Update on Bored Geothermal Heat Exchanger Rulemaking

The 2013 Legislative session amended Minnesota Statutes, chapter 103I (Wells, Borings, and Underground Structures) to include all bored geothermal heat exchangers, including horizontal, angled, and vertical borings. While the Minnesota Department of Health (MDH) has regulated vertical heat exchangers since 1984, this legislation brings in a sector of the geothermal industry that is new to MDH.

To start the rulemaking process, the Request for Comments was published in the State Register on August 5, 2013, inviting interested persons to provide comments on any issues relevant to regulating these borings. This comment period remains open. MDH established an advisory committee of contractors who install these borings. This committee has been meeting since September 2013 to discuss a variety of technical issues to be addressed in rulemaking and to make recommendations to MDH. Major issues of discussion include qualification requirements for a segment of the industry previously unlicensed, piping materials, heat transfer fluids and additives, grouting, and installation of horizontal and angled borings in relation to utilities, buildings, and property lines.

MDH staff are currently drafting proposed rule language and the associated Statement of Need and Reasonableness. After review and approval by the Governor’s office, MDH will publish the Notice of Intent to Adopt Rules, at which point persons can review and provide comments on the specific requirements proposed in rule. If there are a sufficient number of requests for hearing, a hearing before

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an Administrative Law Judge would follow. MDH hopes to have the rule amendments to be effective by the 2015 construction year. If you have any questions or wish to provide comments, you may contact Michael Convery at 651-201-4586. Comments can also be submitted online at: www.health.state.mn.us/divs/eh/wells/rules/bghecomments.html.

Minnesota Private Well Protection Study
Arsenic in New Private Wells

The Well Management Section has begun a three-year study of arsenic occurrence in newly-constructed domestic wells. The goals of the study are meant to answer three questions:

1. Do different water sampling methods influence arsenic test results?
2. Are the arsenic test results from the water samples collected by the well contractor at the time of well construction representative of arsenic levels after the well has stabilized and has been in regular use?
3. What are the geochemical conditions that control arsenic mobilization in groundwater?

Ultimately, the Minnesota Department of Health (MDH) hopes to identify conditions related to the presence of elevated arsenic levels in groundwater, in order to provide contractors with guidance on when and how to collect water samples that will yield stable arsenic results. In addition, we hope the results of the study will help identify aquifers or geologic conditions with low arsenic concentrations so well contractors can construct new wells that avoid high arsenic conditions.

MDH plans to test 250 new wells, sampling each well at the time of construction, then two additional times over the first year that the well is in use. Water samples will be tested by MDH Public Health Laboratory for total arsenic, dissolved arsenic, arsenic species (As\(^{+3}\), As\(^{+5}\)), dissolved iron, dissolved manganese, nitrate, and sulfate. For each sampling event, several field parameters will be measured, including conductivity, pH, temperature, dissolved oxygen, and redox potential, in an effort to understand the general groundwater chemistry at the time of sampling.

MDH is focusing water sampling efforts in counties with a history of elevated arsenic in groundwater and which have different hydrogeologic conditions, including Becker, Carlton, Carver, Clay, Hennepin, Kandiyohi, McLeod, Meeker, Otter Tail, Todd, and St. Louis counties. Well owners will be mailed a detailed report of water quality results. A comprehensive report will be published at the end of the three year study.

Well contractor participation is vital to the success of this study. If you plan on constructing a well in one of the counties listed above, please contact MDH district hydrologist that covers that county or Emily Berquist at 651-201-4594, to enroll the well into the study and arrange for sampling.
Many thanks to all of the contractors listed below who have already stepped up and are assisting with the study.

Alberg Water Services, Inc.  
Antonson Well Drilling, Inc.  
Anderson Well Drilling and Repair, Inc.  
Bergerson-Caswell, Inc.  
Bob Kent Well Drilling  
Bohn Well Drilling Co., Inc.  
Braunwarth Well, LLP  
Brovold Wells, Inc.  
Don Stodola Well Drilling  
Elsner Well Drilling  
Fergus Well Co.  
Fobbe Well, LLP  
Geib Well Co.  
Gracco Well Drilling, Inc.  
Leuthner Well, Inc.  
LTP Enterprises, Inc.  
Mantyla Well Drilling, Inc.  
Mathews Drilling and Pump Co.  
Mattson Well Co.  
Mork Well Co., Inc.  
Ray Cichy and Sons Well Drilling, Inc.  
Reed and Reed Water Well Drilling  
Robertson Well Drilling, Inc.  
Saga Well Drilling  
Sampson Well Co.  
Stevens Drilling and Environmental Services, Inc.  
Sunnarborg Well Drilling, Inc.  
Torgerson Well Co., Inc.  
Werner Well Drilling

Chuck Howe Serves 22 Years on Advisory Council

Charles “Chuck” Howe is stepping down from the Advisory Council on Wells and Borings after 22 years of outstanding and dedicated service as the Minnesota Department of Transportation (MNDOT) representative (1993-2014). He is retiring after 33 years of service with MNDOT.

Chuck graduated from (what was then) Southwest Minnesota State College in 1975. After starting with Johnson Screens, he joined MNDOT and rose through the ranks to become Chief Engineering Geologist. He became the department’s expert on ground vibration, rock slopes, and groundwater. During his career, he was involved with the construction of the Silver Creek Cliff and Lafayette Bluff tunnels on State Highway 61 along the North Shore of Lake Superior, dewatering for Interstate-394, investigation of Camp Coldwater Spring, and most recently, the structural support of the St. Croix River Bridge. He helped make geophysical investigations an integral part of MNDOT site investigations. In 2013 Chuck received the Alumni Achievement Award from Southwest Minnesota State University. At the June 4, 2014, meeting of the council, Roger Renner, chair of the council, presented Chuck with a plaque to honor his years of dedicated service.

June 4, 2014, Chuck Howe (left) receives a plaque in recognition of his 22 years of service on the Advisory Council on Wells and Borings, from Roger Renner (right).
Manganese in Drinking Water

Manganese occurs naturally in groundwater throughout much of Minnesota. New information suggests that consumption of too much manganese from drinking water may not be good for our health.

Health Effects – The new guidance value for manganese in drinking water is 100 micrograms per liter (µg/L) for formula-fed infants and infants that drink tap water. The manganese guidance value for children and adults (including nursing mothers) is 300 µg/L. Infants are at greater risk from manganese in drinking water than children and adults because their brains are developing rapidly, they absorb more manganese and are less able to remove manganese from their bodies, and they drink more water and eat more food based on body weight. Formula-fed infants get enough manganese from formula to meet their dietary needs. However, they may get too much manganese (above the recommended amount for nutrition) in their bodies when formula is mixed with water that contains manganese.

Manganese is considered a trace beneficial element, which means that low levels of manganese are a benefit to humans. Adults and children get enough manganese from the foods we eat. Infants and children younger than one year old get enough manganese from breast milk, food, or formula. However, high exposures to manganese can harm the nervous system, especially affecting learning and behavior in infants and young children. High concentrations have been reported to cause Parkinsonism, headaches, insomnia, weakness in the legs, and mental confusion. The level at which manganese benefits one individual could overlap with the level at which it is harmful to another individual. Recent studies suggest that manganese from drinking water poses a greater health risk than manganese found in foods.

Bathing and showering in manganese-containing water does not increase your exposure since manganese in water does not cross the skin and doesn't get into the air.

Occurrence in Groundwater – Manganese is one of the most abundant metals on the earth’s surface, making up approximately 0.1 percent of the earth’s crust. Manganese is not found naturally as the element, but is a component of over 100 minerals. Manganese (Mn), should not be confused with magnesium (Mg), another common element found in well water that causes “hard” water. Manganese typically dissolves in groundwater under low oxygen (reducing conditions) and high carbonate (hard) water. Older, deeper groundwater is more likely to have elevated manganese. Shallow water table wells are less likely to have manganese. Once stabilized, manganese concentrations generally do not change significantly with time.

Manganese concentrations in Minnesota groundwater range from below detection to 5,040 micrograms per liter (µg/L), with a statewide mean concentration of 214 µg/L, and a median of 93 µg/L. One µg/L is approximately equal to 1 part per billion. Approximately 50 percent of wells tested exceed the 100 µg/L manganese standard established for infants. Manganese distribution in Minnesota groundwater is highly variable. In southeastern Minnesota concentrations are consistently less than 50 µg/L, while in southwestern Minnesota concentrations of 1,000 µg/l have been observed. These higher concentrations roughly correspond to the western flank and interior of the Des Moines Lobe till.

Quaternary (glacial drift) water table and buried artesian aquifers have the greatest median manganese concentrations, 155 and 160 µg/L, respectively. In Quaternary water table aquifers, 56.5 percent of drinking water wells have manganese concentrations greater than 100 µg/L. In Quaternary buried artesian aquifers, 63.0 percent of drinking water wells have manganese concentrations greater than 100 µg/L. Paleozoic bedrock aquifers of southeastern Minnesota had the least manganese, averaging 32 µg/L, with 24.3 percent exceeding 100 µg/L. Sedimentary bedrock wells with the highest manganese
concentrations are located along the western boundary of the sedimentary bedrock formations, within or near, the likely regional recharge zone.

Well Construction
- For a newly-drilled well, the initial manganese concentration may be erroneously high, sometimes by an order of magnitude or more. A stabilized sample should be collected prior to designing treatment.
- The MDH has observed that manganese concentrations in plastic-cased (polyvinyl chloride-PVC) wells are typically twice those in steel-cased wells. Steel casing is thought to promote scavenging of manganese as water passes through the screen. The scavenged manganese may precipitate on well components as scale.
- For wells completed in water table settings, no correlation was determined between manganese concentration and screen placement below static water level.

Nuisance Effects – Manganese will generally produce black or dark brown stains on plumbing fixtures or laundry when concentrations are greater than 300 µg/L. Manganese deposits may be almost greasy, or have the characteristics of ink, when wet and fresh. With time, manganese deposits can harden to a solid, brittle consistency, and plug pipes or plumbing fixtures. Manganese may give water a metallic or bitter taste that may be “sweet” at higher concentrations.

Testing – Public water suppliers may test their water for manganese. If you get your drinking water from a public utility, call them to find out if they have tested for manganese. If you have a private well and wish to have the water tested, you will need to contact a water testing laboratory. Most local governments and many small testing laboratories do not test for manganese. You may have to contact a larger, private laboratory for manganese testing. A list of certified laboratories that can test for manganese is available at: www.health.state.mn.us/labsearch. It should be noted that private well owners, public water suppliers, and makers of bottled water are not required to test for manganese.

Water Treatment
Point-of-entry (whole house treatment):
- A water softener (sodium chloride regenerated cation exchange) will remove small amounts of reduced manganese (clear water manganese) under some conditions. A water softener is not effective removing oxidized manganese (dark colored water) or high manganese concentrations. Manganese can plug the ion exchange media and can be difficult to remove. Cation exchange with potassium chloride regeneration may more effectively remove manganese.
- Catalytic media, sometimes referred to as an oxidizing filter, using a zeolite (greensand), BIRM, or other media is the most common method used to remove moderate amounts of manganese (and iron). The filter contains a media coated with manganese dioxide with is periodically regenerated with potassium permanganate. The precipitated manganese (and iron) is flushed out of the filter by backwashing.
- Oxidation and filtration using a strong oxidizer such as chlorine followed by filtration to remove the precipitated manganese is typically used to remove higher concentrations of manganese. Chlorine or another oxidizer such as ozone or potassium permanganate is added. Considerable contact or “detention” time is needed, so a larger treatment or storage tank is needed. A sand filter is commonly used to remove precipitated manganese, which must be periodically backwashed.
Point-of-use treatment (single faucet):

- Carbon pitcher or faucet filters, found at grocery and home stores, that also contain an ion exchange resin can remove approximately 50 percent of manganese from drinking water. A carbon filter should not be used if the manganese level is greater than 2 mg/L.
- Distillation will remove manganese, but has high energy costs and is only practical for point-of-use applications providing small quantities of drinking water.
- Reverse osmosis will remove manganese along with many other elements and compounds. However, the membrane can quickly plug, and like distillation, is only practical for point-of-use drinking water applications, not whole-house treatment.

Advisory Council on Wells and Borings
Upcoming Vacancies

The Minnesota Department of Health (MDH) is seeking qualified individuals to fill upcoming vacancies on the Advisory Council on Wells and Borings. The council advises MDH on technical matters related to the construction, maintenance, and sealing of wells and borings, and on the licensure/registration of well and boring contractors. The council meets quarterly (usually on the first Wednesday of March, June, September, and December). As established in Minnesota Statutes, section 103I.105, the council consists of 18 members, including six well contractors, four limited or specialized well/boring contractors (elevator, explorer, monitoring well, bored geothermal heat exchanger), two public members, and six representatives of various state agencies. Terms of appointment are for four years. More information on the council can be found at: www.health.state.mn.us/divs/eh/wells/lwcinfo/advisory.html.

Effective January 1, 2015, the terms of six council members will expire, including three well contractors, one explorer, one bored geothermal heat exchanger contractor, and one public member.

Persons interested in serving on the council must submit an application to the Secretary of State, who handles applications for open appointment to state boards, councils, commissions, and other groups. The MDH Commissioner makes the actual appointments to the council. Members receive a $55 per diem for each meeting attended. Expenses for lodging, meals, and travel are reimbursed. State agency representatives are assigned by their respective Commissioners and do not receive per diem.

Application forms and related information can be obtained by contacting the Secretary of State at:

Secretary of State – Open Appointments  
State Office Building, Room 180  
100 Rev. Dr. Martin Luther King Jr. Boulevard  
St. Paul, Minnesota 55155-1299  
Phone: 651-201-1324 (metro) or 877-600-8683 (outstate)  
Fax: 651-215-0682  
Email: open.appointments@state.mn.us  
Website: www.sos.state.mn.us

Individuals may also contact Mike Convery of MDH at 651-201-4586 or michael.convery@state.mn.us for information on the council or to request an application form.
Are you only using your smart phone for taking and making phone calls and checking out the status of your social network? That smart phone can become a great working tool with a little effort on your part. Whether you have an Android or Apple-based operating system, chances are you have downloaded a game or two. But, did you know that you can actually find a lot of other tools on the phone and out in the cyber world that may help you out on your job sites? Most new phones today have a number of applications (mobile apps) or tools that are already loaded on the device. Other apps, some free, and others for a fee, can be loaded on the phone to help you in your daily work.

Many phones come with flashlights, timers, cameras, and calculators already installed on them. There is a tool app at the Android Play Store called the Super Swiss Army Knife that has a flashlight, compass, bubble level, plumb bob, magnifier, simple measure, cross vertical measure and distance measure. Other apps you might also look for include a unit conversion table, a weather app, and a Winter Survival Kit.

The GPS mapping application can help you navigate to a potential job site just by adding an address and setting it as a destination. The phone will display a map and show you where to go. There is also an application that will find the closest gas station so you can fuel up and get a cup of coffee before you head to the job site.

Once you arrive at the job site, you can use the camera on your phone to take pictures before, during, and after work on the site. The photos can then be used to establish dates that you were on site, work that was done, and can be placed in a job file for future use or billing discussions. Photos of drilling equipment, wells, and other job sites are also handy for showing to prospective clients so that they can get an idea of what is involved in having drilling done on their property.

Another helpful tool is the voice recorder. You can record voice messages that you can use to remind you to pickup supplies that you ordered or of discussions you had with a client.

You can also save documents on your smart phone. “The Rules Handbook, A Guide to the Rules Relating to Wells and Borings, Minnesota Rules, Chapter 4725” can be downloaded right to your phone from the Minnesota Department of Health Well Management Section website at: www.health.state.mn.us/divs/eh/wells/ruleshandbook. It’s a pdf file. You can have the rules, statutes, approved materials lists, grouting tables, and variance information right at your fingertips at all times!

These are just a few of the tools and applications that can be placed on a smart phone to help you in your daily work. You may also want to look for apps from manufacturers, organizations, and magazines that might suit your needs. Be aware of your smart phone provider’s billing rate for your data plan.
Business Continuity
Planning for the Future of Your Contractor License or Registration

Have you ever wondered what would happen if the certified representative for a licensed or registered well contracting company retired, quit, had their certification revoked, or if they died? What would happen to the company? Would they be able to continue to do well contracting work? A few well contracting companies have to wrestle with this situation every year. Does your company have a plan to deal with this situation? The reality is that many companies only have one certified individual to represent the company and do not have a backup plan to continue operation should that individual leave the company.

A licensee or registrant must notify the Minnesota Department of Health (MDH) within five days of losing a certified representative. If the company does not have another certified representative, they may continue to operate for up to 150 days by naming an acting representative to oversee operation of the company. The acting representative must notify MDH at least 24 hours prior to beginning any well or boring construction or sealing work. The company must either hire another certified representative, or another employee must apply for, and become certified by the end of the 150 day period. Failure to acquire another certified representative within 150 days will result in the company losing its well contracting license or registration.

Licensed and registered contractors should have a plan for the future to assure that they have qualified individuals who either are, or can easily become, certified to represent their companies in the case where a current representative is lost.

Individuals interested in becoming certified must meet minimum qualification requirements, complete and submit a qualification application to MDH, pass an exam, then apply to MDH for certification. Qualification requirements for certified representatives for well contractors, individual well contractors, limited well contractors, and monitoring well contractors are listed in Minnesota Rules, part 4725.0650. Minimum qualification requirements are different for each type of license or registration. The applicant must have, and be able to document, the required years of personal experience performing the type of well contracting work that they desire to become certified for. This involves obtaining and providing documentation of specific well or boring contracting work. Many individuals have trouble documenting experience because they either do not keep track of the wells they have constructed, repaired, or sealed, or their company does not place their names on the records as the person who actually performed the work. Well contractors and applicants for certification can simplify the certification process by keeping accurate records of well contracting work and by making sure the name of the person performing the work appears on the records.

There are two other timelines to keep in mind. Once an applicant is qualified to take the exam, he/she must take and pass the exam(s) within one year. Also, once an applicant passes the exam(s), he/she has one year to actually become certified.

Well contracting companies may have more than one certified representative in their employ. Having a second representative already on board will make any transition, after the loss of a certified representative, smoother. It is also important to note that a certified representative may only represent one company (licensee) at a time.

For additional information on licensing applications and registration visit the MDH Well Management Section website at: www.health.state.mn.us/divs/eh/wells/licenses.
Licenses and Registrations will Expire Soon . . .
Contractors are Reminded to Send in Well Records and Lab Reports to Minnesota Department of Health

Well contractor, limited well and boring contractor, and elevator boring contractor licenses expire on January 31, 2015. Explorer and monitoring well contractor registrations expire on December 31, 2014. The Minnesota Department of Health (MDH) cannot process license or registration renewal applications until all outstanding records and lab results are submitted, reviewed, and are accepted. Contractors who wait until the last minute to submit well records and water sample results will likely have their licenses and registrations expire and will not be allowed to perform regulated work until all records are accounted for and complete license and registration applications, bonds, and fees have been received and approved.

Well and boring construction and well and boring sealing records and water sampling reports are very important documents for well owners, well contractors, MDH and other groundwater professionals. It is extremely important for well contractors to complete these records in a timely fashion and submit them to the well owner and MDH. In many cases, these documents are needed for loan applications, property transfers, closings, and for well contractor license and registration renewal. Well owners get extremely upset when they receive a lab report several months after the analysis was completed, and it shows the presence of coliform bacteria or the occurrence of arsenic or nitrate at levels exceeding drinking water guidance. Minnesota rules require that the well contractor submit well and boring construction and sealing records to the well owner and the MDH within 30 days of completing the work. Well contractors must collect samples within 30 days of completion of a new well, and the water sample results must be submitted to the well owner and MDH within 30 days of completion of the water analysis (see Minnesota Rules, part 4725.5650.)

The Well Management Section will be mailing license/registration renewal packets the first week in November 2014 for explorer companies, monitoring well contractors, and certified representatives for monitoring well contractors. All other renewal packets for licensed well contractors, limited licensed well/boring contractors, elevator boring contractors, and certified representatives will be mailed out during the first week in December 2014. A list of outstanding well and boring construction records, well and boring sealing records, and water sample reports, if applicable, will be included in the renewal packets. Contractors are asked to submit these records as soon as possible so that they can be processed.

MINNESOTA WELL MANAGEMENT NEWS
Published twice per year by the Well Management Section, Minnesota Department of Health
www.health.state.mn.us/divs/eh/wells
Editor: Patrick Sarafolean, 651-201-3962
Contributors: Well Management Section Staff unless otherwise noted.

To request this document in another format, call 651-201-4600

Reprinting of articles in this newsletter is encouraged. Please give credit to the Minnesota Department of Health or noted source.
Obituaries

Basil Allistar Bowman, age 90, of Cohasset, Minnesota, died Thursday, August 28, 2014, at Grand Itasca Hospital.

Basil Bowman was born in 1924 to Norris and Luthera Bowman in Walker, Minnesota, where he grew up and attended school. His grandparents founded the town of Walker, Minnesota. Basil served in the U.S. Navy during WWII. On May 10, 1946, he was married to Ruth G. Gard in Walker, Minnesota, where they made their home. Basil worked as an iron worker in the iron mines and lived in Virginia, Minnesota, and International Falls, Minnesota, for several years, and finally settled in Cohasset in 1957. In 1961, he owned and operated a wholesale produce trucking company, Bowman’s Produce. In 1975, he started The B & R Bowman’s Well Drilling Company which is still operated by Basil’s grandsons. He was a lifetime member of The American Legion, Veterans of Foreign Wars, The Disabled American Veterans, and The Loyal Order of Moose. Basil enjoyed fishing, sailing, and building his own boat in Florida.

Preceding him in death were his parents; sons, Charles and Michael Bowman; daughter, Judy Beckers; two brothers and a sister.

Basil is survived by his wife of 68 years, Ruth; daughters, Debbie Richardson, Bonnie Bowman; seven grandchildren; seven great-grandchildren; one great-great-grandson.

Interment was in the veteran’s section of Itasca-Calvary Cemetery in Grand Rapids, Minnesota.


Chuck was born in New Prague on August 4, 1951, the son of George J. and Mabel (Choudek) Kaderlik. He graduated from Montgomery High School in 1969. After graduation he enlisted in the Air Force Reserves serving his country until 1975. He married Carol Beer on May 11, 1974, at St. Henry Catholic Church in rural Le Sueur. They lived and raised their six children on the home place where Chuck grew up. Chuck worked with his dad in the family business, Kaderlik Well Drilling and Service until 1992.

He was a charter member of the Rice Krispies 4-H Club and a boy scout in his youth. He was an active member of the Montgomery Knights of Columbus and Lonsdale American Legion, Lonsdale Jaycees, Lonsdale Lions and was on the Holy Redeemer school board. He was very involved with the Minnesota Water Well Association holding numerous offices including President in 1985.

Chuck was very much a people person and could start up a conversation with anyone and everyone. During the Christmas season he enjoyed playing Santa’s helper bringing much joy to young and old alike.

He is survived by his wife, Carol; children, Corey (Brenda) Kaderlik of Montgomery, Heather (Mark) Jensen of New Prague, Jennifer (Aaron) Stender of Rosemount, Christine (John) Todaro of Attleboro, Massachusetts, Nathan (Krystle) Kaderlik of Prior Lake, and Holly Kaderlik of Fargo, North Dakota; nine grandchildren; sisters, Cindy (Tom) Gilhousen and Sue Richardson; nieces and nephews.

He is preceded in death by his parents and grandparents.

Military Honors were provided by the Lonsdale area Honor Guard.
Continuing Education Calendar

The Internet link to the Minnesota Department of Health (MDH), Well Management Section’s, Continuing Education Calendar is: www.health.state.mn.us/divs/eh/wells/lwcinfo/training.html.

This calendar lists the upcoming continuing education courses that have been approved for renewal of certification for representatives of Minnesota licensed and registered well and boring contractors. The calendar also lists the number of credits available for each course. The calendar is updated monthly and, if you subscribe, you will be notified by email when this page changes (new classes added, changes to existing classes).

For additional information about any of these training opportunities, call the contact person listed for the program of interest. For general information about continuing education, more current CEU listings, or to request approval for other continuing education activities not listed, contact Mike Convery, Minnesota Department of Health, Well Management Section Operations Unit Supervisor, at 651-201-4586, or michael.convery@state.mn.us.
New Contractor Certifications

**Well Contractor**
John J. Fahey  
Hydro Operating, LLC  
Norwood Young America, Minnesota

Dennis R. Petersen  
Petersen Well Drilling, Inc.  
Mountain Iron, Minnesota

Joseph J. Witucki  
Justin’s Well Services, LLC  
Brainerd, Minnesota

**Monitoring Well Contractor**
Scott A. Wisher  
Vironex, Inc.  
Golden, Colorado

**Pump Installer**
Anthony S. Croat  
Tony Croat d.b.a. Nesvold Pump and Well Service  
Madison, Minnesota

**Well Sealing Contractor**
Anthony S. Croat  
Tony Croat d.b.a. Nesvold Pump and Well Service  
Madison, Minnesota

**Explorer**
Daniel O. Cervin  
Hibbing Taconite Co.  
Hibbing, Minnesota