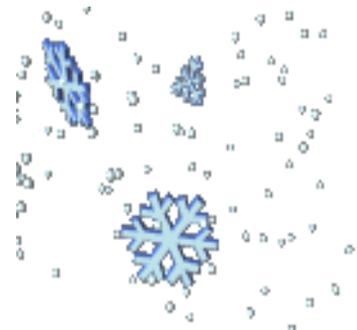


# Well Said

WINTER 2016 • Newsletter of Arizona Water Well Association for our Members and Friends



Saturday January 21, 2017  
Membership Meeting



NEW LOCATION!

**COCO's Restaurant**  
2026 N. 7th St.  
Phoenix, AZ

8:30am—Meet & Greet/Networking  
9:00am—Guest Speaker  
Speaker: Baroid IDP

Business meeting will follow the speaker presentation.

---

## REGISTRATION

Name: \_\_\_\_\_

Company Name \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Number of people attending : \_\_\_\_\_

\_\_\_\_ Fax registration to 480-609-3939 or mail to:  
950 E. Baseline Rd. #104-1025, Tempe, AZ 85283

**ARIZONA WATER WELL ASSOCIATION**



PROTECTING ARIZONA'S WATER SUPPLIES for ITS NEXT CENTURY

**Officers**

- Nate Little, President  
Arizona Beeman Drilling  
480-983-2542
- David Williams, President Elect  
David E. Williams Water Well Services  
520-235-8549
- Gabe Tregaskes, Secretary/Treasurer  
Southwest Waterworks Contractors  
480-369-0456
- Larry Coffelt, Immed. Past President  
Quest Enterprises, Inc.  
928-333-4478

**District Directors**

- Dan Shuck, 928-726-5153  
District 1( Yuma, Mohave)
- Bill Myers, 928-774-8243  
District 2 (Coconino, Yavapai. Gila)
- Larry Coffelt, 928-333-4478  
District 3 ( Navajo, Apache)
- Vacant 520-792-0792  
District 4 (Graham, Greenlee, Cochise)
- Dave Williams, 520-235-8549  
District 5 (Pinal, Pima, Santa Cruz)
- Ralph Anderson, 480-983-2542  
District 6 (Maricopa)

**M&S**

- Dennis McKay ..... 602-510-8412
- Tom Poley..... 520-834-0400

**Technical Director**

Marvin Glotfelty, P.G.480-659-7131

**Legislative Chair**

Bob Way ..... 928-684-3301

**Membership Chair**

Tim Collins ..... 602-275-5415

**Newsletter Chair**

Jan Oster.....(Cell) 636-541-0201  
Email.....janoster@ sprintmail.com

**Safety Director**

John Fowler, CSP ....480-558-3500

**Executive Administrator**

Debbie Hanson Tripp...480-609-3999  
950 E. Baseline Rd. #104-1025  
Tempe, AZ 85283  
Fax: 480-609-3939  
Email: admin@azwwa.org

**President's Message**

Hello AzWWA Members;

Here we are again starting off a new year. I hope it's not just me but that last one just flew by. I hope everyone had a happy and joyous holiday. I know my calorie counter was in hiding. I would like to take this time, with all the chaos that's been going on in the country and beyond, to wish each and everyone a health, happy, safe, and prosperous New Year. Before you know it Christmas will be right around the corner.

Nate Little  
AzWWA President

**DIRECTORY OF ADVERTISERS**

101 Pipe & Casing.....	12
2M Company .....	20
Atlas Copco .....	30
Baroid IDP .....	16
Bill Johnson Equipment Co.....	16
BJ Drilling .....	30
Clear Creek Associates .....	30
EMC Insurance .....	35
Flomatic.....	15
Gicon Pumps & Equipment .....	31
HCT, LLC .....	04
In2Wells, LLC .....	04
Jentech Drilling Supply, Inc. ....	26
Karam Pump & Supply .....	32
Kelly Pipe .....	26
Mitchell Lewis & Staver.....	27
Mud Puppy Internation– Tibban Rfg., Inc. ....	28
National Pump Co. ....	22
Numa .....	11
Preferred Pump .....	29
Roscoe Moss.....	21
Southwest Exploration Services.....	28
Southwest Waterworks Contractors Inc .....	30
Well Scan.....	30

# 'The county is not in the water business, but...' Supes Give Their Take on Wells, Growth, Regulations

Reprinted from the Daily Courier, Article by Sue Tone



Yavapai County Supervisors Craig Brown, left, and Tom Thurman talk about the county's role in water issues at the Nov. 12 meeting of the Citizens Water Advisory Group

A group of more than 50 participants eager to hear about the county's water responsibilities met Nov. 12 for a Citizens Water Advocacy Group (CWAG) meeting with two guest speakers, Yavapai County Supervisors Craig Brown, Dist. 4, and Tom Thurman, Dist. 2.

Participants heard what local government can and can't do about water within the limitations of state statutes. The county has no jurisdiction over fire, water, waste treatment, or school districts, Thurman began.

"We can't not OK a subdivision if there's no water," Thurman said, as the result of Gov. Doug Ducey's recent veto of a bill that would have required municipalities to reject plans to subdivide property if there is a lack of water. (Ducey's veto letter said the bills would have encouraged a patchwork of water ordinances throughout cities and towns and "leave our water supply securities in peril.")

Brown's district has the greatest growth rate in Yavapai County. He said the plans for large developments that stalled during the economic downturn are beginning to come back as smaller "pockets" of growth. "Look at Talking Rock and Inscription

Canyon. That was supposed to have 3,500 homes; there are only 500," he said.

Thurman cited four challenges as issues facing the county: unregulated developments that have exempt wells, a lack of enforcement from the AMA (Active Management Areas), the Proposition 207 property value decision on compensation, and water assurance requirements.

Gary Beverly, chair of CWAG's Public Policy Committee, does not believe the AMA is successful. "Safe yield," he said, is a goal, not a requirement.

Brown is concerned that any hydrologist can sign a piece of paper saying there is adequate supply of water, but is that really proof there is? "By the time you figure it out, he's gone to another job in another state," he said.

The lack of regulations on property owner's private wells is another concern, but one not likely to change. Many owners may not be aware of how much water they are using, but still do not want their wells metered or overseen by governmental entities. When asked if there was a way they could make metering the wells mandatory, Brown said he'd get recalled; Thurman said he'd get shot.

An additional problem, Thurman said, is that septic systems sometimes need more water to operate than what a flush of the toilet can provide. "Some smaller sewer plants of 50 (customers) or less need to take groundwater to make the sewer work. Some have to haul in water and that can be very, very expensive," he said, adding that some water systems are paying companies to drain and transport their septic wastes to Phoenix.

The requirement ADWR to prove a 100-year adequate water supply before developers build, isn't effective Brown said. "They still build." The water table in Chino Valley has dropped 7 feet in the past four years. Yet, with new houses going into the Granite Oaks subdivision, for example, water production has to increase. "The answer is to increase the price of water for those who use a lot more water and don't care about paying more," he said.

Another issue is developers selling lots that have no water supply. Brown reported that new owners of lot splits to the north have had to haul in water, not knowing at the time of purchase that there was no water on the property.

Lot splits and exempt wells are serious problems, Brown said. The county's RCU-2A (residential, rural) zoning requires lot sizes of two acres or more, so a developer purchasing 640 acres could sell to 320 homeowners who then put in 320 wells and 320 septic tanks.

The county building code already includes water conservation requirements for new developments. At the same time, some current homeowners associations continue to require that a certain percentage of yards must be green grass.

(Continued on page 4)

(Continued from page 3)

There are property owners who have reduced vegetation on their property to decrease wildfire risk. This can reduce summer water use for landscaping by half, Thurman said.

Brown said he would like to see more flexibility in the state regulatory requirements for individual water basins, and not have **them all lumped together**. “Rural areas are dependent on groundwater,” he said, but metropolitan areas are served by Central Arizona Project (CAP). Phoenix area residents use an average of 282 gallons a day, while Prescott residents average 115, and Payson residents get by with 87 gallons per day.

Heavy rainfall, or even when the basin receives ‘normal precipitation,’ the annual snow pack is minimal or missing altogether; it is inadequate to supply enough moisture to recharge the aquifer, Thurman said.

“We don’t benefit from heavy rainfall,” Brown agreed.

---

## EPA and DOT Issues Air Emission Standards for Heavy Trucks

In an effort to reduce greenhouse gas releases, the EPA and DOT issues a final rule on August 16 related to air emission standards of medium and heavy trucks.

The final rule provided for exemptions without request for trucks if they are primarily designed to perform off-road (oil fields, mining, forest, construction sites, etc.) and have fixed components designed to work inherently in an off-road environment (such as off-road drill equipment) or to operate at low speeds.

The vehicle must also meet one of the following criteria:

Gross axle weight rating at or above 29,000 pounds

Speed attainable in 2 miles of not more than 33 mph

Speed attainable in 2 miles of not more than 45 mph, an unloaded vehicle weight that is not less than 95% of gross vehicle weight, and only able to carry the driver and operating crew

Maximum speed at or below 54 mph

Other truck standards will apply. This rule exemption will allow drill rig trucks to continue in production and operation without meeting the higher air emission standards.

**In2Wells**

QUALITY  
EXPERIENCE  
KNOWLEDGE

**CERTIFIED**  
Water Well Inspector & Consultant

Gary L. Hix, R.G., CWD/PI  
Water Well Inspector & Consultant

(520) 631-7113  
gary.hix@cox.net, www.in2wells.com

**HCT**  
SOLUTIONS TO WATER

“In over 30 years (whether it is have ever been a program that can deliver predictable results, lower cost and time again, it’s just a new meaning to the word rehabilitation and restoration both our businesses”

**NSF**  
Certified to  
NSF 61

Experienced For Different

**Well-Klean®**  
Over 300 wells served for re-lubricating, scale, corrosion, and bioactive

**INDUSTRY LEADER IN WATER WELL CLEANING**  
Partnering with well and pump companies providing beginning to end professional assessment, processes, and chemistry.

Municipal / Industrial / Agricultural

For more information, give us a call (888) 788-5267 • (520) 631-7113 or visit us online at [www.hctusa.com](http://www.hctusa.com)

# In Memoriam



**Cory M. Voss**, 59, of Chandler, AZ passed away unexpectedly on Sunday, Oct. 16, 2016. He was born October 31, 1956, to Remmer and Mary Voss.

He is survived by his wife of 35 years, JoAnn Voss of Chandler; step children, Julie Burkhead Spaid of Ames and Jeff Burkhead of Chandler; sister, Ila Byrne of Scottsdale and brothers, Curt of Council Bluffs and Craig (Inez) of Council Bluffs. He was preceded in death by his parents.

A memorial service was held Nov. 10, 2016 at Bueler Mortuary and Chapel in Chandler, AZ.

Cory was an avid golfer. He was also a very long-term, dedicated supporter of the Arizona Water Well Association and will be missed by many.



AZWWA Picnic – Thumb Buttes - 1996



AZWWA Trade Show in AJ 1999



AZWWA Meeting 1998



Playing Horseshoes at AZWWA Picnic

# Preferred Pump's Phoenix Open House

November 5, 2016





# Injury Reporting Requirements

By AZWWA Safety Director, John Fowler, CSP



The Occupational Safety & Health Administration (OSHA), Mine Safety & Health Administration (MSHA), and many state agencies require employers to keep track of workplace injuries/illnesses and require the “immediate” reporting of certain events. Reporting can be somewhat complicated and confusing especially while dealing with an emergency and trying to remember who needs to be called and when. For example, MSHA requires notification within 15 minutes of a fatality, but just imagine how quick those 15 minutes will come and go when dealing with that kind of tragedy.

These federal and state agencies also require the periodic recording of workplace injuries/illnesses. Unfortunately, the reporting requirements are not flexible and can come with stiff fines for late reporting. The false reporting of hours worked and not reporting injuries/illnesses can even result in jail time. For example, in May of 2013, a Safety Manager for a large construction contractor was sentenced to 78 months in prison for falsifying injury/illness records to OSHA in order to receive safety bonuses. While this case involved dozens of unreported injuries and millions of dollars in safety bonuses, the falsifying of OSHA reporting is taken seriously. It can be overwhelming when faced with all the reporting requirements, but this article will help give you a general idea of where to start and of the resources that are available.

A great place to start is understanding what the reporting requirements are for MSHA. There are two forms that you need to be familiar with when working on MSHA property: the 7000-1 form and the 7000-2 form. Both of these forms can be found on the MSHA website: <https://www.msha.gov/forms-online-filing>. The 7000-1 form is the “Mine Injury, Accident and Illness” reporting form and needs to be completed to document any injuries that require medical treatment that happen on a mine site. The form can be filled out electronically and asks basic questions about the incident. The 7000-1 instructions are very detailed and include good information on what MSHA considers a medical treatment injury versus a first aid injury.

MSHA’s 7000-2 form is the “Quarterly Mine Employment and Coal Production Report”. This form needs to be submitted within 15 days of the end of each quarter. The form asks for the average number of persons working, the total employee hours worked, and if you had any injuries or illnesses that quarter. Make sure you record the hours under the correct type of mine: Underground, Surface Coal or Metal/Non-Metal. In order to report your hours and injuries you will need a Contractor ID number, this is how MSHA identifies and tracks your company. In order to apply for a Contractor ID (Form 7000-52) just go to the MSHA website: <https://www.msha.gov/support-resources/forms-online-filing/2015/04/15/contractor-id-request> and follow the step by step instructions.

MSHA also has 12 situations which require their immediate notification. “Immediate” means that MSHA must be notified within 15 minutes of when the operator or contractor knows or when they “should know” that an accident has occurred. All twelve situations can be found on the MSHA website, but the ones that are most relevant to us are:

1. A death of an individual at a mine.
2. An injury to an individual at a mine which has a reasonable potential to cause death.
3. An entrapment of an individual for more than thirty minutes or which has a reasonable potential to cause death.
4. In surface mines and surface areas of underground mines, an unplanned fire not extinguished within 30 minutes of discovery.
5. An event at a mine which causes death or bodily injury to an individual not at the mine at the time the event occurs.

If any of these events happen, notify the mine you are working in and, if requested, notify MSHA. The 24 hour MSHA reporting number is: 1-800-746-1553.

Some states, like Arizona, have state offices with their own reporting requirements. In Arizona, the office that oversees mining is called the State Mine Inspector. Arizona has two forms similar to the MSHA 7000-1 and 7000-2 form. The “Quarterly Labor Report” is similar to MSHA’s 7000-2 and asks for hours worked and number of injuries and the “Lost Time Accident Report” is similar to MSHA’s 7000-1 and needs to be filled out if there is a lost time accident. These forms are all available on the Arizona State Mine Inspector website: <https://asmi.az.gov>.

(Continued on page 9)

The Arizona State Mine Inspector's office also has immediately reportable events that are similar to MSHA's. The events are:

1. Any accident or injury to an individual resulting in death, or which has reasonable potential to cause death.
2. An entrapment of an individual for more than 30 minutes.
3. An unplanned inundation of a mine by a liquid or gas.
4. An unplanned ignition of a blasting agent or explosive.

The emergency reporting number for Arizona is: 520-975-7644 (if calling at off hours, a recording will tell you what number to call for the on-call inspector). Remember, you must also notify federal MSHA. In addition, the State Mine Inspector's office needs to be notified within ten days of any accident or injury that may result in "the injured person being incapacitated for regular work for at least one day beyond the day of injury." If you have any questions you can call the State Mine Inspector's office at: 602-542-5971.

OSHA's reporting requirements are, in general, similar to MSHA's, but the forms are different and just this year the reporting requirements changed. However, if you are an employer with less than 10 employees you do not have to do any recordkeeping. For those companies with over 10 employees, OSHA has three forms used for recording injuries and illnesses: the 300, 300A and 301. These forms can all be found on the OSHA website: <https://search.osha.gov/search?affiliate=usdoloshapublicwebsite&query=reporting+requirements>.

The OSHA 300 form is the "Log of Work-Related Injuries and Illnesses". This form is the ongoing record of the work related injuries and illnesses that occur over each calendar year. The Log is a record of the basic information concerning the name of the employee, date and time of the event, and the nature of the injury or illness. The Log form also asks for a classification of each injury: Death, Days Away From Work, Job Transfer or Restriction, Other Recordable Cases. The OSHA website listed above has very good information on how to classify each injury/illness as well as the difference between a first aid and medical treatment. The Log must be kept on file for 5 years.

The OSHA 300A form is the "Summary of Work-Related Injuries and Illnesses". This form is, like the name states, a summary of the injuries and illnesses that occurred over the previous year. There is no requirement for names, just summaries of how many deaths, how many days away from work, transfers or restricted duties, and total recordable cases from the year. The 300A is required to be posted from February 1<sup>st</sup> to April 30<sup>th</sup> of the following year so that all employees have access to it. At the bottom of the form the Company Executive must sign and date to certify that the information is "true, accurate, and complete". The 300A must also be kept on file for 5 years.

The OSHA 301 form is called the "Injury and Illness Report" and is much like the MSHA 7000-1 form and simply records the detailed information about each injury or illness. This form details the "who, what, when, where, and how" of each injury/illness. Each event on the 300 Log must have a completed 301 or equivalent form associated with it. Both forms (300 Log and corresponding 301 or equivalent form) must be filled out within 7 days of receiving information that an injury/illness has happened and kept on file for 5 years.

Just like MSHA, OSHA has immediately reportable events. Their four events that require immediate notification are:

1. Employee killed on the job
2. Work-related hospitalization
3. Amputation
4. Loss of an eye

But remember that like MSHA, OSHA is a federal agency, so it is important to also know the laws of the state you are working in. Arizona, for example, has the Arizona Department of Occupational Safety & Health (ADOSH) that oversees worker safety and has the same reporting requirements as federal OSHA where a fatality must be reported within 8 hours and any hospitalization, amputation or loss of an eye must be reported within 24 hours. Call the ADOSH Phoenix office at (602) 542-5795 or the Tucson office at (520) 628-5478. If you have any questions the ADOSH website is: <https://www.azica.gov/adosh-safety-and-health-compliance>.

If you are working in a state that is governed by federal OSHA or working on tribal lands, a military base, or any other federal property you must report an immediately reportable event to federal OSHA. You can report either to the local OSHA office or call 1-800-321-6742. OSHA's website has helpful descriptions for each event that can help you to decide whether or not you need to report to OSHA. If you are confused about whom to call, call the federal OSHA number and let them help you contact the correct agencies.

And if there already wasn't enough to keep track of, OSHA has published new rules regarding injury and illness reporting that will take effect next year. The new rules and helpful tips are on OSHA's website: <https://www.osha.gov/recordkeeping/finalrule/index.html>. Remember, currently there are no requirements to submit a 300, 300A or 301 to OSHA. So, what is changing? OSHA is asking that by 2018 all employers with more than 250 employees electronically submit their Forms 300, 300A, and 301 much like MSHA requires the 7000-2 to be completed and submitted. The new rule will be phased in over the next two years. By July 1<sup>st</sup>, 2017 all employers with more than 250 employees will be required to electronically submit their 2016 Form 300A. Starting the next year in 2018 the same employers will be required to submit their 2017 Form 300,300A, and 301 by July 1<sup>st</sup>, 2018. In 2019, the 2018 Form 300, 300A, and 301 will be required to be submitted electronically by March 2<sup>nd</sup>, 2018.

However, if you are an employer with between 20 and 249 employees you may still be required to submit your records. OSHA states that employers with between 20 and 249 employees in "certain high risk industries" must submit their forms like the bigger companies. How do you know whether or not you are considered "high risk"? OSHA classifies an industry using the North American Industry Classification System (NAICS). The NAICS website is: <http://www.census.gov/eos/www/naics/index.html>. I cannot tell you how to classify your business, but Well Drilling and Well Pump, and Piping Installation are both classified with the number 237110, a subcategory of Construction which is number 23. Construction is one of the industries that OSHA classifies as "high risk" so you might want to start preparing to submit your records next year if this pertains to your industry.

This is a lot of information to absorb and the form numbers and terms can be confusing. The most important takeaway is that if there is a work related injury or illness it will need to be reported to the appropriate government agency: Either a federal agency, a state agency, or both. If there is a fatality, it will need to be immediately reported which can be as immediate as within 15 minutes. The various agency reporting requirements can and do change, but the latest information is always available on their respective website. I hope that there is never a need to report an injury or illness let alone a fatality, but if tragedy strikes, hopefully this article can steer you in the right direction when it comes to reporting.

Feel free to contact John with any questions, comments or suggestions:  
John Fowler, CSP - Safety Manager



PH: 480.558.3500 PH; Cell: 480.352.2041; Email: [jfowler@nationalewp.com](mailto:jfowler@nationalewp.com)



## Mobile Drill International (MDI) Acquired USExploration

In May, Mobile Drill International (MDI) acquired USExploration Equipment in a move that is expected to further strengthen Mobile Drill's current market position and expand its capacity in the geotech, geoenvironmental, and geoconstruction drilling service industry. MDI has experienced solid growth over the past few years, expanding its market share both in the United States and abroad.

"This deal provides two essential elements to Mobile Drill Intl increased market share and capacity to the tooling side of our business and the opportunity to bring former Mobile Drill Intl. Sales Executive Bill Knorr back to the company. Both of these factors further our company mission of providing unmatched value to the drilling service industry through our products and services," said Tim Sabo, MDI president. "Mobile Drill shares the key values of a passion for customer focus and service with USExploration, and the overall principles, culture, and personality of the established USEx brand are very much in line with those of MDI," Sabo continued. "It's a natural strategic fit."

Bill Knorr agrees "The combination of what we've built over the past 15-years at USExploration now combined with the resources available from a market leader like Mobile Drill...the marriage made perfect sense for everyone involved. Our mission has always been to provide a level of knowledge and expertise to assure that the right product, was shipped to the right place - the right way, every time...that commitment to excellence will never change!"

Sabo noted that Bill will rejoin Mobile Drill as vice president of sales. Knorr previously worked for 12 years at Mobile Drill as its international sales manager. "Bill holds an excellent reputation in the drilling industry and we anticipate him having an immediate positive impact," said Sabo. USExploration, with a facility in Indianapolis, manufactures and distributes tooling for the geoenvironmental and geoconstruction industries.

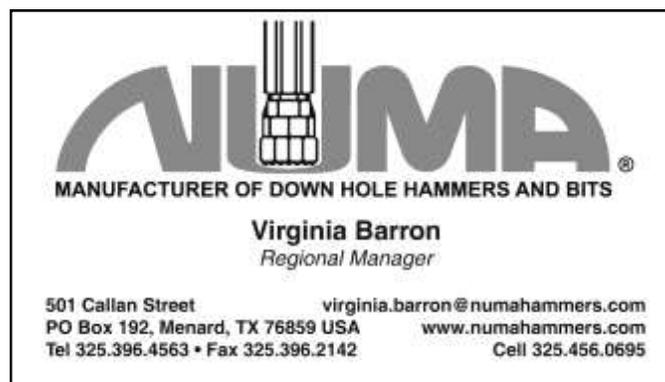


---

Just Announced!  
Clear Creek Associates joins Geo-Logic  
Associates



Clear Creek Associates is pleased to announce that it is joining the firm Geo-Logic Associates (GLA), a multi-disciplinary geology, hydrogeology, and engineering consulting firm based in Ontario, California. Clear Creek's expertise in water resources, hydrogeologic investigations, mining hydrogeology, groundwater modeling, and environmental investigations closely align with the skills and expertise of GLA. GLA has more than 20 offices in 7 states and an office in Lima, Peru. With the addition of Clear Creek, we will have depth of resources with a staff of over 250. Clear Creek will remain intact (wholly owned by GLA) under its current management team. Both firms look forward to collaborative efforts that will meet the needs of our clients in industry, municipalities, mining, and utilities



# WE DO WATER WELL.



## 101 is Second to None.

101 Pipe & Casing has been an industry leader in stocking, manufacturing and fabricating prime carbon and stainless steel pipe products since 1986. Find out what our customers already know – 101 puts it all together and keeps water wells flowing.

- *Stainless and carbon steel casing*
- *Pump column and tube & shaft*
- *In-house machine shop and fabrication*
- *Any and all steel tubular products*



- *Slot perforated casing/well screen*
- *Wide range of sizes, grades and specifications*
- *Custom fabricated discharge heads & elbows*

## NOW SERVING ALL OF ARIZONA



**Dennis Fookes**  
*Regional Vice President*

**101 PIPE & CASING, INC.**

10201 S. 51st Street, Suite 220, Phoenix, AZ 85044  
877-585-1101 · Cell 480-213-4816 · Fax 480-897-6101  
Email: [dfookes@101pipe.com](mailto:dfookes@101pipe.com)  
Website: [www.101pipe.com](http://www.101pipe.com)



**Cory Voss**  
*Sales Manager*

**101 PIPE & CASING, INC.**

10201 S. 51st Street, Suite 220, Phoenix, AZ 85044  
480-897-1101 · Cell 480-519-4698 · Fax 480-897-6101  
Email: [cvoss@101pipe.com](mailto:cvoss@101pipe.com)  
Website: [www.101pipe.com](http://www.101pipe.com)

# Silver v. Pueblo Del Sol, Arizona Court of Appeals Update

Submitted by Jesse Richardson, Jr, Legal Advisor to Water Systems Council

The Arizona Court of Appeals ruled on the Silver case on November 8. Pueblo Del Sol, a private water company, applied to ADWR for an Adequate Water Supply Designation (AWS D) for a proposed development in Cochise County. The AWS D was required for the development. Pueblo plans to pump groundwater to supply the development (which could have as many as 7,000 homes). The AWS D determination must show water of adequate **quality and quantity that will be “continuously, legally and physically available” for at least 100 years to be approved.**

ADWR determined that the application met the legal requirements and approved the application. Environmental groups and the Bureau of Land Management filed objections and appealed to the Administrative Law Judge (ALJ). The ALJ held a five-day evidentiary hearing and issued a written decision finding that Pueblo had satisfied the legal requirements and affirming the decision of ADWR. The environmental groups and BLM filed a complaint with the trial court seeking judicial review, arguing that the groundwater pumping would interfere with **the San Pedro Riparian National Conservation Area’s water rights, thereby not meeting the requirement of “legally available”.**

The BLM holds federal reserved water rights for the Conservation Area. Federal reserved water rights are water rights that are automatically found to be included in the reservation of national parks, Indian reservations and other federal lands. The water rights are the minimum amount necessary to fulfill the purposes of the federal land designation.

The BLM rights in this case have not been quantified, and the General Stream Adjudication for the Gila River System and Source (Gila Adjudication) is pending in a different Arizona Court to determine the water rights of all water rights holders in the watershed. This adjudication has been pending for over 40 years. Despite introducing no evidence that the Pueblo Del Sol groundwater withdrawals would interfere with reserved water rights, and the fact that the water rights have not even been determined, the lower court reversed the decision of ADWR and found that ADWR must consider existing legal rights and determine whether and to what extent these claims may impact the availability of groundwater for the Pueblo Del Sol project. Note that the water rights held by BLM are surface water rights, but the claim was that the groundwater pumping would impact surface water, with no evidence to show any impact.

The Court of Appeals reserved, upholding the ADWR’s interpretation of “legally available”. However, the court found that ADWR must consider the BLM’s unquantified federal reserved water rights in making the determination of whether ‘adequate water’ exists for Pueblo Del Sol’s project. Importantly the court made clear that ADWR does not have to consider the “potential” impact of the groundwater pumping on area streams and on the San Pedro Riparian National Conservation Areas or on the Conservation Area’s water right. In so ruling, the court found that the reserved federal water rights are an “existing use”, so must be considered. Also, the court emphasized that these considerations are within the agency’s discretion, meaning that any reasonable finding by the agency will likely be upheld.

Finally, the court reversed the grant of attorneys’ fees to the environmental groups and BLM. The matter was sent back to ADWR to reconsider the application with consideration of BLM’s federal reserved water rights. The court has subsequently granted an extension of the time for parties to request a rehearing. The parties will likely request a rehearing, and regardless of the outcome of the request, the case is likely to be appealed to the Arizona Supreme Court. Water Systems Council filed a friend-of-court brief in this case, supporting ADWR’s determination.

---

## Made in the USA

If every adult living in America were to spend \$64 more a year on a Made-in-USA product, it would create 200,000 new jobs!

*(ABC World News Report- Diane Sawyer)*



# Fracking Chemicals May Be Getting a Bum Rap

Reprinted from IEN (Industrial Equipment News)



Research shows that most of the fracking fluids do not return to the surface, and are retained in the shale deep underground.

A new study out of Duke University says that man-made fracking fluids only account for 4% to 8% of the wastewater produced by fracked wells. Most of the fluid (more than 92%), is naturally occurring brines, which certainly come with their own concerns.

According to Avner Vengosh, professor of geochemistry and water quality at Duke's Nicholas School of the Environment, the public's fear of fracking primarily centers around the chemical-laden fracking fluids that are injected into wells at the start of production. Many people believe that the chemicals can be harmful if they spill or are disposed of improperly.

Well, the research shows that most of the fracking fluids do not return to the surface, and are retained in the shale deep underground. According to the professor, that means that the chance of having an environmental impact from the man-made chemicals is low unless there is a direct spill before the actual fracking.

The naturally occurring brines that are extracted along with the gas and oil contain varying levels of salts, heavy metals and even naturally occurring radioactive elements. The volume alone makes it difficult to dispose of them.

According to Vengosh, if the brines were treated properly, they could have beneficial reuses, particularly out West. The study found that the brines produced by fracked wells out West are much less saline than those in the East. That means that the brines could possibly be treated and re-used for agricultural irrigation or other useful applications in areas where freshwater is scarce and drought is persistent.

Funding for the study came from the National Science Foundation (grants #EAR-1441497 and #OISE-12-43433) and the Duke University Energy Initiative.

---

**Remember: When you see flashing lights, “Move Over”! Give ‘em space!!! It’s a state law!**



# FLOMATIC® VALVE

*High Quality Valves Built to Last ...*

LOW-LEAD



## New VFD Enviro-Check® Valve

**Available 1" - 4" Unique Patented Design VFD Check Valves**

*(Also available in Ductile Iron and Stainless Steel 1" thru 8")*

### America's First Choice

New patented submersible pump check valve for use on variable flow demand (VFD) systems and applications. Standard check valves will "chatter" and be noisy when the system goes to low flow, causing eventual failure. The unique Model 80E VFD and 100E VFD valves are designed to minimize flow losses and hydraulic shocks in the pumping system.



Composite Poppet      Stainless Steel Poppet

Fromatic's valves are used by more pump manufacturers than any other valve on the market. This new, exclusive poppet system ensures that the valve smoothly and automatically adjusts to flow changes and is noiseless at even very low flows. Call for complete information at 800-833-2040 or visit us on the web at [www.flomatic.com](http://www.flomatic.com)



**FLOMATIC VALVES**  
*High Quality Valves Built To Last...*



© 2016

**Fromatic Corporation**

15 Pruyn's Island Drive  
Glens Falls, NY 12801

Phone: (800) 833-2040 • (518) 761-9797

Fax: (518) 761-9798 • [www.flomatic.com](http://www.flomatic.com)

Email: [flomatic@flomatic.com](mailto:flomatic@flomatic.com)



*The Sign of Service.  
The Symbol of Quality.*

- Grouts•
- Drilling Fluids•
- Well Cleaning Chemicals•

Local Contact:

**William (Chip) Jackson** (480) 273.5772  
**Brian Mikelson** (775) 455.5508  
**Danny Oaks** (605) 645.9406  
**Martin Quinones** (480) 318.4225

**Baroid Industrial Drilling Products**

Product Service Line, Halliburton

P.O. Box 1675 Houston, TX 77251

(877) 379.7412 or (281) 871.4613

[www.baroidip.com](http://www.baroidip.com)

© 2014 Halliburton. All Rights Reserved.



**Bill Johnson Equipment Company**

**21 S. 40th St., Phoenix, AZ 85034**

**(602)275-5415 (877)275-2532**

**[www.billjohnsonequipment.com](http://www.billjohnsonequipment.com)**

**Your source for Tricone bits  
Stocking 2-15/16" through 12-1/4" bits  
Mill Tooth and Button, New and Rerun**

**Complete line of Drilling Supplies and Equipment  
New & Used Rigs, Parts, & Tools  
Machine & Welding Shop and Rig Repair  
Rental Tools, Job Site Deliveries  
Steel Casing, Tricone Bits, Wire Rope**

**Acker Drill - Atlas Copco - Baroid - Bilfinger Screens - Boart Longyear - Buckeye  
CertainTeed - Crosby - Drill King - FMC - Gearench - Hunke - Jet Lube - Numa  
Powers Electric - Premier Silica - Ridgid - Sandvik - Stratex - Western Rubber**

**If we don't have it, we'll find it!**

# Negotiations Over Arizona Drought Plan Ongoing

Completed in 1993, the Central Arizona Project is the largest aqueduct system in the country, stretching 336 miles.

By Will Stone



Arizona farmers, cities and tribes continue to work on a deal to avert major cutbacks in water deliveries from Lake Mead in the coming years.

*Photo via azwater.gov*

State water managers are quietly making their pitch to those stakeholders who rely on the Colorado River to voluntarily give up some water now to avoid potentially losing even more later.

**There's about a 50 percent chance Southwest states will face a shortage declaration in 2018.** The proposed "drought contingency plan" would result in almost 200,000 acre feet being left in Mead when the water level is between 1090 feet and 1075 feet.

Completed in 1993, the Central Arizona Project is the largest aqueduct system in the country, stretching 336 miles.

Director of ADWR, Tom Buschatzke, said they are hoping to come up with even more than that. "It's imperative that we

**take actions to protect lake levels and we will take the time we need to do it right to build a consensus,"** Buschatzke said.

**Buschatzke can't give details about the negotiations, but hopes to get legislative approval next year.** Among those with a lot at stake are farmers in Pinal County.

**"More needs to be done to reduce the probability of that initial shortage,"** said attorney Paul Orme, who represents four irrigation districts, which are low priority, meaning even an initial shortage would drain their entire share.

Orme said this proposed plan is ultimately an insurance policy to prevent the most severe cutbacks, which would affect cities.

**"We are long out of the picture, by the time Lake Mead gets down to that level. So we don't want to be the sacrificial lamb,"** Orme said.

**That means his clients want all the users, even those with seniority, to chip in now. So far he's encouraged by the talks.**

Ultimately, Arizona will have to reach an agreement with its neighbors Nevada and California, as well.



# MOUNTAIN STATES GROUND WATER EXPO

## Tentative Program Schedule To Date

### Thursday, February 9, 2017

7:30 am – 9:00 am	Continental Breakfast
8:00 am – 9:00 am	<u>Legal Updates and Exempt Wells</u> Jesse Richardson, Jr., Water Systems Council
9:00 am – 1:00 pm	Exhibit Hall Open
11:30 am – 12:30 pm	Buffet Lunch in Exhibit Area
12:30 pm – 3:30 pm	Exhibitor Teardown
12:30 pm – 1:30 pm	<b><u>The 7 P's of a Great Contractor</u></b> David Hanson (tentative)
1:45 pm – 2:45 pm	<u>Installation and Sizing of Well Meters</u> Pamela Fuller, McCrometer Seminar Summary: Learn about reasonable and practical ways measure flow in groundwater applications with emphasis on various style meters and how they pertain to sizing and installation to insure accuracy and long equipment life.
3:00 pm – 4:00 pm	<u>Cutting Edge Technology in Perforating Casing</u> (Tentative) Pat Hanley, Tryad Service Corp: <u>Seminar Summary:</u> Learn about the latest technology in slotting and perforating tubing and casing for any application.
4:00 pm – 5:30 pm	Hospitality Meet & Greet in Exhibit Hall; Beverages Available
5:30 pm – 8:30 pm (?)	Buck Lively Scholarship Auction/ Raffle Food & Beverages Available

### Friday, February 10, 2017

7:30 am	Registration Opens
7:30 am – 8:00 am	Continental Breakfast
8:00 am – 9:00 am	<u>Overcoming Costly Added Charges from Your Suppliers and Subs</u> Fred Rothauge, Hydro Resources
9:15 am – 10:15 am	<u>Life of well costs of Well In-Efficiency</u> Kevin McGillicuddy, Roscoe Moss Co.
10:30 am -11:30 am	<u>Troubleshooting Irrigation Problems with a VFD/Advantages of Employing a VFD in Groundwater Systems</u> Danny Peters, Yaskawa America
11:30 am – 12:30 pm	Lunch on your own
11:00 am – 3:00 pm	Exhibitor setup
12:30 pm – 1:30 pm	<u>Well Rehabilitation Methods</u> Charlie Carner, Well Jet Seminary Summary: Update on the latest in well rehabilitation techniques with high pressure jets.
1:45 pm – 2:45 pm	<u>Well Development Methods and Materials: Critical to the Success of your Well Project</u> Stuart Krause, Wyo-Ben, Inc. Seminary Summary: Spend the time and effort to develop new or old wells to maximize efficiency.
3:00 pm – 4:00 pm	<u>Safety update in Well Drilling Operations and for Every Day</u> John Fowler, Safety Supervisor National EWP Seminary Summary: Safety on the job site and for everywhere.
4:00 pm – 5:30 pm	Hospitality Meet & Greet in Exhibit Hall; Beverages Available
5:30 pm – 8:30 pm (?)	Buck Lively Scholarship Auction/ Raffle Food & Beverages Available

### Saturday, February 11, 2017

8:30 – 10:00 am	Mountain States Ground-water Board Meeting
-----------------	--

See pages 19 and 33 for additional information

# Registration Form

PLEASE PRINT CLEARLY – This form will be used to produce your badge!

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

MEMBERS - Please check all that apply:

- |   |   |
|---|---|
| <input type="checkbox"/> Arizona Water Well Association<br><input type="checkbox"/> New Mexico Ground Water Association<br><input type="checkbox"/> Nevada Ground Water Association | <input type="checkbox"/> Colorado Water Well Contractors Assoc.<br><input type="checkbox"/> Utah Ground Water Association<br><input type="checkbox"/> Other _____ |
|---|---|

*Register and pay online at [www.mountainstatesgroundwater.com](http://www.mountainstatesgroundwater.com)*

Registration Fee includes Thursday and Friday morning continental breakfasts, Friday lunch, Thursday evening **Exhibitor's Reception, admission to all seminars and Exhibit Hall:**

	<i>Before or on</i>	<i>After</i>
	<u>January 31, 2017</u>	<u>January 31, 2017</u>
<b>Contractor</b> .....	<b>\$ 80</b>	\$ 100\$ _____
<b>Spouse/Employee [List Name(s) below]</b> .....	<b>\$ 65</b>	\$ 85 \$ _____
<b>Thursday evening ONLY guest pass</b> .....	<b>\$ 30</b>	\$ 40 \$ _____
<b>Friday Lunch only</b> .....	<b>\$ 15</b>	\$ 15 \$ _____
<b>Student</b> .....	<b>\$ 50</b>	\$ 70 \$ _____
<b>Scholarship Recipient</b> .....	<b>\$ No Charge</b>	\$ ____ - 0 - ____
<b>Technical</b> .....	<b>\$ 80</b>	<b>\$100</b> \$ _____
<b>..Non-Exhibiting Manufacturer/Supplier</b> ...	<b>\$140</b>	\$180 \$ _____

Donation to Buck Lively Scholarship Fund \$ \_\_\_\_\_

*(Cash contributions will be acknowledged before the Auction/Raffle begins)*

TOTAL ENCLOSED: \$ \_\_\_\_\_

I/We will donate \_\_\_\_\_ item(s) to the Buck Lively Scholarship Auction and Raffle

NOTE: All companies and individuals making donations will be acknowledged as their items are auctioned or raffled off unless requested otherwise. All income generated for the Buck Lively Scholarship Fund is evenly distributed among the scholarship programs of the 5 state associations hosting the Expo.

CANCELLATION POLICY: 50% if notified by January 31, 2017; No refunds after that date.

Name of Spouse/Employee/Other(s): Name: \_\_\_\_\_ Name: \_\_\_\_\_ Name: \_\_\_\_\_  
 Name: \_\_\_\_\_

Pay online or complete the credit card information below, then fax, email or mail the completed form OR mail completed form with a check to:

Mountain States Ground Water Expo  
 950 E. Baseline Rd. #104-1025  
 Tempe, AZ 85283

Card#: \_\_\_\_\_  
 Exp. Date: \_\_\_\_\_ CVV#: \_\_\_\_\_  
 Signature/Name on card: \_\_\_\_\_  
 Zip code of card holder: \_\_\_\_\_

For further information call (480) 609-3999, fax 480-609-3939 or  
 email [info@mountainstatesgroundwater.com](mailto:info@mountainstatesgroundwater.com)



**COMPANY  
INC.**

*"Legendary Service"*

# Moving Water is Our Business



 **Franklin Electric**

**2M Company, Inc. Phoenix**

1839 West Culver St. • Phoenix, AZ 85007

Phone: 602-283-2805 • Fax: 602-283-2810

**Toll Free: 888-502-4926**

[www.2mco.com](http://www.2mco.com)

**New at ROSCOEMOSS.COM**

**ONLINE INTERACTIVE CALCULATIONS**

Log on to the Roscoemoss.com



**Roscoe Moss Company**

*"We Make Water Work Worldwide"*

 **HISTORY**

 **MANUFACTURING  
CAPABILITIES**

 **PRODUCTS**

 **PROJECTS**

 **RESEARCH &  
DEVELOPMENT**

 **CALCULATIONS &  
SPECIFICATIONS**

 **FAQ'S**

 **CONTACT US**

 **ESPAÑOL**

● *Since 1926, the Roscoe Moss Company has been the leading manufacturer of water well casings and screens. They are marketed under the most respected brand name: Moss Well Products.*

*New from Roscoe Moss Company*

- **STORM WATER SOLIDS REMOVAL DEVICE**
- **ROSSUM SAND TESTER**



**Roscoe Moss Company**

4360 Worth Street Los Angeles, CA 90063

Phone: 323-263-4111 • Fax: 323-263-4497



**Your Vertical Pump Specialists**

- 4" - 30" Diameter Designs
- Flows to 20,000 GPM, Heads to 2,000 FT
- Testing to 1,500 HP

**Jets and Centrifugals**

- Shallow and Deep Well Jets
- Multi-stage Centrifugals
- Self-priming Sprinklers
- Booster Pumps



[www.nationalpumpcompany.com](http://www.nationalpumpcompany.com)

7706 N. 71st Avenue | Glendale, Arizona 85303

623-979-3560 | 800-966-5240

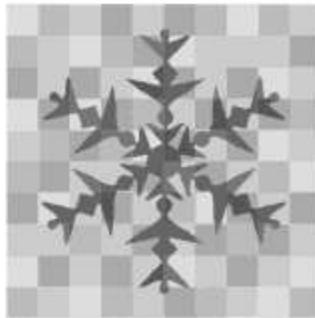
## KARAM PUMP & SUPPLY RELOCATING

Effective January 2, 2017, Karam Pump & Supply Inc. will be moving to:

820 N. Geneva, #101

Tempe, AZ 85282

Their phone numbers and email addresses will remain the same.



---

### **\*\*REMINDER\*\***

#### **The Arizona Department of Water Resources Has Moved**

As of Monday, June 13, 2016, ADWR's new office will be located at:

1110 W. Washington St. Suite 310 , Phoenix, AZ 85007

Mailing Address: PO BOX 36020, Phoenix, AZ 85067

\*ADWR staff phone numbers and email addresses will stay the same

---

#### **ADWR has launched the Arizona Water Newsletter**

Stay up-to-date on the latest happenings in Arizona water.  
Sign up to receive the Arizona Water Newsletter at [engage@azwater.gov](mailto:engage@azwater.gov)

Link to past articles: [http://www.azwater.gov/azdwr/ADWR\\_News/default.htm](http://www.azwater.gov/azdwr/ADWR_News/default.htm)

# Gicon Pump & Equipment Open House October 7, 2016



(Continued on page 25)





SINCE 1898  
**kellypipe**

THE **ULTIMATE SOURCE**



**PUMP PRODUCTS:**

- Pump Column—  
Butt & Taper
- Tube & Shaft Assemblies
- Carbon & Stainless Steel  
Pump Shafting
- Oil Tubes
- Bronze Line shaft  
Bearings
- Turbine Column  
Couplings
- Combination Couplings
- Tube Centering Spiders
- Water Lube Bearing  
Retainers
- Stainless Steel Sleeves
- Flanged Column Pipe
- Fabricated Discharge  
Head

**WELL DRILLING**

**PRODUCTS:**

- Well Casing
- Perforated Pipe
- Drive Shoes
- Well Screens
- Weld Collars

**SERVICES:**

- Custom Pipe  
Fabrication
- Machining thru 52"
- Wrapping and  
Coating
- Threading
- Grooving
- Saw Cutting

**Phoenix Branch & Warehouse:**

**1617 S. 40th Avenue, Phoenix, AZ 85009**

**www.kellypipe.com**

**Phone 602-256-2990**

**Fax 602-253-6781**



**Main Office**

195 Ingenuity Drive  
Sparks, Nevada 89441

**Branches**

Elko, Nevada  
Bakersfield, California

Phone 775.424.3045  
Fax 775.424.3046

Serving The  
Mining, Exploration, and  
Groundwater Industries  
Throughout  
The West

DTH Hammers  
& Bits  
Drill Steel & Subs  
Drilling Fluids  
& Thread  
Compounds  
New & Rerun  
Rotary Bits  
Bit & Pipe  
Handling Tools

"Top to Bottom Drilling Tools & Accessories"  
[www.jentechdrillingsupply.com](http://www.jentechdrillingsupply.com)

# Mitchell

Lewis & Staver

MITCHELL LEWIS & STAVER RESIDENTIAL WATER SYSTEMS

• STOCK ON HAND  
• WE DELIVER

## MLS supplies everything for the residential water systems contractor.

Since 1882, Mitchell Lewis & Staver has served the West, providing superior products and service. Today, we provide top quality pumps, turbines, drives, panels, water systems & conditioning along with packaged systems to the Agriculture, Municipal, Industrial and Residential markets. Mitchell Lewis & Staver is a proud member of the AzWWA.



Franklin Electric



STA-RITE  
Pentair Water



LORENTZ



PENTAIR



Danfoss

FAIRBANKS NIJHUIS

To view our entire lineup of top quality brands and pumping solutions, or to sign up for one of our many online training events, visit us online at [www.mitchellewis.com](http://www.mitchellewis.com)

**Mitchell Lewis & Staver**  
5525 W. Latham Street #11  
Phoenix, AZ 85043

**800-962-9500**  
602-233-0441  
602-233-0036 fax



# Tibban MFG Inc. – MudPuppy® International

www.MudPuppyInfo.com | Phone: 442-242-7507 | Victorville, California | sales@tibban.com

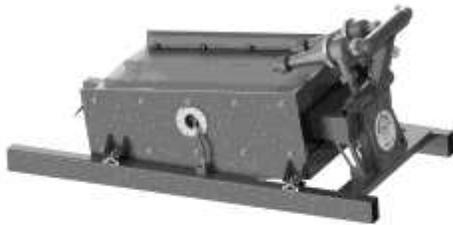
**TETRA  
GRENE**  
POWERED BY TIBBAN.COM



Finest 5" Desander Cones



CHROME Centrifugal Pumps and Sand Guzzler®



Mud Cleaners and Shaker Screens



Mud Systems



## Southwest Exploration Services, LLC

borehole geophysics & video services

### Geophysical Well Logging/Inspections

- Experienced engineers focused on data quality and customer service
- Seven modern logging trucks outfitted with the latest generation logging tools and equipment
- 2 in. to 8 ft. diameter wells up to 10,000 ft. in depth
- Open & cased hole capabilities
- Portable units, UTV, and 4X4 trucks to access remote well locations

### Basic Well Logging to Advanced Methods

- 3/4-Arm Caliper, Electric Log, Full Waveform Sonic, Temperature, Fluid Resistivity, Natural/Spectral Gamma
- Magnetic and Gyroscopic Deviation
- Focused Resistivity, Induced Polarization, Magnetic Susceptibility, Density, Neutron, Induction, Spinner Flowmeter

### Exploration for Water, Minerals, & Geothermal Energy

#### Environmental & Engineering

- Pier evaluation, elastic moduli, rock properties
- Flow log acquisition, analysis, modeling, and fluid sampling
- Ambient & pumping flow with single or multi-well testing/analysis

#### Well Evaluations with Video and Imaging

- Water production wells, gas storage, and monitor wells
- High resolution, real-time video inspection
- Casing thickness evaluation (4" to 20")
- Acoustic casing inspections
- Leader in the industry in imaging acquisition with 2<sup>nd</sup> generation Acoustic/Optical Televiewer, analysis & fracture characterization

25811 S. Arizona Ave. Chandler, AZ 85248

Phone: 480-926-4558 Fax: 480-926-4579

www.swexp.com

# THE #1 DISTRIBUTOR FOR WATER WELL EQUIPMENT & ACCESSORIES

*Submersible Pumps • Motors & Controls • Valves & Fittings  
Residential & Industrial Water Systems • Steel & PVC Pipes*

Preferred Pump & Equipment, L.P. is the leading wholesale distributor of domestic water system products in the United States. Our goal is to build long-lasting relationships with loyal customers who rely upon us to meet their business needs. We build these relationships with superior customer service, coast-to-coast warehouse locations, and the best dealer rewards program in the industry.



**PREFERRED PUMP**



**BOSHART  
INDUSTRIES INC.**



**YASKAWA**



**FLOWISE**

5020 W. Watkins St. • Phoenix, AZ 85043

Toll Free: (800) 526-7608

4320 E. Illinois St. • Tucson, AZ 85714

Toll Free: (800) 526-7609

[www.preferredpump.com](http://www.preferredpump.com)

**B-J DRILLING COMPANY, INC.**

Robert Jackson  
President

PO Box 815  
Benson, AZ 85602  
Bjdrilling.com  
Lic# 070264-002 Class A-04 • Lic# 062110-010 Class C-53

520-586-3282  
520-623-1010  
bjdrilling@cox.net



**CLEAR CREEK ASSOCIATES**  
*Practical Solutions in Groundwater Science*

Scottsdale: 480.659.7131, Tucson: 520.622.3222  
www.ClearCreekAssociates.com

*Atlas Copco*



**Atlas Copco CMT USA, LLC**  
6393 S. Campbell Ave.  
Tucson, AZ 85706  
Tom Poley: C: 520-668-3249  
F: 520-834-0444

**SOUTHWEST**  
**WATERWORKS**  
CONTRACTORS, INC.

Complete Commercial, Industrial, Agriculture  
and Municipal Water Systems

**John Bailey**  
President  
**Mike Richardson**  
Vice President

Office: 602-442-1110  
P.O. Box 6338  
Phoenix, Arizona 85005  
2205 W. Grant Street

Licensed & Bonded ROC# 170251

**WELL SCAN**  
INCORPORATED

**For Over 30 Years WELL SCAN  
Has Provided Service Excellence**

**CAMERA** - "3" diameter COLOR camera for inspecting wells down to a 2400 foot depth with a selection of downward wide-angle view or close-up side scan at anytime.

**SMALL DIAMETER** - (1 5/8") black and white downhole camera for inspecting wells and boreholes as small as 2"

**SONAR-JET WELL CLEANING** - a quick, effective and environmentally safe method for opening plugged perforation and screen.



**See it Our Way!**

*As an independent company **SERVICING ARIZONA** you can count on us for the downhole technology you need.*

**Office: (480) 895-2230**

**Cell: (602)739-9097**



# EFFICIENT PUMPING SOLUTIONS



## THE PRODUCTS & SERVICES TO EXCEED YOUR PUMPING SOLUTION NEEDS

Up to 20,000 GPM with Line-shaft turbine, centrifugal and sewage pumps.

Up to 5,000 Ft. of Head with Submersible Turbine Pumps.

## PUMP PERFORMANCE TESTING

- 10,000 GPM Max Flow Rate
- 600 Horsepower Maximum
- Testing pressure to 1,472 PSI/ 3400' TDH
- Testing live well depth 80' by 36" diameter
- 480, 2300, or 4160 test voltages available
- Automated 21 point testing
- Real time automated performance testing and report generation
- Internet access witness testing
- Custom adaptations available

**WWW.GPELTD.COM**

Amarillo, TX — 800-530-4744  
Lubbock, TX — 800-530-4755

Odessa, TX — 800-530-4766  
Abernathy, TX — 866-998-2024

Fort Worth, TX — 866-656-0823  
San Antonio, TX — 855-654-8905

Clovis, NM — 855-763-9022  
Phoenix, AZ — 800-772-6265

Gicon Pumps & Equipment © 2014. All Rights Reserved. 4298CD41014

# **KARAM PUMP & SUPPLY**

**ARIZONA OWNED AND OPERATED  
KARAM PUMP & SUPPLY  
IS A STOCKING DISTRIBUTOR  
OF THE FOLLOWING LINES:**

**Goulds Pumps**

**Franklin Motors & Controls**

**Simmons Valves & Seals**

**Flomatic Valves**

**Warrick Level Controls**

**Baldor Motors**

**Cresline Drop Pipe**

**Service Wire**

**Symcom**



**Tempe, AZ 1-800-524-7867**

**Tucson, AZ 520-670-1266**

**Statewide delivery and a  
24hr emergency number  
allows us to provide fast  
and efficient service**

MOUNTAIN STATES GROUND WATER EXPO  
February 9 & 10, 2017  
Aquarius Casino Resort  
Laughlin, AZ

Aquarius Casino Resort  
1900 South Casino Drive  
Laughlin, Nevada  
1-800-662-5825

**This resort welcomes us back and continues to offers some of Laughlin's finest rooms and suites on the banks of the beautiful Colorado River, including a variety of restaurants from casual to gourmet dining. Special hotel rates of \$29.00 for Sunday - Thursday nights, \$65.00 for Friday and \$85.00 for Saturday night have been arranged.**

Call 1-800-662-5825 to make your reservations and mention the group code of C-MOU17. These rates are ensured only for reservations made prior to January 27, 2017.

CONFIRMED EXHIBITORS TO DATE

101 Pipe & Casing	Kelly Pipe
2M Company, Inc.	McCrosco
Allied Industrial Drilling Supplies	Mill Man Steel, Inc.
Atlas Copco	Mitchell Lewis & Staver
Baker Water Systems Division	Mitsubishi Materials USA Corp
Baroid IDP	Moab Bit & Tool Co.
Bill Johnson Equipment Company	National Pump Company
BITCO	Pentair
Boshart Industries	Preferred Pump
Carson Underground	Premier Silica
Challenger Pipe & Steel	Red Flint Sand & Gravel
Cotey Chemical Corp.	Redi Clean
Custom Pipe & Coupling Co.	Remote Control Technology
Desert Pacific Marketing	Roscoe Moss Company
Dotson Sales/Jet Lube	SEMCO
Duke Equipment Company	Shakti Pumps
East West Machinery & Drilling	Submersibles and Electric Inc.
Flexcon	Versa-Drill
Flint & Walling Pumps	Webtrol Pumps
Flomatic Valves Corp.	Well-Vu Cameras
Foremost	Western Hydro
GEFCO, Inc.	World Wide Drilling Resource
Gicon Pumps & Equipment	Versa-Drill
HercChemTech, LLC	Webtrol Pumps
Hose Solutions, Inc.	Well-Vu Cameras
Jentech Drilling Supply, Inc.	Western Hydro
Johnson Screens	World Wide Drilling Resource
Karam Pump & Supply, Inc.	



## Recent Arizona Water Well Association Scholarship Recipients

The *Arizona Water Well Association* offers educational scholarships of \$1,000 per semester for the children and/or grandchildren of a contractor who has been an association member for a minimum of two years or an employee of said contractor who has a reasonable relationship with the association.

Congratulations to the following most recent recipients:

**Kaitlyn Tode** – Pursuing an Associates of Arts degree at Mesa Community College . (Her Stepdad is owner of Arizona Preston Drilling, LLC)

**Madelyn Shrum** – Pursuing a degree in Science at Arizona State University. (Her Dad is Robert Shrum who is employed by National EWP)

If you know someone who may be interested in applying for a Scholarship or have any questions regarding our Scholarship program, please contact one of the following:

**Scholarship Chair**  
Fred Tregaskes  
480-229-0737  
ftregaskes1@gmail.com

**AZWWA Administrator**  
Debbie Hanson Tripp  
480-609-3999  
admin@azwwa.org



### WHO ON EARTH DREAMS THESE UP?

- Venison for dinner again? Oh deer!
- England has no kidney bank, but it does have a Liverpool .
  - I tried to catch some fog, but I mist.
  - They told me I had type-A blood, but it was a Typo.
- I changed my iPod's name to Titanic. It's syncing now.
  - Jokes about German sausage are the wurst.
- I'm reading a book about anti-gravity. I just can't put it down.
  - Why were the Indians here first? They had reservations.
  - I didn't like my beard at first. Then it grew on me.
- Did you hear about the cross-eyed teacher who lost her job because she couldn't control her pupils?
  - Broken pencils are pointless.
- What do you call a dinosaur with an extensive vocabulary? A thesaurus.
  - I got a job at a bakery because I kneaded dough.
  - Velcro - what a rip off!
- Don't worry about old age; it doesn't last.



*Count on EMC<sup>®</sup> for the tailored coverage you need and exceptional customer service you deserve.*



EMC's Water Well Drillers program offers more than great coverage. Our policyholders also receive industry-appropriate loss control resources, personalized claims service and the kind of expertise you'd expect from a company that's been in the commercial insurance business for over 100 years.

Find your local EMC Independent Agent at [www.emcins.com](http://www.emcins.com).

**EMC Insurance | Phoenix Branch**  
16150 N. Arrowhead Fountains Center Drive, Suite 350  
Peoria, AZ 85382 | 800-423-8422





Arizona Water Well Association  
950 E. Baseline Rd. #104-1025  
Tempe, AZ 85283

### Events Calendar

**January 21, 2017**

**AzWWA Membership Meeting**  
**8:30am Meet & Greet**  
**9:00am Speaker with meeting to follow**  
**Coco's Restaurant**  
**2026 N. 7th St.**  
**Phoenix, AZ**  
**Speaker: Baroid IDP**

**February 9-10, 2017**

**Mountain States Ground Water Expo**  
**Aquarius Casino Resort**  
**Laughlin, NV**  
**For more information go to [www.mountainstatesgroundwater.com](http://www.mountainstatesgroundwater.com) or email [info@mountainstatesgroundwater.com](mailto:info@mountainstatesgroundwater.com)**

**May, 3-5, 2017**

**90th AZ Water Conference**  
**Phoenix Convention Center**  
**[www.azwater.org](http://www.azwater.org) or contact Debbie Muse 888-559-8844**

**June 16 & 17, 2017**

**AzWWA Golf Tournament, Picnic and Chili-Cook Off**