



IOGCC

International Committee

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Aging Infrastructure and Liability

- Joint Legal & Regulatory and International Committee Session
- Legal & Regulatory Session
- International Session

**International
Committee**

**Session
Agenda**

- 1:45–3:00 Jurisdictional review of requirements for inactive \ temporarily abandoned wells
- 3:00-3:15 Break
- 3:15-4:15 Working session
- 4:15-4:30 Set priorities for October

Inactive and Temporary Abandoned Wells

- Challenges and considerations
- Jurisdictional review
- Comparative analysis

Inactive \
Temporary
Abandoned
Wells

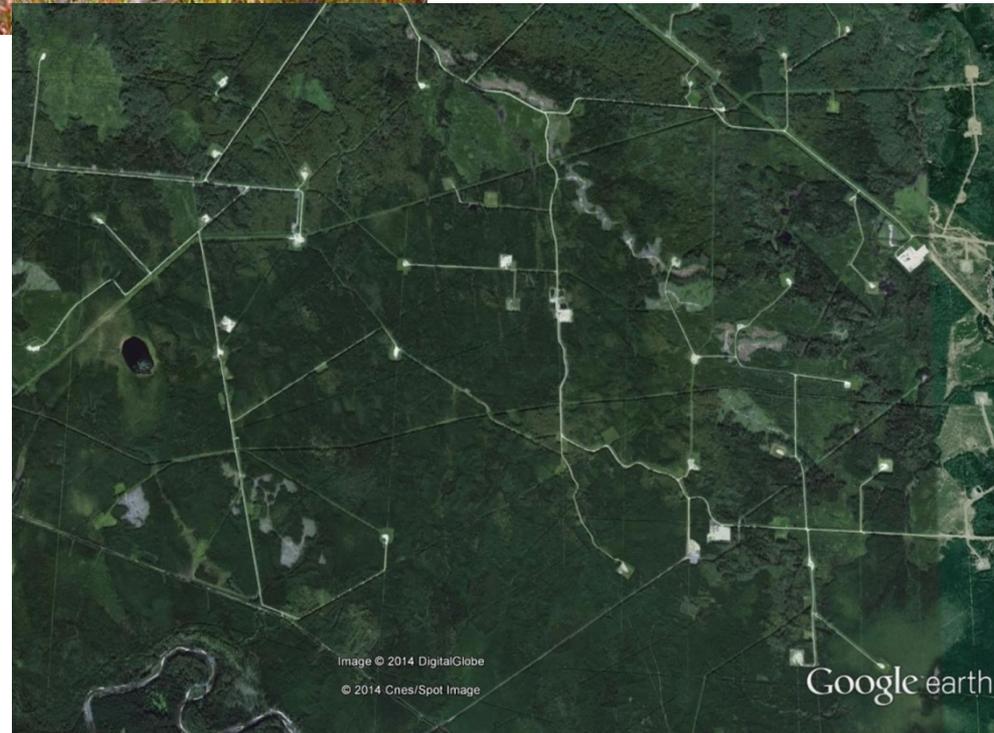
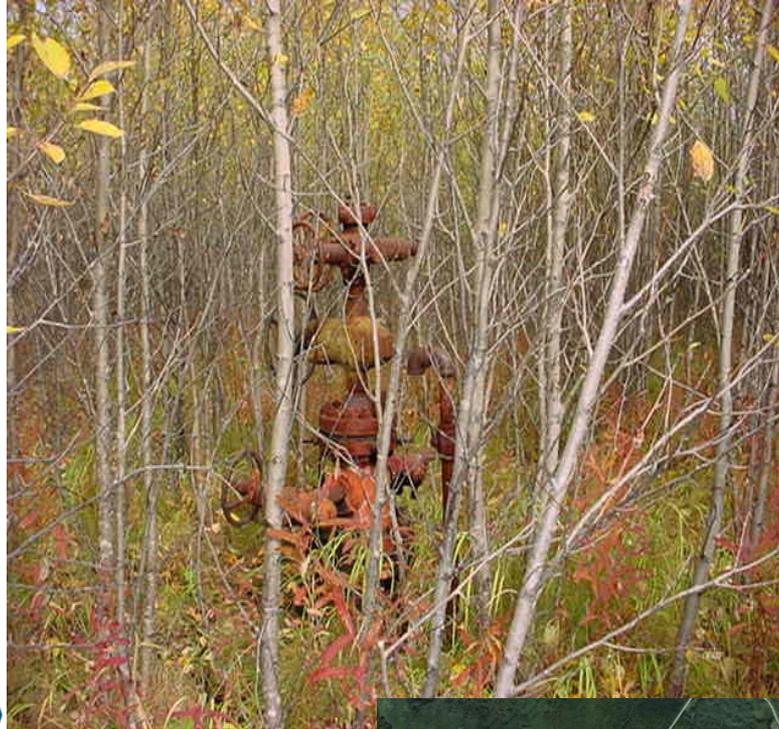
Challenging to regulate

- Want to maximize resource recovery
- Need to meet organizational values associated with protection of the environment and people, and from financial liability

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Considerations

Financial
Liability



Considerations Environmental Protection



Considerations

Future Potential



Considerations

Competing Land Use



**Jurisdictional
Requirements**

Jurisdictional review of requirements

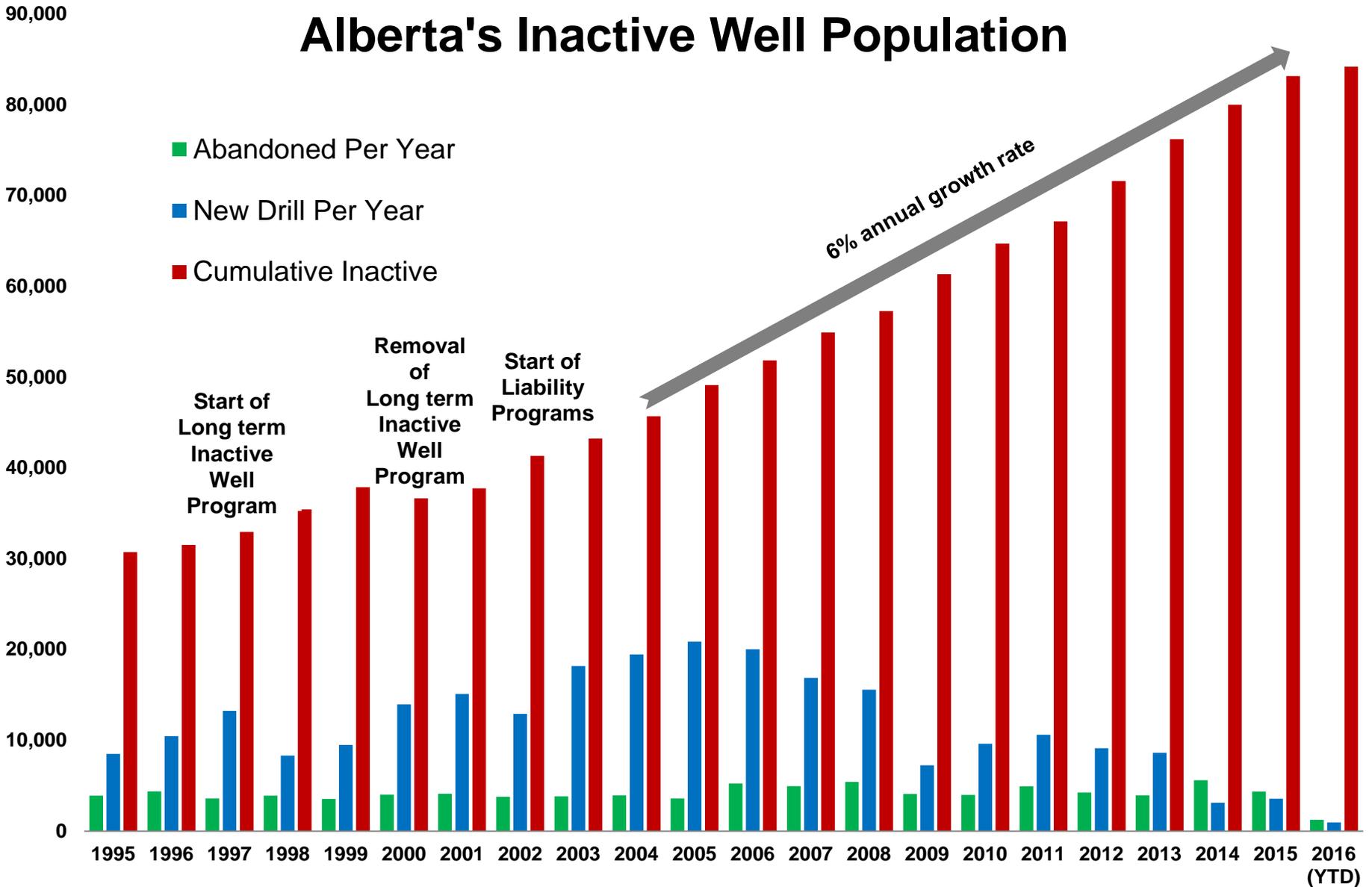
**Jurisdictional
Requirements**

What is in place across North America?

- Timelines
- Required security deposits
- Well status application

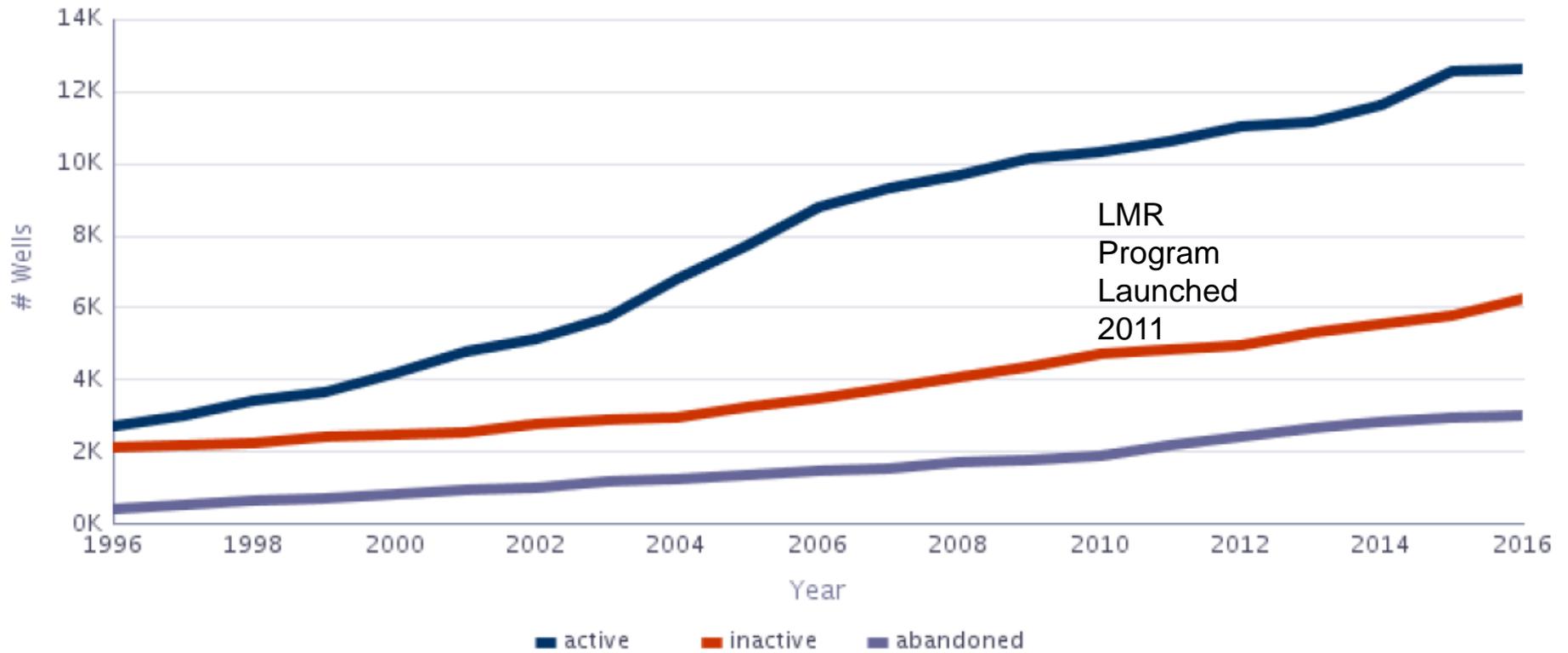
- Current status
 - No timelines for abandonment
 - No well specific security deposits
 - No application for a well to be inactive \ suspended
 - Liability program threshold (deemed assets and deemed liabilities)
- Historic program
 - Long Term Inactive Well Program (1997 to 2000) - Included both timelines and security deposits

Alberta's Inactive Well Population



- Current status
 - No timelines for abandonment
 - No well specific security deposits
 - No application for a well to be inactive \ suspended
 - Liability program threshold (deemed assets and deemed liabilities)
- Historic program
 - Drilling deposit framework.

Active, Inactive & Abandoned Well Statistics



- Current status
 - No timelines for abandonment
 - Application for inactive status that includes eight options including:
 - Performance based
 - Security based

Blanket Extension Options (See Instructions)

<input type="checkbox"/> A	The filing operator has plugged or restored to active status 10% of the number of inactive land wells operated at the time of the last annual renewal of the operator's organization report;
<input type="checkbox"/> B	The filing operator is a publicly traded entity and has filed with the Commission documentation naming the operator as "debtor" and the Railroad Commission of Texas as the "secured creditor" and specifies the funds covered by the documents in the amount of the cost calculation for plugging all inactive wells.
<input type="checkbox"/> C	The filing operator has submitted additional financial security covering the amount of the cost calculation for plugging all inactive wells or \$2 million, whichever is less.

OR

- If you are applying for a plugging extension for a single well:

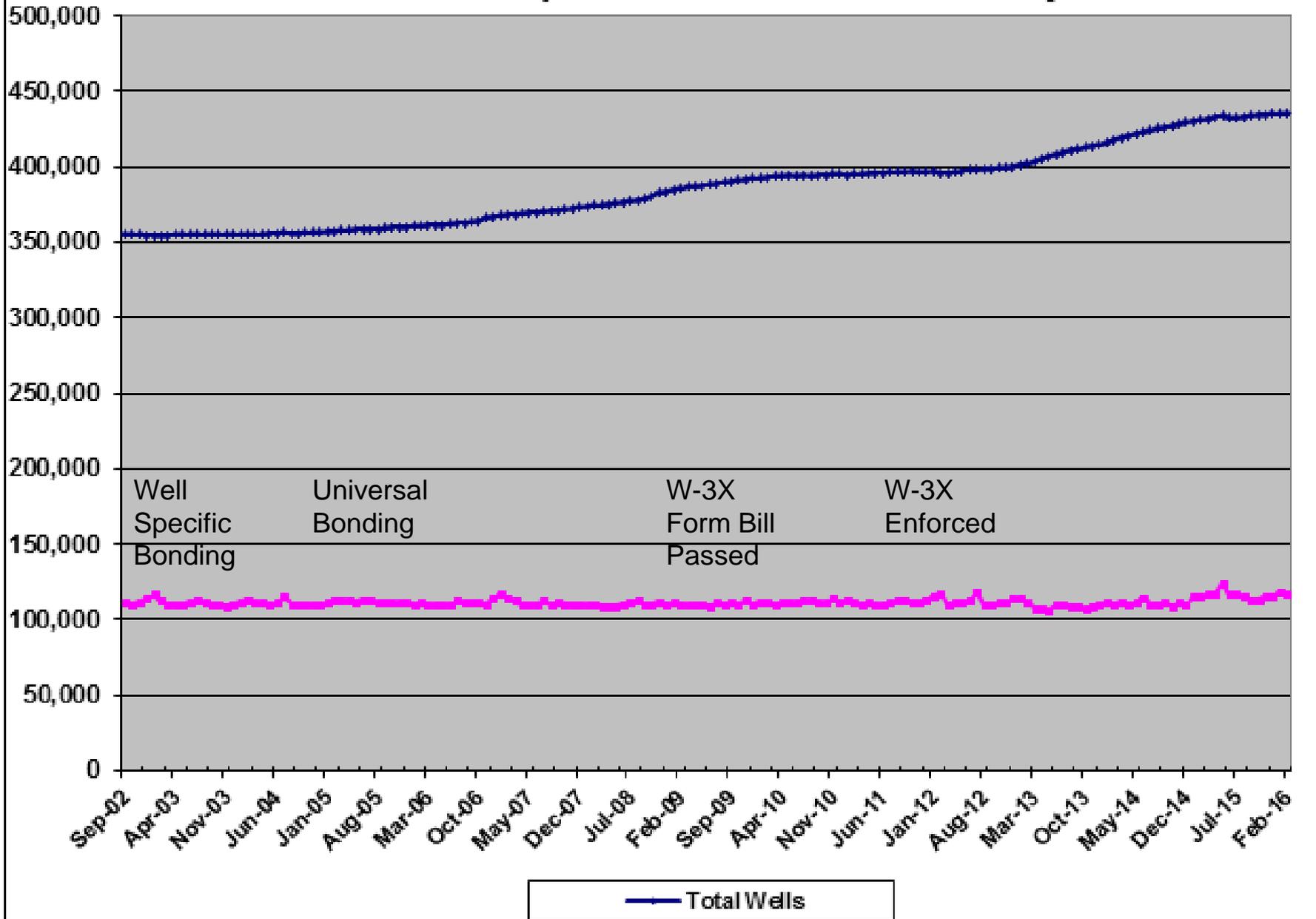
4. LEASE NAME as shown on Proration Schedule			5. FIELD NAME as shown on Proration Schedule		
6. API NUMBER 42-	4. RRC DISTRICT NO.	8. OIL LEASE / GAS ID NO.	9. WELL NO.	10. COUNTY	

Individual Well Extension Options (See Instructions)

<input type="checkbox"/> D	The well identified above is covered by an abeyance of plugging report and the operator has paid the required filing fee of \$100. (Please attach the abeyance of plugging report.)
<input type="checkbox"/> E	The well identified above is part of a Commission-approved EOR Project.
<input type="checkbox"/> F	The well identified above is not otherwise required by Commission rule or order to conduct a fluid level or hydraulic pressure test of the well, and the operator has conducted a successful fluid level or hydraulic pressure test of the well and has paid the required filing fee of \$50. (The test results must be filed with the Railroad Commission on Form H-15.)
<input type="checkbox"/> G	The operator has filed additional financial security in the amount of the cost calculation for plugging the well identified above.
<input type="checkbox"/> H	The operator has filed an escrow fund deposit in an amount at least equal to 10% of the cost calculation for plugging the well identified above.

Total Wells / Inactive Wells

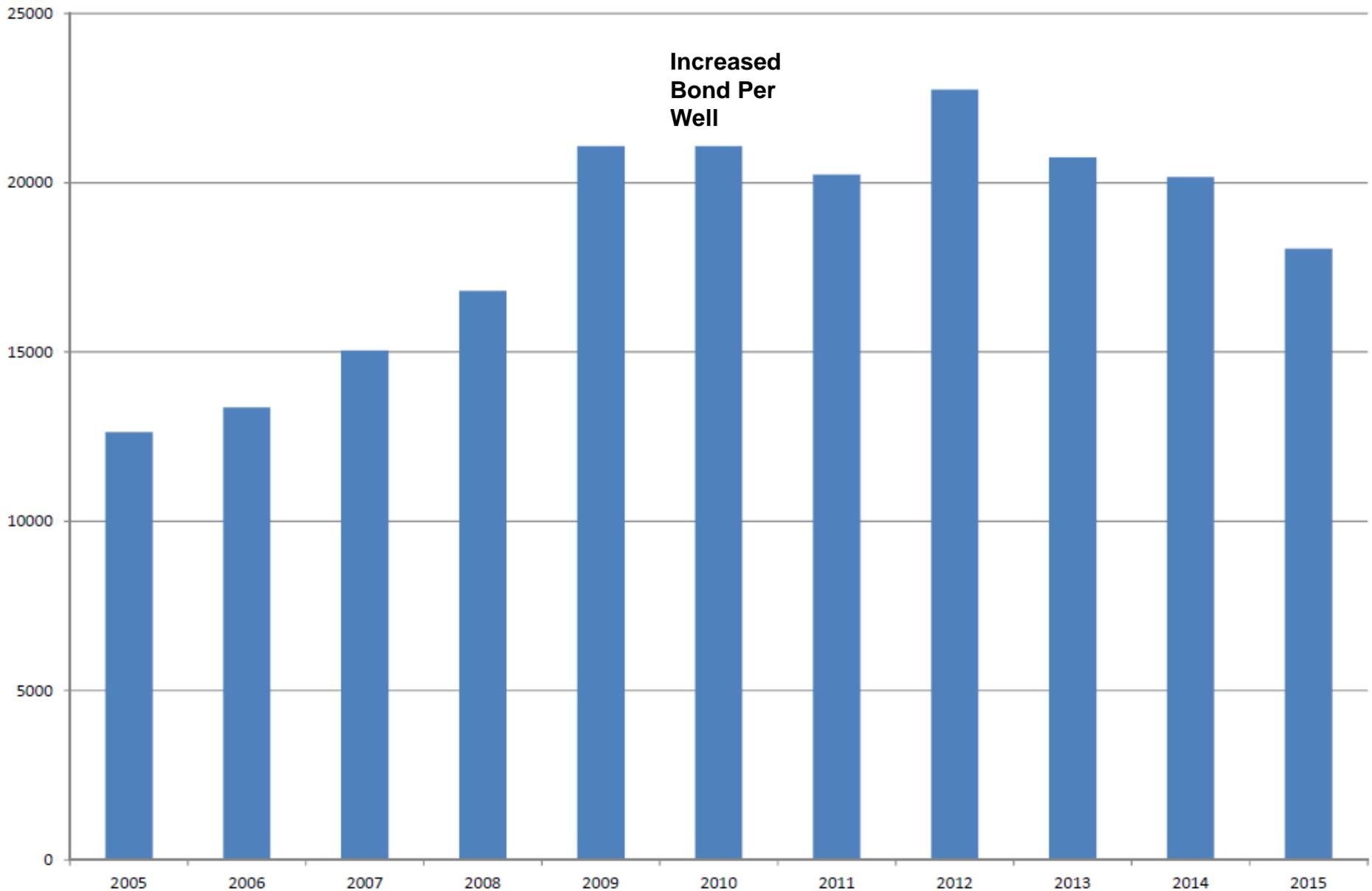
September 2002 thru February 2016



Wyoming

- Current status
 - No timelines for abandonment
 - Companies must post \$10/ft for temporarily abandoned wells.
- Application
 - Every two years, an application must be submitted for wells to be inactive
 - Conduct an annual inactive well review state wide

Wyoming Shut In Well Count



Number of shut in wells calculated from July production reporting each year.

- Current status
 - No timelines for abandonment
 - Well specific security deposits
 - \$20K/well over the \$60K blanket bond.
 - Application for a well to be shut-in \ temporary abandoned status

- Current status
 - No timelines for abandonment
 - Increasing annual fees to keep well in temporary inactive status.
 - (\$100, \$250, \$500 fee, then up to \$10K surety bond)
 - No application for inactive well. Must apply for temporary inactive status.
 - Requires an inspection and possible integrity test.

Louisiana

- Current status
 - No timelines for abandonment
 - Well specific fee
 - \$250 / well per year
 - No application for a well to be shut-in \ temporary abandoned status

- Current status
 - 12 month trigger (without operations) must make application.
 - No additional bonds for inactive wells
 - Application process is for temporary abandonment (TA) which is for 1 year*
 - TA is for 5 years if connected to pipeline infrastructure.

* only allow 10% of wells to be shut in at any time

- Current status
 - Timelines for abandonment
 - Maximum of 5 years in temporary abandoned status
 - Well specific security deposits
 - Single well bond \$5000 + \$1.00/foot
 - Blanket bond of \$150K for 1-5 wells, 6-10 for \$300k, 11-25 for \$500K, or more than 25 for \$1MM
 - Application for a well to be inactive \ suspended

**Common
Themes**

What common themes do we see?

Common Themes

Jurisdictions (Alberta, BC) with no timelines, no well specific security deposits, or no application to allow a well to be maintained in an inactive \ temporary abandoned status:

- Show a similar growth in the inactive well population before and after other regulatory mechanisms were implemented.

Common Themes

Jurisdictions (Texas) that do not have timelines, but have application requirements which include well specific security deposits, and jurisdictions that only have security deposit requirements (Wyoming):

- Show a relatively static trend in their inactive well population

Common Themes

Jurisdictions (New Mexico) that have set timelines, well specific security deposits, and an application process to allow a well to be maintained in an inactive \ temporary abandoned status:

- Show a declining trend in their inactive well population

Summary of Common Themes

Regulatory Mechanism	Alberta & British Columbia	Texas	New Mexico
Timelines for abandonment			
Well-specific security deposit			
Application for inactive / temporary abandonment status			
Trend	No impact to increasing population trend	Static population trend	Declining population trend

Break

Break Time!

Working Session When We Return

The regulatory requirements are only part of the equation...

**Working
Session**

**Timelines,
Security,
Application**

- What are the challenges associated with each of the common themes?
 - Administration
 - Compliance
 - Integrating asset retirement
 - Wells, facilities, pipelines
- What have we each learned in this area?
- What do we still need to understand?

**Working
Session**

**Timelines,
Security,
Application**

- Does the number of companies make certain options unworkable as it becomes too administratively heavy?
- What are the challenges to assess justifications for exemptions?
- At what value does requiring security become a deterrent for companies keeping their wells in an inactive state?

**Working
Session**

**Timelines,
Security,
Application**

- Have hard deadlines ever resulted in unanticipated consequences?
 - Reduced resource production
 - Receiverships
 - Etc.
- Incentives?
 - Tax breaks
 - Exemption from security deposits
 - Public recognition

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Next Steps

Where to from here?

Next Steps

Where to from here?

- Further investigation of this issue (more participating states, additional details, etc.)?
- Timelines for moving abandoned wells to reclamation?
- Well integrity risk models?
- Physical requirements for inactive \ temporarily abandoned wells, and plugged and abandoned wells?

Next Steps

Where to from here?

- Inactive \ temporarily abandoned facilities or pipelines?
- Adequacy of security deposits?
- Evaluation of other sectors (mining, nuclear, etc.)
 - How do they manage inactive infrastructure?

Do you like the combination of presentation and working session?

Protecting what matters

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