

The Conduit

Volume 11, Issue 1
January & February 2014

NEWS & VIEWS OF ELECTRICAL INSTALLATIONS, INC.



We apologize that, due to circumstances beyond our control, this edition of the Conduit was delayed.



EMPLOYEE SPOTLIGHT



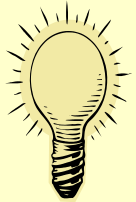
- 1/13 Wayne Wickens
- 1/18 Cory Glines
- 1/18 Christian Brosious
- 2/1 Ben Fritz
- 2/4 Tom Therrien
- 2/19 Sandra Ringelstein
- 2/19 Bryan Payne



Tom Therrien 17 years
Mike Leary 15 years
Christian Brosious 2 years

Anniversaries

Factoid of the Month



Richard Cadbury invented the first Valentine's Day candy box in the late 1800s. Approximately 36 million boxes of chocolate are sold each Valentine's Day.



Charlie's Quality Corner

Tool, Instrument & Vehicle Maintenance

It is very important that we properly maintain all the tools we use to efficiently carry out our mission.

Tools: Inspect daily for any defects including, frayed cords, plug problems, sparking brushes or oil / grease contamination. Timely attention to these basic items will payoff in increased safety and productivity.

Instruments: Keep calibration and analytical instruments in protective cases and perform calibrations at recommended intervals.

Vehicles: Change oil and check tires etc. at 6000-7000 mile intervals. Use caution when using services such as Speedy Lube as they often recommend services (flushes, fuel system cleaning etc.) which may be redundant or unnecessary.

Number of hours worked without a "Lost Time" Injury

137,663

VEHICLE INSPECTIONS

Our annual employee meeting has been moved to April (details to follow). You will receive an updated vehicle registration. Please have vehicles inspected in March.



**134 DAYS TILL
SUMMER!**





The Conduit

Volume 11, Issue 2
March & April 2014

NEWS & VIEWS OF
ELECTRICAL INSTALLATIONS, INC.



FEATURED PROJECT

WASTEWATER TREATMENT FACILITY, PHASE 2 UPGRADE BERLIN, NH



Electrical Installations, Inc. has been selected to provide instrumentation and process control for a major upgrade and modernization of the Berlin, NH Wastewater Treatment Plant. This project consists of all new PLC-based controls, extensive digital instrumentation, energy saving equipment, and a state-of-the-art SCADA System. The project was made particularly challenging because all plant operations had to be maintained while bringing the new equipment on line in order to insure compliance with EPA regulations.

The City of Berlin has been a valued repeat customer of Electrical Installations' since 1994 in both the water and wastewater departments. We are performing the current project under a subcontract with Apex Construction, Inc. with whom we also have a long-standing relationship. Jim Fritz is Project Manager, ably assisted by Jimmy Fritz. Special thanks to Brian and Darlene Chevrette for their extra efforts generating very complex design drawings and submittals and also to our Panel Shop crew, Matt Blood and Casey Damon, for their expertise in manufacturing the 25 control panels required for this project. The project has progressed very smoothly with successful completion anticipated in June.



March is truck inspection month.





EMPLOYEE SPOTLIGHT

Happy Birthday

3/10 Eva Fritz

4/24 Rick Milliken

4/30 Brian Chevrette



Anniversaries

✿			✿
✿	Matt Blood	10 Years	✿
✿	Tom Brosious	10 Years	✿
✿	Dennis Lloyd	5 Years	✿
✿	Jared Leary	4 Years	✿
✿	Zack Fritz	4 Years	✿

ANNUAL EMPLOYEE MEETING
FRIDAY, APRIL 11, 2014
8:00 AM - 3:00 PM
RIDGEWOOD COUNTRY CLUB
Moultonborough, NH



All employees will participate in First Aid, CPR and AED training with those previously certified receiving updated certifications.

WELCOME NEW EMPLOYEE

Rick Milliken - Rick comes to EI after running his own successful electrical company for many years. Rick lives in Gilmanton with his wife Gail. In their spare time they enjoy snowmobiling, motorcycle riding and kayaking. They have two grown sons.

Number of hours worked without a "Lost Time" Injury
141,262

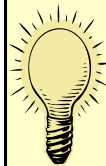
Charlie's Quality Corner Marking

The need to mark and number all power and control wiring goes without saying. Of equal importance is marking all circuit breakers and disconnecting devices.

I see entire installations going on line without identifying a single circuit breaker. Obviously, this constitutes a safety hazard, not to mention a serious code violation.

While everyone "wants to get the job done" we need to take the time, first, to look out for our most important job...everyone's safety. Simply taking a strip of white color coding tape and writing on it with a black marker pen provides an effective temporary marker that is easy to remove when the permanent labels arrive and it really takes only a minute.

Factoid of the Month



Each year in the U.S., there are 16 billion jellybeans manufactured just for Easter. It takes 7 to 21 days to make a jelly bean.



**REMEMBER TO SET
YOUR CLOCKS FORWARD
ON SATURDAY NIGHT
MARCH 8**



The Conduit

Volume 11, Issue 3

May & June 2014

NEWS & VIEWS OF ELECTRICAL INSTALLATIONS, INC.

TEAM MEETING 2014



On April 11, Electrical Installations' employees gathered at Ridgewood Country Club for a day-long Team Meeting focusing on our #1 priority, safety. Our meeting began with Arc Flash Training conducted by James Witherell of Horizon Solutions. All field personnel attended this informative presentation. The balance of our morning was devoted to CPR, First Aid, and AED Training. Matt Dodge and Lisa Masse of Becker Training Associates combined narrative, Power

Point, and hands-on training for an educational and enlightening training session. We are proud that every member of the EI team has received training in these critical areas.

Our afternoon began with a thorough review of Electrical Installations' newly updated Employee Handbook. Many thoughtful questions arose as we progressed through company policy, benefits, and payroll matters. A brief "State of the Company" presentation followed highlighting Electrical Installations' many strengths. Twenty-six years of excellence have created significant financial strength and a reputation of integrity, leadership and innovation. The true foundation of our success, however, is our employees. With much pride, we ended our meeting with employee recognition. Mike Leary was honored for 15 years of dedicated service, Matt Blood and Tom Brosious for 10 years of dedicated service, and Dennis Lloyd and Craig Sharpe for 5 years of dedicated service. We had a terrific day and, as always, the EI team thoroughly enjoyed their time together.



Number of hours worked
without a "Lost Time" Injury

152,990





EMPLOYEE SPOTLIGHT



5/2 Mike Zompanti



Anniversaries

Cory Glines	9 Years
Mike Merrill	8 Years
Rick Frame	8 Years
Eva Fritz	8 Years
Casey Damon	7 Years
Michele Near	7 Years
Sam Kelley-Vail	2 Years
Ben Fritz	1 Year



Recipients of Milestone Awards: Craig Sharpe and Dennis Lloyd, 5 years, Tom Brosious and Matt Blood, 10 years, Mike Leary, 15 Years

UPCOMING PROJECTS

- Acton, MA Instrumentation – Waterline Industries Corp.
- Bellingham, MA WTP – Waterline Industries Corp.
- Canaan, VT WWTF & PS Upgrade – Daniel Hebert, Inc.
- Claremont, NH Pump Stations – Penta Corp.
- Cranston, RI WPCF Upgrade – Carlin Contracting Co., Inc.
- Dover, NH WWTF Upgrade – Apex Construction, Inc.
- Durham, NH Dewatering System Upgrade – Keymont Construction, Inc.
- Manchester, NH WWTP Upgrade – Penta Corp.
- New Bedford, MA WWTP SCADA Upgrade – Fall River Electrical Assoc.
- New Haven, CT WPAF Improvements – CH Nickerson & Co.
- Sprague, CT PS Upgrade – CH Nickerson & Co.
- Warner, NH WWTP Improvements – Apex Construction, Inc.
- Woodstock, VT WWTP Upgrade – Infrastructure Construction

Charlie's Quality Corner

What is intrinsically safe equipment and why is it used?

For our purposes in the electrical control industry, intrinsic safe equipment limits energy to an extent that even in a short circuit condition, there is not enough energy let through to provide enough heat to cause ignition of a hazardous atmosphere. An intrinsically safe system assumes that fuel and oxygen are present in the atmosphere, but the system is designed so the electrical energy or thermal energy of a particular instrument loop can never be great enough to cause ignition.

Energy is limited by the use of intrinsic safe barriers or relays. These devices, when properly applied, enable us to safely use general purpose wiring, and standard devices, in classified areas.

There are important rules in the NEC related to intrinsic safe circuit extensions. In general:

1. IS wiring MUST be separated by a minimum 2" airgap from non IS wiring.
2. Usually, UL requires IS barriers to be in a separate enclosure.
3. Barriers must be compatible with the device being protected. Generally, passive devices such as float switches, etc. are easily applied but devices which may store energy such as level probes are tested for use with specific barriers.

Conduits containing IS wiring must be clearly marked.



Factoid of the Month



Father's Day was first started in 1909 in Spokane, Washington, by the daughter of a widowed farmer who was raising 6 children on his own, but it did not become a Federal holiday until 1972. Mother's Day, however, was started in 1908 and became a national holiday in 1914, making this year the 100-year anniversary.



NEWS & VIEWS OF ELECTRICAL INSTALLATIONS, INC.

FEATURED PROJECT

Wastewater Treatment Facility Aeration System Upgrade Manchester, NH



The Manchester Wastewater Treatment Facility treats up to 30 million gallons of wastewater per day serving Manchester, Milford, and other surrounding towns. Since 1990, Electrical Installations, Inc. has designed and installed upgrades to this facility's influent pumping, clarifiers and thickeners, chemical treatment, and now the aeration system. As part of the current project, we will provide all new aeration automation including controls for blowers, gate, and bypass. The Aeration System is a critical part of the treatment process, and Electrical Installations, Inc. will perform all

control work and programming including the plant-wide SCADA System.

A major milestone of the aeration project recently occurred when Factory Acceptance Testing (FAT) was performed on six large industrial control panels manufactured by Electrical Installations' Panel Shop. Those involved in the testing process included Scott Hinckley and Bryanna Denis of Wright-Pierce Engineers and Rob Morris and John Baron of the Manchester EPD, as well as our own Matt Blood, Casey Damon, Cory Glines and Charlie Fritz. Our Panel Shop was so well prepared for the extensive 2-day testing process that all was complete in only six hours.

This project is progressing smoothly and ahead of schedule and we look forward to project completion early next year.





EMPLOYEE SPOTLIGHT



- 7/1 Jimmy Fritz
- 7/9 Darlene Chevrette
- 7/9 Craig Sharpe
- 7/28 Charlie Fritz
- 8/11 Andy Fritz
- 8/26 Zack Fritz

Anniversaries

- Brian Chevrette 18 Years
- Darlene Fritz 18 Years
- Neil Davis 18 Years
- Jimmy Fritz 4 Years
- Mike Zompanti 2 Years

Number of hours worked without a "Lost Time" Injury

164,409

3rd Annual TDK Golf Classic



Electrical Installations is proud to have, once again, participated in the TDK Golf Classic which was held at Ridgewood Country Club in Moultonboro on June 6. More than 100 golfers enjoyed a fun-filled day on the links in support of Nolan, Landan and Adisyn Keyser's College Funds and the Concord Hospital Payson Center for Cancer Care. Thank you to all who worked so hard to make this event such a great success. Congratulations to tournament champions (left to right) Matt Blood, Andy Fritz, Cory Glines and Jimmy Fritz!



Factoid of the Month



Americans consume about 155 million hot dogs on Independence Day alone; it is the biggest hot dog holiday of the year.



God bless



...land that I love.

NEWS & VIEWS OF ELECTRICAL INSTALLATIONS, INC.

FEATURED PROJECT

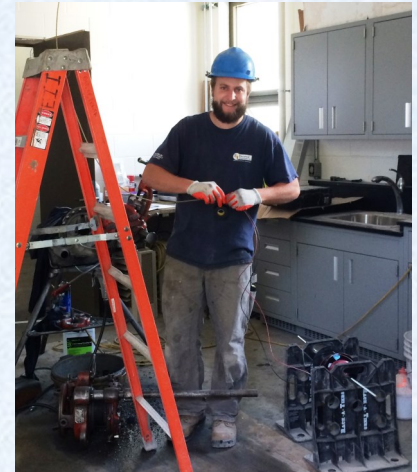
Wastewater Treatment Facility Upgrade Sunapee, NH

Electrical Installations, Inc. is nearing completion of this extensive 2-year project which replaces Sunapee's small antiquated wastewater treatment plant with a 21st century, state-of-the-art facility. The project includes construction of a Process Building including Primary Treatment Systems, Septage Receiving Facilities, a Dewatering and Solids Handling System, Alkalinity Chemical System, Pump Station, Instrumentation, Control and Electrical Systems.

Working as a subcontractor to Penta Corporation, Electrical Installations has completed all specified electrical, instrumentation, process control, and SCADA system work with final change order items currently nearing completion. This challenging project has progressed very smoothly under the watchful eye of Project Manager Jim Fritz. Special thanks to Bryan Payne and Sam Kelley-Vail for their long-term commitment to this project and to Neil Davis, Wayne Wickens, Andy Fritz and Rick Milliken who all contributed significantly to successful project completion.



Bryan Payne and Sam Kelley-Vail, still smiling after 2 years at the Sunapee Wastewater Treatment Plant!



Number of hours worked
without a "Lost Time" Injury

174,340





EMPLOYEE SPOTLIGHT



Chuck Fritz	9/9
Casey Damon	9/14
Matt Blood	9/15
Jim Fritz	9/17
Jared Leary	9/20
Rick Frame	10/10
Michele Near	10/17
Darlene Fritz	10/28

Anniversaries

Jim Fritz	27 Years
Chuck Fritz	27 Years
Charlie Fritz	27 Years
Darlene Fritz	27 Years
Bryan Payne	8 Years
Kim Souza	6 Years
Mitchell Leary	1 Year

We apologize for the error in our last issue listing Darlene Fritz instead of Darlene Chevrette as having an 18-year anniversary.

Welcome New Employee

Jesse Chaloux—Born and raised in Berlin, Jesse currently resides in Manchester and has joined the EI team as a Master Electrician. He enjoys snowmobiling, golf, and music in his spare time.

27 YEARS OF EXCELLENCE

It is with much gratitude and pride that we mark Electrical Installations' 27th anniversary. Since October 5, 1987, our exceptional employees have worked to establish Electrical Installations as an industry leader. We are most thankful for your hard work, dedication, and commitment to excellence!



UPCOMING PROJECTS

Augusta, ME Treatment Bldg & Water Mains – C.H. Stevenson, Inc.

Conway, NH Wastewater Improvements – DeFelice Corp.

Harwich, MA WTP – Winston Builders Corp.

Kittery, ME Wastewater Improvements – Penta Corp.

Laconia, NH SCADA System – Electrical Installations, Inc.

Merrimack, NH WWTF – Methuen Construction Co., Inc.

Spencer, MA WWTF & PS – Nuwater, Inc.

Taunton, MA Pump Station – Winston Builders Corp.

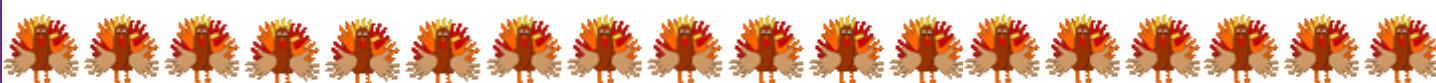
Turner Falls, MA Water Well Pump – Bay State Regional Contractors



Factoid of the Month

5 seconds is the minimal amount of attention that a driver who texts takes away from the road. If traveling at 55 mph, this equals driving the length of a football field without looking at the road.





The Conduit

Volume 11, Issue 6
November & December 2014

NEWS & VIEWS OF ELECTRICAL INSTALLATIONS, INC.

FEATURED PROJECT NEW BEDFORD, MA WASTEWATER TREATMENT PLANT SCADA UPGRADE



Nearly 30 years ago, the City of New Bedford was compelled to address alarming water quality issues. A critical element of the City's wastewater collection and treatment system, their 30-mgd water pollution control facility, was in violation of the Clean Water Act. In 1987 the city entered into a consent decree with the U. S. Environmental Protection Agency, the Massachusetts Department of Environmental Protection, and the Conservation Law Foundation to begin planning, design, and construction of a new water pollution control facility to provide both primary and secondary treatment. The consent decree specifically mandated that the city improve its wastewater collection and treatment systems, and included a court-enforceable schedule. The successful startup of the water pollution control facility on August 22, 1996 was a critical milestone in the process to improve the city's treatment systems.

In recent years, the City recognized that components of their facility had now become outdated and that an upgrade to current technology was necessary in order to maintain their commitment to clean water standards. Electrical Installations, Inc. is proud to have assisted the City in reaching their SCADA System improvement goals.

Under a large subcontract to Fall River Electrical Associates, Electrical Installations is nearing completion of significant Wastewater SCADA System Improvements. EI replaced the facility's outdated Turbitrol system allowing increased monitoring and control capabilities. As part of the new SCADA System, EI manufactured eight large industrial control panels which required factory acceptance testing by project engineer, CDM Smith, prior to being transported to New Bedford. EI

also provided a new fault-tolerant server, a dozen thin clients, required software packages, and other components. Our control panels are currently being put into service and we look forward to successful project completion by year-end.



Matt Blood, happy to ship completed panels

Special thanks to the staff of our Westport, MA office for coordinating this project under the direction of Project Manager, Mike Leary. Thanks also to Matt Blood and Casey Damon for their exemplary efforts in EI's Panel Shop.



EMPLOYEE SPOTLIGHT



11/2	Mike Leary
11/3	Dennis Lloyd
11/9	Neil Davis
11/14	Tom Brosious
11/26	Sam Kelley-Vail
12/20	Kim Souza



Anniversaries

Sandra Ringelstein 16 years
 Craig Sharpe 5 years

Welcome New Employee

Adrien Labrie – Adrien lives in Moultonboro with his wife of 43 years, “Dickie,” and has joined the EI team as a project coordinator. He has two grown children, Brian and Chrissy. In his free time, Adrien and Dickie enjoy riding their trike motorcycle.

Number of hours worked
 without a "Lost Time" Injury

185,772



EI CHRISTMAS PARTY

Saturday, December 13, 2014

6:00 PM – 9:00 PM

Lemon Grass

64 Whittier Hwy (Route 25)

Moultonboro, NH

RSVP 603-253-4525



Charlie's Quality Corner

The 2014 National Electrical Code requires source labelling on all devices. For example, each switch and receptacle must indicate the source power or lighting panel and the circuit number.

As a practical matter we should use a label maker, usually with white tape (say 1/2" wide) with the required information on 2 lines.

Disconnects, unit heaters and the like should also have similar labels showing where the circuit originates.

Generally, the NEC is moving toward easy identification of all energy sources, both for safety and efficiency purposes.



The Wago display truck recently visited Electrical Installations' Moultonboro office where Mark Joseph spent time with the EI crew promoting Wago products.



Factoid of the Month



One night before Christmas, in the 16th Century, a German preacher, Martin Luther, - who may have been the first to bring a Christmas tree into his home - was walking through the forest and looked up to see the stars shining through the tree branches. It reminded him of the Star in the East and Jesus, and so he crafted a star for the top of his Christmas tree.

