Message from Jason King, State Engineer

Here we are in the third year of a drought. In a state where we are used to dry conditions, these extreme drought conditions only amplify how little water we have. I expect many of you are responding to drought conditions through the drilling of replacement wells, drought relief stock water wells, new wells and well rehabilitation. I have been asked whether our water law is drought “resilient” and the answer is unequivocally “Yes”. The prior appropriation doctrine works very well whether in times of drought or in times of surplus. Like it or not, senior right holders get their water first, and in times of drought, at least on surface water sources, junior right holders may get curtailed. In times of surplus, everyone is satisfied. Nevada is lucky to have a sound water law!

In terms of drilling, in 2013 Nevada saw about the same number of wells drilled statewide as in 2011 and 2012 – approximately 1,900. The all time high occurred in 1996 when a total of 4,579 wells were drilled. Since 1996, the number of wells drilled has oscillated between 2,000 and 4,000. If we look back 100 years to 1914, only one well was drilled. It was drilled by Mr. B. Fox and Mr. A.L. McSwain for Mr. W.B. Thompson in Fish Lake Valley. The well was drilled to a depth of 169' and was to be used for irrigation purposes. The remarks stated that “…there is 152' of water bearing strata and 140' of perforations… I estimate the well will pump 150 inches of water…” The lithologic log is very detailed in terms of formation depths and thicknesses, as well as types of soil encountered. In thinking about the “150 inches of water”, I assume the flow was approximately 1,700 gpm (based on 40 miner inches to 1 cfs). If any of you other have insight to this measurement, I’d be interested in knowing.

As you probably already are aware, the Division is in the process of updating the Regulations for Water Well and Related Drilling. We hope to have the new codified version complete by the end of this year. Unrelated but running parallel to our well drilling regulations is the joint effort by the Divisions of Minerals and Environmental Protection to adopt regulations related to hydro-fracturing (fracking) – also due by the end of this year. It will be interesting to see in the years to come whether the play on oil exploration in northeastern Nevada comes to fruition.

The Division has had a few personnel changes since last year. In Carson City, Ken Haffey, a seasoned division engineer, has moved to the Well Drilling and Adjudication Section and now heads up the Well Driller Exam. Also in Carson City, Amanda Brownlee has taken a position as a Well Supervisor and will be teaching classes on well logs and notice of intent cards. These CEU class will be offered free of charge. In Las Vegas, please welcome Christi Emery. Christi is also a Well Supervisor and will be working with the well drillers in southern Nevada.

The Division continues to update and populate our website with timely information, including well driller logs and schedules for CEU courses. Just recently, we have added a new and improved Interactive Water Resource Map. I strongly encourage you to play around with this powerful feature. Not only can you see locations of points of diversion and places of use but there are quick links to our water right database.

As always, you play an immensely important role in protecting our most precious resource, water, and the Division thanks you for all the work you do every day. I hope 2014 is a great year for all of you!
Statewide Well Driller’s Advisory Board Members

<table>
<thead>
<tr>
<th>Advisory Board Member’s Name</th>
<th>License Number</th>
<th>Company</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roger Thrall</td>
<td>1132</td>
<td>Aqua Drilling Company</td>
<td>Reno, NV</td>
</tr>
<tr>
<td>Fred B. Allen III</td>
<td>1301</td>
<td>Allen Drilling, Inc.</td>
<td>Las Vegas, NV</td>
</tr>
<tr>
<td>Gary (Layne) Harris</td>
<td>1698</td>
<td>Nevada Newmont</td>
<td>Elko, NV</td>
</tr>
<tr>
<td>Daniel Kohlman (alternate)</td>
<td>2193</td>
<td>Boart Longyear</td>
<td>Elko, NV</td>
</tr>
<tr>
<td>Harlen (Andy) Andresen (alternate)</td>
<td>1028</td>
<td>Andresen Exploration Drilling</td>
<td>Reno, NV</td>
</tr>
</tbody>
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Upcoming Well Drillers Exam Dates

- June 19, 2014 — Written Examination parts I & II is given in Carson City, Elko and Las Vegas
- July 17, 2014 — Written Examination parts I & II is given in Carson City, Elko and Las Vegas
- August 6, 2014 — The Board meets in Carson City to conduct interviews (part III)
- August 7, 2014 — The Board meets in Las Vegas to conduct interviews (part III)
- September 18, 2014 — Written Examination parts I & II is given in Carson City, Elko and Las Vegas
- October 16, 2014 — Written Examination parts I & II is given in Carson City, Elko and Las Vegas
- November 5, 2014 — Board interviews, part III, meets in Carson City
- November 6, 2014 — The Board meets in Las Vegas to conduct interviews (part III)
- December 18, 2014 — Written Examination parts I & II is given in Carson City, Elko and Las Vegas

The Well Drillers Exam consists of three parts:

I.) A written examination to determine the applicant’s knowledge of the rules and regulations for drilling wells in the State of Nevada.

II.) Identification of a well location on a topographic map by full legal description.

III.) An oral interview by the Statewide Well Driller’s Advisory Board regarding the applicant’s experience and knowledge of general drilling practices.

Well Drilling Activity Update

Well drilling/plugging activity remained steady in 2013 compared to the previous two years. The following table shows the number of well logs submitted for 2007 thru 2013, by year.

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014 (thru May)</th>
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</thead>
<tbody>
<tr>
<td>Well logs</td>
<td>2984</td>
<td>2786</td>
<td>2030</td>
<td>2648</td>
<td>1999</td>
<td>1902</td>
<td>1939</td>
<td>561</td>
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</table>
Well Drillers Licensed in the State of Nevada

The Statewide Well Driller’s Advisory Board recommended to the State Engineer that licenses for 7 new well drillers be approved in 2013-2014 (listed below). As of May 2014, there were a total of 374 licensed drillers by the State of Nevada.

In the previous year 2012-2013, there were 32 newly licensed well drillers and a total of 402 licensed drillers in the State of Nevada.

<table>
<thead>
<tr>
<th>License Number</th>
<th>Driller’s Name</th>
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<tbody>
<tr>
<td>2500</td>
<td>Trevor O’Brien</td>
</tr>
<tr>
<td>2501</td>
<td>Aaron Gonzeles</td>
</tr>
<tr>
<td>2502</td>
<td>Jared Kusener</td>
</tr>
<tr>
<td>2503</td>
<td>Clarence (CJ) Hurd</td>
</tr>
<tr>
<td>2504-LTD</td>
<td>Ronald Sink</td>
</tr>
<tr>
<td>2505-LTD</td>
<td>Randall Wilder</td>
</tr>
<tr>
<td>2506</td>
<td>Larry Gagnon</td>
</tr>
</tbody>
</table>

New Workshops Available

The Nevada Division of Water Resources would like to invite you to a new workshop titled “Well Drilling Forms” it has been designed for all Licensed Nevada Well Drillers. This workshop can be taken annually for Continuing Education Units (CEU). Each class is valued at two (2) CEU’s for two (2) hours of education, you will be reviewing all the material regarding well drilling, such as; Well Driller’s Reports, Notice of Intent Cards, Affidavit of Intent to Abandon and Waivers.

Reminders of Specific Deadlines & Reporting Periods

- **NAC 534.320(3)**: Notice of Intent (NOI) shall be filed **three (3) working days** before the rig is set up and the drilling commenced.
- **NAC 534.325**: NOI is valid for **sixty (60) days** from date of filing. If a NOI expires, a new notice must be filed prior to drilling and the previous NOI must be referenced on the new card. Drilling may start the day the new card is filed.
- **NRS 534.170**: A Well Driller’s Report shall be filed within **thirty (30) days** after the well is completed.
- **NAC 534.420(2)(b)**: The Division requires a **24 hour notice** before plugging a well.

Changes in Limited Licensing

Most applicant’s are licensed as water well drillers, but some are issued limited (LTD) license’s that pertain to the rig’s, class or types of work e.g., M = monitor wells, ABDS = shallow dewater wells, R&P = recondition and plugging. To simplify all of these acronyms your license will now be printed with just 3 variations. A water well license that allows a well driller to drill without any limitations will just show your license number. A monitor well license will show the license number followed by the letter “M”. Finally, any license with limitations will show the license number followed by the letters “LTD” and the limitations you hold on that license will be provided on the back of each license.
**Public Relations**

Most of us go to work with the goal of quietly going about our business and getting the job done. If you are working in rural areas, this is often the case. However, there are times and places where this is just not possible. You could be set up in a public place or location where the presence of a drill rig could cause a negative reaction from the public. Good public relations can go a long ways to smoothing over concerns. Communicating with the public is often the first step, but requires your best social skills. Here are some additional tips to head off complaints and to deal with difficult people.

1. **Professionalism**— It is important that the public see you as a professional worker that is serious about his job. Keeping a respectable appearance, clean worksite, and well maintained equipment will go a long ways toward that perception.
2. **Complaints**— Listen to the persons complaint and let them fully explain their position. Try and see the complaint from their point of view. Always take some time before responding to think about your words. If you remain calm and polite, it will often diffuse the situation. Explain why you are there, the necessity of the work, and an estimate of how long it will take.
3. **Solutions**— Look for ways to solve complaints. Common complaints when drilling in a residential neighborhood are blocking someone's driveway, disrupting traffic, littering, blasting loud music, starting work before dawn and speeding to and from the worksite. This can be very disruptive in residential neighborhoods and could violate local ordinances. Try and correct the situation immediately and communicate with the neighbors so they are assured you are taking care of the problem.
4. **Be proactive**— Talk to the neighbors ahead of the scheduled work. Something as simple as offering to do a small chore for an elderly neighbor can start you off on the right track and possibly earn you a future customer.

**How accurate is your GPS?**

Not all GPS unit are the same when it comes to accuracy. High quality GPS receivers can be as accurate as +- 9 feet; however, accuracy of many standard handheld devices could be as much as +- 24 feet. Unfortunately, the accuracy can also be negatively affected by numerous factors such as clouds, buildings, walls, mountains, trees and the number of satellites available. It is important to take your time when reading your GPS unit. Make sure the reading has stabilized before recording the data. Drilling on the wrong side of a section line or outside of 300 feet for a replacement well can cost your client a lot of money and cause unnecessary delays.

**What's new within the Division of Water Resources**

The Division is working on new revisions to the well drilling regulations for 2014 (see below for more information). Our goal is to have updated regulations in place by the end of the year. The Division is also offering a new well driller’s class “Well Drilling forms – How to properly complete a Well Driller’s Report, Notice of Intent Card, Affidavit of Intent to Abandon and Waivers.” This class is free and continuing education credits can be earned for successful completion. If your drilling company has office staff that assists you with filling out your paperwork, they are also welcome and encouraged to attend.

With the drought affecting most of Nevada, there has been a recent increase in requests to deepen domestic wells, replace old irrigation wells, and drill new wells for supplemental irrigation. While drought is never a good thing, at least it provides some increased opportunities for the well drilling community.

**New well drilling regulations are being drafted for 2014.**

New well drilling regulations are being drafted for 2014. Go to the Nevada Division of Water Resource’s public web page at http://water.nv.gov to view the draft regulations and to view workshop dates and times. Your input will help shape the regulations and all constructive comments are welcome. If you have a particular change you would like to see in the well drilling regulations, please take the time to participate in the workshops.

**Continuing Education Opportunities offered by NWRA**

**Well Design, Construction & Rehab Workshop**

Tuesday, June 10, 2014. 8 AM -5:30 PM. Washoe County Dept. of Water Resources in Reno. Cost is $200 for NWRA members, $250 after May 16, or $250/$300 for non-members.

**Water Well Rehabilitation: Problems and Effective Solutions**

Wednesday, June 11, 2014 8:30 AM – 3:30 PM. Washoe County Dept. of Water Resources in Reno. Cost is $200, or $125 in companion to Well Design Workshop June 10th.

**2015 Drilling Symposium, in conjunction with the 2015 NWRA Annual Conference.**


Find more information on registration and course content at www.NVWRA.org, call (775) 473-5473, or email creativerno@charter.net