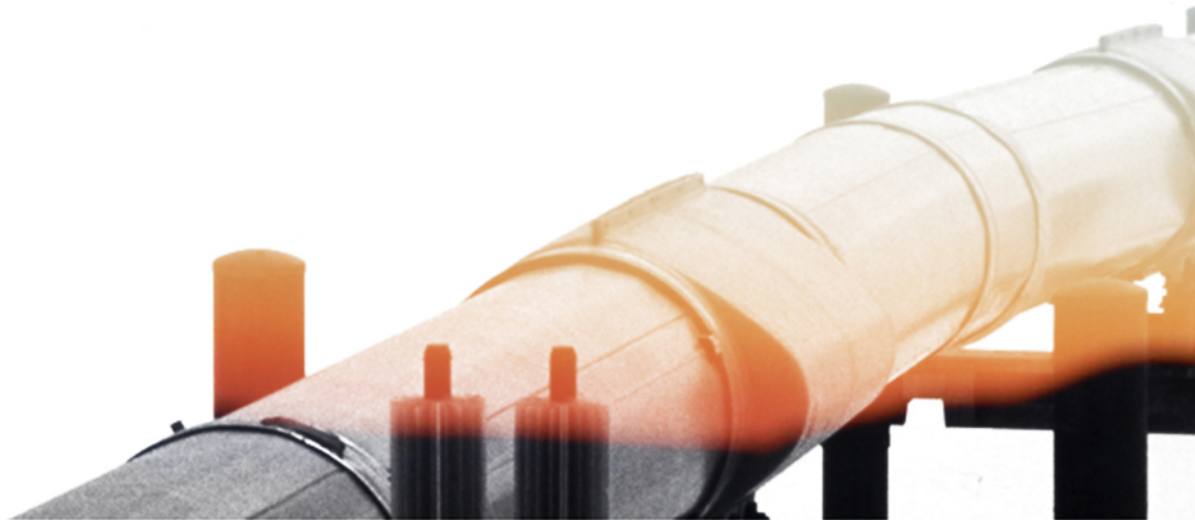
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*“Public expectations for corporate social responsibility and transparency continue to grow. To thrive, businesses increasingly need public, customer and employee trust. In this environment, leaders will succeed only if ethical behavior is a foundation of their organization’s culture.”*

**Tom Barrett, President,**  
Alyeska Pipeline Service  
Company



# Community Outreach

## Flagship events:

- 2015 Anchorage Heart Walk involved 130 TAPS walkers, raising \$29,000 in pledges
- Alyeska's Traveling Health Fair supported rural Prince William Sound communities
- In Fairbanks, Alyeska's Track and Field Day drew 400 children

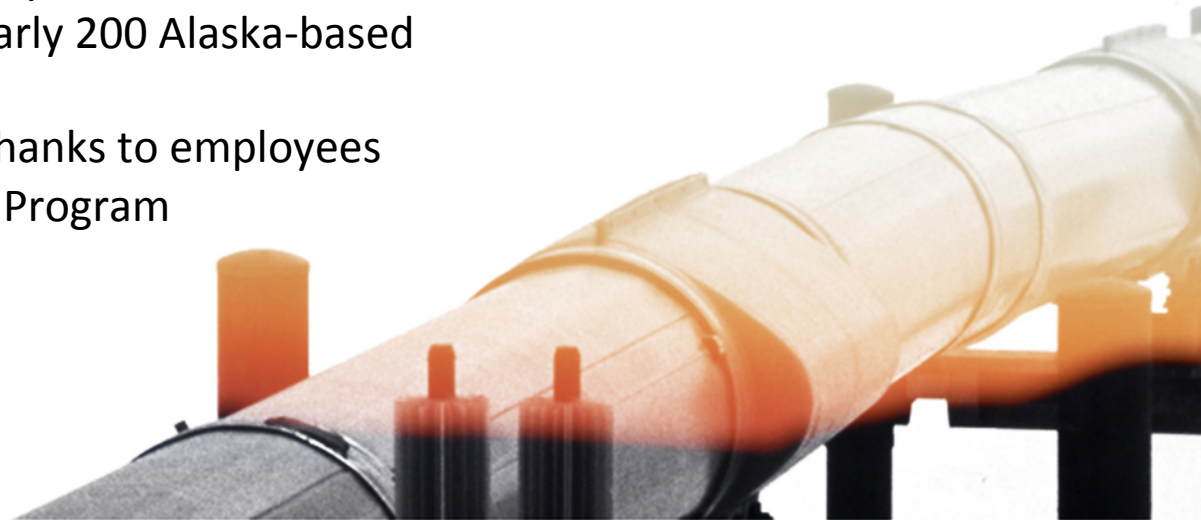
## Supporting our partners:

- \$565,000 raised for United Way in Alaska
- Direct Alyeska support for nearly 200 Alaska-based nonprofit agencies
- 118 of those received funds thanks to employees using Alyeska's Matching Gift Program

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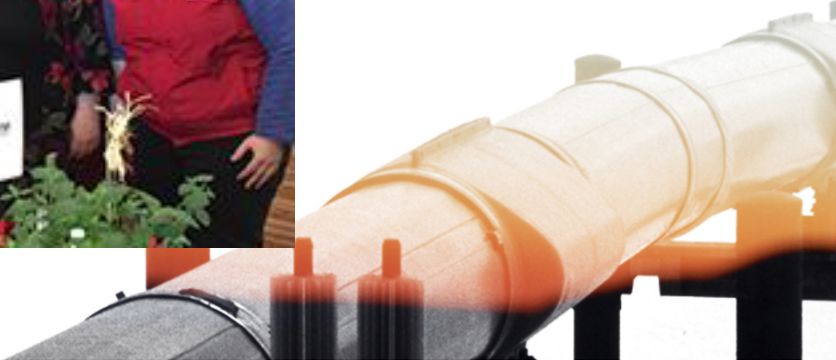
Throughout Alaska, employees support communities where they live and work with volunteerism, leadership and financial support.

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# In the Community



# No Easy Day

*The only easy day was yesterday*

## Managing challenges:

- Lower throughput
- Cold weather operations
- Water and wax issues
- Aging infrastructure

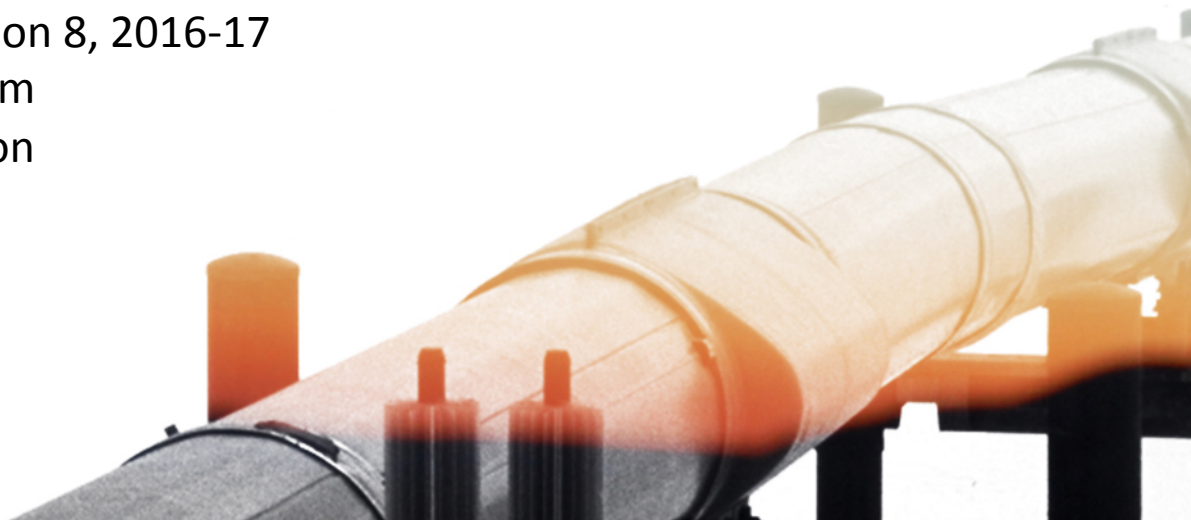
## Implementing solutions:

- Recirculation at Pump Stations 3, 4, 7 and 9
- Crude oil heater added at Remote Gate Valve 65
- Crude oil heater at Pump Station 8, 2016-17
- Flow assurance testing program
- Contingency methanol injection
- Advancing pigging technology

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Our goal is to build on our successes, learn from our experiences and sustain TAPS' high performance for years to come.

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# Point-Source Heat

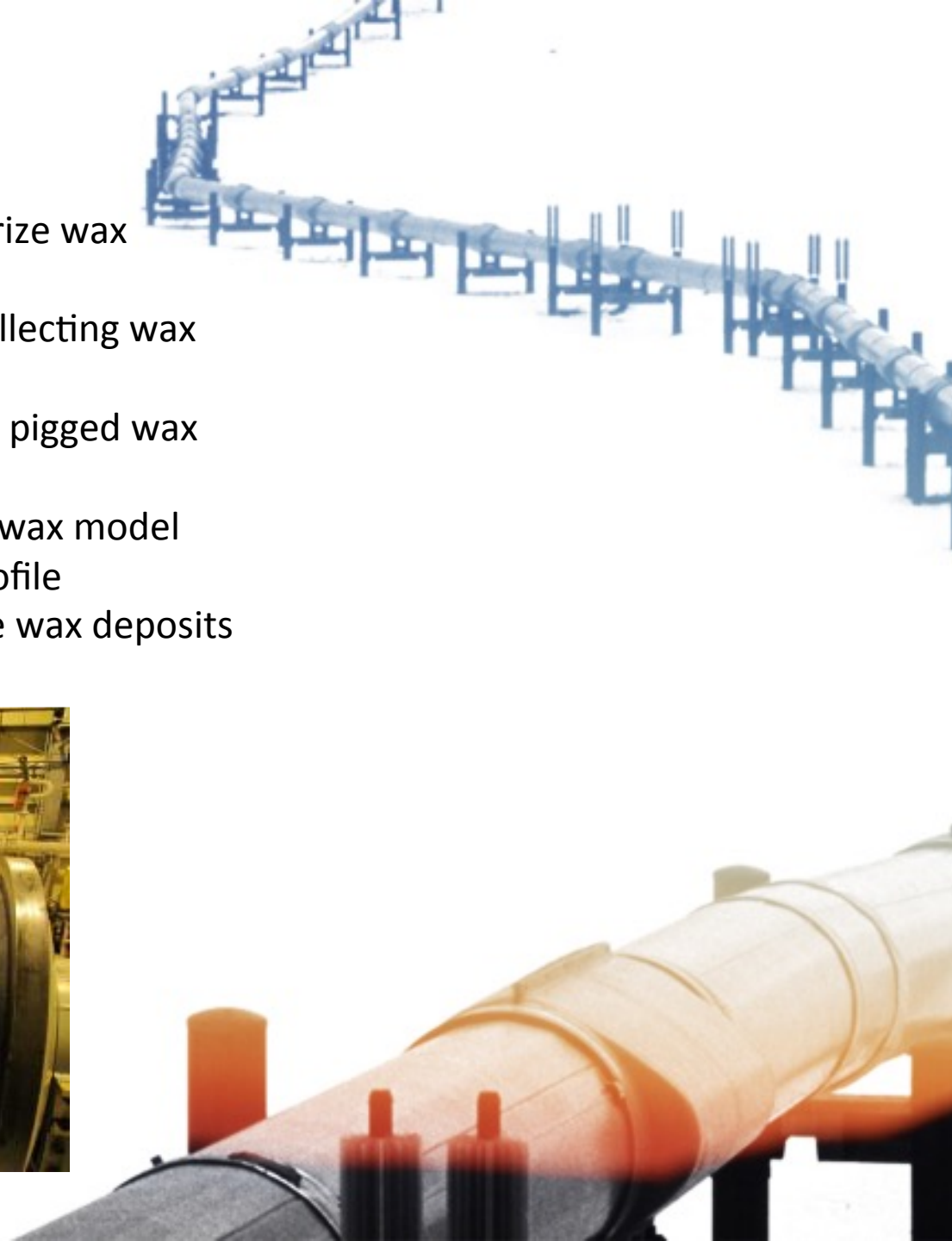


Winter 2015-16



# Wax Management

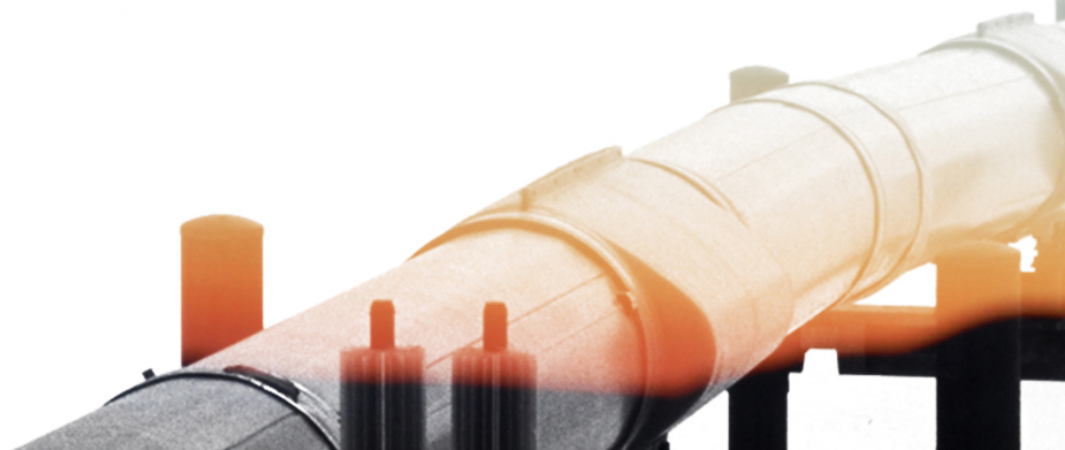
- Flow loop wax testing to characterize wax thickness and composition
- Cauty devices on TAPS to begin collecting wax behavioral data
- Sampling and testing of recovered pigged wax from TAPS
- Use results of wax testing to tune wax model
- Model pipeline wax deposition profile
- Adjust pigging program to manage wax deposits





# TAPS: Critical Infrastructure

- Oil throughput is the key to sustainability
- Access is essential
- Stable fiscal climate
- Improved regulatory climate
- Risks of burden shifting
- Strong partnerships are essential



# TAPS People

## Who we are:

- Alyeska had 806 employees this month, plus hundreds of contractors
- 94.6 percent of Alyeska employees live in Alaska
- 20 percent are Alaska Native; 30 percent are women; 33 percent are minorities
- 70 percent of our contract partner companies are headquartered in Alaska

## TAPS people are:

- Committed to safety and protecting the environment
- Professionals who value integrity and respect
- True-grit Alaskans who are smart, tough and proven problem-solvers, leveraging teamwork and ingenuity in the face of incredible challenges

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**Our people understand that not just what they do, but how well they do it, matters enormously.**

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