

Tuesday, April 29, 2025

7:30 a.m. Shuttle departs from Hampton Inn and Suites to

TDW Technology Center

6801 South 65th West Avenue | Tulsa, OK 74131 Full shuttle schedule provided on last page of agenda.

Breaks will be included throughout the day.

8:00 a.m. 9:00 a.m. Workshop Opener

Instructor: Bruce Nestleroth

Introductions

Overview of the workshop Summary of types of pigs Historical developments

9:00 a.m. 12:00 p.m. Pigging Field Operations: Factors to Success

Instructor: Rusty Jackson, Quest Integrity Group

Pipeline piggability evaluation. Line cleanliness requirements.

Bends, fittings, and other restrictions. Modeling – simulation – verification

Pig launching, propelling, tracking, and receiving. Defect locating: marker systems and GPS coordination. What pigging vendors expect from pipeline operators.

12:00 p.m. 1:00 p.m. Lunch provided

1:00 p.m. 2:00 p.m. Chemical Cleaning of Pipelines

Instructor: Nicholas Landon, Coastal Chemical/Brenntag

Use of chemicals, handling, and disposal.

Optimizing a cleaning program. Knowing if the line is clean.

2:00 p.m. 3:30 p.m. Operation of Geometry and Mapping ILI Tools

Instructor: Matt Romney, TD Williamson

Geometry deformation tools XYZ mapping technology



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3:30 p.m. 5:00 p.m. Operation of Metal Loss ILI Tools

Instructor: Bruce Nestleroth, ROSEN USA

Utilizing MFL tools:

Basic principles, magnets, sensors, and resolution.

• Operational limitations; velocity, bends, pipe density.

Detecting defects; understanding pipeline features.

Metal loss corrosion sizing.

6:30 p.m. Class Workshop Dinner (offsite) TBD

Hosted and provided by Nick Landon, Coastal Chemical/Brenntag

Shuttle transportation provided.

Wednesday, April 30, 2025

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7:30 a.m.		Shuttle departs from Hampton Inn and Suites to TDW Technology Center 6801 South 65 th West Avenue Tulsa, OK 74131 (Breaks will be included throughout the day.)
8:00 a.m.	10:00 a.m.	Operation of Metal Loss ILI Tools, continued Instructor: Bruce Nestleroth, ROSEN USA Familiarization with MFL tools. Understanding ultrasonic tools for corrosion and cracking.
10:00 a.m.	12:00 p.m.	Data Analysis Demonstration Instructor: Miguel Maldonado, TD Williamson Practice data diving and analyzing ILI data. Understand raw signal data from key ILI technologies. Familiarize with how your ILI report is developed and generated. Utilize close collaboration for fostering accuracy.
12:00 p.m.	1:00 p.m.	Lunch provided
1:00 p.m.	1:15 p.m.	Shuttle transfer to TDW Test Loop Facility



Wednesday, April 30, continued

1:15 p.m. 3:00 p.m. MFL Signal Scavenger Hunt | TDW Test Loop Facility

Instructor: Bruce Nestleroth, ROSEN USA Instructor: Matt Romney, TD Williamson

Learning objective:

During this hands-on session, participants will utilize knowledge gained in the training thus far by working to locate defects based on

data collected from an intelligent pig test run.

3:00 p.m. 5:00 p.m. Field Defect Measurements | TDW Test Loop Facility

Instructor: Jonathan Elliott, TD Williamson Instructor: Chad Schweikert, TD Williamson

Learning objective:

During this hands-on session, an *in-the-ditch* measurement of corrosion will be performed using methods from low to high tech. Following an introduction to measurement methods, participants will measure pits using gauges and bridging bars. They will compare labor

time and accuracy of high-resolution laser scans.

6:30 pm- 8:30 pm Class Workshop Dinner- Hosted and provided by TD Williamson

TBD

Activity and Dinner

6:00 pm Shuttle transportation provided from hotel

Thursday, May 1, 2025

7:30 a.m. Shuttle departs from Hampton Inn and Suites to

TDW Technology Center

6801 South 65th West Avenue | Tulsa, OK 74131

(Breaks will be included throughout the day.)

8:00 a.m. 9:00 a.m. ILI Service Center Tour

Presented by: Daniel Ringer, TD Williamson

9:00 a.m. 9:15 a.m. Shuttle transfer to TDW Test Loop Facility



Thursday, May 1 continued

11:30 a.m. 9:15 a.m. SAFETY: Introduction, Orientation, and Demonstrations Instructor: Roger Poe, TD Williamson Line locating AGM site selection Pig launching and receiving Pig tracking (pig passages and locating a stuck pig) 11:30 a.m. 11:45 a.m. Shuttle transfer to TDW Technology Center 11:45 a.m. 12:15 p.m. Review of Test Loop ILI Data Instructor: Miguel Maldonado, TD Williamson Understand key areas of interest from test loop pipeline. Familiarize how operational conditions affected the ILI data. List new and unique features in the pipeline. 12:15 p.m. Lunch provided 1:00 p.m. 1:00 p.m. 2:00 p.m. Tool Performance: Specifications and Determinations + Validation with Field Results Instructor: Dane Burden, TD Williamson Introduction to API 1163 Inline Inspection Systems qualification. ILI and operator responsibilities for ILI tools. Tools for assessment; are ILI results in/out of specification. 2:00 p.m. 3:00 p.m. **Pigging Standardization** Instructor: Bruce Nestleroth Learning objective: Documents reviewed during this session are to provide understanding and guidance so the pipeline operator can make informed decisions of implementation and utilization of in-line inspection systems and technologies to mitigate risk.

- Pipeline Operators Forum Standard
- NACE Pigging Recommended Practice

Participants will learn the following standards and practices of:

- API ILI Equipment Standard
- ASNT Personnel Qualification Standard

4:00 p.m. Workshop concludes



Shuttle Transportation Schedule

Tuesday, April 29

7:30 a.m. Shuttle departs from Hampton Inn and Suites

7004 South Olympia Avenue | Tulsa, OK 74132 going to

TDW Technology Center

6801 South 65th West Avenue | Tulsa, OK 74131

5:00 p.m. Shuttle departs from TDW Technology Center going to

Hampton Inn and Suites

6:00 p.m. Shuttle departs from Hampton Inn and Suites going to Workshop Dinner (offsite). Shuttle

provided back to hotel following dinner.

Wednesday, April 30

7:30 a.m. Shuttle departs from Hampton Inn and Suites going to

TDW Technology Center

1:00 p.m. Shuttle transfer to from TDW Technology Center going to TDW Test Loop Facility

5:00 p.m. Shuttle departs from TDW Test Loop Facility going to

Hampton Inn and Suites

6:00 p.m. Shuttle departs from Hampton Inn and Suites going to Workshop Dinner (offsite). Shuttle

provided back to hotel following dinner.

Thursday, May 1

7:30 a.m. Shuttle departs from Hampton Inn and Suites going to

TDW Central Services

9:00 a.m. Shuttle transfer to from TDW Central Services going to TDW Test Loop Facility

11:30 a.m. Shuttle departs from TDW Test Loop Facility going to TDW Technology Center

3:00 p.m. Shuttle departs from TDW Technology Center going to Hampton Inn and Suites