

Inactive Well Compliance Program (IWCP)

Year Two Final Report

In addition to *Bulletin 2014-19*, Alberta Energy Regulator (AER)

July 2017

The Alberta Energy Regulator's (AER) Inactive Well Compliance Program (IWCP) was implemented on April 1, 2015, to bring into compliance a backlog of inactive wells that did not meet requirements in *Directive 013: Suspension Requirements for Wells*. *Directive 013* details suspension, monitoring, and reporting requirements for inactive wells in Alberta. The rules outlined in *Directive 013* ensure that industry monitors and maintains inactive wells to reduce the potential for impacts on the public, on the environment, and on resource development in Alberta.

The IWCP began a second year with 30 723 inactive wells belonging to 659 licensees. This total includes wells that were compliant with AER requirements during the previous year of the program, which ended on March 31, 2016 (figure 1). The compliant wells were included in a licensee's total IWCP well count.

The AER determines the number of wells each licensee must bring into compliance by dividing the number of licensee-owned wells that were noncompliant as of April 1 of that year by the number of years left in the program. All noncompliant inactive wells will be brought into compliance by the end of year five as licensees bring their annual quota into compliance each year.

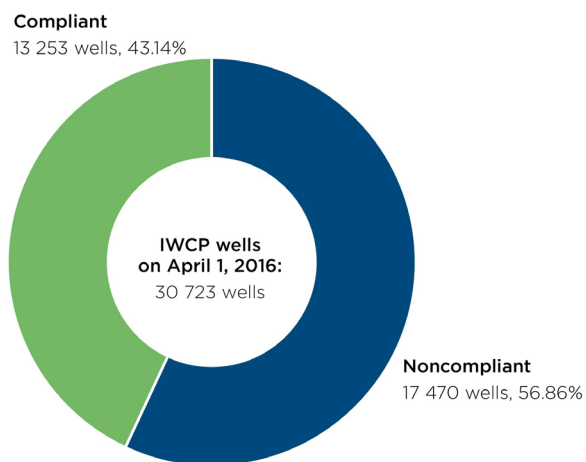


Figure 1—IWCP progress as of April 1, 2016

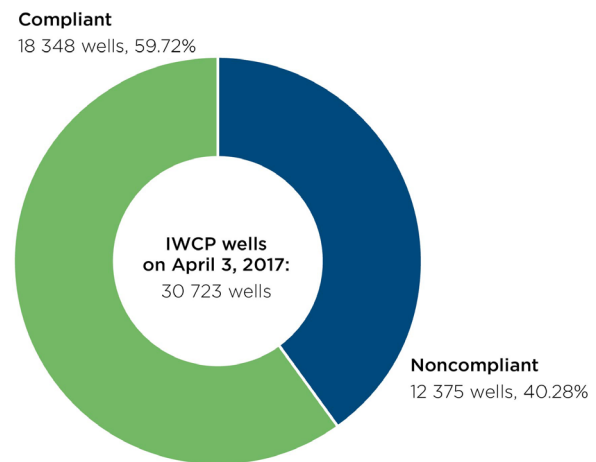


Figure 2—IWCP progress as of April 1, 2017

Wells included in the IWCP are all low and medium risk, posing minimal risk to public safety and the environment on an individual basis; however, the cumulative number of wells is a concern. The backlog of high-risk inactive wells was addressed outside of the IWCP, and all were 100 per cent compliant with AER requirements in April 2015. Licensees of high-risk inactive wells that become noncompliant are subject to enforcement. These wells are addressed by the AER as they become noncompliant.

The Alberta Energy Regulator ensures the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle. This includes allocating and conserving water resources, managing public lands, and protecting the environment while providing economic benefits for all Albertans.



In year two, which ended March 31, 2017, 412 licensees met or exceeded their quota of inactive wells to be brought into compliance. Overall, licensees brought 5811, or 19 per cent, of the noncompliant wells in the IWCP into compliance with AER requirements. Therefore, the total number of compliant wells is now 18 348 (figure 2). The year-two target was 4467 wells.

For year two, 126, or 19 per cent, of licensees did not achieve their quotas. Similar to the first year of the program, the AER is investigating and, where appropriate, issuing enforcement against these noncompliant licensees. The AER has a number of enforcement tools available to compel compliance and to correct and deter future noncompliance. When a noncompliance is identified, the AER uses the most appropriate tool.

In order to comply with AER requirements, operators must reactivate, suspend, or abandon the wells. However, in some cases, licensees submitted new data showing the wells were no longer inactive or the wells were classified for other uses; these include training, cavern, geo exchange, and environmental observation wells (figure 3).

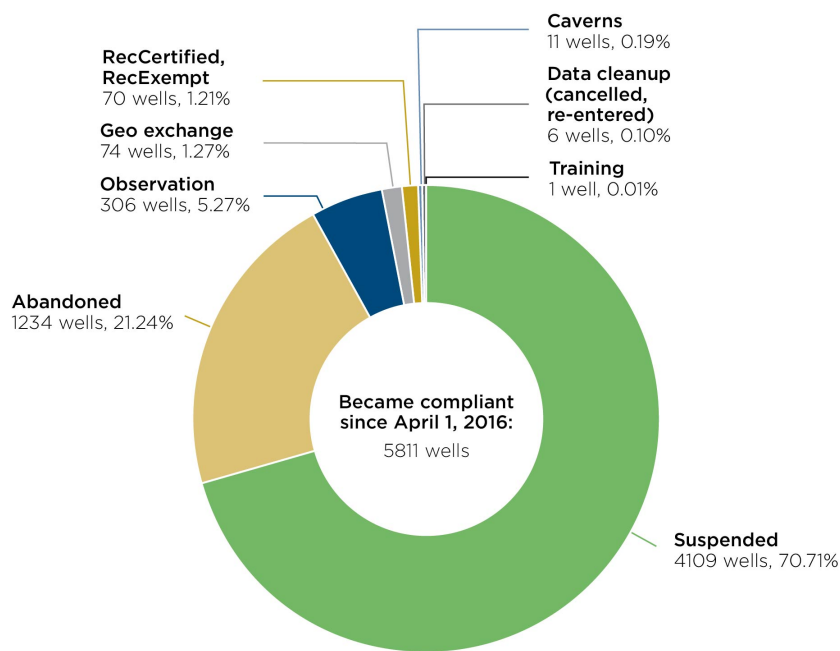


Figure 3—IWCP year-two compliant wells compared to target quotas

Inactive Wells in Alberta – How Did We Get Here?

The number of inactive wells in Alberta has more than doubled over the last 20 years (figure 4). The AER determined that the large inventory of inactive wells in the province limits alternative land use due to a lack of abandonment and reclamation. Because the wells are no longer producing, resource recovery is not being optimized and no royalties are being generated. The noncompliant inactive wells could also potentially lead to unknown wellbore integrity issues. Even noncompliant low- and medium-risk wells have the potential to cause the release of energy products such as oil or gas. The IWCP was created to protect the public and environment by ensuring that the backlog of noncompliant inactive wells in the province complies with AER suspension requirements by April 1, 2020.

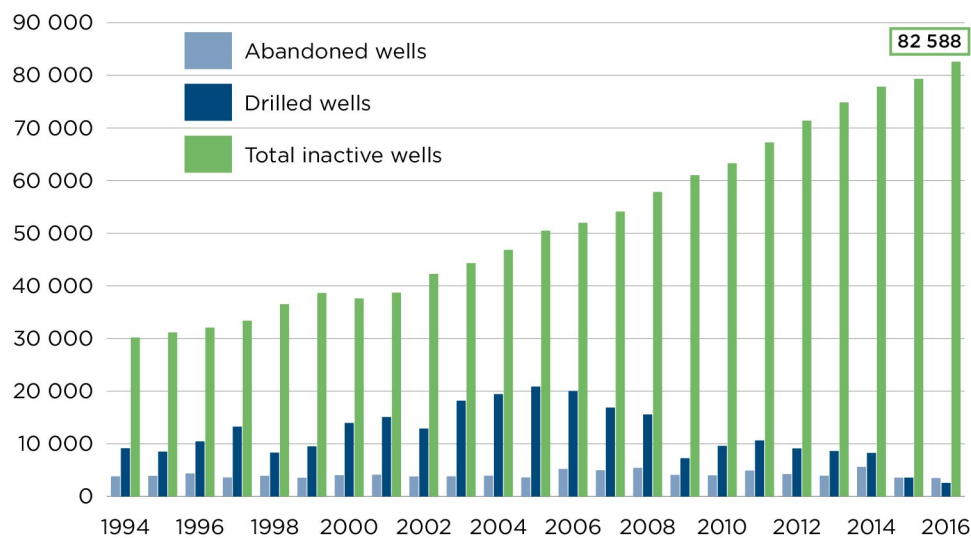


Figure 4—Alberta’s inactive wells: 1994–2016

Because of the increasing number of inactive wells and the manual assessment process, the AER and its predecessor organizations were unable to effectively monitor the inventory to determine which wells were inactive and which were suspended in accordance with *Directive 013*. The AER has since built a software system that tracks well status and publishes the inactive well licence list to allow industry to more easily identify and monitor inactive wells. If the data on the list is not consistent with a licensee’s records, the licensee is required to update the information with the AER. With the increase of AER surveillance on inactive wells, there has been a significant increase in compliance with *Directive 013* requirements. This can be seen in figure 5 where the current compliance rate for all inactive wells is 83 per cent, an increase from 53 per cent in 2014.

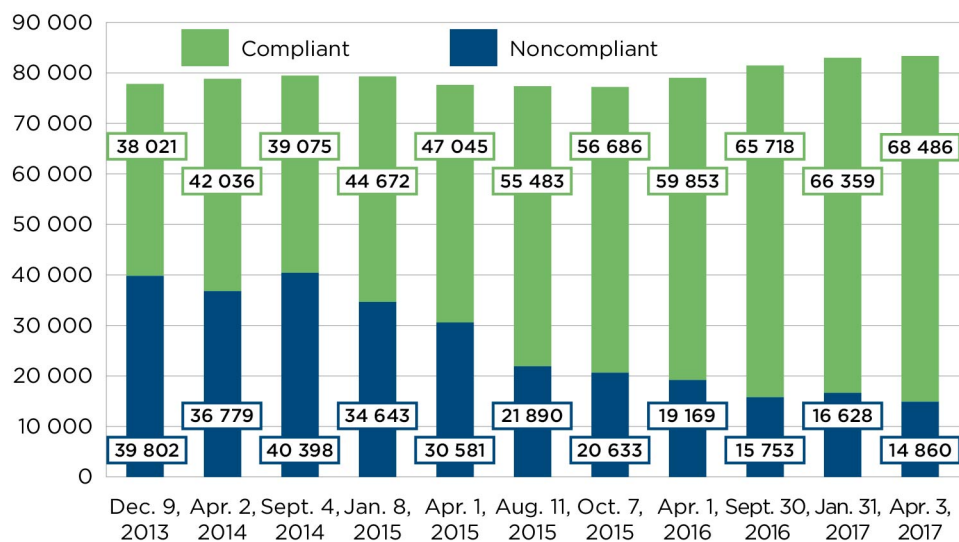


Figure 5—Inactive wells: December 9, 2013, to April 3, 2017

IWCP Challenges

Between March and December 2016, 3467 inactive wells, or 35 per cent of inactive wells that were due for ongoing *Directive 013* compliance (wells outside of IWCP inventory), received notice of noncompliance letters. On average, 70 per cent of licensees were noncompliant each month with their ongoing *Directive 013* activities. Subsequently, 12 per cent of wells that received a notice of noncompliance have escalated further through the compliance assurance process.

Despite all the AER efforts in improving regulatory processes and providing the necessary tools to track and manage inactive wells, industry has not yet demonstrated management of their inactive well inventory. As IWCP's success is based on industry's performance with all inactive wells, the AER will be continuing with improving educational and surveillance activities to ensure compliance with current regulations.

IWCP Year Three

As the AER and licensees validated well status data on the inactive well licence list, the AER identified an additional 111 inactive wells that were included in the IWCP inventory. These wells had legacy regulatory approvals for extending compliance deadlines, which are now replaced with IWCP timelines. Therefore, the total number of wells in the IWCP is 30 834.

Each year of the IWCP, the AER determines how many wells each licensee in the program must bring into compliance. The number of wells each licensee must bring into compliance is determined by dividing the number of the licensee's noncompliant IWCP wells (as of April 1 of that year) by the number of years left in the program.

For year three, there are 12 375 noncompliant wells belonging to 470 licensees in the IWCP. This includes wells under the care and custody of the Orphan Well Association (OWA). The industry-wide quota of inactive wells that must be brought into compliance during year three is 4010 wells. Further information is available in the *IWCP Annual Target Quota and Progress Report* available on the *Directive 013* page.

Orphan Well Association

The OWA is a not-for-profit organization that is funded by the energy industry through the orphan fund levy. The OWA manages the abandonment of upstream oil and gas orphan wells, pipelines, and facilities, and the remediation and reclamation of their associated sites.

The IWCP includes several wells that are under the care and custody of the OWA. In addition, as defunct licensees' well inventories are orphaned, the number of wells for which the OWA is responsible increases. The OWA is responsible for ensuring compliance with all AER requirements, regardless of whether the wells were compliant when they entered the OWA's inventory. The OWA brings the wells into compliance with the IWCP by abandoning them and reclaiming the sites.

In year one, the OWA was responsible for addressing 549 wells in the program over the five years. The number of inactive wells that have become orphaned due to operators going defunct increased the number of OWA wells in the IWCP to 1272 by the end of year two. On April 3, 2017, the OWA had 827 noncompliant inactive wells for the remaining three years of the program. Further information about the OWA is available on its website, www.orphanwell.ca.

Inactive Well Compliance Program

e iwcp@aer.ca fax 403-297-2691
Suite 1000, 250 – 5 Street SW, Calgary, Alberta T2P 0R4