

ENCANA SHALLOW GAS INFILL DEVELOPMENT PROJECT
AND EUB APPLICATION NO. 1435831

JOINT REVIEW PANEL HEARING CONDUCTED PURSUANT TO:
SECTION 4.5 OF THE "AGREEMENT TO ESTABLISH A PANEL
FOR THE ENCANA SHALLOW GAS INFILL DEVELOPMENT PROJECT"
AND THE EUB'S RULES OF PRACTICE

PROCEEDINGS AT HEARING

OCTOBER 30, 2008

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Energy Resources Conservation Board
Govier Hall, 640-5th Avenue S.W.
Calgary, Alberta

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(PROCEEDINGS COMMENCED AT 8:30 A.M.)

THE CHAIRMAN: Good morning, Ladies and Gentlemen. I would like to begin by welcoming you back to these proceedings. I hope you have had a few good days of rest between -- since Saturday and now. And welcome. We'll start shortly.

PRELIMINARY MATTERS SPOKEN TO:

THE CHAIRMAN: But before we do, I have a couple of preliminary matters that I would like to raise this morning. The first is to make a correction to the record, to the transcripts on a statement I made; and I will give you specifically the volume, page number, and line number.

It's from Friday's proceedings. It's Volume 16, page 3675, and the specific reference is to line 21. Just by way of context, this was the exchange between Mr. Mousseau and Colonel Bruce on the matter of meetings that are, or were -- are planned, I believe, with the Chair of the ERCB. And in that context, I spoke to clarify the record that there had been no discussions involving this Panel with either the Board, the Chair of the ERCB, or, of course, the Minister of the Environment.

The record actually states, and I quote:

"I just want to be very clear there

1 has been discussion of meetings
2 with the chair of the ERCB..."

3 And the word "no" is missing from that line, so
4 the record should show -- it's funny how one word
5 changes the meaning rather significantly -- but I just
6 want to be very clear here once again that there has
7 been no discussion of meetings. So the word "no" must
8 be inserted in that particular sentence.

9 So that's the first matter that I wish to
10 deal with.

11 The second is, since we finished the
12 proceedings on Saturday and the hearing of evidence,
13 we have received I believe on, dated October 29th, a
14 letter from the Federation of Alberta Naturalists
15 asking that information, the information dealing with
16 their Access to Information Request to the Government
17 of Canada be submitted as evidence. And we, at this
18 point, have received their letter. It's on the Public
19 Registry. We have not received any attached documents
20 that deal with the response to their Access to
21 Information Request.

22 What I would like to do at this point is to
23 hear from the parties on the matter of whether this
24 information should be accepted as part of the record
25 at this point. And I'll call, perhaps, first from

1 Ms. Klimek in this respect. Ms. Klimek, please.

2 **SUBMISSIONS RE: ACCESS TO INFORMATION REQUEST OF THE**
3 **FEDERATION OF ALBERTA NATURALISTS, BY MS. KLIMEK:**

4 MS. KLIMEK: Good morning, Mr. Chair,
5 Panel Members, I do apologize for hacking but you may
6 have to put up with that for today.

7 I understood that those documents had been
8 sent, but I do have them on a stick if -- a memory
9 stick, to have them made available as I understand
10 they didn't get through.

11 Now, what these are, just for reference,
12 before I get into any submissions, were an Access to
13 Information that had been made quite some time ago, I
14 think it's gone into months and those arrived after
15 the close of evidence on Saturday. They are similar
16 to what you've already seen -- in fact, we haven't had
17 a good chance to go through them. And for
18 completeness, we put them all -- we weren't going to
19 go through and high grade them because we thought if
20 they went in, the whole lot should go in.

21 We see there is some repetition of documents
22 that are already before you. They deal with
23 environmental overviews and similar issues to what is
24 there. Now, our intention would be not to refer to
25 them in argument and our position is, for completeness

1 of record, they probably should be on the record.

2 I understand my friends have not had time to
3 look at it. And if there were anything arising out of
4 it, if they go on, I think we could address that in
5 the next day or so, you know, by written. But that's
6 just the gist of why we think they should be on for
7 completeness of record. We will not be referring to
8 them, but we think they may be something useful for
9 this Panel. Those are my submissions on that.

10 THE CHAIRMAN: Ms. Klimek, may I ask you a
11 question of clarification, first of all; in your view,
12 does this introduce new evidence or is this largely --
13 I think you've used the word "repetitive" of existing
14 information that we've already received.

15 MS. KLIMEK: Well, I would have to say in
16 all fairness, there probably is some element of
17 newness because it -- for example, it speaks of one
18 project called the "Battery 111". There's
19 environmental overviews, what's been found there. So
20 there should be some element, but it is similar to
21 what is there before. So I think it just enhances
22 what you've heard. It's not entirely new. It's not
23 like we're bringing up some new theme that you've not
24 heard before.

25 THE CHAIRMAN: Thank you, Ms. Klimek. I'll,

1 I'll, I'll call on Mr. Lambrecht next to see, sir, if
2 you have any comment you wish to make on this.

3 **SUBMISSIONS RE: ACCESS TO INFORMATION REQUEST OF THE**

4 **FEDERATION OF ALBERTA NATURALISTS, BY MR. LAMBRECHT:**

5 MR. LAMBRECHT: Mr. Chairman, we've received
6 the letter but not the documents to which it relates.
7 They do come from my client, so I assume it could be
8 said that the Government of Canada has these documents
9 in its possession but I have not seen them, nor has my
10 colleague, Mr. Drummond, the litigation team here. We
11 are operating under the AEUB Rules of Practice and
12 these provide in section 40 that:

13 "Unless the Board otherwise
14 directs, no documentary evidence
15 may be presented unless the
16 evidence was filed and served in
17 accordance with Section 16."

18 I think this has not been filed and served in
19 accordance with 16. The Panel has been very generous
20 during the hearing in admitting documentation, but, of
21 course, all the parties had then a chance to speak to
22 that evidence.

23 We're now after the close of evidence and
24 since this does not introduce new themes, I think it's
25 fair to say that the existing evidence goes to the

1 theme, adding I don't know what weight, if any, this
2 additional new material would bring. But we are after
3 the close of evidence and there's no opportunity for
4 the parties to speak to this. So I would submit that,
5 as matter of procedural fairness, it would be within
6 the Board's power to decline to admit these documents
7 and on -- because of non-compliance with the Rule and
8 because in essence the theme to which the evidence
9 would go has been addressed in other evidence.

10 THE CHAIRMAN: Thank you, Mr. Lambrecht.

11 Are there other interventions before I call on
12 Mr. Denstedt with EnCana? There seem to be none.

13 Mr. Denstedt, please.

14 **SUBMISSIONS RE: ACCESS TO INFORMATION REQUEST OF THE**

15 **FEDERATION OF ALBERTA NATURALISTS, BY MR. DENSTEDT:**

16 MR. DENSTEDT: Thank you, Mr. Chairman, I
17 find myself in the unusual position of agreeing with
18 Mr. Lambrecht this morning. A couple additional
19 comments to make. I think, by Ms. Klimek's own
20 admission, that this is an amplification of themes
21 that are already in front of the Panel. Our view of
22 those themes are clear on the record and require no
23 amplification other than what Ms. Klimek intends to do
24 in final argument.

25 The Board, the Board's test for this is, is

1 pretty simple. Is, is the evidence that is being
2 tendered reasonably necessary for the Board to make
3 its decision; and, two, does it raise an issue that
4 has not been canvassed by the Panel or not clear on
5 the record. I think it fails on both those counts.
6 The issue that these -- this information would go to
7 is clear on the record, and again, that, that's by
8 Ms. Klimek's own admission.

9 I would also remind the Board of the first
10 Rule of the Board's Rules of Practice, which is to
11 ensure that there's a fair expeditious and efficient
12 determination of the, the Project on its merits.

13 And the submission of this evidence would
14 require EnCana to go away, review the information,
15 there's a reference to an EO for Battery 11 which is
16 not in the NWA. Hundreds of EOs have been performed
17 on wellsites and facilities outside the NWA; are all
18 those then relevant? We would have to make sure that
19 the Board has a sampling of those in front of it.
20 That would take time.

21 There's a high probability, then, that people
22 may want to cross-examine on that. I think it lends
23 to a very inefficient and ineffective process when
24 it's not needed and for those, those reasons,
25 Mr. Chairman, I think there's no prejudice to any

1 party by the exclusion of these documents.

2 THE CHAIRMAN: Thank you, Mr. Denstedt. I
3 think at this point I would just like to have a short
4 recess to discuss the matter with, with my colleagues
5 and with counsel, so if you would -- excuse me for one
6 sec.

7 Ms. Klimek, my -- one of my colleagues asked,
8 which I think is very appropriate, if you would care
9 to speak again to this matter if there's anything more
10 that you wish to add.

11 **REPLY SUBMISSIONS RE: ACCESS TO INFORMATION REQUEST OF THE**
12 **FEDERATION OF ALBERTA NATURALISTS, BY MS. KLIMEK:**

13 MS. KLIMEK: I'll be brief.

14 First, I just want to make clear, it wasn't
15 any delay on the Federation's in getting it in. We
16 just didn't get it until recently. And I would
17 suggest that if you do -- there is a way of dealing
18 with all of this and that is the amount of weight you
19 give to it, if you admit it, that you would not -- we
20 would recognize that it's not been examined under
21 cross-examination. And again, I just reiterate it's
22 for completeness of record of what is -- for this
23 matter. That's all my submissions.

24 THE CHAIRMAN: Thank you, Ms. Klimek, we
25 will take a short break and be back quickly with a

1 decision on this regard.

2 (BRIEF BREAK)

3 (PROCEEDINGS ADJOURNED AT 8:43 A.M.)

4 (PROCEEDINGS RECONVENED AT 9:05 A.M.)

5 THE CHAIRMAN: Ladies and Gentlemen, thank
6 you for your patience in waiting for us to discuss
7 this matter and returning with our decision, which I
8 will now relay to you, assuming I can read my bad
9 writing here.

10 But in any case, we start off by saying the
11 Panel considers it unfortunate that this information
12 was not received earlier. We regret that it took so
13 long for the Government of Canada to respond to the
14 Access to Information Request and we thank the
15 Federation of Alberta Naturalists for trying to secure
16 this information to assist us in our deliberations.

17 We would be prepared to accept this
18 information if we felt that it was entirely new
19 material and that -- sorry, let me back up here.

20 We would be prepared to accept this
21 information if we felt it was not entirely new
22 material and followed a theme already -- excuse me, I
23 can't read my writing here. I've got to back up on
24 this.

25 Yeah, as I say, we, we would be prepared to

1 accept this if we felt it was entirely new information
2 and would assist us in our deliberations.

3 However, if we were to accept this
4 information, we would, in all fairness, need to
5 adjourn and reconvene to allow the opportunity for
6 cross-examination and then reschedule final argument.

7 And given that the Panel or that -- sorry,
8 given that the parties consider this information is
9 similar to what has been received before, we do not
10 consider it to be necessary for our conclusions.

11 Also, we see little purpose in receiving it
12 at this point and giving it no weight.

13 So, in conclusion, we've decided not to
14 accept this material as evidence since it is
15 consistent with the theme of information before the
16 Panel and do not consider the information necessary
17 for our deliberations.

18 So that concludes our decision. I hope it is
19 clear to all of you. Thank you.

20 **(RULING)**

21 THE CHAIRMAN: We will now proceed to final
22 argument and I'll outline the order of argument.
23 We'll start with Mr. Denstedt with EnCana, hear
24 EnCana's final argument, the Coalition, the Government
25 of Canada, and then we'll return as necessary to the

1 Coalition and EnCana. So that will be the order in
2 which we will proceed.

3 Mr. Denstedt, we would like to break roughly
4 around 10:30, if you think that is appropriate. And
5 I'll leave that with you obviously in terms of how you
6 want to structure your final argument. And if that's
7 fine with you, I would ask you now to proceed.

8 **CLOSING ARGUMENT OF ENCANA CORPORATION, BY MR. DENSTEDT:**

9 MR. DENSTEDT: Thank you, Mr. Chairman,
10 Panel Members, Panel staff. I'm pleased to be here
11 today and deliver these final submissions.

12 **PART ONE - INTRODUCTION**

13 I will be lengthy this morning. There's been
14 a lot of issues canvassed at the, at the hearing and I
15 intend to cover the vast majority of them so the Panel
16 has a full and complete understanding of EnCana's
17 position.

18 I've given a copy of my notes to the Court
19 Reporter so that she can insert references to the
20 evidence in transcript as we go along and so I don't
21 have to stumble over them and probably add another
22 hour or so to my, my final argument. So, hopefully
23 that's an efficient process, sir.

24 Mr. Chairman, I think it's important to start
25 with the context here and make it clear that this

1 hearing is not about esoteric legal arguments. There
2 will be a few, but that's not what it's about. And
3 it's not about contractual rights and it's not about
4 who gets to sign permits and it's not about black box
5 models that generate information.

6 What this hearing is about is about making
7 good decisions. And it's about making decisions that
8 support sustainable development and it's about making
9 decisions that balance the rights and the concerns of
10 all parties in a fair and a cautious manner.

11 And Mr. Chairman, approval of this Project at
12 this time presents an opportunity to the Panel to
13 support sustainable development.

14 EnCana has more experience operating in the
15 native prairie environment than any other oil and gas
16 company in Canada. It's drilled more than 20,000
17 wells in the shallow gas complex and is a leader in
18 the evolution of sustainable shallow gas practices.
19 EnCana continuously evaluates and sets practices to
20 identify areas of improvement, adopt new practices and
21 new technologies to improve both efficiency and to
22 reduce its environmental footprint, SpiderPlow being
23 just one example of that.

24 [Footnote 1: Exhibit 002-123,
25 Package of Slides & Opening

1 Statement of EnCana, pages 8-9]

2 Over the past 35 years EnCana has drilled
3 more than 9,000 wells at CFB Suffield and more than
4 1,000 wells in the NWA. This experience and EnCana's
5 successful track record demonstrate that EnCana will
6 operate within the NWA in an environmentally
7 responsible manner.

8 [Footnote 2: Exhibit 002-123,

9 Package of Slides & Opening

10 Statement of EnCana, pages 8-9]

11 No company is better suited to execute this
12 Project in a sustainable manner than EnCana.

13 That's why EnCana is asking this Panel to
14 approve its Shallow Gas Infill Project in the NWA by
15 doing the following:

16 (i) Determining that the Project
17 is not likely to cause any
18 significant adverse environmental
19 effects provided that EnCana
20 implements the extensive mitigation
21 it has proposed and that a permit
22 be issued under the *Wildlife Area*
23 *Regulations; and.*

24 [Footnote 3: C.R.C. c. 1609]

25 (ii) by approving the three wells

1 applied for under the Energy
2 Resources Conservation Board
3 Application Number 1435831 as being
4 in the public interest,

5 both of those subject to the conditions EnCana
6 has recommended and whatever other conditions the
7 Panel may recommend.

8 This infill development is consistent with the
9 ERCB's mandate to ensure that the Province's resources
10 are developed in a manner that maximizes recovery or
11 have a regard to the environmental and social effects
12 of the Project. Mr. Chairman, EnCana has demonstrated
13 that it can develop this Project in an environmentally
14 and responsible manner and approval should be
15 recommended.

16 And it is one of the themes in this, this
17 hearing, one of the themes throughout Canada today is
18 about sustainable development. I've been on a lot of
19 Joint Review Panel hearings. Proponents are rightly
20 urged by the public, by regulators and ENGOs to design
21 and develop projects that promote sustainability and
22 EnCana has done just that.

23 Sustainable development is listed in the
24 ***Canadian Environmental Assessment Act.***

25 [Footnote 4: S.C. 1992, c.37]

1 And in the Guidelines for the Environmental
2 Impact Statement as a guiding principle for this
3 assessment, this assessment. Sustainable development
4 seeks to meet the needs of present generations without
5 compromising the ability of future generations to meet
6 their own needs. And there are three pillars to that:

- 7 - Preserving environmental
- 8 integrity
- 9 - Improving social equity; and
- 10 - Improving economic
- 11 efficiency.

12 [Footnote 5: Exhibit 001-005,
13 Final Guidelines for the
14 Preparation of the Environmental
15 Impact Statement, Section 3.4]

16 Those are the three fundamental pillars. This
17 Project has been designed to meet all three of those
18 pillars.

19 And besides the clear economic benefits, an
20 increasingly important part of the value of natural
21 gas is its relatively low carbon intensity as an
22 energy source. Natural gas is the lowest carbon
23 emissions per unit of energy of all hydrocarbon
24 sources. This resource, this particular resource at
25 Suffield, in the NWA, has the added advantage of being

1 close to existing infrastructure and requiring only a
2 small incremental footprint to develop.

3 The Project will make available to consumers
4 approximately 125 billion cubic feet of gas, enough
5 natural gas to heat 80,000 homes for a decade, 80,000
6 homes for 10 years.

7 If this natural gas is left in the ground,
8 its energy potential will have to be supplied by some
9 other source. And although renewable sources are
10 being developed by companies, including EnCana, that
11 energy will not be capable of replacing natural gas
12 drilling during the life of this Project. Natural gas
13 provides a low carbon bridge to our energy future.

14 In addition, the Project will provide jobs
15 for local residents and support nearby communities.
16 At the informal hearing session in Medicine Hat, two
17 oil and gas service companies attended, Flint Energy
18 Services and Cerpro Energy. They spoke about EnCana's
19 current operations in the proposed Project. Mr. Randy
20 Marshall, who's lived within 50 miles of the NWA for
21 50 years and has been gainfully employed for 20 years
22 on the Suffield Block noted:

23 "There is a good news story here
24 that's being overlooked ..."

25 That's what he said. Those were his words. And

1 it's:

2 "... the social and economic
3 benefits."

4 [Footnote 6: Hearing Transcript,
5 October 20, 2008, page 2575, lines
6 1-10]

7 And they are unique benefits. He noted that
8 exploration and development of oil and gas in the area
9 allows workers to remain in the local community and
10 earn their living where they grew up, a hallmark of
11 sustainability, for sustainable communities in this
12 country.

13 If this Project is approved, it will provide
14 employment continuity for local residents by employing
15 welders, truck drivers, mechanics, service companies,
16 supply stores, heavy equipment contractors,
17 reclamation specialists, all for the long-term.

18 Mr. Chairman, this Project is a development
19 that meets the needs of the present without
20 compromising the ability of future generations to meet
21 their own needs, stay in their own communities, work
22 at jobs, stay with their families. It protects the
23 integrity of the NWA and it provides long-term, stable
24 economic benefits to the local community. EnCana's
25 extensive experience with this type of development

1 throughout southern Alberta, and specifically on CFB
2 Suffield, gives it the unique capability to develop
3 this resource in a sustainable and environmentally
4 responsible manner that respects the goals of the NWA.

5 And Mr. Protti said this in the Opening
6 Statement:

7 "We are proposing something that we
8 think ... really demonstrates our
9 commitment to ... a project that
10 embodies sustainable development
11 principles."

12 [Footnote 7: Exhibit 002-123,
13 Package of Slides & Opening
14 Statement of EnCana, page 6]

15 [Footnote 8: Hearing Transcript,
16 October 7, 2008, page 392,
17 lines 4-7]

18 So that's the basis of EnCana's application. And
19 in spite of this, this Project has attracted
20 considerable criticism from various interveners,
21 including the Government of Canada. And briefly let
22 me enumerate those criticisms:

23 (i) First of all, the methodology
24 that was used in the completeness
25 of the EIS;

- 1 (ii) EnCana's approach to the EIS
2 (including the analysis of native
3 prairie integrity and Project
4 footprint);
5 (iii) the ability to reclaim the
6 area has been criticized; and
7 (iv) the transparency and
8 robustness of the pre-disturbance
9 process has been criticized.

10 There have also been concerns raised that there
11 are gaps in the regulatory system to manage this
12 Project. Mr. Chairman, I'm here to tell you that is
13 just not accurate.

14 There have also been concerns raised that
15 there are -- sorry, there is evidence filed by the
16 intervenors to support these criticisms.

17 Mr. Chairman, they do not, in any meaningful or
18 credible way, call into question the reliability of
19 EnCana's EIS and the significance determinations that
20 have been made here.

21 They don't call into question the
22 effectiveness of the mitigation measures proposed or
23 the soundness of the PDA process. This is a Shallow
24 Gas Infill Project that will use minimal disturbance
25 techniques, effective and well-proven mitigation to

1 ensure that wildlife, vegetation and native prairie
2 are not impacted in any significant way.

3 For this reason, the criticism put forth by
4 the interveners and the Government of Canada are,
5 quite frankly, without merit.

6 In the midst of all this criticism, in the
7 midst of it all, my friends seem to have forgotten
8 that just five years ago the Government of Canada,
9 after consulting with many of the very intervenors who
10 appeared before you, created the NWA with the full
11 knowledge, the full knowledge that shallow gas
12 development was a compatible land use and the
13 Regulatory Impact Analysis Statement specifically
14 provided that shallow gas recovery would continue.

15 [Footnote 9: Exhibit 002-132,
16 *Regulations Amending the Wildlife*
17 *Area Regulations - Regulatory*
18 *Impact Analysis Statement*]

19 Similar assurances were made to EnCana by the
20 Government of Canada in writing and in that same
21 letter, the very same letter, EnCana was commended for
22 its environmental record.

23 [Footnote 10: Exhibit 002-030,
24 Reply to Comments to EIS-004 to
25 AWA, IR No. AWA-58-B, page 5]

1 And Mr. Semenchuk from the Federation of
2 Alberta Naturalists appeared at the informal hearing
3 and he agreed. He said at the time the NWA was
4 designated, they knew there was the potential for
5 future expansion of gas wells in the NWA.

6 [Footnote 11: Hearing Transcript,
7 October 18, 2008, page 2359,
8 lines 1-13]

9 The decision that shallow gas development is an
10 acceptable land use in the NWA was made by the
11 Government of Canada in 2003. That decision has been
12 made. Your decision, Mr. Chairman, Panel Members, is
13 whether the proposed Project can be carried out in a
14 manner that is not likely to cause any significant
15 environmental effects. That's the decision you're
16 charged with making.

17 Let me provide an outline of my remarks
18 today. First, I'm going to focus on EnCana's
19 application and the legal framework which the Panel
20 must review of this Project. Following that, I intend
21 to address some of the specific regulatory issues
22 related to this application. And finally, I will
23 address the specific issues on the environmental side
24 that have been raised by the interveners and the
25 Government of Canada.

1 **PART TWO - APPLICATION & LEGAL FRAMEWORK**

2 **A. The Project Application**

3 So the Project is, is relatively well known.
4 EnCana is proposing an Infill Project within the
5 boundaries of the existing NWA and its proposing to
6 drill 1275 sweet shallow gas wells and develop
7 associated infrastructure over three drilling seasons.

8 To minimize environmental impact, EnCana will
9 be using existing infrastructure including access
10 trails and no new roads will be constructed.

11 During operations, standard maintenance
12 activities will be undertaken to ensure that the
13 infrastructure performs both safely and efficiently.

14 The Project will be part of EnCana's ongoing
15 shallow gas drilling of CFB Suffield and the infill
16 drilling will displace other segments of EnCana's
17 overall Suffield program. As a result, overall
18 activity levels in the area will not increase from
19 existing levels in the area today. And Mr. Heese said
20 that in testimony. The development is not incremental
21 to current activity.

22 [Footnote 12: Exhibit 002-010,

23 EIS, Volume 1, Section 2, page 2-1]

24 So EnCana is seeking two separate decisions from
25 the Panel:

1 - First, it's asking the Panel to
2 recommend, pursuant to section 34 of the CEAA, that
3 EnCana's proposed wells and infrastructure are not
4 likely to cause any significant adverse environmental
5 effects when taking into consideration the proposed
6 mitigation measures and subject to the condition that
7 the PDA process be complied with. The Panel's
8 recommendations will allow DND, as the Responsible
9 Authority, to issue a permit under the *Wildlife Area*
10 *Regulations* and allow EnCana to conduct both its
11 Pre-Disturbance Assessment process and to carry out
12 this Project.

13 - Second, EnCana is asking the Panel to
14 approve, pursuant to the ***Oil and Gas Conservation***
15 ***Regulations***, [Footnote 13: Alta. Reg. 151/1971], the
16 three wells applied for under Application 1435831, on
17 behalf of the ERCB with the condition that the PDA for
18 those wells be conducted in the season prior to
19 construction and processed in accordance with EnCana's
20 proposal.

21 So EnCana has been asked by intervenors and
22 through Information Requests why did it apply for
23 1275 wells under CEAA and only three well licences
24 under the ERCB? So let me be clear on that one point
25 so there's no confusion.

1 EnCana did this because it wanted the full
2 extent of its plans for drilling in the NWA to be
3 considered, that the entire project be evaluated by
4 the appropriate authorities. This process also avoids
5 unnecessary delays in duplication which are both
6 requirements of the CEAA [Footnote 14:
7 Section 4(1)(b.1)] that could arise from separate
8 reviews.

9 Finally, Mr. Chairman, it's the responsible
10 thing to do. EnCana could have applied one well at a
11 time. But would that have been transparent? Would
12 that have been fair to the interveners and the public
13 and the Government of Canada? EnCana did what was
14 right. It brought forward its entire plans, its
15 entire proposal for the NWA so that there could be a
16 fair and full discussion of the issues.

17 So let me touch briefly on EnCana's proposed
18 condition of compliance with the PDA process and how
19 it fits within the regulatory process. I'll deal with
20 the PDA process, the substantive part, when I get to
21 that later in the morning.

22 The proposed PDA process is quite
23 straightforward. Its primary purpose is to avoid
24 environmentally sensitive features. Features are
25 identified, species-specific setback is applied, that

1 ensures avoidance. It's a simple elegant process.

2 EnCana has been refining and improving this
3 process over the last two years. It's been informed
4 by expert discussion and feedback as well as
5 information from stakeholders. They have conducted
6 simulations to provide a practical process that will
7 not only work to protect the environment, but will
8 also raise the bar for all developments in sensitive
9 areas.

10 The development of the PDA process is a
11 state-of-the-art siting procedure facilities -- for
12 facilities in sensitive areas and is a significant
13 benefit of this Project.

14 The PDA process is described in detail in
15 EnCana's Reply evidence, namely Appendices E
16 [Footnote 15: Exhibit 002-110, Reply to Intervener
17 Submissions] and J [Footnote 16: Exhibit 002-117,
18 Appendix J: Demonstration of the Pre-Disturbance
19 Assessment (PDA) Process]. It involves an initial
20 desktop siting followed by wildlife and vegetation
21 surveys as well as a field constructibility
22 assessment. Once the fieldwork is completed, EnCana
23 will adjust its locations to ensure it is maintaining
24 applicable environmental setbacks. If maintaining a
25 setback is not possible, EnCana will retain a

1 specialist or specialists to determine that specific
2 mitigation measures can be implemented to ensure that
3 the process -- the purpose of the setback, protection
4 of wildlife, protection of rare plants, protection of
5 wetlands is complied with. Then the proposed site
6 will be referred to SEAC, Suffield Environmental
7 Advisory Committee, for review as a non-routine
8 application. A hallmark of sustainability is about
9 making informed decisions so that the three objectives
10 of sustainability, environmental protection, social
11 equity, economic efficiency, are all balanced fairly.
12 EnCana believes SEAC is the right party to do that.

13 EnCana believes its process, having SEAC
14 conduct that independent review of non-routine
15 activities is the appropriate method for generating
16 good decisions that balance parties' rights and
17 concerns.

18 And there's been a lot of comment and
19 criticism, and perhaps confusion among the intervenors
20 and the Government of Canada about this process; so
21 let me repeat it.

22 EnCana will be abiding by setbacks unless two
23 things are met: (1) site-specific mitigation can be
24 developed and is appropriate; and (2) an independent,
25 expert third party, SEAC, has recommended those sites

1 to the Base Commander for approval. There are no
2 loopholes. There are no escape hatches.

3 Should the Panel approve the three wells
4 applied for under Application 1435831 and grant EnCana
5 the well licences, EnCana will conduct a new PDA to
6 ensure compliance with any conditions of the approval.
7 That PDA will undergo SEAC review and recommendation
8 to the Base Commander. If the three-well Applications
9 do not receive the support of SEAC, EnCana will
10 withdraw those licences and otherwise allow them to
11 expire.

12 [Footnote 17: Hearing Transcript,
13 October 17, 2008, page 2089,
14 lines 18-22]

15 So, accordingly, EnCana is not asking the Panel
16 to approve the specific location of each individual
17 component; EnCana is, EnCana is asking the Panel to
18 approve the PDA process itself.

19 Mr. Chairman, this process will ensure the
20 environment is protected, informed decisions are made,
21 and no significant adverse effects, environmental
22 effects will occur.

23 So although this is not about esoteric legal
24 arguments, let me give you a preliminary legal
25 discussion which you are going to have to decide and

1 it needs to be part of your decision.

2 **B. Preliminary Issue: Requirement for a Permit under**
3 ***Wildlife Area Regulations***

4 And the preliminary issue is: What does
5 "wildlife area" within the meaning of the *Wildlife*
6 *Regulations* mean?

7 EnCana has spent millions of dollars on this
8 assessment. I'm sure the Government of Canada and the
9 intervenors have spent endless hours, resources and
10 dollars participating in this process. And they did
11 so because they wanted to make sure that this Project
12 was evaluated in an open and comprehensive review of
13 the issues.

14 Having said that, there is a preliminary
15 decision for the Panel to make. The Regulation
16 provides that no person shall carry on any commercial
17 or industrial activity in a wildlife area unless he
18 does so under and in accordance with the permit issued
19 by the Minister pursuant to Section 4. The
20 preliminary question, as I indicated, is what is meant
21 by the term "wildlife area" in the meaning of that
22 Regulation and if mines and minerals are included
23 within the meaning of that definition.

24 So the *Regulations* were amended in two ways
25 in 2003. [Footnote 18: *Regulations Amending the*

1 *Wildlife Area Regulations*, P.C. 2003-919, C. Gaz.
2 2003.II.1843]

3 First, "wildlife area" was amended to read as
4 follows, and I quote:

5 "'Wildlife area' means an area of
6 public lands set out on
7 Schedule 1."

8 Schedule 1 of that *Regulations* sets out the legal
9 definition of the NWA which includes mines and
10 minerals.

11 Second, the ***Canada Wildlife Act*** defines
12 "public lands" as follows, and I quote:

13 "'Public lands' means lands
14 belonging to Her Majesty in Right
15 of Canada and lands that the
16 Government of Canada has power to
17 dispose of, subject to the terms of
18 any agreement between the
19 Government of Canada and the
20 government of the province in which
21 the lands are situated ..."

22 [Footnote 19: ***Canada Wildlife Act***,
23 R.S.C. 2985, c. W-9, Section 2]

24 Mines and minerals under the NWA do not belong to
25 the Government of Canada nor can they be disposed of

1 by the Government of Canada and they are specifically
2 excluded from the definition of "wildlife area".

3 Canada's expropriation of the lands now
4 comprising the Base did not include mines and minerals
5 which, by law, include the right to work, use and
6 access those minerals. These rights were reserved to
7 the Province and leased EnCana. This means that the
8 rights to mines and minerals are not public lands
9 within the meaning of the **Canada Wildlife Act** and
10 therefore are not within the meaning of "wildlife
11 area" pursuant to the *Regulations*.

12 You'll recall, Mr. Chairman, I asked each and
13 every party what they thought that meant and I got
14 various responses.

15 Colonel Bruce takes the view that the
16 exclusions of mines and minerals from the NWA
17 designation does not include a right of access.

18 [Footnote 20: Hearing Transcript,
19 October 24, 2008, page 3609,
20 lines 16-20]

21 And I'm sure we'll hear more about that from the
22 Government of Canada.

23 The law, however, provides that rights to
24 mines and minerals include the right to recover and
25 access those mines and minerals.

1 [Footnote 21: **Alberta Energy Co.**
2 **V. Goodwell**, 2003, ABCA 277,
3 **Natural Resource Transfer Act;**
4 **Alberta Land Titles Act]**

5 The Access Agreement, [Footnote 22:
6 Exhibit 007-005, Suffield 1975 MOU/Master Agreement],
7 does not diminish that right. It simply provides for
8 a methodology for how EnCana's rights are to be
9 exercised during the currency of that agreement.

10 So where Section 3 of the *Regulations*
11 prohibits "commercial or industrial activity" in any,
12 quotation marks, "wildlife area", unless it's done
13 under a permit, the mines and minerals underlying the
14 NWA are not part of that wildlife area and therefore,
15 literally, by Section 3 of the *Regulations*, it does
16 not appear to apply to activities in or related to
17 mines and minerals.

18 The principles of statutory interpretation
19 establish that all the words in a statute and
20 regulation must have meaning. Therefore the exclusion
21 of mines and minerals must have some meaning under the
22 law. The law, [Footnote 23: **Alberta Energy Co. v.**
23 **Goodwell**, 2003 ABCA 277, **Natural Resource Transfer**
24 **Act; Alberta Land Titles Act]**, clearly establishes
25 that a grant, reservation or lease of mines and

1 minerals includes the rights to recover those mines
2 and minerals otherwise the mines and minerals have no
3 value. So when the mines and minerals are excluded
4 from the Wildlife Regulations, it would appear that
5 the access rights that go along with them were
6 excluded as well.

7 So while EnCana has never questioned the
8 appropriateness of this review, and they have spent
9 millions of dollars participating in it, and they
10 believe that there's an importance of a full and
11 transparent environmental review of the Project, and
12 they are committed to that, as a matter of law,
13 Mr. Chairman, you must decide whether mines and
14 minerals are, in fact, included within the definition
15 of "wildlife area" within the meaning of the
16 *Regulations*.

17 **C. Timing of Process and Pace of Development**

18 Let me turn to some other primary issues.
19 One of those is the timing of the process and pace of
20 development which was canvassed at the hearing.
21 EnCana plans to drill its 1275 infill wells over three
22 winter drilling seasons. The intent is to minimize
23 the Project footprint by optimizing the construction
24 period so EnCana can start with reclamation and
25 recovery as soon as possible.

1 [Footnote 24: Hearing Transcript,
2 October 15, 2008, pages 1454-1455]

3 Furthermore, even if the Project is approved,
4 EnCana's overall pace of development at CFB Suffield
5 will remain consistent with previous years. Mr. Heese
6 said this:

7 "The number of wells that we have
8 proposed in the National Wildlife
9 Area in any given year is roughly
10 equivalent to our current drilling
11 programs elsewhere on the Suffield
12 Block. So if approval is granted
13 to proceed with these wells, it
14 will not be in addition to an
15 equivalent amount elsewhere on the
16 block, but it will effectively
17 replace activity that may have
18 happened elsewhere on the block..."

19 [Footnote 25: Hearing Transcript,
20 October 14, 2008, pages 1312-1313]

21 EnCana understands that the Panel and others may
22 be concerned about the pace of development and how the
23 PDA process works. Specifically, the Panel raised the
24 possibility of having a pilot period where EnCana may
25 drill one or two batteries to test the PDA process and

1 use the learnings to ensure that the process works as
2 predicted.

3 [Footnote 26: Hearing Transcript,
4 October 15, 2008, page 1450,
5 lines 17-24; Hearing Transcript,
6 October 18, 2008, page 2125]

7 First, Mr. Chairman, it's EnCana's view that
8 such a pilot project is not required.

9 As stated by Mr. Protti, EnCana is confident
10 that it can properly manage its proposal to drill the
11 425 wells per year over three years.

12 [Footnote 27: Hearing Transcript,
13 October 18, 2008, page 2126,
14 lines 1-2]

15 EnCana will use adaptive management to ensure
16 the environment is protected. On-site Environmental
17 Inspectors will play a key role to manage those issues
18 and adapt accordingly.

19 [Footnote 28: Hearing Transcript,
20 October 15, 2008, page 1511,
21 lines 17-19]

22 EnCana will also implement formalized project
23 look backs to keep the Environmental Protection Plan
24 or EPP updated with real field information and changes
25 in procedures.

1 [Footnote 29: Hearing Transcript,
2 October 15, 2008, pages 1509-1512]

3 The PDA siting process is not a new process,
4 it is an enhanced process.

5 But despite this, Mr. Protti and Mr. L'Henaff
6 have confirmed in evidence that EnCana is fully
7 prepared to pilot the PDA process in the NWA and
8 develop the Project over a four to five year time
9 period if that gives the Panel greater assurances that
10 the process will be effective.

11 [Footnote 30: Hearing Transcript,
12 October 17, 2008, page 2001,
13 line 23 to page 2003, line 16;
14 October 18, 2008, page 2127,
15 lines 11-17]

16 EnCana has committed, as part of that
17 process, to work with SEAC, DND, Base Commander, other
18 interested parties, relevant regulatory agents,
19 agencies to use that pilot period, if one is required
20 by the Panel, to further optimize the PDA process.

21 [Footnote 31: Hearing Transcript,
22 October 17, 2008, page 2128,
23 lines 7-12]

24 If the Panel believes a pilot period is
25 appropriate, EnCana requests that the pilot project be

1 of a sufficient size to provide a good cross-section
2 of potential wells, batteries and outcomes to enable
3 SEAC, DND and the Base Commander gain a real and full
4 appreciation for how the complete PDA process works
5 and that the pilot be in the NWA as the first stage of
6 the larger Project.

7 [Footnote 32: Hearing Transcript,
8 October 17, 2008, page 2125,
9 lines 16-24]

10 EnCana also committed in evidence to use any
11 learnings or improvements from that pilot as the
12 development proceeds over the following years.

13 [Footnote 33: Hearing Transcript,
14 October 10, 2008, page 1450, line
15 17 to page 1452, line 4]

16 Let me provide just a brief bit of background
17 on the NWA as a backdrop to some of my later comments.

18 **D. NWA Background**

19 It was 1992 when the Minister of National
20 Defence and the Minister of the Environment signed the
21 Memorandum of Understanding that started the process
22 of designating the eastern 458 kilometres of CFB
23 Suffield as an NWA. EnCana supported both the Federal
24 Government and the Canada Wildlife Service in
25 establishing the NWA. And at that time, AEC was

1 assured by the Base Commander as follows, and I quote:

2 "Your access rights for oil and gas
3 activity as outlined in the
4 Suffield Access Agreements of 28
5 October 1975 and 14 November 1977
6 remain in full force and will
7 continue. The Memorandum of
8 Understanding (MOU) between DND and
9 DOE [Department of Environment]
10 clearly recognizes current
11 activities in the environmentally
12 protected areas and that these
13 activities will continue under the
14 auspices of the applicable
15 environmental advisory committee,
16 in your case, Suffield
17 Environmental Advisory Committee
18 (SEAC)."

19 [Footnote 34: Exhibit 002-030
20 Reply to Comments on EIS - 004 - to
21 AWA, Information Request
22 No. AWA-58-B, page 4]

23 The Base Commander of the day went on to
24 state as follows. And I quote:

25 "Hopefully this letter will allay

1 your concerns and will serve our
2 successors with the assurance that
3 absolutely no changes to current
4 agreements were envisaged as a
5 result of this new DND/DOE
6 accord ...

7 ... I view AEC ... as an
8 intrical [sic] part of the CFB
9 Suffield operation. Your
10 environmental concerns and, more
11 importantly, actions have been duly
12 recognized. I believe that we have
13 entered into an agreement which
14 recognizes that the apparently
15 conflicting aims of the various
16 range users can be achieved while
17 maintaining what clearly is a
18 nationally significant prairie
19 ecosystem."

20 [Footnote 35: Exhibit 002-030
21 Reply to Comments on EIS - 004 - to
22 AWA, Information Request
23 No. AWA-58-B, page 5]

24 As the holder of the mineral rights,
25 including the access rights attached to those mineral

1 rights, the NWA could not have been created without
2 EnCana's cooperation, without the expropriation of its
3 rights.

4 In the Regulatory Impact Analysis Statement
5 that accompanied the designation of the NWA, it was
6 contemplated that ongoing land use in the area,
7 including resource development, was expected to
8 continue. This proposal is no surprise. We heard the
9 evidence from FAN at the informal hearings that they
10 understood that and were fully aware of it.

11 [Footnote 36: Hearing Transcript,
12 October 18, 2008, page 2359,
13 lines 4-18]

14 This ongoing and future use for shallow gas
15 development is formerly recognized in the Regulatory
16 Impact Analysis.

17 [Footnote 37: Exhibit 002-132,
18 *Regulations Amending the Wildlife*
19 *Area Regulations - Regulatory*
20 *Impact Analysis Statement*]

21 **E. 1975 Access Agreement and the Regulatory Regime**

22 So let me move on to the 1975 Access
23 Agreement and the regulatory regime. EnCana's gas
24 operations at CFB Suffield are subject to an Access
25 Agreement dated October 28th, 1975 between the

1 Government of Canada as the surface rights owner at
2 CFB Suffield and the Province of Alberta as the owner
3 of mines and minerals underlying CFB Suffield.

4 [Footnote 38: Exhibit 007-005,
5 Suffield 1975 MOU (Master
6 Agreement)]

7 You've heard a lot about that Agreement and
8 perhaps more than we'd care to remember. But it's an
9 important backdrop to the hearing nonetheless.

10 And I think the recitals, or a few of the
11 recitals from that agreement may help you to
12 understand the importance of that backdrop. And I'm
13 going to read four of them to you, and I quote:

14 "(i) WHEREAS portions of the Base
15 are extremely fragile in nature and
16 valuable from an ecological point
17 of view and have not heretofore
18 been used for Military purposes and
19 should be preserved to the extent
20 possible."

21 Parties recognized there are areas of CFB
22 Suffield, in particular, the Middle Sand Hills and the
23 South Saskatchewan River that were important. Those
24 now form the part of the NWA. The parties knew that.
25 No surprise:

1 "(ii) WHEREAS Canada has agreed
2 with the Government of the United
3 Kingdom of Great Britain and
4 Northern Ireland pursuant to the
5 United Kingdom agreement dated
6 August 20th, 1971 to permit the
7 Armed Forces of the United Kingdom
8 to conduct troop exercises on
9 portions of the Base involving the
10 use of tanks, artillery and
11 infantry weapons encompassing the
12 firing of live ammunition including
13 120 millimetre tank guns."

14 Again, no surprise. This Base is going to be
15 used for Military training, an important function.

16 "(iii) WHEREAS the existence of
17 substantial reserves of natural gas
18 underlying the Base have been
19 established by a pilot drilling
20 program conducted by Alberta on the
21 Base."

22 Again, no surprise. Not natural gas, not the
23 hope of natural gas. "Substantial reserves of natural
24 gas". No secrets.

25 And, finally:

1 "(iv) WHEREAS the parties hereto
2 recognize the need to develop and
3 produce such natural gas reserves
4 to further explore for oil and
5 natural gas underlying the Base and
6 to cooperate with each other so
7 that such exploration, development
8 and production activities may be
9 conducted along with the continued
10 use of the Base for Military
11 purposes."

12 Mr. Chairman, what those recitals reflect is
13 an idea of shared use, military use, shallow gas
14 development, environmental protection.

15 It's a basic principle of contract law that
16 interpretation of a contract must be done by looking
17 at the agreement as a whole. One must try to give
18 effect to every part of that agreement. The best
19 interpretation of a contract is one that will
20 harmonize and reconcile all portions of the agreement.

21 And, at the end of the day, this is pretty
22 simple stuff, Mr. Chairman. This is common sense.
23 My mother used to say, "When you hear hoof beats,
24 think horses, not zebras", and I would recommend that
25 to you, sir.

1 The purpose of the Access Agreement when
2 considered as a whole is simple:

3 (i) It provides that Alberta or
4 its assignee, EnCana, is to access
5 its resources in an environmentally
6 responsible manner.

7 (ii) It provides for the Military
8 to be able to continue and conduct
9 its activities.

10 (iii) It provides the Base
11 Commander the authority to control
12 access to the Base for the purposes
13 of safety and to get direction on
14 environmental issues from an expert
15 body, that being SEAC.

16 (iv) And it provides for Alberta's
17 energy regulatory system, the ERCB,
18 to apply to EnCana's activities on
19 the Base and that environmental
20 oversight be vested in SEAC
21 recognizing the shared jurisdiction
22 of the Base.

23 Let me deal with something my friend seemed to
24 infer in his cross-examination. To suggest the
25 Agreement gives the Base Commander absolute discretion

1 for any reason to exclude EnCana's access to CFB
2 Suffield is a tortured interpretation of the Agreement
3 that defies logic and common sense.

4 Does anyone, does anyone in this room
5 seriously believe for one moment that Premier Lougheed
6 would have authorized an agreement whereby the
7 Province's access to its mineral rights could be
8 denied at any moment and for any reason by the Base
9 Commander? Does anybody seriously believe that's a
10 logical interpretation? It's just wrong.

11 In regards to accessing the resource in
12 an environmentally responsible manner, the Access
13 Agreement establishes SEAC which includes a member of
14 the ERCB, Alberta Environment and Environment Canada.
15 It's submitted that SEAC was established to resolve
16 environmental concerns that the DND has in a
17 co-operative fashion by an expert body. The Base
18 Commander must abide by SEAC's recommendation. Simply
19 read the words of the contract if you don't believe
20 me.

21 Let me now turn to the regulatory regime on
22 the Base because it is tied to the '75 Agreement.
23 Contrary to the assertions of the intervenors and the
24 Government of Canada, it is EnCana's view that there
25 is a comprehensive regulatory regime applicable to the

1 energy industry on CFB Suffield and, in particular, in
2 the NWA based on both applicable laws and the
3 provisions of the Access Agreement. What the parties
4 must do is recommit to the processes that were agreed
5 to in that Agreement, and worked quite well for more
6 than 25 years, and to provide the SEAC with the
7 resources it needs to re-invigorate its
8 responsibilities and, quite frankly, its obligations
9 under that agreement.

10 Both parties have rights, Mr. Chairman.
11 Cooperation is the only option. The Access Agreement,
12 in EnCana's view, was a sophisticated and
13 forward-looking contract designed to protect the
14 environment, protect the Base, and ensure that the
15 energy resources underlying the Base were developed
16 responsibly. It addressed the issue of shared
17 jurisdiction in a creative fashion by adopting
18 Alberta's regulatory system for energy development on
19 the Base, a solution, by the way, that is still being
20 used today by the Government of Canada.

21 The Province of Alberta and the Government of
22 Canada have agreed and through regulation have adopted
23 Alberta's regulatory system for oil sands development
24 on Federal lands for Fort McKay's Indian Reserve near
25 Fort McMurray.

1 [Footnote 39: *Fort McKay First*
2 *Nation Oil Sands Regulations,*
3 SOR/2007-79]

4 What Alberta and Canada did by contract in
5 1975 they're still doing 33 years later. So to
6 suggest it's some antiquated thought or idea
7 is simply wrong.

8 Alberta and Canada adopted Alberta's
9 regulatory system for oil sands on First Nation lands.
10 You can look at the Regulation if you like; we've
11 cited it. And those are lands, those First Nation
12 lands, are lands for which the Government of Canada
13 owes a sacred trust to administer. Surely,
14 Mr. Chairman, if the approach that was taken in
15 respect of the First Nation lands is good enough for
16 the Government of Canada, the regulatory system in
17 this province expected under the 1975 Agreement is
18 good enough for CFB Suffield as well.

19 There's no regulatory gap, and Mr. Protti
20 said this:

21 "Now, in terms of uncertainty on
22 the regulatory framework, there has
23 been change, but I feel that with
24 the underpinning of the Access
25 Agreement, which is strong,

1 frankly, very well written document
2 between the parties, that I think
3 we've been able to demonstrate that
4 ... it really is a belts and
5 suspenders approach. There's an
6 ample protection to ensure that the
7 environment at the end of the day
8 is protected with all the different
9 elements of ... the legislation and
10 the Regulation."

11 [Footnote 40: Hearing Transcript,
12 October 17, 2008, page 2029,
13 lines 3-13]

14 So let's walk through some of those, those
15 Regulations and what applies. The ERCB regulates
16 the development of the Province's energy resources
17 including those on the Base. It regulates the
18 conservation, development, operation and abandonment
19 of all energy resources and associated facilities.

20 It has an obligation under Section 4(f) of
21 the ***Oil and Gas Conservation Act*** [Footnote 41: R.S.A.
22 2000, c. 0-6] to control pollution, below and at the
23 surface and, by the way, it does a very good job at
24 it. I don't have to refer to Mr. Hutton's comments
25 when he said all he had to do was pick up the phone

1 and within 24-hours the ERCB was there, was on his
2 ranch to resolve one of his concerns.

3 With respect to the environment, SEAC
4 provides advice to the Base Commander in respect of
5 all environmental issues and the Base Commander can
6 specifically ask for SEAC's advice. Further, the Base
7 Commander can order an activity to stop for any
8 environmental reason and then refer that matter to
9 SEAC for a recommendation which he then must follow.
10 There are no gaps.

11 In addition, provincial laws of general
12 application, meaning everything other than the land
13 surface and conservation reclamation provisions which
14 are expressly excluded by Section 6 of the -- or
15 Part 6 of the EPEA applies on these lands. And
16 Federal laws apply.

17 Again, we can see no gap.

18 And parties seem concerned about the
19 reclamation process and they wrang their hands about
20 it and my friend was vexed by it.

21 I don't understand that. Yes, Alberta
22 Environment's reclamation process is specifically
23 excluded from applying.

24 [Footnote 42: Exhibit 003A-032,

25 Letter from Alberta Environment to

1 Base Commander dated February 2,
2 2006]

3 But the Agreement provides specifically and
4 clearly for a reclamation process. Under the Access
5 Agreement, EnCana is required to obtain a development
6 and reclamation approval from the ERCB for all
7 developments on CFB Suffield. We saw an undertaking
8 Exhibit 002-129 which had a, a sampling of those
9 applications and approvals. For any lands in the NWA
10 area, that application first goes to SEAC for review
11 and consideration.

12 [Footnote 43: Exhibit 002-129,
13 Response to Undertaking]

14 By requiring a D&R Approval, the Access
15 Agreement required that all of EnCana's development on
16 the Base undergoes the highest level of scrutiny and
17 provide in advance a plan to reclaim any disturbances.

18 So while the Access Agreement provided an
19 approval process development and reclamation, a
20 separate process was included in those approvals
21 agreed to by the parties to provide for the actual
22 certification that the reclamation was complete and
23 successful. EnCana is required to reclaim sites in
24 accordance with its D&R Approval or as further agreed
25 to by the parties. And when a facility was abandoned,

1 SEAC would inspect the site, based on reclamation
2 criteria SEAC, DND and EnCana had all agreed to, and
3 recommend approval to the Base Commander.

4 [Footnote 44: Hearing Transcript,
5 October 7, 2008, pages 387-389;
6 Hearing Transcript, October 8,
7 2008, page 593, lines 9-19]

8 The Base Commander would then approve the
9 sites if he was satisfied that the land had been
10 properly reclaimed. The reclamation criteria used
11 were consistent with Alberta's reclamation guidelines.
12 Once Base Commander approval was given, the
13 Reclamation Certificates were signed off on by SEAC.

14 There was much debate about the reclamation
15 criteria, but, quite frankly, the hand wringing over
16 that is just not warranted as the Base Commander has
17 final say on the status of reclamation, any standard
18 or criteria is within his control and there is no
19 shortage of expertise and examples to help him.

20 [Footnote 45: Hearing Transcript,
21 October 24, 2008, page 3634,
22 line 21 to page 3635, line 18]

23 Counsel for SEAC suggested that since the
24 **Land Surface Conservation and Reclamation Act**, which
25 is referred to in the Access Agreement, has since been

1 repealed and incorporated into the ***Environmental***
2 ***Protection Enhancement Act***, [Footnote 46: R.S.A.
3 2000, c. E-12], which specifically excludes
4 reclamations, there is now a hole in the regulatory
5 framework.

6 [Footnote 47: Hearing Transcript,
7 October 2, 2008, page 407,
8 lines 1-6]

9 That's, that's incorrect. It's incorrect in
10 law. The parties agreed by contract to follow
11 a process and that contract remains valid and
12 enforceable.

13 The implications of a contract which
14 incorporates repealed legislation is a matter of
15 simple contractual interpretation. This is determined
16 by looking at the intention of the parties and
17 imparting the most commercially reasonable meaning to
18 the language contained in the agreement. In other
19 words, the question is whether the parties intended to
20 incorporate the legislation that stood at the time of
21 the contract or as the legislation was amended,
22 altered or subsumed.

23 The Supreme Court of Canada, no less, has
24 indicated it will only interpret a contract as
25 incorporating amendments or newly enacted legislation

1 if the requisite intention to do so is clearly
2 contained within the contract.

3 [Footnote 48: *Spooner Oils Limited*
4 *v. Turner Valley Gas Conservation*
5 *Board*, [1993] S.C.R. 629]

6 While EnCana submits that a clear intention
7 to incorporate newly enacted legislation cannot be
8 found in the Access Agreement, the Access Agreement
9 is unique in that it is a binding intergovernmental
10 agreement.

11 It is clear in the Access Agreement that the
12 parties envisaged an ongoing role for SEAC to oversee
13 environmental matters in connection with oil and gas
14 activity on the Base and in respect of development and
15 reclamation. A commercially reasonable interpretation
16 of this contract leads to the conclusion that the
17 parties should continue to apply the legislation as
18 incorporated at the time of the contract as improved
19 by the -- as improved by recent guidelines and
20 development enhancing the development and reclamation
21 process. That's the commercially reasonable
22 interpretation of the contract.

23 [Footnote 49: *Oceanic Exploration*
24 *Co. v. Denison Mines Ltd.*, [1996]
25 O.J. No. 4387 at para. 44]

1 The reclamation provisions in the Access
2 Agreement and SEAC's role in respect of the
3 reclamation remains intact and it works.

4 In respect of the standard, the reclamation
5 standard under the contract is quite simple. It's
6 equivalent land capability; it says so in the
7 contract. Reclamation was dealt with in the Access
8 Agreement. Alberta Environment's reclamation
9 guidelines were adopted by all parties and Reclamation
10 Certificate Number 501 was issued using that
11 procedure. Additionally, the 1998 Code of Conduct
12 explicitly stated that the criteria used to measure
13 acceptable reclamation shall be in accordance with
14 the provincial requirements outlined in Reclamation
15 Criteria for Wellsites and Associated Facilities or
16 other documents as established for the other -- for
17 various activities. That's in Exhibit 002-129.

18 [Footnote 50: Hearing Transcript,
19 October 17, 2008, page 2089, lines
20 18-22]

21 At the hearing, Colonel Bruce also noted that
22 the application of provincial-type legislation in a
23 Federal context would satisfy most of his
24 jurisdictional concerns.

25 [Footnote 51: Hearing Transcript,

1 October 24, 2008, page 3752,
2 lines 11-18]

3 This is precisely the intention of the Access
4 Agreement. And, as noted previously, the Base
5 Commander has the final authority on whether he's
6 satisfied with the reclamation or not, including the
7 appropriate criteria to be used to determine that
8 state. There is no gap.

9 **(a) Role of SEAC**

10 Let me turn to the role of SEAC. As
11 mentioned earlier, SEAC is responsible for the
12 environmental oversight of Suffield. SEAC was created
13 in accordance with the set of objectives found in
14 Appendix 2 to Schedule D of the Access Agreement.

15 [Footnote 52: Exhibit 007-005,
16 Suffield 1975 MOU (Master
17 Agreement), Section 12(4)(a)]

18 In addition to general Base-wide objectives,
19 the objectives also specify a process for
20 environmental assessment and development in the South
21 Saskatchewan River Bank Zone and the Middle Sand Hills
22 Zone.

23 Under the South Saskatchewan River Bank Zone,
24 it states as follows, and I quote:

25 "Natural gas resource development

1 for this zone should be limited to
2 wells recommended for approval by
3 the Suffield Environmental Advisory
4 Committee."

5 [Footnote 53: Exhibit 007-005,
6 Suffield 1975 MOU (Master
7 Agreement), Schedule "D",
8 Appendix 2]

9 And in respect of the Middle Sand Hills Zone
10 it states:

11 "No natural gas development for
12 this zone should be undertaken
13 until the completion of an
14 Environmental Impact Assessment of
15 the zone. The Environmental Impact
16 Assessment shall be submitted to
17 the Suffield Environmental Advisory
18 Committee for review."

19 [Footnote 54: Exhibit 007-005,
20 Suffield 1975 MOU (Master
21 Agreement), Schedule "D",
22 Appendix 2]

23 It's important to note that since a great
24 extent of the Project falls within the South
25 Saskatchewan River Bank Zone and Middle Sand Hills

1 Zone much of SEAC's review and approval of wells
2 suggested by EnCana in the PDA process mirror what
3 they are required to do under the agreement. This is
4 not a new branch or obligation for SEAC. It's simply
5 an enhancement of what they are already required to do
6 under the agreement.

7 Under Section 12(5) of the Access Agreement,
8 AEC was required to conduct an Environmental Impact
9 Statement. It did so, and that's on the record.

10 [Footnote 55: Exhibit 002-133,
11 Alberta Energy Company, Evaluation
12 and Recommendations, Middle Sand
13 Hills, Suffield Military Block,
14 1981; Hearing Transcript October
15 10, 2008, page 1064, lines 10-24]

16 For this Project, Encana filed an EIS and
17 will be conducting PDAs and sending them to SEAC for
18 review. Routine applications require SEAC's
19 confirmation of compliance with the PDA process.
20 Non-routine applications require SEAC's review and
21 recommendation in respect of the application, similar
22 to what's required in the Agreement.

23 [Footnote 56: Exhibit 007-005,
24 Suffield 1975 MOU (Master
25 Agreement). Under section 12(7),

1 the Base Commander may give or
2 refuse consent for activities, but
3 only upon the recommendation of
4 SEAC]

5 For the Project, EnCana has proposed that
6 the PDAs go to SEAC. If a specific activity involves
7 siting that can respect all environmental setback
8 guidelines the application is to be treated as routine
9 but only in the sense that the review of those
10 facilities should be more stream-lined and that SEAC
11 can, after confirming compliance with the setbacks,
12 recommend approval to the Base Commander.

13 So it's not the concept of routine that has
14 been put forward by my friends that, well, this is
15 going to be simple, it's going to go through very
16 quickly, it's going to be routine in the sense that
17 they're going to stamp it as approved. That's not the
18 case at all.

19 Routine is in the sense that SEAC will review
20 it, ensure compliance with the PDA process setbacks,
21 and then recommend it for decision by the Base
22 Commander.

23 If the application involves siting that
24 cannot respect all environmental setback guidelines
25 EnCana will consult with an expert or experts in the

1 field, propose mitigation for the site or cancel the
2 location.

3 If EnCana elects to proceed, as I've said
4 before, it goes to SEAC as a non-routine application
5 to be evaluated in more detail and a recommendation
6 made to the Base Commander. Again, similar to the
7 agreement.

8 EnCana recognizes that the Project will
9 involve an enhanced role for SEAC, particularly with
10 regards to the oversight of the PDA process. This is
11 not inconsistent, however, with the Access Agreement
12 and what SEAC's obligations are under that agreement.
13 Just look at EnCana's response to the
14 Undertaking 002-129 and satisfy yourselves if you
15 don't believe me.

16 [Footnote 57: Hearing Transcript,
17 October 10, 2008, page 1117,
18 lines 10-11 and Exhibit 002-129]

19 SEAC is the right body for the job and SEAC
20 members have the necessary expertise in respect of
21 environmental protection and energy development from
22 their respective backgrounds with Environment Canada,
23 Alberta Environment and the ERCB.

24 [Footnote 58: Hearing Transcript,
25 October 9, 2008, pages 920-922]

1 Colonel Bruce confirmed that position stating
2 that SEAC is a "fundamental component" of the way he
3 works with industry in terms of environmental effects
4 and impacts.

5 [Footnote 59: Hearing Transcript,
6 October 24, 2008, page 3643,
7 lines 1-3]

8 He also recognized that SEAC represents key
9 capabilities from both the Province and Environment
10 Canada.

11 [Footnote 60: Hearing Transcript,
12 October 24, 2008, page 3655,
13 lines 14-16]

14 During the hearing, DND also expressed their
15 desire to have SEAC fulfill the role assigned it
16 within the Access Agreement and stressed the
17 importance of SEAC's advisory role to the Base
18 Commander and inputs into reclamation.

19 [Footnote 61: Hearing Transcript,
20 October 24, 2008, page 3644,
21 lines 16-19]

22 This is one point on which EnCana and DND
23 are in complete agreement.

24 As noted by Mr. Protti, SEAC is made up of
25 extremely capable people and it is simply a matter of

1 dedicating the necessary time, money and resources,
2 meaning support staff, to ensure SEAC can properly
3 perform its role under the contract.

4 [Footnote 62: Hearing Transcript,
5 October 7, 2008, pages 392-393]

6 Colonel Bruce acknowledged that he would be
7 happier if SEAC was resourced sufficiently to fulfill
8 their mandate as set out in the Access Agreement.

9 [Footnote 63: Hearing Transcript,
10 October 24, 2008, page 3699,
11 lines 1-4]

12 EnCana, DND, SEAC, all agree SEAC needs to be
13 better resourced. Hence, Mr. Chairman, this Panel
14 should recommend to the Province of Alberta and to the
15 Government of Canada the signatories to that Agreement
16 that they review their commitment to SEAC and provide
17 it the resources it needs to fulfill its obligations.

18 This does not take away from the fact that
19 SEAC is the correct mechanism to assist the Base
20 Commander in protecting the environment and the
21 correct body for providing EnCana an independent
22 expert review of its activities. It's a shared use
23 area. Go back to the Access Agreement and the basis
24 for why that agreement was created.

25 The importance of SEAC was explained by

1 Mr. Protti as follows, and I quote:

2 "And we think it's just a
3 tremendous opportunity to bring in
4 a process that will really be a
5 hallmark of how the Federal
6 Government, Alberta Government, oil
7 and gas producer, members of the
8 scientific community, public, can
9 have confidence that we can ... do
10 a project, protect the environment,
11 and provide a resource that society
12 needs. So we use the term
13 'sustainable development' in
14 describing that. And ... I think
15 that fits very well with our whole
16 philosophy."

17 [Footnote 64: Hearing Transcript,
18 October 17, 2008, pages 2029-2030]

19 We think SEAC can help fulfill that goal.

20 **F. Legal Framework for the Review**

21 **(a) Background of the Joint Review Panel Process**

22 So let me turn to the legal framework for
23 your review and what you're required to do and your
24 decision-making process. So, Mr. Chairman, it's
25 important to review this framework and the roles that

1 the Panel is operating under because you have two
2 roles and there are different obligations under each.

3 EnCana's Project is subject to, as you know,
4 both Provincial and Federal review. Pursuant to
5 Section 4 of the *Wildlife Area Regulations* a permit is
6 required from DND to develop in the NWA as the
7 authority under the *Regulations* for the NWA. This
8 authorization is listed in the *Law List Regulations*
9 which triggers the need for an environmental
10 assessment under CEAA.

11 At the request of the Responsible Authority,
12 DND, the Federal Minister of Environment, referred
13 EnCana's Project to a Review Panel. The Minister of
14 the Environment and the ERCB entered into a Joint
15 Panel Agreement to conduct the review of the Project
16 by way of a Joint Review Panel.

17 [Footnote 65: Exhibit 001-004,
18 Joint Panel Agreement]

19 The Joint Panel Agreement sets out the
20 mandate and the authority of this Joint Review Panel,
21 its composition and the Project review guidelines. So
22 when you're looking for guidance on what your -- what
23 rules apply to you in your decision making, you
24 look -- you need look no further than the Joint Panel
25 agreement.

1 The final Guidelines for the Proponent --
2 preparation of the EIS were issued by the Panel on
3 December 20th of 2006.

4 So the Guidelines for the preparation of the
5 EIS are Guidelines that provide a framework for the
6 gathering of information necessary for the Panel to
7 review the proposed project and fulfill its mandate
8 under the Joint Agreement. As a framework for the
9 collection of information, the Guidelines provide
10 great flexibility in the preparation of the EIS and
11 supporting documentation.

12 This flexibility is specifically provided for
13 in Section 4.5 of the Guidelines where it states that,
14 and I quote:

15 "The Proponent shall observe the
16 intent of the guidelines."

17 Moreover, Section 4.1 of the Guidelines
18 specifically contemplates that the Proponent will
19 exercise its judgment in providing information
20 identified in the Guidelines. It is ultimately the
21 Panel who must determine if the intent of the
22 Guidelines have been fulfilled and we specifically
23 request that the Panel make just such a determination.

24 In preparing the EIS, EnCana fulfilled the
25 intent of the Guidelines by preparing a document based

1 on a robust set of data and employed the professional
2 judgment and experience of numerous leading experts
3 in their fields. All this work resulted in an EIS in
4 which there is a high degree of confidence in the EIS
5 predictions. To interpret the Guidelines as
6 prescriptions with no flexibility is contrary to law,
7 it's contrary to the wording of the Guidelines and,
8 quite frankly, it's counterproductive to good
9 environmental assessment and informed decision-making,
10 where we should be focusing on those issues which are
11 key and important, which have a difference and make a
12 difference in people's lives, and in the protection of
13 the NWA instead of focusing on every blade of grass.
14 That's improper environmental assessment in a modern
15 world.

16 After the EIS was submitted, the Panel
17 reviewed the submissions and issued 43 supplemental
18 Information Requests in September of 2007. That was
19 in addition to the 842 Information Requests received
20 from interveners and the Government of Canada. EnCana
21 provided responses to the Panel's Information Requests
22 in November of 2007 and on December 20th, 2007 the
23 Panel determined that the EIS and supporting
24 documentation provided by EnCana was sufficient to
25 proceed to a public hearing. Noting that EnCana had

1 committed to filing its Environmental Effects
2 Monitoring Plan and EPP by January 21st and at that
3 time it issued a Notice of Hearing.

4 [Footnote 66: Exhibit 001-035,
5 Letter to EnCana regarding adequacy
6 of EIS]

7 The review must also satisfy the requirements
8 of Alberta's *Energy Resources Conservation Act* and the
9 *Canadian Environmental Assessment Act*.

10 First let me deal with the Panel's role as
11 the ERCB.

12 **(b) The Panel's Role as the ERCB**

13 The ERCB has statutory responsibilities
14 pursuant to the *Energy Resources Conservation Act*
15 [Footnote 67: R.S.A. 2000, c. E-10] and *Oil and Gas*
16 *Conservation Act* [Footnote 68: R.S.A. 2000, c. O-6]

17 And as the ERCB this Panel is guided by the
18 purposes of the *Oil and Gas Conservation Act*, namely
19 as follows:

20 (i) To effect the conservation
21 of, and to prevent the waste of,
22 the oil and gas resources of
23 Alberta.

24 That's one of the purposes you must turn your
25 mind to. It's also:

1 (ii) To provide for the economic,
2 orderly and efficient development
3 in the public interest of the oil
4 and gas resources of Alberta.

5 It's also:

6 (iii) To control pollution above,
7 at or below the surface in the
8 drilling of wells and in operations
9 for the production of oil and gas
10 and in other operations over which
11 the Board has jurisdiction.

12 And while performing your function as the ERCB,
13 you must have regard to Section 3 of the **Energy**
14 **Resources Conservation Act**, which requires the Board
15 to give consideration to whether this Project is in
16 the public interest, having regard to the social and
17 economic effects of the Project and the effects of the
18 Project on the environment.

19 That's your mandate. It's a broad one. It
20 must consider the interests of not only the
21 Proponent's and the interveners in this specific
22 application, but you must also reach outward and
23 consider the interests of all Albertans who own this
24 resource and of all Canadians who might benefit from
25 this resource. That's your job.

1 In determining whether EnCana's infill
2 shallow gas Project is in the public interest, the
3 Panel is charged with balancing EnCana's property
4 rights in its leases, the public's legitimate,
5 legitimate expectation to receive value from the
6 resource which it owns, the economics benefits of the
7 proposed Project such as jobs, taxes and royalties,
8 the benefits of the environmental data and information
9 that will be generated by the Project against any
10 potential negative environmental, social or economic
11 impacts.

12 That's the balancing that you must do as the
13 ERCB.

14 If the Panel acting as the ERCB believes the
15 three wells are in the public interest, the Panel may
16 attach conditions on the carrying out of those three
17 wells that comes with the ambit -- within the ambit
18 of the Board's jurisdiction.

19 If, however, the ERCB decides that the three
20 wells are not in the public interest, the ERCB must
21 provide reasons to EnCana about why this specific
22 application is not in the public interest.

23 Mr. Chairman, EnCana believes that the
24 evidence that has been put forth clearly demonstrates
25 that the three wells before this Panel meet the

1 purposes of the *Oil and Gas Conservation Act* and the
2 *Energy Resources Conservation Act* and that approving
3 the three wells is in the public interest.

4 **(c) The Panel's Role under CEAA**

5 Let me turn to your role under the *Canadian*
6 *Environmental Assessment Act* and the Joint Panel
7 Agreement. And under those documents, the Panel must
8 conduct an environmental assessment of the Project by
9 collecting and considering the evidence
10 it considers is necessary to make its recommendations
11 and comply with the Terms of Reference attached to the
12 Joint Panel Agreement.

13 The Joint Panel Agreement governs this
14 review. The basic test that the Panel must consider
15 under the CEAA is whether this Project is likely to
16 cause significant adverse environmental effects after
17 taking into consideration the mitigation measures
18 proposed by EnCana.

19 Environmental effects are defined in the CEAA
20 to include those effects caused by the Project on the
21 physical environment and includes socio-economic
22 effects and effects that are result of -- sorry,
23 include socio-economic effects that are a result of
24 biophysical effects.

25 Under the Joint Panel Agreement, the Panel

1 must consider the following:

2 (i) The environmental effects of
3 the Project, including the
4 likelihood and significance of
5 those effects within the temporal
6 and spatial boundaries;

7 (ii) Accidents and malfunctions;

8 (iii) Cumulative effects;

9 (iv) Public comments;

10 (v) Mitigation measures;

11 (vi) The need and purpose of the
12 Project;

13 (vii) Alternatives to the Project;

14 (viii) Alternative means of carrying
15 out the Project;

16 (ix) The need for a follow-up
17 program; and

18 (x) The impacts on the capacity
19 of renewable resources to meet the
20 needs of present and future
21 generations.

22 [Footnote 69: Exhibit 001-004,
23 Joint Panel Agreement, Appendix -
24 Terms of Reference]

25 The Canadian Environmental Assessment Agency and

1 the Courts have informed the process to systematically
2 determine whether there are likely to be any
3 significant adverse environmental effects.

4 And here's the test that has been derived as
5 a result of the, the legislation and the Court's
6 interpretation. Here's the first step:

7 First:

8 - The Panel must ask, first, whether
9 there is an effect (which is defined in the
10 ***Environmental Assessment Act*** as a "change" in the
11 environment). So first you must ask, first, is there
12 an effect on the environment caused by the Project?
13 Negligible residual environmental effects are those
14 effects that are predicted to result in no measurable
15 or detectable change in the environment and, thus, are
16 not an effect. If there is no effect of the Project
17 on the environment, the analysis stops there.

18 Second:

19 - If you determine that there is an
20 effect, you move on to the second step. If there's an
21 effect on the environment caused by the Project, the
22 Panel must then ask whether the effect would be
23 adverse. If the effect is not adverse, the analysis
24 stops there. The Panel can consider potential
25 beneficial effects in respect of an overall

1 contribution to sustainability.

2 Third:

3 - If the Panel determines there's an
4 effect and it's an adverse, then you go to the third
5 step. The Panel must then determine is that effect
6 significant after taking into consideration the
7 mitigation measures that are proposed? If the adverse
8 effect is not significant, then the effect is only
9 considered in the terms of cumulative effects.

10 So then you must, after those three steps,
11 is there an effect, is it adverse, is it significant?
12 Then you must go on to the fourth test, assuming
13 you've arrived at the conclusion there is an effect,
14 it's adverse and it's significant.

15 Fourth:

16 - Finally, if the Panel has determined
17 there is a significant adverse environmental effect
18 after taking into consideration mitigation measures
19 the Panel must then consider whether the significant
20 adverse environmental effect is "likely" to occur.
21 not possible, not potentially, but likely to occur.
22 This step requires the Panel to consider mitigation
23 and determine whether, based on the evidence before it
24 the effect is likely. One must remember that
25 mitigation and adaptive management measures are very

1 important because they may render a potentially
2 significant adverse environmental effect "not likely"
3 to occur.

4 [Footnote 70: CEA Agency Reference
5 Guide: *Determining Whether a*
6 *Project is Likely to Cause*
7 *Significant Adverse Environmental*
8 *Effects, Section 3; Bow Valley*
9 *Naturalists Society v. Canada*
10 *(Minister of Canadian Heritage),*
11 [2001] 2 F.C. 461 (C.A.) at
12 para. 49]

13 And the Federal Court of Appeal dealt with this
14 specifically in ***Alberta Wilderness Association v.***
15 ***Express Pipelines Ltd.***, there can be no purpose in
16 considering purely hypothetical environmental effects
17 when it is known and proposed that such effects can
18 and will be mitigated by appropriate measures.

19 [Footnote 71: (1996), 137 D.L.R.
20 (4th) 177 at para. 13]

21 That's the direction from the Court of
22 Appeal. The Panel, when considering the claims and
23 assertions of the interveners of the risk of
24 significant environmental effects, must look at
25 whether those claims are founded on real evidence and

1 whether those effects, those risks of effects are
2 likely to occur.

3 In order for there to be a "likely
4 significant adverse environmental effect" caused by
5 this Project, you must answer all four parts of that
6 test "yes" - it's a conjunctive test.

7 In determining the significance of effects,
8 it is also necessary to examine each situation in
9 its appropriate context. The idea that there are
10 degrees of importance which must be considered when
11 determining significance under the CEAA has been
12 acknowledged again by the Federal Court where it's
13 stated, and I quote:

14 "The principal criterion set out by
15 the [CEAA] is the 'significance' of
16 the environmental effects of the
17 project: that is not a fixed or
18 wholly objective standard and
19 contains a large measure of opinion
20 and judgment. Reasonable people
21 can and do disagree about the
22 adequacy and completeness of
23 evidence which forecasts future
24 results and about the significance
25 of such results without thereby

1 raising questions of law."

2 [Footnote 72: (1996), 137 D.L.R.

3 (4th) 177 at para. 10]

4 Ultimately, the Panel must ask itself whether
5 any likely adverse environmental effects are
6 significant in relation to both the size and scope of
7 the Project and the size and scope of the environment
8 in which the Project will be carried out. That's your
9 task.

10 So when the Panel considers environmental,
11 ah, EnCana's evidence in light of the test outlined
12 above, it's my submission that the only logical
13 conclusion supported by actual evidence is that
14 EnCana's Project is not likely to cause any
15 significant environmental effects.

16 EnCana submits that the evidence has shown
17 that the Project will not interfere with the
18 conservation of wildlife under the *Wildlife Area*
19 *Regulations* and, in fact, the information obtained
20 through the PDA process and through the Environmental
21 Effects Monitoring Plan will contribute valuable
22 information and assist in the conservation of wildlife
23 in a positive manner.

24 Mr. Chairman, I'm now going to turn to some
25 of the regulatory issues that you specifically must

1 deal with under your mandate under CEAA. And the
2 first one I want to talk about is the Project need,
3 purpose, and alternatives to the Project.

4 **PART THREE - REGULATORY ISSUES**

5 **A. Project Need and Purpose and Alternatives to the**
6 **Project**

7 EnCana analyzed the need for and purpose of
8 the Project, as well as alternatives to and
9 alternative means of carrying out the Project in
10 accordance with CEAA's Operational Policy Statement.

11 [Footnote 73: CEAA Operational
12 Policy Statement: Addressing "Need
13 for", "Purpose of", "Alternatives
14 to" and "Alternative Means" under
15 the *Canadian Environmental*
16 *Assessment Act*]

17 The purpose of the Project is to fulfill the
18 identified need and enable EnCana to efficiently
19 develop the natural gas resources to which it is
20 entitled and to which the Province of Alberta expects
21 to be produced.

22 That will benefit EnCana. It benefits its
23 shareholders. It benefits local economies. It
24 benefits the Province of Alberta, the citizens of
25 Canada, and energy consumers by meeting the demand for

1 low cost clean burning energy in today's world.

2 EnCana has already drilled over more than
3 1,000 wells in the NWA and has been successful in
4 doing so in an environmentally responsible manner.
5 The additional wells applied for in this proceeding
6 are needed to fully develop the remaining reserves and
7 to ensure there are no wasted resources. These
8 resources are needed in order to continue to provide a
9 reliable and low carbon intensity energy to the
10 country's consumers.

11 EnCana has the right under its mineral leases
12 with the Province and under the Access Agreement
13 between the Government of Canada and the Province of
14 Alberta, which was assigned to EnCana, to develop the
15 resources underlying the NWA.

16 [Footnote 74: Exhibit 002-066, EUB
17 Application No. 1435831 and
18 supporting documents]

19 EnCana has an obligation under the ***Oil and***
20 ***Gas Conservation Act*** to the people of Alberta to
21 develop the resource in an efficient, economic and
22 responsible manner. EnCana also has an obligation to
23 its shareholders to pursue the development of this
24 valuable asset. In addition, EnCana also knows that
25 this development must be in the public interest having

1 regard to the social, economic, and environmental
2 effects of the Project.

3 That is the need and the purpose.

4 EnCana considered alternatives to this
5 Project in the context of that need and purpose in
6 accordance with the CEAA's Operating Policy Statement.
7 Any "alternative" must be capable of fulfilling the
8 need and purpose identified.

9 [Footnote 75: Exhibit 002-010,
10 EIS, Volume 1, Section 1.4 (see
11 Footnote 73 above)]

12 In doing so, EnCana considered the
13 environmental, technical, and economic costs and
14 benefits against the following general criteria:

- 15 - Ability to exercise the
16 rights to the natural resource,
17 natural gas resource.
- 18 - Ability to efficiently
19 produce the natural gas resource.
- 20 - Ability to maximize the
21 recovery of the natural gas
22 resource.
- 23 - Sustainability of natural gas
24 production from the field.
- 25 - Operational efficiency.

- 1 - Optimization of invested
2 capital.
3 - Minimization of environmental
4 footprint, and
5 - Ability to fulfill policy
6 commitments.

7 EnCana ultimately concluded that there were
8 no viable alternatives to the Project as currently
9 configured.

10 [Footnote 76: Exhibit 002-123,
11 Package of Slides & Opening
12 Statement of EnCana, page 16]

13 Essentially, this means that EnCana cannot
14 produce these incremental reserves without additional
15 contact with the resource through drilling.

16 [Footnote 77: Hearing Transcript,
17 October 15, 2008, page 1456-1457]

18 This conclusion does not relate to the
19 Project schedule, the magnitude of the Project, or the
20 amount of the wells.

21 [Footnote 78: Hearing Transcript,
22 October 15, 2008, page 1457,
23 lines 14-16]

24 EnCana must contact the reservoir to access
25 these incremental reserves.

1 EnCana's view is that only infill vertical
2 drilling will enable the efficient production of the
3 remaining natural gas and prevent the waste of this
4 valuable resource. No other functionally different
5 ways of addressing the need for the Project and
6 pursuing the purposes of the Project have been
7 identified. The proximity of the natural gas reserves
8 within the NWA to existing natural gas transportation
9 infrastructure is an important attribute of the
10 Project. Because the Project is incremental to its
11 existing operations, it is both capital efficient and
12 economically viable. Technical performance is
13 reliably predictable based on over 30 years of
14 operating experience in this area. The ability to
15 make efficient use of existing infrastructure and
16 EnCana's low impact drilling and tie-in methods
17 substantially minimize the environmental footprint of
18 the Project and can be taken advantage of today.

19 [Footnote 79: Exhibit 002-010,
20 EIS, Volume 1, Section 1.4.2]

21 The alternative of not proceeding with the
22 Project was not considered viable as the result would
23 be to waste this natural gas resource and thus not
24 meet the need and purpose of the Project.

25 Delaying the Project would not substantively

1 change the environmental cost or benefits but would
2 have considerable technical and economic implications,
3 including reduced operational efficiency of the field
4 and inability to sustain forecast production levels, a
5 failure to meet owner expectations, the deterioration
6 of existing assets, and the inability to take
7 advantage of the current market demand for
8 clean-burning natural gas.

9 [Footnote 80: Exhibit 002-010,
10 EIS, Volume 1, page 1-11]

11 EnCana has considered the alternative means
12 of carrying out the Project.

13 [Footnote 81: Exhibit 002-010,
14 EIS, Volume 1, Section 2.8]

15 And those means were as follows:

- 16 - Drilling and completion
17 techniques.
- 18 - Pipeline integrity testing.
- 19 - Layout and construction of
20 the gas gathering system.
- 21 - Water supply.
- 22 - Maintenance and production
23 operations.
- 24 - Layout and use of temporary
25 and permanent access routes; and

1 - Management, storage, and
2 disposal of waste materials.

3 The decision to proceed with each preferred
4 development option was based on evaluation of the
5 alternatives against the following criteria:

- 6 - technical suitability.
7 - effects on resource recovery.
8 - effects on economics.
9 - socio-economic effects.
10 - safety; and.
11 - environmental effects.

12 Based on those criteria, EnCana came up with
13 a preferred option for its development.

14 One particular alternative means of carrying
15 out the Project; and EnCana spent a great deal of time
16 analyzing, was the use of slant or directional
17 drilling as opposed to vertical drilling. In short,
18 these options are not viable because they will result
19 in wasted resources.

20 Slant or directional drilling will not allow
21 for optimal resource recovery because not all of the
22 shallow gas zones can be effectively accessed.
23 Vertical wells with inter-well spacing of 400 metres
24 (resulting in 16 wells per section) is required to
25 avoid wasting the resource.

1 [Footnote 82: Exhibit 002-110,
2 Reply to Intervener Submissions,
3 Appendix F; Exhibit 002-060,
4 Additional information to the EIS
5 as requested by the Panel on
6 September 26th, Response to
7 Information Request No. 15]

8 And Mr. L'Henaff said this, and I quote:

9 "To access and effectively produce
10 the remaining recoverable reserves,
11 well spacing of 16 wells per
12 section is required... There is no
13 other way to obtain these resources
14 in an efficient and environmentally
15 responsible manner, while also
16 avoiding wasting the resource."

17 Unquote.

18 [Footnote 83: Exhibit 002-123,
19 Package of Slides & Opening
20 Statement of EnCana, page 15]

21 A further alternative means of carrying out the
22 Project was raised by DND for the first time about
23 10 days into the hearing; that being the installation
24 of caissons instead of above-ground wellheads, which
25 is what is being proposed by EnCana and which EnCana

1 is seeking approval for.

2 As noted by Mr. Kansas, although caissons
3 have a slightly larger footprint as compared to
4 above-ground wellheads, it is a negligible difference.

5 EnCana takes the position that the Project
6 can be applied for, approved as applied for with
7 above-ground wells. Based on Mr. Kansas's
8 observations, however, regarding the small disturbance
9 difference in respect of below-ground caissons which,
10 by the way, is the only evidence in front of this
11 Panel in respect of whether underground caissons are
12 suitable or not, is that the Panel can determine that
13 there's no likely significant adverse environmental
14 effect associated with those caissons.

15 Let me turn to the incremental reserves.

16 **(a) Incremental Reserves.**

17 EnCana's estimated incremental reserves show
18 that the additional 1275 wells from the Project can
19 produce an additional 125 bcf of gas. Simply put,
20 Mr. Chairman, this is a "tight gas" formation.
21 Without the Project, those volumes will stay in the
22 ground and be wasted contrary to Alberta's laws to
23 conserve this resource.

24 [Footnote 84: ***Oil and Gas***
25 ***Conservation Act***, R.S.A. 2000,

1 c. 0-6, Section 4]

2 Mr. L'Henaff asked the rhetorical question, "With
3 tight gas, can you reach out 80 acres?" In other
4 words, can one get the incremental reserves without
5 infill drilling? He then answered his own question
6 and concluded, "This is extremely tight gas... we
7 cannot. There is no way it can happen."

8 EnCana based its estimate on incremental reserves
9 in part from its D6/D8 pilot program in the NWA as set
10 out in the EIS.

11 [Footnote 85: Exhibit 002-010,
12 EIS, Volume 1, pages 1-10, 2-8 and
13 3-2; Exhibit 002-013, EIS,
14 Volume 3, pages 3-9, 3-16, 3-17 and
15 3-19]

16 The Panel asked for more information concerning
17 the pilot results and EnCana provided that information
18 in Response JRP 7.

19 [Footnote 86: Exhibit 002-060,
20 Additional information to the EIS
21 as requested by the Panel on
22 September 26th]

23 Subsequently, the Coalition filed the
24 Martin & Brusset Report.

25 [Footnote 87: Exhibit 006-025,

1 Supplemental Written Submission
2 from Environmental Coalition]

3 The M&B Report criticized the use of a "ring" of
4 12 sections surrounding the four-section pilot for the
5 decline analysis that quantifies incremental gas
6 recovery.

7 [Footnote 88: Exhibit 006-025,
8 Supplemental Written Submission
9 from Environmental Coalition,
10 page 5]

11 The Coalition then filed another report on
12 September 29th of 2008 that built on the first M&B
13 Report to suggest that there will be unaccounted-for
14 well interference, such that EnCana's Project is based
15 more on reserve acceleration than incremental
16 recovery.

17 [Footnote 89: Exhibit 006-035,
18 Report]

19 Those assertions are wrong.

20 Concerning the "ring approach", pilot decline
21 analysis is simply a "before and after" exercise.
22 Typically, EnCana looks at pilot results after infill
23 drilling. But in the case of the D6/D8 pilot, EnCana
24 could not get a proper "before" look because the
25 operational activity that was taking place prior to

1 infill drilling. Ten wells were drilled between 1997
2 and 2000, [Footnote 90: Exhibit 002-110, Reply to
3 Intervener Submissions, page 98], three wells were
4 drilled in 2000, and three wells were refractured in
5 2004.

6 [Footnote 91: Exhibit 002-124,
7 EnCana's Reply to M&B Analysis]

8 Those activities impacted the production of
9 the base decline analysis. To get a proper "before"
10 picture, EnCana looked at the sections "next door".
11 As set out in EnCana's Reply evidence, the offset used
12 in the pilot analysis also achieved other study
13 objectives confirmed under cross-examination.

14 [Footnote 92: Hearing Transcript,
15 October 14, 2008, page 1152]

16 The M&B Report suggested that the ring
17 approach is inappropriate because, based on M&B
18 interpretations of well performance, and not geology,
19 I might remind you, the D6/D8 section was in a
20 reservoir "sweet spot".

21 [Footnote 93: Exhibit 006-025,
22 Supplemental Written Submission -
23 from Environmental Coalition,
24 page 3]

25 However, EnCana explained that the ring

1 sections were an appropriate analogue for NWA
2 production because there was "no material difference
3 in geology", [Footnote 94: Exhibit 002-110, Reply to
4 INtervener Submissions, page 98], and those are
5 Mr. L'Henaff's words, which is described in EnCana's
6 Information Request response JRP 9.

7 [Footnote 95: Exhibit 002-060,
8 Additional information to the EIS
9 as requested by the Panel on
10 September 26th]

11 Mr. L'Henaff walked Mr. Binder through these
12 points in the course of cross-examination.

13 [Footnote 96: Hearing Transcript,
14 October 7, 2008, pages 316-319]

15 Furthermore, M&B provided no geological
16 evidence at any point to substantiate its bare
17 assertion of different behaviours.

18 Critically, and as noted by Mr. Protti,
19 [Footnote 97: Hearing Transcript, October 7, 2008,
20 pages 319-325], EnCana's approach was considered and
21 approved by McDaniel & Associates, respected
22 independent reserve auditors. The information is
23 attached to EnCana's response to Information Request,
24 JRP 7.

25 [Footnote 98: Exhibit 002-060,

1 Additional information to the EIS
2 as requested by the Panel on
3 September 26th]

4 Mr. Protti explained McDaniel's involvement
5 at Suffield and their substantial experience
6 specifically in the Suffield shallow gas complex.
7 They have completed a detailed annual review of
8 EnCana's 16 well pilots in the NWA for the past 10
9 years. They are intimately familiar with how these
10 formations produce.

11 [Footnote 99: Hearing Transcript,
12 October 7, 2008, page 320, line 2
13 to page 321, line 12]

14 In contrast, Mr. Sedgwick conceded under
15 cross-examination that M&B's analysis was restricted
16 by time [Footnote 100: Hearing Transcript,
17 October 15, 2008, page 1587, lines 16-17], and that
18 EnCana has a better understanding of the reservoir.
19 [Footnote 101: Hearing Transcript, October 15, 2008,
20 page 1580, lines 9-11]. On a number of occasions,
21 Mr. Sedgwick also admitted that he did not have access
22 to all the data which EnCana and McDaniels had.

23 [Footnote 102: Hearing Transcript, October 15, 2008,
24 page 1587, lines 16-17; Hearing Transcript,
25 October 16, 2008, page 1777, lines 9-16, page 1780,

1 lines 1-2]. It is clear that the best evidence before
2 the Panel are the facts put forward by EnCana and the
3 endorsement of McDaniel, not the unsupported
4 assertions of M&B.

5 Another issue raised by M&B in both its
6 report, [Footnote 103: Exhibit 006-025, Supplemental
7 Written Submission - from Environmental Coalition,
8 page 2], and its late filed submission, [Footnote 104:
9 Exhibit 006-035, Report, page 4], is that there is
10 significant reservoir interference apparent in the
11 production results. Mr. L'Henaff was cross-examined
12 on this point at length. And he explained the
13 "downward shift" held out by Mr. Binder to be
14 reservoir interference simply cannot be based upon the
15 geology and the rock properties. And this is what he
16 said:

17 "A reservoir effect with this
18 tight, tight ... rock would take
19 quite a while to reach from one
20 well to the other, or to basically
21 change the flow regime."

22 [Footnote 105: Hearing Transcript,
23 October 14, 2008, page 1167]

24 [...]

25 " You wouldn't expect to see

1 interference effects through these
2 small silt layers. You wouldn't
3 expect to see them on early-time
4 basis ... You basically have to,
5 would have to reverse the flow ...
6 That would be impossible to do in
7 a tight reservoir on a short-time
8 scale."

9 [Footnote 106: Hearing Transcript,
10 October 14, 2008, page 1177]

11 Mr. L'Henaff carefully explained the
12 relationship between EnCana's conceptual model of the
13 reservoir and its reservoir model and the pilot
14 decline analysis. This is tight gas. This is not a
15 reservoir that can be characterized as a "milk shake"
16 into which EnCana is just adding more straws. As
17 Mr. L'Henaff explained to Mr. Mousseau in
18 cross-examination, and I quote:

19 "The silt stringers are the major
20 flow mechanisms, but it's their
21 discontinuity that doesn't allow
22 you to have very large drainage
23 radius, so it's really [the] infill
24 wells that allow you to contact
25 more of the rock that's really not

1 being connected up by those silt
2 stringers."

3 [Footnote 107: Hearing Transcript,
4 October 14, 2008, p. 1162,
5 lines 11-16]

6 There is no doubt, on the evidence before
7 this Panel, that there are incremental reserves of at
8 least 125 bcf associated with this Project.

9 Let me move on to the optimization of drainage and
10 production.

11 **(b) Optimizing Drainage and Production**

12 The source of shallow gas production in
13 southeast Alberta comes from three main stratigraphic
14 formations. That's the Milk River, the Medicine Hat,
15 and Second White Speckled Shale.

16 [Footnote 108: Exhibit 002-123,
17 Package of slides & Opening
18 Statement of EnCana, page 15]

19 EnCana only owns part of the mineral rights
20 to the Second White Speckled Shale in the southern
21 half of the NWA.

22 [Footnote 109: Hearing Transcript,
23 October 14, 2008, page 1214]

24 EnCana will only co-mingle production in all
25 three formations if they own all of the necessary

1 mineral rights.

2 [Footnote 110: Hearing Transcript,
3 October 14, 2008, page 1218]

4 With respect to the three wells under the
5 current application, EnCana owns the mineral rights to
6 all three formations.

7 [Footnote 111: Exhibit 002-066,
8 EUB Application No. 1435831 and
9 supporting documents]

10 As the mineral rights holder of such a large
11 tract of land, EnCana has also obtained the required
12 holding orders from the ERCB for special drilling
13 spacing units. This gives EnCana flexibility in the
14 size and shape of its drilling spacing units and
15 associated target areas, [Footnote 112: *Oil and Gas*
16 *Conservation Regulations*, Alta. Reg. 151/71,
17 s. 4.040(1)], but EnCana still aims to maintain an
18 inter-well distance of 400 metres.

19 [Footnote 113: Hearing Transcript,
20 October 15, 2008, page 1448,
21 lines 24-25]

22 This freedom from LSD constraints allows
23 EnCana some flexibility to place its wells for more
24 effective drainage of the reservoir and avoidance of
25 environmental constraints. It is, however,

1 constrained by the configuration of existing wells.

2 [Footnote 114: Hearing Transcript,
3 October 15, 2008, page 1448, line
4 19 to page 1449, line 1]

5 I have a couple more topics I think I can get
6 through before the break, sir, which would be a
7 logical split.

8 So let me turn to accidents and
9 malfunctions.

10 **B. Accidents and Malfunctions**

11 EnCana is required to consider the potential
12 environmental effects of accidents and malfunctions
13 that may occur as a result of the Project. EnCana has
14 committed to operating all components of the Project
15 safely as well as in a manner that demonstrates care
16 for other land users and the environment, that's
17 EnCana's top priority.

18 So EnCana considered the various potential
19 malfunctions and accidental events that may occur, how
20 to prevent them and mitigate against them, and the
21 potential environmental effects. And that's all
22 referenced in the evidence. Examples are where EnCana
23 has considered collisions and releases from vehicles,
24 [Footnote 115: Exhibit 002-010, EIS, Volume 1,
25 Section 2.2.5.1, page 2-23], pipeline accidental

1 releases, [Footnote 116: Exhibit 002-010, EIS,
2 Volume 1, Section 2.2.5.2, page 2-23], blowouts and
3 surface casing vent flows, [Footnote 117:
4 Exhibit 002-010, EIS, Volume 1, Section 2.2.5.3,
5 page 2-24], and grassland fires, [Footnote 118:
6 Exhibit 002-010, EIS, Volume 1, Section 2.2.5.6,
7 page 2-27], all as potential sources of project
8 malfunctions and accidents. And you are required to
9 consider that in the Joint Agreement and you can find
10 that in the evidence, sir.

11 The EIS illustrates how the Project was
12 designed to minimize the likelihood of such events
13 occurring and the Environmental Protection Plan
14 further reduces the risk by outlining proposed
15 mitigation.

16 EnCana's practices and operational monitoring
17 systems make accidents and malfunctions unlikely to
18 occur. However, in the event where an accident or a
19 malfunction does occur, EnCana's Emergency Response
20 Plan will minimize the extent of any potential
21 effects. It should be noted that training associated
22 with the emergency response is not optional. It is
23 mandatory for all employees and all contractors to be
24 trained and competent in responding to emergencies.

25 An example of EnCana's Emergency Response

1 Plan in action was in response to a recent
2 uncontrolled release of sweet gas from a deep sweet
3 gas well on CFB Suffield prior to the hearing. As
4 noted by Mr. Protti in the Opening Presentation:

5 "Our emergency response plan was
6 activated and worked, regulators
7 were notified and engaged, the well
8 was shut-in promptly in less than a
9 day."

10 [Footnote 119: Exhibit 002-123,
11 Package of Slides & Opening
12 Statement of EnCana, page 1]

13 Mr. Chairman, this is a textbook example of
14 how a company is supposed to act in the face of an
15 accidental event.

16 **C. Impact on Renewable Resources**

17 Under both the Joint Panel Agreement and EIS
18 Guidelines, EnCana was required to assess whether the
19 Project is likely to cause significant effects on
20 renewable resources and whether those resources, the
21 capacity of those resources might be compromised to
22 respond to the present needs as well as the needs of
23 those in the future generations.

24 [Footnote 120: Exhibit 001-004,
25 Joint Panel Agreement, Appendix -

1 Terms of Reference, Section 2(h)
2 and Exhibit 001-005, Final
3 Guidelines for the Preparation of
4 the Environmental Impact Statement,
5 point 23, page 27]

6 As you heard Mr. Protti, EnCana is committed
7 to ensuring this Project goes ahead in a responsible
8 and sustainable manner and would not have proposed it
9 if EnCana did not believe it could be carried out that
10 way.

11 [Footnote 121: Exhibit 002-123,
12 Package of Slides & Opening
13 Statement of EnCana, page 2]

14 In respect of renewable resources, EnCana
15 considered the impact of the Project throughout the
16 EIS and has concluded that the Project is consistent
17 with the principles of sustainability.

18 [Footnote 122: Exhibit 002-117,
19 Updated EIS Guidelines Concordance
20 Table, page 39]

21 I intend to deal with each of those renewable
22 resources, those environmental assets, as part of my
23 specific comments on those issues.

24 In addition, EnCana reviewed the impact of
25 the Project on wildlife and plants and, again, Value

1 Ecosystem Components and arrived at the conclusion
2 that there are no likely significant effects. And, as
3 I indicated, I will deal with those in that section of
4 my argument.

5 Mr. Chairman, I -- the next section is about
6 the adequacy of the environmental assessment. It's a
7 good time for a break, if that's okay with you, sir.

8 THE CHAIRMAN: That's a good suggestion,
9 Mr. Denstedt. We will break now and reconvene at
10 quarter to 11:00. Thank you.

11 (BRIEF BREAK)

12 (PROCEEDINGS ADJOURNED AT 10:30 A.M.)

13 (PROCEEDINGS RECONVENED AT 10:45 A.M.)

14 THE CHAIRMAN: Ladies and Gentlemen, we are
15 now ready to convene once again.

16 Mr. Denstedt, before you begin, perhaps I
17 could just ask you a timing question, and I do not
18 mean to rush you in any way, but I'm wondering if you
19 have a sense of approximately how much longer your
20 final argument might take so that we can plan a lunch
21 break accordingly. I think it would be ideal if, if
22 we could complete your argument before lunch, if you
23 think that's possible, And delay lunch if necessary.

24 Now, a 3 o'clock lunch would be a little bit
25 too long but ...

1 MR. DENSTEDT: We've actually had that
2 discussion, and we did the math. Assuming a fairly
3 short break at some point this morning, I think I
4 could be wrapped up between 1:15 or 1:30, if we could
5 delay lunch to that point, that would give my friends
6 the lunch hour then to think about the comments and
7 maybe consolidate their remarks. But I'm just over a
8 third of the way through, so about 40 percent of the
9 way through. It looks like another two-and-a-half
10 hours probably. But again, if we had a later lunch, I
11 think that would help my friends. But I'm in your
12 hands. I'll do whatever you want me to do, sir.

13 THE CHAIRMAN: I think I see from -- at
14 least nodding from one of the individuals, Ms. Klimek,
15 that that would be acceptable.

16 Mr. Lambrecht, I see nodding as well.

17 So we may need to pause -- I think it's too
18 much to ask you to go for that long a period without a
19 break, so --

20 MR. DENSTEDT: My wife could. I apologize.

21 THE CHAIRMAN: We will take a break,
22 perhaps, at about 12:30, if that's appropriate,
23 roughly about that time. Just to allow the court
24 reporters a few minutes' break and then continue on.

25 MR. DENSTEDT: That will be great. Thank

1 you, sir.

2 THE CHAIRMAN: Okay. Thank you,
3 Mr. Denstedt. Please proceed.

4 MR. DENSTEDT: And the Court Reporter has
5 warned me that I'm approaching the speed limit, so I
6 should be cautious.

7 Let me turn to the environmental portion of
8 the argument, which will take up the remainder of the,
9 of my argument, and start with the environmental
10 assessment process, or the environmental assessment
11 itself.

12 **PART FOUR - THE ENVIRONMENTAL ASSESSMENT**

13 **A. EIS Lead Scientists**

14 Mr. Chairman, one thing that you will have
15 noticed in reviewing EnCana's EIS and -- is that the
16 lead scientists, Mr. Kansas, Mr. Collister, and
17 Dr. Walker, operate their own local, independent
18 consulting businesses.

19 And Mr. Heese explained this in the Opening
20 Statement, and I quote:

21 "When EnCana began to contemplate
22 this Project, EnCana knew the NWA
23 was a unique area. EnCana wanted
24 to ensure it got advice from people
25 experienced in the native prairie.

1 To evaluate the potential
2 environmental effects, EnCana hired
3 independent experts with
4 significant and specific expertise
5 in native prairie environments and
6 an environmental assessment
7 methodology. These independent
8 experts were commissioned to
9 prepare a detailed, comprehensive
10 Environmental Impact Statement in
11 order to meet the Joint Review
12 Panel's Environmental Impact
13 Statement Guidelines. After more
14 than three years of rigorous field
15 study and extensive research and
16 analysis, we are very confident in
17 the work they have done and the
18 advice they have given us regarding
19 how to execute this Project... The
20 overall approach taken by the
21 experts was to focus on determining
22 the environmental effects of infill
23 development by examining the
24 current environmental effects of
25 infill development at CFB Suffield

1 and in the NWA. These independent
2 experts have challenged us every
3 step of the way to make certain
4 this Project is environmentally
5 sound."

6 [Footnote 123: Exhibit 002-123,
7 Package of Slides & Opening
8 Statement of EnCana, page 19]

9 That's the starting point for EnCana's EIS.
10 Mr. Kansas has over 30 years of experience
11 working in Western Canada, including CFB Suffield.

12 Mr. Collister has extensive experience at CFB
13 Suffield and was responsible for conducting aspects of
14 two extensive natural resource inventories on the
15 Military Training Areas.

16 Dr. Walker was the Reclamation Planner for
17 the Express Pipeline which was noted by Ms. Bradley of
18 the Coalition as a good example of reclamation.

19 [Footnote 124: Hearing Transcript,
20 October 16, 2008, page 1877,
21 line 10 to line 18]

22 Several of our experts, including
23 Mr. Collister, Mr. Kansas and Mr. McNeil, have worked
24 for both EnCana and the DND in recent years, lending
25 further credibility to their assessments.

1 Mr. Chairman, these experts know the native prairie;
2 they know how important it is and, more importantly,
3 they know how to protect it.

4 **B. EIS and Methodology**

5 **(a) Completeness of EIS**

6 Let me turn to completeness of the EIS, which
7 has been a recurring theme here. And EnCana has been
8 criticized for not including more information in its
9 EIS. Many of the recommendations from the Government
10 of Canada have involved requests for additional
11 details on a wide range of issues including VECs,
12 species at risk, facilities locations, traffic,
13 fragmentation, reclamation, baseline information,
14 impact analysis, experimental results, and the PDA
15 process and Environmental Effects Monitoring Program.

16 But it's important to recognize the purpose
17 of environmental assessment and I would have thought
18 the Government of Canada would have a full
19 understanding of that. They are responsible for the
20 legislation.

21 Section 11 of the ***Canadian Environmental***
22 ***Assessment Act*** provides that where a Federal authority
23 requires an EA of a project, that Federal authority
24 "shall ensure the environmental assessment is to be
25 conducted as early as is practicable in the planning

1 stages of the project and before [irrevocable]
2 decisions are made..."

3 The early conduct of the environmental
4 assessment is statutorily mandated. That means that
5 some detailed project information may in fact not be
6 available at the time of the EIS. That's expected.

7 One of the reasons for this is so that the
8 environmental assessment can influence design
9 decisions, execution plans, mitigation and monitoring.
10 It is a well-accepted in -- it's well accepted in
11 Canadian jurisprudence that environmental assessment
12 is a planning tool used to help achieve the goal of
13 sustainable development by providing an effective
14 means of integrating environmental factors into
15 planning and decision-making processes early in the
16 planning stages of a project. That was decided in the
17 ***Bow Valley Naturalists Society v. Canada.***

18 [Footnote 125: ***Bow Valley***
19 ***Naturalists Society v. Canada***
20 ***(Minister of Canadian Heritage),***
21 [2001] 2 F.C. 461, (C.A.) at
22 para. 17.]

23 Having said that, the information and data
24 available for this EIS was extensive and
25 comprehensive.

1 EnCana prepared its EIS in accordance with
2 the Guidelines for this EIS issued by the Panel.

3 [Footnote 126: Exhibit 002-117,
4 Updated EIS Guidelines Concordance
5 Table]

6 EnCana has reviewed the recommendations and
7 the concerns of interested parties and addressed them
8 accordingly through responses to Information Requests,
9 through evidence at the hearing, and its EPP, its EEMP
10 and the Reply evidence. The EIS meets the purpose set
11 out in the Guidelines for the EIS through its thorough
12 examination of effects, including accumulative
13 effects, the effects of construction, operation,
14 reclamation, decommissioning and abandonment of the
15 Project, and evaluating their significance.

16 [Footnote 127: Exhibit 001-005,
17 Final Guidelines for the
18 Preparation of the Environmental
19 Impact Statement, Section 1.1]

20 Mr. Fudge has over 25 years of experience as
21 an environmental consultant; his Masters thesis in the
22 effects of shallow gas drilling in the Middle Sand
23 Hills a long time ago, and has participated in some of
24 the country's largest and most complex environmental
25 assessments. Take a look at his CV, you'll see the

1 Sydney Tar Ponds clean-up, the Confederation Bridge,
2 Goose Bay Military Flying, Hibernia Offshore
3 Development and Deep Panuke Offshore Development, all
4 environmental impact assessments done under the
5 **Canadian Environmental Assessment Act**. And this is
6 what he had to say about this particular assessment:

7 "This Environmental Impact
8 Statement (EIS) is a very thorough
9 and comprehensive assessment
10 document. This environmental
11 impact assessment was a unique
12 opportunity to assess a proposed
13 Project with an existing extensive
14 biophysical database, and an
15 opportunity for the study team to
16 go into the field and actually
17 measure the effects of past shallow
18 gas development on the resident
19 vegetation and wildlife. The
20 ability to base environmental
21 assessment predictions on real
22 observed effects (and to not have
23 to rely on modelling or other
24 similar methods) is very unusual
25 and provides strong credibility to

1 the assessment results. Therefore,
2 Mr. Chairman, in my opinion, we
3 have a robust assessment document
4 supported by extensive field
5 measurements and observations,
6 which is unique in my experience."

7 [Footnote 128: Exhibit 002-123,
8 Package of Slides & Opening
9 Statement of EnCana, page 20]

10 And I refer you back to that experience.

11 Mr. Chairman, because the EIS is required by
12 law to be done early in the planning stage of a
13 project, detailed fieldwork is rarely available for EA
14 predictions.

15 I've been at ten Joint Review Panels and I
16 can attest to that.

17 What makes EnCana's EIS unique is that such
18 detailed fieldwork was available and it was used in
19 the environmental assessment, including aspects of the
20 ecological inventory that was done by the Canada
21 Wildlife Service, which has been described by
22 Environment Canada as "extraordinary in its scope and
23 comprehensiveness", [Footnote 129: Environment
24 Canada, online: [Http://www.mb.ec.gc.ca/nature/whp/nwa/
25 suffield/dd0s0d.en.html](http://www.mb.ec.gc.ca/nature/whp/nwa/suffield/dd0s0d.en.html)], and by Mr. Norton, in

1 testimony, as a ground-breaking piece of work that is
2 still used as a fundamental information source.

3 [Footnote 130: Hearing Transcript,
4 October 22, 2008, page 3068,
5 lines 16-22]

6 Further, the D6/D8 pilot project provided an
7 opportunity to directly compare wildlife and
8 vegetation conditions in areas that experienced 8 and
9 16 wells per section drilling. This information
10 assisted EnCana in directly comparing the effects of
11 8 and 16 wells per section on the environment,
12 resulting in a high degree of confidence for the
13 productions in the EIS that there are no likely
14 significant adverse effects caused by this Project.

15 As pointed out by Mr. Kansas, for this
16 Project, there was a luxury of extensive real data and
17 real experience with similar development in similar
18 conditions. It's unparalleled.

19 [Footnote 131: Exhibit 002-123,
20 Package of Slides & Opening
21 Statement of EnCana, page 19]

22 In addition, as noted by Mr. Fudge in the
23 Opening Statement, this EIS is conservative in its
24 approach and therefore likely over-predicts the
25 environmental impacts of the Project.

1 [Footnote 132: Exhibit 002-123,
2 Package of Slides & Opening
3 Statement of EnCana, page 21]

4 By using this approach, the conservative
5 assumptions and inputs used in the EIS are an
6 effective manner of dealing with the limited
7 uncertainty that remains associated with the
8 environmental assessment, and further ensures that the
9 NWA will be protected.

10 So despite the use of EnCana's use of
11 extensive real data and conservative approach in the
12 EIS, interveners still expressed concern over the fact
13 that EnCana had not undertaken extensive studies and
14 surveys in preparation of its EIS.

15 [Footnote 133: Hearing Transcript,
16 October 6, 2008, pages 164, 170-171
17 and 178-181]

18 Mr. Kansas had this to say. He said that we
19 had a "focused empirical" approach to its EIS, and I
20 quote:

21 "By focused, we mean that our study
22 team allocated time and resources
23 to what were considered to be the
24 real issues as identified by
25 scoping. We intentionally avoided

1 conducting large amounts of
2 ecological inventory for the sake
3 of inventory. The vast majority of
4 our time and resources focused on
5 understanding past and current
6 wildlife and vegetation impacts
7 associated with shallow gas
8 development. This kind of focus
9 was specifically requested by the
10 Joint Review Panel in the
11 Environmental Impact Statement
12 Guidelines for the Project."

13 And he goes on to say:

14 "By empirical, we mean that we used
15 direct field observations to
16 support our evidence and impact
17 predictions. Direct observations
18 were framed by working hypotheses
19 that related directly to the
20 specific impacts of the Project
21 (i.e., infill drilling, including
22 lease and pipeline construction.)
23 This was aided in large part by the
24 fact that EnCana has constructed
25 and operated 1126 wells in the NWA

1 since commencing drilling in 1973,
2 including four sections infilled to
3 16 wells per section."

4 [Footnote 134: Exhibit 002-123,
5 Package of Slides & Opening
6 Statement of EnCana, pages 21-22]

7 The information available to EnCana's
8 scientific team was much more than is required to
9 predict the effects of the Project with great
10 confidence, and develop an implementation and
11 mitigation plan including the PDA process with a high
12 degree of certainty. And finally, the EEMP will
13 confirm that these predictions are accurate and
14 implement adaptive management as necessary.

15 The information from the PDAs will feed into
16 the monitor and following-up program. It will be
17 utilized by EnCana's adaptive management approach and
18 used to verify the predictions of the Project.

19 [Footnote 135: Exhibit 002-110,
20 Reply to Intervener Submissions,
21 Appendix B]

22 Perhaps more importantly, the information
23 that will be generated will enhance the Base
24 Commander's ability to manage and conserve the
25 wildlife resources in the NWA in accordance with his

1 mandate under the Regulation.

2 During the informal hearing session, the
3 Panel expressed its appreciation for the information
4 from locals like Ms. Kettenbach about what's really
5 going on on the land.

6 [Footnote 136: Hearing Transcript,
7 October 18, 2008, page 2329,
8 lines 16-20]

9 EnCana's approach to this EIS and the use of
10 its PDA process does just that. It looks at what is
11 really going on on the land.

12 **(b) VEC Selection**

13 EnCana also was criticized for its
14 methodology for selecting VECs. Some interveners
15 argued that the species included as VECs were
16 under-inclusive; others argued that EnCana's selection
17 of VECs have been over-inclusive. Such is the life of
18 the Proponents in the environmental assessment process
19 in this country.

20 The question for the Panel, however, is
21 whether EnCana's approach is appropriate. Wildlife
22 VECs were selected based on their being resident in
23 the NWA at some portion of the year and being either
24 Federally or Provincially listed leading to the
25 deliberate exclusion of certain species. For example,

1 you heard the Greater Sage Grouse, Sage Thrasher, and
2 Swift Fox were not considered as VECs because they
3 were not resident in the NWA or CFB Suffield.

4 Similarly, although the Yellow Rail and
5 Piping Plover do occur as migrants in the NWA, they
6 are not known as resident. In any event, the Yellow
7 Rail is a wetland species and would be protected by
8 the 100-metre wetland buffer.

9 The Peregrine Falcon also occurs in the NWA
10 as a migrant, but is not known to nest there.
11 Furthermore, the Peregrine Falcon's ecology is similar
12 to the Prairie Falcon, which is a VEC.

13 The Northern Pocket Gopher and Mule Deer were
14 not included as VECs because they are not rare, at
15 risk, or susceptible to defined impacts from the
16 Project.

17 [Footnote 137: Hearing Transcript,
18 October 14, 2008, pages 1228-1231;
19 Exhibit 002-110, Reply to
20 Intervener Submissions, page 5]

21 In the end, EnCana chose to evaluate 48 VECs
22 rather than focus on a smaller number of threatened
23 VECs or a larger number which had watered down the
24 EIS. While this number is large, the intent was to
25 assess potential effects on wildlife as transparently

1 and as comprehensively as possible and ensure all
2 habitat and ecosystem functions were considered.

3 [Footnote 138: Exhibit 002-110,
4 Reply to Intervener Submissions,
5 page 4]

6 Mr. Collister explained this, and I quote:

7 "Our feeling was, as I mentioned,
8 to be comprehensive and to use ...
9 all listed provincial or federal
10 wildlife species as VECs. And that
11 ... is consistent with the
12 recommendation from SARA as well...
13 We wanted to be sure that we
14 considered all of the ecosystem
15 considerations out there. It
16 didn't result in any dilution of
17 assessment to look at 48. It's a
18 big number, I appreciate, but it
19 didn't result in any dilution.
20 Rather ... it was simply more
21 comprehensive in my view."

22 [Footnote 139: Hearing Transcript,
23 October 14, 2008, pages 1231-1232]

24 This approach to consider all listed species
25 is recommended in guidance provided by Environment

1 Canada.

2 [Footnote 140: Addressing *Species*
3 *at Risk* Considerations under the
4 **Canadian Environmental Assessment**
5 **Act**: A federal policy and
6 procedures guide, page 17]

7 **(c) Precautionary Principle, System Tolerance and**
8 **Resilience**

9 Let me turn to the precautionary principles
10 which also got air play at the, the evidentiary
11 portion of the hearing and there's been considerable
12 mention of it by the Coalition and the DND and
13 Environment Canada. And reference was made primarily
14 to the requirements as noted in the Environmental
15 Impact Statement Guidelines.

16 [Footnote 141: Exhibit 001-005,
17 Final Guidelines for the
18 Preparation of the Environmental
19 Impact Statement, page 5]

20 In applying the precautionary approach, the
21 Panel required the Proponent to do the following, and
22 that is to:

23 "... demonstrate that the proposed
24 actions are examined in a careful
25 and precautionary manner in order

1 to ensure that they do not cause
2 serious or irreversible damage to
3 the environment, especially with
4 respect to environmental functions
5 and integrity, considering system
6 tolerance and resilience, and will
7 not interfere with the conservation
8 of wildlife in a protected area."

9 And let me say a few words about that. EnCana
10 examined the project and its cumulative effects in the
11 context of that direction. Recommended mitigation
12 measures were designed to ensure negligible or
13 insignificant effects on ecosystem integrity and
14 function, including reclamation approaches to enhance
15 native vegetation recovery. Field studies
16 demonstrated resilience of VECs within this system.
17 For example, Sprague's Pipit point count densities
18 were as high or higher in the Military Training Area
19 as they were in the NWA, [Footnote 142: Hearing
20 Transcript, October 25, 2008, page 3839, lines 11-20],
21 in spite of digitized disturbance being approximately
22 three times higher in the MTA. In fact, Sprague's
23 Pipit point count densities did not appear to be
24 affected until digitized footprint in the MTA
25 approached 31 percent of their habitat.

1 [Footnote 143: Exhibit 002-013,
2 EIS, Volume 3, pages 5-14]

3 The existing footprint in the NWA by
4 comparison ranges to 1.3 to 2.3 percent and the
5 additive footprint from this Project to the NWA is
6 less than 0.5 percent.

7 It is clear that native prairie and its
8 wildlife possess strategies to assimilate even high
9 levels of native prairie disturbance, let alone the
10 very small footprint associated with this Project.
11 This type of resilience, Mr. Chairman, is just not
12 surprising in light of the evolution of these species
13 and this prairie, in the face of known and extensive
14 effects from natural disturbances such as grazing from
15 bison, from fire, and from drought. This is a very
16 resilient environment.

17 [Footnote 144: Exhibit 002-110,
18 Reply to Intervener Submissions,
19 pages 7-8]

20 EnCana's assessment, mitigation, monitoring
21 plans, and its commitment to piloting the PDA process
22 at the first stage of the Project all demonstrate
23 compliance with the Precautionary Principle.

24 **C. Experimental Design and Statistical Analysis**

25 Let me briefly discuss the, the issue of

1 experimental design and statistical analysis. The
2 Government of Canada and the Coalition have criticized
3 EnCana's EIS sampling sizes and the conclusions
4 reached from the experimental results and for failing
5 to conduct statistical analysis, including ordination
6 and power analysis.

7 [Footnote 145: DND: Exhibit
8 003-012, Written Submission Formal
9 Hearing 003, pages 74-78;
10 Environment Canada: Exhibit
11 003-012, Written Submission Formal
12 Hearing 003, points 39, 40 and 49;
13 Coalition: Exhibit 006-017, Written
14 Submission Formal Hearing 004A,
15 Written Submission, pages 8, 10,
16 12, 20 and Tab 4, pages 12, 15, 16,
17 20]

18 First, let me be clear, EnCana used
19 acceptable experimental design in the EIS. It's
20 consistent with Environmental Impact Assessment in
21 this country today. Stratified random selection of
22 sampling locations was done for most of the wildlife
23 and vegetation field studies, especially those that
24 directly tested effects of 8 versus 16 wells per
25 section.

1 [Footnote 146: Exhibit 002-110,
2 Reply to Intervener Submissions,
3 page 16]

4 And Mr. Kansas explained that:
5 "I would like to reiterate again
6 ... that we sampled areas that were
7 infilled to 16. We didn't guess.
8 We didn't put buffers down. We
9 sampled them. They were drilled
10 from [8] to 16 wells per section."

11 [Footnote 147: Hearing Transcript,
12 October 9, 2008, page 878,
13 lines 6-10]

14 Can he be any clearer?

15 Second, the EIS Guidelines do not require
16 EnCana to conduct any specific statistical analysis.
17 The Guidelines speak in terms of probability,
18 reliability, and certainty; going into the field,
19 doing sampling, making decisions on that basis,
20 provide a high degree of probability, reliability, and
21 certainty.

22 [Footnote 148: Exhibit 001-005,
23 Final Guidelines for the
24 Preparation of the Environmental
25 Impact Statement, pages 6 and 36]

1 EnCana did just that. Their evidence is
2 reliable, and credible. They used appropriate
3 statistical tests to compare effects of 8 versus
4 16 wells per section on birds and vegetation integrity
5 in a variety of sampling conditions. In determining
6 significance, EnCana's experts -- experts did so in
7 light of numerous factors, including statistical
8 significance of field studies and Mr. Canvas -- Kansas
9 had this to say:

10 "[I]t's been really frustrating
11 going to hearings because you're
12 guessing based on a model, you're
13 making assumptions. What ... Doug
14 and I tried to do with this is take
15 a different approach. We knew
16 there were 16 wells per section
17 already drilled in the NWA. It was
18 a ... great possibility for us to
19 go in and ... actually look at the
20 change between 8 and 16. We tried
21 our best to control variables and
22 ... come up with some feelings
23 about how these animals respond.
24 And as it turned out ... in our
25 professional opinion, the effects

1 were minimal."

2 [Footnote 149: Hearing Transcript,
3 October 9, 2008, pages 803-804]

4 He goes on to say this about statistical
5 significance:

6 "I think it's ... really important
7 to distinguish differences between
8 statistical significance,
9 ecological significance, or
10 biological significance and
11 environmental impact significance.
12 Those are three quasi-related
13 things... [They] can even be
14 considered to be distinct. As a
15 professional on this Project, I was
16 hired to assess the significance of
17 this Project, the incremental
18 significance and the cumulative
19 significance of the residual
20 environmental impacts of the
21 Project. To do that, I relied on,
22 in my particular area of expertise
23 ... from my Valued Ecosystem
24 Components, I relied on a number of
25 factors with statistical

1 significance being one small
2 element of those factors. Some of
3 those factors included measured
4 magnitude through footprint
5 measurements, a rating criteria,
6 standard rating criteria used by
7 any environmental impact
8 practitioner who does EIAs, such as
9 magnitude, duration, direction,
10 probability, etc."

11 THE COURT REPORTER: Mr. Denstedt, can you please
12 slow down for me.

13 MR. DENSTEDT: Sorry.

14 THE COURT REPORTER: "A rating criteria."

15 MR. DENSTEDT:
16 "... a rating criteria, standard
17 rating criteria used by any
18 environmental impact practitioner
19 who does EIA, magnitude, duration,
20 direction, probability.
21 Importantly, the recovery, the
22 reversibility of the ... impact, as
23 well as ... articles from analogue
24 studies that were done that ...
25 helped inform my ability to call

1 the impact significant or
2 insignificant. So statistical
3 significance is but one element and
4 it's not necessary to ... have
5 P-values, you know, working the way
6 you want them to, to come up with
7 an impact significance rating.
8 Now, ecological significance is all
9 about the long-term sustainability
10 of ecological processes and the
11 species and composition and
12 structure of habitats and species
13 ... that occur in the area and
14 that's what we focused on ... I
15 think we need to all be cautious of
16 mixing those."

17 [Footnote 150: Hearing Transcript,
18 October 8, 2008, page 679, line 23
19 to page 681, line 9]

20 In spite of the fact that both the Coalition
21 and the Government of Canada criticized EnCana's lack
22 of power analysis in the EIS, various studies relied
23 upon by the Coalition and the Government of Canada,
24 such as the Linnen (2006), [Footnote 151: Exhibit
25 003-040, Effects of Minimal Disturbance Shallow Gas

1 Activity on Grassland Birds, by C. Linnen, 2006],
2 Mr. Smith's reports, Dr. Rowland's reports, [Footnote
3 152: Exhibit 003A-029, Ecosystem Impacts of
4 Historical Shallow Gas Wells within the CFB Suffield
5 National Wildlife Area], did not have power analysis
6 conducted and were not peer-reviewed.

7 In terms of experimental design, it is
8 important to know that a natural environment makes
9 "true" experimental design almost impossible because
10 there are too many variables that cannot be controlled
11 for, such as fire and precipitation. Dr. Rowland
12 agreed that for analysis to be meaningful, the
13 experimental design is important and one needs to be
14 able to control for the various variables.

15 [Footnote 153: Hearing Transcript,
16 October 23, 2008, page 3177, line
17 21 to page 3178, line 3]

18 And I walked her through that in
19 cross-examination. Since an environmental assessment
20 is conducted in a natural environment, statistical
21 analysis is just one tool, and a tool that does not
22 tell you what you need to know. A statistically
23 significant difference is just that; it's a
24 difference. Statistical significance does not equal
25 biological or environmental significance. Whether the

1 difference is important requires analysis by competent
2 biologists familiar with the species that might be
3 impacted. That's what EnCana did.

4 [Footnote 154: Hearing Transcript
5 October 8, 2008, page 679, line 23
6 to page 680, line 9]

7 Let me turn briefly to public consultation.

8 **PART FIVE - PUBLIC CONSULTATION**

9 Seeking public and stakeholder input, as you
10 heard from EnCana, is a core principle of their
11 approach. And it is a requisite component of CEAA
12 environmental assessment and the ERCB's process under
13 **Directive 56**. EnCana initiated its public
14 consultation in October 2005.

15 Since then, EnCana has ensured stakeholders,
16 including members of the public, received up-to-date
17 information on the Project and had an opportunity to
18 respond and provide input into the process.

19 When concerns did arise EnCana worked hard to
20 resolve those concerns through a collaborative and
21 consultative approach. I think this is best evidenced
22 by EnCana's dealings with the Siksika First Nation, a
23 group which has largely been ignored in respect of CFB
24 Suffield. As you may recall, Mr. Chairman, the
25 Siksika opposed this Project in 2007 and gave a

1 written notice to the Panel of its opposition.

2 [Footnote 155: Exhibit 005-029,
3 Comment on EIS - 007]

4 EnCana worked with the Siksika to ensure
5 their concerns were addressed. The Siksika later
6 informed this Panel that they had reached an agreement
7 with EnCana that addressed its concerns about the
8 Project and that it was formally withdrawing its
9 opposition to the Project.

10 [Footnote 156: Exhibit 005-052,
11 Letter regarding an agreement
12 between the Siksika Nation and
13 EnCana]

14 One such concern was involved -- was resolved
15 by the inclusion of the Siksika into the PDA process.
16 The Siksika's involvement will allow it to provide
17 meaningful input into the Project through the PDA
18 process, particularly the siting of Project locations
19 in order to avoid any impact to historical and
20 environmental resources that are of importance to the
21 Siksika.

22 Mr. Chairman, it's a great example of
23 successful consultation where reasonable parties meet
24 and resolve their differences. A concern was raised,
25 it was dealt with in a collaborative fashion,

1 modifications were made to the Project and the PDA
2 process to ensure the concern was alleviated and the
3 Project is better for it. That's how it's supposed to
4 work.

5 Interestingly, with respect to the Government
6 of Canada's consultation with the Siksika regarding
7 designated critical habitat for rare plants,
8 Mr. Duncan admitted that the consultation process only
9 began after EnCana alerted the government that the
10 Siksika should be a part of the consultation process.

11 [Footnote 157: Hearing Transcript
12 October 22, 2008, page 3105,
13 line 24 to page 3106, line 10]

14 So if you're comparing and contrasting
15 consultation in respect of projects and what's
16 required in open and fair communication, I suggest
17 that as an example.

18 **PART SIX - ISSUES**

19 **A. Introduction**

20 Let me turn to the specific issues and there
21 are -- in three general categories:

- 22 (i) General issues;
- 23 (ii) Operational issues; and
- 24 (iii) Environmental issues.

25 And although some of these issues were raised

1 and discussed at the hearing, I would like to remind
2 the Panel that the discussion of these, these issues,
3 in EnCana's view, did not in any meaningful way
4 challenge the validity or credibility of the Project
5 or the conclusions reached by EnCana's scientists.

6 Mr. Chairman, I propose to deal with these
7 issues by first summarizing the concerns that have
8 been raised and then briefly discussing why the
9 concern is not applicable or has been addressed by
10 EnCana.

11 **B. General Issues**

12 **(a) Intervener Recommendations**

13 Let me deal first with the recommendations
14 because I can deal with that relatively expediently.
15 Hundreds of recommendations have been provided by the
16 Government of Canada and the Coalition, and EnCana
17 responded to those recommendations in its Reply
18 evidence.

19 [Footnote 158: Exhibit 002-110,
20 Reply to Intervener Submissions,
21 Appendix B]

22 And I'd simply refer you to those -- that
23 response for EnCana's position on the various
24 recommendations instead of taking the Panel's time up
25 this morning.

1 But let me give you a very simple test to
2 evaluate the various recommendations or conditions put
3 forward. You must ask yourselves this question: Is
4 the recommendations required to ensure that this
5 Project is in the public interest and not likely to
6 cause a significant adverse environmental effect?
7 That's the question you must ask yourself in respect
8 of every recommendation that gets made. If the
9 recommendation does not pass that test, it should not
10 be included in your report unless it is to guide
11 future actions by governments or regulators. That's
12 the test you should apply.

13 **(b) Relationship Between DND and EnCana**

14 There was a great deal of discussion at the
15 hearing about the relationship and level of trust
16 between EnCana and the Department of National Defence.
17 Mr. Protti's response to Mr. Mousseau was that things
18 had worked extremely well for 25 years and that
19 there's a lot of consensus and trust today, as well as
20 cooperation between the parties to do the right thing
21 for the environment.

22 [Footnote 159: Hearing Transcript,
23 October 17, 2008, page 2118,
24 lines 16-19]

25 He noted the relationship is getting better each

1 year and that EnCana is committed to working with the
2 DND.

3 [Footnote 160: Hearing Transcript,
4 October 17, 2008, page 2118, lines
5 16-19; page 2119, line 25 to page
6 2120, line 4]

7 When asked a similar question, the Base
8 Commander stated that the relationship is very broad
9 and deep.

10 [Footnote 161: Hearing Transcript,
11 October 21, 2008, page 2846,
12 lines 3-8]

13 He noted that although there are issues that
14 will need to be dealt with, he suspects that if the
15 parties can sit down and make it work, they will.

16 [Footnote 162: Hearing Transcript,
17 October 21, 2008, page 2847,
18 line 7]

19 On the scientific side you heard in the
20 rebuttal by Dr. Walker, he think's he's about two
21 beers away from resolving the reclamation issues with
22 his counterparts on the other side.

23 Mr. Chairman, I think it's important that you
24 note that although there have been bumps in the road,
25 the parties are committed to working out these issues.

1 Your Panel report should build on and nurture this
2 growing cooperation among the parties by giving the
3 parties a framework within which the Project can
4 proceed in an environmentally acceptable and efficient
5 manner.

6 Let me turn to the NWA management plan.

7 **(c) NWA Management Plan**

8 The need for a management plan for the NWA
9 was a recurring theme. And although EnCana has not
10 been consulted with respect to this plan, EnCana would
11 like to be, and they have said that in testimony, and
12 hopes the DND will engage all stakeholders in the NWA
13 (EnCana, the PFRA, researchers, and the Siksika) in
14 discussions regarding the content on the management of
15 the NWA. EnCana believes the plan can and should be
16 developed concurrently with the Project. The PDAs and
17 the EEMP will help inform the development and
18 refinement of that plan and provide the best possible
19 information, on EnCana's dime, by the way, upon which
20 the wildlife conservation goals of the plan can be
21 fulfilled. Again, cooperation and coordination are
22 the bedrock of good decisions.

23 EnCana proposed that DND be involved
24 throughout the PDA process and be a part of the EEMP
25 Advisory Committee. EnCana believes that will provide

1 valuable information to the DND to incorporate and
2 consider in the development and execution of an NWA
3 management plan.

4 **C. Operational Issues**

5 So let me go on to operational issues. And
6 the first one I would like to deal with is EnCana's
7 track record, which became an issue at the hearing.

8 **(a) Compliance and EnCana's Track Record**

9 DND filed evidence identifying EnCana's
10 "compliance" issues at CFB Suffield, namely issues
11 with trail management, trail degradation, non-native
12 species invasion and fragmentation.

13 [Footnote 163: Exhibit 003-012,
14 Written Submission Formal Hearing
15 003, page 95]

16 Similarly, the Coalition noted that certain
17 wellsites required remedial action and that eroding
18 soils were found on wellsites, pipelines and access
19 roads.

20 [Footnote 164: Exhibit 006-017,
21 Written Submission Formal Hearing
22 004A, Tab 4, page 14]

23 So let me deal with those things.
24 Specifically, in regard to DND's supplemental
25 submission regarding EnCana's compliance history,

1 [Footnote 165: Exhibit 003-019, Supplemental Written
2 Submission Formal Hearing 003, Section II], EnCana
3 reviewed the incidents and visited every single site
4 in DND's submission, and noted that none of them
5 resulted in environmental degradation following
6 cleanup. In its Reply evidence, EnCana noted that the
7 incidents and photographs were taken by DND during the
8 construction process before final cleanup had been
9 conducted and you heard me cross-examine the
10 Department of National Defence on that. EnCana has
11 provided the Panel with recent photographs of the
12 sites in which DND expressed concern and it is clear
13 that those sites, just one season later, are recovered
14 or recovering.

15 [Footnote 166: Exhibit 002-110,
16 Reply to Intervener Submissions,
17 Appendix M]

18 In addition, in response to DND's inspection
19 of the Koomati area, EnCana notes that DND's
20 inspection or audit or study, or whatever you want to
21 call it, was conducted partway through EnCana's
22 drilling program and thus was inappropriate and
23 misleading in assessing the effectiveness of EnCana's
24 practices.

25 [Footnote 167: Exhibit 002-110,

1 Reply to Intervener Submissions,
2 page 112]

3 On rebuttal, Mr. Heese -- you heard Mr. Heese
4 speak -- indicated that he found parts of it to be
5 unfair. Well, those are the measured words of a young
6 man who has a lot of credibility, sir. I would have
7 characterized it somewhat differently -- particularly
8 that a location could fail for having a single
9 depression or rut less than one centimetre in depth.
10 Does that make any sense?

11 [Footnote 168: Hearing Transcript,
12 October 25, page 3962, line 5 to
13 page 3964, line 9]

14 Over its 30-year history at CFB Suffield,
15 EnCana has been commended many times by SEAC for its
16 good practices. As noted in the SEAC Annual General
17 Minutes from 1998, and I quote:

18 "The Chairperson ...

19 And that's the Base Commander:

20 "... especially passed on his
21 appreciation to AEC for their
22 conscientious stewardship of their
23 environmental activity, for their
24 responsible access control and for
25 their coordination and cooperation

1 in all Base activities."

2 [Footnote 169: Exhibit 002-129,
3 Binder containing Undertakings from
4 October 10, 2008, tab 10, page 4]

5 In 1988:

6 "Dr. Edwards stated that in spite
7 of the extreme conditions
8 encountered, i.e. no moisture
9 accumulation, no rain, high
10 temperatures, and wind, there has
11 been no damage in the Sand Hills.
12 He was extremely pleased to see
13 that AEC's environmental efforts
14 over the years have paid obvious
15 dividends. The stabilization
16 efforts on the verges of Mounted
17 Rifles Road and at the meter
18 station along that road have been
19 good. The key well at 16-14-19-3
20 continues to look good. He
21 congratulated AEC on their
22 continued good work in this area."

23 [Footnote 170: Exhibit 002-129,
24 Binder containing undertakings from
25 October 10, 2008, Tab 14, 1988 AGM

1 Minutes, page 6]

2 Dr. Edwards was the Canadian Wildlife Service
3 representative on SEAC.

4 Mr. Chairman, if you don't believe me, read
5 the minutes. Go back and read the minutes.

6 EnCana acknowledges that its not perfect,
7 that occasional issues have occurred in the past on
8 CFB Suffield, but it's committed to continually evolve
9 its practice and get better. And those issues,
10 Mr. Chairman, are the exception, not the rule. The
11 overwhelming evidence in front of this Panel is that
12 operations have been conducted with care and
13 diligence. Again, read the minutes of the SEAC
14 meetings. Listen to the words of Mr. Heese.

15 [Footnote 171: Hearing Transcript,
16 October 17, 2008, page 2141, lines
17 9-16; Exhibit 002-110, Reply to
18 Intervener Submissions, page 104]

19 **(b) Access**

20 In respect of access trails, Mr. Heese
21 explained that EnCana is in the midst of a project to
22 optimize existing access within the NWA. EnCana
23 intends to work with the Military on the development
24 of an access trail map. [Footnote 172: Hearing
25 Transcript, October 14, 2008, page 1299], and the

1 development of the map will continue to proceed
2 regardless of the outcome of the hearing.

3 [Footnote 173: Hearing Transcript,
4 October 14, 2008, pages 1297-1298]

5 So win, lose or draw, EnCana will proceed with
6 that access management plan. EnCana does note that
7 the information from the PDA process would be useful
8 in optimizing the existing trail network, [Footnote
9 174: Hearing Transcript, October 14, 2008, page
10 1298], as EnCana is proposing to review the whole
11 trail system in each battery and eliminate redundant
12 trails.

13 [Footnote 175: Hearing Transcript,
14 October 6, 2008, page 150,
15 lines 10-17]

16 With respect to developing an access
17 management plan that would outline mitigation,
18 monitoring and reporting and enforcement, EnCana
19 believes that the best approach would be through
20 continued consultation among EnCana, DND and SEAC to
21 further build relationships and understand
22 expectations.

23 [Footnote 176: Hearing Transcript,
24 October 14, 2008, page 1303]

25 That's not an unreasonable approach to take,

1 sir.

2 **(c) Traffic**

3 Both Department of National Defence and
4 Environment Canada expressed concerns over the
5 anticipated increase in traffic if the Project's
6 approved. Specifically, DND has suggested that the
7 Project will result in significant additional traffic
8 on the Base and this will impact Base operations in
9 several ways.

10 [Footnote 177: Exhibit 003-012,
11 Written Submission Formal Hearing
12 003, page 56]

13 Environment Canada expressed concern that the
14 Project would increase traffic in both the NWA and
15 throughout the region and have a negative cumulative
16 effect.

17 [Footnote 178: Exhibit 003-012,
18 Written Submission Formal Hearing
19 003, page 186]

20 EnCana took those concerns seriously and in
21 response conducted a detailed traffic analysis.

22 [Footnote 179: Exhibit 002-110,
23 Reply to Intervener Submissions,
24 page 108]

25 Results of the analysis confirm EnCana's

1 position that the operation of the wells will result
2 in only a small increase in traffic in the NWA
3 compared to the current traffic volume. And no net
4 increase in traffic in the region. Wells are visited
5 once a month for the first year and approximately two
6 to five times per year for the life of the well.

7 [Footnote 180: Hearing Transcript,
8 October 8, 2008, page 739, lines
9 23-24]

10 The traffic is low. Mr. Collister noted that
11 even if a grassland bird chose to nest near an access
12 trail during Project operations this might only result
13 in one disturbance to its nesting cycle. And he said
14 this is not enough disturbance to cause the bird to
15 abandon its nest or result in any significant impact.

16 [Footnote 181: Hearing Transcript,
17 October 8, 2008, page 740, lines
18 13-21]

19 The small increase in traffic in the NWA is
20 due in part to fewer vehicles and trips being required
21 to construct, complete and operate wells, compared to
22 historic levels because of changes in the regulatory
23 regime as well as advances in technology. And that
24 all can be found in the evidence.

25 [Footnote 182: Hearing

1 Transcript, October 9, 2008,
2 page 779, lines 20-22]

3 EnCana has calculated that the operations
4 phase of the Project will result in an extra
5 0.9 vehicles per day on average in the NWA. Less than
6 one vehicle per day. During construction, although
7 traffic will be greater, it is important to remember
8 that it will be conducted during the dormant season
9 and winter months when most wildlife species are not
10 present in the NWA.

11 **D. Environmental Issues**

12 So let me move on to the environmental issues
13 that are specific to the Project. And I'll start with
14 the Natural Resources Canada.

15 **(a) Response to Natural Resources Canada**

16 So, first of all, EnCana stands by its
17 conclusion that the Project will have an insignificant
18 effect on soils and a negligible effect on groundwater
19 and surface water.

20 [Footnote 183: Exhibit 002-013,
21 EIS, Volume 3, Section 2; Exhibit
22 002-015, EIS, Volume 4, Sections
23 2.8.1 and 3.8.2]

24 **A. Soils**

25 A number of statements and recommendations by

1 Natural Resources Canada (NRCan) in its Opening
2 Statement regarding soils are inaccurate and they are
3 groundless. NRCan stated that EnCana needs a risk
4 rating methodology for soils.

5 [Footnote 184: Hearing Transcript,
6 October 21, 2008, page 2758,
7 lines 20-21]

8 In fact, Mr. McNeil explained EnCana's soil
9 risk ratings to the Government of Canada's lawyer
10 during the hearing.

11 [Footnote 185: Hearing Transcript,
12 October 8, 2008, pages 665-666]

13 Furthermore, the soil section in the EIS
14 provides six references on which the risk ratings were
15 developed and discussed in Information Request
16 responses.

17 [Footnote 186: Exhibit 002-013,
18 EIS, Volume 3, Section 2.6]

19 NRCan also asserted that EnCana's EIS did not
20 provide a description of the slopes in the LSA or RSA.

21 [Footnote 187: Hearing Transcript,
22 October 21, 2008, pge 2767, lines
23 11-13]

24 This assertion is also unfounded. This
25 information can be found in the soil survey discussion

1 in the EIS.

2 [Footnote 188: Exhibit 002-013,
3 EIS, Volume 3]

4 In addition, NRCan recommended that EnCana
5 include risk of soil compaction and soil instability
6 to its soils risk assessment.

7 [Footnote 189: Exhibit 003-031:
8 Government of Canada - Opening
9 Statement, Natural Resources Canada
10 Presentation, page 7]

11 EnCana has already thoroughly considered
12 these issues and developed appropriate mitigation
13 measures in its EIS, EPP and in the Rangeland
14 Functionality Assessment which was proposed by
15 Dr. Walker.

16 [Footnote 190: Exhibit 002-013,
17 EIS, Volume 3, pages 2-4, 2-5, 2-8,
18 2-16 to 2-21, 2-30, 2-27, 2-30,
19 2-38 and 2-39; Exhibit 002-010,
20 EIS, Volume 1, Appendix H,
21 s.H.2.2.]

22 [Footnote 191: Exhibit 002-077,
23 EPP, pages 2-8 to 2-10, 3-30, 3-33
24 and 7-8]

25 [Footnote 192: Exhibit 002-110,

1 Reply to Intervener Submissions,
2 appendix K, page k-11]
3 NRCan recommended a requirement for
4 monitoring of soil instability.

5 [Footnote 193: Hearing Transcript,
6 October 21, 2008, page 2763, lines
7 9-10]

8 EnCana has indicated that planning of
9 wellsites and access roads will include consideration
10 of soil and topographic conditions to avoid drainage
11 courses, steep slope areas, active dunes, wetlands,
12 and other sensitive landscapes. And that's all in
13 Exhibit 002-013.

14 [Footnote 194: Exhibit 002-013,
15 EIS, Volume 3, Section 2.8.1]

16 The selection of routes for access and
17 pipelines to avoid steep, steep slopes and erosions
18 will be dictated by the constructibility assessment in
19 the PDA.

20 [Footnote 195: Hearing Transcript,
21 October 8, 2008, page 524, lines
22 2-5]

23 EnCana will also respect a 100-metre setback
24 from the slope break of the South Saskatchewan River.

25 [Footnote 196: Hearing Transcript,

1 October 8, 2008, pages 667-668]

2 This follows, and exceeds, the requirements
3 as set out by Alberta Sustainable Resource Development
4 ("ASRD") in its Guidelines for permanent non-seasonal
5 watercourses and immediate tributaries.

6 [Footnote 197: ASRD, Industry
7 Directive 2002-01, Slope and Break
8 Setback Guidelines (December 2002);
9 Hearing Transcript, October 21,
10 2008, pages 2770-2771]

11 By avoiding the South Saskatchewan River area
12 and steep slopes, EnCana will not construct or operate
13 any wells in unstable areas. EnCana's avoidance
14 approach also makes it unnecessary to investigate
15 active or historical slides as suggested by NRCan.

16 [Footnote 198: Hearing Transcript,
17 October 21, 2008, page 2767, lines
18 20-24]

19 Furthermore, when NRCan raised the issue of
20 soil slumping for the Project, [Footnote 199:
21 Exhibit 003-031: Government of Canada - Opening
22 Statement, Natural Resources Canada Presentation,
23 page 15], Mr. Heese testified he has no knowledge of
24 any incident where drilling led to slumping or, or it
25 was a possible contributor.

1 [Footnote 200: Hearing Transcript,
2 October 15, 2008, page 1516, lines
3 17-19]

4 Coupled with the fact that EnCana has never
5 had an issue after drilling more than 9,000 wells at
6 CFB Suffield is telling.

7 Let me turn to water use.

8 **B. Water use**

9 Many of NRCan's concerns regarding water use
10 are also unfounded. NRCan stated that the main water
11 sources for the Project are dugouts, licensed wells
12 and spring-fed dugouts. That's just wrong.

13 [Footnote 201: Hearing Transcript,
14 October 21, 2008, page 2782,
15 lines 19-22]

16 On the contrary, EnCana's evidence clearly
17 states that EnCana has incorporated a three-source
18 approach to their water use to minimize the Project
19 footprint: The South Saskatchewan River, the City of
20 Medicine Hat, and licensed groundwater wells and
21 dugouts.

22 [Footnote 202: Exhibit 002-010,
23 EIS, Volume 1, Section 2.8.4, page
24 2-45; Hearing Transcript,
25 October 8, 2008, pages 650-661]

1 EnCana will use the appropriate source
2 nearest to where an activity is located to conserve
3 fuel and minimize traffic.

4 [Footnote 203: Hearing Transcript,
5 October 8, 2008, pages 651,
6 lines 2-6]

7 In addition to this, NRCan claims that
8 aquifers are over-allocated.

9 [Footnote 204: Hearing Transcript,
10 October 21, 2008, page 2789,
11 line 18]

12 This is incorrect because NRCan failed to
13 consider the portion of water utilized by the Project
14 from non-aquifer sources such as the South
15 Saskatchewan River and the City of Medicine Hat.

16 In response to questions from the Government
17 of Canada, Mr. Fudge discussed the reasons why the
18 conclusion was reached in the EIS that there will be
19 negligible impacts as a result of water use by EnCana.

20 First, Mr. Fudge noted that groundwater
21 withdrawal won't change significantly from what is
22 currently being withdrawn because EnCana will be
23 constructing a relatively similar number of wells in
24 the NWA as they currently do throughout CFB Suffield.
25 So there is not likely to be any net increase in

1 groundwater use.

2 [Footnote 205: Hearing Transcript,
3 October 8, 2008, page 653,
4 lines 4-12]

5 Second, regarding the South Saskatchewan
6 River, Mr. Fudge noted that the water is proposed to
7 be withdrawn during the winter period when water
8 withdrawals from other sources are at their very
9 lowest.

10 [Footnote 206: Hearing Transcript,
11 October 8, 2008, page 653,
12 lines 13-25]

13 Mr. Fudge also correctly pointed out that
14 NRCan, in its supplemental submission to the Panel,
15 [Footnote 207: Exhibit 003-019, Supplemental Written
16 Submission Formal Hearing 003, NRCan, Page 34],
17 concluded that the proposed Project will likely have
18 relatively small negative environmental impacts on
19 groundwater quantity and quality.

20 [Footnote 208: Hearing Transcript,
21 October 8, 2008, page 656, line 25
22 to page 658, line 20]

23 However, based on the Opening Statement by
24 NRCan, EnCana understands that NRCan has shifted its
25 position since filing its supplemental submission on

1 June 27th. The basis of that shift, quite frankly,
2 remains a complete mystery. There's been no
3 significant changes to the Project. But NRCan is now
4 concerned that activities associated with
5 construction, operation, and decommissioning of the
6 Project may now have a potential effect on quantity
7 and quality of groundwater.

8 [Footnote 209: Exhibit 003-031,
9 Government of Canada - Opening
10 Statement, Natural Resources Canada
11 Presentation, page 20]

12 In short, based on Mr. Fudge's evidence, and
13 that of the LandWise report, all of which is in the
14 evidence, the evidence demonstrates that there will in
15 fact be no water deficit, that the wells that are
16 proposed to be used draw on a very good aquifer.
17 Those wells recover very well; they do not have
18 decreasing water levels.

19 [Footnote 210: Hearing Transcript,
20 October 25, 2008, page 3981, line
21 24 to page 3982, line 4]

22 EnCana does not agree with NRCan's
23 recommendations but has agreed in principle with the
24 overall recommendations regarding groundwater
25 monitoring that are described on pages 111 to 113 in

1 the LandWise 2008 report.

2 [Footnote 211: Exhibit 003A-031,
3 References to Responses to
4 Information Requests, Tab G]

5 **(b) Response to Woosaree**

6 So let me move on to Mr. Woosaree who is the
7 Panel's expert in respect of vegetation and
8 reclamation. Mr. Woosaree, the Panel's third party
9 expert, provided testimony and helpful observations to
10 the Panel based on his professional grassland
11 experience. Mr. Woosaree was, in EnCana's view, an
12 extremely credible witness and provided informed,
13 independent recommendations.

14 At the hearing Mr. Woosaree testified that
15 EnCana provided enough information to properly
16 mitigate future impacts from the Project noting that
17 some mitigation measures will be developed along the
18 way.

19 [Footnote 212: Hearing Transcript,
20 October 25, 2008, page 3823, lines
21 23-25]

22 Mr. Woosaree also disagreed with Dr. Duncan's
23 assertion that adaptive management is a "smoke
24 screen", [Footnote 213: Hearing Transcript, October
25 24, page 3681, lines 5-8], noting that adaptive

1 management does, in fact, have its positive benefits.

2 [Footnote 214: Hearing Transcript,
3 October 25, 2008, page 3818, lines
4 13-18]

5 Mr. Woosaree also stated that he did not see
6 the value in modelling because it is based on what you
7 put into the model, [Footnote 215: Hearing
8 Transcript, October 25, 2008, page 3818, lines 13-18],
9 and observed that the PDA is a type of pre-adaptive
10 management and is justifiable.

11 [Footnote 216: Hearing Transcript,
12 October 25, 2008, page 3818, lines
13 12-14]

14 Obviously, EnCana agrees with those
15 statements.

16 **(c) Response to Whidden**

17 Let me respond to Dr. Whidden's evidence.
18 Dr. Whidden's evidence at the hearing appeared to be
19 based on submissions and evidence that were filed
20 prior to his Wildlife Report No. 2 (August 2008).

21 [Footnote 217: Exhibit 009-006,
22 Report No. 2, Wildlife
23 Review-Whidden Environmental Ltd.]

24 Although Dr. Whidden stated under
25 cross-examination by the Government of Canada that the

1 majority of his recommendations are still valid,
2 [Footnote 218: Hearing Transcript, October 25, 2008,
3 page 3841, line 23 to page 3842, line 7], quite
4 frankly, it was confusing what Dr. Whidden believed.
5 In particular, he agreed under cross-examination by
6 myself that if he had reviewed all the evidence, it
7 would have influenced his recommendations.

8 [Footnote 219: Hearing Transcript,
9 October 25, 2008, page 3866,
10 lines 1-12]

11 He specifically agreed that fragmentation had
12 been addressed by EnCana with EnCana's counsel and
13 said the opposite under cross-examination with the
14 Government of Canada's counsel.

15 [Footnote 220: Hearing Transcript,
16 October 25, 2008, page 3848, line
17 21 to page 3849, line 13; Hearing
18 Transcript, October 25, 2008, page
19 3865, lines 15-20]

20 Dr. Whidden appeared to lack an understanding
21 of the details of the EIS, its Reply evidence and
22 testimony. He did not appear to have informed himself
23 of recent material on the record and gave ambiguous
24 responses to Board staff's questions that included
25 such things as "in part", and he would have to think

1 about that and didn't understand what the question
2 was.

3 Mr. Chairman, the recommendations reached by
4 Dr. Whidden are only as good as the information upon
5 which they are based. And I would suggest that
6 Dr. Whidden's recommendations are of little use to the
7 Panel given his testimony at the hearing.

8 Simply contrast Dr. Whidden's response with
9 those of Mr. Woosaree's and come to your own
10 conclusions on the reliability of that evidence.

11 **(d) Native Prairie Integrity**

12 Let me move on to native prairie integrity as
13 one of the key issues at the hearing. In its
14 submission, the Government of Canada alleges that
15 EnCana failed to describe and assess the impacts of
16 the Project on vegetation and submitted research that
17 it claims indicates that species-level differences
18 along with bare ground litter and range health persist
19 for many years.

20 [Footnote 221: Exhibit 003-012,
21 Written Submission Formal Hearing
22 003, pages 45-55]

23 They expressed concern about the increase in
24 bare ground and exotic species that are likely to
25 increase and will establish anywhere where bare ground

1 exists.

2 [Footnote 222: Exhibit 003-012,
3 Written Submission Formal Hearing
4 003, pages 26, 59, 60-63, 100 and
5 187]

6 The Coalition expressed similar concerns.

7 [Footnote 223: Exhibit 006-017,
8 Written Submission Formal Hearing
9 004A, Tab 4, pages 4, 8, 12, 19]

10 In its submission, the Department of National
11 Defence relied on both Mr. Smith's and Dr. Henderson's
12 assessment of the spread of Crested Wheatgrass into
13 native prairie.

14 [Footnote 224: Exhibit 003-012,
15 Written Submission Formal Hearing
16 003, page 47]

17 And Dr. Walker rightly pointed out that some
18 of the key assumptions on which those reports were
19 based are not right.

20 [Footnote 225: Hearing Transcript,
21 October 15, 2008, pages 1528-1529;
22 Hearing Transcript, October 8,
23 2008, pages 745-746]

24 For example, both reports are based entirely
25 on the assumption that the right-of-way for older

1 pipelines was 2.44 metres wide, the width of a seed
2 drill, [Footnote 226: Exhibit 003C-006, Response to
3 Information Requests, Reference - IR 100 - Henderson
4 2008, page 1], in their view, when in reality the
5 standard right-of-way at that time would have been at
6 least 20 metres with primarily broadcast seeding used
7 as testified to by Dr. Walker. And here's what he
8 said:

9 "It's not possible to put a
10 pipeline in, either trenching or
11 ripping, in that kind of a distance
12 without disturbing outside that
13 area. It would be far more typical
14 to go way outside that area. In
15 fact, in that era, there were no
16 Guidelines for the edge of a
17 pipeline right-of-way. They could
18 go wherever they wanted and
19 generally they did. It wasn't
20 until about 1990 when I worked on
21 the TransCanada pipeline in the
22 Great Sand Hills that we actually
23 assigned a boundary for
24 construction and edge of
25 right-of-way. And so they would

1 have spread out all over the place.

2 And so what we're looking at
3 is, is old plants that have
4 persisted over the duration of time
5 and probably we're looking at
6 native encroachment in to the
7 sides. I mean, this is purported
8 to be Crested Wheatgrass being --
9 invading outwards from picture
10 right to left. It's probably just
11 as likely that this is native
12 species encroaching into the
13 Crested Wheatgrass from the right,
14 so it is an overstatement to say
15 this is evidence of Crested
16 Wheatgrass invasion."

17 [Footnote 227: Hearing Transcript,
18 October 25, 2008, page 3922, lines
19 2-23]

20 Furthermore, Mr. Chairman, everything was
21 seeded at a very heavy reseeding rate using broadcast
22 method, so the drift of seed blowing downwind could
23 have gone 30 metres or more. You simply need to look
24 at the evidence filed in respect of the Middle Sand
25 Hills evaluation at Exhibit 002-133. The width of

1 right-of-ways and seeding method was confirmed by that
2 document.

3 [Footnote 228: Exhibit 002-133,
4 Alberta Energy Company, Evaluation
5 and Recommendations, Middle Sand
6 Hills, Suffield Military Block,
7 1981]

8 Crested Wheatgrass would also have
9 established over the trench because topsoil was not
10 saved at that time. And Dr. Walker concluded this
11 way, and I quote:

12 "And so what they were looking at
13 was not the spread of Crested
14 Wheatgrass out from the
15 right-of-way; they were looking at
16 the recovery or ingress of native
17 species into the seeded area."

18 [Footnote 229: Hearing Transcript,
19 October 15, 2008, page 1529,
20 lines 5-8]

21 Colonel Lamarre agreed with me under
22 cross-examination that opinions are only as good as
23 the facts and expertise upon which they are based. If
24 the facts are wrong, the opinion is wrong.

25 [Footnote 230: Hearing Transcript,

1 October 22, page 3034, lines 2-8]

2 Given the incorrect factual assumptions made
3 by both Mr. Smith and Dr. Henderson, I would suggest
4 that Mr. Smith and Dr. Henderson's opinions regarding
5 the invasion of Crested Wheatgrass along with the
6 various of opinions of others who have built on that
7 work is simply not credible.

8 Mrs. Bradley filed a 2003 paper regarding a
9 workshop that looked at the invasion of non-native
10 species.

11 [Footnote 231: Exhibit 006-022,
12 Response to Information Requests
13 made by EnCana - from Environmental
14 Coalition, Invasion of Non-Native
15 Plant Species Report of Workshop
16 Results]

17 Within that paper, Marilyn Neville, who was
18 the reclamation specialist on the Express Pipeline,
19 observed that a site where the native matrix is
20 healthy, like the NWA, resists invasion. Mr. Smith's
21 own evidence demonstrated Mrs. Neville's observations;
22 his work showed that, much to his surprise, native
23 prairie existed on right-of-ways that had been seeded
24 with agronomic species. Mr. Chairman, think horses
25 not zebras.

1 [Footnote 232: Exhibit 006-022,
2 Response to Information Requests
3 made by EnCana - from Environmental
4 Coalition, Invasion of Non-Native
5 Plant Species Report of Workshop
6 Results, page 6]

7 But lest we get confused, let me be clear,
8 EnCana is not using Crested Wheatgrass in its seed
9 mix. This is a historical issue. EnCana has
10 committed to revegetate with native species.
11 Dr. Walker indicated that his Rangeland Functionality
12 Success Assessment Protocol will encourage EnCana to
13 choose sites, choose them, that have Crested
14 Wheatgrass or other undesirable species over native
15 prairie sites.

16 [Footnote 233: Hearing Transcript,
17 October 7, 2008, page 459,
18 lines 6-13]

19 This provides an opportunity to replace
20 non-native species or improve the ratio of native
21 species by seeding in other material. This will
22 result in improved functionality of some sites from
23 their pre-disturbed state.

24 Mr. Chairman, it is not EnCana's
25 responsibility to eradicate undesirable species and

1 weeds on their own. SEAC confirmed in the 1985 annual
2 meeting minutes that EnCana would not be required to
3 eradicate Crested Wheatgrass seeded in the 1970s and
4 1980s for which it had approval to do so.

5 [Footnote 234: Exhibit 003-044,
6 1985 Minutes of AEC Oil and Gas
7 Company - CFB Suffield, page 4]

8 Dr. Walker suggested that the Panel should
9 recommend a multi-stakeholder committee involving
10 parties such as the DND, Canadian Wildlife Service,
11 PFRA, and EnCana to facilitate a standardized and
12 coordinated effort for identifying means of
13 controlling undesirable species in the area.

14 [Footnote 235: Hearing Transcript,
15 October 8, 2008, pages 578-579;
16 Hearing Transcript, October 15,
17 2008, page 1473, lines 13-21]

18 Dr. Walker went on to state as follows:

19 "The whole issue of undesirable
20 species in the NWA needs to be
21 addressed by all the stakeholders,
22 by the graziers, the cattle
23 ranchers and DND and it should be
24 done in an effective way."

25 [Footnote 236: Hearing Transcript,

1 October 8, 2008, page 750,
2 lines 4-11]

3 Mr. Woosaree made a similar recommendation.

4 [Footnote 237: Hearing Transcript,
5 October 25, 2008, page 3896,
6 lines 4-6]

7 Mr. Heese has indicated EnCana is willing to
8 continue further discussions with DND regarding the
9 control of weeds and Crested Wheatgrass.

10 [Footnote 238: Hearing Transcript,
11 October 7, 2008, page 463, lines
12 8-11]

13 EnCana's EIS has recommended co-operative
14 arrangements to manage and monitor invasive plant
15 species.

16 [Footnote 239: Exhibit 002-013,
17 EIS, Volume 3, pages 3-30]

18 Mr. Chairman, the Panel should recommend just
19 such a multi-stakeholder group be struck and engaged
20 on this issue.

21 EnCana assessed the impacts of the project on
22 vegetation in the EIS and this past summer conducted
23 specific field studies designed to examine the exotic
24 species associated with the infill drilling footprint.

25 [Footnote 240: Exhibit 002-013,

1 EIS, Volume 3, Appendices 3D and
2 3C; Exhibit 002-110, Reply to
3 Intervener Submissions,
4 Appendices G and H]

5 Through these field studies, EnCana concluded
6 that the native matrix of the NWA has high integrity
7 and remains intact and largely free of weeds. The
8 summer of 2008 studies also demonstrated considerable
9 recovery towards native vegetation integrity within
10 the majority of the deemed leases.

11 [Footnote 241: Exhibit 002-110,
12 Reply to Intervener Submission,
13 pages 39-43 and Appendices G and H]

14 And again, there's references to all this in the
15 evidence already.

16 Based on the minimal footprint, improved
17 construction and reclamation techniques, winter
18 construction, cleaning of vehicles, demonstrated
19 recovery towards a near-native condition with
20 appropriate reclamation measures, combined with the
21 matrix remaining intact, means that the effect of this
22 Project on native prairie integrity will be
23 insignificant.

24 [Footnote 242: Exhibit 002-110,
25 Reply to Intervener Submissions,

1 pages 39-43]

2 **(e) Footprint Calculation**

3 Let me turn to footprint calculation, which
4 was an issue at the hearing. And DND asserted that
5 past project footprints are much larger than measured
6 and that there are deficiencies in the existing
7 footprint assessment.

8 [Footnote 243: Exhibit 003-012,
9 Written Submission Formal Hearing
10 003, pages 48-53]

11 Environment Canada claimed that its own digitized
12 footprint in the area shows that it is expanding
13 faster.

14 [Footnote 244: Exhibit 003-012,
15 Written Submission Formal Hearing
16 003, page 187]

17 And the Coalition had similar concerns and
18 alleged certain weaknesses in EnCana's footprint
19 calculation. Let me deal with that.

20 [Footnote 245: Exhibit 006-012,
21 Written Submission Formal Hearing
22 004A, Tab 3, pages 11-12]

23 EnCana discussed these concerns in its Reply
24 evidence. And I would refer you to it. That report
25 details the additional fieldwork that was done through

1 June and July of this summer, that was specifically
2 designed to assess these concerns, ground-truth the
3 measurements, and the re-analysis to quantify the
4 disturbance footprint predicted by the Department of
5 National Defence.

6 [Footnote 246: Exhibit 002-110,
7 Reply to Intervener Submissions,
8 pages 32-39 and Appendices G and L]

9 The results of both of the additional reports
10 confirm EnCana's original footprint analysis and the
11 conclusions in the EIS.

12 Furthermore, even this small footprint is
13 conservative. It doesn't include the benefits of
14 reclamation and recovery.

15 [Footnote 247: Hearing
16 Transcript, October 15, 2008,
17 page 1526, lines 16-17]

18 This is significant. Remember what Mr. Woosaree
19 said. He said, with a SpiderPlow, he said, after a
20 couple of years, you can hardly tell a plough had been
21 there. And Mr. Woosaree said, with trenching, we are
22 looking at recovery after three or four years.

23 [Footnote 248: Hearing Transcript,
24 October 25, 2008, page 3882, lines
25 7-11, and page 3883, lines 5-9]

1 None of those impacts are taken as a credit in
2 the calculation of the footprint. It's very
3 conservative.

4 This is further supported by research in the
5 Dry-mixed Grass Region that showed recovery from a
6 weedy pioneer stage to a community type that was
7 similar to the control in just three to four years
8 after pipeline trenching without seeding.

9 [Footnote 249: Exhibit 002-110,
10 Reply to Intervener Submissions,
11 page 41]

12 Any footprint potentially associated with
13 Mr. Smith and Dr. Henderson's theory of Crested
14 Wheatgrass invasion was based on their erroneous
15 assumptions.

16 With respect to the footprint analysis relied
17 on by DND, Mr. Kansas noted that it was based on
18 summer construction which results in more trampled and
19 dead vegetation.

20 [Footnote 250: Hearing Transcript,
21 October 9, 2008, pages 794-796]

22 And the subsequent multispectral analysis showed
23 that over 49 percent of the area designated as
24 footprint by the DND's analysis was, in fact,
25 senescent vegetation or litter.

1 [Footnote 251: Exhibit 002-110,
2 Reply to Intervener Submissions,
3 page 33]

4 Mr. Kansas's visit to over 100 points in the
5 landscape within the footprint in DND's analysis
6 revealed that the vegetation was native prairie
7 vegetation in most cases.

8 [Footnote 252: Hearing Transcript,
9 October 9, 2008, page 795,
10 lines 7-13]

11 EnCana's footprint analysis fills an information
12 gap on the status of past land use and allowed EnCana
13 to take a quantitative approach to cumulative effects.

14 [Footnote 253: Hearing Transcript,
15 October 7, 2008, page 411,
16 lines 10-21]

17 Yes, "quantitative" approach to cumulative
18 effects. As we heard from Mr. Kansas, the existing
19 footprint in the NWA is small; 1.3 percent in the
20 north NWA and 2.3 percent in the south NWA. The
21 incremental footprint associated with this Project is
22 less than 0.5 percent which includes no credit, no
23 credit for recovery, making it extremely conservative.

24 [Footnote 254: Exhibit 002-123,
25 Package of Slides & Opening

1 Statement of EnCanaa, page 22]

2 Furthermore, Mr. Kansas used very conservative
3 values in his calculations. For example, it was
4 assumed that the entire width of an access trail
5 associated with local tie-ins was 100 percent
6 disturbed.

7 [Footnote 255: Hearing Transcript,
8 October 7, 2008, pages 415-416]

9 Mr. Chairman, look at the evidence, look at the
10 picture of what an access trail looks like and make
11 your own mind up about whether that looks like
12 100 percent disturbed or not.

13 Loop-lines were overestimated by 9 to 10 metres.

14 [Footnote 256: Hearing Transcript,
15 October 8, 2008, pages 547,
16 lines 9-14]

17 All of that was included in the 0.5 percent.

18 [Footnote 257: Hearing Transcript,
19 October 15, 2008, page 1526,
20 lines 16-17]

21 The use of such conservative values means that
22 0.5 percent is likely a worst-case scenario.

23 [Footnote 258: Hearing Transcript,
24 October 7, 2008, page 416,
25 lines 3-5]

1 In addition, the minimal incremental
2 footprint of 0.5 percent will be reclaimed to
3 functioning native prairie. EnCana will be monitoring
4 it to confirm the Project footprint predictions are
5 accurate as part of its EEMP.

6 All of the study and re-analysis that EnCana
7 has conducted, the conclusion is still the same;
8 EnCana's Project will result in a very small change in
9 the footprint in the NWA. Even if caissons are to be
10 utilized, this will only be a very small increase in
11 the predicted footprint, but there will be no change
12 in the effects prediction. Mr. Kansas said that.

13 [Footnote 259: Hearing Transcript,
14 October 23, 2008, page 3283,
15 lines 4-8]

16 In its discussion, the preliminary critical
17 habitat, Environment Canada stated that an area
18 slightly less than 5 percent of the NWA was possibly
19 insignificant. That was their words.

20 [Footnote 260: Hearing Transcript,
21 October 22, 2008, page 3103,
22 lines 2-5]

23 EnCana's predicted footprint of 0.5 percent
24 increase is 10 times smaller than that:

25 "After mitigation," Mr. Kansas

1 says, "with this size of footprint,
2 and I can't express enough how
3 small this footprint is in the
4 context of any project I've ever
5 done in my career ... this is a
6 tiny footprint. And I could not
7 come to the conclusion there was a
8 significant effect."

9 [Footnote 261: Hearing Transcript,
10 October 8, 2008, page 630,
11 lines 15-21]

12 **(f) Fragmentation**

13 Let me move on to fragmentation. There was --
14 there's been considerable discussion in this
15 proceeding as to whether the Project will cause
16 fragmentation or effective habitat loss. And although
17 there's a great deal of literature about
18 fragmentation, some of which we went through under
19 cross-examination, in general, almost none of it
20 investigates the kinds of small disturbances that are
21 relevant to this Project.

22 [Footnote 262: Hearing Transcript,
23 October 14, 2008, page 1249]

24 So Environment Canada undertook, in Mr. Jensen's
25 key message, a "thorough and systematic review" of the

1 literature to assess the direction and magnitude of
2 the effects of bare ground, habitat fragmentation,
3 alien invasion species, traffic and secondary impacts
4 on the short-list of VECs.

5 [Footnote 263: Environment Canada:
6 Exhibit 003-012, Written Submission
7 Formal Hearing 003, page 184]

8 So let me deal with that. A paper by Ingelfinger
9 and Anderson on Passerine response to roads was used
10 as a supplemental citation and scored by Environment
11 Canada as a "negative". And I cross-examined
12 Mr. Jensen on this. And under cross-examination,
13 Mr. Jensen admitted that this paper determined that in
14 respect of a highway, a highway that averaged 344
15 vehicles per day (not once a month) that there was no
16 significant decline detected in birds.

17 [Footnote 264: Hearing Transcript,
18 October 24, 2008, page 3519,
19 lines 2-7]

20 In another paper used by Environment Canada,
21 the effect of traffic on grassland birds was also
22 noted as "negative". And that was Forman's paper.

23 [Footnote 265: Hearing Transcript,
24 October 24, 2008, page 3515,
25 lines 12-18]

1 In reality, that paper concluded that "light"
2 traffic volumes, and light traffic volumes are
3 described in that paper as 3,000 to 8,000 vehicles per
4 day had no significant effect on grassland bird
5 populations.

6 Mr. Chairman, if papers with these kinds of
7 conclusions can be scored as "negative" relevant
8 papers in the context of this Project, it is hard to
9 imagine what would have warranted a neutral or not
10 relevant score in Environment Canada's analysis.

11 Mr. Chairman, EnCana analyzed every single
12 paper used by Environment Canada in its meta-analysis
13 and confirmed on testimony that, while Environment
14 Canada may have conducted a very "systematic and
15 thorough" search for the papers, the analysis of those
16 papers for relevance to the Project leaves much to be
17 desired. As noted by Mr. Collister:

18 "Most of the references that were
19 provided by Environment Canada
20 dealt with study areas quite
21 different than EnCana's shallow gas
22 infill proposal, and papers
23 reported on a myriad of things, in
24 some cases, hundreds or thousands
25 of vehicles per day compared to

1 what we're looking at in the
2 Project, high-grade roads, not
3 trails, major pipelines, non-native
4 habitat, recreational activities,
5 species that don't occur in the
6 NWA, et. cetera."

7 [Footnote 266: Hearing Transcript,
8 October 25, 2008, page 3942-3943]

9 [...]

10 "In summary," Mr. Collister went on
11 to say, "I have to say, it's
12 disappointing that Environment
13 Canada takes the position that the
14 low impact shallow gas infill
15 development proposed by EnCana will
16 result in fragmentation and
17 effective habitat loss for
18 grassland birds when the body of
19 literature suggests otherwise."

20 [Footnote 267: Hearing Transcript,
21 October 25, 2008, page 3945,
22 lines 5-10]

23 And although literature directly on point is
24 scarce, a study by Linnen on shallow gas effects in
25 Saskatchewan is noteworthy for its finding that there

1 was no evidence of problems associated with the effect
2 of wells or trails.

3 [Footnote 268: Hearing Transcript,
4 October 14, 2008, pages 1249-1250]

5 And the Great Sand Hills study found no
6 significant effects on Sprague's Pipit from wells.

7 [Footnote 269: Hearing Transcript,
8 October 25, 2008, page 3944, lines
9 24-25 and page 3945, lines 1-4]

10 It is clear that scientific literature does not
11 support the notion that wells, access trails, and
12 minor pipelines associated with this Project result in
13 effective habitat loss. Mr. Collister said this:

14 "A lot of the studies that have
15 been done on fragmentation, if
16 you're familiar with the
17 literature, the opportunity has
18 been there to look at these kind of
19 effects but the research ... of
20 these kind of potential effects on
21 these small features, on these
22 narrow features with very low
23 contrast to adjacent vegetation.
24 Researchers typically focused on
25 major roads or paved highways, or

1 graveled roads, or isolated patches
2 that are isolated because of
3 agriculture and so on. They just
4 haven't looked at these things.
5 And I don't think that's because
6 they weren't aware they are there;
7 and there was no possibility of
8 doing it. I think there was a
9 tendency to assume and, you know,
10 expect..."

11 What the effects would be; low or none.

12 [Footnote 270: Hearing Transcript,
13 October 14, 2008, pages 1251-1252]

14 During the Opening Statement by the Government of
15 Canada, Dr. Rowland claimed that, while the effects of
16 indirect habitat loss as a result of shallow gas
17 development may not be statistically significant, the
18 literature, she suggested, suggested that the effects
19 were biologically significant.

20 [Footnote 271: Hearing Transcript,
21 October 17, 2008, page 2229,
22 lines 6-11]

23 On cross-examination, Dr. Rowland confirmed she
24 was referring to Mr. Linnen's work. And Mr. Linnen's
25 work makes no such suggestion. Simply read the paper.

1 Drawing a conclusion of biological significance
2 regarding the effect of minimal disturbance natural
3 gas development on prairie birds from Mr. Linnen's
4 work is not correct. It's wrong.

5 The analysis in EnCana's Reply evidence shows
6 that the potential for effective habitat loss from the
7 Project is simply not credible and that any effect on
8 any of the wildlife VECs would be, by anyone's
9 definition, insignificant, even if it is real.

10 [Footnote 272: Exhibit 002-110,
11 Reply to Intervener Submissions,
12 page 51]

13 This is due to the confinement of construction
14 activities to the non-active winter season and to the
15 extremely low traffic levels during operations.

16 During cross-examination, Mr. Collister
17 elaborated further on the low levels of disturbance
18 for the Project:

19 "I think anyone who is familiar
20 with the literature and is
21 objective could not ... do anything
22 but conclude that the kind of
23 disturbance we're talking about
24 with this Project, with this kind
25 of a project, very, very small

1 widths of disturbance -- we saw
2 pictures in ... EnCana's Opening
3 Statement of what these access
4 trails and pipelines look like.
5 They're, in many cases, barely
6 discernible from ... the adjacent
7 vegetation. You know, considering
8 that and the, and the extremely low
9 levels of use that we're talking
10 about ... one pass by a truck every
11 month or two during, say, during
12 the bird breeding season, we're
13 talking about really, really low
14 levels of disturbance ... of
15 sensory disturbance, and hardly
16 noticeable changes in the actual
17 habitat on the ground."

18 [Footnote 273: Hearing Transcript,
19 October 14, 2008, pages 1250-1251]

20 And, finally, one of EnCana's key measures to
21 avoid habitat loss is the reclamation and restoration
22 of these disturbances. As noted by Mr. Woosaree, it
23 is important to utilize appropriate plant species for
24 reclamation to reduce the risk of effective habitat
25 loss.

1 [Footnote 274: Hearing Transcript,
2 October 25, 2008, page 3887,
3 lines 13-22]

4 And that's exactly what EnCana's proposing.

5 **(g) Wetlands**

6 Let me move on to wetlands. And EnCana's
7 conclusion in respect of wetlands is that the Project
8 is predicted to have a negligible effect on wetlands.

9 [Footnote 275: Exhibit 002-013,
10 EIS, Volume 3, pages 4-2]

11 EnCana relied on CWS's rigorous mapping of
12 wetlands in 1994 and 1995 to determine where wetlands
13 were located for the EIS.

14 [Footnote 276: Hearing Transcript,
15 October 6, 2008, page 179,
16 lines 24-25]

17 That information was further updated by the
18 LandWise report, which has been filed.

19 [Footnote 277: Exhibit 003A-031,
20 References to Information Requests,
21 Tab G]

22 PDAs will confirm wetland presence, their extent,
23 and identify any wetland that has not already been
24 mapped, including Class 1 and Class 2 wetlands, to
25 ensure the inclusion of ephemeral and temporary

1 wetlands.

2 [Footnote 278: Exhibit 002-013,
3 EIS, Volume 3, Section 4.10]

4 A comprehensive Grasslands Vegetation Inventory
5 has been done by Alberta Sustainable Resources
6 Development and that will be incorporated as it
7 becomes available. EnCana made that commitment.

8 [Footnote 279: Hearing Transcript,
9 October 6, 2008, page 180, lines
10 1-24]

11 Ephemeral drainages will also be crossed only at
12 right angles to minimize Project impacts.

13 [Footnote 280: Hearing Transcript,
14 October 6, 2008, page 248,
15 lines 2-4]

16 EnCana will not be traversing through the basin
17 of a wetland and will honour a 100-metre setback
18 around the high water mark of each wetland, both
19 ephemeral and temporary, aside from those
20 circumstances which must go before SEAC for a review
21 and a recommendation to the Base Commander. That's
22 their commitment.

23 EnCana's position on wetland setbacks was
24 further explained by Mr. Heese, and I quote:

25 "Our first position is to avoid

1 wetlands by 100 metres with all of
2 our developments. If we have
3 competing environmental variables
4 that we are trying to evaluate,
5 there may be odd situations where a
6 well centre will be located within
7 a 100-metre setback. It's very
8 unlikely. We believe we have a
9 great ability to either move
10 outside of these locations or, in
11 some cases, we may elect to cancel
12 the location entirely. So in
13 unlikely situations where we would
14 encroach on the 100-metre setback,
15 we have also provided the mechanism
16 to address those, which is the
17 review to SEAC or referral to
18 SEAC."

19 [Footnote 281: Hearing Transcript,
20 October 7, 2008, page 278,
21 lines 9-19]

22 **(h) Sumps and Other Ancillary Project Features**

23 In respect of sumps, EnCana estimates that
24 approximately 25 sumps will be required for the
25 Project and will be sited on previously disturbed

1 sites on the Base (outside of the NWA).

2 [Footnote 282: Exhibit 002-040,
3 Reply to Comment on EIS - 012 -
4 Terrestrial - Part 2 to Federal
5 Gov, IR Terr No. 66B]

6 EnCana has committed to work with the Base to
7 identify sites for sumps such as areas of Crested
8 Wheatgrass or within existing Military footprints to
9 not only minimize impacts but to potentially improve
10 the native prairie.

11 [Footnote 283: Hearing Transcript,
12 October 9, 2008, page, lines 13-21]

13 As such, this will ensure no significant impacts
14 or potentially positive impacts as a result of the
15 Project. In addition, development of the sumps are
16 regulated by the ERCB. They must be constructed in
17 accordance with the ERCB Directive 050, Drilling Waste
18 Management, to ensure no significant environmental
19 effects occur.

20 Mr. Chairman, if it's appropriate to stop
21 now, I'm entering the species at risk and critical
22 habitat, which is a little longer piece, and if this
23 is a good time to break, it might be appropriate.

24 THE CHAIRMAN: I think that would be fine,
25 Mr. Denstedt. Fifteen minutes I think will be

1 adequate for everybody to take a short break.

2 MR. DENSTEDT: Thank you, sir.

3 THE CHAIRMAN: We'll reconvene, then, at
4 about 12:15.

5 **(BRIEF BREAK)**

6 **(PROCEEDINGS ADJOURNED AT 12:00 P.M.)**

7 **(PROCEEDINGS RECONVENED AT 12:15 P.M.)**

8 THE CHAIRMAN: Mr. Denstedt, I believe we're
9 ready to proceed. Please do so, sir, when you're
10 ready.

11 MR. DENSTEDT: Thank you, Mr. Chairman. I
12 have about an hour left. Out of respect for the Court
13 Reporter, I'll try and make it an hour and 15, though.

14 So let me start with species at risk and
15 critical habitat.

16 **(i) Species at Risk and Critical Habitat**

17 **A. Assessment Approach.**

18 The *Species at Risk Act* ("SARA") imposes
19 obligations to identify adverse effects on listed
20 wildlife species and its critical habitat and to
21 ensure that those effects are mitigated and monitored.

22 Specifically, Section 79(2) of SARA states
23 that the Responsible Authority:

24 "Must identify the adverse effects
25 of the Project on the listed

1 wildlife species and critical
2 habitat and, if the project is
3 carried out, must ensure that
4 measures are taken to avoid or
5 lessen those effects and to monitor
6 them. These measures must be taken
7 in a way that is consistent with
8 any applicable recovery strategy
9 and action plans."

10 That requirement is reinforced by Section 16(1)
11 of the **Canadian Environmental Assessment Act** to
12 consider all the environmental effects of the Project.

13 With regard to species at risk EnCana's approach
14 consisted of using all SARA-listed species
15 (Schedules 1, 2, and 3), COSEWIC and ASRD listed
16 vertebrate species at risk in the Project area as
17 wildlife VECs and then grouping together all rare
18 plants as another VEC.

19 [Footnote 284: Exhibit 002-013,
20 EIS, Volume 3]

21 Additionally, EnCana provided a report on the
22 potential effects of the Project on arthropods,
23 including the SARA-listed Gold-edged Gem Moth.

24 [Footnote 285: Exhibit 002-110,
25 Reply to Intervener Submissions,

1 Appendix T]

2 To protect the listed species in their critical
3 habitat, EnCana will be implementing a PDA process to
4 allow for the identification and avoidance of species
5 at risk and other environmental features. During this
6 PDA process, EnCana will conduct surveys for 10 of the
7 15 listed species, including all SARA listed plants.
8 Those listed species that will not be surveyed for are
9 the following:

10 - the Gold-edged Gem Moth (an expert
11 report commissioned on this species concluded that
12 Project activities are unlikely to harm the species
13 and identify the plant species that Gold-edged Gem
14 Moth are reliant on will not be surveyed for.

15 [Footnote 286: Exhibit 002-110,
16 Reply to Intervener Submissions,
17 Appendix T]

18 - As well, Sprague's Pipit (because low
19 frequency of operational activity means it is unlikely
20 that any individuals will be harmed and surveying for
21 this species is disruptive to the individuals), and,
22 according to Mr. Collister's evidence, more disruptive
23 than the Project itself.

24 [Footnote 287: Hearing Transcript,
25 October 6, 2008, page 208,

1 lines 15-18]

2 - McCowan's Longspur (an uncommon summer
3 resident and breeder, is unlikely to be harmed and no
4 individual is likely to be harmed or its residence due
5 to the low frequency of occupational activity).

6 [Footnote 288: Exhibit 002-013,
7 EIS, Volume 3, pages 5-29]

8 - And, finally, the Long-billed Curlew,
9 (because it is an uncommon summer residence and
10 breeder and there is unlikely to be harm to an
11 individual or residence, again, due to the low
12 frequency of operational activity).

13 [Footnote 289: Exhibit 002-013
14 EIS, Volume 3, pages 5-34]

15 None of the above bird species returned to the
16 same nest each year. Therefore residences will not be
17 harmed by winter construction activities and the
18 extremely low frequency of activities during
19 operations, likely one or less visits to any of the
20 wellsites during the breeding season, means that
21 effects on these species are unlikely, thus it was
22 determined that surveys are not appropriate for these
23 species.

24 The PDA process will ensure that the Project
25 effects on listed species are minimized by siting

1 infrastructure away from species at risk and their
2 critical habitat.

3 EnCana has complied with the requirements of
4 CEAA and SARA to assess the potential adverse effects
5 of the Project on all listed species and has concluded
6 that the Project will have insignificant to negligible
7 effects on listed species.

8 Furthermore, the information and data
9 generated by the PDA process at the EEMP will provide
10 for more effective management and conservation of
11 these species, contribute to the databases of them,
12 and ultimately assist in providing a long-term benefit
13 to the protection of these species.

14 Let me turn to critical habitat which had
15 significant air time at this hearing.

16 **B. Critical Habitat**

17 SARA requires the Minister of Environment to
18 prepare recovery strategies and action plans for
19 listed, extirpated, endangered and threatened species.

20 [Footnote 290: ***Species at Risk***
21 **Act**, S.C. 2002, c.29, Sections 37
22 and 47]

23 Such recovery strategies and action plans must
24 also include the identification of the species'
25 critical habitat to the extent possible, based on the

1 best available information.

2 [Footnote 291: **Species at Risk**
3 **Act**, S.C. 2002, c.29, Section
4 41(1)(c) and 49(1)(a)]

5 Under SARA, "critical habitat" means the
6 following: It means habitat that is necessary, that's
7 the test, for either of one of the two following
8 things: That the habitat be necessary for either,
9 one, the survival of the species, or two, the recovery
10 of the species.

11 To date, none of the listed species in the
12 NWA has had their critical habitat posted on the SARA
13 Registry. However, in its submission, Environment
14 Canada identified what they call preliminary assessed
15 critical habitat for Ord's Kangaroo Rat, Sprague's
16 Pipit, Tiny Cryptanthe, Small-flowered Sand-verbena
17 and Slender Mouse-ear-cress.

18 [Footnote 292: Environment Canada:
19 Exhibit 003-012, Written Submission
20 Formal Hearing, pages 156-172]

21 Environment Canada has recommended that "no
22 [additional] industrial activity" should be permitted
23 in areas preliminarily assessed as critical habitat
24 year-round unless it can be demonstrated there would
25 be no adverse impacts.

1 [Footnote 293: Environment Canada:
2 Exhibit 003-012, Written Submission
3 Formal Hearing, page 159]

4 That's their recommendation. It provides no
5 policy or law to support that position. To EnCana's
6 knowledge, Environment Canada has not ever delineated
7 preliminarily assessed critical habitat until they
8 filed their submission for this hearing and has never
9 done so in any other hearing or in any other public
10 forum.

11 [Footnote 294: Hearing Transcript,
12 October 23, 2008, page 3226,
13 lines 1-4]

14 It is also interesting to note that these
15 preliminary assessments of critical habitat do not
16 cover the Military Training Area in CFB Suffield,
17 which leaves one wondering what the real purpose of
18 this material is. This is particularly troublesome,
19 as Mr. Collister indicated, because point counts for
20 Sprague's Pipit in the NWA and the Military Training
21 Area have shown that Sprague's Pipit, in particular,
22 do not discriminate between the NWA and the Military
23 Training Area and there may, in fact, be more
24 Sprague's Pipit in the Military Training Area.

25 [Footnote 295: Hearing Transcript,

1 October 25, 2008, page 3839,
2 lines 11-20]

3 The only plausible inference to be drawn is that
4 the preliminary critical habitat was a concept created
5 by Environment Canada on-the-fly for the purposes of
6 this hearing to thwart EnCana rather than a genuine
7 attempt to truly identify critical habitat for species
8 at risk.

9 Mr. Chairman, let's be honest; if the
10 Government of Canada wants to prevent this Project
11 from occurring, it should acquire EnCana's rights for
12 fair value under the various mechanisms available to
13 it. That would be the fair and honest thing to do.
14 It should not attempt regulatory expropriation.

15 Let me move on to their assessment, though.
16 Environment Canada has admitted that its preliminary
17 critical habitat is not final because a, quotation
18 marks, significant consultation requirement, quotation
19 marks, still needs to be met. Hopefully the Siksika
20 is on that list.

21 [Footnote 296: Hearing Transcript,
22 October 22, 2008, page 2956,
23 lines 18-21; Environment Canada:
24 Exhibit 003-012, Written Submission
25 Formal Hearing, page 158; **Species**

1 **at Risk Act**, S.C. 2002, c. 29,
2 Sections 39(3) and 48(3)]

3 Environment Canada has also conceded that there
4 is an uncertainty surrounding its preliminary
5 assessment of critical habitat.

6 [Footnote 297: Hearing Transcript,
7 October 24, 2008, pages 3765-3766]

8 Its continuing evolution is evident by the
9 differences between the map of preliminary assessed
10 critical habitat for Ord's Kangaroo Rat in Environment
11 Canada's opening presentation, [Footnote 298:
12 Environment Canada: Exhibit 003-031, Government of
13 Canada - Opening Statement, page 7], and the map in
14 its original submission from February 2008, [Footnote
15 299: Environment Canada: Exhibit 003-012, Written
16 Submission Formal Hearing, page 160].

17 The changes are partially as a result of
18 consultation with directly-affected parties, including
19 EnCana.

20 [Footnote 300: Hearing Transcript,
21 October 22, 2008, page 3102,
22 lines 6-15]

23 Environment Canada has also conceded that the
24 model which generated the preliminary assessed
25 critical habitat for Ord's Kangaroo Rat included both

1 roads and trails even though the evidence they
2 submitted shows that will not form part of their
3 critical habitat.

4 [Footnote 301: Hearing Transcript,
5 October 23, 2008, page 2977,
6 lines 2-7, pages 3099-3100]

7 Mr. Jensen indicated that trails identified as
8 preliminary assessed critical habitat may in fact be a
9 sink for Ord's Kangaroo Rats and subsequent survival
10 may be questionable.

11 [Footnote 302: Hearing Transcript,
12 October 24, 2008, pages 3721-3722]

13 One wonders what the value of that preliminarily
14 assessed critical habitat is. The Panel can take no
15 comfort from Environment Canada that it has any kind
16 of grip on what is and is not "critical habitat" at
17 this moment. In addition, the map of preliminary
18 critical habitat for Sprague's Pipit includes areas of
19 extensively disturbed and seeded grassland such as
20 Murphy's Horn on the southern most portion of the NWA.

21 [Footnote 303: Exhibit 002-013,
22 EIS, Volume 3, pages 3-13]

23 This makes no sense, Mr. Chairman. Sprague's
24 Pipit is a native prairie grassland specialist.

25 [Footnote 304: Environment Canada,

1 Recovery Strategy for Sprague's
2 Pipit in Canada (2008), page 5]

3 Environment Canada also assigns "preliminary
4 critical habitat" on the basis of a 10 percent
5 probability that a Sprague's Pipit might be present.
6 If that is remotely logical, when the law defines
7 critical habitat as "necessary" for the survival or
8 recovery of a species, it casts all doubt on the
9 accuracy and usefulness of the preliminary critical
10 habitat assessment done by Environment Canada. This
11 is especially true since the recovery strategy for
12 Sprague's Pipit, which was released just in May of
13 2008, declined to identify Sprague's Pipit critical
14 habitat because, and I quote, "There is a lack of
15 adequate information determined what habitat is
16 necessary for the survival and recovery of this
17 species." That's May 2008.

18 [Footnote 305: Environment Canada,
19 Recovery Strategy for Sprague's
20 Pipit in Canada (2008), page 19]

21 In addition, at the recent Mackenzie Gas Project
22 hearings, Environment Canada stated in its final
23 submissions, and I quote:

24 "Neither the absence of ...
25 recovery strategies, nor the

1 identification of critical habitat
2 presents an impediment (legal or
3 otherwise) to the JRP to finalize
4 its report to the Government of
5 Canada."

6 [Footnote 306: Exhibit 002-135,
7 Environment Canada Submission to
8 Mackenzie Joint Review Panel,
9 November 21, 2007]

10 EnCana submits the same is true for this hearing.
11 There is no impediment, legal or otherwise, to this
12 Panel approving EnCana's Project.

13 As there is no critical habitat identified
14 for any of the listed species in the NWA, EnCana did
15 what it is supposed to do. It analyzed the effects of
16 the Project on suitable habitat, including foraging
17 and breeding habitat. For vertebrate species, EnCana
18 utilized a habitat suitability mapping approach to
19 determine the effects of the Project on the habitat of
20 the wildlife VECs.

21 Habitat suitability ratings for all of the
22 VECs were reviewed by third party scientists and
23 experts in the field.

24 [Footnote 307: Hearing Transcript,
25 October 14, 2008, page 1235]

1 The conclusion was that less than 0.25 percent of
2 the high suitability habitat will be affected by the
3 Project. This approach, by the way, is consistent
4 with Environment Canada's draft SARA Protection Policy
5 dated May 30th, 2008, which indicated that where
6 critical habitat has not been designated, the
7 competent Minister will consider the effects of the
8 Project on any habitat identified as high quality or
9 of special importance since adverse effects on such
10 habitat may in turn adversely affect the species. And
11 that can be found in Exhibit 002-110.

12 [Footnote 308: Exhibit 002-110,
13 Reply to Intervener Submissions,
14 page 55]

15 The estimated habitat loss for the EIS was less
16 than 0.25 percent for all VECs. Furthermore, this
17 0.25 percent of habitat is not really lost as it
18 recovers over time.

19 [Footnote 309: Hearing Transcript,
20 October 8, 2008, page 736,
21 lines 6-12]

22 This is not permanent loss. In addition, EnCana
23 considers the effects of SARA-listed plants and
24 concluded that the effects will be negligible as the
25 Project will avoid all SARA-listed rare plants

1 locations. Thus, the Project is not anticipated to
2 affect the survival or recovery of any of these listed
3 species.

4 And, finally, Mr. Chairman, there's been
5 guidance given in other Joint Review Panels on this
6 very issue. Concern for a particular species can be
7 effectively addressed through conditions for
8 subsequent licences or approvals. The Joint Review
9 Panel that heard the Kearl Oil Sands Project
10 recommended to Alberta and Alberta Environment that,
11 through the EPEA approval in that process, or the
12 Wildlife Regulations in our situation, could implement
13 the findings of a Yellow Rail initiative for surveys,
14 determination of effects, and mitigation strategies
15 where appropriate.

16 [Footnote 310: Joint Review Panel,
17 *Application for an Oil Sands Mine*
18 *and Bitumen Processing Facility*
19 *(Kearl Oil Sands Project)*, EUB
20 Decision 2007-013 (February 27,
21 2007), page 50]

22 That approach is much more useful for protecting
23 species at risk specifically as opposed to a complete
24 ban on industrial activities in areas that have been
25 quite frankly haphazardly characterized as

1 preliminarily critical habitat.

2 **C. Requirement for SARA Permits**

3 Let me move on to the need for SARA permits.
4 EnCana's view is that the Project does not involve any
5 activities prohibited under SARA and that it will not
6 require a permit.

7 Mr. Gregoire from Environment Canada stated
8 that, in the event that setbacks for species at risk
9 are encroached upon, it warrants further consideration
10 to determine whether a permit would be required.

11 [Footnote 311: Hearing Transcript,
12 October 22, 2008, page 2990,
13 lines 16-22]

14 This need for further consideration is exactly
15 what the PDA process will fulfill. During SEAC's
16 review, it will be possible to determine if in fact a
17 SARA permit is required. EnCana has designed its
18 project to avoid harming any listed species or their
19 habitat. EnCana has proposed extensive measures to
20 avoid effects on listed species, including the PDA
21 process.

22 Seasonal separation of use of the NWA by
23 listed species and construction activity, minimizing
24 traffic during operations, and reducing speed during
25 the active period for most wildlife will assist in

1 ensuring species at risk are protected.

2 Accordingly, it is not likely that the
3 Project will harm any listed species or their
4 residents.

5 And, Mr. Chairman, the provisions of SARA are
6 clear; the Proponents have assessed the adverse
7 effects of the Project on SARA-listed species and met
8 the legal requirements of both SARA and the
9 Guidelines. If EnCana needs a permit in the future,
10 it will apply for one. And it will ensure it has met
11 the three conditions for a permit under Section 73,
12 which Mr. Gregoire enumerated:

13 (i) all reasonable alternatives to
14 the activity that will reduce the
15 impact on the species have been
16 considered and the best solution
17 has been adopted;

18 (ii) all feasible measures will be
19 taken to minimize the impact of the
20 activity on the species or its
21 critical habitat or the residence
22 of its individuals; and

23 (iii) the activity will not
24 jeopardize the survival or the
25 recovery of the species.

1 In considering non-routine applications in the
2 PDA process, SEAC will be well informed by those three
3 things. It's all part of the process, sir.

4 Let me turn to a discussion of certain
5 species present in the NWA and some of the issues that
6 surrounded them. I don't propose to discuss every
7 species that came up, but I would propose to deal with
8 a few that were of specific concern.

9 **(j) Birds**

10 **A. Sharp-Tailed Grouse**

11 Let me start with the Sharp-tailed Grouse.
12 wildlife surveys conducted as part of the PDA process
13 will locate Sharp-tailed Grouse and their leks.
14 EnCana has committed to respecting a 500-metre buffer
15 from leks year-round, except for exceptional
16 circumstances, again, which would be brought before
17 SEAC for approval.

18 [Footnote 312: Exhibit 002-013,
19 EIS, Volume 3, Section 3.8.3.2;
20 Hearing Transcript, October 8,
21 2008, page 733, lines 11-15]

22 As noted by Mr. Collister, 500 metres is, in his
23 words, a "big" buffer. And, in any event, approaching
24 to within 500 metres will not cause the birds to leave
25 the Lek or result in any noticeable reaction from the

1 Grouse. That was his evidence.

2 [Footnote 313: Hearing Transcript,
3 October 8, 2008, page 734,
4 lines 6-9]

5 Additionally, construction will not occur while
6 Grouse are on their leks breeding. Environmental
7 effects of the project on Sharp-tailed Grouse will be
8 insignificant or negligible.

9 **B. Sprague's Pipit**

10 Let me turn to Sprague's Pipit. Environment
11 Canada claims that EnCana's conclusion that there will
12 be no residual environmental effects on Sprague's
13 Pipit is at odds with the information presented in the
14 recovery strategy.

15 [Footnote 314: Exhibit 003-012,
16 Written Submission Formal Hearing
17 003, pages 158, 163-166 and 174]

18 The Project does not conflict with the recovery
19 strategy for Sprague's Pipit. Furthermore, the
20 recovery strategy notes that successful management of
21 grassland habitat often requires some form of
22 disturbance and idling grassland habitat will reduce
23 its suitability for Sprague's Pipit.

24 [Footnote 315: Environment Canada,
25 Recovery Strategy for the Sprague's

1 Pipit in Canada (2008), page 7]

2 In delineating preliminary assessed critical
3 habitat, Environment Canada developed a resource
4 selection function ("RSF") model that indicates
5 shallow gas drilling is significantly reducing habitat
6 suitability for Sprague's Pipit in the NWA and there
7 will be negative impacts on the species as a result of
8 the Project.

9 That's just wrong.

10 In its RSF, Environment Canada reanalyzed
11 Mr. Linnen's 2006 report. It is EnCana's view they
12 did so in able to make an assumption that there's a
13 statistically significant difference in the number of
14 Sprague's Pipits close to trails contrary to the
15 author's direct findings.

16 How can that be a credible approach?

17 Then, without providing any evidence, or
18 explanation, that their new found statistical
19 significant difference had any biological
20 significance, they assumed it is "biologically
21 significant", and that well density is the culprit.
22 Those are their assumptions in the model.

23 Then Environment Canada assumes that a
24 "biologically relevant well density" is the number of
25 wells within a 908-metre radius.

1 [Footnote 316: Exhibit 003-012,
2 Written Submission Formal Hearing
3 003, page 206]

4 That selection has absolutely no biological
5 relevance to the Sprague's Pipit. Biological
6 relevance in selecting an aerial unit is required in
7 that model.

8 When questioned under cross-examination,
9 Ms. Dale for Environment Canada was unable to cite
10 anything in the literature that suggested a
11 disturbance 908 metres away would have an impact on
12 Sprague's Pipit.

13 [Footnote 317: Hearing Transcript,
14 October 23, 2008, pages 3257-3258]

15 Environment Canada's assessment is a house of
16 cards built on one erroneous assumption upon another.

17 EnCana's assessment of Environment Canada's RSF
18 model can be found in the Reply evidence.

19 [Footnote 318: Exhibit 002-110,
20 Reply to Intervener Submissions,
21 pages 56-66]

22 And I would simply refer it to you. Environment
23 Canada's approach defies both common sense and logic.
24 Incredibly, Environment Canada's model portrays an
25 ever decreasing Sprague's Pipit population in the NWA.

1 The model is unable to explain actual field data that
2 shows a 200 percent increase in Sprague's Pipit
3 between the two survey periods. Models that can't
4 predict the future have little value. Models that
5 can't predict the past, must be wrong. Mr. Collister
6 explained in cross-examination:

7 "All of the construction on this
8 Project is in the season when
9 Sprague's Pipits are not present in
10 the NWA, [and] there's no potential
11 for disturbance at that time."

12 [Footnote 319: Hearing Transcript,
13 October 6, 2008, page 208,
14 lines 15-18]

15 Mr. Chairman, I would suggest that Environment
16 Canada's submission and its RSF model are wholly
17 unreliable and cast no doubt on EnCana's predictions
18 which are based on data collected in the real world
19 and not a product of a computer simulation based on
20 assumptions.

21 Lastly, much has been made of the fact that
22 Sprague's Pipit will not be surveyed during the PDA
23 process. Finding the nests of Sprague's Pipit involve
24 a level of disturbance that can and should be avoided.

25 [Footnote 320: Hearing Transcript,

1 October 6, 2008, page 208,
2 lines 8-11]

3 This disturbance, in Mr. Collister's testimony,
4 would be higher than the potential disturbance for the
5 Project itself. Accordingly, Sprague's Pipit will not
6 be surveyed during the PDA process.

7 **C. Baird's Sparrow**

8 Environment Canada's concerns regarding
9 Baird's Sparrow are partly based on a model that
10 estimates a population decrease of 58 percent when
11 drilling density is increased from 8 to 16 wells per
12 section.

13 [Footnote 321: Exhibit 003-012,
14 Written Submission Formal Hearing
15 003, page 175]

16 EnCana has responded to that in its Reply
17 evidence.

18 [Footnote 322: Exhibit 002-110,
19 Reply to Intervener Submissions,
20 pages 67-69]

21 And, again, I refer you to that evidence.
22 Environment Canada's modelling again is based on
23 assumptions that just do not fit with reality.
24 Serious doubt must be cast on the validity of a model
25 when its predicted results do not correspond with

1 field data from breeding bird surveys in the area
2 surrounding the NWA.

3 [Footnote 323: Exhibit 002-110,
4 Reply to Intervener Submissions,
5 pages 67-69]

6 Simply look at EnCana's Reply evidence. In the
7 EIS, EnCana presented numbers of birds by year for
8 Canadian Wildlife Service point count surveys since
9 1994, 1995. Environment Canada's generalized linear
10 model predicts that Baird's Sparrow numbers should
11 have decreased by 35 percent from 1994, 1995 due to
12 increased well density from 4 wells per section to 8
13 wells per section. The surveys conducted in 2006
14 indicated that Baird's Sparrows are higher than 1994
15 and 1995.

16 [Footnote 324: Exhibit 002-110,
17 Reply to Intervener Submissions,
18 page 69]

19 Mr. Chairman, again, when predicted results from
20 a model disagree with real life data, as Environment
21 Canada's model predictions do here, the most likely
22 explanation is that the model is wrong. Most modelers
23 would attempt to calibrate their models to the real
24 world. Environment Canada apparently feels no such
25 constraints. Mr. Chairman, think horses; not zebras.

1 **D. Burrowing Owl**

2 There was some discussion in the hearing that
3 EnCana did not survey for Burrowing Owls during its
4 EIS fieldwork. Burrowing Owls and other species will
5 be surveyed as part of the PDA process NWA-wide using
6 a protocol consistent with ASRD recommendations and a
7 500-metre setback will be respected for any nest sites
8 discovered.

9 [Footnote 325: Hearing Transcript,
10 October 25, 2008, page 3940,
11 lines 2-21]

12 Conducting this survey prior to the EIS would not
13 have informed the impact assessment.

14 As explained by Mr. Collister, EnCana rated
15 habitat suitability with reference to the 1994/1995
16 CWS inventory (which Environment Canada states is
17 extraordinary in its scope and comprehensiveness) and
18 considered potential Burrowing Owl habitat loss at a
19 landscape scale.

20 [Footnote 326: Environment Canada,
21 online:
22 [Http://www.mb.ec.gc.ca/nature/whp/
23 nwa/suffield/dd02s03.en.html](http://www.mb.ec.gc.ca/nature/whp/nwa/suffield/dd02s03.en.html)]

24 EnCana will locate Burrowing Owl nest sites as
25 part of the PDA, contrary to Dr. Roland's assertion,

1 or confusion. The surveys will cover the entire NWA.

2 EnCana has also committed to complying with
3 setback recommendations outlined by regulators.

4 [Footnote 327: Hearing Transcript,
5 October 6, 2008, page 187,
6 lines 5-9]

7 If a burrow is discovered during the PDA process
8 or otherwise, Mr. Heese described the procedure for
9 evaluating and monitoring a burrow. In some cases, it
10 means EnCana will cancel its facilities.

11 [Footnote 328: Hearing Transcript,
12 October 6, 2008, page 191,
13 lines 22-23]

14 Past mitigation measures have included
15 consideration of the burrow in the design of the
16 drilling program, curtailing operational access, and
17 lowering speed limits on nearby roads.

18 [Footnote 329: Hearing Transcript,
19 October 6, 2008, page 191]

20 Based on this evidence, the Panel can be
21 confident that the Project will not have a significant
22 effect on the Burrowing Owl.

23 **(k) Mammals**

24 **A. Ungulates**

25 Let me move on to mammals and deal with

1 ungulates first. EnCana recognizes that the NWA is a
2 known and important winter range for Pronghorn
3 Antelope. It has been for a long time.

4 [Footnote 330: Exhibit 002-110,
5 Reply to Intervener Submissions,
6 page 71]

7 Some interveners are concerned that winter
8 construction will have an adverse impact on the use of
9 the NWA as ungulate winter range.

10 In response to these criticisms, EnCana conducted
11 a pellet group survey in the spring of 2008 to assess
12 the effects of EnCana's 2007/2008 Winter Infill
13 Drilling Program on ungulates.

14 [Footnote 331: Exhibit 002-110,
15 Reply to Intervener Submissions,
16 page 72]

17 The results showed that avoidance of infilled
18 quarter sections during winter months was only
19 temporary. This study also indicated that ungulates
20 do not avoid existing shallow gas facilities and that
21 antelope move freely among drilled and undrilled
22 quarter sections.

23 [Footnote 332: Exhibit 002-110,
24 Reply to Intervener Submissions,
25 page 72]

1 During cross-examination, Mr. Heese noted that at
2 any given point, EnCana is "operating in such a small
3 area across the block that there is ample opportunity
4 for ungulates to move around where we are not
5 operating."

6 [Footnote 333: Hearing Transcript,
7 October 6, 2008, page 141,
8 lines 2-5]

9 Studies have also shown that Pronghorn antelope
10 are very sensitive to snow and that most will move off
11 the NWA range in severe winters.

12 [Footnote 334: Hearing Transcript,
13 October 6, 2008, page 200-201]

14 According to Alberta Sustainable Resource
15 Management Guidelines, general timing restrictions for
16 key ungulate winter range areas apply in southern
17 Alberta from January 1 to April 30th.

18 [Footnote 335: ASRD Fish &
19 Wildlife Division, Recommended Land
20 Use Guidelines for Key Ungulate
21 Areas (Sept 29, 2000) Draft, page 2

22 Mr. Heese was previously employed by ASRD in the
23 Medicine Hat offices. He's familiar with their
24 approach to protecting ungulate critical winter ranges
25 and this is what he said. Mr. Heese explained that

1 timing restrictions is not a no-go zone for industrial
2 activities. Rather, the January 1 to April 30 window
3 identified the range where there might be temporary
4 suspension of operations to protect ungulates.

5 [Footnote 336: Hearing Transcript,
6 October 6, 2008, page 204,
7 lines 9-16]

8 In the last eight years, Mr. Heese has only had
9 one experience of suspending oil and gas operations
10 for ungulates on the request of ASRD and that was for
11 merely a two-week period. EnCana will comply with
12 those obligations.

13 [Footnote 337: Hearing Transcript,
14 October 6, 2008, page 204,
15 lines 20-25]

16 Further, studies in the Jonah Gas Field described
17 in the Reply evidence and which has a much larger
18 footprint than the proposed Project showed that
19 wintering Pronghorn are resilient to deep gas infill
20 drilling from 8 to 16 wells per section.

21 [Footnote 338: Exhibit 002-110,
22 Reply to Intervener Submissions,
23 page 71]

24 In fact, that study showed that survival was
25 actually higher for animals using the gas field area

1 and there was no significant effect of gas field
2 development on body mass, stress hormone production,
3 or pregnancy rates. All of these factors should have
4 been altered if increased energetic costs were having
5 a significant effect on the Pronghorn. And, again,
6 that's found in the EnCana's Reply evidence.

7 EnCana is confident that relevant studies,
8 previous experience, and the commitment to future
9 surveys all point to the conclusion that the Project
10 will not have a significant environmental effect on
11 ungulates and their use of the NWA as a winter range.

12 **B. Ord's Kangaroo Rat.**

13 Let me turn to Ord's Kangaroo Rat. The
14 effects of the Project on Ord's Kangaroo Rat were
15 rated as insignificant for the construction,
16 operation, decommissioning and abandonment phases.

17 [Footnote 339: Exhibit 002-013,
18 EIS, Volume 3, Section 5.8.3.34]

19 This was based on proposed mitigation measures,
20 dormancies and construction, and winter drilling when
21 Kangaroo Rats are in dens. Minimal past evidence of
22 vehicle collisions and the minimal documented impacts
23 of major pipeline construction on radio-collared
24 Kangaroo Rats from AEC's, EnCana's predecessor, North
25 Suffield Pipeline in 2001.

1 In regard to why EnCana did not conduct
2 surveys of Ord's Kangaroo Rats during the EIS field
3 studies, EnCana was specifically asked by the
4 University of Calgary to refrain from conducting
5 surveys on Ord's Kangaroo Rat as they had
6 long-standing research going on in the area.

7 [Footnote 340: Hearing Transcript,
8 October 6, 2008, page 170,
9 lines 13-16]

10 Existing locations as a result of years of
11 studies will be a setback as part of the PDA process.
12 The PDAs will identify special habitat features,
13 including Kangaroo Rat den sites and appropriate
14 setbacks will be respected.

15 [Footnote 341: Exhibit 002-013,
16 EIS, Volume 3, Section 5.8.3.34]

17 The effectiveness of these mitigation measures
18 will be monitored as part of the EEMP.

19 In its submissions, both Environment Canada
20 and the Coalition noted that Ord's Kangaroo Rats are
21 believed to be negatively influenced by exotic species
22 which are commonly found with linear disturbances and
23 that these linear disturbances are suspected
24 population sink.

25 [Footnote 342: Environmental

1 Canada: Exhibit 003-012, Written
2 Submission Formal Hearing 003,
3 pages 160-162; Coalition: Exhibit
4 006-017, Written Submission Formal
5 Hearing 004A, Tab 5, page 7]

6 EnCana addressed those concerns in its Reply
7 evidence.

8 [Footnote 343: Exhibit 002-110,
9 Reply to Intervener Submissions,
10 pages 69-71]

11 EnCana's activities will not create the kind of
12 artificial combined denning foraging habitat that is
13 hypothesized to act as a sink for the Kangaroo Rat
14 population. No roads will be constructed. And there
15 have been no record of vehicle mortality for Kangaroo
16 Rats in the NWA during 13 to 14 years of intensive
17 research.

18 [Footnote 344: Hearing Transcript,
19 October 6, 2008, page 196,
20 lines 1-5]

21 Further, during cross-examination, Mr. Kansas
22 also explained that, and I quote:

23 "The actual source sink dynamic and
24 the effect on the overall meta
25 population on the Suffield Block on

1 the NWA has not been demonstrated.

2 It's conjecture..."

3 [Footnote 345: Hearing Transcript,

4 October 6, 2008, page 196,

5 lines 10-13]

6 Additionally, the population viability model
7 found that all habitat types, including anthropogenic,
8 contributed to the persistence of the population.

9 [Footnote 346: Exhibit 003C-006,

10 Response to Information Requests,

11 No. 7]

12 EnCana's position is further supported by the
13 only study of oil and gas activities done on Ord's
14 Kangaroo Rats.

15 [Footnote 347: Hearing Transcript,

16 October 15, 2008, page 1404,

17 lines 7-14]

18 This study was completed by the foremost expert
19 in Ord's Kangaroo Rats, Dr. David Gummer, and others
20 in conjunction with the North Suffield Pipeline put in
21 by AEC, EnCana's predecessor. That study found, and I
22 quote:

23 "No construction-related

24 mortalities, no decrease survival,

25 no effect on reproduction ... no

1 effect on large-scale dispersals,
2 and no differences in the frequency
3 of carrying food."

4 End quote.

5 [Footnote 348: Hearing Transcript,
6 October 6, 2008, page 194,
7 lines 17-22]

8 Mr. Kansas pointed out that the pipeline
9 construction for this study was done during 54 days
10 from August to November, which is an active period for
11 Kangaroo Rats. Therefore, the short-term work that
12 EnCana is doing in the wintertime should have an even
13 lesser effect.

14 [Footnote 349: Hearing Transcript,
15 October 6, 2008, page 195,
16 lines 3-7]

17 In addition, COSEWIC status report on the Ord's
18 Kangaroo Rat also quoted the following from
19 Mr. Gummer, and I quote:

20 "Effects of pipeline construction
21 on resident Kangaroo Rats have been
22 studied intensively and several
23 mitigation measures appear to
24 effectively minimize direct
25 mortalities of Kangaroo Rats."

1 [Footnote 350: COSEWIC, Assessment
2 and Update Status Report on the
3 Ord's Kangaroo Rat (2006), page 20]

4 And those mitigation measures are found in
5 EnCana's EPP.

6 **(1) Herpetiles**

7 **A. Snakes**

8 Let me move on to snakes. The Government of
9 Canada expressed concern over the possibility of
10 increased snake mortality from the Project. During
11 the hearing, Mr. Didiuk from Environment Canada led
12 the Panel through an abstract modelling exercise to
13 demonstrate that there would be significant adverse
14 effects as a result of snake mortalities.

15 [Footnote 351: Hearing Transcript,
16 October 24, 2008, page 3524-3531]

17 This illustration quite frankly is of no use to
18 the Panel. Mr. Didiuk makes numerous assumptions,
19 incorrect in some cases, unsupported in others. For
20 example, he assumed a population of 575 adult females.
21 Likely a known number in the context of thousands,
22 perhaps more than 10,000 snakes in the NWA as stated
23 by Mr. Collister.

24 [Footnote 352: Hearing Transcript,
25 October 25, 2008, page 3935,

1 lines 2-13]

2 The "model" also uses figures from an Ontario
3 study on a Black Rat Snake from highways in cottage
4 country, a species that does not exist in the NWA.

5 Fears over increased snake mortality are
6 unfounded for a number of reasons. First, EnCana will
7 not be constructing during high risk times for snakes
8 when they migrate to and from the river. Second, the
9 level of activity in the NWA during Project operations
10 is very low. Speed limits during active snake time
11 are restricted to 50 kilometres per hour. At this
12 speed, the driver is more likely to see the snake and
13 the snake also has time to react and move out of the
14 way.

15 [Footnote 353: Hearing Transcript,
16 October 8, 2008, page 758-759]

17 In the Black Rat Snake study cited by Mr. Didiuk,
18 the authors recognized the importance of slower speeds
19 as an effective way to reduce snake mortality. And
20 note, these are the authors, they note, that when
21 travelling at relatively low speeds, and in their
22 study they suggested 60 kilometres was a slow speed,
23 in most cases drivers can probably see snakes well in
24 advance and avoid them.

25 [Footnote 354: Hearing Transcript,

1 October 25, 2008, page 3934,
2 lines 6-23]

3 Third, EnCana's snake mitigation measures also
4 include minimizing north/south access within high-risk
5 areas, promoting snake awareness in the community,
6 operating snake migration signs, and hiring an on-site
7 biologist for immediate response to snake encounters.

8 [Footnote 355: Hearing Transcript,
9 October 8, 2008, page 756]

10 Lastly, EnCana has embraced the mitigation
11 recommendations made by Mr. Didiuk. Those are all
12 found at EnCana's EPP as mitigation measures.

13 [Footnote 356: Hearing Transcript,
14 October 25, 2008, page 5936,
15 lines 6-14]

16 In addition to the -- let me move on to
17 amphibians.

18 **B. Amphibians**

19 In addition to the amphibian studies
20 conducted for the EIS, PDA surveys will also identify
21 amphibian breeding ponds. EnCana will also respect
22 the year-round species-specific setbacks from breeding
23 or hibernation ponds apart from exceptional
24 circumstances as I've already discussed.

25 [Footnote 357: Exhibit 002-013,

1 EIS, Volume 3, Section 5.8.3.42]

2 As noted by Mr. Collister, and I quote."

3 "There's certainly a remote
4 possibility that ... a Great Plains
5 Toad could be impacted by
6 construction in the winter in its
7 hibernation site. If it does
8 happen, my feeling is that it would
9 be highly unusual and certainly
10 wouldn't be a significant effect."

11 [Footnote 358: Hearing Transcript,
12 October 6, 2008, page 216,
13 lines 9-14]

14 The EIS rated the effects of the Project on the
15 Great Plains Toad, Plains Spadefoot Toad and Northern
16 Leopard Frog as insignificant as a result of the
17 proposed mitigation in the PDA process.

18 **(m) Arthropods**

19 Let me turn to arthropods, which after ten
20 joint review panels, this is the first time I've seen
21 this come up and I'm happy to deal with it.

22 Intervenors have noted that arthropods were
23 not considered a VEC in the EIS. In response, EnCana
24 filed an assessment entitled "Evaluation of Arthropods
25 Species at Risk in the Suffield National Wildlife Area

1 in Southern Alberta."

2 [Footnote 359: Exhibit 002-110,
3 Reply to Intervener Submissions,
4 Appendix T]

5 EnCana didn't dismiss the issue; it went ahead,
6 did the work, filed the evidence to support its
7 position. The report discusses the likelihood of
8 specific arthropod-listed species being present in the
9 NWA, provides information for identifying potential
10 arthropod habitat in the PDA process, and confirms
11 that mitigation proposed by EnCana is appropriate for
12 arthropod species at risk. No one put that evidence
13 into doubt.

14 [Footnote 360: Exhibit 002-110,
15 Reply to Intervener Submissions,
16 Page 3]

17 Further, EnCana's experts have posited that
18 protecting the native prairie, the sand dunes in the
19 north, and the habitats of larger species, this will
20 result in the protection of arthropod and insect
21 habitats as well.

22 [Footnote 361: Hearing Transcript,
23 October 8, 2008, page 519,
24 lines 1-7]

25 At one of the informal hearing sessions,

1 Dr. Longair made a presentation to the Panel regarding
2 his concerns that arthropods were not considered in
3 the EIS; that, despite the fact that Dr. Longair
4 admitted he had not read the Environmental Protection
5 Plan and the over 400 mitigation measures proposed
6 therein, he stated that EnCana could not demonstrate
7 that the Project will have no significant effect.

8 [Footnote 362: Hearing Transcript,
9 October 18, 2008, page 2378, line
10 23 to page 2379, line 7, and page
11 2382, line 20, to page 2383,
12 line 7]

13 One wonders how you can arrive at that conclusion
14 when you haven't read the information. Unfortunately,
15 when questioned by the Chairman, Dr. Longair was
16 unable to indicate an appropriate arthropod indicator
17 that could have been used.

18 [Footnote 363: Hearing Transcript,
19 October 18, 2008, page 2388, line
20 6, to page 2391, line 18]

21 His assistance, Mr. Chairman, is quite of limited
22 value to the Panel.

23 Let me move on to rare plants.

24 **(n) Rare Plants.**

25 As many as 24 rare plant species are known to

1 occur within the NWA.

2 [Footnote 364: Exhibit 002-013,
3 EIS, Volume 3, Section 3.7.2.3]

4 The Alberta Natural Heritage Information System
5 is a database that tracks records of rare plants found
6 in the past by researchers in the area.

7 [Footnote 365: Hearing Transcript,
8 October 6, 2008, page 172,
9 lines 11-15]

10 The database enabled EnCana to gain a good
11 understanding about the types of rare plants in the
12 area and their broad distributions throughout the NWA.

13 Interveners were particularly concerned with the
14 Tiny Cryptanthe, Slender Mouse-ear-cress, and
15 Small-flowered Sand-verbena, which are SARA-listed
16 species.

17 The effects of the Project on rare plant
18 species were rated as insignificant for the
19 construction, operations, and
20 decommissioning/abandonment phases of the Project.

21 [Footnote 366: Exhibit 002-013,
22 EIS, Volume 3, Section 3.7.2.3]

23 This was based on proposed mitigation measures
24 and primarily the location marking an avoidance of
25 rare plant species during the PDA process. Although

1 rare plant surveys were not conducted for the EIS
2 potential impacts, the PDA process is designed to
3 identify and avoid rare plants.

4 I need only refer you to the direction of the
5 Federal Court of Appeal in this country that said it
6 is unhelpful to consider hypothetical effects when
7 known mitigation will be used and implemented to avoid
8 an impact. It applies directly to this issue.

9 EnCana is currently proposing a single survey
10 window from late June to mid-July based on the
11 flowering dates of all the potential ANHIC Centre and
12 SARA-listed species.

13 [Footnote 367: Exhibit 002-110,
14 Reply to Intervener Submissions,
15 Appendix E, page E-9]

16 The survey windows will be adjusted appropriately
17 each year based on the judgment of a professional
18 botanist to ensure these listed species are being
19 identified appropriately and in compliance with the
20 ANHIC Guidelines on surveys.

21 Rare plant surveys from the PDA process will be
22 effective for protecting rare plants because of their
23 site-specific nature.

24 [Footnote 368: Hearing Transcript,
25 October 8, 2008, page 699,

1 lines 8-19]

2 Due to this, the Project is predicted to have
3 negligible effects on rare plants.

4 [Footnote 369: Hearing Transcript,
5 October 6, 2008, page 88,
6 lines 21-24]

7 In the exceptional circumstances, where avoidance
8 is not possible, EnCana will implement mitigation
9 measures with a non-routine application to SEAC or
10 elect to cancel the location.

11 But let me deal with that because it's
12 important for the Panel to understand what the issue
13 is in respect of rare plants.

14 Dr. Walker and Mr. Woosaree gave evidence
15 that transplanting and propagation success of rare
16 plants works. Other native prairie species have also
17 been successfully transplanted and rescued on the AEC
18 Express Pipeline. Transplanting is not an unknown
19 mitigation.

20 [Footnote 370: Hearing Transcript,
21 October 6, 2008, page 244-245]

22 In addition, Dr. Walker noted that rare plants
23 that are annuals don't survive over winter but their
24 seeds become part of the seed bank. Since
25 construction is over winter and the topsoil will be

1 replaced, if the rare plant seeds are part of the soil
2 seed bank, they will replace back in the same spot and
3 will be allowed to germinate the following season.

4 [Footnote 371: Hearing Transcript,
5 October 8, 2008, page 70,
6 lines 10-21]

7 There is also ample evidence that disturbance can
8 actually be beneficial to the rare plants. With
9 respect to EnCana's monitoring at Koomati, Mr. Heese
10 noted this:

11 "Sand Verbena is flourishing amidst
12 a variety of disturbance ... there
13 is evidence to suggest ...
14 disturbance leads to long-term
15 viability of these populations."

16 [Footnote 372: Hearing Transcript,
17 October 6, 2008, page 229,
18 lines 5-10]

19 Furthermore, monitoring has shown that in an area
20 where no disturbance, no further disturbance occurred,
21 Tiny Cryptanthe has actually started to disappear.

22 [Footnote 373: Hearing Transcript,
23 October 6, 2008, page 176,
24 lines 20-22]

25 Even the recovery strategy for Tiny Cryptanthe

1 states, Tiny Cryptanthe appears to require some
2 element of disturbance.

3 [Footnote 374: Environment Canada,
4 Recovery Strategy for the Tiny
5 Cryptanthe (*Cryptantha minima*) in
6 Canada, October 2006, page 8]

7 And here's what Dr. Walker had to say. And I
8 quote:

9 "... If anything, it [construction
10 activities] may improve their
11 habitat because the three COSEWIC
12 species are somewhat dependent on
13 disturbance and reduced
14 competition. They have been there
15 for 30 years of various levels of
16 disturbance and I think the prudent
17 approach would be to perhaps keep
18 on doing what's been going on; that
19 we are not sure whether the
20 activity is there ... is perhaps
21 promoting their presence and
22 creating habitat for them.

23 Now ... I've noticed somewhat
24 of a disjunct between the recovery
25 plans and the SARA legislation.

1 The recovery plans all say that
2 they are there to look after
3 natural populations as if, I guess,
4 artificially-created populations or
5 disturbance-created populations are
6 somehow not as good as
7 naturally-occurring ones. But, to
8 my mind, the plants don't care how
9 they got their habitat created for
10 them."

11 [Footnote 375: Hearing Transcript,
12 October 6, 2008, page 227]

13 Dr. Walker's experience during the reclamation of
14 the Foothills Pipeline in Saskatchewan is yet another
15 example of how the lack of disturbance can lead to the
16 disappearance of rare plants.

17 [Footnote 376: Hearing Transcript,
18 October 6, 2008, pages 237-239]

19 We should be cautious, Mr. Chairman. We should
20 not take at face value recovery strategies and
21 statements by Environment Canada that avoidance is the
22 only way to save rare plants. It's not borne out by
23 the evidence. The evidence clearly shows that the
24 rare plants at issue need some level of disturbance to
25 remain viable and adherence to a strict setback may

1 actually be detrimental to their survival.

2 Nevertheless, the currently generally-accepted
3 practice advocated by Environment Canada, and which
4 EnCana has committed to, because of that, is
5 avoidance.

6 **(o) Cumulative Effects & Selection of Study Area**

7 Let me move on to cumulative effects. EnCana
8 has been criticized in the submissions filed by
9 various interveners for the selection of its study
10 area and for the treatment of cumulative effects in
11 the EIS. DND expressed concern regarding EnCana's
12 approach to assessing cumulative effects specifically
13 alleging that it lacked information.

14 [Footnote 377: DND: Exhibit

15 003-012, Written Submission Formal

16 Hearing 003, pages 95-97]

17 This is despite the fact that DND's own
18 environmental assessment of formation-level training
19 at CFB Suffield didn't even consider shallow gas
20 activities and it was completed in 2006 after this
21 Project was announced. Nor did it assess critical
22 habitat suitability, habitat modelling, constraints
23 mapping, statistical and power analysis, or habitat
24 fragmentation.

25 [Footnote 378: Hearing Transcript,

1 October 23, 2008, page 3166,
2 lines 15-25]

3 Environment Canada said they participated in that
4 environmental assessment.

5 In addition, DND also speculated that the
6 cumulative effects of this Project could impact the
7 entire training area or the sustainability of Military
8 training and defence research.

9 [Footnote 379: DND: Exhibit
10 003-012, Written Submission Formal
11 Hearing 003, page 55]

12 Further, Environment Canada criticized EnCana's
13 approach alleging that it had not conducted a full and
14 proper cumulative effects assessment. In fact, for
15 the formation-level training, which excluded shallow
16 gas activities, DND and Environment Canada didn't even
17 bother to contact EnCana about the EIS that was being
18 conducted on the Base.

19 [Footnote 380: Exhibit 003-012,
20 Written Submission Formal Hearing
21 003, pages 155, 184-188 and
22 Appendix H]

23 So one wonders about their comments about the
24 methodology employed for cumulative effects when they
25 choose to ignore it themselves.

1 But let me deal with it. The Joint Review
2 Panel for the Express Pipeline project articulated the
3 currently applicable test for considering cumulative
4 effects for a project. The Joint Review Panel
5 identified three requirements that must be met before
6 they would consider as relevant any evidence related
7 to cumulative effects. And they said this:

8 First, there must be an
9 environmental effect of the project
10 being assessed.

11 Second, the environmental
12 effect must be demonstrated to
13 operate cumulatively with the
14 environmental effects from other
15 projects or activities.

16 Third, it must be known that
17 the other project or activities
18 have been or will be carried out
19 and are not hypothetical.

20 [Footnote 381: NEB-CEAA Joint
21 Review Panel, *Environmental*
22 *Assessment of the Express Pipeline*
23 *Project: Joint Review Panel Report*
24 OH-I-95, (May 1996) pages 187-188].

25 In its decision, the Joint Review Panel also

1 noted that a further requirement is that the
2 cumulative effects must be likely.

3 [Footnote 382: CEA
4 AgencyCumulative Effects
5 Practioners Guide, 1999,
6 Section 2.1]

7 That's the context you must consider cumulative
8 effects in.

9 The Project is the only new additive effect that
10 will take place in the NWA so the level of complexity
11 of future cumulative land use effects in the NWA is
12 extremely low. The Coalition was concerned with the
13 possibility that 32 wells per section might be needed
14 by EnCana in the future. And Mr. L'Henaff addressed
15 that. He said, and I quote:

16 "... we really don't see at this
17 time that this [32 well per
18 section] is a viable option ...
19 it's extremely, highly unlikely.
20 If that situation were ever to
21 occur, we would have to come back
22 here and go through this same
23 process."

24 [Footnote 383: Hearing Transcript,
25 October 6, 2008, page 137,

1 lines 15-20]

2 EnCana addressed these criticisms in detail on
3 page 82 of its Reply evidence. And I simply refer you
4 to that document. They also addressed it under
5 cross-examination by the Government of Canada.

6 Mr. Kansas discussed the process for
7 determining cumulative effects. First, he noted that
8 they considered regional issues of concern within the
9 prairie region and looked at what are the residual
10 impacts of the Project. Increment -- impacts of the
11 Project increment overlap in time and space.

12 [Footnote 384: Hearing Transcript,
13 October 9, 2008, page 856,
14 lines 3-17]

15 In discussing the study area, Mr. Kansas compared
16 it to other projects, including the Cheviot mine, with
17 a 3,200 square kilometre study area, and a footprint
18 area of 26 kilometres by 2 kilometres. He compared it
19 with the Great Sand Hills regional study, which was
20 1,900 square kilometres and he compared that to the
21 Project study area which was 2,900 square kilometres.

22 [Footnote 385: Hearing Transcript,
23 October 9, 2008, page 857,
24 lines 1-16]

25 Mr. Kansas also specified that in accordance with

1 the CEAA Practitioner's Guide, if there was a
2 negligible effect, no cumulative effects assessment
3 was done for that VEC. Whereas if there was an
4 insignificant effect, a cumulative effects assessment
5 was conducted. That's in accordance with the CEAA
6 requirements.

7 [Footnote 386: Hearing Transcript,
8 October 9, 2008, page 859, lines 19
9 to page 860, line 24]

10 EnCana conducted an environmental assessment for
11 each species at risk in its EIS and considered 31 VECs
12 in its cumulative effects assessment, including Ord's
13 Kangaroo Rat, Burrowing Owl, Sprague's Pipit,
14 Loggerhead Shrike and Pronghorn Antelope.

15 [Footnote 387: Hearing Transcript,
16 October 9, 2008, pages 862-864]

17 The Cumulative Effects Assessment for vegetation,
18 wildlife, and soils predicted that there will be no
19 significant effects.

20 [Footnote 388: Exhibit 002-013,
21 EIS, Volume 3, Section 7; Exhibit
22 002-110, Reply to Intervener
23 Submissions, page 73-82]

24 EnCana intentionally took the Project-specific
25 approach to conducting its cumulative effects

1 assessment. Regional planning requires considerable
2 multijurisdictional collaboration and planning and it
3 is not appropriate for project-specific environmental
4 assessment. That, again, is in accordance with the
5 CEAA guidance on preparing cumulative effects
6 assessments.

7 [Footnote 389: Exhibit 002-110,
8 Reply to Intervener Submissions,
9 page 74]

10 The Joint Review Panel instructed EnCana to
11 follow the CEAA's cumulative effects assessment
12 Practitioner's Guide. This guide notes that
13 cumulative effects assessments are usually done as
14 part of a single project application submitted to
15 regulatory agencies for approval.

16 [Footnote 390: CEA Agency
17 Cumulative Effects Practitioners
18 Guide, 1999, Section 4.2]

19 It emphasizes that project-specific cumulative
20 effects assessment cannot be forced into the role of
21 regional planning. Such studies are not the
22 responsibility of a single Proponent but of a number
23 of government agencies and stakeholders.

24 [Footnote 391: CEA Agency
25 Cumulative Effects Practitioners

1 Guide, 1999, Section 4.2]
2 On this point, Mr. Kansas stated:
3 "... after all, we were asked by
4 the Panel in the Cumulative Effects
5 Assessment to follow the Guidelines
6 of the *Hegman et. al.*, CEAA
7 Practitioner's Guide. It's very
8 clear that guide is fundamentally
9 focused on single project CEAA and
10 not strategic CEAA and not even a
11 regional planning based CEAA... So
12 we followed a single project CEAA
13 which, fundamentally, has to mix
14 the incremental effect of the
15 Project in the context of the
16 regional effects. And That's what
17 we did."
18 [Footnote 392: Hearing Transcript,
19 October 9, 2008, page 860,
20 lines 7-19]

21 Dr. Stelfox recommended quantifying the range of
22 natural variability for all key VECs using simulation
23 models and conducting backcast and forecast
24 simulations for the Suffield NWA for the period 1955
25 to 2055.

1 [Footnote 393: Coalition:

2 Exhibit 006-017, Tab 3, page 9]

3 The simulations recommended by Dr. Stelfox will
4 not add value or change the EIS predictions that have
5 been made using local empirical knowledge, analogue
6 studies, and expert opinions.

7 [Footnote 394: Exhibit 002-110,
8 Reply to Intervener Submissions,
9 page 78]

10 Back-casting is a general planning approach that,
11 by his own definition, is potentially rife with
12 uncertainty due to the lack of quantitative
13 comparative information and the arbitrary selection of
14 a timing period.

15 [Footnote 395: Exhibit 002-110,
16 Reply to Intervener Submissions,
17 page 78]

18 EnCana's EIS has already accounted for
19 information concerning natural range of variability of
20 disturbances to relevant VECs. Information of the
21 natural range of variability of VECs, the trajectory
22 of recovery is available from past studies and
23 specific monitoring in the NWA. Simulation models are
24 not required for quantifying natural range of recovery
25 and forecasting when real world data is available.

1 As Mr. Kansas explained, and I quote:
2 "If there's no data, there's no
3 data. You can't make data up. And
4 to assign trajectories or
5 percentages in a model that are
6 based on a range and run scenarios,
7 to me, is nowhere near as powerful
8 as going out and actually finding
9 out what happens."

10 [Footnote 396: Hearing Transcript,
11 October 8, 2008, pages 620-621]

12 The CEAA's cumulative effects assessment
13 Practitioner's Guide clearly states that there is not
14 one comprehensive method by which any cumulative
15 effects assessment may be performed.

16 [Footnote 397: CEA Agency
17 Cumulative Effects Practitioners
18 Guide 1999, s. 5.0]

19 Furthermore, it gives us this warning:
20 "Expectations as to what CEA's can
21 accomplish must not exceed what can
22 be technically accomplished, what
23 is scientifically known about
24 environmental conditions, and what
25 is possible within the existing

1 regulatory review process and
2 jurisdictional land
3 administration."

4 [Footnote 398: CEA Agency
5 Cumulative Effects Practitioners
6 Guide, 1999, s.5.0]

7 Mr. Chairman, there is no information lacking in
8 the cumulative effects assessment. As the cumulative
9 effects assessment concluded that there will be no
10 significant affects, and the assessment specifically
11 took into account the possibility of increased
12 Military training, the Project will not result in
13 cumulative effects to the training area.

14 EnCana's assessment was conducted using an
15 approach consistent with the Guide and, contrary to
16 the interveners' suggestions, it is complete,
17 thorough, and not lacking in any respect.

18 **(p) Environmental Protection Plan (EPP)**

19 Let me move on to the Environmental
20 Protection Plan. In its supplemental submission, the
21 Department of National Defence and Natural Resources
22 Canada provided several broad recommendations
23 regarding the EPP. Environment Canada makes a broad
24 statement that the EPP has not addressed several
25 uncertainties. What those are, we're not sure.

1 EnCana has submitted responses to DND's and NRCan's
2 recommendations and I simply direct the Panel to those
3 responses to those recommendations in the Reply
4 evidence Exhibit 002-110.

5 [Footnote 399: Exhibit 002-110,
6 Reply to Intervener Submissions,
7 Appendix B]

8 DND's general concern regarding the EPP is that,
9 while EnCana provides many mitigation measures in the
10 EPP that could be used, the EPP does not provide
11 specific information about which mitigation will be
12 initially implemented and which mitigation will be
13 implemented should initial mitigation be ineffective.

14 [Footnote 400: Exhibit 003-019,
15 Supplemental Written Submission
16 Formal Hearing 003, Section I]

17 Mr. Chairman, that request is not in line with
18 what happens in the real world and is not possible to
19 undertake. And let me explain. The EPP provides a
20 suite of proven mitigation measures that are available
21 to the individuals in the field to make site-specific
22 informed decisions. Different mitigation options are
23 provided so that the Environmental Inspector and
24 others can make a decision in the field as to what
25 measure is best suited for a particular situation. It

1 is contrary to good environmental management to
2 require a command and control approach to
3 environmental protection. Different circumstances
4 require different solutions. The goal of the EPP is
5 to create all of the available tools. No one can know
6 in advance every possible situation that will arise.
7 The responsible approach is, thus, to provide the
8 tools to deal with those different situations that may
9 arise.

10 There will be environmental inspection in the
11 field during the construction of all field facilities
12 as part of the EPP.

13 [Footnote 401: Hearing Transcript,
14 October 8, 2008, page 568,
15 lines 8-11; Exhibit 002-077, EPP,
16 s. 3.4]

17 Environmental Inspectors will work very closely
18 with contractors. And you heard the contractors speak
19 in Medicine Hat about what is required to be done and
20 what is required to be done right in respect of a
21 specific site.

22 [Footnote 402: Hearing Transcript,
23 October 8, 2008, page 570,
24 lines 1-4]

25 Activity Coordinators, Activity Inspectors, and

1 Environmental Inspectors will be the eyes and ears on
2 the ground to ensure that contractors comply with the
3 requirements of the EPP during all phases of the
4 Project.

5 [Footnote 403: Hearing Transcript,
6 October 8, 2008, page 568,
7 lines 12-18]

8 All EnCana employees and contractors will be
9 trained with regard to the commitments and
10 expectations from the EPP and the EEMP, as well as the
11 consequences of non-compliance.

12 [Footnote 404: Hearing Transcript,
13 October 8, 2008, page 570,
14 lines 17-22]

15 And, again, you heard those consequences in
16 Medicine Hat. Anyone on site, anyone, has the ability
17 and responsibility to halt activities if an
18 environmental issue arises, including Activity
19 Coordinators, Activity Inspectors, and Environmental
20 Inspectors.

21 [Footnote 405: Hearing Transcript,
22 October 8, 2008, page 570,
23 lines 17-22]

24 You heard in Medicine Hat from EnCana's
25 contractors, the approach works.

1 It is impossible for a Proponent to list a
2 specific initial mitigation measure for every possible
3 situation as well as a back-up measure in the event
4 that initial mitigation is ineffective for every
5 possible situation. That's what DND is asking for.
6 That is far beyond what is required under CEAA and in
7 respect of good environmental management.

8 The tools are available in the EPP for
9 specific site protection. In addition, the EEMP will
10 be monitoring the effectiveness of that mitigation and
11 will provide feedback loop for implementing adaptive
12 management measures as required, which takes me to the
13 EEMP.

14 **(q) Monitoring and Follow-Up Plan (EEMP)**

15 In its supplemental submission, DND provided
16 two recommendations in its assessments of EnCana's
17 EEMP, both of which EnCana addresses in its Reply
18 Submission. In responding to the recommendations,
19 EnCana has committed to establishing the Environmental
20 Effects Monitoring Advisory Committee prior to
21 implementation of the Project and providing a
22 finalized emergency response plan to CFB Suffield for
23 comment.

24 [Footnote 406: Exhibit 002-110,
25 Reply to Intervener Submissions,

1 Appendix B]

2 With respect to an EEM Advisory Committee, even
3 Mr. Wallis from the Environmental Coalition conceded
4 that they can be very good if they are structured
5 right and given the commitment from agencies to
6 implement their recommendations.

7 [Footnote 407: Hearing Transcript,
8 October 16, 2008, page 1875,
9 lines 8-11]

10 The Environmental Coalition also expressed a
11 willingness to work with EnCana in such a committee to
12 address problems within Suffield, always, of course,
13 to be fair, subject to their primary position that
14 this Project not be approved.

15 [Footnote 408: Hearing Transcript,
16 October 16, 2008, page 1875,
17 lines 19-25]

18 Ongoing monitoring is important to the successful
19 use of adaptive management. Adaptive management
20 ensures that mitigation and follow-up programs can be
21 modified in accordance with the results of
22 environmental monitoring to address incidents and
23 improve environmental performance.

24 EnCana's approach to adaptive management is
25 not an experimental trial and error approach. That's

1 just not it. Rather, it is a decision tree in
2 choosing an appropriate mitigation measure.

3 [Footnote 409: Hearing Transcript,
4 October 15, 2008, page 1480,
5 lines 17-24]

6 Various examples of how adaptive management have
7 been used in the field were discussed during the
8 hearing.

9 [Footnote 410: Hearing Transcript,
10 October 15, 2008, pages 1486-1488]

11 Mr. Heese also made note of the role that
12 adaptive management would play throughout the life of
13 the Project, and this is what he said, and I quote:

14 "But addressing the environmental
15 variables that are captured through
16 the PDA process, we ... want to
17 respond to those variables during
18 construction and implementation
19 phase but also throughout the life
20 of the Project. So making sure
21 that operationally we are making
22 appropriate decisions and we
23 continue to make good decisions of
24 how we access the field and how
25 those environmental constraints

1 continue to interact with our
2 operations."

3 [Footnote 411: Hearing Transcript,
4 October 14, 2008, page 1286]

5 Mr. Chairman, EnCana's EEMP proposes candidate
6 studies to monitor the effectiveness of the mitigation
7 measures and verify the predictions of the EIS.
8 EnCana's EEMP will also be coordinated with other
9 kinds of research done by the government or
10 universities. And that can again all be found in
11 Exhibit 002-078.

12 [Footnote 412: Exhibit 002-078,
13 EEMP, pg. 3; Hearing Transcript,
14 October 8, 2008, page 581, lines
15 15-18]

16 The EEMP meets the requirements of the Guidelines
17 in the CEAA. It contains enough flexibility to deal
18 with any recommendations this Panel might have and is
19 flexible enough to deal with any recommendations that
20 either the DND, the regulators, or other interested
21 parties like the Coalition might have.

22 It will provide valuable information on a
23 variety of species that is currently lacking, which
24 can be used to manage these natural resources
25 throughout the dry mixedgrass prairie ecosystem.

1 Let me move to reclamation.

2 **(r) Reclamation**

3 The interveners raised several issues about
4 reclamation. DND raised the issue that EnCana has not
5 clearly defined its reclamation objectives and that
6 these need to be clearly articulated and evidence of
7 successful reclamation based on these objectives must
8 be provided.

9 [Footnote 413: Exhibit 003-012,
10 Written Submission Formal Hearing
11 003, pages 119-121]

12 Environment Canada recommended that a plan should
13 be implemented to reclaim and remediate the current
14 industrial footprint before adding to the footprint.

15 [Footnote 414: Exhibit 003-012,
16 Written Submission Formal Hearing
17 003, page 188]

18 And the Coalition recommended reclaiming to
19 equivalent conditions as maintaining soil site
20 stability, hydrologic function, and integrity of the
21 biotic community.

22 [Footnote 415: Exhibit 006-017,
23 Written Submission Formal Hearing
24 004A Tab 4, page 31]

25 Mr. Chairman, in response to these concerns,

1 EnCana, and Dr. Walker on behalf of EnCana, filed a
2 report entitled "Rangeland Functionality Assessment"
3 which is the monitoring assessment section of the
4 original conceptual Reclamation Plan filed within the
5 EIS.

6 [Footnote 416: Exhibit 002-110,
7 Reply to Intervener Submissions,
8 Appendix K]

9 [Footnote 417: Exhibit 002-010,
10 EIS, Volume 1, Appendix H-1]

11 The report follows the Society for Ecological
12 Restoration Guidelines and aims to restore rangeland
13 functionality.

14 [Footnote 418: Hearing Transcript,
15 October 15, 2008, page 1372,
16 lines 4-8]

17 Dr. Walker testified that the standards of his
18 protocol are higher than the current Alberta
19 Environment reclamation standards as well as the new
20 standards that are currently under development.

21 [Footnote 419: Hearing Transcript,
22 October 17, 2008, page 2116-2117]

23 Mr. Woosaree noted that rangeland health
24 assessment is basically a system adopted by ASRD to
25 gauge potential effects on a particular disturbed site

1 when it's reclaimed and it's just a matter of adapting
2 that to the existing conditions in the NWA. He saw no
3 issue with Dr. Walker's proposal.

4 [Footnote 420: Hearing Transcript,
5 October 25, 2008, page 3799,
6 lines 14-21]

7 Dr. Walker is one of the leading authorities for
8 reclamation in prairie environments and took part in
9 developing the Reclamation Plan for the Express
10 Pipeline. The Proponent of the Express Pipeline was
11 50 percent owned by AEC. Now EnCana. The Canadian
12 portion of the Express Pipeline consisted of
13 approximately 430 kilometres of 24-inch pipeline, this
14 is a transmission pipeline, with a stripped
15 right-of-way which is much more invasive than the
16 proposed Project. And it can all be founded in
17 Exhibit 006-044.

18 [Footnote 421: Exhibit 006-044,
19 Field Observations of the Recovery
20 of Native Rangeland Plant
21 Communities on Express Pipeline 0
22 July 2008, page 3]

23 Over 10 years after the construction of the
24 Express Pipeline, members of the original stakeholders
25 of the Environmental Advisory Committee, including

1 Mrs. Bradley, from the Coalition, embarked on a
2 three-day tour of the site to monitor reclamation.
3 One of the finding of that report was that site
4 selection and route planning with avoidance of the
5 most ecological sensitive sites is the key to success.
6 That's exactly what EnCana is proposing.

7 [Footnote 422: Exhibit 006-044,
8 Field Observations of the Recovery
9 of Native Rangeland Plant
10 Communities on Express Pipeline -
11 July 2008, page 7]

12 When questioned by the Panel, Mrs. Bradley from
13 the Coalition conceded that the Express Pipeline was a
14 good example of dry mixedgrass prairie reclamation.

15 [Footnote 423: Hearing Transcript,
16 October 16, 2008, pages 1905-1906]

17 The success that AEC and Dr. Walker experienced
18 with Express Pipeline should provide the Panel with
19 great assurance about EnCana's ability to reclaim this
20 Project, which will have a significantly smaller
21 footprint, limited soil stripping, and the advantage
22 of 15 years of learning.

23 Dr. Walker's report provides a monitoring program
24 based on concepts of rangeland health that will
25 consider the reclamation process at all stages and

1 evaluate it at all stages from planning to
2 construction to early post-construction monitoring to
3 the post-abandonment phase.

4 [Footnote 424: Hearing Transcript,
5 October 8, 2008, page 690,
6 lines 11-20; Hearing Transcript,
7 October 15, 2008, pages 1366-1367]

8 This approach ensures there is a trajectory for
9 its successful restoration of the disturbance to a
10 pre-defined target. All you need to do is look at
11 Dr. Walker's proposal. Dr. Walker described the
12 restoration protocol as follows, and I quote:

13 "It is a way of comparing to a
14 reference site. And that reference
15 site should be one that is in
16 existence. It could be one that
17 DND and EnCana goes out and looks
18 at a wellsite and says, yes, this
19 is exactly what we're looking for.
20 The protocol provides a means of
21 measuring that and describing that
22 quantitatively and then that can
23 become a target. It's flexible
24 enough, the protocol, that it can
25 accommodate a variety of different

1 land uses and land use objectives."

2 [Footnote 425: Hearing Transcript,
3 October 15, 2008, page 1371,
4 lines 1-10]

5 And Dr. Walker walked you through that in the
6 rebuttal evidence.

7 In its Opening Statement, Environment Canada
8 asserted that EnCana's Reclamation Plan was based on
9 unclear land use objectives and inappropriate
10 definitions of success and monitoring.

11 [Footnote 426: Hearing Transcript,
12 October 21, 2008, page 2719-2720]

13 Environment Canada would appear to be confused.
14 EnCana's Reclamation Plan builds on key components of
15 the grasslands framework by the Alberta Reclamation
16 Criteria Advisory Group. The RCAG is a
17 multi-stakeholder group which is currently designing
18 the upstream oil and gas reclamation criteria for
19 Alberta Environment and a certification process to
20 assist industry, government and landowners.

21 In Dr. Walker's report, reclamation goals and
22 objectives are clearly defined. Methods to measure
23 reclamation success are clearly described. And the
24 standards and criteria for reclamation success are
25 clearly proposed.

1 To ensure that reclamation is proceeding
2 appropriately, EnCana proposes to utilize the Range
3 Health Assessment Protocol specifically created for
4 this Project by Dr. Walker which measured rangeland
5 functionality on the basis of the very three
6 indicators suggested by the Coalition: Site stability
7 function, watershed function, and by audit integrity.

8 There is ample evidence to show that EnCana's
9 efforts at mitigation and reclamation have been
10 successful in the past. The AXYS Report evaluated a
11 number of sites from the EnCana drilling program two
12 years after a Spider-Plow was used for installation of
13 the pipeline rights-of-way.

14 [Footnote 427: Exhibit 002-001,
15 Post Construction Vegetation
16 Assessment - prepared for EnCana]

17 On and off pipeline plant species similarity
18 rates above 75 percent were achieved for vegetation
19 communities similarity within two years of the
20 pipeline installation.

21 [Footnote 428: Hearing Transcript,
22 October 23, 2008, page 3327, lines
23 4-14]

24 Dr. Walker has stated that, based on EnCana's
25 proposed actions, the post-Project landscape, will be

1 closer to native prairie perhaps than it is today.

2 [Footnote 429: Hearing Transcript,
3 October 8, 2008, pages 632-633]

4 As noted by Mr. Woosaree, who has 20 years of
5 experience working on native plant development habitat
6 restoration, when it comes to reclamation in areas of
7 the NWA, he said, "We can reclaim them all."

8 [Footnote 430: Hearing Transcript,
9 October 25, 2008, page 3894,
10 lines 1-8]

11 Lastly, Dr. Walker is proposing to utilize a soil
12 loss equation of four tonnes per hectare per year. In
13 response to criticism by Dr. Wolf of NRCan that one
14 tonne per hectare per year is more appropriate,
15 [Footnote 431: Hearing Transcript, October 25, 2008,
16 page 3368, lines 15-24], Dr. Walker noted four tonnes
17 per hectare per year is the accepted standard of
18 Agriculture Canada, all agricultural departments
19 throughout Canada, and the City of Calgary, and it's
20 been approved by Dr. Foster, one of the developers of
21 the Universal Soil Loss Equation.

22 [Footnote 432: Hearing Transcript,
23 October 25, 2008, page 3926,
24 line 17, to page 3937, line 7]

25 Let me move on, as I'm getting close to the end,

1 to Pre-Disturbance Assessment.

2 **(s) Pre-Disturbance Assessment (PDA)**

3 Mr. Chairman, the PDA process is the primary
4 mitigation for the Project and the assurance that the
5 predicted effects of this Project will be accurate.
6 It will locate and avoid all environmentally-sensitive
7 features and, by doing so, will prevent impacts to
8 those features. As noted by Mr. Fudge, one of the
9 best mitigations is avoidance. That is echoed by the
10 Federal Court of Appeal in the Express Pipeline.

11 [Footnote 433: Hearing Transcript,
12 October 8, 2008, page 731,
13 lines 23-25]

14 EnCana has modified and expanded upon the PDA
15 process explained in earlier documents such as the EIS
16 and EPP in order to arrive at what it believes is a
17 state-of-the-art siting process for development in
18 sensitive areas. EnCana's proposed PDA process has
19 been informed by several iterations of expert
20 discussion and simulations in order to provide a
21 practical process that works to protect the
22 environment.

23 [Footnote 434: Hearing Transcript,
24 October 7, 2008, page 465, line 12,
25 to page 467, line 4]

1 It is not unusual to apply for a project or
2 facility prior to the final determination of project
3 site locations. It happens all the time. In past
4 facilities applications, conditions are imposed on
5 proponents to follow a specific siting plan or to
6 follow a specific Environmental Protection Plan with
7 regulatory authorities confirming compliance with
8 those plans prior to development. That is evidenced
9 in numerous NEB decisions, GH-3/2002, GH-2/2007,
10 OH-1/2007, projects dealing with Maritimes and
11 Northeast Pipeline, TransCanada Keystone Pipeline, and
12 the Express project.

13 [Footnote 435: **Maritimes &**
14 **Northeast Pipeline Management Ltd.**
15 (November 2002), GH-3-2002 (NEB),
16 pages 26-44; **TransCanada Keystone**
17 **Pipeline GP** (September 2007),
18 OH-1-2007 (NEB)]

19 The field investigations that will be done as
20 part of the PDAs are detailed in EnCana's Reply
21 evidence.

22 [Footnote 436: Exhibit 002-110,
23 Reply to Intervener Submissions,
24 Appendix E]

25 It explains by species the areas to be surveyed,

1 methodologies to be used, survey timing, and
2 qualifications of all personnel. Details regarding
3 timelines and required manpower for all PDA surveys
4 were also discussed at the hearing.

5 [Footnote 437: Hearing Transcript,
6 October 15, 2008, pages 1334-1342]

7 The importance of field investigations was noted
8 by Mr. L'Henaff in discussion on constraints mapping:

9 "It's useful at the desktop, but
10 you will never, I believe, it will
11 never be more valuable than going
12 out to the site and taking an
13 assessment at the site. So, in
14 reality, those sources need to be
15 used in conjunction with each
16 other."

17 [Footnote 438: Hearing Transcript,
18 October 14, 2008, page 1255]

19 Preliminary landscape surveys will be done over
20 the area that was subject to construction in the
21 following season.

22 [Footnote 439: Hearing Transcript,
23 October 14, 2008, pages 1282-1283]

24 This will be followed by a survey on the specific
25 deemed leases and right-of-way sites. The field

1 constructibility assessment will determine final well
2 location and Mr. Heese elaborated on how these three
3 different levels of surveys worked together:

4 "The first type, being
5 landscape-style surveys, by nature
6 of our Project proceeding through
7 the NWA, it is only inherent that
8 by the end of the three years we
9 will also have completed those
10 landscape-style surveys throughout
11 the NWA. The second type of
12 inventory he [Mr. Collister] was
13 referring to would be the
14 right-of-way specific, where the
15 actual developments are
16 individually selected to, to
17 travel, and then again, based upon
18 that -- or evaluation of that
19 survey, we would again do small --
20 probably less so intensive
21 movements of, of wells and
22 pipelines [to accommodate what we
23 see on the ground.]

24 And then, in fact, there's a
25 third, final step, which is the

1 field constructibility assessment
2 to look at potential mitigative
3 strategies for soil condition,
4 reclamation strategies, those sorts
5 of things."

6 [Footnote 440: Hearing Transcript,
7 October 14, 2008, page 1258]

8 In addition, the results of the numerous field
9 surveys that will take place during the PDAs will be
10 incorporated into EnCana's databases and constraint
11 maps.

12 [Footnote 441: Hearing Transcript,
13 October 14, 2008, page 1255]

14 The PDA information will also assist in the
15 implementation of the EPP and further inform the EEMP.
16 Finally, the information will be invaluable in
17 managing and conserving the wildlife in the NWA and
18 the dry mixedgrass prairie as a whole.

19 EnCana has committed to utilize Scobie and
20 Faminow (2000) or its successor and ASRD setback
21 distances to determine setback distances for all
22 species listed in those Guidelines.

23 [Footnote 442: Exhibit 002-077,
24 Environmental Protection Plan,
25 Section 2.5, Article 21]

1 Should ASRD setbacks evolve and become more
2 conservative, EnCana will recognize those changes.

3 [Footnote 443: Hearing Transcript,
4 October 14, 2008, page 1278]

5 EnCana acknowledges that DND has also issued
6 setback Guidelines.

7 [Footnote 444: Exhibit 003A-010,
8 Supplemental information requested
9 by panel in letter dated August 14,
10 2007]

11 The multiplicity of setback Guidelines is not
12 problematic, as Mr. Collister explained. And I quote:

13 "EnCana has embraced the setback
14 for a particular listed species
15 using one or the other of those
16 references that you alluded to,
17 [Scobie and Faminow, ASRD and DND
18 setbacks], and in all cases they
19 have embraced the most
20 conservative.

21 If we compare those setbacks
22 to the setbacks recommended by DND,
23 I believe that there's only one
24 listed species for which DND has a
25 greater setback. That's Loggerhead

1 Shrike, I believe. So I guess my
2 suggestion would be that the effect
3 wouldn't be large using DND
4 setbacks in place of Environment
5 Canada and ASRD setbacks, but I
6 would point out, I believe that the
7 DND's setbacks are based on, in
8 large part, those two references.
9 And it just so happens that the
10 species we're talking about,
11 Loggerhead Shrike, for which they
12 differ, there's information
13 available that supports the setback
14 as recommended by Environment
15 Canada."

16 [Footnote 445: Hearing Transcript,
17 October 14, 2008, page 1277-1278]

18 Along with performing its responsibilities under
19 the Access Agreement, SEAC will review compliance with
20 the PDA process and make recommendations to the Base
21 Commander.

22 [Footnote 446: Hearing Transcript,
23 October 7, 2008, page 382,
24 lines 15-19]

25 The involvement of SEAC will ensure that the PDA

1 is an open and transparent process.

2 [Footnote 447: Hearing Transcript,
3 October 8, 2008, page 512,
4 lines 25, page 513, line 1]

5 As discussed by Mr. L'Henaff in the Opening
6 Statement, EnCana anticipates that approximately
7 80 percent of all wells, access trails, and
8 rights-of-way will be located without any conflicts
9 with environmental constraints or operational issues.

10 [Footnote 448: Exhibit 002-123,
11 Package of Slides & Opening
12 Statement of EnCana, page 31]

13 This number is supported by the results of PDA
14 demonstration where project infrastructure was able to
15 be sited without any setback issues over 80 percent of
16 the time.

17 [Footnote 449: Exhibit 002-110,
18 Reply to Intervener Submissions,
19 Appendix J]

20 Much was made of the fact that two of the
21 pipelines fell within the buffers of wetlands. I'm
22 not sure why. EnCana was very transparent in its
23 approach. It made no attempt to hide that fact. It
24 ran the model, ran the PDA process, did the
25 simulation, and provided you the information. Eighty

1 percent of the facilities were outside those setbacks.
2 Two of the access pipelines happened to be inside.
3 They presented that to you. Those will have to go
4 through SEAC for review and recommendation to the Base
5 Commander. That's how it works. No one's trying to
6 hide anything.

7 [Footnote 450: Hearing Transcript,
8 October 7, 2008, pages 386-387;
9 Hearing Transcript, October 9,
10 2008, pages 927-928]

11 For these applications that are non-routine, SEAC
12 will give a recommendation to the Base Commander and
13 it is expected that they will audit an appropriate
14 sampling to ensure proper adherence to the PDA
15 process.

16 In circumstances where EnCana is unable to
17 avoid a feature or must be active in a setback, the
18 proposed location must be reviewed by SEAC as
19 non-routine and recommendation made to the Base
20 Commander. When this occurs, EnCana will engage an
21 independent environmental specialist to propose an
22 alternative site or route adjustment along with
23 site-specific mitigation measures.

24 CEAA will consider that proposed mitigation
25 and provide a recommendation to the Base Commander for

1 approval or denial.

2 At the same time, the need for a SARA permit
3 can be evaluated, as I discussed earlier.

4 [Footnote 451: Exhibit 002-123,
5 Package of Slides & Opening
6 Statement of EnCana, page 31]

7 Mr. Heese gave a good example of how EnCana's
8 approach to balancing environmental variables work.

9 [Footnote 452: Hearing Transcript,
10 October 8, 2008, pages 510-511]

11 Two of the wells, 15 of 28 and 11 of 28 in
12 Application --

13 THE COURT REPORTER: I'm sorry, Mr. Denstedt,
14 could you please repeat those numbers.

15 MR. DENSTEDT: I sure will. Two of the
16 wells, 15 of 28 and 11 of 28 in Application 1435831
17 have been sited within wetland buffers in order to
18 minimize the effects of wind erosion in areas with
19 sensitive soils.

20 Additionally, the well in the 11 of 28
21 location is within 20 metres of a Class 1 ephemeral
22 wetland so that the distance from the wetland with the
23 higher level of classification could be maximized.

24 Constructing completely outside the wetland
25 buffer would have been an inferior route and would

1 have added approximately 20 percent of length to the
2 pipeline.

3 The purpose of the PDA is to make good
4 decisions by making the right environmental decisions
5 balancing wind erosion versus being within a buffer
6 and lengths of lines which may cause additional
7 disturbance. That's the purpose of non-routine
8 applications in the PDA process; making informed
9 decisions.

10 EnCana does not intend to file the PDAs for
11 all of the proposed wells and pipelines one
12 application at a time. In order to reduce the
13 workload of SEAC and the DND, applications will
14 typically be on a battery basis. Similarly, as they
15 were done under the agreement.

16 With information being submitted at each
17 stage of the PDA process for SEAC and the DND to stay
18 informed.

19 [Footnote 453: Hearing Transcript,
20 October 14, 2008, page 1309-1310]

21 For example, as EnCana conducts field surveys for
22 wildlife, the results of those surveys for the battery
23 will be submitted to SEAC and DND as the survey is
24 completed and as part of a compiled PDA final product
25 report for review by SEAC and ultimate decision by the

1 Base Commander.

2 As I mentioned earlier today, EnCana is not
3 asking the Panel to approve each individual well and
4 pipeline. EnCana is seeking the Panel's approval of
5 this process, the PDA process, as the primary
6 mitigation measure in siting project infrastructure
7 and that compliance with that process be a condition
8 of approval.

9 This approach provides an efficient and
10 effective way to ensure the environment is protected.
11 Individual permits do not have to be obtained for each
12 PDA.

13 [Footnote 454: Hearing Transcript,
14 October 14, 2008, page 1291]

15 Rather, EnCana is seeking one permit approving
16 the Project, including the activities to conduct the
17 PDA process and the compliance with the PDA process be
18 a condition of that approval.

19 It is important to note that the PDA process
20 is not new. PDAs evolved from EPPs, like the one
21 which formed such a critical part of the Express
22 Pipeline project and the other major projects I
23 referred to above.

24 [Footnote 455: Express Pipeline
25 Project, Report of the Joint Review

1 Panel, May 1996 and National Energy
2 Board Decision OH-1-95, "Express
3 Pipeline Ltd.", 1996]

4 Express was the very first project to ever
5 undergo a Joint Review Panel process under CEAA. For
6 the Express Pipeline, the Panel had a split decision;
7 3-to-1 in favour.

8 Today, the Express Pipeline project, in
9 EnCana's view, can be regarded as an example of good
10 environmental planning, balanced environmental
11 protection, and economic development.

12 [Footnote 456: Exhibit 006-044,
13 Field Observations of the Recovery
14 of Native Rangeland Report
15 Communities on Express Pipeline -
16 July 2008 [Bradley Express cite]]

17 Dr. Walker also pointed out a recommendation from
18 Western Oilfield Report from over 30 years ago
19 suggesting something very similar to the PDA process
20 now being proposed. In that report, route and site
21 selection made by a group trained to recognize areas
22 most suitable for development should be followed.
23 That was one of the recommendations from 30 years ago.
24 That recommendation is enhanced and brought to a
25 state-of-the-art in this PDA.

1 [Footnote 457: Hearing Transcript,
2 October 15, 2008, page 1503,
3 lines 4-11]

4 So what EnCana is suggesting, Mr. Chairman, it's
5 not novel - it's simply improved.

6 On this point, I would like to wrap up with words
7 by Mr. L'Henaff. And he says:

8 "We are very confident in the PDA
9 process. It's not absolutely brand
10 new. I think how it's all come
11 together and the various forms of
12 surveys are enhanced but we
13 certainly have been surveying for
14 wildlife and for vegetation out
15 there. We certainly know how to do
16 that. We know how to take that
17 information and incorporate that
18 into a site-specific plan. We know
19 how to make site assessments. And
20 so these are all pieces that we
21 have done many, many times before
22 and we know how to move them
23 through a process that manages at a
24 campaign level. So we are very
25 experienced at that. And I think

1 we're very proud of the PDA process
2 because we think we've gone quite a
3 few steps ahead. We are siting
4 environmental assets at the battery
5 level and will ultimately be at the
6 NWA level. But, you know, we as a
7 community, we've done that before
8 in past and we know how to do it.
9 So a lot of these elements are very
10 tried and true. How we are putting
11 them together is just a new and
12 better way of doing it."

13 [Footnote 458: Hearing Transcript,
14 October 15, 2008, page 1451]

15 Mr. Chairman, the PDA process will ensure that
16 the Project will be carried out without any likely
17 significant adverse environmental effects. The Panel
18 can take comfort from the fact that EnCana's primary
19 mitigation measure and condition of their permit, the
20 PDA process will ensure the environment is protected
21 through mitigation that is well proven.

22 In addition, through the oversight of SEAC
23 and DND, this Panel and the public will have yet
24 further comfort that the process will be effective and
25 transparent.

1 **PART SEVEN - CONCLUSION**

2 Mr. Chairman, let me conclude my remarks this
3 morning.

4 EnCana's evidence that there is not likely to
5 be any significant adverse environmental effects
6 caused by this Project, in our view, has not been
7 contradicted.

8 The evidence clearly shows that EnCana has
9 integrated and balanced the three objectives of
10 sustainable development in the planning and
11 decision-making process for this Project. As a
12 result, each component of this Project is designed to
13 ensure sustainable development:

14 (i) Regarding the environment,
15 EnCana has completed an extensive
16 environmental assessment and
17 proposed numerous proven and
18 effective mitigation measures to
19 ensure that the impact of its
20 development on the area is not
21 likely to result in significant
22 adverse effects.

23 (ii) Regarding social
24 considerations, EnCana's proposal
25 ensures that the NWA will continue

1 to be available to the current
2 users, military, cattle grazing,
3 industry, research, while
4 continuing to protect and preserve
5 this valuable conservation area so
6 that it is available to future
7 generations. At the same time, the
8 Project will advance the knowledge
9 of all species in the NWA and will
10 provide valuable information to
11 improve the conservation and
12 protection of the NWA's
13 environmental resources. The
14 Project provides additional social
15 value in the development of a low
16 carbon intensity energy source
17 which would otherwise remain
18 inaccessible.

19 (iii) And, finally, in respect of
20 economic considerations, this
21 resource will provide a long-term
22 source of low impact employment to
23 local people who can stay in their
24 own towns, services and business,
25 and contribute to the taxes and

1 royalties that support Provincial
2 and Federal programs.

3 EnCana's history demonstrates that it has
4 employed a sustainable development approach through
5 its 30 years of operating in the NWA.

6 Interveners in this proceeding have commented
7 extensively on the NWA as being "pristine" and
8 comprised of "virgin prairie". Those words appear in
9 the Regulatory Impact Analysis Statement. The fact
10 is, Mr. Chairman, those comments say as much about
11 EnCana's operations over the last 33 years as they do
12 about the NWA. EnCana's been there that long. And
13 those words still apply.

14 Mr. Collister noted:

15 "It's interesting that Parliament
16 has made that decision [to
17 designate this area under the
18 ***National Wildlife Act***
19 notwithstanding the history of the
20 National Wildlife Area and all the
21 things that have happened there,
22 including shallow gas drilling to
23 eight wells per section.

24 Notwithstanding that, this area is
25 viewed as a very important area for

1 prairie species. I think that
2 speaks to the low impact of an
3 activity like shallow gas
4 development."

5 [Footnote 459: Hearing Transcript,
6 October 9, 2008, page 885-886]

7 I think that speaks loud and clear to EnCana's
8 demonstrated commitment to conducting responsible and
9 sustainable operations in a protected area.

10 Mr. Chairman, EnCana requests that this Panel
11 recommend additional resourcing for SEAC so that it
12 can properly do its job under the Access Agreement and
13 also complete its proposed advisory role for this
14 Project.

15 We ask that you approve this Project as the
16 ERCB.

17 And as a CEAA Panel, recommend that this
18 Project is not likely to cause any significant adverse
19 environmental effects that cannot be mitigated and
20 that the RA, DND, proceed with issuing a permit under
21 the *Wildlife Area Regulations* for this Project subject
22 to the condition that the PDA process be complied
23 with.

24 Mr. Chairman, thanks for your patience.

25 Madam Court Reporter, thanks for your

1 patience.

2 Unless there's any questions, I'm completed.

3 THE CHAIRMAN: Thank you, Mr. Denstedt.

4 There are no questions from the Panel. We appreciate
5 your argument and summary of your position here this
6 morning and into this afternoon.

7 We will break for lunch now. I just want to
8 check with Ms. Klimek and Mr. Lambrecht to see if
9 approximately an hour will be sufficient time. If so,
10 I would propose coming back at about quarter to 3:00,
11 but let me check with you first.

12 MS. KLIMEK: Mr. Chair, I think if we
13 could just have a little bit longer. We would like to
14 go through it and tighten up our submission. There
15 are some things we might be able to get rid of in
16 light of what Mr. Denstedt said. And there might be a
17 few things we need to add. But I am just trying to
18 make it as efficient as I can. So if we could have
19 maybe an hour and ten minutes, if that would work.

20 THE CHAIRMAN: So, say, even 3 o'clock?

21 MS. KLIMEK: I think that would be fine.

22 THE CHAIRMAN: Mr. Lambrecht?

23 MR. LAMBRECHT: That would work for me. I am
24 intending to speak with my clients, and in terms of
25 communication with Ms. Klimek and coordination of our

1 arguments, I think that what I'm going to do is just
2 adjust as I hear her argument and proceed from there.

3 THE CHAIRMAN: All right. Then we'll break
4 until 3 o'clock.

5 MR. LAMBRECHT: Thank you.

6 THE CHAIRMAN: Thank you.

7 (NOON BREAK)

8 (PROCEEDINGS ADJOURNED AT 1:40 P.M.)

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REPORTER'S CERTIFICATION

1
2
3 I, Nancy Nielsen, RCR, CSR(A), RPR, Official
4 Realtime Reporter in the Provinces of British Columbia
5 and Alberta, Canada, do hereby certify:
6

7 That the proceedings were taken down by me in
8 shorthand at the time and place herein set forth and
9 thereafter transcribed, and the same is a true and
10 correct and complete transcript of said proceedings to
11 the best of my skill and ability.
12

13 IN WITNESS WHEREOF, I have hereunto subscribed my
14 name this 1st day of November, 2008.
15
16
17

18 _____
19 **Nancy Nielsen, CSR(A), RPR, RCR**
20 **Realtime Reporter**
21
22
23
24
25

1 its funding to assist us with our intervention. What
2 we hope to do over the next hour or so is to give you
3 some, what we hope is assistance in the task that you
4 have before you.

5 The Coalition's position is that this Panel
6 should recommend that this application for the
7 1275 wells and the three wells before the ERCB, or the
8 EUB, should be denied in its entirety. It is our
9 position that no further drilling should be allowed in
10 the NWA, not now, not ever.

11 It is our position that once you consider the
12 nature of the area, why it was created, the pressures
13 it is currently being subjected to and the cumulative
14 effects of this Project together with what is already
15 there and what is likely to be there, there is only
16 one clear answer. the Project is unacceptable.

17 There's ample evidence to deny this
18 application right now. However, if you disagree with
19 our last position, then we submit that your fallback
20 position is that there is not enough evidence before
21 you to determine that there will not be any adverse
22 significant effects. If you come to that conclusion,
23 any uncertainty must be resolved in favour preserving
24 the NWA.

25 Before getting into the substance of the

1 argument, I would like to make our position very
2 clear: there cannot be a compromise. A pilot in the
3 NWA is not acceptable. Staging developments over a
4 longer period of time is not acceptable. This is an
5 important area and it must be protected. What should
6 be occurring in that area is that it should be
7 restored, not further degraded.

8 Now, I propose to get into the substance of
9 our argument that supports that position and you have
10 before you -- and I won't go through it now -- but the
11 areas we hoped to -- we will cover and the order I'm
12 going to do it.

13 Now, after I get done with my part, then
14 Mr. Binder will discuss the need for the Project.

15 Now, before I get into the framework, there's
16 one argument of Mr. Denstedt's I would like to address
17 right at the outset and that is EnCana's position that
18 they somehow have a right, because they have the
19 mineral rights to go into the NWA, because mineral
20 rights includes access.

21 I suggest it is not that simple. When
22 companies obtain mineral rights they get no guarantee
23 that they're going to be able to exploit them.
24 Surface owners have rights and the public has rights.
25 That's why we have a regulatory regime and one in

1 particular that has a public interest mandate.

2 Now, part of that public interest mandate is
3 environmental considerations. That's why, when
4 companies have mineral rights, they often have to go
5 through hearings and on occasion have been refused the
6 right to develop them. The Whaleback (phonetic) is an
7 example of that.

8 Now, Mr. Denstedt said with the agreements
9 you have to harmonize the rights and that might be the
10 first step, but where they conflict you have to choose
11 which one is paramount. So I would suggest that this
12 Panel does not have to, and should not assume that
13 because EnCana has mineral rights they have some
14 God-given right to access them.

15 Now, I'm going to start out by looking -- or
16 putting forward to you a framework that I think this
17 Panel should use to assess this Project. Now, there
18 are two components to that framework. One is the law
19 on policies that govern this Panel and the Project and
20 the second is the Guidelines that were developed for
21 this Project.

22 Now, CEAA is the governing piece of
23 legislation and it requires you, this Panel, to make a
24 determination if the Project is likely to cause
25 significant adverse environmental effects. If so,

1 then it goes on to -- it must go on to determine
2 whether they are justified.

3 Now, CEAA has given you some guidance on what
4 you must look at when making that determination.
5 There is the magnitude of the effect, the geographic
6 extent, the duration and frequency of those effects,
7 whether they're reversible and the ecological context
8 and, in this case, the purpose of the area.

9 You must also assess the need for the
10 Project, the alternatives to that Project, mitigation
11 measures and cumulative effects.

12 In addition to CEAA there's other pieces of
13 legislation that govern this area. First is SARA, the
14 species at risk and the *Wildlife Act* as well as many
15 other policies and Guidelines.

16 Now, a full discussion of the relevant
17 policies and Guidelines and legislation is under
18 Tab 11 of our submission. I'm not going to go through
19 it in detail but will be referring to portions of that
20 throughout the closing argument. I do, however,
21 invite you to have a close look at that to see the
22 rules and Guidelines that govern this.

23 It is our position that since Federal
24 legislation takes paramountcy over Provincial
25 legislation, the Wildlife and SARA should take

1 precedence over any right to extract gas if it becomes
2 a conflict.

3 Now, the EIS Guidelines were developed
4 specific to this Project and to provide guidance of
5 what specific matters you, the Panel, should look at
6 in coming, in coming to its recommendations. They
7 provide guidance to the Proponent as to what
8 information it was to supply in its EIS.

9 Now, I'm not going to go through it in
10 detail, but I'm going to pick out some of the
11 Guidelines which I believe are relevant to your
12 determination.

13 The first was EnCana was to thoroughly assess
14 the alternatives to the Project including the
15 feasibility and rationale for rejecting such
16 alternatives. In that regard, it was to look at the
17 effect of alternatives on the environment and the cost
18 benefit analysis of those alternatives. It is our
19 position that one of the alternatives it should have
20 looked at was not proceeding with the Project. What
21 would happen if that didn't occur?

22 Another series of Guidelines was to --
23 required EnCana to assess the impacts on wildlife,
24 including species at risk or other sensitive species,
25 those under SARA and the Provincial regulations, how

1 the Project will affect the conservation of wildlife,
2 the effect on it and their habitat.

3 There was -- birds were singled out and
4 EnCana was asked to consider migratory birds, other
5 birds in the area, their habitat and what locations
6 are used by them. They were directed to examine birds
7 that are of scientific, social, economic or cultural
8 insect -- interest.

9 With respect to wetlands, EnCana was to
10 identify the location of wetlands and their function,
11 the effect of the Project on them, what measures were
12 being used to protect them and how they were going to
13 meet the Federal wetland policies. They were to
14 assess the invasion of non-native species and how they
15 intended to deal with it and a big one of course which
16 Mr. Denstedt spent quite a bit of time on was
17 mitigation strategy and how they would reduce the
18 significant of the effect.

19 With respect to SARA species, they were to
20 look to mitigation throughout the lifecycle of those
21 species and how it would enhance the area. They were
22 to assess incremental on the endangered or valued
23 wildlife, plant communities including the native
24 prairie ecosystem, sensitive soils and land forms and
25 conservation of wildlife. In that regard, they were

1 to include past, future operations and in particular
2 the Military operations and grazing.

3 Now, I'm not going to repeat it because
4 Mr. Denstedt did but all of this was to use a
5 precautionary principle and it was any uncertainty was
6 not to be a reason to go ahead but a reason not to.

7 Now, it is our position that EnCana did not
8 fulfill these Guidelines and did not put the right
9 information before you.

10 Now, Mr. Denstedt this morning said they're
11 not prescriptive, there's some flexibility within
12 them, but I remind you, the EIS Guidelines are not a
13 generic set of Guidelines. They were developed with
14 this specific area in mind looking at the habitat that
15 is there and the value of the area.

16 Now, it's our position that's the framework
17 that you must work within to decide whether or not
18 this should go ahead.

19 Now, I would like to make some observations
20 on the evidence before you and what we submit you
21 should do with it. It is our position that the
22 evidence of the Coalition and those of Canada's
23 experts should be preferred over that of EnCana.

24 EnCana's evidence was not consistent, and
25 we'll point you to some of those throughout our

1 arguments. Their experts are not experts in protected
2 areas and protected species. I would suggest it's
3 making projects better. Now, that's a good expertise
4 to have, but I'm not sure that's what you need when
5 you are looking at a protected area such as an NWA. I
6 think we need a very high bar when you're looking at a
7 protected area.

8 And I would submit that EnCana used a double
9 standard in evaluating evidence. Their scientific
10 witnesses said they relied on subjective personal
11 opinion that they gathered through the years, of what
12 they see in the NWA and what they predict will happen.
13 They didn't do thorough surveys and they haven't done
14 a lot of research.

15 For example, Dr. Walker's evidence on how to
16 deal with rare plants is contrary to all conventional
17 thoughts on the species. His evidence was avoidance
18 did not -- was not necessarily the prime way of
19 dealing with it. In many cases he made factual
20 errors. For example, with the Slender Mouse-Ear
21 Cress, which is one of the species of concern, he
22 advised it was a polar species when in fact it was
23 native to western North America. He was also wrong on
24 its abundance and life history. Now, this is one of
25 the species that's very important here.

1 He said that the setbacks under SARA do not
2 apply to annual and bi-annuals if the work is done in
3 the winter or if there is a drought period.

4 [Klimek Footnote: Transcript
5 page 270, line 13]

6 This view contradicts all the Guidelines
7 developed by Environment Canada on SARA species.

8 Now, in spite of the fact that their experts
9 did not put their studies through a power analysis and
10 were not peer reviewed, EnCana challenged the
11 Coalition and Canada's experts on the basis that their
12 work had not done that, had not been through a
13 thorough scientific rigor. But I would like to remind
14 you that the experts provided by the Coalition and
15 Canada have recognized expertise in their specific
16 fields, in the species of concern here and in the
17 area. They are the ones who know this. They have
18 completed more thorough, long-term research on the
19 species in the area and that research has been
20 evaluated by others.

21 So in light of how -- when you see how
22 EnCana's experts have approached this matter and then
23 their attack on our and Canada's experts, we're of the
24 view that their -- the experts provided by those in
25 opposition to this should be accepted and EnCana's

1 disregarded.

2 Now, I'm going to get into some of the
3 specifics of the application now and I'm going to
4 start out with the NWA. Why are we here? Why is this
5 application and hearing so important? Well, we have a
6 National Wildlife Area that is important from both a
7 legislative and ecological perspective. It was
8 designated a NWA under the *Wildlife Area Regulations*.

9 Now, what's the purpose of an NWA under that?
10 Well, it's to conserve wildlife species and their
11 habitat. It is to maintain, to protect and improve
12 their habitat. It's not just keeping a status quo.
13 It's to make it better.

14 The resources are to be managed in a manner
15 that will conserve them. How do you do this? Well,
16 when you have blocks of habitat where SARA species
17 occur, you should be protecting those blocks. You
18 should establish monitoring programs to ensure that is
19 happening and you should take steps to improve that
20 habitat. That's what the regulation recognizes these
21 areas are for.

22 Now, to achieve those, the *Regulations*
23 restrict activities and a permit can only be granted
24 if the Minister is satisfied it will not, you have to
25 be satisfied, will not interfere with the conservation

1 of wildlife.

2 Now, if you look at the prohibited
3 activities, they're extensive and they range from some
4 very minor activities to very large ones. They
5 prohibit removing or damaging plants, operating a
6 vehicle up to carrying on industrial activity,
7 disturbing soils and sands and depositing waste
8 materials. So when you look at that legislative
9 scheme it is clear the number one priority is
10 protecting the area.

11 Now, this area is also governed by SARA and
12 the purpose of that Act is to protect -- to identify,
13 protect and recover species at risk, again not just
14 the status quo. Under that Act, habitat is recognized
15 as being key to the conservation of a species and
16 protected areas have been recognized as one method of
17 preserving habitat and any activity that would affect
18 a SARA species is prohibited.

19 Now, under this Act, the government has
20 established Guidelines of setbacks and these are
21 currently being reviewed and in all likelihood, they
22 will become more stringent. Now, another act that
23 covers this is the *Migratory Birds Convention Act*.
24 It, too, is designed to protect and conserve migratory
25 birds.

1 Now, in addition to this there are several
2 policies which should guide your decision making. The
3 Federal policy on wetlands advised that there should
4 be no net loss of wetland function. Again, setbacks
5 are recognized as one of the methods of doing that and
6 a current setback of 100 metres from all wetlands,
7 including your seasonal temporary ones has been -- is
8 the recommended setback.

9 Now, a summary of principles from other
10 policies that are relevant to this area is the
11 precautionary principle that uncertainty should not be
12 allowed or to use -- to use to allow a project to
13 proceed. Biodiversity must be protected. We can't
14 just continually look at one-off species.

15 The preservation and protection of habitat is
16 fundamental to preservation and protection of
17 protected areas of wildlife species. Any assessment
18 must be done in the ecological context. Accurate
19 baselines are important to habitats. Emphasis must be
20 placed on priority species and habitats, including
21 national wildlife areas and cumulative effects must be
22 properly assessed and addressed.

23 So I submit to you that you must look at all
24 of those principles when you're evaluating this
25 application, when you're entering on to your

1 deliberations.

2 So that sets out the legislative importance
3 of this area.

4 Now, let's look at the ecological importance
5 of this area. The NWA is important both locally,
6 regionally and internationally. It is a large intact
7 remnant of the Northern Great Plains. This ecosystem,
8 the Northern Great Plains, has been recognized by the
9 World Wildlife Fund as one of about 200 most
10 significant natural regions in the earth. It is one
11 of North America's most threatened ecosystems.
12 Because of its diversity, it has and the threats to it
13 attention must be paid to the conservation of the
14 ecosystem, not just parts of it but the whole
15 ecosystem.

16 Now, the uniqueness of this NWA has been
17 recognized by many groups, World Wildlife Fund, Nature
18 Conservancy, the Commission For Environmental
19 Cooperation, DND, who will not conduct training on it,
20 and EnCana itself. I think they admitted that in
21 their evidence. Why is that? Well, it's a centre of
22 grassland bird richness in North America. It's an
23 important bird area. It has many species including
24 15 SARA-listed species. It's a major winter area for
25 wildlife such as the Pronghorn.

1 So when you look at all of these, it's
2 understandable why it was declared an NWA. And I
3 think it's important to look at the RIAS, and I'm
4 going to go to it as -- to give you some idea of why
5 this area was so important and what the government was
6 thinking when it declared it a National Wildlife Area.
7 And I'm just going to pull out a few of the points out
8 of the RIAS.

9 At the first page it said it was formally
10 designated as an NWA thereby ensuring -- now, this is
11 the reason (as read):

12 "... that these lands are
13 maintained as Federally protected
14 and managed wildlife habitat."

15 It was to elevate it to some level of protection.
16 It goes on to say (as read):

17 "Natural grasslands and rivers are
18 among the most endangered
19 ecosystems in prairie Canada."

20 And then it goes (as read):

21 "In the Mixed-Grass Prairie
22 Subregion of Western Canada,
23 urbanization, industrial
24 development, livestock grazing [and
25 it goes on to list others] have

1 fragmented an otherwise degraded
2 wildlife habitat."

3 So when you look -- it recognizes these
4 activities do fragment and do degrade:

5 "The national significance ... has
6 been eloquently substantiated by
7 recent wildlife studies on
8 invertebrates, birds, mammals,
9 reptiles, and amphibians."

10 RIAS goes on to say that by:

11 "... designating it as an NWA it
12 will ensure critical habitat
13 protection for species at risk and
14 reverse habitat loss and
15 fragmentation trends ..."

16 So the idea is to turn things back, to turn them
17 in the other direction.

18 Now, this, I think, is a vitally important
19 principle, the next one that is set out in here, and
20 it said:

21 "A Wildlife Policy for Canada
22 emphasizes that protection of
23 habitats in the ecosystems is the
24 most cost effective method of
25 preserving wildlife given that the

1 amount of wildlife is declining ...
2 the policy indicates that restoring
3 ... is difficult, expensive, and
4 often impractical."

5 It's that old adage, "An ounce of prevention is
6 worth a pound of cure". We must be careful because if
7 we destroy it, it may be impossible, difficult or
8 expensive to restore.

9 And when looking at alternatives, the
10 statement "is not designated in the area" would signal
11 that the Federal Government does not value the
12 ecological significance of the NWA and would leave the
13 area at risk, at future risk to development and
14 potentially increased Military use.

15 And it goes on to say, and this is where I
16 think it's important, that it will impact:

17 "[The government recognized
18 declaring it an NWA would] impact
19 on any new proposed land use
20 developments within the NWA such as
21 management projects, resource
22 extraction and agriculture."

23 It was recognized -- it goes on to say:

24 "Since new activities could
25 potentially harm wildlife ... such

1 activities could be subject to
2 approval and mandatory
3 environmental screening."

4 The RIAS did not guarantee continued use, as my
5 friend suggested. It recognized there is a -- it will
6 impact that future use so you should not be afraid of
7 saying that this cannot go ahead.

8 And then the last point, or the last two
9 points, it was recognized there was some discussion
10 about Alberta Energy and it was recognized -- I'll
11 read it:

12 "The Alberta Department of Energy
13 has been continually advised on the
14 development of the protected area
15 status through negotiations with
16 DND on surface access agreements
17 governing petroleum development on
18 CFB Suffield. The Energy
19 Department will continue to issue
20 statements to petroleum [producing]
21 producers identifying access
22 limitations to mineral leases on
23 the designated lands."

24 And that supports our point that because you have
25 a mineral right does not guarantee you access.

1 And, finally, the RIAS was recognized as it
2 would:

3 "... significantly strengthen DND's
4 powers for protecting wildlife
5 compared with relying on the
6 *National Defence Act*, which does
7 not contain provisions relating to
8 wildlife."

9 Now, when you look at the RIAS as a whole, it was
10 there for a reason. It was to set up a protected
11 area, it was to maintain that protection and ensure
12 that wildlife was protected. So while there is some
13 development in the NWA, that does not mean it wasn't
14 valuable. It still has some attributes, but when you
15 look back at the legislation, the policies, our jobs
16 now are to restore and recover, not further degrade.

17 So it is against this backdrop of the
18 legislation and the importance of the area that this
19 Project must be examined and that's why we must put
20 such close scrutiny to it, why we must put it under a
21 microscope and look at it closely and you must be
22 satisfied it will not harm the wildlife there before
23 you allow it to go ahead.

24 Now, the first step in doing that is to
25 understand the Project. What exactly is EnCana

1 proposing? Now, they would lead you to believe it is
2 a simple project, wells with small tie-in lines and
3 access trails. All of these will be done using
4 minimum disturbance techniques. However, once you
5 look at it closely and when EnCana was questioned, it
6 became apparent this Project is much, much more than
7 that.

8 They will be doing more and the effects will
9 be larger. There will be more than small plowed-in
10 pipelines. At least 100 kilometres will be larger
11 than the two-inch pipelines. Most of the larger
12 pipelines will be trenched in.

13 Furthermore, some of the two-inch pipelines
14 will be trenched in as well if they are installed
15 during frozen conditions or if they are in areas where
16 a SpiderPlow cannot be used. Now, what does that
17 mean? Well, trenching requires soil disturbance. In
18 some cases the subsoil will not be separated from the
19 top soil. It will be add mixed. In other cases, the
20 whole right-of-way will be stripped.

21 Now, EnCana, upon closer questioning, advised
22 that some access trails will require landscape
23 contouring, further construction and if they run into
24 difficulties may have to be graveled. So there is a
25 possibility of more than simple low grade access

1 trails.

2 Not all setbacks will be honoured. Wetland
3 setbacks will be violated. It's not a "may" it's a
4 "will". The two PDAs you have before you all have
5 asked for relaxations. Slope setbacks may not be
6 adhered to. If trails must go across slopes, they
7 may. If SARA species are found within a setback
8 EnCana's first proposal was to go and get a permit
9 rather than move the structure.

10 Now, another inconsistency that came out is
11 the timing of the work. At first EnCana said: we
12 will be putting in the pipelines in non-frozen and the
13 wells in frozen soil conditions. Pipelines will all
14 be SpiderPlowed. That was their Opening Statement.

15 Upon closer examination, it became apparent
16 pipelining will start on October 1st and end November
17 15th. Drilling will start on October 15th, so clearly
18 one of those is outside of its Guidelines because on
19 October 15th if you have one activity on frozen and
20 one on non-frozen they both can't be doing it.

21 It became clear that in all likelihood
22 pipelines will be installed over the winter. If
23 freeze-up comes and they still haven't got all their
24 pipelines in they will try to use other techniques.
25 Those were not addressed.

1 Now, another part of the activity, or the
2 Project, that was not addressed is the activity other
3 than drilling and installation of pipelines. One
4 process that it became apparent will have a lot of
5 activity is the PDA process. There will be multitude
6 of surveys done throughout the NWA.

7 There will be wildlife surveys done at
8 different times for different species. There will be
9 rare plant surveys, there will be surveying and those
10 will all happen over the summer months. The magnitude
11 and the intensity of that activity will be further
12 compounded by the Military activities as there are
13 times when those activities cannot occur so therefore
14 they will become more concentrated at different times.

15 Weather is also a factor because we've been
16 told if it's wet they will not be out there. That
17 activity has not been explored as to what happens if
18 you concentrate a lot of activity in a very short
19 period of time and especially if that is a critical
20 habitat time for certain species and their habitat.

21 In addition to that, we will have mitigation
22 activities following up. In addition to that, we have
23 operational activities. We heard that wells need to
24 be refrac'd. We've heard about water swabbing and
25 another one that received no attention as to when and

1 how and what the effects were was the mowing of the
2 Crested Wheatgrass for weed control.

3 That's another level of activity that will
4 change the appearance of the landscape, and what does
5 that mean to species that are utilizing it?

6 Then we have the potential for emergencies.
7 Those, of course, you have very limited control over
8 when they happen and what is the potential impact?
9 Those were all activities that are going to occur to
10 allow this Project to go ahead. They were not
11 examined in any detail.

12 Then there are potential future activities.
13 EnCana's own estimation is that 50 percent of the gas
14 will be left behind. I think it was 43 and 57 was the
15 number. And they said they must get this gas now, the
16 rest, because it will waste. Well, will there come a
17 day when this 50 percent is seen as a waste and they
18 will have to go back and get it?

19 You have to realize pilots of 32 wells for
20 gas are occurring and the logical conclusion is they
21 may be back. EnCana would not commit to not coming
22 back. And, in fact, they said, if we do come back we
23 have to do this again. But that has to be factored in
24 I believe in a cumulative effects incremental way.

25 Now, in addition to the activities that occur

1 within the NWA there's other activities required for
2 the NWA outside of that area that could have impacts.
3 There is water extraction and waste disposal. Now, if
4 you wanted to understand and assess the true impacts
5 of this process, this Project, each of these things
6 that I've mentioned should have been discussed in
7 detail, should have been looked at temporarily. They
8 should have been looked at geographically and an
9 assessment done on those. By limiting the assessment
10 to the construction and installation of pipelines, a
11 good portion of this Project is not being assessed.

12 Now, another aspect of the process that I
13 would like to discuss now is the issue of minimum
14 disturbance techniques. What does that mean in this
15 -- for this Project? EnCana says that all activities
16 will be done using those techniques. It's similar to
17 what they have done elsewhere and the DND witnesses
18 supported that. What they've seen in the NWA is what
19 they've seen elsewhere.

20 Now, when you examine what they propose
21 there's one of two conclusions. It will not all be
22 minimum disturbance or minimal disturbance still has
23 problems. In the Koomati they used minimum
24 disturbance techniques and this was, we understood at
25 the beginning, there would be no impact during any of

1 it. The rig would be set down, you would hardly know
2 it was there.

3 Well, one out of 33 wells examined had only
4 one access. All the others had multiple access.
5 There were many lease sites that were rutted. Now,
6 it's fine for Mr. Denstedt to say it's not fair to
7 have looked at this during construction, but remember,
8 their promise was that construction would be minimal
9 disturbance, not that a cleanup would fix up a mess
10 and then we would be fine. So you have to look at
11 that closely.

12 Now, the D6/D8 pilot used minimal disturbance
13 and the access report indicated that disturbances were
14 still evident three years after the construction.
15 They found significantly more bare soil off the
16 right-of-way than on the right-of-way. So minimal
17 disturbance may not give us the comfort -- or will not
18 give us the comfort that EnCana would like us to have.
19 Things will go wrong and even with the best techniques
20 it will not always be disturbance free.

21 So what is the impact of this Project on this
22 land? Now, the EIA was to address that and our
23 position is it was sadly lacking. It did not meet EIS
24 Guidelines. As set out, it did not look at the full
25 project. It did not do the required surveys and

1 studies to allow a proper assessment of the impacts
2 and it does not support the conclusions reached by
3 EnCana. And I'm going to look at what we submit is
4 wrong with the EIS and the conclusions it came to.

5 The first point is what is your reference
6 point? If you're going to assess impacts, you have to
7 have a reference point. This is what we've been
8 calling the baseline. The EIS Guidelines required
9 EnCana to compare the Project to the 1975 landscape.

10 Now, as we understand it, that's fairly close
11 to an undisturbed state as there were very few wells
12 in the area at that time. Now, EnCana used either a
13 4 well per section or an 8 well per section as their
14 baseline even though they admitted there were areas in
15 the NWA or adjacent to it that had no wells per
16 section.

17 [Klimek Footnote: Transcript
18 page 437, line 23]

19 They didn't do their comparison of the 16 wells
20 with the no wells. They did the 16 wells to the 4
21 wells or the 8 wells. So we did not use a true
22 baseline or a good reference point.

23 Now, Dr. Stelfox gave some compelling reasons
24 on why you use a true baseline and how you determine
25 that baseline. The only way you can determine the

1 true effects of the Project together with everything
2 else is to define what the area looked like without
3 any industrial development, what he called looking
4 over your shoulder. If you only look over to what you
5 did yesterday, instead of looking back to the 8 wells
6 rather than the no wells, you may not see anything
7 even though small changes are happening. And the
8 significance of those small changes over time are not
9 apparent until you look back to where you were maybe
10 decades ago and if you were to look -- and I'm not
11 going to bring it up -- but slide 17 of Mr. -- or
12 Dr. Stelfox sets that out very well. If you take a
13 little bit off each time you suddenly have a huge
14 change but you just don't see it until then.

15 So how do you determine that baseline? Well,
16 Dr. Stelfox gave you the answer. There's two ways to
17 do it. Find an area that's not impacted and watch it
18 over time to determine the range of natural
19 variability, or you model it. EnCana did neither.
20 Now, it's difficult to do the first because we don't
21 have many areas that aren't impacted so it appears
22 that modelling is the best way to back cast to where
23 we would have been.

24 So without a good baseline, how do you
25 measure the true impact? And that's one of the

1 problems here. We can't do that.

2 Now, even if you look at the 4 well per
3 section or the 8 well per section as a baseline,
4 there's still some problems with that and some red
5 flags. In our submission, EnCana didn't even do that
6 properly. They didn't do field studies on all the
7 VECs and it's clear from the PDA they're not going to
8 do that. They did not do a rare plant study for the
9 whole area. They used the CWS study for wetlands and
10 although it is a good study, it wasn't complete. It
11 was admitted that that study did not include the
12 temporary or seasonal wetlands. They didn't do a
13 study of the Sprague's Pipit, the Ord's Kangaroo Rat,
14 the Great Plains Toads, snakes, Pocket Plover,
15 Pronghorn, the Sharp-Tailed Grouse which was
16 provincially listed. They did no field work on
17 arthropods. So even if you're going to use your 4,
18 8 wells these should have been done.

19 They didn't look at the soils and slopes at a
20 fine scale even though pipelines may be placed on
21 those steep slopes.

22 [Klimek Footnote: Transcript
23 page 524, line 6, evidence of
24 Mr. Kansas, and Transcript page
25 526, line 14, evidence of

1 Mr. Heese]

2 Instead they picked species that were not
3 relevant to the area such as the Piliated Wood Pecker
4 and others that are set out in Mr. Wershler's
5 presentations. So the EIS required that type of
6 analysis. It asked them to do studies and our
7 position is they should have looked at all of them.
8 If not then, then most of them.

9 Now, EnCana's response as to why they didn't
10 do that is telling. Dr. Walker said he disagreed with
11 spending resources on the two SARA species listed even
12 though directed by the Guidelines.

13 [Klimek Footnote: Transcript
14 page 241, line 3]

15 It was told it was, it was not necessary and it
16 was a waste of resources, that it would produce too
17 much information and that is not the way we do EIAs.

18 Well, maybe for an area that is important to
19 the NWA we should take a look at how we've been doing
20 things in the past. The bar for an area such as this
21 cannot be too high. That level of study should have
22 been done so we know what we're dealing with before we
23 go ahead.

24 So the next step is what are the effects on
25 those things? Even though we don't know quite what

1 they are because the work wasn't done, we have to do
2 our best I guess with the information to determine
3 what the effects of the Project are.

4 [Klimek Footnote: Transcript
5 page 168, line 25, and page 180,
6 line 21]

7 EnCana used several processes to determine those
8 effects. They calculated the footprint and they did
9 some varying samples and surveys. Now, the Coalition
10 takes issue with how those were done and the relevance
11 of them and what they show.

12 Now, I'm going to talk a little bit about the
13 calculation of the footprint and what use was made of
14 that. Their approach was to determine the footprint
15 that currently exists, then add the footprint from --
16 the predicted footprint from the Project and assess
17 the difference between them.

18 Now, to determine the existing footprint they
19 examined aerial pictures. They caught what you could
20 see in a picture from the sky. They did not include
21 areas that had been disturbed but not fully
22 revegetated to its original status.

23 Now, the ground-truthing showed it was not
24 accurate. Mr. Kansas said they calculated the sites
25 as being 10 metres square when in fact they were

1 30 metres squared. So some was missed there.

2 [Klimek Footnote: Transcript
3 page 417, line 23]

4 And the page numbers for these I will give to the
5 Court Reporter when I give her my submission here.
6 And Mr. Kansas stated that he figures they missed 1.0
7 to 1.5 percent of the total footprint.

8 [Klimek Footnote: Transcript
9 page 414, line 20]

10 So, there's some errors on what the current
11 footprint is. Then they estimated the amount of
12 future disturbance and because it was small or -- they
13 determined it to be negligible or insignificant. We
14 take issue with the amount of disturbance and the
15 effect of that disturbance. Like we said earlier, it
16 did not consider all aspects of the Project such as
17 enhanced roads and the trenching of the pipelines. It
18 didn't include the footprint from PDA surveying, the
19 monitoring and operation's activities. And it treated
20 all disturbances as equal.

21 [Klimek Footnote: Transcript
22 page 298]

23 There are some disturbances that may have much
24 more impact than others. If it's in a sensitive soil
25 or some other sensitive area, those disturbances may

1 carry a different weighting. And it did not look at
2 the impacts outside the NWA. They advised they would
3 be taking water from the groundwater and dugouts and
4 the effects of that on the wetlands outside were not
5 looked at. So the impact may be spreading beyond the
6 NWA.

7 Another method of determining effects was to
8 use what's called the triangle sampling. Now, this
9 analysis was to compare different areas with other
10 areas. It looked at different well densities. Now,
11 what it didn't look at was taking an area where there
12 were 16 wells and compare it to an area where there
13 are no wells. It did not sample all habitat types.
14 It focused on the uplands, triangle sampling of the
15 wetter areas were not -- was not done.

16 So it did not take into account those
17 communities that may have shown a higher level of
18 impact such as those that are with a higher moisture
19 level near the wetland basins. The samples were not
20 statistically valid as the power analysis showed there
21 were not enough samples to be reliable. But in spite
22 of that lack of reliability, they do show some trends
23 which should cause this Panel some concern. Those
24 with higher well densities, the 8 compared to the 4,
25 showed more adverse effects than the 4. The

1 preponderance of the indicators, such as the number of
2 native species cover and the number of non-native
3 invasive and weedy species, were all less desirable in
4 triangles with more wells. So there is evidence that
5 increased density does cause an impact.

6 [Klimek Footnote: Transcript
7 page 189, line 10]

8 Another series of sampling was the paired
9 pipeline sampling. EnCana completed this sampling and
10 came to the conclusion there was no effect. It takes
11 the position that this sampling showed that Crested
12 Wheatgrass is not a problem and that non-native
13 species are replacing it. Again, they did -- they
14 were not -- they did not pass the power analysis.

15 Now, the paired pipeline sampling showed
16 invasion of Crested Wheatgrass on all pipelines
17 regardless of the age of that pipeline. And it was
18 not designed to determine whether native wheatgrass
19 was encroaching into native prairie.

20 Now, in light of this, EnCana has taken the
21 position that there's no edge effect from the linear
22 disturbance. Now, this assertion, we submit, defies
23 the preponderance of evidence. The overwhelming
24 evidence across all -- many of the submissions showed
25 that Crested Wheatgrass is the problem.

1 The Government of Canada's submission -- and
2 I'll let them speak to it, but I'm just going to
3 mention it -- suggests areas in the NWA invaded and
4 compromised by non-native species is to be in the
5 order of 30 to 50 percent higher than the service --
6 surface disturbance footprint calculated as part of
7 the EIS. The Suffield Grazing Advisory Committee has
8 identified Crested Wheatgrass introduction during
9 reclamation of industrial sites as a future -- as a
10 threat to future integrity of the Suffield NWA.

11 Dr. Henderson's research shows that Crested
12 Wheatgrass does move into the prairies. The Great
13 Sand Hills Study contradicts Dr. Walker's assertion
14 that all Crested Wheatgrass is replaced by native
15 species. This study found that non-native species,
16 including the Crested Wheatgrass and Smooth Brome,
17 increased substantially along roads and trails. Now,
18 this is at page 19 of the executive summary. That
19 same study showed that Smooth-Aired Goosefoot,
20 Goosefoot decreased dramatically within 150 metres of
21 a road or trail and the Annual Skeleton Weed decreased
22 dramatically across a three to 400-metre zone. Both
23 these plants are in the NWA.

24 The D6/D8 study showed Crested Wheatgrass is
25 on the disturbed area.

1 [Klimek Footnote: Transcript
2 page 719, line 12]

3 And EnCana acknowledged that vehicles act as a
4 vector for non-native plants. So it's clear from the
5 evidence that there will be an edge effect from this
6 development.

7 Now, other surveys done by EnCana we would
8 like to discuss now are the surveys on birds. EnCana
9 conducted surveys and determined that there would be
10 no impact on Sprague's Pipits. Now, these surveys did
11 not rule out observer bias and again the power
12 analysis indicates there's insufficient power to
13 support the conclusion.

14 [Klimek Footnote: Transcript
15 page 681, line 12]

16 When Canada re-analyzed that data, that started
17 to see an effect.

18 [Klimek Footnote: Transcript
19 page 3729, line 3 to 13]

20 Now, when you look at all the sampling and the
21 studies that were done, it is clear that that approach
22 to say there are no effects is flawed. The studies,
23 when you look at them closely, and the studies from
24 other areas, indicates that there will be significant
25 adverse effects and they are there in the current

1 development.

2 Now, when you look at specific species and
3 discuss them outside of these studies, it becomes even
4 more implausible that there will be no effects. And
5 I'm going -- like Mr. Denstedt, I'm not going to spend
6 time on all of the species but I'm going to pick a few
7 and look at them in detail.

8 Snakes: now, Mr. Didiuk is the expert on
9 snakes. He spent time studying stem, he knows them
10 well. He indicates that the current level of
11 development in the area is already having an adverse
12 effect on snake population, and it will only increase
13 if the Project goes ahead. We would ask you to
14 carefully review his evidence of October 24th, and
15 this is one where the audio recording is helpful
16 because you get the, the gist of where it's going
17 better than when it's written and the transcript is
18 not clear. And I would recommend or suggest minutes
19 26 to minutes 27 of that day.

20 Mr. Didiuk is the only expert who has done
21 long-term studies in the area. His evidence is that
22 populations are declining and road mortality is a
23 major threat and it is a problem that is already
24 causing adverse effects.

25 Now, EnCana does acknowledge there will be

1 mortality. Their evidence is that it doesn't matter.
2 Their response is to continue with mitigation
3 strategies of reducing speed and educating workers.

4 However, one has to presuppose that they're
5 doing that already and we still are seeing problems
6 with the existing development. He also gave evidence
7 that speed limits and education will not be effective
8 and the only true mitigation is avoidance, reducing
9 the activity. This is one species where it's clear
10 they are impacted and will be further impacted.

11 The Ord's Kangaroo Rat is a species listed
12 under SARA. It is a small population, and there's
13 many reports. There's Teushcer's report who had
14 studied in the NWA, the COSEWIC report, the status
15 report, all of these indicate that anthropogenic
16 disturbances create low quality habitat and are
17 actually sink habitats for these species.

18 The Sprague's Pipit: now, you've heard
19 differing opinions from the experts. Well, you had
20 before you Brenda Dale who studied the species
21 extensively and discussed the effects of linear
22 disturbance on these species. Her evidence is that
23 they will avoid such disturbances.

24 Now, the answer is we're going to do winter
25 drilling. But in her estimation, and she's the

1 expert, winter drilling will not alleviate the problem
2 as it does not address the loss of habitat caused by
3 linear disturbances such as pipelines and roads. It
4 does not address the operational activities. It does
5 not address the PDA activity which we submit will be
6 extensive. The answer is, well, we'll disturb them by
7 looking for them. Well, won't we disturb them by
8 looking for other species as well? Her evidence is
9 that these birds will avoid the disturbance.

10 Another species of concern is the Pronghorn.
11 It's a provincially sensitive species and a
12 significant portion of Alberta's population uses the
13 NWA as their critical winter habitat.

14 Now, other areas of jurisdictions have
15 developed management Guidelines that show a need for
16 caution around these animals and prohibit mineral
17 exploration and development during the winter. When
18 are they doing it here? In the winter.

19 Mr. Whidden supported that conclusion and
20 found that they should not be disturbed. EnCana has
21 ignored the species saying they will just accommodate
22 to us.

23 Another species the regulators have accorded
24 special status to is the Sharp-Tailed Grouse. This is
25 another species that's listed as sensitive in Alberta.

1 The status reports and recovery strategies provide
2 that industrial activity including oil and gas is a
3 problem for these birds. And EnCana acknowledged this
4 sensitivity at 5.8.3.2 of the EIS where it's stated
5 that "a disturbance within 2 kilometres of a lek may
6 be harmful".

7 Now, in the face of that we heard this
8 morning that they will try a 500-metre setback but
9 couldn't even guarantee that and thought it was a
10 large setback.

11 Oil and gas has also been recognized as a
12 problem for the Burrowing Owl.

13 Now, another animal species is the Great
14 Plains Toad. Again, the status report recognizes that
15 oil and gas is a problem for them. Now, EnCana says
16 they're going to look at their breeding grounds, the
17 wetlands, but what they have not looked at is their
18 winter range, where they hibernate and where they will
19 be and this is the time they're going to be digging up
20 these areas. They may be trenching pipelines and
21 they've done no work to determine whether they will be
22 harming them. Their answer is, well, that will be
23 remote. Well, how do they know that?

24 [Klimek Footnote: Transcript
25 page 216, line 1]

1 And, finally, the rare plants. There are three
2 SARA listed plant species: the Tiny Cryptanthe, the
3 Slender Mouse-Ear Cress and the small flowering Sand
4 Verbena. There is no information in the EIS upon
5 which to base the conclusion that there will not be
6 any effect on these plants. To date no surveys have
7 been done.

8 Dr. Walker says he's not concerned about
9 these plants as they do well in disturbed soils. In
10 fact, he's seen that on a few occasions, so the
11 conclusion is that the Project is good for them.

12 However, we caution an observation in a few
13 locations does not tell you anything about long-term
14 survivability and whether it is really suited for that
15 plant and others associated with it.

16 Furthermore, the Slender Mouse-Ear Cress does
17 not fit into that group as it does not require
18 disturbed sandy soil. And all of this disturbance
19 flies in the face of EnCana's position that we won't
20 cause any disturbance. You can't have it both ways.
21 We're not going to cause any but yet we're going to do
22 some good things by causing disturbance.

23 Each recovery plan sets out the number one
24 method of dealing with this is to avoid them and their
25 habitat. These plans were developed by experts in the

1 species. It's also been supported by people such as
2 our experts and Canada's who have done field surveys
3 and worked in this area. So to say the plans are all
4 wrong I think is just reckless.

5 [Klimek Footnote: Transcript
6 page 1754, line 25]

7 So when you look at all of these species and the
8 samplings it is not evident that there will be no
9 adverse effects. In fact, there is ample evidence to
10 say there will be -- there has been and there will be.

11 So what is EnCana's approach to this? And
12 that's the PDAs, the pre-disturbance assessments and
13 pre-development. Their approach is that the PDA
14 process and the mitigation designed by it will solve
15 the problems. Now, this is how I understand it is
16 that some studies will be done on a landscape level.
17 Others will be done on a site-by-site basis. They
18 will search -- survey each site for rare plants, once,
19 sometime between June -- in June and July. They will
20 adhere to setbacks where possible and the list seems
21 to be getting longer on which ones they will not be
22 able to do.

23 Once they do that assessment they will decide
24 where the wells and infrastructure will be placed and
25 then they'll decide if it's routine or non-routine.

1 All non-routine will go to SEAC and then to the Base
2 Commander. There will be an audit of the routine, is
3 their recommendation. Then it goes to the ERCB.

4 Well, the Coalition has a problem with that
5 process and I'm going to explain to you why. If it's
6 done perfectly it still does not get to cumulative
7 effects. It will look at each well by well by well
8 and nowhere do we get a chance to look at the
9 cumulative effects. It truly is just looking at your
10 shoulder at the very last one.

11 However, it's not going to be done perfectly.
12 They're looking at some species, such as the Sprague's
13 Pipit. With one survey you won't catch them all. And
14 the one that I think is very telling is how they deal
15 with rare plants.

16 Now, what they have said for their process
17 for rare plants, EnCana's process, they will do the
18 surveys on the sites where the wells and pipelines are
19 to be located. How does that account for the
20 300-metre setback Environment Canada has set for SARA
21 species? If you're only looking a small distance out
22 from your wellsite, you will miss that setback.

23 Now, what is the process for doing that
24 survey? EnCana acknowledged the Alberta Native Plant
25 Council Guidelines and Ms. Bradley, one of our

1 experts, participated in drafting those Guidelines and
2 her evidence on the purpose of those Guidelines is
3 instructive. The minimum guideline requires two
4 surveys. A more thorough one requires a
5 multi-seasonal multi-year survey.

6 EnCana isn't even going to achieve the
7 minimum standards. They're going to do one survey.
8 Their basis for not doing more is a clause at the
9 beginning that says:

10 "The Guidelines allow for
11 professional judgment."

12 Ms. Bradley said that clause was there to deal
13 with exceptional circumstances where you wanted to go
14 out and look for one species. If I'm going out to do
15 a reconnaissance for one specie and I know when it's
16 flowering, one survey is probably suitable.

17 Now, doing one survey during June to July has
18 logistical problems. EnCana proposes to survey
19 400 sites during a six-week window. Now, within that
20 -- and presumably they're going to move through so if
21 you have a species that is evident in June and one in
22 July, if you happen to be there in June you're going
23 to miss the July species and vice versa. You have to
24 remember during that period of time is when the
25 templates and the Military training will be at its

1 height. So that has to be accounted for in that six
2 weeks.

3 You also have weather. Rain is not --
4 they're not going to be there for rain. It is clear
5 the Project is driving the surveys, not the other way
6 around. I would suggest there's a very high
7 probability that rare plant species will be missed
8 using that process.

9 Now, EnCana also states that if their
10 professionals advise them that they need more time to
11 do surveys, they would listen to them and slow it
12 down. Now, they also -- we also take issue with its
13 routine versus non-routine assessments. EnCana says
14 20 percent will be non-routine, the rest will be
15 routine while the Base Commander takes a view that all
16 are non-routine.

17 Now, any time a land -- if you're using ERCB
18 Guidelines any time a landowner takes exception, it
19 automatically moves to a non-routine. If all are
20 non-routine, 400 PDAs must be done and reviewed each
21 year.

22 So that's the plan for the PDAs. Well, let's
23 look at the three PDAs before us. I think they're
24 instructive on how the process will work and reveal
25 the shortcomings of that process.

1 Now, we heard this morning that one of the
2 purposes of the PDAs is to avoid as that is one of the
3 best mitigations. We agree with that proposition
4 except we think avoidance should be at a regional
5 level.

6 Now, in this one, they have not completed all
7 the studies that need to be done, so we can't be sure
8 what they're going to avoid. They have not done the
9 rare plants, they have not looked for amphibians and
10 they have not got the slope analysis at a fine level.
11 They have relaxed the setbacks for wetlands for two of
12 the three wells. So it's clear that they are not
13 designed to avoid if this is how they're going to come
14 in for an approval.

15 Now, we heard evidence that setback
16 relaxations will be rare. Well, it's interesting that
17 the first two of three are going to ask for a
18 relaxation and one of the reasons was to avoid a
19 longer pipeline. Well, we've heard earlier how these
20 pipelines cause absolutely no problem, so why would we
21 worry about a longer pipeline and put it closer to a
22 wetland? I think it's because both are a problem.

23 The -- now, the second observation is that
24 these PDAs that are before you for an approval,
25 they're not -- remember these are not here to show us

1 how it's going to be done and this is what we're going
2 to do. EnCana is asking for three well licences based
3 on these approvals. They did not meet their own
4 criteria. They did not do a rare plant survey for
5 these. They did one in October. They acknowledged
6 that that one wasn't worth anything and they did not
7 slow down the process to allow for one. That was
8 their criteria back at the outside.

9 There's also an issue of the amphibian
10 survey. The EIS indicates they didn't do one at the
11 right time. They surveyed this for toads before a
12 rain and found none. However, when they went back
13 later they found an adult toad. It came from
14 somewhere. That would indicate there was a breeding
15 ground, but that has not been clearly identified.
16 There's also the issue, where does this creature spend
17 its winter? That was not found out.

18 So in the face of finding a toad there, which
19 is a endangered species, or SARA listed, they chose to
20 relax the buffer. So that's how these PDAs are going
21 to work. There is no soil assessment done on site.
22 They used a global one. No fine-scale analysis for
23 slopes.

24 They have not done any field studies for
25 other species, the Gold-Edged Gem, arthropods.

1 There's possibly others. So how, how can EnCana, when
2 they put forward these three, say that they're going
3 to avoid? There's no evidence before you on that.
4 They didn't follow their own process. Furthermore,
5 they didn't send it to SEAC and it didn't go to the
6 Base Commander. Those were all to be done before it
7 came to the ERCB, for all intents and purposes, which
8 is you.

9 It is our submission the PDAs that are before
10 you are a complete failure. They didn't follow their
11 own process. They're asking you for an approval to
12 allow them to do a PDA.

13 Now, Mr. Denstedt referred to his mother and
14 I'm going to refer to my grandmother and she always
15 gave us girls young -- advice when we were young.
16 He's on his best behavior when he's dating. It
17 doesn't get better than this. And I tell you, if this
18 is dating, do you want to marry these PDAs?

19 Now, the next area I would like to talk about
20 is constraints mapping. There's been some discussion
21 about doing a constraints mapping to determine where
22 you could put the wells and the related structures.
23 Now, the PDA is not working for that because they're
24 placing wells before assessing, not the other way
25 around. And they're working around -- they're putting

1 them into the buffer zones.

2 The PDAs do not determine areas where wells
3 should not go. It appears they're indicating areas
4 where we should relax the standards. We submit the
5 best constraint map was that which was done by Canada.
6 It showed a serious -- severely constrained area and
7 if you followed it, it would be impossible to put this
8 Project in the area. That's not reason for
9 disregarding it. It's reasons for looking closely at
10 this Project.

11 For example, 63 percent of the soils were
12 related -- rated as extreme to high for wind erosion
13 and that's from Volume 3. So the large picture shows
14 a lot of sensitive soil. So EnCana has limited its
15 access to slopes under 15 percent and even with
16 technology that could determine those slopes they
17 haven't delineated where they were and did a
18 constraints mapping there.

19 Other constraints are not taken seriously;
20 wetlands, as we've seen. Now, another one that
21 surprised us was when the evidence -- or questions
22 were asked, what if you find a SARA species and the
23 first answer, and I know Mr. Denstedt tried to deal
24 with it differently today, but the first answer to
25 anyone from EnCana on what are you going to do when

1 you find a SARA species was, we will go get a permit.

2 Now, surely your first answer might be how
3 can we do this differently? And I was pleased to find
4 out there's at least some rigour to a permit, but
5 after EnCana's, it sounded like you just go to Ottawa
6 and you get your permit. That doesn't sound like a
7 company that really cares.

8 The next area I would like to deal with is
9 reclamation. EnCana relies on reclamation as a
10 mitigation and takes the position that the ultimate
11 reclamation will deal with impacts. Well, Mr. McNeil
12 gave evidence that it could take generations, hundreds
13 of years for soils to restore themselves to a
14 pre-disturbance. That in and of itself is a
15 significant adverse effect. There are no standards
16 for reclamation.

17 [Klimek Footnote: Transcript
18 page 100, line 3, page 610, line
19 11]

20 Now, we heard today that, yes, the Base Commander
21 can develop them, he has the authority, but this Panel
22 should know what those standards are so they can
23 assess whether it's going to be achieved. It appears
24 the standard by EnCana is not restoration. It is
25 something less.

1 And interesting comment on reclamation this
2 morning with -- reference was made to the repealed
3 legislation and I hope, I hope I misheard this because
4 I understood Mr. Denstedt saying when a piece of
5 legislation is repealed and agreement refers to it, it
6 stands as it did at the time of repealing. We may be
7 looking at legislation that's 30 years old. Clearly
8 reclamation standards have changed sometime since
9 then.

10 There is some reference to, to the Express
11 Pipeline and what Ms. Bradley had to say. I would ask
12 you to look carefully at that report. It has some
13 good points, but there is some areas that need a lot
14 of work, that are not done properly, that have not
15 been restored and, remember, Express Pipeline was not
16 a National Wildlife Area.

17 The reclamation in the area, it's still
18 uncertain, the process, who does it and how do you
19 compel reclamation? There is no legislation that
20 requires a company to reclaim. It is up to them when
21 they do it and there's a lot to be done. There's many
22 wells, very few have gone through a process, we don't
23 know where it's going.

24 Cumulative effects, they have not been
25 addressed. The PDA does not address them. The EIS

1 does not do a thorough analysis of them, although
2 required to do so. EnCana's position is that there's
3 currently not very much disturbance and they're only
4 adding a small amount. Since there's negligible or
5 insignificant effects they don't have to do a
6 cumulative effects assessment. Let's look at those
7 conclusions.

8 The researchers have found that the actual
9 current footprint is higher. Dr. Rowland and
10 Dr. Henderson's submission suggests the current
11 footprint is between 2.3 and 2.7 all of which we say
12 is significant.

13 The Great Sand Hills study of a similar
14 terrain to at least part of the NWA found the density
15 of 1.9 kilometres per square kilometre is the
16 threshold between high and less development. The
17 current footprint is 3 kilometres per square
18 kilometre. So while there's some debate where that
19 actual line may be, it's certainly greater than the
20 Great Sand Hills Study, what they found to be
21 significant.

22 Now, what has not been assessed in any
23 cumulative way is the level and timing of activities
24 over the life of the Project. And I ask you to look
25 at that one slide of Dr. Rowland's with the activities

1 laid over the Military training. This will be an
2 extremely busy area if this Project goes ahead.
3 There's the PDA, the surveying, there's the
4 operations, there's the mowing, there's the drilling,
5 the pipelining, all of this impacted by what's
6 happening outside the Base.

7 Finally, there's the cost benefits analysis.
8 We've heard a lot about the benefits. Is this Project
9 justified? I would ask you to look carefully at
10 Dr. Powers's analysis of economic implications. He is
11 the only evidence you have of the cost benefits.

12 Mr. Binder is going to address the
13 incremental versus accelerated. For my purposes, if
14 you find a net incremental is smaller than predicted
15 and most of it is accelerated, that only enhances what
16 Dr. Powers said. The major benefit is to EnCana and
17 that benefit may be able to be replaced by other
18 energy resources that do not threaten a unique area.

19 The benefits must, must be balanced against
20 the value of the NWA. The NWA is a value to society
21 and as Dr. Powers said, that value will only increase
22 over time. As these areas become more degraded, this
23 area will rise in significance. It's much like a
24 painting. If it's a Rembrandt or a Da Vinci, those
25 increase because they become more and more rare.

1 So you have to look at the value, the
2 temporary gain from this against the long-term value
3 of the NWA. When you look at those it makes sense
4 that you set some areas of this importance aside.
5 They're valuable. Saskatchewan has done that with the
6 Great Sand Hills and that area hasn't been granted as
7 much protection as this area.

8 Now, I would like to address, in this vein,
9 the concept that gas will be wasted if it's not
10 exploited. Companies always do an internal cost
11 benefit and when it's not economic they leave the gas
12 in the ground and they don't call that wasting it.
13 They call that a wise economic decision. So if you
14 step back and you look at the cost benefit, it's no
15 more waste to leave it there because the benefit or
16 the cost of losing a Wildlife Area is too great. That
17 is not -- that's a wise societal decision. And you
18 can look at this like, would you burn up a Picasso to
19 heat your house when there's another source down the
20 way? And that's what you might be doing here, or you
21 will be.

22 Now, my last -- I believe my last item is
23 regulation of activity: What's going on out there and
24 who regulates it? This is important. If -- any
25 project you must consider who is doing what to make

1 sure it goes properly and this is muddled. We touched
2 a bit on the process, the PDAs done by the company, it
3 goes to SEAC, to the Base Commander, to the ERCB. Who
4 is monitoring and who is enforcing what goes on there?

5 From watching the evidence as an outsider
6 looking in, there seems to be some dispute about who
7 reigns supreme on this Base. DND takes the position
8 they're the final arbiters of anything that goes on
9 there. EnCana disputes that. I submit that this
10 Panel does not have the jurisdiction to determine
11 that. That's a contractual dispute and that must be
12 resolved before anything gets approved.

13 There's other players and I would like to
14 touch a bit on their role. The ERCB role is unclear.
15 They grant the licence. There are some minutes of the
16 Base saying the ERCB has no jurisdiction over surface
17 issues, except for pollution, but whether reclamation
18 is being done properly. Their inspection record of
19 the Base would support that.

20 Mr. Mousseau pointed out how many times the
21 ERCB has been out to inspect wells and for the number
22 of wells it could only be characterized as minuscule.
23 There's some suggestion that they regulate
24 reclamation. However, it isn't them that signs it
25 off. And I would say it is the only place in the

1 world where the ERCB does regulate reclamation if
2 that's the case. The rest of Alberta, it belongs to
3 Alberta Environment. So do they have the capacity and
4 the expertise when this is the only area that they do
5 it?

6 A great deal of reliance is put on SEAC.
7 This is a three-member committee that meets once a
8 year, once a year, and does some inspection which they
9 even say is not a significant number to be able to
10 gauge anything by. My friend says they are to provide
11 environmental oversight and are well qualified.

12 Well, I would submit there's no evidence that
13 they are qualified for the job they have and this is
14 not a personal attack on anyone on SEAC. It's the
15 nature who is there. The ERCB member does not have
16 any environmental training. He is an operational
17 individual, operational skills and no doubt he does
18 those very well. Are those the skills you need for
19 environmental oversight?

20 Alberta Environment isn't here. We don't
21 know what skills they have, what their role is. We've
22 been told all decisions are unanimous and, therefore,
23 anything that was said to you from SEAC is not a voice
24 of SEAC but two members because a third party could
25 veto anything that is said here. All have full-time

1 jobs, this is an add-on, and they have limited
2 resources. To put so much reliance on this committee
3 with the structure that they work under, the
4 limitations they have is just foolhardy, and again
5 it's nothing personal to these people. They do not
6 have the capacity.

7 What authority do they have? This is another
8 dispute. EnCana says it needs tweaking. Canada and
9 SEAC says it needs to be totally revamped, totally
10 revamped. Again, this is something that needs to be
11 resolved and I'm not sure this Board has the
12 jurisdiction to do that.

13 Then there's SIRC, a fully-owned subsidiary
14 of EnCana who appears historically to have been the
15 agent of everybody. It signs on behalf of the Base,
16 it signs on behalf of the companies, it seems to be --
17 it's the one who gets directives that gets wells out.
18 It's not clear what they do and whether -- it's clear
19 they've overstepped their mandate.

20 It is clear that the regulatory framework
21 needs to be fixed and I would suggest you need to make
22 that recommendation, but not for the purposes of
23 allowing this to go ahead, but to deal with what is
24 already there, to change the trajectory of this
25 ecosystem, to get it going in the right direction.

1 Now, I would like to talk a little bit about
2 EnCana's conduct. What have you seen of their work in
3 the area and should that guide you? One of the
4 best -- a good predictor of future behavior is past
5 behavior. First of all, is their attitude that we
6 will make this area better. Just let us at it and we
7 will make it better. People have historically shown
8 they do not make nature better. We wouldn't have a
9 SARA. We wouldn't have endangered species. We
10 wouldn't have extinctions happening. I wouldn't have
11 a job if people made nature better. Frankly, that's
12 an extremely arrogant attitude that a group of people
13 can go out and do what Mother Nature did or does much
14 better.

15 EnCana has shown a resistance to doing things
16 properly. The access to information indicates they
17 resisted this process. They resist getting permits to
18 go on to the NWA. They take the view they don't have
19 to, even though the Base has been trying to get a
20 process working. They have walked out of ADRs and
21 their actual on-the-ground work shows problems.

22 I'm going to focus on a few. The well in the
23 Nishimoto Wetland is an indication of how they handle
24 errors. They fought tooth and nail to removing that
25 well. 11 months, three directors and an "or else"

1 letter finally got that well out. They had a pipeline
2 incident in front of the Court. They had two
3 incidents, trapping near the Ord's Kangaroo Rat
4 habitat and the Sand Verbena. When there was not
5 enough evidence to prosecute, DND took the view that
6 they were violating the spirit of the permit, if not
7 the actual wording. So it's clear things must be very
8 specific.

9 Finally, there's the July incident that is
10 referred to in the October 24th transcript. They were
11 on the NWA without any authorizations which resulted
12 in environmental damage which was not reported and
13 which was found by Canada's biologist. When we asked
14 about if they had any situations when they were on the
15 Base without authorizations in this last year, we were
16 told "no" in cross-examination. The access to
17 information made it clear that they were.

18 [Klimek Footnote: Transcript
19 page 648, line 2]

20 Now, these are found without any formal audit
21 process. It is a haphazard way the Base has of
22 finding out things just due to lack of capacity. And
23 they're occurring as late as July, 2008. So one of
24 two things, either EnCana has a problem or they're
25 just inherent to the industry that these things go

1 wrong. And either is not a satisfactory answer and it
2 should cause concern on allowing them in there in the
3 future.

4 Then there's the issue, what do you do when
5 things go wrong? What can be done? It appears no one
6 is minding the farm here. The Base has limited tools
7 of enforcement. It appears they can negotiate or bar
8 access. There's no sliding scale of enforcement.
9 ERCB certainly isn't doing anything out there. So who
10 makes sure things are done right and how do you do
11 that? Again, another gap.

12 Now, what if EnCana asked for one permit to
13 do it all? And when you look at their past record,
14 their current record, their view of wetlands, is this
15 a company that you want to give such a blank cheque
16 to?

17 So this comes to the end. What would the
18 Environmental Coalition recommend? Well, I'm going to
19 quote Dr. Stelfox here. You have a choice. You can
20 have an NWA or you can have a gas field. You can't
21 have both. You get to pick. If you allow it to go
22 ahead you're foreclosing on the NWA. If and when a
23 technology is developed that can get the gas without
24 drilling in the NWA, we won't be able to use it.

25 So before I close, I would like to address

1 one point and this leads up to our conclusion. The
2 Coalition was asked by several parties, the Panel,
3 Mr. Mousseau, Mr. Denstedt, whether they would be
4 willing to participate in a potential environmental
5 monitoring committee if the Project were to go ahead
6 as well as to the development of an NWA management
7 plan?

8 I would like to make the Coalition's position
9 very clear. There's two key answers to that question.
10 First, the point of this review for the reasons that
11 we have just articulated over the last hour or so and
12 that have been reinforced by the testimony from
13 Canada, the Coalition is opposed to the approval of
14 this Project in whole or in part with prejudice to
15 future developments. Your recommendation should be
16 that this area should be preserved and start working
17 towards restoration. Therefore, the application for
18 this Project and the three wells should be denied.

19 Now, independent of that decision and that --
20 of the Project, independent of the Project, we are of
21 the view that this Panel should also recommend on the
22 go-forward on how to preserve this area that a
23 regional cumulative impact -- cumulative effects
24 assessment of the area must be completed and a
25 management plan for the NWA developed.

1 Now, Mr. Kansas acknowledged that a strategic
2 cumulative effects assessment of the region would put
3 this Project in context and would be in order.

4 Dr. Stelfox gave you information on how that could be
5 done, how it has been done in other areas. It is our
6 position it should have been part of the EIA and it
7 should be done now.

8 Once that is done, a management plan for the
9 NWA should be done. It will provide guidance on how
10 the NWA should be and will be managed for preservation
11 and recovery. The Coalition is more than willing to
12 participate in those activities that, that being the
13 cumulative effects assessment and the development of a
14 management plan for the NWA and that is our
15 recommendation to this Board. Deny the Project and
16 start moving towards restoring this area.

17 Subject to any questions, those are our
18 submissions and Mr. Binder will finish off our
19 submission.

20 THE CHAIRMAN: Thank you, Ms. Klimek. Let
21 me check with my the colleagues here. I see no
22 questions.

23 Just one question, I'm just trying to gauge
24 time, Mr. Binder, whether to take a break at this
25 point or whether your presentation will be fairly

1 short.

2 MR. BINDER: I would expect to be about
3 35 minutes.

4 THE CHAIRMAN: 35 minutes. In that case
5 let's take a break and come back.

6 (AFTERNOON BREAK)

7 (PROCEEDINGS ADJOURNED AT 4:41 P.M.)

8 (PROCEEDINGS RECONVENED AT 4:55 P.M.)

9 THE CHAIRMAN: Ladies and Gentlemen, I
10 believe we're ready to begin once again. I'll call on
11 Mr. Binder to continue to present the Coalition's
12 argument. Mr. Binder, please.

13 **FINAL ARGUMENT OF THE COALITION, BY MR. BINDER:**

14 MR. BINDER: Okay. Thank you, sir,
15 Mr. Chairman, Panel Members. Out of necessity, my
16 argument in parts will be a little technical because
17 of the disagreement between EnCana and our reservoir
18 engineer, Martin & Brusset, over the appropriate
19 methodology. Because of that I, I have written out
20 the argument and I believe you have copies before you
21 and they are, they are separate so that
22 you'll be able to refer to the, the illustrations
23 while looking at the written portion.

24 THE CHAIRMAN: We do not have them before
25 us. I think they're with the Secretariat --

1 MR. BINDER: Oh, sorry, sir.

2 THE CHAIRMAN: -- Mr. Binder.

3 MR. BINDER: I have --

4 THE CHAIRMAN: You are referring to things
5 in, in the text --

6 MR. BINDER: No, I have three additional
7 copies here, so --

8 THE CHAIRMAN: I believe the Secretariat has
9 copies, so perhaps we can get them. We just weren't
10 sure what the material was and you have explained --

11 MR. BINDER: Okay.

12 THE CHAIRMAN: -- what it was --

13 MR. BINDER: Fine.

14 THE CHAIRMAN: -- you wish to refer to. All
15 right. Please proceed.

16 MR. BINDER: Now, just before getting into
17 that specific material, I would like to make one
18 comment about Mr. Denstedt's assertion that this
19 Project constitutes a sustainable development. It may
20 well be -- it may well do so, but with regard to the
21 non-renewable resource, that is natural gas, there's
22 certainly no evidence that it constitutes sustainable
23 development.

24 In fact, there hasn't even been a theoretical
25 framework proposed in that regard, so I would submit

1 that that statement be accepted in the same context
2 that many others are.

3 Sustainable development is something that
4 everyone likes to say about their projects these days,
5 but to properly assess sustainable development is
6 quite a complex issue and you would have to look at
7 the entire situation of Canada with respect to natural
8 gas and whether drilling and exporting natural gas
9 constitutes sustainable development and whether that,
10 in terms of intergenerational equity, also has a
11 desirable outcome.

12 So it's, it's a very complex argument both
13 theoretically and in terms of crunching the numbers
14 empirically and that certainly hasn't been done for
15 this Project.

16 Now, all of the reservoir engineering
17 evidence taken together paints a very simple picture
18 in spite of what appears to be complicated. The Milk
19 River formation is comprised of tight rock as shown
20 by the geological evidence, but it is also virtually
21 all hydraulically connected as seen from the pressure
22 data and the diminishing returns curve produced by
23 GLJ Consultants. So virtually all the rock in the
24 reservoir contributes to production. There may be
25 some isolated pockets that don't, but I would submit

1 that the interference and acceleration that have been
2 found by GLJ and by M&B, Martin & Brusset Associates,
3 indicates that there's a, a great deal of connection.

4 Roughly speaking, at the farthest distances
5 from existing wells, there is tight rock still under
6 relatively high pressure. This rock is helping push
7 gas through existing wells, but the specific gas in
8 this location will largely never actually be recovered
9 through existing wells. It appears trapped but is
10 contributing to production. After infill drilling,
11 pressure at the infill locations drops. This results
12 in reduced production of existing wells first through
13 less capture from the high permeability flow units and
14 ultimately through less capture from the tighter rock
15 that feeds into the flow units.

16 The reduced production from existing wells
17 is a consequence of well interference which
18 contributes to accelerated production. What happens
19 in this typical situation is illustrated in Figure 2,
20 2-3 -- I've got A there. It should be 2-3C. To
21 arrive at incremental production, the light blue wedge
22 representing accelerated production must be subtracted
23 from the dark blue wedge on the other side of where
24 the curves cross. Although Figure 2-3C is
25 illustrative only, it reflects the typical situation

1 seen in the M&B analysis and found in the GLJ study.

2 I would urge the Panel to accept the evidence
3 in the GLJ report which EnCana now appears to agree
4 with, namely, that well interference and accelerated
5 production increase with well density and that this
6 causes incremental recovery per infill well -- excuse
7 me -- to decrease at higher well densities.

8 Although EnCana's geological knowledge of the
9 area is sound, it has used that knowledge to create a
10 vision of the reservoir as one without interference or
11 acceleration effects. This vision is reflected in
12 EnCana's Figure 2-3 which shows existing well
13 production carrying on as though infill had never
14 occurred with total production being bounded from
15 below by existing well production.

16 It is apparent that these curves can't cross
17 even at the 16 well per section density, so
18 accelerated production is precluded in EnCana's
19 analysis.

20 Now, I appreciate that EnCana has been
21 talking about accelerated production and I'll get to
22 how that fits in with this in a few moments.

23 Over time, EnCana has slowly abandoned key
24 aspects of its vision in the face of credible evidence
25 to the contrary. It nevertheless is trying to save

1 what it can of its analysis, especially its result of
2 125 billion cubic feet for incremental recovery. As a
3 consequence, EnCana's evidence is burdened with
4 shifting ground and inconsistencies as it now tries to
5 incorporate more reality into its position.

6 This circuitous route to the truth indicates
7 that EnCana's evidence is unreliable especially where
8 it is in conflict with the analysis of
9 Martin & Brusset Associates.

10 Martin & Brusset has provided the Panel with
11 an independent evaluation suitably qualified to point
12 out possible sources of weakness or error. The
13 analysis has not changed since it was first reported.
14 It is respectfully submitted that the Martin & Brusset
15 evaluation, including all the necessary figures in
16 support, should be accepted as providing the best
17 evidence of incremental recovery for this reservoir.

18 There's no mystery in the Martin & Brusset
19 analysis about where acceleration effects show up. If
20 you look at that analysis, you can see all the charts
21 and diagrams and they clearly indicate accelerated
22 production.

23 EnCana's Figure 4, with some superimposed
24 markings which you have before you, can be used to
25 illustrate much of the disagreement between EnCana

1 and Martin & Brusset over whose method provides the
2 best estimate of incremental recovery.

3 Now, this is for the -- the, the pre-infill
4 case, trying to assess what the ultimate recovery of
5 pre-infill wells would be. In the figure, EnCana's
6 historical and forecast production for 6.5 well per
7 section density is shown as the green line.

8 The black line is transposed for Martin and
9 Brusset's Figure 3 and represents Martin and Brusset's
10 historical and forecast production for 6.5 well per
11 section drilling density. So you can see there's
12 quite a difference.

13 Martin and Brusset's historical forecast
14 period lies between the two small black vertical lines
15 and ends before the commencement of 16 well per
16 section infill drilling which occurs at the red dot.
17 The respective historical forecast periods and
18 forecasts are markedly different. To forecast
19 ultimate recovery based on 6.5 well per section
20 density, M&B restricted its historical forecast period
21 to where 6.5 well per section density actually
22 existed.

23 To forecast the same ultimate recovery,
24 EnCana uses data mostly from the period where well
25 density is actually 16 wells per section. This means

1 that EnCana's estimate of ultimate recovery for the
2 6.5 well per section density must be understated.
3 It is based on 16 well per section recovery and,
4 according to GLJ, there is diminished recovery per
5 infill well at higher densities.

6 So EnCana is using the 16 well per section
7 case to forecast the ultimate recovery of pre-infill
8 wells and, according to GLJ, you'll get a smaller
9 result and that's a result that EnCana now accepts.

10 If you look at these historical forecast
11 periods, you can see that the Martin & Brusset period
12 is quite short and follows in line with the trend at
13 6.5 well per section density, but EnCana's period is,
14 is quite long. So in terms of who is right you might
15 say that Martin & Brusset is sort of shooting a gun
16 perhaps with a shorter barrel but aiming in the right
17 direction. EnCana has a longer barrel but is aiming
18 in the wrong direction.

19 EnCana now appears to adopt GLJ's view as
20 indicated in the following statement:

21 "So although we see interference at
22 the pressure level, at the PID
23 level, and although we see
24 interference at the diminishing
25 returns level, as we subsequently

1 drill more, we have not seen it
2 through a decline curve yet."

3 EnCana, nevertheless, proceeds with an
4 analysis inconsistent with this position and supplies
5 a result that must be incorrect.

6 EnCana doesn't seem to appreciate that GLJ's
7 conclusions about diminishing recovery are based on
8 the Plot 1 data points which were obtained from
9 decline analysis. So EnCana accepts the GLJ result,
10 but in accordance with its no interference vision
11 attributes the huge drop in production after the red
12 dot to surface effects. This failure to recognize
13 a significant drop in production causes EnCana to
14 seriously overestimate incremental recovery. It
15 causes it to underestimate what existing wells would
16 have actually produced and, therefore, it causes to
17 overestimate incremental recovery. For EnCana, this
18 result nevertheless reinforces its confidence in its
19 previous estimate. In regard to the outcome, EnCana
20 states:

21 "You know, coupled -- coupled with
22 the fact that, you know, every time
23 we present these curves to senior
24 management or to this Panel, we are
25 always presenting a 90 percent

1 probability. So inherent in the 90
2 percent probability is every time
3 you do an update, likely as not
4 your estimates will creep up.
5 They'll be moving up towards the
6 P-mean."

7 So even though this analysis is -- EnCana's
8 analysis is inconsistent with its understanding now
9 of acceleration effects and its confirmation of the
10 GLJ result about interference and acceleration
11 effects, it nevertheless proceeds to provide this
12 result and has a lot of confidence in it.

13 Now, just to speak about well interference
14 versus surface effects for a moment, EnCana indicates
15 that interference will ultimately be seen in a decline
16 curve. Since this statement is made in the context
17 of declines only exhibiting surface effects such as
18 backout issues, it is helpful to discuss this comment
19 by referring to Figure 4. Essentially, EnCana's
20 internal analysis does not recognize that there's a
21 significant change in the trend of the green line at
22 the red dot. EnCana asserts that the curves in
23 Figure 4 do not show deviation from the existing
24 decline plots and that they, therefore, don't reflect
25 any interference effects through the small silt

1 stringers.

2 Now, it is true that they don't. EnCana is
3 likely right about the effect through the small silt
4 stringers being delayed, but this doesn't address the
5 issue.

6 M&B indicates that a significant decline
7 trend, the black line, is established before the red
8 dot. The explanation that appears reasonable, in
9 light of the current evidence, is that the initial
10 drop in production after infill is associated to some
11 degree with backout which lasts from three to six
12 months. Interference then appears in the high
13 permeability streaks and stringers between wells
14 being greatest in cleaner sand which behaves more
15 conventionally. Later, the effects of interference
16 extend into the small silt stringers and tight
17 formations.

18 These reservoir influences are all captured
19 in the shape of the green decline curve which M&B
20 indicates ultimately shows lower decline results for
21 the pre-infill wells because of 16 well per section
22 infill drilling.

23 M&B also points out that since the infill has
24 been running for several years now, production is
25 being driven by interference.

1 The Martin & Brusset analysis. In spite of
2 its internal comparison results being necessarily
3 incorrect, EnCana disagrees with M&B's internal
4 analysis saying that M&B's choice of historical period
5 for the 6., 6.5 well per section forecast is not
6 suitable. M&B confirms, however, that a significant
7 decline trend, which you can see between those two
8 vertical black lines, was established during the
9 analysis period and that the impact of the additional
10 wells on production shown by the spike did not have
11 much impact on this trend.

12 Since M&B's analysis recognizes the change in
13 trend, its Figure 3, which is the -- is this one,
14 since it recognizes the change in trend, its Figure 3
15 shows two projections from the point where
16 16 well per section infill occurs: one showing
17 projected performance with 6.5 well per section and
18 a second, roughly equivalent to EnCana's, showing a
19 steep drop in production of existing wells associated
20 with infill drilling.

21 So M&B's approach, therefore, incorporates
22 the reality of diminishing return on incremental
23 recovery into its work. Although EnCana doesn't do
24 so, it is aware of the reality of diminishing returns.

25 Now, if we look at the cross-examination

1 of Mr. Sedgwick, the validity of M&B's D6/D8 analysis
2 was confirmed under cross-examination. Mr. Sedgwick
3 pointed out, in regard to the black line in Figure 4,
4 that he was aware of the new wells that came on stream
5 and that they did not affect a major trend in the
6 decline curve.

7 On the refracturing issue, EnCana is confused
8 where it indicates the decline analysis actually
9 tracks through the blue line, not the green line which
10 has a 2 billion cubic feet difference. M&B doesn't
11 know what EnCana is trying to get at here because the
12 suggestion that M&B made a 2 billion cubic foot
13 mistake makes no sense. If one looks at Figure 3 of
14 M&B's analysis, it is clear that its analysis for the
15 pre- -- performance of pre-infill wells after infill
16 takes into account new well production and
17 refracturing, as indicated by the horizontal trend at
18 the end of the squiggly part of the curve labelled
19 "Post-Infill Forecast Pre-Infill Wells".

20 Also, as seen in M&B's Figure 5, which I'm
21 sorry I neglected to include here, but the reference
22 is there, hyperbolic decline arrives at
23 an ultimate recovery of 18.5 billion cubic feet for
24 this projection, that is the one equivalent to
25 EnCana's green line which is the same or even a little

1 larger than what is shown in EnCana's Figure 4.

2 So when looking at projections after infill,
3 Martin & Brusset arrive at the same projection line as
4 EnCana, but when looking at the projection pre-infill,
5 Martin & Brusset arrive at a different result.

6 EnCana says that the result is the same for
7 both cases because they don't recognize any
8 interference or acceleration effects.

9 Now, EnCana further cross-examined
10 Martin & Brusset in regard to EnCana's Figure 3, which
11 I think is -- EnCana's Figure 3 which is this one,
12 there was cross-examination on that figure, and that
13 only re-affirms the correctness of Martin and
14 Brusset's work. The examination was in regard to
15 EnCana's decline curve falling below a particular peak
16 marking a swabbing event and M&B's curve shown in its
17 Figure 6 running through it.

18 Firstly, M&B indicates that he doesn't think
19 knowing the peak represented a swabbing event would
20 change his graph. Secondly, and more importantly, one
21 wonders why EnCana now relies on
22 its Figure 3 after indicating that readings from it
23 aren't valid.

24 EnCana indicated, instead, that confidence
25 should be placed in the figures contained in No. JRP7.

1 When one looks at the original representation,
2 Figure 7C and JRP7 in which EnCana does have
3 confidence, it is readily apparent that EnCana's
4 fitted curves goes through the same peak as M&B's
5 curve.

6 So the cross-examination tried to indicate
7 that M&B made an error because they didn't recognize a
8 swabbing event, but if you look at the actual curve
9 that EnCana has confidence in, their curve goes
10 through exactly the same points.

11 Now, I would like to talk a little bit about
12 the problem of attributing back because EnCana keeps
13 referring to the situation where they've attributed or
14 if acceleration shows up they would attribute it back
15 to the Base and there is a sense in which attributing
16 back occurs, but that sense is really with respect to
17 the assumption that existing well production would not
18 be affected by infill drilling. That's because the
19 incremental production is stacked on top of the
20 historical and forecast curve for existing wells.

21 In Figure 2-3 it is clear from EnCana's
22 testimony that it is assuming the Base wells will
23 carry on and produce their 120 billion cubic feet and
24 that the blue area represents actual production of
25 infill wells assuming no well interference. EnCana,

1 however, has made various statements indicating that
2 incremental production, as depicted in Figure 2-3,
3 doesn't change if acceleration effects happen to show
4 up because they've attributed it back to the Base or
5 in EnCana's words:

6 "So in that regard, maybe this is a
7 good way to kind of explain how
8 we've incorporated acceleration
9 effects kind of and taken it out of
10 the equation. We've attributed it
11 to the Base."

12 Now, I would say in normal decline work and
13 in the work presented by Martin & Brusset there's
14 no mystery about acceleration effects. They can be
15 read right from the graph, there's no attributing
16 back to the Base, nothing. It's all -- it's all very
17 clear.

18 That incremental production is reduced by
19 incorporating acceleration effects into Figure 2-3
20 has been demonstrated. EnCana's representation about
21 attributing production back to the Base appears to
22 arise because it now realizes that it no longer can
23 avoid the realities of well interference and
24 accelerated production. It has to accept them, but
25 it still won't admit that this acceptance also entails

1 lower incremental recovery.

2 The problem with EnCana's Figure 2-3 is
3 readily appreciated by looking again at EnCana's
4 Figure 4. If the numbers from Figure 4 were to be
5 depicted in an illustration like Figure 2-3,
6 incremental reserves from Figure 4 of 5.5 billion
7 cubic feet would represent the blue area. The Base
8 production from the time of 6. -- 16 well per section
9 infill would be represented by that portion of the
10 red area that lies directly under the blue area. It
11 is assumed to be unaffected by infill drilling, but
12 because of well interference actual base production
13 falls short of what it would have been in the absence
14 of infill drilling.

15 So total production can only be the sum of
16 actual base production and incremental recovery.
17 By assuming a greater base production than what is
18 actually achieved, total production is exaggerated.
19 That is why EnCana's forecast in Figure 2-3 looks so
20 odd with total production being bounded from below
21 by the existing well forecast curve.

22 The extent of the overstatement of existing
23 well forecast, assuming M&B's forecast for existing
24 well production is correct, is about 3.5 billion cubic
25 feet. Therefore, to properly reflect production

1 possibilities to take well interference into account,
2 the blue area must drop down into the red area to a
3 very significant extent.

4 I would just like to talk for a moment about
5 EnCana's -- I don't know how I'm doing for time, but
6 I have a --

7 THE CHAIRMAN: Please continue.

8 MR. BINDER: -- a little ways to go, sir.
9 I would like to talk a little bit about EnCana's
10 offset ring analysis. In support of its approach,
11 M&B points out the significant variability in ultimate
12 recovery across the reservoir and for the D6/D8 pilot
13 in comparison to the poor surrounding sections. M&B
14 points out that, unlike EnCana,
15 GLJ, who prepared Appendix H for the Great Sand Hills
16 Environmental Study, used performance analysis and
17 standard internal comparisons to evaluate the D6/D8
18 pilot.

19 M&B points out that from GLJ's plot, which
20 unfortunately I also haven't provided, but you'll have
21 to -- I can give you the reference if you'd like to
22 look it up, Exhibit 003A-009, page 80 -- 88. If you
23 looked at GLJ's plot, you'll see that the solid red
24 squares always lie above the data points
25 for the surrounding ring at all of the well densities

1 except for one anomalous outcome where it drops below,
2 you know, which appears to be an error of some sort.
3 But that GLJ study provides independent support for
4 M&B's observation that the surrounding ring is of poor
5 reservoir quality than the D6/D8 pilot. Now, this is
6 based on actual performance.

7 EnCana's position is that its knowledge of
8 the reservoir provides better information about the
9 similarity between these two reservoirs than actual
10 performance and to calculate incremental recovery
11 we really can only look to actual performance. And
12 the actual performance, based on both of these other
13 analyses, indicate that the surrounding ring is of
14 poor quality and that, therefore, EnCana has
15 overestimated incremental recovery by doing this
16 comparison approach.

17 M&B points out that if EnCana had used
18 an offset comparison within the National Wildlife Area
19 for their D14/D16 pilot evaluation, this would have
20 resulted in zero incremental recovery because the
21 ultimate recovery of the offset -- offset with no
22 infill drilling is greater than recovery for their
23 pilot with infill.

24 So there's so much variation across the
25 reservoir that if you move a few miles you can

1 actually get more recovery with the existing wells
2 than you can by infill drilling in some of the other
3 sections. So that's a, that's quite a variation in
4 recovery and I don't think that -- well, EnCana I
5 don't think was initially disputing those numbers.

6 But in response to M&B's observation, EnCana
7 produced Figure 3, which is also here. It's this
8 figure, and it appears to have produced this figure to
9 show that it could realize incremental recovery by
10 using the surrounding ring as a comparison analog for
11 the D14/D16 pilot. Initially it did an internal
12 analysis and then it wanted to show, I believe, that
13 it could get incremental recovery by doing a
14 surrounding ring analysis here as well. To arrive at
15 this result, EnCana had to revise its D14/D16 analysis
16 and stretch ultimate recovery with infill from 3.3
17 billion cubic feet to 4.4 billion cubic feet. M&B
18 points out that this significant change would be
19 questioned by a reserve auditor and
20 is not justified by the data which indicate no change.

21 EnCana apparently failed to appreciate that
22 this stretch also changed its internal comparison
23 number from about 70 million cubic feet per well to
24 143 million cubic feet per well.

25 EnCana now indicates its Figure 3 cannot be

1 used to determine incremental recovery for its D14/D16
2 pilot at least for the internal comparison. This is
3 surprising since the new internal comparison numbers
4 are included in as Table 1 and replaced the earlier
5 numbers determined from Figure 7C.

6 Now, I would like to say a few words about
7 the McDaniels analysis. In our view, the Panel should
8 attach very little or no weight to the McDaniel and
9 Associates Consultants letter. Firstly, the report
10 refers to having -- to having done work on the pilot
11 projects including the offsetting D6/D8 pilot area.
12 The fact that that's referred to as offsetting
13 indicates that -- that McDaniel has likely used the
14 same incorrect approach to evaluating that area as
15 EnCana did.

16 McDaniels' work is, therefore, subject to the
17 same criticism of overstating incremental recovery as
18 EnCana's work. If McDaniels did use the offset for
19 comparison, this indicates that even though it is an
20 independent reserve auditor, its evaluation may have
21 been very much influenced by EnCana's approach to this
22 reservoir. It is possible that it also considered
23 all production from infill wells to be incremental.
24 We simply don't know. We do know that there were
25 detailed sessions with EnCana where elements around

1 decline analysis and reservoir models were discussed.

2 Another concern arises out of the great
3 variability in ultimate recovery and incremental
4 recovery across the reservoir. Since McDaniels refers
5 to having evaluated high-density plots in the area,
6 this means they're referring to locations outside the
7 NWA since the NWA has only one internal plot. So we
8 don't have the specific information about location or
9 performance of all these pilots necessary to determine
10 how that information might apply to this particular
11 project.

12 Also, since the McDaniels evaluation is not
13 on the record and was not presented, there could be
14 no examination in regard to how it was done, what
15 assumptions were made -- excuse me -- and so forth
16 which is the whole point of these proceedings. If the
17 Project could be appropriately evaluated on the basis
18 of one-page letters from experts, there would be no
19 need for hearings.

20 In examination, Mr. Denstedt points out in
21 regard to EnCana's testimony regarding the McDaniels
22 report that this is one more piece of information
23 M&B didn't have. What is more critical here is that
24 the evaluation done by McDaniels is one more piece of
25 information the Panel doesn't have. This was pointed

1 out by Mr. Sedgwick in the following words:

2 "Now you claimed that they, they
3 were given specific information on
4 this Project and I don't understand
5 if they were why their evaluation
6 wasn't presented. All we got was a
7 letter."

8 Now, the next topic is the importance of time
9 and I don't know if I'm running a little bit late or
10 not, but I, I just have perhaps 15 minutes to go.

11 THE CHAIRMAN: It looks like you're getting
12 close to the end, Mr. Binder, so please continue.

13 MR. BINDER: Okay, thank you.

14 With these analysis, the end date for various
15 analyses plays a significant role in determination of
16 incremental recovery which can be seen in Figure 2-3A.
17 If you look at Figure 2-3A, that light blue area
18 the extent to which production could have carried on
19 in the future with existing wells in the absence of
20 infill drilling, that reflects accelerated production.
21 So the longer those existing wells could have carried
22 on producing, the smaller incremental recovery will be
23 because that light blue area has to be subtracted
24 from the dark blue area across from it to arrive at
25 incremental recovery. And that is also evident in the

1 M&B analysis where the decline results are all
2 presented.

3 In cases where we simply have a number for
4 incremental recovery such as the McDaniels analysis or
5 the GL, GLJ study, we simply don't know how end rates
6 were determined. The GLJ study doesn't include its
7 decline analysis for the D6/D8 pilot in its report,
8 but the other declines included in the report show
9 end dates only extending out usually less than 26
10 years and often less than 20 years. This will, of
11 course, produce a much higher result for incremental
12 recovery than if production with acceleration effects
13 were extended out 40 or even 60 years as in one of the
14 M&B hyperbolic forecasts.

15 So although the GLJ conclusions may be
16 reliable for some comparative purposes and general
17 insights, they can't be relied upon to determine
18 actual incremental recovery for this particular
19 plot -- pilot, at least it's not something we can have
20 confidence in.

21 This is apparent from Plot 1, from their
22 Plot 1 where it's apparent that using the actual red
23 square to calculate incremental recovery would result
24 in a significant change in incremental recovery per
25 infill well.

1 Now, some additional observations just
2 generally with regard to EnCana's evidence. EnCana
3 initially indicated that drainage area, when
4 questioned by the Panel, is an inappropriate concept
5 for unconventional reservoirs because of the
6 associated geological model and flow mechanisms. This
7 is typical of EnCana's reliance on complex information
8 that only it has access to. Now EnCana discusses the
9 reservoir in terms of drainage area.

10 EnCana initially discusses zero incremental
11 recovery for 32 well per section density in a context
12 that made it very clear it was discussing a physical
13 limitation that points out that facilities and
14 economics were considered separately and that it
15 believed its model outcome of little or no incremental
16 reserves was directionally correct. When it came to
17 appreciate that this did not fit at all well with its
18 notion of isolated trapped gas, it revised its view
19 of incremental recovery, it revised this view to
20 incremental recovery being not sufficient to cover
21 incremental environmental and economic costs.

22 Importantly, EnCana has not provided the
23 Panel with their rate versus time declines which would
24 indicate the extent of accelerated production and,
25 therefore, the extent to which their estimate of

1 incremental recovery is overstated.

2 Only Martin & Brusset has provided a
3 consistent, long-term evidence regarding the
4 production from this reservoir. This longer-term
5 analysis may not be typical but is necessary to assist
6 the Panel in arriving at its recommendations.

7 EnCana's criticism of other work is often
8 completely unfounded. Consider EnCana's criticisms of
9 my report for applying an end rate of 5,000 cubic feet
10 per well per day. The criticism leveled was that the
11 report hadn't considered the physical characteristics
12 to the reservoir and the characteristics of the
13 gathering system nor that the production rate at which
14 a field is abandoned is a function of the total rate
15 from the field so that employing abandoned rate per
16 well is not appropriate. Ironically, it now turns out
17 that the only consideration EnCana applies to its
18 pilot evaluations is an abandoned rate of 5,000 cubic
19 feet per well per day.

20 In addition to its Figures 3 and 4, EnCana
21 demonstrates its use of decline results in its Figure
22 7B. If you look at Figure 7B for a moment, that's
23 this one, even though its abandon -- abandonment rule
24 is 5,000 cubic feet per well per day, the total
25 abandonment rate for the infill case is actually lower

1 than the total abandonment rate for the pre-infill
2 case. So, you know, 5 times 16 is, is larger than
3 5 times 8, so that the, the curve to the right should
4 actually be higher than the curve to the left.

5 Also note that the end result of 118 million
6 cubic feet per well for incremental recovery is
7 obtained by very accurately reading from the
8 horizontal scale at the respective end rates. If
9 you -- you know, if you look at the horizontal axis,
10 you can read those numbers off very exactly, 6.18
11 billion cubic feet per section for the 16 well per
12 section case and 5.23 for the 8 well per section
13 offset. So this is a very accurate depiction, but it
14 doesn't incorporate EnCana's abandonment rule.

15 If the 5,000 cubic feet per day per well were
16 uniformly applied and, and I estimated this, the graph
17 would indicate incremental recovery of about 75
18 million cubic -- billion cubic feet per infill well.
19 So that's a drop of from 118 to 75 just by using
20 EnCana's, the abandonment rate that they say that
21 they've been using.

22 Acceleration project. Martin and Brusset's
23 conclusion regarding its economic evaluation of the
24 Project is as follows:

25 "Our economic analysis demonstrates

1 that even with low incremental
2 reserves, the acceleration
3 potential provides a significant
4 incentive to infill drill."

5 M&B further points out that the value of oil
6 and gas reserves are determined by discounting
7 so that the sooner a thousand cubic feet of gas is
8 likely to be produced, the more value it has to the
9 reserve.

10 The acceleration component indicates that
11 EnCana is drilling to recover some additional gas but,
12 also significantly, to simply get the gas out faster
13 to increase profitability. The true infill story may
14 be partly to avoid wasted gas, but as M&B's analysis
15 shows, it is largely a story about just getting the
16 gas out faster to increase profit.

17 There's no doubt that the tight -- there's
18 no doubt that the tight formations in this reservoir
19 provide the perfect opportunity for an acceleration
20 project.

21 As M&B points out, EnCana has not provided
22 its rate versus time projections which would show the
23 acceleration component and has instead
24 chosen to misrepresent rate versus time as a different
25 analysis technique.

1 Economics. Dr. Power makes the point that
2 it would be economic -- economically irrational to
3 risk irreversible damage to a unique and valuable area
4 like the National Wildlife Area for the incremental
5 recovery that could be gained, also, that leaving some
6 resource in the ground is not waste but, instead,
7 an example of the environmental costs being so high
8 that pursuing the natural resource doesn't cover them.

9 EnCana has arrived at a similar conclusion
10 in regard to a 32 well per section development in the
11 National Wildlife Area. It states:

12 "The incremental reserves at 32
13 well per section are too small to
14 justify the incremental
15 environmental and economic costs."

16 As the M&B report indicates, incremental
17 reserves are much smaller than what EnCana's analysis
18 forecasts. Using hyperbolic decline and given enough
19 time, incremental recovery of zero is theoretically
20 possible. Now, that may not happen, but it could be
21 very, very low.

22 The Panel must now consider whether the much
23 smaller incremental amount justifies the incremental
24 environmental and economic costs.

25 Thank you for your time and attention.

1 THE CHAIRMAN: Thank you, Mr. Binder.

2 Questions, Panel? We have no questions,
3 Mr. Binder.

4 MR. BINDER: Okay, thank you.

5 THE CHAIRMAN: So I gather that concludes
6 the final argument from the Coalition at this point?

7 MR. BINDER: Yes, it does, sir.

8 THE CHAIRMAN: Okay, thank you.

9 I'll ask -- it is getting late,
10 Mr. Lambrecht, but I did want to turn to you to see
11 what your preference might be in terms of proceeding
12 either this evening or tomorrow morning.

13 MR. LAMBRECHT: My preference would be to
14 proceed to tomorrow morning. I have prepared an
15 electronic compendium of sorts and if we could proceed
16 tomorrow morning, then -- at 8:30 I'll be ready to go
17 with that.

18 My colleague, Mr. Drummond, has tested this
19 with the JRP staff during one of the breaks here this
20 afternoon and it's just a simple matter of hooking up
21 his laptop computer to -- to the system here. This
22 will allow me then to display some documents as I go
23 through my submissions and it will assist me in going
24 at pace.

25 I have, during the course of the submissions

1 this afternoon, had an opportunity to consider some
2 of Mr. Denstedt's submissions and I would like to
3 integrate some responsiveness to those submissions
4 this evening. So it would certainly assist me in,
5 in -- to have this evening's time so that I could
6 proceed effectively and most comprehensively tomorrow.

7 I am ready to go. Notwithstanding that, I
8 haven't fully had a chance to integrate some of the
9 materials in, but I think, given the scope of the
10 material, I have not tested it, I think it would be
11 some time and we would likely be at least two or three
12 hours before I would wrap up. And I think if I could
13 have the evening, I could probably proceed more
14 quickly tomorrow and more effectively tomorrow. So I
15 would like to have the break, sir.

16 THE CHAIRMAN: Okay. Thank you,
17 Mr. Lambrecht. Well, given the fact that we will also
18 need time for response and it would be difficult to
19 imagine completing all of that this evening, so I
20 think it makes sense to adjourn at this point and we
21 will continue tomorrow morning at 8:30.

22 MR. LAMBRECHT: Thank you, sir.

23 **(PROCEEDINGS ADJOURNED AT 5:47 P.M.)**

24 **(PROCEEDINGS TO RECONVENE ON FRIDAY,**

25 **OCTOBER 31, 2008 AT 8:30 A.M.)**

REPORTER'S CERTIFICATION

1
2
3 I, Tambi Balchen, CRR, CSR No. 9166, Official
4 Realtime Reporter in the Provinces of British Columbia
5 and Alberta, Canada, do hereby certify:
6

7 That the proceedings were taken down by me in
8 shorthand at the time and place herein set forth and
9 thereafter transcribed, and the same is a true and
10 correct and complete transcript of said proceedings to
11 the best of my skill and ability.
12

13 IN WITNESS WHEREOF, I have hereunto subscribed my
14 name this 1st day of November, 2008.
15
16
17

18 _____
19 **Tambi Balchen, CRR, CSR No. 9166**
20 **Official Realtime Reporter**
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6 Transcript October 10, 2008, page 1064,

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1	Rangeland Report Communities on Express	
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16	line 6, evidence of Mr. Kansas, and	
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