

Arizona Corporation Commission

Winter Preparedness Meeting October 21, 2014

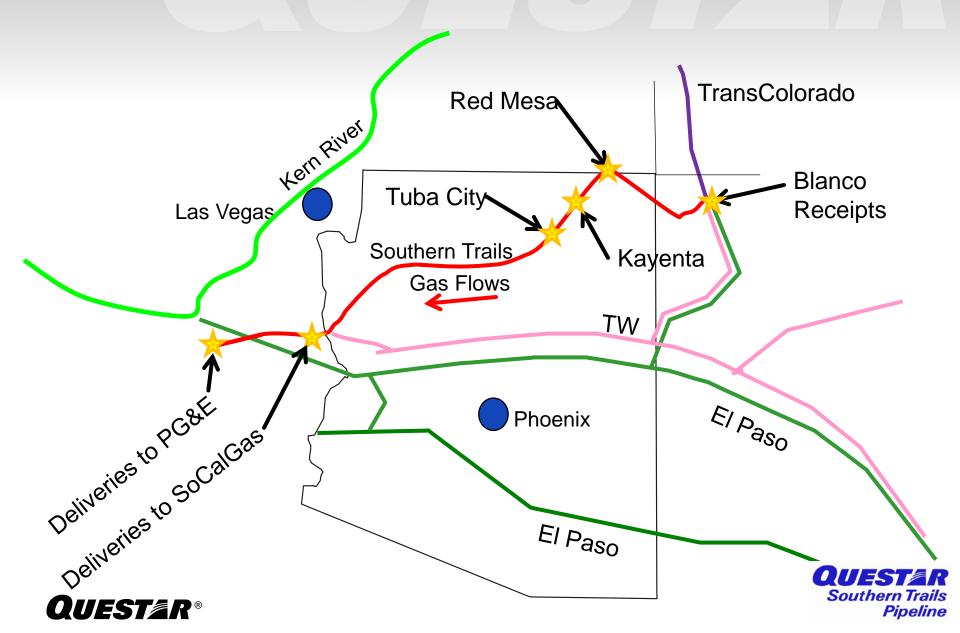
Pipeline Safety Update: Questar Southern Trails



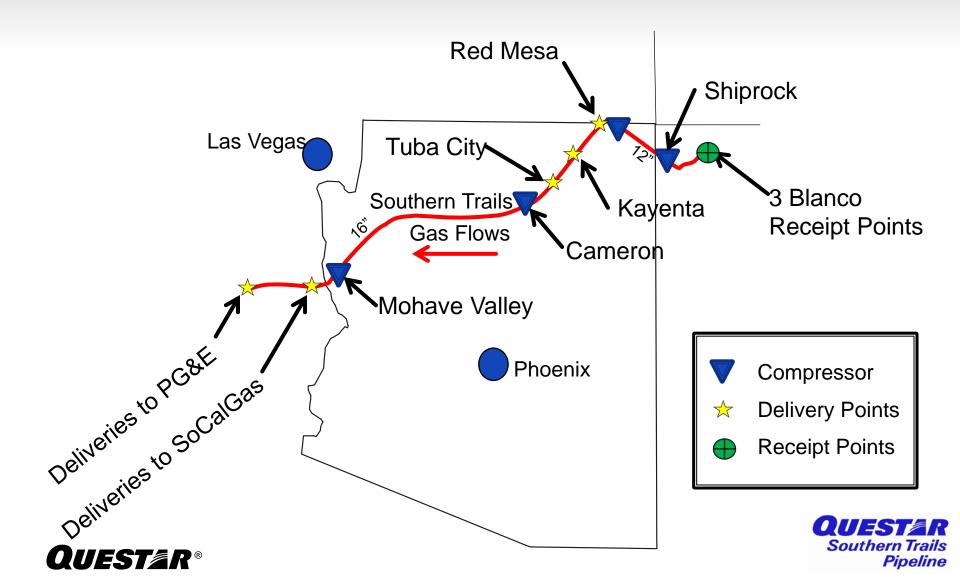
Making lives better by developing and delivering essential energy



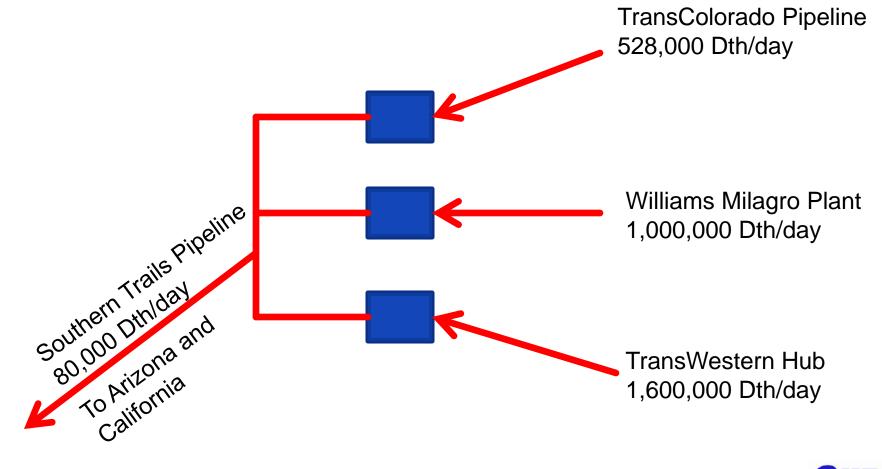
Interstate Pipelines Serving Arizona



Southern Trials Primary Facilities



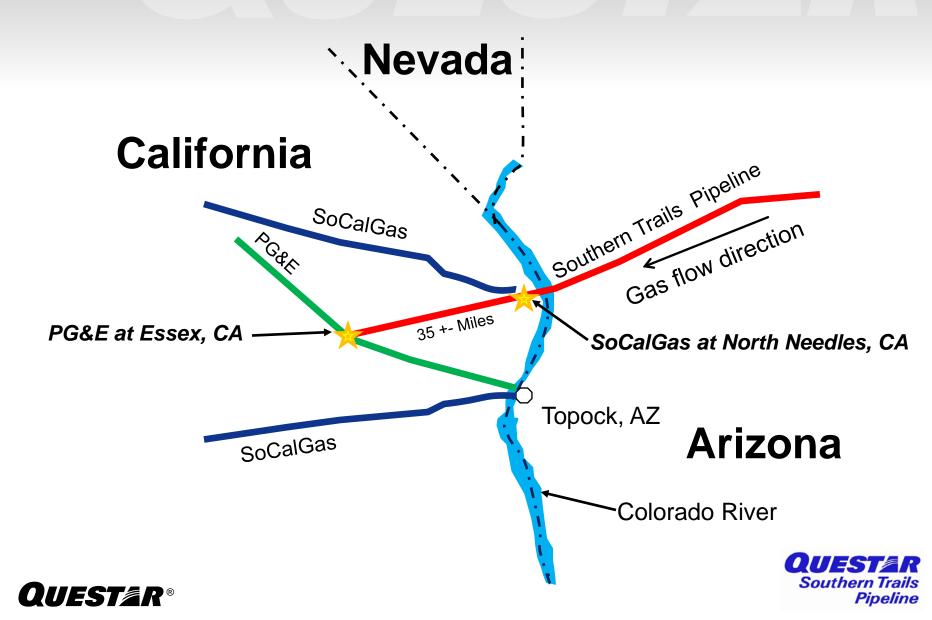
Southern Trails Blanco Gas Supplies





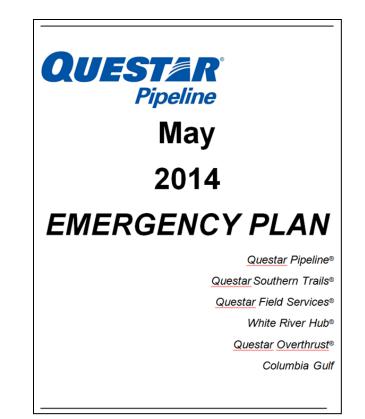


Southern Trails West End Deliveries



Emergency Plan

- Federal Code: 49 CFR Part 192.615
 - Requires every pipeline company to have a current Emergency Plan.
 - Questar updates and publishes this plan every year.
 - Each operations employee is trained on every aspect of the plan each year.







Emergency Training Drills

- Questar Operations employee's participate in Emergency Training Drills throughout the year.
 - These Table Top Drills are either :
 - Internal with fellow employees and management
 - or
 - External with Emergency Responders and Public Officials usually through Local Emergency Planning Coun







2014 Table Top Drill Line Break in Arizona







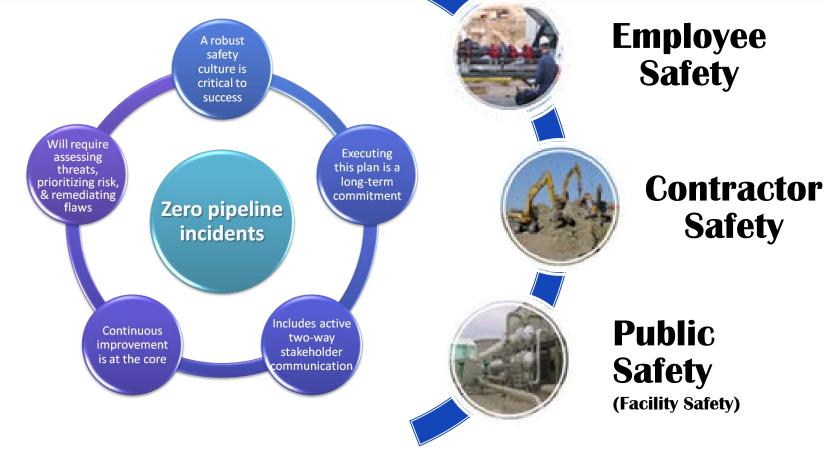
The Weather Centre High Pressure along the West Coast

- The Weather Centre is a nonprofit weather blog created to share weather information in a reporting and teaching environment.
- Last winter, if you'll remember, they predicted the Southwest to be warmer and drier than average. They were right. Arizona had it's 3rd driest and 4th warmest winter on record. So.... what for this winter.....
- Southwest US forecast for winter 2014 2015: "A warmer than normal winter with above average precipitation is currently favored". "Snowfall is projected be around average".





Aspects of Safety Culture







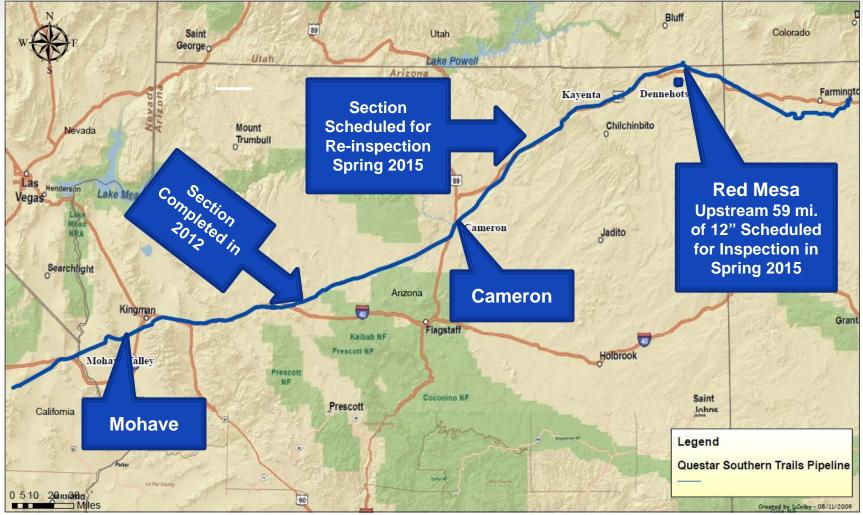
Pipeline Safety Update

- ✓ In Line Inspection
- ✓ Hydrotesting for Class Location changes
- ✓ PHMSA Integrated Audit of QST
- ✓ Arizona Pipeline Safety meetings
 - Excavators
 - Emergency Responders & Public Officials
 - Land Owners / Public





In Line Inspection







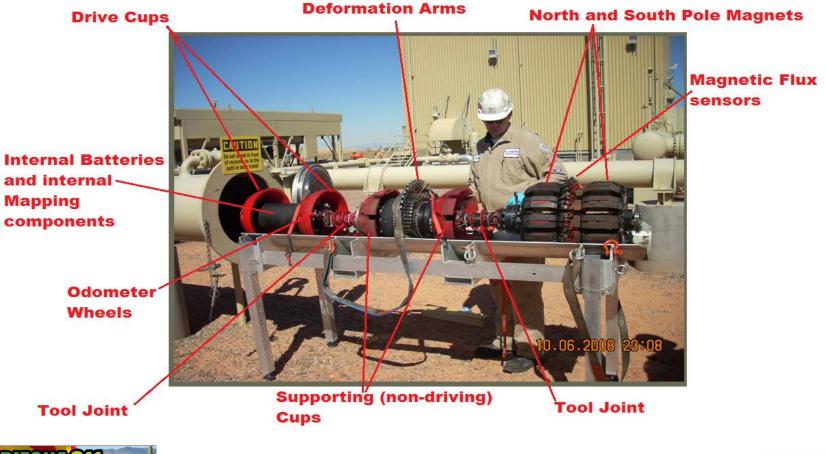
ILI Completed on Final 42 miles from Mohave AZ to Essex CA (August 2013)



Arizona Blue Stake, Inc.

Southern Trails Pipeline

Preparing to Launch an ILI Tool (a.k.a. "Smart Pig")







Assessments for 2014-2015

✓ <u>2014 Integrity Management Work</u>

- Completed scheduled anomaly digs & repairs between Cameron and Red Mesa (2012 ILI tool run)
- Completed scheduled anomaly digs & repairs between Mohave and Essex (2013 ILI tool run)
- Completed two (2) Class Location change Hydrotests
- ✓ 2015 Integrity Management Work
 - Second ILI tool run from Red Mesa to Cameron in the spring of 2015 (7-year reassessment, 149 miles of 16")
 - Initial ILI tool run on 12" section to Red Mesa in the spring of 2015 (59 miles, all Class 1)
 - Continue schedule anomaly dig evaluations, as required





Hydrostatic Testing

- Hydrostatic testing is used to confirm safe operations of the system by testing pipe integrity using water pressurized well above normal operating levels (8-hr. test)
- Test is performed following all new pipeline construction prior to placing a pipeline into service
- Southern Trails was 100% hydro-tested in 2001 before it was placed into natural gas service (min. of 1.25 times MAOP for converted lines)
- Hydrostatic testing can also be performed on existing pipelines that are already in service to re-confirm pipeline integrity (e.g. Change in Class Location etc.)





Hydrostatic Testing

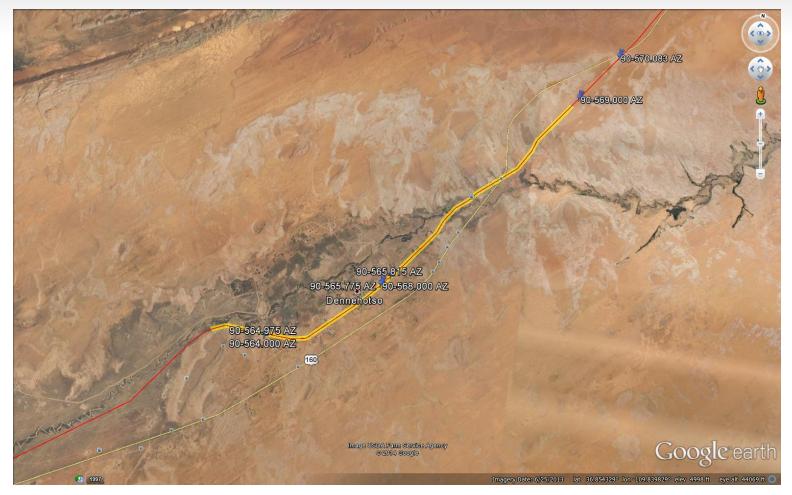
- Two sections in Arizona were retested in the past few weeks as a result of a Class Location change due to housing growth and the construction of a RV park near our pipeline
- No services to local gas distribution was disrupted during the tests







Hydrotest at Dennehotso (Navajo Nation near Kayenta, Arizona)







Hydrotest at Black Mountain RV (Near Kingman, Arizona)







2014 PHMSA Integrated Audit

- Multi-week integrated PHMSA audit conducted on Southern Trails pipeline in 2014
- PHMSA and State agencies both participated, including the Arizona Corporation Commission pipeline safety staff
- ✓ One week spent in headquarters on safety / DOT records
- Three weeks spent in the field covering New Mexico, Utah, Arizona, and California sections of QST
- In addition to a multi-week integrated PHMSA audit of parent company, Questar Pipeline Company, in 2013





2014 PHMSA Integrated Audit - Records

- Records & documentation inspected included:
- DOT maintenance, including line and valve inspections
- ✓ Public Awareness Program
- Cathodic Protection
- Integrity Management
- Emergency Preparedness







2014 PHMSA Integrated Audit - Field

- Cathodic protection reading verification
- Cathodic protection rectifier inspection
- ✓ Signs and line marking
- ✓ HCA inspections
- Facility inspections
 (Block valves and compressors)



The field audit through Arizona is the largest section inspected and covers over 350 miles of pipeline. This portion of the audit took one full week to complete.





2014 Public Awareness Meetings

 ✓ 2014 Damage Prevention, Emergency Response & Public Awareness Meetings: Coordinated with Arizona Blue Stake, Local Utility and Transmission Companies, and the ACC







2014 Meetings Attended

- Mohave County Blue Stake Excavator Awareness Meeting, Emergency Responder Meeting
- ✓ <u>Kingman, AZ</u> City of Kingman, Emergency Response & Blue Stake Excavator Awareness Meeting
- ✓ <u>Flagstaff, AZ</u> Emergency Response, & Blue Stake Excavator Awareness Meeting
- <u>Prescott, AZ</u> Emergency Response & Blue Stake Excavator awareness meeting



- <u>Window Rock, AZ</u> Navajo Nation Emergency Response
 & Blue Stake Excavator Awareness Meeting
- ✓ <u>Red Mesa, AZ</u> Chapter House
- ✓ <u>Teece Nos Pos, AZ</u> Chapter House





Purpose of Meetings

- ✓ Inform the public and communities of pipelines in vicinity & their locations
- Train excavators on Blue Stake laws, excavation safety, and safe marking practices
- Make emergency responders and public officials aware of pipelines and high consequence areas (HCAs) in their response zones
- ✓ Train emergency responders on leak recognition and response
- Review product hazards and characteristics
- Share pipeline emergency numbers and introduce local pipeline operators to public and responders
- Define Emergency Planning partners pipeline operators, police, fire, ambulance, hospitals, LEPC, and public officials





Benefits – Transmission Integrity Mgmt. & Public Awareness

- ✓ Thorough, up-to-date analysis of pipeline integrity
- Continue "smart pigging" at 7 year intervals (two ILI tool runs scheduled for next year, including Cameron to Red Mesa)
- Develop baseline knowledge & track history of known pipeline anomalies
- Real time remote monitoring and control of cathodic protection
- Provides foundation for incident avoidance through public, excavator, public official and emergency responder communications
- Give knowledge to local communities of pipelines
- In summary, this all helps maintain system reliability and safety of our pipeline through the State of Arizona





Questar Pipeline Priorities

Operational efficiency and effectiveness

- Ensure ongoing safety and reliability are highest priorities
- Retain system flexibility to meet changing demands

Commercial excellence

- Focus on excellent customer service
- Reputation of trust, responsiveness and compliance
- Fully-contracted "Hub of the Rockies"

Market responsive growth

- Pipeline and storage projects
- Strategic opportunities

Market competitiveness

Maintain competitive rates and variable costs



Clay Basin Gas Storage

Pipeline

Mhite River Hub





Pipeline

