

TENURE PRESENTATION

Department of Energy
Tenure Branch

December 3, 2009

Notice

The material in this book does not have any legislative or official government sanction, and accordingly is not binding in any way upon the Government of Alberta, and in particular, the Department of Energy. It is accurate as to the date presented.

Agenda

Tenure Presentation – December 3, 2009

Gulf Canada Square Auditorium

401 9th Ave SW, Calgary

| | |
|---------------|---|
| 8:30 – 8:45 | Introductions – Marion Leonardo, CAPLA |
| 8:45 - 9:15 | Overview of the Tenure Branch – Brenda Allbright |
| 9:15 – 9:45 | SRR Update, Consolidation Letter, Continuations – Donna Crawford |
| 9:45 – 10:00 | Break |
| 10:00 – 10:30 | Good applications – Geology Perspective – David Pollock & Pierangelo Grande |
| 10:30 – 11:00 | Vested Wells, Undisposed Approvals – Grace Matias |
| 11:00 – 11:30 | Trespass – Claudia Cooper |
| 11:30 – 12:00 | Questions and Wrap-up |

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OVERVIEW OF THE P&NG TENURE BRANCH

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Tenure Branch

Peter Watson
Deputy Minister

Rhonda Wehrhahn
Assistant Deputy Minister
Resource Revenue and Operations

Brenda Allbright
Tenure Branch Head

Paul Batke
Director

Brenda Ponde
Director

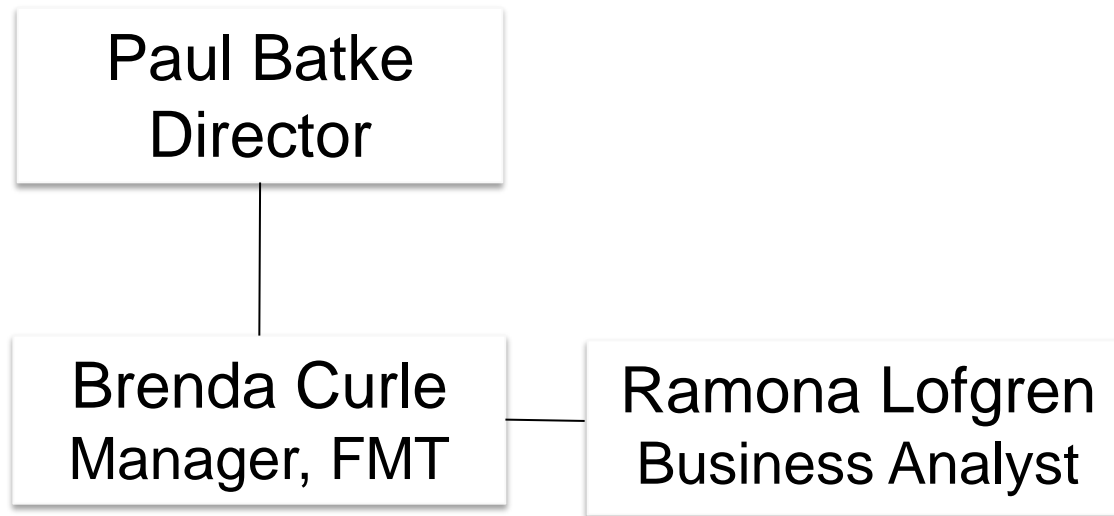
Retha Purkis
Director

Lori Enns
Director

Why Tenure Exists?

- Petroleum & Natural Gas Licence or Lease agreements provide our tenants with the legal right of occupancy
- Our work covers:
 - The life cycle of an agreement from beginning to end, except for royalty
 - Includes maintenance activities
 - Unit negotiations
 - Use of undisposed Crown land and vested wells
 - Freehold mineral tax
 - Review of well licences issued by the ERCB and assignment of percentages for royalty calculation

Regulatory Issues and Freehold Mineral Tax



- Any issues on Freehold Mineral tax assessment or collection
- Any concerns with legislation or regulations pertaining to Tenure

Unconventional Tenure (UT) and PNG Sales and Registrations

Retha Purkis
Director

Sharon Wong
Business Analyst, UT

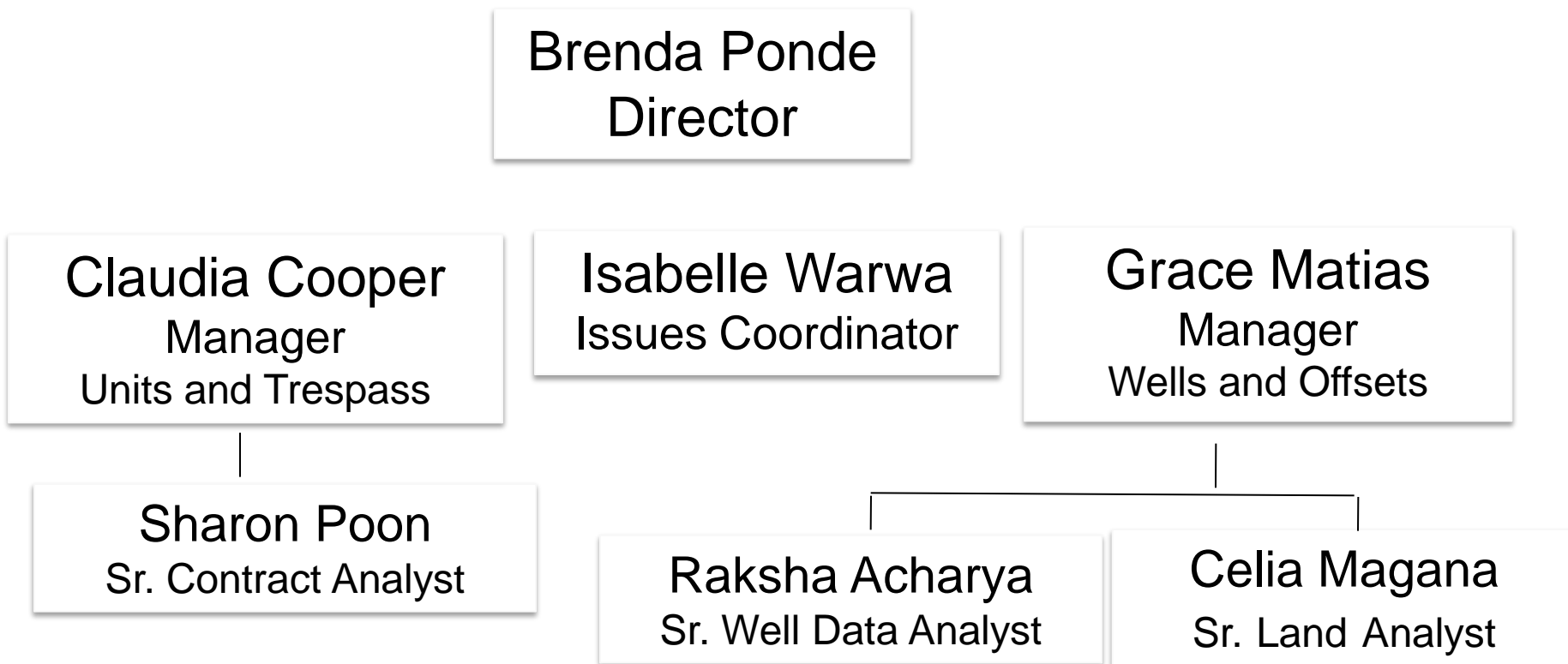
Chris Rudland
Manager, Sales & Reg.

Chris Fortner
ETS Coordinator

Dennis Stenerson
Senior Supervisor

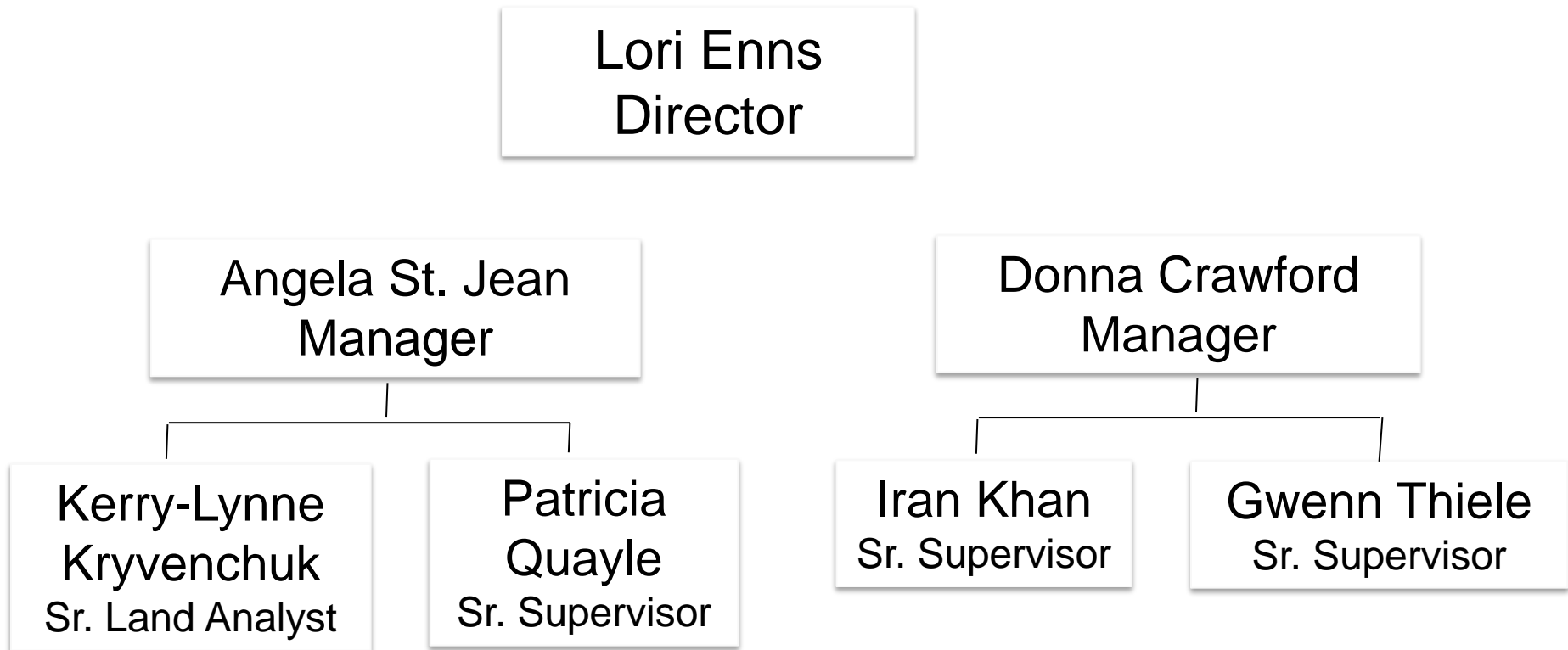
- Any issues on PNG sales (postings, bidding)
- Transfers and registration questions for all commodity types, historical searches, certified copies of agreements
- Unconventional tenure questions

Business Analysis



- Issues on vested wells, use of undisposed Crown land
- Offset notices or termination of offset compensation
- Questions on units negotiations, production allocation unit agreements or trespass

Tenure Operations



- Expiries of agreements and Section 15, 16 or 17 continuations
- Section 18 notices
- Surrenders, rental or royalty defaults
- Validation and grouping of licences

Web Presence

- www.energy.alberta.ca
 - Click on Our Business tab
 - Click on Tenure
- Click on Publications & Maps for the newest edition of the Tenure Brochure (September 2009)
- Click on Tenure Contacts to find phone numbers
- General Reception phone number for department
 - 780-427-8050

Tenure Review Process

- Last major review of legislation in 1998
- Project is in process of being scoped
- Sub-group of Tenure Industry Advisory Committee will meet this month to help develop the scope of the project
 - Members include Canadian Association of Petroleum Landmen, Canadian Association of Petroleum Land Administration, Small Explorers and Producers of Alberta, Canadian Association of Petroleum Producers, ERCB and the Department
- Stay tuned!

QUESTIONS?

SRR UPDATE, CONSOLIDATION LETTER, CONTINUATIONS

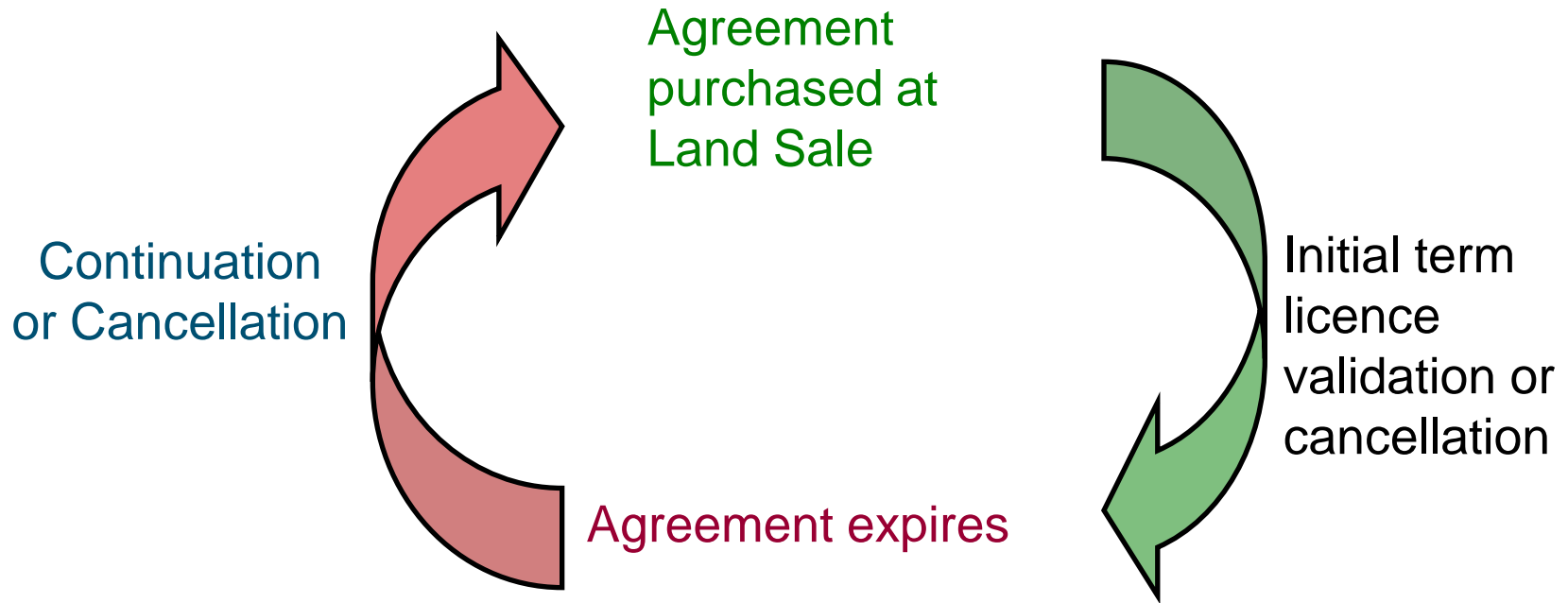
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Subsection Outline

- **Continuations – what it is**
 - Frequently asked questions
 - Timeline
- **Licence Validation...some examples**
 - Examples of unusual validations
- **Shallow Rights Reversion (SRR)**
 - Review and update
- **Consolidations**

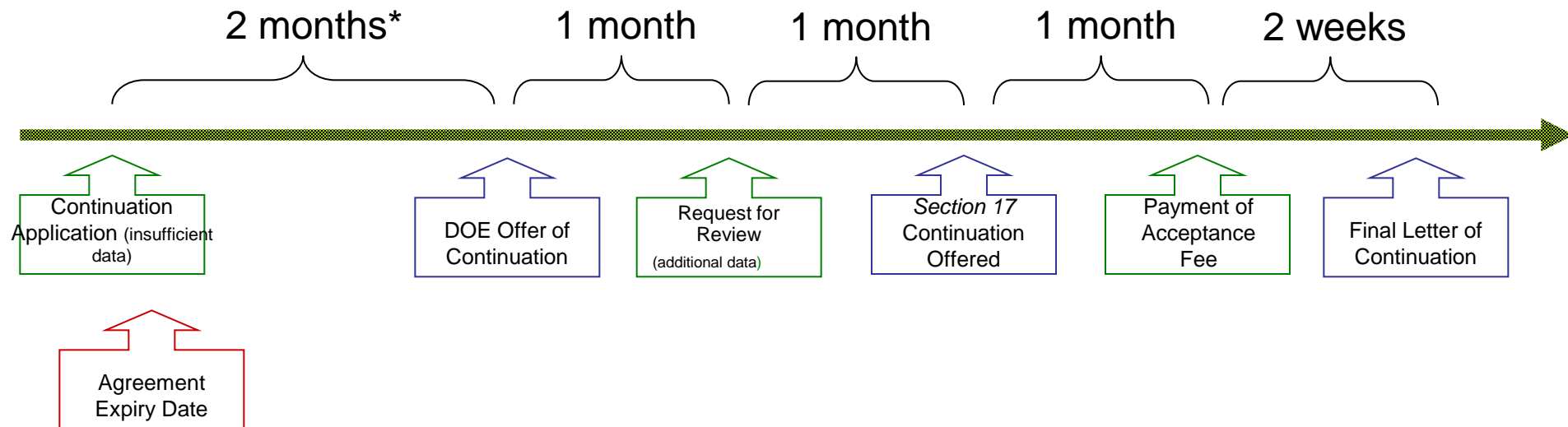
Continuation Process



- The process of continuation takes place after the expiry of a primary term lease or intermediate term licence
- Continuation is the process of a company proving they have upheld their obligation to prove productivity and/or produce the rights in their agreement

Continuation Timeline

All required geological data should be submitted with the initial application to be more successful in your continuation



*Advance Rulings, *Section 16* applications, or extension requests under *Sections 16(8), 18(6)* or *8(1)(h)* are normally responded to within one month from date of receipt

Frequently Asked Questions

1. Can I do work before I receive the final letter?
2. If I respond to my offer letter right away, can I get the final letter right away?
3. Can I leave a bottom-hole recorder in the well after expiry?

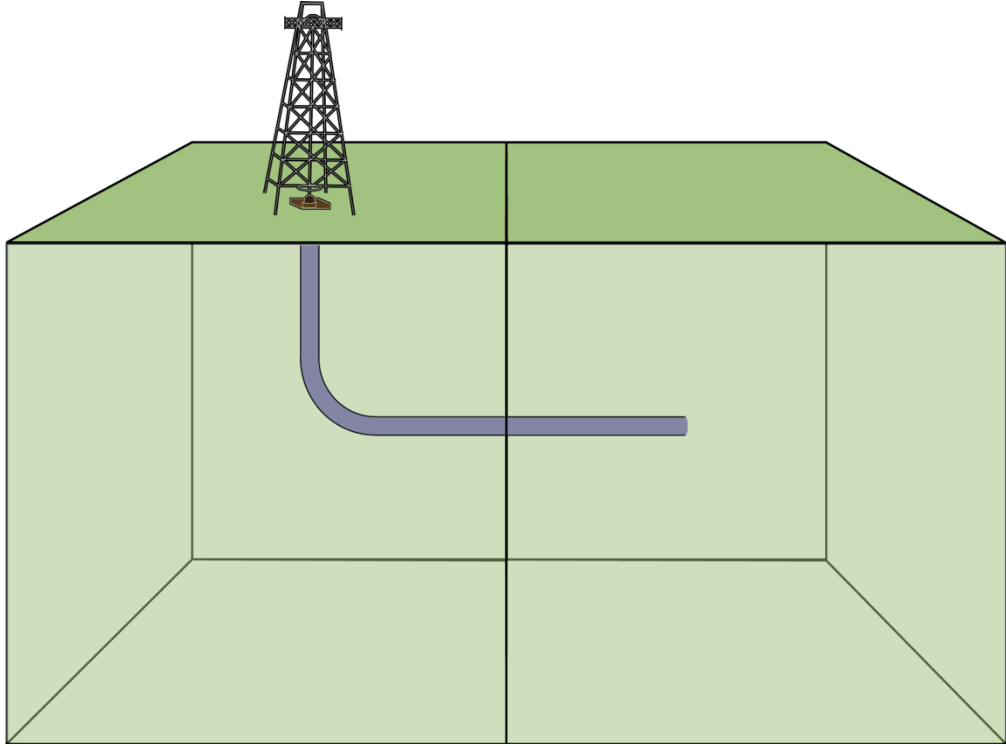
Frequently Asked Questions

4. If a well is producing before expiry and I have to shut it in to do repair work, can I turn it on again after expiry and before the agreement is continued?
5. If I accept a Section 17 offer, can the rent be paid when the charge appears on my monthly statement?
6. Co-Mingled Wells – many phone calls and questions



Validation of petroleum and natural gas licencessome examples

Horizontal Well Drilling from a Licence to a Lease

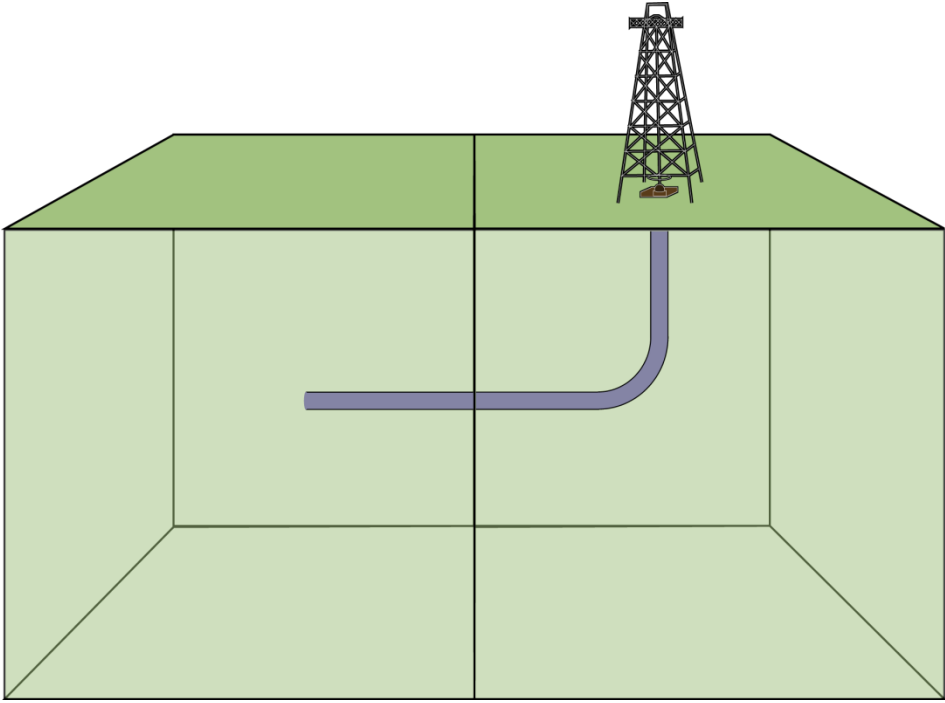


Initial Term Licence

P & NG Lease

Distance calculated for validation is the measured length of the wellbore path within the licence only

Horizontal Well Drilling from a Lease to a Licence

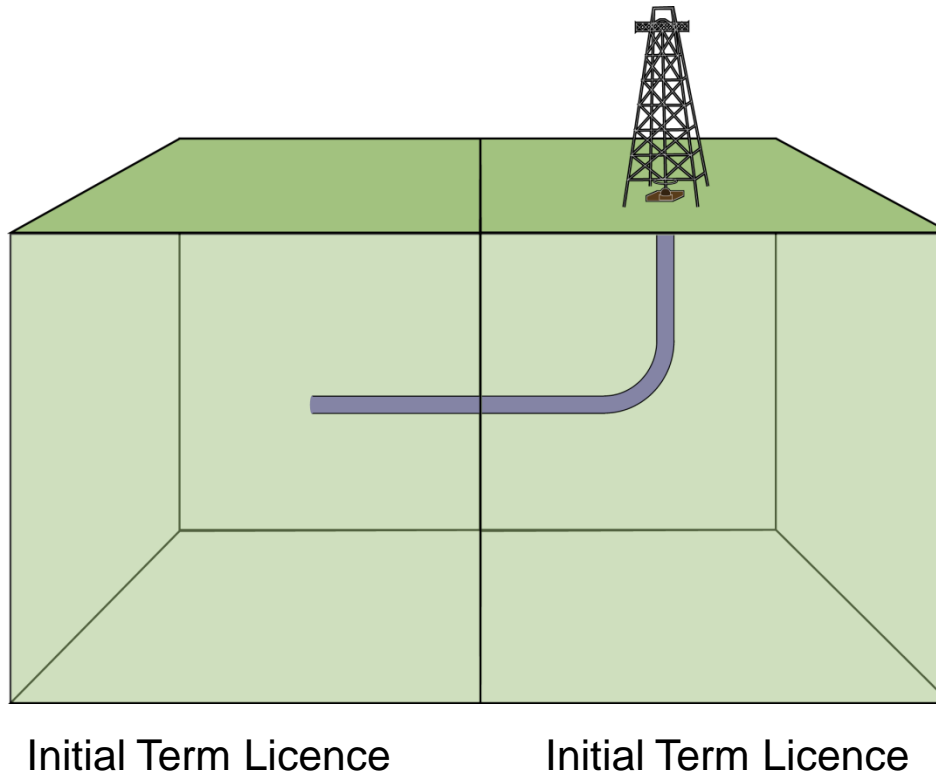


Distance calculated for validation is the total length of the wellbore path from surface to bottom hole

Initial Term Licence

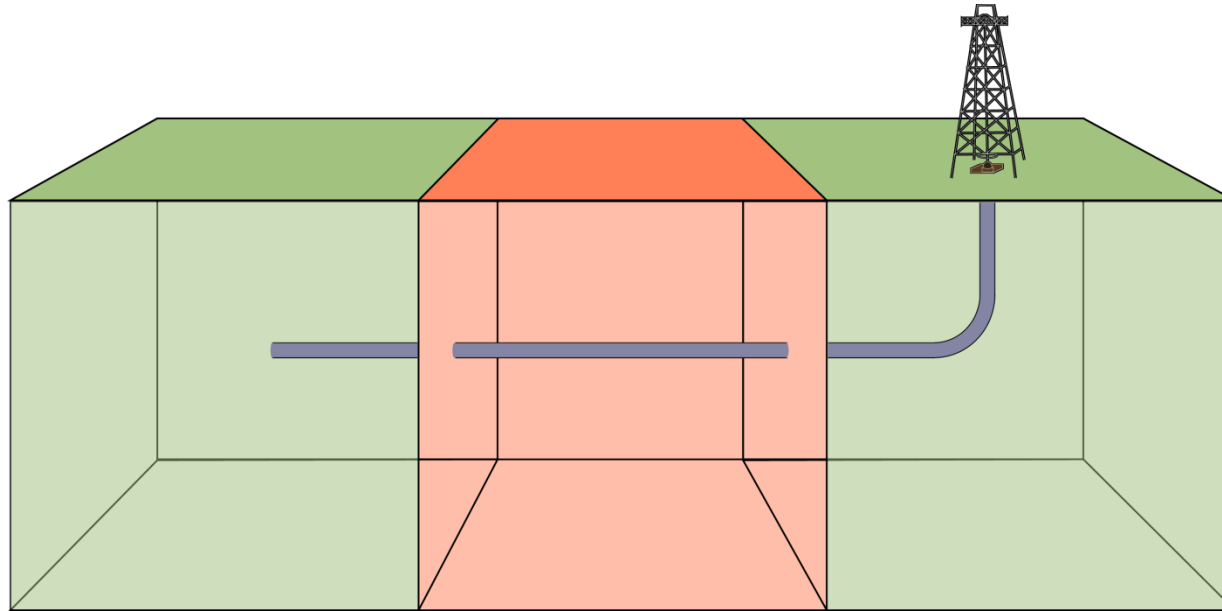
P & NG Lease

Horizontal Drilling from a Licence to a Licence



These licences must be grouped or the length of the wellbore path is prorated

Drilling Completely Through a Licence



Distance calculated for validation is the measured length of the wellbore path within the licence only

P & NG Lease

Initial Term Licence

P & NG Lease



Shallow Rights Reversion

Shallow Rights Reversion (SRR)

- The *Mines and Minerals Act* has been amended to include SRR under Section 82
- The P & NG Tenure Regulation will be updated prior to 2014
- SRR became effective January 1, 2009 for new agreements
- Agreements that existed prior to January 1, 2009 will be impacted when a SRR notice has been served and expired



Shallow Rights Reversion

- SRR will sever the petroleum and natural gas rights above the top of the shallowest productive zone from an agreement
- At expiry this will result in the agreement being continued from the top of the shallowest productive zone to the base of the deepest productive zone
- In some cases this may result in zone specific continuation

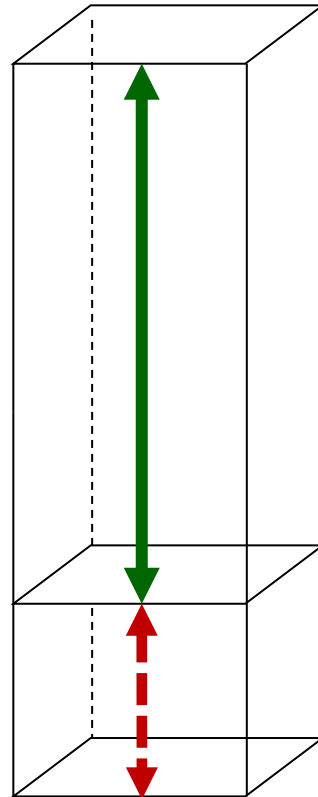
What Shallow Rights Reversion Looks Like

Deeper rights severance only

Shallow and deeper rights severance

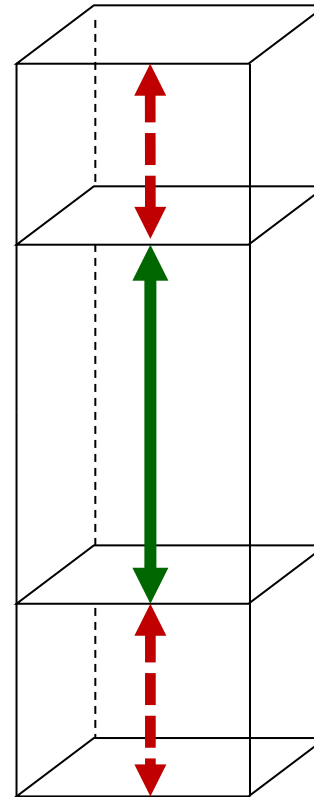
Need to know the deepest productive zone

Continuation is down to the base of the deepest productive zone

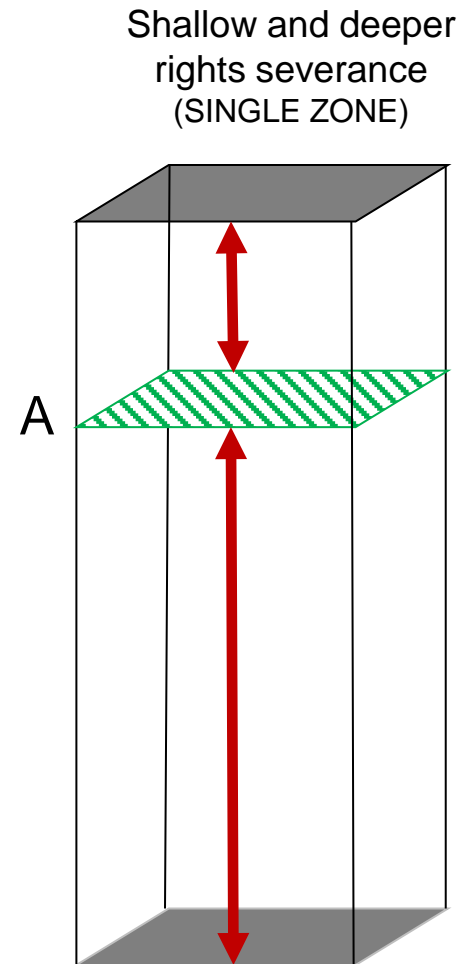
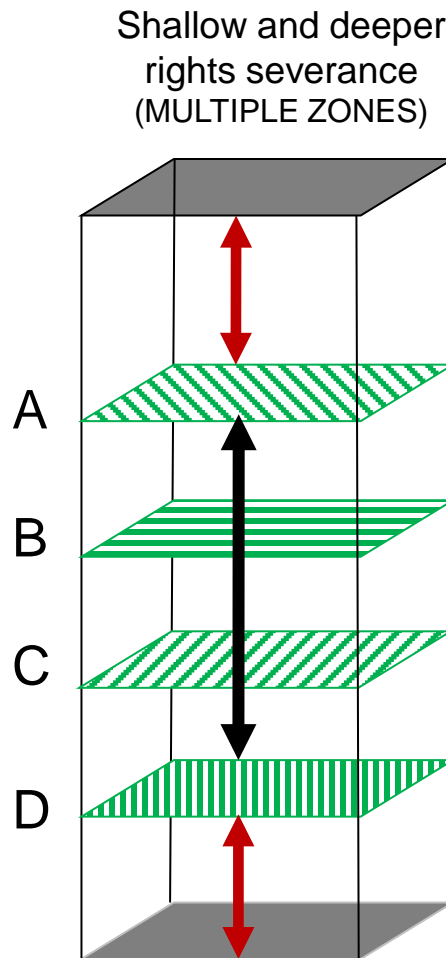
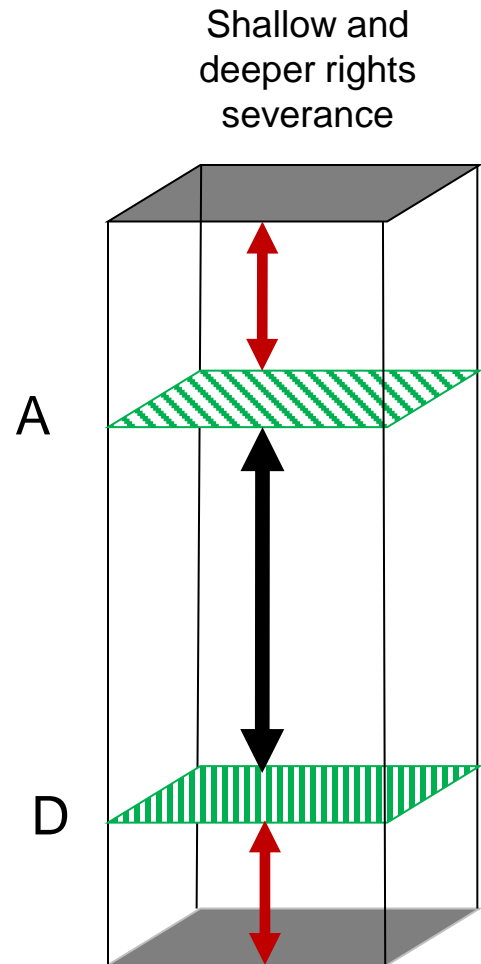


Need to know the shallowest and deepest productive zone.

Continuation is below the top of the shallowest productive zone to the base of the deepest productive zone



Examples of Shallow Rights Reversion





Shallow Rights Reversion

Types of Shallow Rights Reversion:

1. New petroleum and natural gas agreements issued January 2009 and later.
2. Existing expired agreements that have already been indefinitely continued.
3. Existing agreements that were issued prior to January 2009, and not yet expired.

Information Letter 2008-30

1. Agreements Issued After January 2009

- At expiry of a primary term lease or intermediate term licence, an agreement holder will need to prove both the shallowest **and** deepest rights to gain continuation
- At expiry of an initial term licence, validation will **not** include shallow rights reversion

2. Expired and Continued Agreements

- Shallow rights reversion notices must be served on agreements continuing indefinitely under Section 15 of the regulation
- The serving of shallow rights reversion notices are planned to begin in 2011 and will expire in 2014
- The notice will include the shallowest zone the department feels is productive based on public records

3. Existing Agreements Expiring After January 1, 2009

- They will be continued under deeper rights reversion rules
- Once continued, they will be added to the continued agreement count and served a shallow rights reversion notice in due course

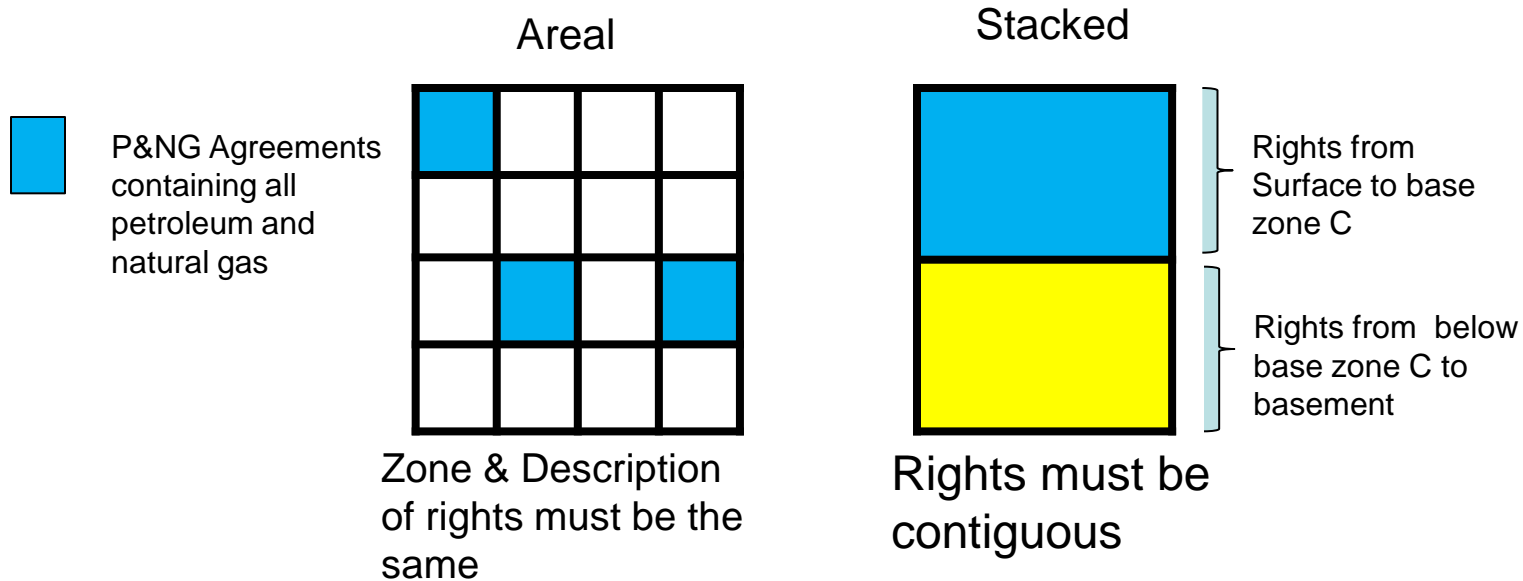
Applications for SRR

- Leases issued subject to SRR (post-January 1, 2009 agreements) will be applied for as set out in the P&NG Tenure Regulation
- **Applications for continuation following a SRR notice will be in accordance with *the Mines & Minerals Act***
- *The Mines and Minerals Act* does not include any late application provisions, so it is critical you keep excellent records

Consolidations

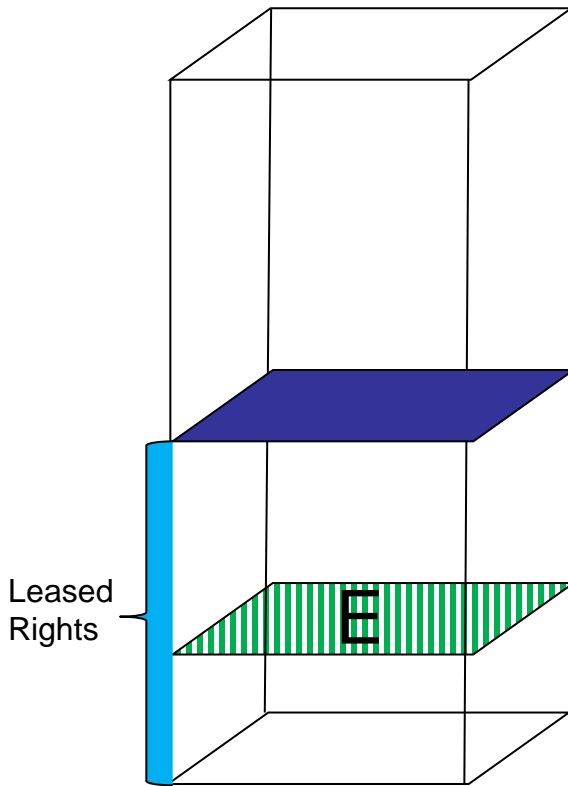
Consolidation

- Lessees may choose to consolidate stacked agreements to retain more rights at shallow rights severance
- In the past, only areal agreements could be consolidated



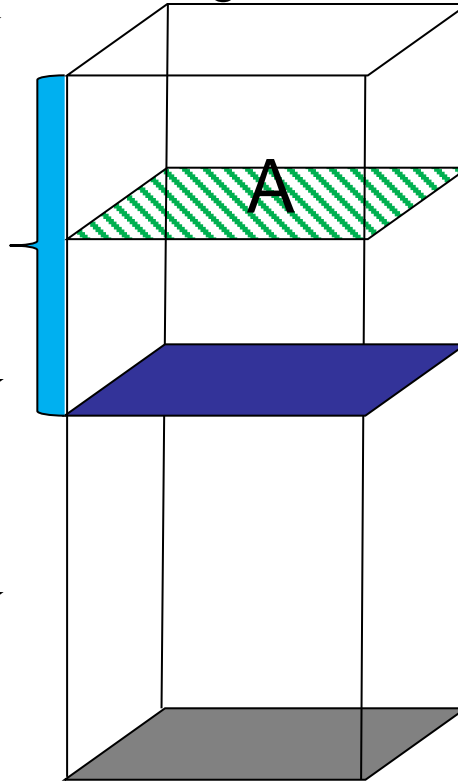
Example of Consolidating Agreements

Deeper agreement



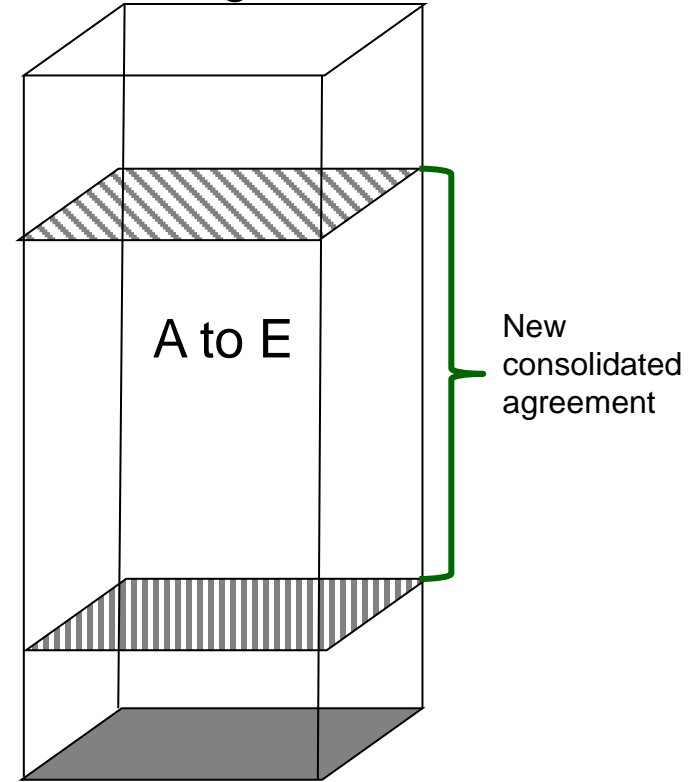
Zone Specific SRR

Shallow agreement



Zone Specific SRR

Consolidated agreement



Multiple Zones SRR

Website

- Department of Energy Website is found at www.energy.alberta.ca
- Tenure forms, FAQs, guides and regulations are found under:

“Our Business”, “Tenure” at:
www.energy.alberta.ca/OurBusiness/tenure.asp

Answers to Frequently Asked Questions

1. Can I do work before I receive the final letter?

The department's official answer to this question has to be NO. This remains a business risk decision. It is up to your company to make the decision, but I will try and help you determine if it is low, medium or high risk.

Low risk would be such as having been made a section 17 offer, you have accepted it and paid your acceptance fee but you do not have the final offer yet.

High risk would be when you have made an application for a Section 17 continuation but have not received an offer or a final letter. Section 17's, as well as mapping applications are high risk.

Low risk would be when you are going to continue to do work on a physically producing well, or on a qualifying well that drilled over expiry.

Medium risk would be if you were continuing work on a qualifying well that finished drilling prior to expiry – why medium? Because you may have miscalculated and it is not a qualifying well.

Just know that if you do not get a continuation to the zone you were expecting and you have conducted operations after expiry, you will be in trespass.

Answers to Frequently Asked Questions

2. If I respond to my offer letter right away, can I get the final letter right away?

If you are offered a straight Section 17 continuation & accept that offer with payment of the acceptance fee & rent, the dept. is able to finalize that continuation prior to the expiry of the one month offer period (*under Section 17(6) of the Regs .*) However, if that Section 17 offer is combined with a Section 15, or you've received an offer for a Section 15 or 16, the dept cannot respond prior to expiry of the offer response period (*pursuant to Section 14(3) of the regs.*)

Answers to Frequently Asked Questions

3. Can I leave a bottom-hole recorder in the well after expiry?

We will tell you NO, but once again, it's a business risk decision, because if you do not get continuation, your information collected would be in trespass.

4. If a well is producing before expiry and I have to shut it in to do repair work, can I turn it on again after expiry and before the agreement is continued?

We advise you NO in this case because once again if you do not get continuation, your production after expiry would be in trespass. *(However, if you have produced over expiry and ceased production after expiry, this would be a low risk decision and you would probably be safe to resume production prior to receiving our response. But that's your business decision. We will not say yes.)*

Answers to Frequently Asked Questions

5. If I accept a Section 17 offer, can the rent be paid when the charge appears on my monthly statement?

No, you must accept the offer with the acceptance fee **and** rent together as per Section 17(5)(c) of the regs.

6. Co-Mingled Wells

We get a variety of questions on co mingled wells in relation to continuations and I would like to emphasize one aspect. When applying for continuation using a co-mingled well, you must provide test data to prove that the deepest zone is contributing to overall production. If you don't, you will get continuation to a shallower zone and the agreement will then have to be reviewed by our trespass unit and you may be asked to plug off that deepest zone. There is an information Bulletin that has been published with regard to co-mingled wells. Information Bulletin 2007-01.

QUESTIONS?

GOOD APPLICATIONS - GEOLOGY PERSPECTIVE

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The Value of Good Continuations

How many P&NG Agreements are due to expire
in 2010 in Alberta?

What are they worth?

Guideline to Good Continuations

- Three Frequently Asked Questions
 - What more could we have sent?
 - What do you mean we don't own it?
 - When should we talk to the Crown?
- The question we ask the most
 - Have you read the Technical Guidelines?

Expectations

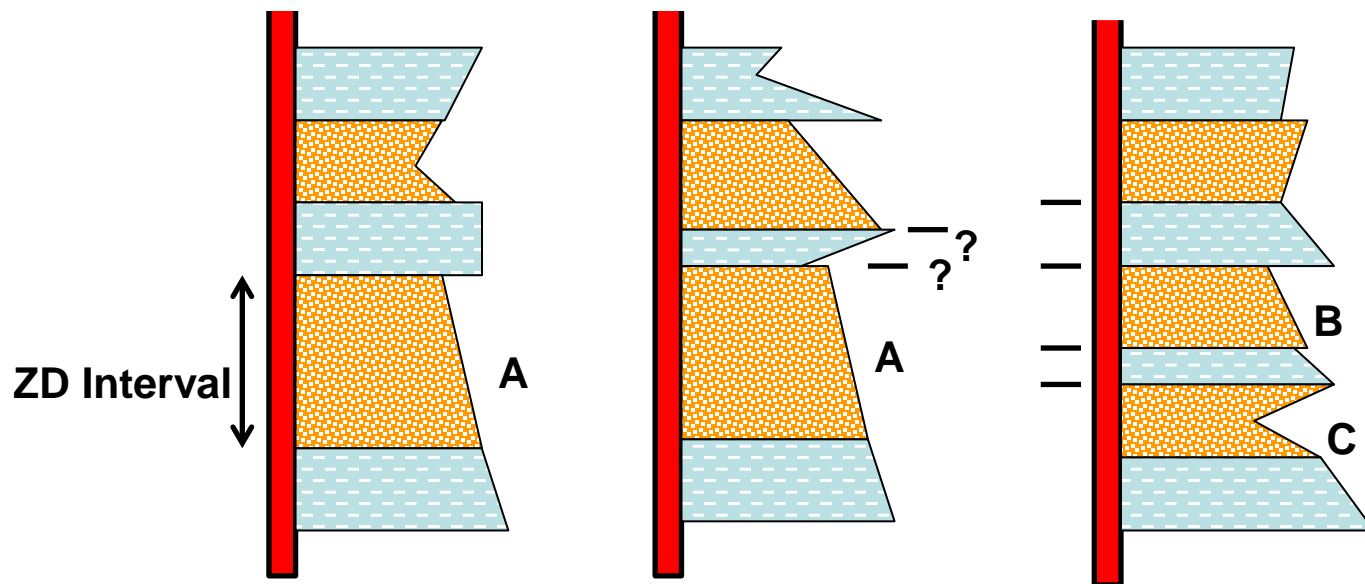
- The Crown expects submissions to be
 - Well presented
 - Well labelled
 - Include all appropriate support

- If we can't see it, we can't evaluate it
 - We cannot do it for you

Leased Rights

Know what you own

- DRRZD vs ZD
- Pay attention to excepted zones



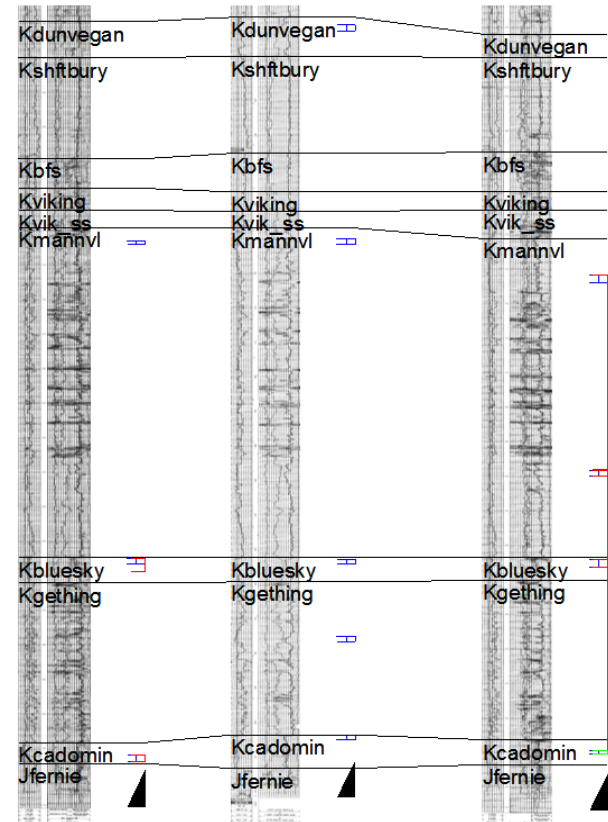
Leased Rights

- DRRZD or a ZD
 - Information Letter 1998-14
 - Mineral Rights Information Bulletin 2009-01
www.energy.gov.ab.ca/Tenure/609.asp
 - Online legend and map directory
www.energy.gov.ab.ca/Our_business/937.asp

Data Expectations

Confidential data (or not in the public database):

- Wells
 - Sufficient log for correlation
 - Completion reports
 - Full testing data
- Engineering data or analysis
- Geophysics
- Mapping



Mapping

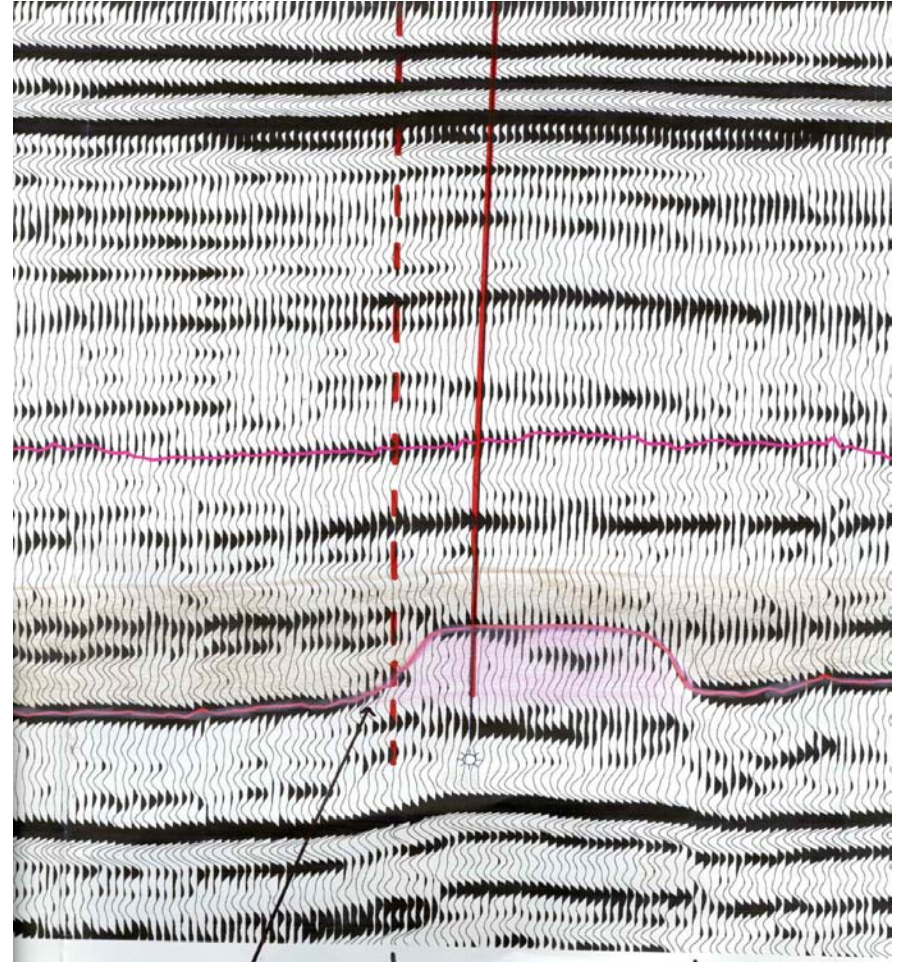
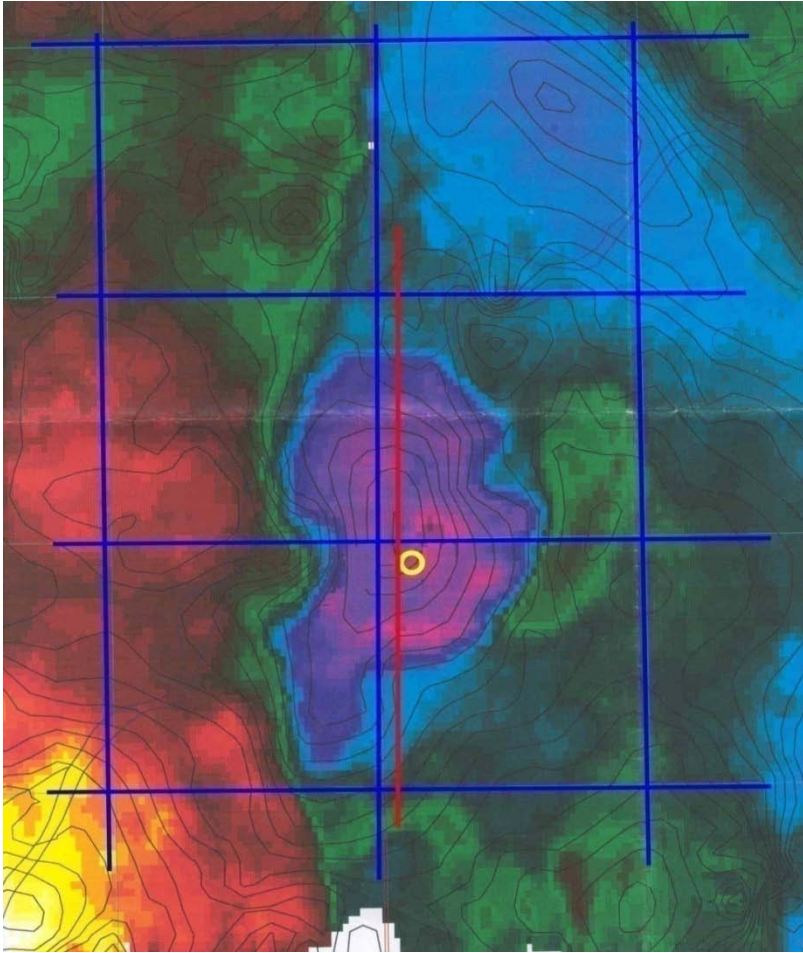
- Mapping should be:
 - Tied to well data, and/or
 - Tied to geophysics
 - Supported by engineering data where possible

- Is it development mapping?

Geophysics

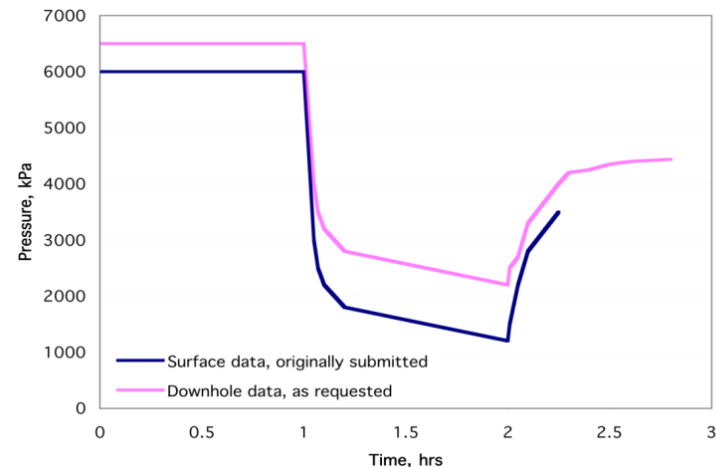
- Geophysics should be:
 - For 3-D: Presented with 2-D extracted lines and a synthetic created from a well with reservoir characteristics at the same time scale
 - For 2-D: Presented with a synthetic created from a well with reservoir characteristics at the same time scale, that is on or near the seismic line.

Good Illustrative Geophysics



Engineering

- Engineering data:
 - Pressure data
 - Drainage
 - Tests to illustrate productivity
 - Test data for deepest commingled zone (Information Bulletin 2007-01)



Geological Discussion

- A technical discussion
 - Ties all elements of an application together to present coherent case for continuation.
 - Opportunity to present the analysis as you want us to see it

The Crown's Point of View

- The Crown will evaluate all of the data you submit for your continuation
- Better supported analyses help us create better frameworks for decisions
- If you are uncertain call us for clarification before or during the process.

Guideline to Good Continuations - Summary

- Planning! Planning! Planning!
- Check rights
- Refer to Technical Guidelines
- Technical Discussion factual not anecdotal
- Well data is complete
- Maps, sections and seismic lines are well documented and labelled
- Seismic data includes a synthetic
- Is there something else we have that we could send but have not? Would I continue it?

QUESTIONS?

VESTED WELLS

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Vested Wells

- Section 32(1) of the *Mines and Minerals Act* states:

*“when an agreement expires or is surrendered or cancelled, the ownership of (a) any well in the location and the installations and equipment, including casing, incidental to the well,
...vests in the Crown in right of Alberta free and clear of all interests, charges and liens.”*

Vested Wells

- What does “vest” mean?
 - To place into possession or ownership of someone
- What is a vested well?
 - A well that vests to the Crown when affected land/rights are deleted from an agreement
- How do I know if a well has vested to the Crown?
 - Request an LSAS search on well location to confirm well is abandoned and not tied to an active mineral agreement

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Vested Wells

- What if the mineral rights have expired and the vested well is not abandoned but my company wants access to the well?
 - A non-abandoned vested well can be ‘linked’ to another active mineral agreement
 - send a letter to Well Administration or complete section 1a) of the ERCB Declaration Document
 - must be the well licensee or department will not link the well until ERCB has transferred the well licence

Addressing Wells for Abandonment

- Upon cancellation of mineral rights, all wells on the agreement are reviewed and affected well(s) are addressed for abandonment
- Department advises ERCB of well(s) requiring abandonment
 - ERCB sends abandonment package to well licensee
 - Includes a Declaration Document with options for response within 30 days of receipt

ERCB Declaration Document

- Option 1:
 - a) Link the well bore to another active mineral agreement, *or*
 - b) Post the rights for the next available land sale, *or* (note: existing wellbores are not acquired with land parcels)
 - c) Transfer the well to another licensee who has the mineral rights, *or*
 - d) Apply to reinstate the cancelled agreement

*Options 1a), b) & d) - Apply to the department but fax form to both organizations

ERCB Declaration Document

- Option 2:
 - Convert the well bore to disposal/injection
 - Apply first to the department for authority to dispose/inject in undisposed Crown, followed by an application to the ERCB for a well licence

- Option 3:
 - Abandon the well bore (within 60 days of submitting the Declaration Document)

When to Apply for Well Re-entry Approval

- Re-entry approval is required from the department where the well is abandoned and the land/rights have reverted back to the Crown
 - Must have all surface approvals (Mineral Surface Lease, Emergency Response Plans etc.)
- If there is an active mineral agreement on the well location (the well has not vested to the Crown) you must contact the current well licensee

Re-entry of Vested Wells

- Must receive approval from the department to re-enter the well bore before you apply to ERCB for a well licence
 - Fax (780 422-0382) or mail your application to the department, Well Administration
- No cost to acquire the use of a vested well bore

Application for Re-entry of Well bore

- Use the 'Request for Well Re-entry Authorization' form on our website at:

www.energy.gov.ab.ca/Tenure/608.asp#Administration

- Provide the following information:
 - Well Type (production, disposal, injection)
 - Formation (where operations are conducted)
 - Substance (oil, gas, other)
 - Indemnification to the Crown
 - Supporting technical data

Re-entry of Vested Wells

- If re-entry operations on undisposed Crown mineral rights are for injection or disposal purposes
 - Submit technical data to prove the zone is non-hydrocarbon bearing or that injecting into the proposed zone/well will not have a detrimental impact on any recoverable hydrocarbon bearing strata.
- Cannot proceed with injection or disposal until department grants approval

Vested Wells

- Active wells defined as water source, injection, disposal or observation at the time of cancellation vest to the Crown
- The department automatically authorizes the well licensee to continue to use the well bore for that purpose under Section 54(5) of the *Mines and Minerals Act*
- Once operations cease, approval no longer applies

Authorization Codes for Undisposed Approvals

- The department grants various approvals to conduct operations in undisposed Crown rights
- Since these approvals do not have corresponding mineral agreements, sequential approval numbers are assigned to note the type of approval, year and month eg) WDI0903245
 - WDI (disposal /injection well)
 - WOB (observation well)
 - WWS (water source well)
 - WAG (acid gas well)
 - WRE (re-entry well)
 - WRD (road allowance well)
 - WRR (re-entry, repair and re-abandon)

Authorization Timelines for Undisposed Approvals

| APPROVAL TYPE | OPERATIONS MUST COMMENCE WITHIN |
|--|---------------------------------|
| Disposal Injection Observation Water Source Acid Gas | 6 months |
| Re-entry of vested well | 2 months |
| Road Allowance Re-entry, Repair & Re-abandon | 1 year |

- If you encounter problems in meeting these timelines, you can re-apply for authorization with a valid reason

Forms for Undisposed Crown Rights

- To apply for access to undisposed Crown minerals:
 - ‘Request for Authorization to Conduct Operations in Undisposed Crown Mineral Rights’
- To apply for access to undisposed Crown minerals within a road allowance:
 - “Request for Authorization to access Crown Mineral Rights within a Statutory Road Allowance”
 - Refer to Information Letter 2003-05.
- www.energy.gov.ab.ca/Tenure/608.asp#Administration

QUESTIONS?

TRESPASS ON UNDISPOSED CROWN

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What is Trespass?

- Section 54(1) of the *Mines and Minerals Act* states:

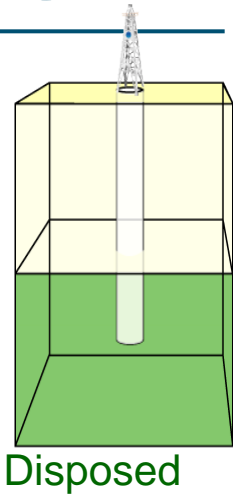
“No person shall win, work or recover a mineral that is the property of the Crown in the right of Alberta unless he is authorized to do so under this Act or by an agreement”.

Trespass Information Letter 2005-26

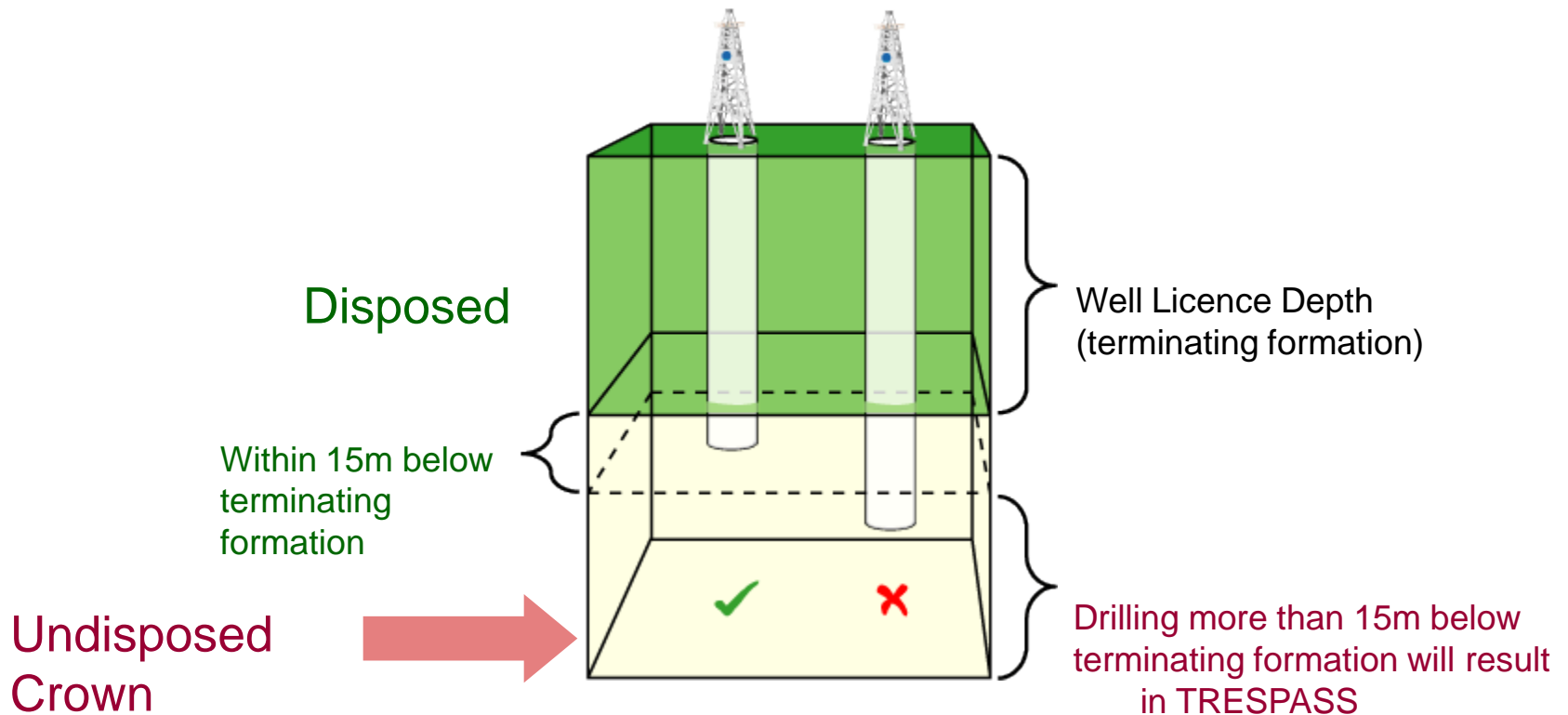
- Drilling, testing or terminating a well in, or producing from undisposed Crown rights (including road allowances) without prior authorization
- Drilling beyond the allowable maximum 15 metres overhole depth into undisposed Crown rights
- A misinterpretation of the Deeper Rights Reversion Zone Designation (DRRZD) or a Zone Designation (ZD)

What is Allowed in Undisposed Rights?

- ✓ Drilling through disposed or undisposed rights to get to leased rights
- ✓ Logging or taking rock samples (as required by ERCB)
- ✓ Drilling up to a maximum of 15 metres beyond the terminating formation indicated on your well licence (into undisposed Crown rights) in order to set logging tools
 - ERCB Directive 056

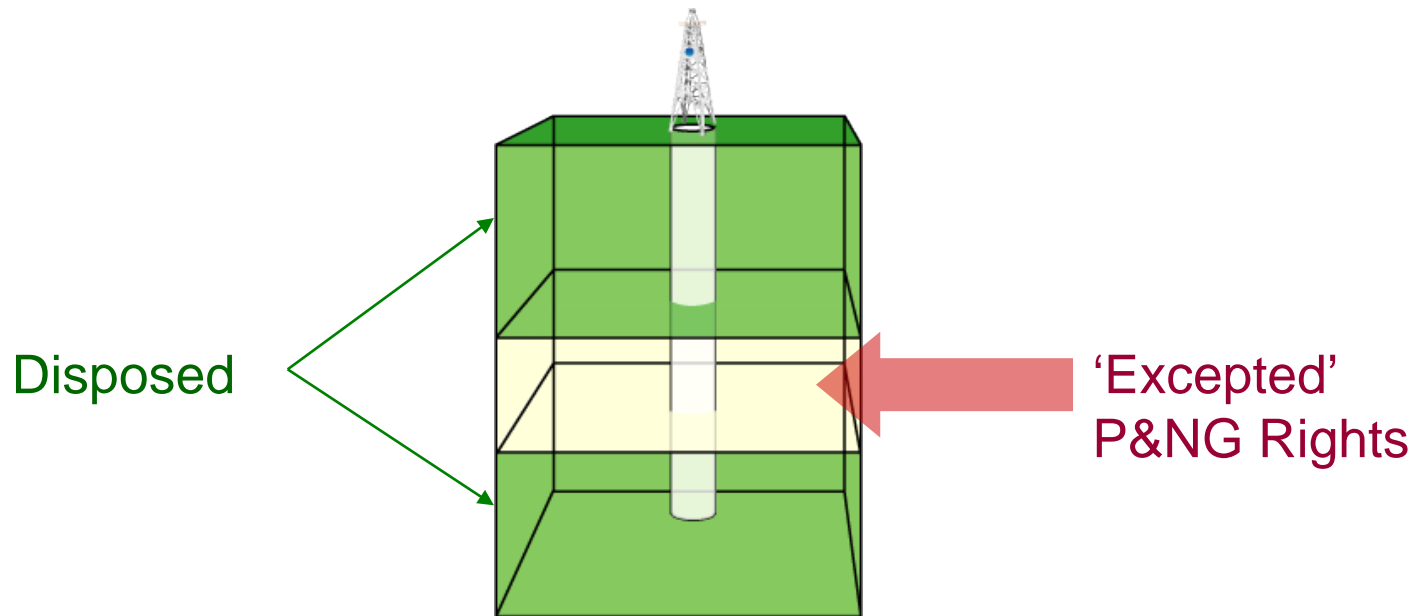


Overhole Trespass



- Cannot drill, terminate, test, core, produce, dispose or inject into undisposed Crown rights

Excepted Rights



- Can drill through undisposed rights to get to leased rights (logging as required by ERCB)
- Be cautious of the definition of the excepted rights versus your leased rights (ZD / DRRZD)

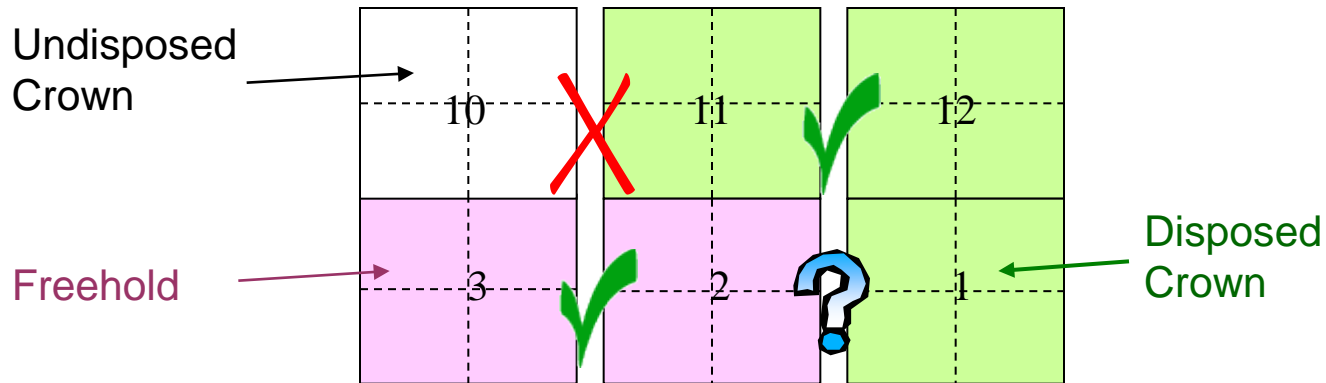
Road Allowances

- Undisposed Crown land
- Exceptions
 - road allowances within units
 - some oil sands leases
 - when a road diagonally intersects a section of land, it's aerial extent is considered part of the spacing unit and is included in the agreement

Accessing Minerals in a Road Allowance

- Information Letter (IL) 2003-05
- FAQs (Trespass - Road Allowances)
www.energy.gov.ab.ca/Tenure/1090.asp
- Road Allowance Application Form
www.energy.gov.ab.ca/Tenure/608.asp#Administration

Information Letter 2003-05



IL grants permission to drill through a road allowance between two disposed Crown sections (11-12) or two Freehold sections (2-3)



IL grants permission to drill through a road allowance between a Crown (1) and Freehold (2) section, but a Production Allocation Unit Agreement will be required before commencing production



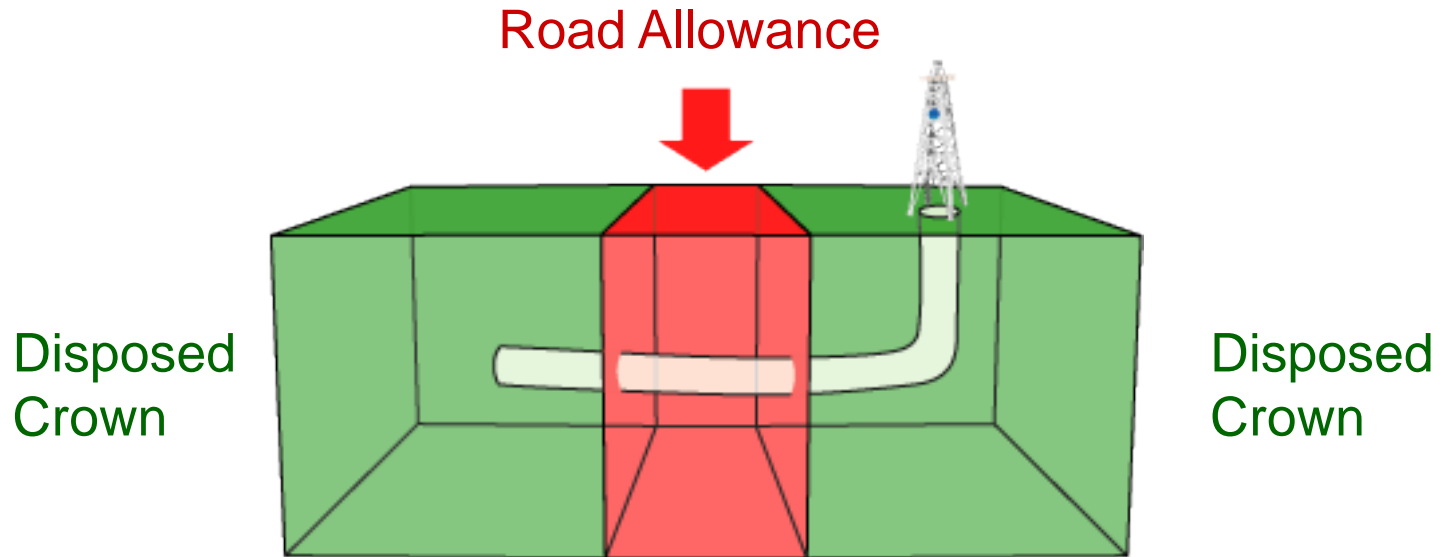
Permission will not be granted between undisposed (10) and disposed (11) Crown sections



Road Allowance Authorization

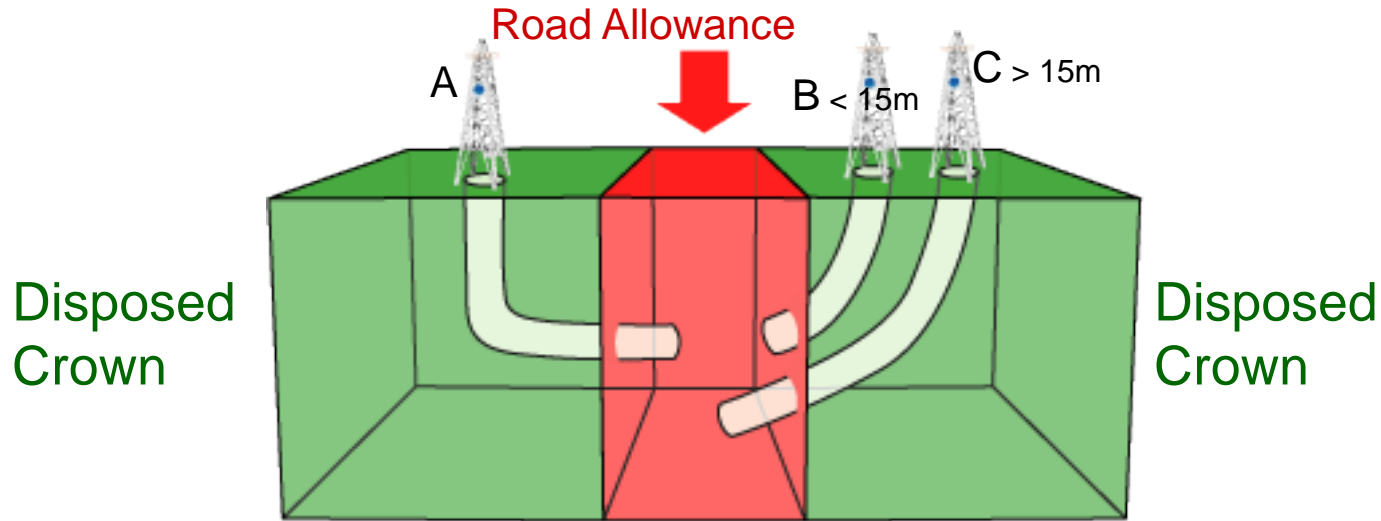
- Prior authorization is required
 - To produce 100% from the road allowance, or
 - To terminate in the road allowance between disposed Crown/Crown section or Freehold/Freehold section

Road Allowances



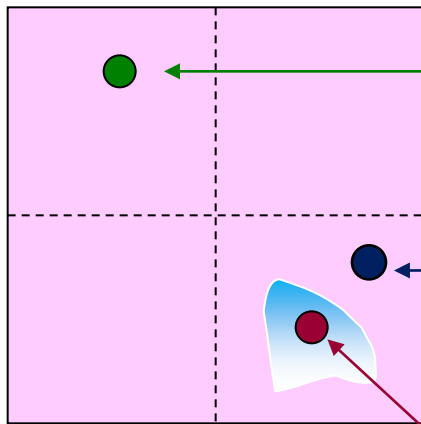
- Drilled through road allowance and terminated in disposed Crown (containing same rights) No authorization required.
- Cannot produce solely from the Road Allowance without prior approval

Road Allowances



- Well A: Prior authorization required to terminate a horizontal well into a road allowance
- Well B: Prior authorization *not* required to terminate a directional well up to 15 metres into a road allowance
- Well C: Prior authorization required to terminate a directional well more than 15 metres into a road allowance

Undisposed Crown Land





Freehold Section

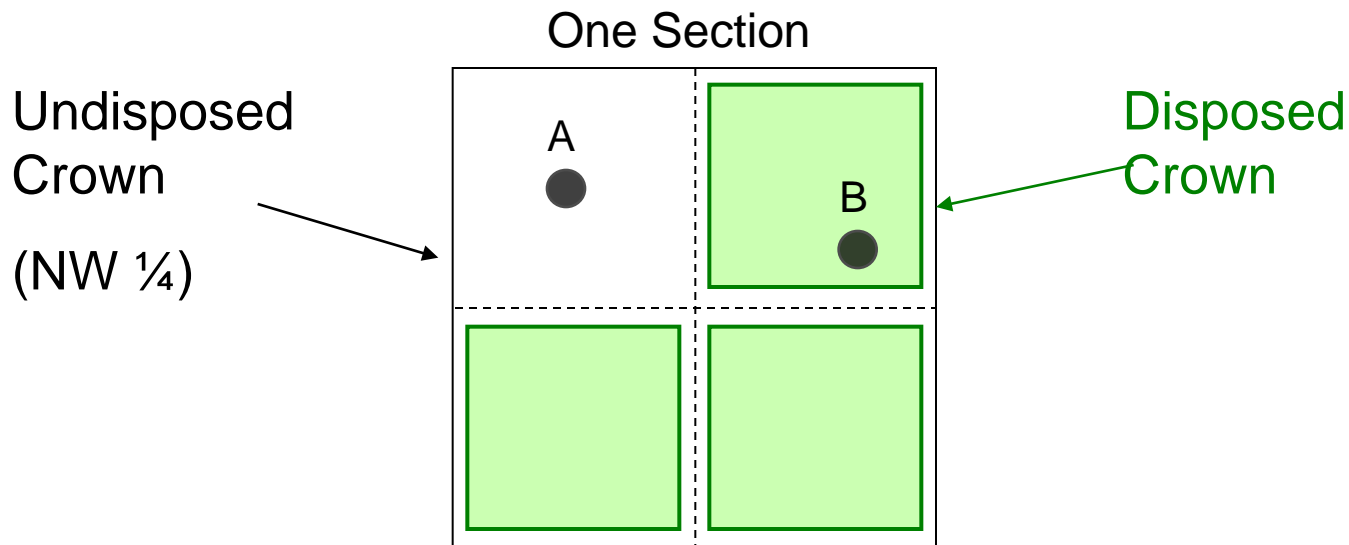
You can drill, test or produce oil from this well if you own the freehold rights

You may or may not be able to drill or produce this well, depending on the spacing, zone and substance

You cannot drill this well as it is on undisposed Crown land

-  Undisposed Crown land
-  Freehold land

Incomplete Spacing Unit



- 1) Can you licence and drill well A?
- 2) Can you licence and drill well B?
- 3) Can you produce well B?
- 4) Can you test well B for gas?

Self Declaring a Trespass



- Cease all activity immediately!
- Communication is critical with the:
 - Department of Energy (contact Trespass area)
 - Energy Resources Conservation Board (contact Audit Applications)



Self Declaring a Trespass

- Provide an explanation of the circumstances
- Data acquired in trespass must be made available to the public (Statutory Declaration required)
- Posting requests will be deferred until all data is publicly available

Consequences of Trespass

- \$50,000 penalty for each instance of trespass occurring **after** September 1, 2004
- Lose successfully acquired parcels at land sale
- Deferred Postings
- Cannot profit from production
- Release data acquired in trespass

- Energy Resources Conservation Board
 - Enforcement



Frequently Asked Questions

1. What type of data do I submit for a trespass?
 - Logs
 - Completion and Daily Drilling Reports
 - Flow Test Data (if well tested in overhole)
 - Directional survey
 - Any other pertinent information



Frequently Asked Questions

2. Can I appeal a trespass?
 - Reasons and circumstances for trespass
 - Additional data
 - Reviewed on a case by case basis

3. What happens if another company is trespassing against my rights?
 - Rights are leased (not undisposed)
 - Communication between lessees

Incomplete Spacing Q&A

- 1) Can you licence and drill well A?
 - No, the well licence would not be approved since it is located on open Crown.
- 2) Can you licence and drill well B?
 - Yes, providing you have the appropriate mineral rights.
- 3) Can you produce well B?
 - You can produce oil since you have the $\frac{1}{4}$ section drilling spacing for oil.
- 4) Can you test well B for gas?
 - Yes, if you have the complete drilling spacing unit for the substance you are testing.

QUESTIONS?