



Municipal Sewer Grout School Waukesha • September 2023

DAY 1 • Wednesday, September 20, 2023

| Time | Item | Instructor(s) | Location |
|--|--|----------------------------|------------------|
| 7:30 - 8:00 | Arrival + Breakfast | | Classroom |
| 8:00 - 8:30 | Welcome: How to get the most of the next two days, introductions | Team | Classroom |
| 8:30 - 9:15 | Introduction to Municipal Grouting | Jacob Swanson | Classroom |
| 9:15 - 10:00 | Infiltration control through remotely operated equipment | Marc Ancil | Classroom |
| 10:00 - 10:15 | BREAK | | |
| 10:15 - 10:30 | Infiltration flow rate demo in sewer pipe bedding soils | Ron Manestar | Shop |
| 10:30 - 11:00 | Grout Truck Introduction | Ron Manestar | Classroom & Shop |
| 11:00 - 11:50 | Introduction to NEW NASSCO/ICGC specifications | Marc Ancil | Classroom |
| 11:50 - 12:30 | LUNCH | | |
| 12:30 - 12:50 | Pressure Transducer | Ron Manestar Marc Ancil | Classroom |
| 12:50 - 1:00 | Hydraulic water pressure & transducer example (mainline plexiglass) | Marc Ancil | Shop |
| 1:00 - 3:00 4 groups – 30 min each | 1. Pump station - Jerry 2. Check Valve - Marc 3. Grout station (AV-100/Urethanes) - Jake 4. Grout Truck - Ron | Team | Shop |
| 3:00 - 3:15 | BREAK | | |
| 3:15 - 4:15 | Grout truck system with water <ul style="list-style-type: none"> • Bucket test • Packer ASTM test on system integrity • Packer pump/void calculation • Questions on gel times/flow rates | Team | Shop |
| 4:15 - 5:00 | <ul style="list-style-type: none"> • Annulus flow demonstration in line pipe • Lateral packer operation in plexiglass pipe | Ron Manestar | Shop |
| 5:00 | Recap of day, Q&A | Team | Class |
| 5:30 - 7:00 | NETWORKING DINNER - TBD | | |

*Agenda subject to change



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DAY 2 • Thursday, September 21, 2023

| Time | Item | Instructor(s) | Location |
|---------------|--|---------------------------|----------------|
| 7:30 - 8:00 | Factory Tour | | Shop |
| 7:30 - 8:00 | Arrival + Breakfast | Team | Classroom |
| 8:00 - 9:15 | Safe Operating Practices Program (SOPP) - Grouting material safety training & test | Jacob Swanson | Classroom |
| 9:15 - 9:30 | BREAK + Class Photo | | |
| 9:30 - 10:15 | Grout Tank Mixing | Jacob Swanson + Volunteer | Shop |
| 10:15 - 11:00 | Logiball Packer Presentation & Maintenance | Marc Ancil | Shop |
| 11:00 - 11:30 | Hydrometer test, Temperature effects on gel time | Jake Swanson | Classroom |
| 11:30 - 12:30 | Manhole Rehab Presentation & Demo | Jake Swanson | Classroom/Shop |
| 12:30 - 1:00 | LUNCH | | |
| 1:00 - 1:30 | Sand Grout Box & Mainline Packer | Team | Shop |
| 1:30 - 2:00 | Annulus Grouting of Lined Pipe | | Shop |
| 2:00 - 2:30 | Lateral Connection Sealing Demo | | Shop |
| 2:30 - 2:45 | BREAK | | |
| 2:45 - 3:15 | Open discussion | Team | Classroom |
| 3:15 - 3:30 | Complete evaluation form | | |
| 3:30 - 4:00 | Issue Certificate of Completion | | |
| 4:00 | End of school – safe travels! | | |

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