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 24, 2008

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

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Dr. Jennifer Rowland, DND (former oath)

Col Chuck Lamarre, DND (former oath)

LCol Malcolm Bruce, DND (former oath)

Mr. Mike Norton, EC (former

affirmation)

Mr. Dave Instrup, EC (former oath)

Dr. Dave Duncan, EC (former oath)

Ms. Jessica Coulson, NRCan (former affirmation)

Mr. Andy Didiuk, EC (former oath)

Mr. Paul Gregoire, EC (former

affirmation)

Ms. Brenda Dale, EC (former

affirmation)

Dr. Darcy Henderson, EC (former oath)

Mr. Olaf Jensen, EC (former

affirmation)

Mr. Brent Smith, DND (former oath)

Ms. Delaney Boyd, DND (former

affirmation)

Ms. Karen Guenther, DND (former

affirmation)

Dr. Tony Hamblin, NRCan (former

affirmation)

Dr. Fons Schellekens, NRCan (former

affirmation)

Dr. Miroslav Nastev, NRCan (former

oath)

Dr. Rod Smith, NRCan (former

affirmation)

Dr. Stephen Wolfe, NRCan (former

affirmation)

Mr. Wes Richmond, DND (former oath)

Mr. Fernando Martins, DND (former oath)

(civilian)

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1 (PROCEEDINGS COMMENCED AT 8:29 A.M.) 2 THE CHAIRMAN: Good morning, Ladies and Gentlemen. Welcome back to our proceedings this morning. I would like to welcome Colonel Bruce back. 5 I, I am sure that you will have a sense that you have 6 been, been missed because I'm sure people will have questions reserved for you, for no other reason than the fact that you've been missed, obviously. So we'll 8 9 get to those in, in a few moments. But, Mr. Lambrecht, I believe you have some 10 exhibits to -- that have been tabled this evening --11 12 this morning that you wish to speak to? UNDERTAKINGS SPOKEN TO 13 14 MR. LAMBRECHT: Yes, sir. I understand these 15 are distributed to my friends and to the staff of the 16 They arise from undertakings that were 17 extended earlier in the week. 18 There was a request to produce the letters 19 respecting the well, known as the Nishimoto Well, and 20 these are 003-052, a letter of September 15th, 2005, 21 and 003-053, a letter of September 21st, 2005. 2.2 Exhibit No. 003-052: Letter from DND to 23 EnCana - Well in a wetland - September 15, 24 2005 Exhibit No. 003-053: Letter from DND to 25

1	EnCana - Removal of EnCana Gas Well in
2	wetland - September 21, 2005.
3	MR. LAMBRECHT: And then secondly, a request
4	to produce the annual reports for the CFB Suffield
5	National Wildlife Area for 2006 and 2007. And the
6	2006 annual report is 003-054 and the 2007 annual
7	report is 003-055.
8	Exhibit No. 003-054: CFB Suffield National
9	Wildlife Area - 2006 Annual Report
LO	Exhibit No. 003-055: CFB Suffield National
L1	Wildlife Area - 2007 Annual Report
L2	THE CHAIRMAN: Thank you, Mr. Lambrecht.
L3	MR. LAMBRECHT: Thank you, Mr. Chairman.
L4	MR. MILLER: Good morning, Mr. Chairman.
L5	Just to re-introduce myself to the Panel, my name is
L6	Keith Miller and I'm counsel for SIRC. As it appears
L7	that my panel may be appearing today, I'm, I'm
L8	appearing to file the curricula vitae of my witnesses
L9	and what I've done is I've combined them as one
20	document, sir.
21	I would propose to enter them as one exhibit
22	and they consist of the Curricula Vitae of Steven E.
23	Moffat, who is the president of SIRC, and Mr. Robert
24	Baron, who is the supervisor of range safety for SIRC
25	as well. And the next exhibit number for SIRC would

```
1
           be 008-003 and I've assigned that on the, on the
           document itself. Sir, if I might have that filed.
 2
      THE CHAIRMAN:
                                    Yes, that's correct.
                                                           Thank
 4
           you, sir.
 5
                    Exhibit No. 008-003: Curriculum Vitae of
 6
                    SIRC witnesses, Steven E. Moffat and Robert
                    Baron
      MR. MILLER:
 8
                                     Thank you. I'll just
 9
           distribute copies.
10
      THE CHAIRMAN:
                                     Okay.
      DEPARTMENT OF NATIONAL DEFENCE, ENVIRONMENT CANADA, AND
11
           NATURAL RESOURCES CANADA WITNESSES (ON FORMER
12
13
           OATH/AFFIRMATION):
      Dr. Jennifer Rowland, DND (former oath)
14
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      Col Chuck Lamarre, DND (former oath)
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      LCol Malcolm Bruce, DND (former oath)
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      Mr. Mike Norton, EC (former affirmation)
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      Mr. Dave Instrup, EC (former oath)
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      Dr. Dave Duncan, EC (former oath)
20
      Ms. Jessica Coulson, NRCan (former affirmation)
21
      Mr. Andy Didiuk, EC (former oath)
2.2
      Mr. Paul Gregoire, EC (former affirmation)
      Ms. Brenda Dale, EC (former affirmation)
23
24
      Dr. Darcy Henderson, EC (former oath)
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      Mr. Olaf Jensen, EC (former affirmation)
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1	Mr. Brent Smith, DND (former oath)
2	Ms. Delaney Boyd, DND (former affirmation)
3	Ms. Karen Guenther, DND (former affirmation)
4	Dr. Tony Hamblin, NRCan (former affirmation)
5	Dr. Fons Schellekens, NRCan (former affirmation)
6	Dr. Miroslav Nastev, NRCan (former oath)
7	Dr. Rod Smith, NRCan (former affirmation)
8	Dr. Stephen Wolfe, NRCan (former affirmation)
9	Mr. Wes Richmond, DND (former oath)
10	Mr. Fernando Martins, DND (former oath) (civilian)
11	THE CHAIRMAN: All right. I believe we're
12	ready to begin the cross-examination of Commander
13	Bruce and we'll begin with the Coalition, followed by
14	EnCana, then Mr. Mousseau of the Secretariat, and then
15	ourselves.
16	Ms. Klimek, please proceed.
17	UNDERTAKINGS SPOKEN TO
18	A. MR. NORTON: Sir, sorry to interrupt. I,
19	my sense is this is the appropriate time for these
20	sort of matters.
21	There was one other undertaken undertaking
22	given to Mr. Jensen yesterday in respect of three
23	citations from the literature review that he conducted
24	and if it's appropriate now, Mr. Jensen was going to
2.5	respond to that undertaking orally.

1	THE	CHAIRMAN: Yes, this is an appropriate
2		moment for that to occur. Mr. Jensen, please.
3	Α.	MR. JENSEN: Yeah, good morning. This was
4		in reference to a request from Mr. Denstedt for three
5		references with respect to our systematic review.
6		I'll just preface this by saying most of the
7		information on the systematic review can be found in
8		Exhibit No. 003C-006, which is the Environment Canada
9		reply to Information Requests, and specifically the
10		reply to EnCana No. 69.
11		The three I'll go through these documents
12		one by one briefly. The first reference was to a
13		paper by Forman, Reineking and Hersperger in 2002
14		entitled, "Road Traffic and Nearby Grassland Bird
15		Patterns in a Suburbanizing Landscape".
16		The effect we noted for that paper was
17		negative, so the effect on traffic on grassland birds
18		is negative. However, our reviewers noted that the
19		paper didn't contain our target species and contained
20		different grassland bird communities.
21		With respect to data quality, it was an
22		artificial study design. Analytical flaws interfered
23		with effect, size, interpretation. Confounding
24		factors were partially controlled. There were biased

observation methods and inadequate sampling intensity.

Therefore, the paper was not used in a meta-analysis.

It was reviewed and it was not cited except in our

Excel sheet summary of all of our citations.

2.2

The second paper is a paper by Miller, Knight and Miller in 1998 entitled, "Influence of Recreational Trails on Breeding Bird Communities". We noted the effect of trails on the abundance of birds to be negative.

Our reviewers indicated this was a good paper with a realistic study design. The analytical methods were robust. The confounding factors were controlled experimentally; unbiased observation methods and adequate sampling intensity. So this paper was used in our meta-analysis and cited in the, in the Government of Canada submission.

. The last paper is a paper by Ingelfinger and Anderson in 2004 entitled, "Passerine Response to Roads Associated With Natural Gas Extraction in a Sagebrush Steppe Habitat".

So this paper noted that the effect of shallow gas on grassland birds was negative. It's not included in the meta, meta-analysis. It did not specifically address any of the grassland birds in our project, but addressed some con specifics or similar species.

1 As I said, it was cited. It was not used in 2 the meta-analysis and was used as a supplemental I believe one important note is from the abstract to the paper, and I'll, I'll cite it here, 5 and I quote (as read): "While a 39 to 60 percent reduction 6 in [grassland] ... obligates within 100 metres of a single road may not 8 9 be biologically significant, the 10 density of roads created during 11 natural gas development and 12 extraction compounds the effect, 13 and the area of impact can be 14 substantial. Traffic volume alone 15 may not sufficiently explain 16 observed declines adjacent to 17 roads, and sagebrush obligates may 18 also be responding to edge effects, 19 habitat fragmentation, and 20 increases in other passerine 21 species along road corridors. 2.2 Therefore, declines may persist 23 after traffic associated with 24 extraction subsides and perhaps 25 until roads are fully reclaimed."

1 End quote. Now, one final note is that the 2 reference to being "biologically significant" is, is important. We had, in our meta-analysis, come up with 4 a final number showing the associated decreases in 5 abundance of grassland birds in proximity to trails 6 associated with shallow gas development. And we again modelled that across the entire landscape showing potentially a reduction in 25 percent of abundance of 8 9 grassland birds in shallow gas infill projects. 10 Thank you. THE CHAIRMAN: 11 Thank you, Mr. Jensen. 12 Mr. Denstedt? 13 MR. DENSTEDT: I have a couple of questions 14 arising out of that response. 15 THE CHAIRMAN: Please proceed. 16 CROSS-EXAMINATION BY ENCANA ON THE PRODUCED UNDERTAKING 17 MATERIAL, EXHIBIT 003C-006, BY MR. DENSTEDT: 18 MR. DENSTEDT: 19 So, Mr. Jensen, in the last paper, would that have Q. 20 been included in your score card as a negative paper? 21 That's correct. Α. 2.2 All right. And in respect of the Ingelfinger paper, Ο. the low traffic volumes there were 700 to 710 23 24 vehicles per day? 25 Α. Yeah, and that's a mistake in the abstract. It should

1	read 7 to 10 vehicles per day.
2	Q. Okay. And in the in that paper, in respect of
3	Highway 351, a paved road, the average there was
4	344 vehicles per day and Ingelfinger indicated that
5	there no significant decline was detected in
6	respect of Highway 351. Isn't that correct?
7	A. I believe that's correct.
8	MR. DENSTEDT: Thank you.
9	THE CHAIRMAN: Thank you, Mr. Denstedt.
10	That completes the undertakings, I, I understand.
11	Then, Ms. Klimek, please continue or begin
12	your cross-examination this morning.
13	CROSS-EXAMINATION BY THE COALITION, BY MS. KLIMEK
14	(CONTINUED):
15	MS. KLIMEK: Good morning, Mr. Chair,
16	Panel Members. Good morning, EnCana (sic) Panel. It
17	seems it wasn't that long we saw you all.
18	Now, I'm going to start with a few questions
19	for you, Mr. Didiuk, out of the materials that you had
20	produced, and where we had left, where you and I had
21	left off in our discussion last time when we were up.
22	Now, I promise to be slow today.
23	Now I heard someone say "but not too slow"
23 24	Now I heard someone say "but not too slow" back here.

1 yes. 2 MS. KLIMEK: No one is anxious to be on their way, I can tell. Ο. Now, Mr. Didiuk, when we had to stop our questioning 5 to allow for the information to be provided, you were 6 explaining what you had found with snakes and traffic mortality and I'm wondering if you can do a brief 7 overview of that because I have some questions, and 8 9 that seems like a year ago that we talked about that. 10 So could you just give us a brief overview of 11 what you were talking about when we had to stop? MR. DIDIUK: 12 We were engaged in my Α. Yes. description of some of the information we had 13 14 pertaining to four main areas of the proposed 15 mitigation measures of, of EnCana in their EPP and 16 that, at the time, we were engaged in discussing the 17 -- what -- Environment Canada's consideration of 18 efficiency of the proposed speed limits and the

Q. Now, what did you, in close notes version, find through that series of work that you did on slowing down speed limits and what the effect was on snake mortality and your conclusions on that?

factors that have to be considered as far as trying to

inform the Panel of how these proposed -- how speed

limits cannot be a very effective mitigation measure.

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1 Α. The close note version is that consistently, even a 2 person who is focused on trying to detect snakes on this pilot study, consistently, almost entirely, was able to safely stop their survey vehicle approximately 5 35 metres beyond the position of the snake. 6 I emphasize safely. I emphasize the fact that it's a person who is trying to see snakes and it's also a circumstance that it's related to the, the 8 factors of allowing a driver to see a snake and this 9 10 is related to the fact that they're cryptic. There's all kinds of other things on the road 11 12 that interfere with you seeing a snake and various 13 factors such as that. So it's very difficult for 14 someone who is trying to see a snake to actually stop. 15 Ο. Now, if we could turn to your -- one of the documents 16 you produced, 003-051 and at page 47 I think you set 17 out some of your conclusions on this. Do you have 18 that in front of you? 19 Yes, I do. Α. 20 And your finding, I believe -- and I'm -- this is Q. 21 leading into some questions (as read): 2.2 "Development of shallow gas fields 23 which began in 1999 greatly 24 increased traffic. This high

traffic is expected to continue and

1 the increased density of well access trails will result in 2 increased traffic over the long-term for maintenance." 5 And I guess, in light of that, and what you've 6 seen, what would you expect would happen with snakes as a result of that? What would be your prognosis? I can address that with two considerations. One would 8 require me to indicate to the Panel -- address some of 9 10 the EnCana's suppositions that there are few snakes 11 killed right now. There are lots of snakes and so 12 it's not a problem. 13 These are what I consider to be subjective 14 opinions that are in the October 7th transcripts. 15 can provide a page reference; I believe it's page 761. 16 However, Environment Canada, in my 17 experience, I believe I can bring to play, to -- into 18 play some information and actual data to show that 19 this is not the case. Environment Canada has indicated that there's 20 21 a very large volume of scientific information and 2.2 publications that indicate that some species, 23 particularly ones such as the Prairie Rattlesnake, in 24 fact, can only withstand -- perhaps you can use that

term -- a very small loss, particularly of

2.2

reproductive aged females. Environment Canada's submission has referred to an excellent study, and of a similar species in Ontario, the Black Rat Snake, suggesting that only one point -- 1.5 percent of adult female mortality due to road mortality is enough to precipitate long-term declines.

Having this demographic limitation of, of rattlesnakes, what I would like to make very clear is that even though there may appear to be a small number of snakes -- and I'll return to that in a moment -- when they -- for example, in EnCana's 2006 Road Survey Monitoring Program, and there may appear to be a lot of snakes, as EnCana has presented, that is not necessarily the case.

When we look at -- there's actually a smaller number of important reproductive adult females, part of the effective population size, and the number of snakes we see on the road has to be modified by several factors to actually come up with a more appropriate estimate of how many are, are actually being killed.

I can provide some -- a quick walk through if the Panel should decide to look at these three numbers, because what we need to, to do to come up with potential effects is look at three numbers:

1 How many snakes are there? 2 How many snakes have to be killed to start populations declines? And how many snakes are actually being 5 killed? I think that would be helpful. 6 Q. Α. I'll try and do the close-note version again but I 7 think it's quite possible. One moment. 8 9 I, I want to emphasize that I'm using an 10 excellent study as a model for us, to walk us through 11 very quickly, and some information we have, both from our Environment Canada submission and from EnCana's 12 own snake monitoring program. However, I would like 13 to emphasize that there should -- there is an 14 15 opportunity to do more robust modelling in this 16 regard. 17 The Government of Canada indicated that -- to 18 the Panel that this was a deficiency when we reviewed 19 the, the EIS and, and this was the EIS -- EnCana 20 remained silent in this respect. But I think this 21 process I'll take you through right now can 2.2 demonstrate the important facts that I've been 23 alluding to. 24 First of all, we'll just confine ourselves to 25 the -- a portion of the Wildlife Area that's south of

2.2

interface to the south boundary of the, of the, of the National Wildlife Area because this is where we have quite a bit of information that's needed to go through this exercise.

We'll also confine ourselves to reproductive age females because, as I've mentioned, these are the most susceptible proportion -- component as far as population decline, keeping in mind that other age/sex classes, males, and other snakes, also have been killed and contribute to the, the population maintenance or decline.

In Appendix G of our -- Environment Canada's submission, we provided regression curves of capture frequencies on all our trip fences (phonetic) that we intercept snakes, intercept snakes moving from the river. I won't go through all the factors but what we can do, what anyone can do perhaps -- I've used -- heard the term a "practitioner" in our hearings, of a herpetologist practitioner in this field, would do several things.

We'd use these intercept values in terms of how many snakes we -- are captured near the river, originating from the river. We multiply by the number of traps we've set up and what percentage we're intercepting along that front of movement. We adjust

accordingly for several factors. I've tried to be conservative in this exercise as far as some -- some snakes may go around these inter -- these fences.

2.2

We've done studies to show that hardly any go over and we would adjust for the number of adult females because a proportion, their bi-annual breeding or tri-annual breeding, we introduce a factor that account for how many snakes aren't being intercepted.

So the number I come up with is -- in this area I've described south of interface, I feel there's an effective breeding population estimate for reproductive females of 575 adult females.

Now, I've tried to be conservative in this estimate. I'm comfortable with it based -- using some information over the years. We've had very large long 500 metre, 1 kilometre long fences along the river. We've studied several hibernacula, complete counts, and we've evaluated potential on the river. So I'm comfortable with this number as -- for a demonstration exercise. So let's move on to the second number.

How many snakes have to be killed to precipitate a decline? From this study on Black Rat snakes, that's referenced, Blouin-Demers and Weatherhead, it's also -- it's an excellent study over ten years of studying the population demographics and,

most importantly, several years of monitoring rattle -- black snakes with radio telemetry to look at their mortality including on roads.

2.2

They've indicated 1.5 to 2 percent of these females have to die to start declines and this exercise will be conservative, let's say 4 percent. I think the rattlesnake is more vulnerable but I'll use a 4 percent mortality rate.

So, using that, that value, I think we're looking at approximately -- let me just check because I want to get this -- we have 570 female rattlesnakes but only 23 of these very important snakes have to be killed to initiate a decline. I'm not talking about a precipitous decline, but a long-term decline.

So now we can move on to the third number. How many snakes are actually being killed? We've heard testimony from EnCana that there's a small number of snakes. This is something we've struggled with through our cooperative efforts but I can try and quickly walk you -- I'm trying to do the close-note version. I'm almost done.

- Q. This is important, so don't be worried about --
- A. Yeah. Well, this has been a central issue we've been cooperatively, cooperatively trying to deal with over the years.

2.2

EnCana's 2006 snake monitoring program detected nine female -- nine dead rattlesnakes on Bingville and interface. The TERA report that described this is not particularly clear, in many respects, but to our -- based on our information on snake dispersal, we know that very few juvenile rattlesnakes get this far and that's presented in our Appendix G. So we can assume these are adult rattlesnakes.

Now, we know that the sex ratio is similar; they're approximately equal from our studies, and it's typical. We know that female rattlesnakes, based on information in Appendix G tend to go a little bit less far. It's the males that are trying to find them.

They tend to go a little farther. So let's see how -- these nine rattlesnakes that were found, let's say, four of them are female, adult females.

So then we have to look at what the study was doing. They were -- there was focus -- the surveys were focused on the vicinity of Bingville and, and the interface at the end. We know from our other many years of study and we know that concurrently there's operational activities going on through that, that whole area south of interface.

We can expect that other snakes are being

2.2

killed that were not detected by that survey effort.

So let's be conservative and let's say half as much again. Another couple of female rattlesnakes were killed. So now we're up to six. Then we have to look at how many aren't detected.

When a snake is hit by a vehicle, it doesn't necessarily stay there. On pavement that quite often happens, a resisting surface. On these gravel roads, they may be hit in the lower portion of the body, pinched. The study on Black Rat Snakes indicated that for every snake found on the road two were found off the road.

I don't think that's the case. I think it was rather a small -- because there was some limitations on their sample size so let's be conservative and say for every snake found on the road, one is found off. So now we have to double that number. So now we're at 12 female rattlesnakes.

And then, the final factor to try to adjust, to get an approximation of how many were killed on roads is this study was conducted in the months of May and June, two months, during the movement period of snakes. We can expect that additional snakes were killed in the months of July and August which, at that Bingville area in particular, but we're talking about

the whole area, and in -- and September it's a

5.5 month dispersal period so let's be conservative
again and let's just double.

2.2

So right now, at this point, we're at 24 dead rattlesnakes on the roads. We're not talking about any interactions and caissons, entrapment by caissons and other -- let's just be conservative. I'm trying to make the best case for, I guess, EnCana.

We predicted that based on this excellent model example and reasonable estimate of population size, that we're at that threshold and this is a concerted effort.

Now, I want to emphasize to the Panel that

I've gone through this modelling exercise and we can

-- and I'd be happy to do it with -- because we could

say, well, was it 5 or 9 here, is it 570, 600, I'm

trying to indicate two things here, that these are

reasonable approximations of these three more

variables and I'm also trying to demonstrate that

perceptions of number of snakes on the road are a

great underestimate of what you see.

So, in my opinion, and this is supported by a large volume in the scientific literature, that the EIS is silent upon is that this is a -- in the profession of herpetology conservation, road mortality

1 habitat loss is the biggest issue. So, in my 2 judgment, at the current time and level and at some time in the past, road mortality as an additive mortality factor is very likely promoting long-term 5 declines. 6 And I can provide that -- put that for the Panel and what I've described is a process. Panel wishes, I can very briefly, hopefully, a better 8 9 close version, put that in a context of what the Panel 10 is seeking, is this impact -- how do I interpret this 11 as a significant and adverse impact. 12 THE CHAIRMAN: Thank you for that summary, Mr. Didiuk. 13 14 MS. KLIMEK: 15 Now, Mr. Didiuk, on the same page, we go down to 16 mitigation and what you said here is (as read): "The most effective means of 17 18 mitigating mortality of snakes due 19 to traffic is through diversion of 20 use the from the areas where snakes 21 are concentrated or travelling." 2.2 Α. Yes. 23 Now, does that mean -- diversion, do you mean not Ο. 24 having them go through that area? 25 Α. I can clarify for you that -- that for you and, and

2.2

I'll refer to perhaps a comment of my colleague,
Ms. Brenda Dale, yesterday when she says, "If there's
one thing I wish, I would not use that particular
term". I think under examination from Mr. Mousseau
yesterday regarding these proposed exclusion zones,
that term sounds a little severe in terms of no
activity.

I would prefer you to consider the term,

"We're looking at restriction zones." In our

Environment Canada submission we're suggesting that a

meaningful reduction in the activity relating to well

visits and other associated activity is what we're

seeking for in these spatial temporal zones.

The history of our cooperative studies with DND, SIRC and EnCana in the early part of this decade, a lot of effort was, was addressing what we consider to be possible mitigation efforts, the speed limits and what -- and public education programs.

Our conclusion was that these could not be effective for a variety of reasons I could discuss. But we -- what was, was needed was not drastic but effective redirection of the bulk of traffic and the initial step that EnCana and SIRC and DND and Canadian Wildlife Service and PFRA collectively decided was to make an initial step, and I stress initial, is to --

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is the point of entry considerations, Bingville entry away from the river, versus South Buffalo. And this was good and this was allotted by the herpetological conservation community when this was presented at conferences. This was a step forward.

But it was always an understanding, and I think it's based on what we all know as common sense, is that although we changed the point of entry farther away from the river to reduce the risk, and we demonstrated that in this 2003 report, the true challenge seems to be what happens to that traffic distribution after it enters Bingville because we all know that eventually they're going to have to go and do their business.

And so what Environment Canada has presented in its -- this 2003 report, which was provided to EnCana, that we stressed it provided the, the data and it also stated -- and bear with me for one moment. I think it's -- I can't find the exact page but we made a statement saying, this is a possible, a possible effective means of mitigation.

And the last comment I'll make in this regard is that in our written Environment Canada submission and in our submission a couple of days ago, we have proposed this, proposed this as a possible mitigation

measure. I can't make a determination if EnCana will be able to even use this, to make it effectively -- and I'll give you three reasons why that is.

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At the time we were formulating this recommendation we were at a certain level of wells per per, per section and level of activity. Can EnCana actually redirect traffic for visits outside these zones in the winter, what have you, effectively to reach a level that I think, since we know that -- we believe that additive mortality was causing population declines at the -- around the 2000 year, the year 2000 and likely, even on our earlier studies back in the early '90s, I don't know. They have to go through that exercise.

This exercise would also have to be tempered by -- because what we're looking at --we've heard about traffic and what is needed is we've -- a network analysis of traffic, where is it occurring and, you know, if this is a process, would have to be tempered by other environmental restraints and one in particular is that if EnCana can effectively direct this traffic outside these periods in the summer, does that create a problem, let's say, with antelope considerations?

So it's an exercise that has to be done. I'm

1		not sure if it's possible, but I feel in view of the
2		ineffectiveness of traffic limits and education
3		programs this is the only possible possibility at
4		this time.
5	Q.	Thank you, Mr. Didiuk. Now I would like to turn to
6		the two letters that were produced which are 003-052
7		and 003-053 and I'll start with the first one which
8		is September 15th.
9		And as I take it, this was these last two
10		letters were the ones that were effective in getting
11		the well out of the Nishimoto wetland. Is that
12		correct?
13	Α.	MR. MARTINS: Fernando Martins. Yes.
14	Q.	And what I one of the reasons I asked for this
15		letter was what was the "or else"? And I think that
16		was on the 003-052, the last paragraph. I'll read it
17		to you and then I'll ask you, Mr. Martins:
18		"The issue has been ongoing for too
19		long and not in the spirit of
20		cooperation. The well at grid
21		279901/LSD [and then the legal] is
22		to be removed by October 1st, 2005
23		or I will close all EnCana access
24		to the CFB Suffield except for
25		maintenance purposes."

1		Now, I take it that was what the Base was
2		prepared to do if the well was not removed; is that
3		correct?
4	Α.	Yes.
5	Q.	Now, going to the next letter which is 003-523 (sic)
6		[053], again, I take it this was in response there
7		was something done in response to the previous letter
8		and this is the response of the Base to that
9		response?
10	Α.	That is my understanding, yes.
11	Q.	Okay. Now, I have a few questions about this and I'm
12		going to paragraph 1:
13		"References to (a) and (j) above,
14		[and there's a whole list of
15		things] detail a litany of
16		exchanges between SIRC and CFB
17		Suffield regarding the subject
18		well."
19		And then it says:
20		"To summarize, the well is in a
21		wetland. SIRC supervisor range
22		safety was directed to have the
23		subject well removed on September
24		10th, 2004."
25		And ten months and three, four more written

1 directives later the well remains. I'm just going to 2 read a bit of the next paragraph and then I have some questions. Reference 1 is the last of the formal written directives -- reference I, and that was the 5 previous letter that we just discussed. Reference J 6 is (as read): "Present SIRC's counter-proposal to discuss yet again this issue. 8 9 counter-proposal reflects SIRC's 10 strategy of deny, delay, deter and 11 deflect, an approach of doing business in the CFB Suffield 12 13 training area that will no longer be tolerated." 14 15 Now, my question is why is SIRC the party that 16 you're dealing with on this well? Is it not EnCana's 17 well? 18 Α. LCOL BRUCE: First of all, Mr. Chairman 19 and distinguished Panel Members, thank you for 20 accommodating my absence for the last two days. 21 -- I did miss it. I do want to, I do want to ask --2.2 or answer this question. I think it's important. 23 As you know, SIRC was established under the 24 1999 Partial Assignment Agreement at which time over, 25 over the course of several years it was decided that

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in order to provide one focus point or funnel point for all our discussions with industry -- as you can appreciate, there are more than one company operating on the CF Suffield Block.

EnCana is by far the largest but not the only one and SIRC provided that, that sort of entry into industry and as well was used as a funnel from industry into the Base and that's, and that's, generally speaking, why it was being sent through SIRC at that particular time.

I will note, though, that based on these letters and a couple of other issues that occurred, by the time of my arrival in 2007 my predecessor had decided to go directly to the companies rather than dealing with SIRC because he found that he was no longer able to effectively communicate with industry.

I will say that over the past year, again, I have gone back to using SIRC primarily as my funnel point, mainly on the bequest of all the oil and gas companies on the Block as they were finding it quite challenging to keep up with the correspondence at times between myself and industry and therefore we continue now to use SIRC as a funnel point but reserve the right, as we always do, to communicate directly to individual companies as needed.

Q. So looking back at these letters then, when you would give a request to the company to do something, then it would be SIRC who would respond with the company's position, or was it SIRC's, or how did, I guess, that work historically?

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A. Again, a very interesting question. I think that in many cases some of this was personality driven. I will say there has been management changes in SIRC over the course of the last couple of years and therefore the personalities within the organization are somewhat different.

The individual or individuals that were involved with SIRC at the time, I believe, felt -- and I'm not speaking for my predecessor because I, I don't purport to do so. However, they believed they had much more authority than they actually had. They are there to assist and, and to resolve issues, but they are not there to speak on the behalf of other operators necessarily.

Q. Now, Colonel Bruce, it's our turn to ask you some questions generally and some of these have come out of answers that we received when you -- in your absence and you'll be pleased to know many of the people said "talk to the Colonel about that", so I guess the buck stops there.

1 Now, what I would like to talk about -- and 2 the majority of my questions to you are to deal with enforcement and understanding when things go wrong. So for the next little bit -- and we have to look historically and I know you may have been there for 5 6 some, but the purpose of that is how are you going to be dealing with things in the future? Are they 7 changing? So that's the framework with, within which 8 9 I'm going to be asking the next questions, okay? 10 Now, I guess before you can enforce you have to find out if things are going well or not well. 11 Now, what methods does the Base have to determine 12 whether companies are complying with their permits, 13 14 the laws, what they're supposed to be doing? 15 Compliance has always been a significant issue on the 16 As you can appreciate with 10,500 wells plus Base. 17 the ancillary infrastructure, 300 plus vehicles a day 18 on average entering and exiting from industry, as well 19 as a limited organization in terms of my range control 20 and my Range Sustainability Section, compliance is 21 mainly done on a, on a spot-check basis rather than a 2.2 complete audit, if you will, or, or check. I have instituted a number of, of initiatives 23

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what is going on out on the Base. And as I have also previously mentioned that up until this last year it was easier for an oil and gas worker to get on my Base than it was for one of my own employees, which I found completely unacceptable.

To that end we've done a couple of things. First of all, I've issued an amplification letter to SIRC earlier this year to basically provide direction on the things that I want them to accomplish on my behalf, primarily ensuring that all the necessary authorities for when a -- an individual from industry must have before they are allowed to cross the gate, so to speak, to enter into the Range and Training Area.

And those authorities range from a safety briefing to ensuring they know where they're going to go and what they are going to do and what routes they are entitled to have.

It also ensures that the vehicles are -- meet all the necessary standards and simple things like no alcohol on the range, make sure that everybody has their driver's licence and little things and insurance for vehicles.

Once those authorities have been verified by SIRC, and I also have a point that, that I will be

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able to insert myself in that process to do a random audit on those, then they must cross the gate at which time all those authorities are again certified to be true and accurate.

Once they're within the training area themselves, as we do with any user, they run their own range safety net to coordinate the activities on oil and gas, vehicles, but are connected to the larger range control safety net. So, if you will, it's a subnet within a net.

It's a -- it's obviously done through radio communications and they also monitor, SIRC does, with their own, if you will, little command post that keeps track via radio of where their folks are. It is not GPS tracked so it's based on trust and it's also based on the assumption that everybody knows where they're supposed to be going.

Once they're inside the Block, there are several means of monitoring compliance. The first one is with the range sustainability section, as I mentioned. There are monitors that I have that will go out and spot check to ensure compliance and that includes within the National Wildlife Area in terms of ensuring people are adhering to the conditions of the, of the NWA permit that they had received.

And then, finally, I do have other entities
just normal patrols, for example, when I'm out and
about touring around I will check and -- to see what
people are about, as well as the Military Police who
will be out monitoring activities that go on.

- Q. Now, this process --
- 7 A. MR. MARTINS: Excuse, me, sorry, 8 Fernando Martins.
- 9 Q. Sorry.

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A. I would like to just add to Colonel Bruce's comments.

When range control and range sustainability section
have been expanded, et cetera, there has been or there
is no attempt to regulate any activities that are
currently regulated by another regulator that is
enforcing their, their laws or regulations upon the
land.

As an example, ERCB has a mandate, and it is ERCB that enforces those rules and laws upon the oil and gas industry at CFB Suffield, whereas the landowner conditions of access, et cetera, those are in Range Standing Orders and those are the types of things that range control would help enforce, et cetera, just as an addendum to Colonel Bruce's comments.

Q. Okay. Now, when we were discussing with Ms. Boyd some

of the incidents, and she referred us to Exhibit 1 2 003-019, and we don't need to go there, but there appeared to be none listed there for 2007 and 2008, 4 yet she said there were some incidents that occurred 5 and they were in the presentation. 6 So if we could go to your presentation at tab 7 -- or page 35 -- no, it's the next page. think these are what she was referring to, the top 8 9 pictures. Now --10 Α. MS. BOYD: Sorry, excuse me. I'11, I'11 just clarify that very specifically the one I'm 11 12 referring to is in the lower left-hand corner only. Oh, okay. So I would like to know a little bit about 13 Ο. 14 this incident and, Colonel Bruce, are you aware of 15 this one or what we're referring to here? 16 Α. LCOL BRUCE: Just one moment, please. 17 With regards to the reporting of that particular 18 incident to me, I cannot confirm that in fact 19 occurred, but to explain the incident itself, I, I 20 think it would be important for Delaney to just walk 21 through what happened. 2.2 Ο. Okay. Essentially, this was an 23 MS. BOYD: Α. 24 incident that was noted when we were out on the range 25 and we discussed it with a representative from EnCana,

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Mr. Heese, and he explained to us what happened. And it was a routine maintenance situation whereby I believe, if my memory is correct, I believe it might have been a swabbing truck, but if it wasn't that it was essentially a routine maintenance vehicle that was accessing the NWA to reach an area, and in this case you can see it was fairly sandy soils and it was dry conditions.

They attempted to use what I understood to be an existing access. However, the vehicle became stuck and they tried to access through other access route into the area and essentially created more than one disturbance, as this photo does demonstrate.

This was discussed with us. EnCana came to us and indicated that it, it -- what the details were of the occurrence and we did report this up our chain of command and discussed it within DND on the Base to determine the way forward.

Essentially, it was -- we provided to EnCana the ability to, to fix this. They wanted to rectify it, and essentially my understanding is that a very simple procedure was applied to the ground whereby the, the area was raked back into place, recontoured slightly, essentially with people, not machines, and natural recovery is, is going to be used here to

reclaim this area.

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This was one of the situations where we had a case -- this is a case-by-case type situation when we're talking about remediation and reclamation and correcting of disturbances in the National Wildlife Area because we do not yet, as I mentioned in previous testimony, have an established set of permit conditions and environmental assessments in place to deal with ground disturbance and associated reclamation of those disturbances in the NWA.

This incident essentially represents a one-off situation. However, the question does arise how often does this occur, especially given the fact that the only reason we found it was an opportunistic find. It wasn't a systematic survey on our part and there could be other incidents like this and how are they being dealt with? So there are definitely uncertainties.

A. LCOL BRUCE: I would like to just follow up on, on the whole issue of the NWA and permitting to allow activity in the NWA. As we have highlighted on, on our opening presentation that in order to do activity within a Wildlife Area you would need a permit for industrial type activities.

As you can appreciate, there's already 1100

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wells in the NWA that need servicing. We have had challenges over the last three years attempting to get EnCana to accept the need for permitting. This has been resolved over the last couple of months where they have now accepted the need for permit for routine operations, what we call it, so maintenance, basic maintenance of the wells, as I've previously mentioned in earlier testimony.

There are five areas that still need resolution, which I understand has been discussed in some detail in previous testimony, but we're working towards resolving this.

But I think it's important to note that it took a letter, a formal letter, to EnCana basically saying, accept this permit. We were trying to give it to them, accept this permit for routine operations or, if you do not, then I have no option but to hand it over to enforcement -- correction, Environment Canada enforcement and it took a formal letter to get that process kick-started. Where we now have resolution, for the most part, on this particular aspect.

When it comes to the actual monitoring and compliance, now that we have the permit in place and we are still working, as I said, through some of the issues, I think it's very important to note that until

we can sit down with the interested parties and come
up with how we are going to tackle some of these
issues, whether it be an additional disturbance,
whether it be remediation, it, it proves to be on a
case-by-case basis until I have that more formally

So incidents like this that occur we will deal with as a one-off; however, we are in the process of trying to establish a more formal identified system that will allow us to proceed.

- Q. Just a few follow-up questions from that. Did EnCana have a permit to go out and do this work that led to this incident?
- A. We're not sure, given we're not sure when the date of this particular incident, but I can, I can take an undertaking to find it for you.
- 17 Q. Could we have that, please?

established.

18 A. Thank you.

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- Q. And my next question was and maybe that will answer it, is when did it occur and is there some -- and where? Is it close to -- if you could give us that information.
- 23 A. Yeah, we'll take that on, thanks.
- Q. Now, one other question, when you said it was an opportunistic find, I take that it was the Base who

found this incident? Am I understanding that 1 2 correctly? Α. MS. BOYD: Actually, what it was, was 4 actually Mr. Olaf Jensen was conducting surveys for 5 the Gold-edged Gem, an endangered species on the Base, 6 and he found the site in a sandy soiled area of the southern NWA near Dugway Trail and certainly Mr. Jensen could provide additional details, if 8 9 necessary. That might -- well, I guess my one guestion was then 10 Ο. 11 EnCana did not report to you that they had a problem 12 out there. It was found by the Base. Am I correct? That's correct. The chain of events is that 13 Mr. Jensen reported this to -- I believe it was 14 15 actually to Ms. Guenther on, I'm told, August 10th and 16 it was then reported to me for NWA related purposes 17 and then we reported that up our chain of command. 18 We contacted Mr. Heese to determine what the 19 situation was and what was happening here and further

discussions precipitated from there.

And did Mr. Heese tell you when this event actually Q. occurred?

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We would have to determine that through e-mail Α. correspondence. He very well may have and that is a detail I'm sure that is possible to determine if

1	necessary.
2	Q. I think it might be helpful to the Panel to see the
3	correspondence that went back and forth around that
4	incident. Would it be able to be produced?
5	MR. LAMBRECHT: Mr. Chairman, I'm just
6	concerned about closure here. We're now on
7	examination on an undertaking with the request for
8	more undertakings. I don't know how long it will take
9	to get this information, but I am very concerned that
10	it will prolong and I don't want to object. I do wish
11	to express a concern because I don't know how long
12	this will take.
13	THE CHAIRMAN: Thank you, Mr. Lambrecht. I
14	must admit I do share that concern at this point and
15	ask whether this information is absolutely essential.
16	MS. KLIMEK: Well, I leave it to the
17	Panel, but it is a recent event on the NWA and I think
18	it's germane to how things are dealt with and handled.
19	I don't think we need to cross-examine on it. I think
20	it's something they can give you before argument.
21	Just so you have it to review.
22	THE CHAIRMAN: Ms. Klimek, I think we have a
23	fairly good understanding of the situation at this
24	stage
25	MS. KLIMEK: Okay.

1 THE CHAIRMAN: -- without asking for the 2 details of the correspondence. That's fine then. MS. KLIMEK: 4 Ο. I have one last question, and maybe this goes to 5 Mr. Jensen, that you found it while you were surveying what I believe were species at risk. 6 Was this found near an area where there were species at risk or ...? 8 No, it's within a kilometre 9 MR. JENSEN: Α. 10 or so of the Dugway Dunes which is an area known now to, to contain Gold-edged Gem. 11 12 Now, I would now like to turn to the annual reports, Ο. 003-055 and 003-054 and this will lead into my last 13 14 questions on enforcement. 15 Now, these are produced, I guess, annually by 16 their nature. They're called an annual report. 17 that correct? 18 Α. COL LAMARRE: Ms. Klimek, can, can we just 19 wait one second. We're getting the copies brought up 20 to this end. 21 Oh, that will be fine. Q. 2.2 LCOL BRUCE: But yes, that is correct. Α. 23 They are produced annually. 24 And I'm going to start with the first one which is Ο. 26 February, 07. Now, are these an internal 25

1 document?

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A. MS. BOYD:

I can provide some clarity on that situation. This is a report that is produced each year that was mandated through the delegation process within DND. It was determined that higher levels of DND wish to receive clarity and oversight and visibility on what was happening within the National Wildlife Area. So this is a report that is produced by the Base, on the Base, and then sent up the chain of command as an information piece.

I believe that the intention is also, though, that it is distributed at some point in the chain of command across to Canadian Wildlife Service

Environment Canada.

Q. Now, I had -- and this might -- your counsel will advise if you're the correct party to answer this, but when we got the one that would have been released through Access to Information and the one we got here is significantly different.

As you can see there's huge portions redacted and when you look at the ones that are redacted, it deals with infractions and what is occurring on the NWA. And I guess what I would like to -- and ask for my client's perspective: when the public asks for information on the NWA and information like that is

1 redacted, how is the -- I mean, is the public ever 2 going to be able to access what's going on out there and being a check on whether things are being handled 4 properly? 5 Now, I'll let Mr. Lambrecht intercede whether 6 this is a proper question for you or someone else. 7 THE CHAIRMAN: Mr. Lambrecht? MR. LAMBRECHT: Well, there are two points to 8 9 First, the general process of be aware of. 10 application for Government information under the Access to Information Act and the Privacy Act and 11 12 then, second, the production of Government information in a legal proceeding such as this one. 13 14 With respect to the first process, when 15 citizens make Access to Information requests of the 16 Government of Canada, there's a process that these go 17 through and the law provides for the documents to be 18 reviewed and for the exemptions to production 19 specified by Parliament in the Access to Information 20 Act and the Privacy Act to be identified and for the 21 documents to be produced subject to those exemptions. 2.2 I think my friend has called them redactions and 23 there's an appeal process for review of that. 24 So, there is, there is a process that exists, 25 set up by Parliament for the production of that

I think the short answer to my friend's 1 material. 2 question is that she is free to pursue her internal remedies on this issue and that what -- what has occurred here is that a legal proceeding has come 5 about and the same information that had been requested 6 in the, in the Access to Information Act was requested in a legal proceeding. Now, Section 8 of the Privacy Act provides 8 9 that in legal proceedings or information that is 10 requested is producible. It is not subject to the 11 same exemptions that would operate in respect of a 12 normal application for information under the Access to Information Act and the Privacy Act. 13 14 So, as a result of that, we have produced, as 15 I mentioned a couple days ago, we produced the 16 unredacted copies to this Tribal. This is in the 17 normal course of things. I think my friend's concern 18 is one for submissions and really not one for the 19 evidence of this Panel. 20 So that's my submission to you, sir, on that 21 matter. 2.2 THE CHAIRMAN: Thank you, Mr. Lambrecht. 23 Maybe if I could just clarify my understanding. 24 think what you're saying is that this information is 25 available, but there is a due process that has to be

1 followed in order to get it and that is the Access to Information Act and the consequent Privacy Act which 2 has to be taken into account as well. MR. LAMBRECHT: Yes, sir. I mean, there are many avenues by which Government information is 5 This is -- this proceeding is a good 6 produced. illustration. One of them is the Access to Information Act and it operates exactly as you've 8 9 mentioned and it was not yet completed when this 10 proceeding, which is another means of accessing Government information, was mature. 11 12 But there are many other ways. 13 difficult to be comprehensive about it. Litigation is 14 an excellent example. So it's -- without meaning to 15 be comprehensive, I think it's fair to say that there 16 are certainly means by which the public can become 17 aware of enforcement issues within the National 18 Wildlife Area and this particular question as framed, 19 I think is really one that the Federal panel -- it 20 belongs in submissions rather than in evidence, I 21 think. 2.2 MS. KLIMEK: I'm okay with that, Mr. Chairman. 23 24 THE CHAIRMAN: Please proceed, Okay. Ms. Klimek. 25

1	MS.	KLIMEK: But out of that I guess
2		there's one question and perhaps this goes to you,
3		Colonel Bruce or Colonel Lamarre. Has the DND
4		contemplated any way, short of requiring citizens to
5		go through Access to Information to make information
6		on the NWA available to the public? It is a National
7		Wildlife Act Area. Is there some other is
8		there have you contemplated that or is there any
9		way that this information can be made available, other
LO		than through this type of process?
L1	Α.	LCOL BRUCE: I think, I think, like all
L2		things, what happens on the Base, as you can
L3		appreciate, we, we tend not to allow as many visitors
L 4		as perhaps others would like simply because of the
L5		nature of what we do there in terms of Military effect
L6		and also Defence research.
L7		However, there are a number of forums which
L8		we do information on or about the National Wildlife
L9		Area and I think the Prairie conservation forum, of
20		which CFB Suffield is a member, of that particular
21		forum, and has been for a number of years and we
22		attend all the meetings, is but one way.
23		The other way is we've tried to come into the
24		20th century with our own website and the like and in

there has specific reference to those things that are

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1 on or dealing specifically with the National Wildlife Area as well as some of the activities that are 2 ongoing in there. It's not comprehensive yet. still a work in progress, but I'm comfortable that 5 those, those types of venues do satisfy that 6 requirement. 7 Okay, thank you for that. Q. Now, looking at this 26 February, '07 annual 8 report, at paragraph 7 of that there's a reference to 9 an infraction and that infraction was EnCana was 10 11 trapping too close to a known Ord's Kangaroo Rat den. And I take that was referred to enforcement but 12 13 enforcement determined that there was no clear indication of infraction. 14 15 I guess this goes to Environment Canada. 16 What types of things do you look for and if there 17 isn't a clear infraction is there anything else you 18 can do about these things to deal with them? 19 Α. MR. INGSTRUP: On, on this particular issue, 20 I really can't comment in terms of whether -- I, I 21 would seek clarification from DND in terms of whether 2.2 Environment Canada was contacted in this case. 23 really can't comment on that at this point. 24 Well, the report says: Ο. "The matter was referred to 25

1 Environment Canada Enforcement. However, it was determined that a 2 clear infraction was not present." 4 Α. MS. BOYD: I can provide some clarity on 5 this that might assist. That would be useful. 6 0. It was referred to Environment Canada Enforcement and 7 Α. that was through the Calgary office. We do have a contact there that we work with. The details were 9 provided of the situation and he looked at that 10 11 situation and determined that it was not something 12 that he felt it was enough to support a full investigation and subsequent Court proceeding or other 13 14 legal proceeding surrounding it. 15 So it was not pursued further in that regard. 16 And one of the main reasons for that is that the 17 permit itself, in the wording of the permit, there was 18 some question of semantics and interpretation that, 19 that led to a somewhat questionable interpretation of 20 the situation. 21 It was DND's opinion that it was -- that the 2.2 Proponent in this case, EnCana, acted outside the 23 spirit of the permit. However, that's why it says 24 here that: "A clear legal infraction was not 25

1 pursued." It's not to say that there was not, as I said, in 2 our estimation, a situation that could have been handled, dealt with better by the permit holder, 5 EnCana. And we, to that effect, sent a letter of 6 displeasure to the Proponent to comment on that and, and be on record that we were not happy with that situation and what transpired as a result of it 8 especially since it did impact upon research of a 9 10 listed species at risk. Now, if we go over to the next page and under G: 11 Ο. "There was discussion of an 12 abandonment of a well in the Middle 13 Sand Hills. Evaluation of this 14 15 site by the Base reclamation 16 subcommittee is still pending." 17 Is that still the case with that abandonment? 18 Α. COL LAMARRE: I'm sorry, Ms. Klimek, could 19 you specify which paragraph and which subparagraph 20 again? 21 It's page 6 and it's G; it will be 12G. Q. 2.2 COL LAMARRE: We have it now. Α. MR. RICHMOND: Wes Richmond. I think that 23 Α. 24 comment actually refers to the fact that SEAC 25 Reclamation Subcommittee that we spoke about, I

1 believe, yesterday, the processes that are required to to, to finalize that process of reclamation have not 2 been fully developed yet. We were in discussions and then we were going 5 to be getting back into discussions again in January with the Province and so I think that's what the 6 reference is to is the fact that there is no formalized process yet, so that reclamation can't be 8 dealt with until that time. 9 Thank you. And the next one, I think it talks a 10 Ο. little bit about what we were talking about the other 11 12 day, H, EnCana conducted a vent leak repair and although the -- I'm paraphrasing: 13 14 "Although the urgency associated 15 with the repair precluded an 16 Environmental Assessment it was 17 noted that emergency repair work in 18 general must be assessed and 19 included in a routine activity 20 permit." 21 So I take it they were allowed to go in and do 2.2 what they needed to do without the Environmental Assessment and that's what you were talking about 23 24 earlier, Ms. Boyd; is that correct? MS. BOYD: 25 Α. Yes. To clarify, this is

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actually a good example of the situation that, that we face regarding emergency work and some of the uncertainties associated with it.

This was a situation where it was posed to
the Base as being an emergency and it was required
that they go in and perform certain emergency work.

In these situations, it is my understanding that under
CEAA it is not necessary to conduct an Environmental
Assessment if we're dealing with certain issues of
human safety and health.

That was the understanding that the Base took and we provided an immediate response saying, yes, proceed with this work.

However, it was some 31 days later that we received an indication that EnCana was going to go in and proceed with the work in a way that was not as originally described. It involved ground disturbance and it was 31 days later which, in our estimation, is not a matter of emergency.

So the question of what is an emergency and what is covered is certainly something that, that needs to be determined well before any sort of additional work is, is allowed in this regard because in that case, caissons were being excavated and ground disturbance was involved. That was not foreseen in

the original request for the emergency work.

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Q. Now, I just have a few more questions on these reports and I'm turning to the one dated 25 February, 2008 and I'm going to page 5 and it's 13 -- and it's Tab I and it says:

"Follow-up on EnCana's post-constructive construction reclamation practices in the NWA including several trail reclamation projects was deferred to 2008 and will be considered by the RSS remediation group."

Has that been done?

A. MS. BOYD: Just one moment, please.

Thank you. There was some follow-up done on some of these sites and we used the Proponent's reports which indicated that they had found certain types of disturbances and leftover materials, such as cement and different things, left at sites. And we went back out, sent out our field people to investigate some of these sites and found that in many cases some of the same materials that were identified by the Proponent were still there and there were ongoing discussions with the Proponent requesting that these materials be removed.

1 Going -- what this is referring to is going 2 back out yet again to determine if in fact that work was done and we have not to date had the opportunity 4 to go and do that. 5 Now, back to you, Colonel Bruce, and I was discussing Q. 6 this with Mr. Richmond in your absence and he invited me to come back and discuss it with you so you can talk to him after. 8 And we were discussing the enforcement that's 9 10 available to you and this is -- for ease of reference 11 if you want to know where this is, it's at page 2892 12 of the transcripts, but I don't think we need to turn 13 them up. 14 And as I understand Mr. Richmond, truly, 15 really, the only true enforcement you have is to 16 limit access to the companies, is what I understood 17 Is that true? him to say. 18 Α. LCOL BRUCE: Actually, very much so, but 19 there are other mitigation measures that -- or other 20 punitive actions that we, we can take and I think 21 Colonel Lamarre addressed them in the Opening 2.2 Statement with regards to the powers of punishment under the National Defence Act and of course DCAARs, 23 24 Defence Control Access Areas Regulations and it's more

abbreviations that I can say.

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But the bottom line being, is essentially those are fairly specific and can be used, if required, if I so determine with of course legal counsel to say whether or not we, we would have a legitimate case.

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However, as are aware, Alberta Environment does not have the authority in one or two areas on the Base and they are traditionally, in terms of Alberta, those that have that escalatory types of powers that provide a broad range of punishments for infractions that do occur.

Essentially, as it stands now, rather than the DCAARs and the **National Defence Act**, it's constraining access. Not closing access, because then we would assume certain liabilities for infrastructure which I'm sure the average Canadian taxpayer would not want me to assume on their position.

But I will give you an instance, for example, in 2004, because of the issues ongoing with industry, we closed the Base for all but essential maintenance activities for two full weeks for development, simply to, to indicate our displeasure with the activities that industry had been performing.

I think it's also important to note that it's very challenging to take punitive actions in some

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cases against industry without being able to tell them why we need to do this and the why is the operating protocols or, in this particular case, the Range Standing Orders, Chapter 7, that deals specifically with oil and gas.

We have, as you probably heard already, been trying to put these together for over three years. It, it finally, to be quite frank, I issued them on the 8th of August, 2008 after numerous attempts for detailed consultation with industry and, quite frankly, I was very disappointed on a number of occasions that nobody would show up to sit down and talk about these things, because the whole purposes of the Range Standing Orders was to be able to provide something that people could look to as operating protocols on this Base.

They are not meant to replace any current statutes or regulatory regimes that are in place like, for example, the ERCB. They are meant to develop.

And how I wish people to operate on Canadian Forces

Base Suffield. That would also then provide me a means to measure how successful they are doing against those criteria.

I think it's also important to note that there have been infractions that continue to occur

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that we continue to address. Traffic violations is one. As I mentioned, not all vehicles are GPS tracked yet. Therefore, we trust the individuals that are out there that they understand how to read a map so they can get from point A to point B in accordance with the access plan.

There have been violations where vehicles have moved into a red templates. And a red template is where there's live fire going on and it becomes very dangerous and once that occurs we need to shut down the red template until those people are, are moved out.

We have also had indications, for example, from SIRC where people at the gates have been found with alcohol in their vehicles and they have been barred from entry. And in fact my understanding is, through industry, they take that quite seriously and in fact have stripped contractors of their, of their obligations to actually work for them.

And then, finally, I think what's also important is that I can bar people from the Base as a whole and there was in 2006 a senior member of SIRC, who no longer works for that company, but was a member at the time, who was restricted from the headquarters building and barred from the officer's mess because of

his conduct in terms of browbeating my staff. And these individuals -- this individual is no longer welcome as far as I'm concerned.

So, though I don't have a full broad spectrum of measures that I may take or as deep as, say,

Alberta Environment, I do have a number of measures that I can use and, like I said, though, I need to put certain things in place first, Range Standing Orders being the key component, so that people know what I'm expecting them to do before I can then enforce some sort of, of standard.

- Q. I just want to clarify one thing, Colonel Bruce. When you said with the RSOs you were disappointed that they didn't show -- people didn't participate. Is that industry you were referring to?
- A. That is correct. I issued a -- and you've heard about the ADR process and you have heard about a number of activities.

My predecessor in 2005 issued the first draft of Range Standing Orders to industry for comment. The comments that were returned were quite scathing and, quite frankly, not very helpful in trying to produce a document that we would have ownership of across the broad spectrum of stakeholders.

When I arrived in 2007 I re-invigorated the

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process and I issued a second draft to industry in

December, 2005. There were several meetings.

Unfortunately, most of the operators did not show up.

SIRC did, on their behalf, but my understanding is
there was a number of operators that had indicated
that they, SIRC, was not to speak on their behalf.

The 23rd of July this summer was the last

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The 23rd of July this summer was the last meeting. I said, before I issue, I would like to have one more sit-down with industry and nobody showed.

So in the end I issued a Range Standing
Orders on the 8th of August and asked for 60 days. I
gave a 90-day implementation period of which I would
accept comments back from industry for the first
60 days and then I would look at those comments to see
if I needed to adjust what I had said, all along
highlighting that I am not in the business of
replacing the regulatory statutes that are already in
place nor would I impose anything that was a threat to
health and safety and I needed their input.

I have now received inputs on several -- from several companies and I will look at those and see if I need to amend or tweak my Range Standing Orders.

I highlight that Range Standing Orders are a living document, meaning that as policies change I will amend them from time to time to ensure that they

1 remain current and relevant.

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- Q. Now, I'm going to -- I have two areas left and I'm just going to switch to PDAs and I'm not going to be long on these. Now, I understand ultimately you will -- it will be you, Colonel Bruce, who signs off on those after they're done on the approval of any individual well and infrastructure; am I correct?
- A. The PDA process is just part -- will be entered as a part of the Application for Development. I have delegated authority, less for those in the National Wildlife Area, to my G3 who will sign off approvals and I retain the right for all denials in the case of the rest of the Range Training Area but specifically for the National Wildlife Area I do all approvals and denials.
- Q. Now, this may have been discussed and I've been away for part of it so forgive me if I have asked something that's been done. Are you going to be relying on SEAC for your recommendation or are you going to have some of your own staff look at it as well, independent of SEAC on things such as relaxation of setbacks?
- A. Are you referring specifically to the National Wildlife Area?
- 25 | Q. Yes, just that area.

- A. With regard to the National Wildlife Area I -- the more input, the better, as far as I'm concerned. So I will have obviously SEAC's input as well as my own staff who look specifically at Base issues.
- Q. And will you also be looking to your counterparts at the end? Will you be using those resources, Canadian Wildlife Services, the recovery teams?
- A. Canadian Wildlife Service and Environment Canada as a whole are an important part of how I manage the National Wildlife Area; and I think it's important to highlight for two reasons.

One, they're the experts and we are relatively new to this game and therefore we, we interact with Environment Canada by I would, I would suggest to you on virtually every issue in the National Wildlife Area. So, from my perspective, we will continue that relationship because it's very important.

However, I think it's also important to highlight that this is one of many National Wildlife Areas, so what we do here may potentially have significant impact across the full range of National Wildlife Areas and therefore it's very important to keep Environment Canada engaged in the business at hand.

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1	Q.	Now, my last area of discussion is on regulation on
2		the Base and I'm going to go back to our Access to
3		Information which is 006-018, I believe. And I would
4		like to take you to Document A0182015 and my next
5		questions, although we're looking back historically,
6		is to look at how things get regulated on the Base
7		and I'm not going to belabour the past very long but
8		to use this to get into the future.
9		Now, if we on paragraph 2 of that, this is
10		a record of a meeting and if you go down, four lines
11		from the bottom it starts:
12		"In addition, the landowner's
13		agreement is required before the
14		AEUB approves well licences. At
15		Suffield someone has been signing
16		well applications on behalf of the
17		Base and contrary to the Base
18		wishes."
19		Now, do you know what who that was or how that
20		was happening?
21	THE	CHAIRMAN: Ms. Klimek, I think we've had
22		some discussion already on the matter of, of words
23		that have been blanked out. I'm not sure that the
24		Government can respond to this one.
25	MS.	KLIMEK: I think Mr. Lambrecht said

1 that anything that was blanked out when it came here could be discussed, if I understood him correctly. 2 I'm not going to MR. LAMBRECHT: Yes, sir. 4 object to this question. My friend received 5 information that was redacted pursuant to the normal 6 routine Access to Information process which allows for redactions in the material that is produced. There is a section, Section 8 of the Privacy 8 9 Act, which provides that the exemptions do not apply 10 in the case of legal proceedings. We've looked at Our view is that the Panel proceedings fall 11 this. 12 within that phrase of "legal proceedings" in Section 8 13 of the Privacy Act so I'm not going to object to this 14 question. 15 THE CHAIRMAN: Thank you, Mr. Lambrecht. Thanks for clarification. 16 17 Please proceed to respond to that question 18 then. 19 Α. MR. MARTINS: Fernando Martins. Μy 20 understanding was that the blanked-out letters or 21 blanked-out portions there refer to SIRC. 2.2 past, it is my understanding that SIRC had been giving the landowner consent without the Base's knowledge 23 24 and, as such, applications that were going to the ERCB 25 had the appropriate annotations indicating that they

had landowner consent when in fact the Base had not directly given landowner consent.

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- A. LCOL BRUCE: May I, may I just add to that? That is part of the reason for the, the evolving Application for Development and now it is that Application for Development that, in essence, provides landowner consent once it's signed off for approval that goes to the ERCB for, for, you know, demonstration of landowner concurrence.
- Q. This leads into my next question then because I presume that is no longer happening, that SIRC is signing on your behalf, but when I look through the information we've seen and what we've heard, SIRC seems to be playing everybody's role here and I would like to understand what that has distilled to today because we hear you are giving directions to SIRC or you, being the Base, to remove a well. SIRC is signing on your behalf.

So what has all of this evolved to in the role for SIRC, from your perspective, on the Base?

A. I think the, the Partial Assignment Agreement in 1999 is quite clear in terms of SIRC's role. I felt, as has been alluded to, that there has been some confusion in the past in terms of SIRC's role.

The amplification letter, for example, with

regards to gates is just one of my mechanisms to, if you will, redefine -- not redefine, that's a bad term -- but to reinforce what my expectations are of SIRC.

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Essentially, SIRC has a responsibility to collect and remit access fees that stem out of the '99 agreement to us, though not verify that those fees are correct. They are just to collect the fees from industry and then annually they present them to me for the Receiver General for Canada.

Second of all, SIRC has, as I mentioned, a range safety function as a subset of my larger range control in terms of monitoring and being responsible for movement of oil and gas activities once they enter the Block.

They also, as mentioned, have a number of responsibilities prior to somebody arriving at the gate to get on to the Block as well as specific responsibilities at the gate.

- Q. Now, I understand when I -- that SIRC is a subsidiary or connected with EnCana. Is that your understanding as well?
- A. They are a wholly-owned subsidiary of EnCana.
- Q. Okay. Now, do you have any recourse if SIRC doesn't do their job properly? What ability do you have to issue sanctions or any enforcement vis-a-vis them?

1 Α. That's an interesting question. I think that there 2 are a couple of recourses that we have not had to resort to, and I think the final one is obviously 4 litigation. 5 But more importantly we deal on a daily basis 6 with SIRC, with regards to issues that are ongoing, and, as I mentioned in my previous testimony, there was one occasion where a senior member of SIRC was 8 restricted or barred from certain places on the Base 9 10 due to his conduct. So there are activities or things 11 that I may impose depending on how these activities fall out. 12 Now, I've just got two more questions or two lines of 13 Ο. 14 questions and for those I need you to go to -- this 15 is the same Document A0182039, and if we could go to 16 page 3 of 7 and No. 13. And I just want to ask you 17 one question out of this and if we look partway down, 18 it says: 19 "Due to the absence of trails in 20 the area of... 21 Is it Moreuilwood? Am I saying that right: 2.2 "G3 bio is proposing that it be 23 kept as an area of low oil and gas 24 well density for use as a control 25 comparison to more heavily [wooded]

1 areas." And then if we could go to -- pardon -- oh, wood 2 3 -- "comparison to more heavily used areas". And if we 4 could go to page 22 of your slide, I would like you to 5 identify where that area is and there's a ... 6 Α. I believe slide 39 would probably be more useful, if I 7 may. Oh, okay. 8 Ο. 9 No, just back to the other one, Scott. That's the Α. 10 Basically the northeast corner, right -- no, 11 Scott, a little to your left. Right in those areas 12 there. As you can see now, the density of the wells 13 14 -- and again this is just, you know, a snapshot that 15 sort of is representative because it's not to scale by 16 any means -- it is representative that Moreuilwood and 17 Coriano, which are sort of centre east are the least 18 developed areas on the Base in terms of percentage of 19 disturbance. 20 Now, they have no status such as the NWA; is that Q. 21 correct?

- 22 A. That is correct.
- Q. So I guess my question is, we have some indication
 that an area that has not been designated as an NWA
 from the Base's perspective should be kept at a low

density and is it fair to	say that when you have it
something declared as a	NWA it should at least be
as protected as this area	outside?

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A. As you can appreciate, that was a recommendation from the G3 biologist at, at the time, saying that this particular area is the least disturbed area.

I have, for information purposes, have issued a letter this summer, basically to industry indicating my desire to keep those two, specifically Moreuilwood and Coriano, as well as two others -- no new development will occur in there, no new disturbances -- correction. No new disturbances will occur in there and I will re-assess that on a yearly basis partially pending the outcome of the National Wildlife Area. And I do this for two reasons.

The first reason is because the primacy of Military training is what I'm all about and to ensure that this training area is sustainable over the long term for the use of Military training.

Those four areas that I've restricted new development in, or new disturbances in, are -- two of them are heavily used for Military operations and the other two are the least disturbed area from our studies on the entire Base including the National Wildlife Area.

1 However, as has been the case in terms of our presentation here is the National Wildlife Area is to 2 be used as a benchmark for the other areas of the Base if and when, depending on the recommendations from 5 this Panel, are such that I might be able to then free up Moreuilwood and Coriano for use for industrial 6 activity depending on the, the recommendations of this Panel. But in the interim I have restricted 8 development as of this summer in those areas. 9 10 Ο. Now, if we could go back to our 006-018 and to Document A0182056 and if we could go to page 8 of 9 11 of that document -- 056, yes. Yes, and I think 12 there's a -- if you keep scrolling down to page 8 13 of 9. 14 And this is on "Blanket Refusal" at the top 15 16 there. And we've been talking about regulation and I 17 think we alluded to this a bit the other day. But we 18 have here the Alberta Department of Energy and this 19 is a bit of a new player, and it discusses blanket 20 refusal and I would like your thoughts on this. 21 I take it Alberta Energy was at this meeting 2.2 or had some input to the Base on their concerns about 23 development on the Base at some point; is that 24 correct?

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LCOL BRUCE:

Alberta Energy attends, or at

least in my experience, the last two SEAC annual 1 2 general meetings, so Alberta Energy is represented at, at the annual general SEAC meetings. 3 4 Q. Okay. Now, at this one it said: 5 "Alberta Department of Energy 6 wanted to ensure that new RSOs are 7 flexible enough to judge each issue individually. There must not be a 8 blanket refusal for any given 9 10 area." Now, is -- what is the role of Alberta Energy 11 12 vis-a-vis the Base? Does it have one or how do you 13 deal -- or what role -- dealings do you have with 14 them? 15 As, as I indicated, first of all, Alberta Energy does 16 sit as a, as a participant within the SEAC Annual 17 General Meeting so that they listen to the way things 18 They also have a large part through their Crown are. 19 corporation, the ERCB, which obviously has a large 20 role to play in terms of technical aspects of oil and 21 gas development on the Base. And then, finally, they 2.2 are consulted from time to time depending on the issue that we're about to undertake or make a determination 23 24 on.

Now, I guess I would like your thoughts on that, on

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the -- one thing, that there cannot be a blanket refusal for any given area. And if you want to protect an area for ecological purposes, from the Base's point of view or, I guess CWS, would not a blanket refusal of any development in that be one of the options you may want to consider if you've deemed an area important and you want to protect it?

And I guess that's my question for you,

Colonel Bruce, and you can consult with your other

counterparts there.

A. LCOL BRUCE: If I may, I'll, I'll start, and if Environment Canada wishes to join in I, I do encourage them to do so. I think the term, "blanket refusal", is a very broad and all encompassing statement. I think, as we've discussed over, over the course of these three, three weeks, I think it is now, that there are significant industrial footprint on the Base and that footprint is, is there and I think it would be foolish of us to think that it is not, is not something that we, we have and something that we must deal with.

Therefore, for example, in this letter that I issued earlier this summer in terms of restricting new disturbances, I did not say no to new development, if they wanted to drill off existing pads, and I also

1 recognized the fact that there are ongoing activities that need to be conducted to ensure the good order and 2 maintenance of those facilities. So I think a blanket refusal is, is perhaps 5 not a correct term in this particular case because there can be no refusal of, of any activity given the 6 nature of what is already in the ground. MR. INGSTRUP: We have nothing to add on 8 Α. 9 that. 10 So I guess, to follow up on that then, is it your Ο. position that it is -- it wouldn't be a -- it isn't 11 12 worthwhile looking at some zoning; to say where there are sensitive issues, no new development? 13 14 And I guess the balance here I'm asking you 15 to look at when it comes -- if it comes down to 16 ecological values versus oil and gas, is it your 17 position that oil and gas has to happen? And that's 18 what I hear -- I thought I heard you say, so maybe if 19 you can address those concerns or comments, Colonel 20 Bruce? 21 LCOL BRUCE: Yeah, I think it's -- I think Α. you're taking my statement out of context. What I 2.2 have said was that blanket refusal is not a term I 23 24 would use nor have I used it in any correspondence.

Blanket refusal seems to be a term Alberta

Energy used in terms of this particular paragraph, or 1 2 at least that's what whoever was the author of these minutes thought. The reality is, is there is oil and gas 5 activity occurring throughout the Range and Training Area which includes the National Wildlife Area. 6 you say "no new development", yes, I can foresee areas that will have no new development. But let's remember 8 9 that there is activity virtually in every spot of the 10 Base and, therefore, a blanket refusal to say no to 11 any activity in there is not appropriate. MS. KLIMEK: 12 Thank you. I think you clarified that. Those are all my questions for this 13 14 panel and, thank you, Canada Panel. 15 THE CHAIRMAN: Thank you, Ms. Klimek, for 16 assisting us in, in your questioning this morning and 17 also on previous days as well. I think this may be a 18 -- since we have to change desks and have Mr. Denstedt 19 with EnCana come forward to begin questioning, this 20 might be a good time to take a coffee break for 21 15 minutes and allow that change to occur. 2.2 So we'll, we'll return in 15 minutes. 23 (PROCEEDINGS ADJOURNED AT 10:16 A.M.) (MORNING BREAK) 24 25 (PROCEEDINGS RECONVENED AT 10:37 A.M.)

1	MR. DENSTEDT: I apologize, Mr. Chairman,	
2	for that.	
3	THE CHAIRMAN: Yes. No problem,	
4	Mr. Denstedt. I just one moment. I believe we are	
5	ready to proceed. I'll just check with the court	
6	reporters. Yes, we are. Please go ahead,	
7	Mr. Denstedt.	
8	CROSS-EXAMINATION BY ENCANA, BY MR. DENSTEDT (CONT'D):	
9	MR. DENSTEDT: Thanks.	
10	Q. Welcome back, Colonel.	
11	A. COL BRUCE: Good to be back,	
12	Mr. Denstedt. Thank you.	
13	Q. A couple of preliminary things in respect of	
14	Mr. Didiuk's work. If I could just get that	
15	reference again, Mr. Didiuk, that would be helpful to	
16	me. The one you gave Ms. Klimek this morning.	
17	A. MR. DIDIUK: I assume you're referring to	
18	the reference of a study with the Black Rat Snake?	
19	Q. That's right. It didn't show up on the transcript,	
20	that's all.	
21	A. This reference is, is provided in Environment Canada's	
22	submission. Appendix G. But I can provide it now.	
23	One moment:	
24	It's referenced on page 291 of our	
25	submission, but I can read it out to you if	

- 1 0. Yeah, that would be --
- 2 A. -- that suits your purpose.
- 3 Q. -- great. That would be very helpful.
- 4 A. The authors are Roe J.R., Lowe and Demers G., and
- Weatherhead P.J. 2007, "Demographic Effects of Road
- 6 Mortality in Black Rat Snake, Biological
- 7 Conservation", Volume 137 and the year 2000 volume,
- 8 pages 117 to 24.
- 9 Q. Thanks, Mr. Didiuk. And is the model you referred to
- 10 contained in that document as well?
- 11 A. A description in the results of the model and the
- input parameters which are the most important things
- 13 that we have to consider when we're doing our
- comparisons are provided in that paper.
- 15 MR. DENSTEDT: Great. Thanks very much.
- And in respect of Mr. Didiuk's work, EnCana will be
- 17 responding to that in rebuttal, either later today
- 18 hopefully or maybe tomorrow.
- 19 THE CHAIRMAN: Right.
- 20 MR. DENSTEDT: Thanks.
- 21 Q. So, Colonel Bruce, a couple questions to start with
- arising out of Ms. Klimek's cross-examination and in
- 23 respect of the NWA routine permits, is it fair to say
- 24 that EnCana had a, and the DND had a difference of
- 25 opinion as to the legal requirement for that permit?

1	A.	LCOL BRUCE: I take	e it you're referring to
2		the fact that they were callin	g it a routine for
3		routine activities but there w	as only one permit and
4		it's called a National Wildlif	e Permit. Is that the
5		one you're referring to?	

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- Q. I'm referring to EnCana's position that the existing wells and the activities associated with those wells are, are not caught by the NWA Act?
- A. That is my understanding of what EnCana's position is and that's why they accepted the NWA permit for routine activities without prejudice.
- Q. And is it also fair to say that that ongoing legal debate was the primary reason for their reluctance to accept that permit?
- A. Again, I would -- I assume that to be the case, but I would recommend that they're the best to answer that.
- Q. All right. And, in fact, they did reference that in their acceptance of the permit that they still reserved their rights on that legal issue; is that correct?
- 21 A. That is correct. That's why they said without 22 prejudice.
- Q. All right. And in respect of the debate around the Range Standing Orders, is it fair --
- 25 A. MS. BOYD: Sorry. Sorry. Could I

1 please add something just in reference to the NWA 2 permit? It's not entirely accurate that, from, from our perspective that the only reason that they are not accepting that permit is because of that ongoing legal 5 debate simply because for upwards of two and-a-half 6 years we worked with EnCana, and specifically I was working in consultation with EnCana, gathering information, asking them for information to inform the 8 9 permit to develop it, providing them with drafts, 10 working through the issues, there were definitely issues to work through, for two and-a-half years. 11 Ιt 12 was only once we reached the point where we said, "Okay, you now have to sign this and accept this 13 14 permit" that suddenly it came forth that, "Actually, 15 we don't think we need one." 16 So it's not entirely accurate that -- that 17 may be their position now, but that was not what was 18 presented to the Base for the last two and-a-half 19

years during the development of that permit.

- So, Ms. Boyd, do you think it's appropriate for EnCana Q. to have consulted with you and provided you that information? Is that your objection?
- Sorry, could you repeat that question? Α.

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You indicated that EnCana had been providing Ο. information to you and responding to you for two and-a-half years. Is your objection that they were co-operating with you? Is that your objection?

- A. No, not at all. I -- in that sense, I'm making the point that during that entire period of consultation, at no time did they indicate, "We're co-operating, however we don't believe we need to do this or need a permit"; it was understood through that process that EnCana believed that they needed a permit and were going to ultimately accept one once the issues were resolved.
- Q. And Ms. Boyd, how do you know what EnCana believes or doesn't believe?
- A. It is only my interpretation of that chain of events.
- 14 Q. That's correct.

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A. LCOL BRUCE: I think it's -- if I may just highlight, I think it's important to note, if somebody enters into discussions about an activity for two-and-a-half years, I, I, I think it would be fair to say one would expect that, that that negotiation is there for a reason.

If it had no intention to -- of accepting the permit for the two and-a-half years, I'm, I'm at a bit of a loss as to find out why they would even enter into that discussion if that was their legal opinion.

O. All right.

A. MS. BOYD:

I will also add to that that
they submitted a permit application form, which was
the basis for the beginnings of that entire
discussion.

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- Q. Ms. Boyd and Colonel Bruce, perhaps I could posit something to you that is pretty common in the energy business. When TransCanada Pipelines, for example, crosses provincial lands or municipal lands, they often submit permits and enter into negotiations that go on much longer than two years in respect of those permits. And every time when it comes time to file the permit, they send in the permit, they say, "We don't think we need this, but here's the information." That's common practice at the National Energy Board and companies like TransCanada and Enbridge. Are you familiar with those companies?
- A. LCOL BRUCE: Yes, I'm familiar with those companies. And that perhaps is the way it works on industry. And as I said, there is an expectation in good faith when we're chatting that, if there was concerns, it would be helpful to have that stated upfront.
- Q. Fair enough, Colonel Bruce. And in respect of the Range Standing Orders, is it fair to say that EnCana had concerns about the ability or the jurisdiction of

the Base to regulate in respect of the activities
that are within the Energy and Resource Conservation
Board's jurisdiction?

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- A. I think it's very fair to say that EnCana has raised on a number of occasions, in terms of the RSO development, that they are concerned with some of the protocols that have been placed in that particular Range Standing Order, that it may conflict with ERCB or other health and safety regulations or statutes.

 In that particular case, as I have stated in my formal correspondence with EnCana, that you need to show me where I'm in error and I will make sure I change it so I do not conflict with any of those particular concerns. Not showing up at meetings does not allow for a reasonable move forward in terms of development of these issues.
- Q. And is it fair to say, though, Colonel Bruce, that in August of this year EnCana requested a meeting of senior executives from EnCana and senior members of the Military?
- A. In fact, that meeting occurred on the 8th of August between the Deputy Minister of Defence and Mr. Protti, the Senior V.P. from EnCana. And I wasn't in attendance.
- 25 Q. And Colonel Bruce, did that meeting help the

relationship between EnCana and the Military?

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- A. I think every meeting helps. I think when we sit down, as demonstrated by that particular meeting, that it tends to work. It's when people don't show up to meetings that it doesn't necessarily work as well.
- Q. And is it, is it fair to say that some of the senior involvement has helped break the impasse that was occurring at the lower levels?
- A. I think that's very fair. And I, and I -- and I think it's important to highlight, I think the same is now occurring on -- with Alberta in terms of Alberta Environment. And as mentioned, my forthcoming meeting with the Chairman of ERCB. I think all these sort of participating at that particular senior level has started to help the Project move a little quicker forward.
- Q. And, Colonel Bruce, is it also fair to say that

 EnCana's frustration and the Military's frustration

 is with some of the inaction by the senior folks

 primarily in Alberta but also at Canada? Is that a

 fair comment?
- A. I, I would tend not to necessarily agree with that. I think it's, it's not necessarily an action. I'm just not sure that the issues got to, necessarily, where they needed to be to be worked on. And I would say,

and this is being brutally frank, I think in the context of the Department of National Defence, it very much is delegated down to the specific Responsible Authority, in this particular case the Base Commander, and until that becomes more than his, his abilities to fix, others will not pile in.

And I think what's happened in terms of the oil and gas issue at Suffield is we now see a growing recognition that we need a broader sort of action plan from not just the Government of Canada but from others, Alberta and, of course, EnCana, to resolve some of the issues.

- Q. That, that's fair comment and a good clarification of the way forward, Colonel Bruce. Thanks for that.
- A. COL LAMARRE: Sir, can I add on to that, please, Mr. Chairman. The bottom line still comes down to this; that the Minister of National Defence, not the Deputy or anybody else in the chain of command, between the Minister of National Defence, all the way down to Colonel Bruce, has really got anything to say about this.

The Minister himself gave authority and direction to the Base Commander of CFB Suffield to look after the Base top to bottom.

I would venture to you the fact that they

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felt compelled to try to call for these additional meetings, meant that they had some question as to the authority of the Base Commander. But, in reality, following those meetings, the authority of the Base Commander and his plan and the way he's proceeding was just reinforced by the entire chain of command.

So he is the guy responsible to look after that area. And anybody who wants to go in that area needs to deal with him. Not with the Deputy Minister, not with the Minister, not with me. With him.

- Q. And Colonel Lamarre, you're not in any way by, in that comment, challenging or suggesting that any person or any corporation shouldn't avail themselves of whatever legal rights they're entitled to, are you?
- A. Absolutely not. What I am saying is that the person who has been designated by the Minister of National Defence to look after Suffield is Lieutenant Colonel Bruce, the Base Commander.
- Q. Yeah, and we agree with that.

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So Colonel Bruce, after that lively start,
I'll get to what I really want to talk about. And
the first question I think is simple, is how did the
DND and the Federal Crown obtain ownership of the
Base at CFB Suffield?

A. LCOL BRUCE: The lands were expropriated

1	in 1941.
2	Q. And those lands did not include mines and minerals; is
3	that correct?
4	A. I just need to confirm. I believe there are some,
5	some mines and minerals that were included in that,
6	but I, I just need to check.
7	Excuse me, Mr. Chairman, I'm just trying to
8	make sure I have the right term so I don't, I don't
9	say something that is quite inappropriate.
10	THE CHAIRMAN: Please take your time to get
11	the correct information.
12	SUBMISSIONS RE: LAND TITLES OFFICE DOCUMENTS BY
13	MR. LAMBRECHT
14	MR. LAMBRECHT: While this is going on,
15	Mr. Chairman, let me say, my friend alerted me this
16	morning that he may want to tender some of the
17	documents from the Land Titles Office of Alberta, as I
18	understand it, relating to the ownership of lands and
19	minerals at Canadian Forces Base Suffield through the
20	course of re-examination of Colonel Bruce here.
21	I think it would be prudent for myself as a
22	barrister to consult with my solicitor colleagues
23	regarding Land Titles documents. And I, having only
24	seen the ones proposed to be tendered by my friend
25	here this morning, I have not had that opportunity.

I'm working on it, but I think it -- and I'm unable to advise at this moment just sort of how this will proceed. I'll check again with my office at noon.

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I would say, however, that I'm not sure why it's necessary to tender the Land Titles documents for the purposes of this proceeding. I mean, I'm not intending to block my friend's efforts to do so. I'm saying that if he does so, I would need to consult with a solicitor, and this may, again, prolong the proceedings. And in anticipation of that undesirable effect, I would like to ask why it's necessary. Because I think the proceedings have proceeded to date on certain facts which are stated in the materials. This seems to be further documentation to support facts which are -- have, to this moment, to my understanding, if not perfectly crystallized in terms of their clarity, are not substantially in any dispute.

And that is to say that EnCana owns mines and minerals. The Federal Crown owns the remaining land. I wouldn't necessarily restrict that to the surface of the land because Canada is the landowner, which would include surface and below surface materials, but EnCana observes the mines and minerals under the surface.

1 And the situation across the entire Block is 2 quite complicated. There are some Federal minerals owned by the Crown. There are other minerals owned by 4 private parties. Once we go into the Land Titles 5 Office, we're going to start to encounter a thicket of 6 encumbrances and other documents that will appear on the Certificate of Title relating largely to the commercial oil and gas activity that is occurring 8 9 there. 10 So before we embark upon this, I just -- I'm not quite sure I see what the relevance of the 11 12 documents is at this point. And I'm concerned that embarkation upon this process might, might prolong our 13 14 proceedings really for, for no purpose. So I thought 15 I would maybe speak to ask for clarification as to 16 where this is going. 17 THE CHAIRMAN: Okay. Thank you, 18 Mr. Lambrecht. 19 Mr. Denstedt, do you wish to respond to that? REPLY SUBMISSIONS RE: LAND TITLES OFFICE DOCUMENTS BY 20 21 MR. DENSTEDT 2.2 MR. DENSTEDT: I think we're largely Sure. 23 in agreement. And if, if my friend can agree to a 24 couple of facts, I think I can dispense with probably 25 25 or 30 minutes of questions on this.

1 There was some, some confusion, I think, as to the extent of EnCana's rights when I cross-examined 2 this panel in particular about the reservation or exclusion of mines and minerals from the National 5 Wildlife Regulation. And I wanted to make sure that it's clear on the record that when mines and minerals 6 are reserved out of title, the reservation, which is actually, in this document, says: 8 "The mines and minerals with the 9 10 full power to work the same and for 11 the purpose to enter upon, use, 12 occupy the said lands and so much 13 thereof and to such extent as may be necessary for the effectual 14 15 working of the said minerals." 16 If my friend can agree that EnCana's mine and 17 minerals rights includes that reservation, which is in 18 the legal documents, I can dispense with all these 19 documents and move forward. 20 MR. LAMBRECHT: Just a moment if I can speak 21 with my friend. 2.2 THE CHAIRMAN: Yes. MR. LAMBRECHT: 23 I think underlying -- I'm 24 sorry. 25 THE CHAIRMAN: Mr. Lambrecht?

FURTHER SUBMISSIONS RE: LAND TITLES OFFICE DOCUMENTS BY MR. LAMBRECHT

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MR. LAMBRECHT:

I think, legally, what my

friend is attempting to establish is that, at the end

of the day, his client has a Certificate of Title from

the Land Titles Office of Alberta which has certain

words on it. The scope and legal effect of those

words is a matter that is interpreted by my friend in

a certain way.

Basically I think it was alluded to in some of the earlier evidence that the common-law right of the owner of minerals to enter upon the surface to work the minerals is operative here.

And the Federal response to that has always been that the right to -- of the mines and minerals owner to enter upon the surface to work the minerals is a complicated matter here because of the function and purpose of CFB Suffield. That's why there is a Memorandum of Agreement which is articu -- which is described as a Surface Access Agreement.

So whatever common-law rights there may be, they are affected by the 1975 Agreement. And our interpretation of that Agreement, I think it's fair to say, you've heard the evidence of SEAC yesterday, that there are differences in respect of how that is to be

1 articulated. 2 If my friend wants to tender a Land Titles document, he had an opportunity to do this through the 3 direct examination of his Panel so that they could 5 tender the certificate to say what it's worth. 6 If he has a Certificate of Title, the current one for EnCana, that he wishes to rely upon, that he wants to tender through Colonel Bruce, I would like --8 I don't, I don't object, but it would be subject to 9 reservations that I would like to check with my 10 solicitors about -- in order to be able to do due 11 12 diligence concerning Land Titles documents. secondly, that all of this is going to be subject 13 14 ultimately to argument between the parties at the end 15 of the day about how all of this fits together in the 16 unique situation that is Canadian Forces Base 17 Suffield, including the Wildlife Area, in the context 18 of what the Panel is being asked to do here today. 19 THE CHAIRMAN: Thank you, Mr. Lambrecht.

FURTHER REPLY SUBMISSIONS RE: LAND TITLES OFFICE DOCUMENTS BY MR. DENSTEDT

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MR. DENSTEDT:

I may have a simple solution. If my friend can simply agree that EnCana has whatever mines and minerals have been granted to it by the Alberta Crown, we can move forward. If he would

1		stipulate to that agreeme	nt, I, I'm okay.
2	MR.	LAMBRECHT:	He can tender whatever
3		documents he wants to sho	w what it reads. That's I
4		think that's appropriate.	
5	THE	CHAIRMAN:	I think Mr. Denstedt
6	MR.	LAMBRECHT:	The rest is argument.
7	THE	CHAIRMAN:	Yeah, I think Mr. Denstedt is
8		not suggesting he needs t	o table the document.
9	MR.	DENSTEDT:	If my friend can simply agree
10		that EnCana has whatever	mines and minerals rights
11		have been granted to it b	y the Crown from Alberta, I
12		would have thought that's	a simple thing, then if
13		that's in dispute, then I	will have to tender evidence
14		and lots of it.	
15	MR.	LAMBRECHT:	Well, I don't know because I
16		haven't been given earlie	r notice and a chance to look
17		at the at what's happe	ned in the last 30 years
18		between the time that min	erals were given by Alberta
19		to EnCana. And I won't -	- I can't make the submission
20		without discharging my du	e diligence.
21		I think it's a sl	horter cut, a shortcut
22		through this for my frien	d to tender the current
23		Certificate of Title if h	e has one and then the rest
24		is submissions.	
25	MR.	DENSTEDT:	Okay, so I'm clear, I need to

1 know, is the Government of Canada challenging EnCana's 2 mineral rights at CFB Suffield? I don't think I could be MR. LAMBRECHT: 4 clearer, Mr. Chairman. What we're speaking about here 5 is evidence. If my friend wants to tender his certificate -- for some reason he seems to feel it 6 necessary, and perhaps -- and I don't know the rationale for this -- to prove a fact that we have all 8 9 proceeded upon to date, without it really elaborating 10 in any clarity upon the full scope of that fact. So if he wants to prove something now with 11 12 greater clarity, within the Alberta Land Titles system, the way to do that is to tender your 13 14 certificate. And I'm not objecting to that. 15 in a position to make any admissions in this regard in 16 the manner that my friend has suggested. And I'm not 17 attempting to assert what my friend alleges. 18 simply saying the law in Alberta says you can rely on 19 your certificate. Let him tender his certificate. 20 The rest is argument in terms of how minerals owned by 21 EnCana might -- how, how the Surface Access Agreement 2.2 interacts with that in the circumstances that we have 23 today at CFB Suffield. 24 THE CHAIRMAN: Mr. Denstedt, is this a 25 matter that you may be able to deal with it in final

1		argument?	
2	MR.	DENSTEDT:	I can deal with it in
3		rebuttal or final argumer	nt. I thought this was a
4		simple thing. My friend	may be seeing more ghosts
5		than there are.	
6	MR.	LAMBRECHT:	Well, tender the certificate.
7	MR.	DENSTEDT:	I'll either deal with in
8		rebuttal or in final argu	ument, sir.
9	THE	CHAIRMAN:	So we have agreed that the
10		certificate will not be t	endered, then, at this point?
11	MR.	DENSTEDT:	I don't need to tender the
12		certificate at this point	. I can still ask my
13		questions without it, sir	·.
14	THE	CHAIRMAN:	Thank you.
15	CROS	SS-EXAMINATION BY MR. DENS	TEDT (CONTINUED):
16	Q.	So I think we got as far	as the lands being
17		expropriated, Colonel Bru	uce. Is that fair?
18	A.	LCOL BRUCE:	I think that's where I left
19		it off, yes.	
20	Q.	And in respect of EnCana,	what's your understanding of
21		the rights EnCana acquire	ed from the Alberta Crown?
22	A.	It is my understanding th	nat EnCana, or its
23		predecessor, purchased ce	ertain mineral rights from
24		Alberta in 1975.	
25	Q.	And do you know, Colonel	Bruce, is the CFB Suffield

1	lands registered in the Alberta Land Titles Office		
2	under their registry system?		
3	Α.	A. I am not sure of that.	
4	Q.	Q. Is that something you could check, Colonel Bruce?	
5	Α.	A. I'm sure it is.	
б	Q.	Q. Would you undertake to do that for me?	
7	Α.	COL LAMARRE: I'm	sorry, Mr. Chairman, can
8		we just consult a bit on tha	t last undertaking that's
9		being proposed?	
10	THE	CHAIRMAN: Yes	, certainly.
11	Α.	COL LAMARRE: Tha	nk you.
12	THE	CHAIRMAN: Mr.	Lambrecht?
13	MR.	LAMBRECHT: Sir	, if you refer to
14		Exhibit 007-005, which is th	e 1975 Master Agreement,
15	the terms are defined. There are a number of terms		
16	defined. And at page 4 of this agreement, under		
17	Item 1C, the term "Base" is used. And there's a		
18	reference to an instrument in the Land Titles Office		
19	of the City of Calgary there.		
20	I mean no disrespect to my friend, but I'm		
21	not sure why we're covering this ground. There's a		
22	reference on the face of the Surface Access Agreement		Surface Access Agreement
23	of 1975 to the appropriate instrument in the Land		
24		Titles Office of Alberta.	
25	MR.	DENSTEDT: Mr.	Chairman, if I may

1 We're covering this because rights do flow from contractual obligations and from land 2 obligations. If we're trying to sort out people's 4 rights here, we need to understand what those rights 5 And that's, that's part of the process. 6 actually, the petroleum and natural gas lease between EnCana and Alberta is on the record I just found out. I didn't know that. And I apologize for that. 8 9 at 002-066. And if my friend is saying that the 10 Surface Access Agreement provides that these lands, the CFB Suffield lands had been brought under the 11 12 Alberta Land Registry System, I'm satisfied with that. 13 THE CHAIRMAN: Okav. It sounds like we have resolved that issue, then. Mr. Denstedt, please, 14 15 please move on. 16 MR. DENSTEDT: 17 So Colonel, Colonel Bruce, and you may not be able to 0. 18 answer this question, but I'm going to try anyway. I haven't had a lot of luck 19 Α. LCOL BRUCE: 20 so far, but anyway. 21 What's your, what's your understanding of what is 2.2 included in EnCana's mineral rights? Do you -- is it 23 your understanding that that also includes the right 24 of access? 25 MR. LAMBRECHT: I am going to object to this

1 question. The witness's understanding on this point 2 is hardly material to what occurs legally. there has been sufficient evidence before this Panel to make clear that there's a dispute between the 5 parties on their legal positions respectively. is something that's going to have to be resolved 6 legally. I'm not sure that the further articulation of the views of the parties on which it's already 8 clear from the evidence of SEAC yesterday that there 9 10 are differences of views and uncertainties is going to shed any further illumination on the role that this 11 Panel is being asked to undertake, which is to 12 determine the environmental effects of the 13 14 applications for the three wells and the, and the 15 program for drilling in the National Wildlife Area. THE CHAIRMAN: 16 Mr. Denstedt, just in 17 response, the Panel is not certain either of the 18 relevance of this. We, we clearly understand that 19 there are some differences of, of opinion on this matter and I think that has been very clear. 20 2.1 MR. DENSTEDT: I understand that, 2.2 Mr. Chairman, but my friend spent almost half a day cross-examining my senior executive from EnCana about 23 24 his legal interpretation of a contract. I ask a few 25 simple questions about information that I would have

1 thought that, if the Colonel is being provided good 2 legal advice, he would have some opinion on it. And it's a fair question. And I'm not spending all day on this. I have three or four questions. I'm not 5 spending half a day on it, sir. I would have thought if he has a right to ask 6 Mr. Protti, "What's your interpretation of this clause?", and I'm not allowed to ask the Colonel what 8 9 his view of the -- EnCana's access rights is to, to, 10 to the Base, which is fundamental to the question, I don't see how that's fair. So I would ask for your 11 12 ruling on that, sir. I'm happy to move on if you want 13 me to, though. 14 THE CHAIRMAN: Okay. Just one moment, 15 please. 16 Mr. Denstedt, we agree that, in the context 17 of fairness, that you may ask questions on the 18 interpretation of the Agreement and we will see if, if 19 -- we'll ask the Government of Canada to respond as best they can to your questions. 20 21 (Ruling on Objection) 2.2 MR. DENSTEDT: Mr. Chairman, just to be 23 clear, does that include the two or three preliminary 24 questions I have to the Agreement? 25 THE CHAIRMAN: Well, Mr. Denstedt, I -- we

are not, we are not anxious to get into extensive 1 discussions on the nature of documents that are in the 2 Land Titles Office and their accuracy. MR. DENSTEDT: And I don't intend to go there. I think we've crossed that bridge and moved on 6 just to finding out what Colonel Bruce's understanding of EnCana's rights is -- are. THE CHAIRMAN: My understanding, your line 8 9 of questions are along the lines of getting the 10 Government of Canada's interpretation or view on the Access Agreement. And, if so, please proceed. 11 MR. DENSTEDT: 12 Okay. So, Colonel Bruce, what's your understanding of 13 Ο. 14 EnCana's right to access CFB Suffield? 15 I would like to refer back to 1975 Agreement. 16 will go through the couple of pertinent paragraphs. 17 Page 3 is the first one. I'll just wait until 18 everybody gets the Access Agreement up. 19 paragraph on page 3. Canada is willing, and I quote 20 (as read): 21 "... to authorize such entry upon 2.2 and use of the Base by or on behalf 23 of Alberta or its assignees, Canada 24 being satisfied that the use of the 25 Base for such purposes on the terms

1 and conditions hereinafter set forth is compatible with the 2 continued use thereof of Military purposes and such dual use of the 5 Base may be carried on with safety and efficiency." 6 7 And then if we go to page 5 Delta, talking about what the Base Commander, in terms of his authorities, 8 to act on behalf of the Minister of National Defence 9 10 to exercise the powers and privileges by the Base 11 Commander under this Agreement. 12 And then I go to page 6. Paragraph 2 13 basically is simply a right of access subject to the 14 Agreement. 15 And then, finally, to page 5, and I won't 16 prolong this because I know we've gone through this in 17 some, some detail, but if you go down to page 5 alpha, 18 and it goes on page 7, sorry, 5 alpha on page 7, it 19 says (as read): "The Base Commander has 20 21 jurisdiction and control over all 2.2 access to the Base 'and' has the 23 authority to coordinate activities 24 thereon for purposes of safety of 25 the Base and all personnel from

1 time to time."

2 And I highlight the "and". So, yes, they have access, but with conditions.

- Q. Right, and you'd agree that EnCana takes a different view based on Mr. Protti's testimony; correct?
- 6 A. Yes.

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- Q. And moving on to the NWA Wildlife Regulation, and I

 asked this of Environment Canada, and I'll ask it of

 you as well, Colonel Bruce. When the wildlife

 regulation creating the NWA says that mines and

 minerals are excluded from the ambit of the

 definition of the National Wildlife Area, what do you

 take that to mean?
 - A. I'm sorry, which document are you referring to, the RIAS?
- Q. This is the, this is the wildlife regulation creating the National Wildlife Area.
- 18 A. The 2004 letters, or is this the RIAs?
- 19 Q. The actual regulations, sir.
- 20 A. Okay. So --
- Q. The regulation excludes from the definition of lands,
 mines and minerals. And I just wanted to find out
 what you understand that to mean as the administrator
 of the NWA.
- 25 A. That is correct. It says (as read), "excepting

1 throughout all mines and minerals." 2 Now, I think it's worth highlighting, though, 3 if I may, Mr. Chairman, that, in terms of airspace, it's our responsibility, the ground itself is our 5 responsibility, but other than mines and minerals. 6 Q. And, Colonel Bruce, what do you think that means, though? What do you mean what do I think that means? 8 Α. Well, as the administrator of the National Wildlife 9 Ο. 10 Area, what do you think is excluded? 11 I'm still not sure I understand your question. Α. 12 question, it's pretty, it's pretty black and white 13 there, where they express that all mines and minerals, 14 i.e. resources that are found with under, underneath 15 the ground, are not mine to exploit. 16 So is it your view when those mines and minerals, when Ο. 17 the NWA regulations excludes mines and minerals, 18 mines and minerals does not include a right of Is that your view? 19 access? 20 Α. That is correct. That is my view. 21 Colonel Bruce, has the Department of National Defence Q. 2.2 ever purchased mineral rights within CFB Suffield? 23 And I might help you on this. I understand that they 24 purchased coal rights from the CPR in 1957. 25 correct?

1	Α.	I'm, I'm not sure about coal rights. I do know that
2		we do have certain freehold leases that we do have
3		ourselves, including natural gas deposits on the Base.
4	Q.	Okay. Could you undertake just to check if the Crown
5		has obtained those coal rights in 1957?
6	Α.	COL LAMARRE: Mr. Chairman, again, we can
7		do an undertaking which will generate a lot of work,
8		but I get the impression that the answer, of course,
9		is known. And if that can be presented just as
10		evidence, then perhaps we could just accept it. Is
11		that reasonable, sir?
12	THE	CHAIRMAN: One moment, please.
13		Mr. Lambrecht?
14	MR.	LAMBRECHT: I am concerned about the time
15		it will take to, to perfect this undertaking. What is
16		the question again, if I might just
17	THE	CHAIRMAN: It had to do with coal
18		rights.
19		Mr. Denstedt, perhaps you could explain the
20		intent or the line of questioning here, please. That
21		might help.
22	MR.	DENSTEDT: Yes. The Base bought coal
23		rights from the CPR. It's our understanding they
24		bought those rights in 1957 to ensure no coal
25		development would take place on the Base. My

1 follow-up question is: Have you considered buying out 2 EnCana's rights in the NWA because there's a precedent That's the purposes of my questions. 4 seems reasonable. 5 THE CHAIRMAN: That question is perhaps 6 something that may be -- they may be able to respond 7 to. MR. DENSTEDT: 8 So, subject to check, Colonel Bruce, the Base has in 9 Ο. 10 the past bought coal rights from CPR. Have you 11 considered buying out EnCana's natural gas rights at the NWA? 12 LCOL BRUCE: No, I have never personally 13 Α. 14 considered purchasing EnCana's natural gas rights from 15 them if they're not allowed to exploit in the National 16 Wildlife Area. 17 You must be a wealthy man, sir. I meant the Q. 18 Government of Canada. 19 And I'm speaking as the Base Commander on behalf. Α. 20 Okay. And I take it, then, that same answer would Q. 21 apply, apply if I asked you the question of that had 2.2 been considered under the Canada Wildlife Act which provides the right of Minister of Environment to 23 24 purchase lands and also under the Federal 25 Expropriation Act? There have been no discussions

with EnCana about acquiring their rights, their
mineral rights under the NWA. Is that fair?

A. To the best of my knowledge, that's correct.

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- Q. Thanks. And Colonel Bruce, what's, what's your understanding of your authority to regulate the oil and gas industry on the Base?
 - A. Again, I think in our Opening Statement it was Colonel Lamarre that was very clear in terms of where my authorities and responsibilities lie. We are somewhat different than a corporation, as you can appreciate.

 We don't have a Board of Governors, per se. We have a Chain of Command. The authority is invested in me through that Chain of Command and the various statutes and legislation.

In terms of regulatory authority of oil and gas, my responsibilities lie to the Base itself and that -- activities that are either are on it or above it, as I include the restricted air space on the ground.

I have responsibilities to ensure access is in accordance with the requirements for the Base given its nature of what it does, i.e. Military training, and I ensure that my decision-making is in accordance with that, that understanding.

Q. And in respect of your authority, is it fair to say

that you have both authority and obligations?

A. That is true.

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- Q. And I think if I go back to the opening presentation, that it's my understanding, at least, that the legislative flow of authority for the Base Commander comes through the Department of National Defence Act through the Queen's regulations and orders to the Range Standing Orders? Do I have that right?
 - A. In terms of Base Commander appointments and the authorities that come from that, it stems from the National Defence Act through Queens's Regulations and Orders, that's correct, but obviously there are a number of other statutes and legislative requirements and policies that I must meet and adhere to as well. For example, the Canadian Wildlife Act.
 - Q. And those are, those are Acts and policies that you must comply with, but you don't gain any authority

under those Acts; correct?

A. No, that's, that's not necessarily correct. With regards to the delegation of the Ministerial authorities less -- a couple to the Minister of National Defence who, in turn, delegated them down to me for the National Wildlife Area. I have now the authority in terms of enforcement as well, so I have received additional authorities with the legislation.

1	Q.	Right, absolutely, and I understand that. And that
2		flow of authority comes from the Wildlife Regulation
3		and I believe the delegations which you just
4		mentioned. But in, in respect of other policies and
5		rules, for example, Canadian Environmental Protection
6		Act, no authority flows to you under the Act, but you
7		have obligations under that; is that fair?
8	Α.	That is correct.
9	Α.	COL LAMARRE: Mr. Chairman, I mean, this is
10		a very legal aspect of things, but I do have
11		delegations that I think it's probably worthwhile for
12		us to review. Can we take just a second to read over
13		that just to be prepared to answer this line of
14		questioning?
15	MR.	DENSTEDT: I'm not going to ask any more
16		questions on the delegations, so. You can avoid
17		reading that if you want to.
18	THE	CHAIRMAN: Okay, so this may save you
19		some time and Mr. Denstedt in his questioning, yes.
20	MR.	DENSTEDT:
21	Q.	So, Colonel Bruce, try and, try and leave the legal
22		area as quickly as I can. How many people does the
23		Base employ in the Range Sustainability Section?
24	A.	LCOL BRUCE: Currently, there are 22
25		people that work in the range sustainability section,

- but as I've highlighted before, they're just a subset
 of my Base operation staff which is in the
 neighbourhood of 65 to 70 folks that look after and
 have the responsibility for all operations on the Base
 - Q. And I understand that some of those folks are here, is that, is that correct; that's Karen Guenther?

which obviously includes the Range and Training Area.

- A. There are several folks from my Range Sustainability

 Section here, yes.
- Q. And if I, if I -- I have a Range Sustainability

 Section organization chart. And just if -- I just

 try to keep people organized here. And you can

 correct me if I am wrong on any of these. G3 is

 Major Dale McPherson; is that right?
- 15 A. That is correct.
- Q. And the range and training area management officer is
 Mike Loch?
- 18 A. Correct.

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- 19 Q. And the RTAM is Brian Talty; is that correct?
- 20 A. He is the number 2, or the second in command of the range, or the range sustainability section.
- Q. Okay. And do you have an oil and gas GIS tech?
- A. Not specific to oil and gas, but I do have a GIS section that looks after all GO products for the Base.
- 25 | Q. Okay. And Mr. Smith is a biology cell coordinator?

- A. Actually, no, Mr. Smith has been seconded to the director of land, land environment over the last two years to be -- well, probably 18, 20 months, to be working on the Suffield Sustainable Management Plan, or the SSMP. Delaney Boyd has been acting as the head of the biology group for that interim period.
- Q. Okay. And Ms. Guenther, is she the oil and gas cell coordinator?
- 9 A. Oil and gas group lead, yes.
- Q. Group lead. And remediation coordinator, is that
 Corey Davidson?
- 12 A. Correct.
- Q. Great. Thank you. And I think you said this earlier,
 Colonel Bruce, but what's the approximate cost to the
 Base of that section?
- 16 A. Currently it's about \$1.2 million.
- 17 Q. And that section reports directly to you?
- 18 A. Through the Base Operations Officer, or the G3, that
 19 is correct.
- Q. Sure. And were you here last Saturday for the informal session?
- 22 A. Yes, I was.
- Q. And if you pull up the transcript from that session, I

 just had a question for you that flows out of that

 session. And it's page 2317, if we could, from -- it

1 seems like a long time ago. October 18th. And while it's being found, I'll read it out and then I'll pose 2 the question to you. It's page 2317. And it was 4 Mr. Hutton. And he said: 5 "Now I've had experience with the 6 EUB, as it was called at that time, 7 and I must say, it was first class. As a landowner or steward of the 8 9 land, I made calls on, on 10 deficiencies that an oil and gas 11 company had left after drilling 12 took place near our ranch. 13 within 24 hours, the EUB was there 14 getting the problem solved. 15 the power of the EUB and I know the 16 fiduciary responsibility that you 17 have. And I have no criticism 18 whatsoever of the EUB, your new 19 name, I'm sorry, I think you've 20 done a first-class job." 21 And my question, Colonel Bruce, is, when you have 2.2 a problem at the Base, do you call the ERCB, and if 23 you don't, why not take advantage of that, that 24 service? 25 Α. I think it's important to highlight that ERCB only has certain responsibilities on the Base, as laid out in the 1975 MAA and, therefore, don't have the full range, so it will depend on what the issue is on whether or not I will call on them.

But I think it's also important to highlight that I believe the ERCB has a very powerful role that they can assist me with and that's why I have a meeting arranged now. It was originally for the 28th of November but on the 26th of November I will be meeting with the Chairman of the ERCB to discuss where he can assist me further in, in some of my issues down in Suffield.

- Q. You read my mind. That was my next question. So I'll skip that one and go to the following one. And if we could pull up Exhibit 006-018, and I believe it's from the Coalition's evidence. And it's A0182015.

 Ms. Klimek was looking at it this morning. 82015, correct.
- A. I have the document.

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Q. And if you go to Paragraph 2 of that section, it says (as read):

"It must be understood that the

Alberta Energy Utilities Board is

not concerned about environmental

issues associated with oil and gas,

only the subsurface resources 1 2 development." And who is the author of the minutes of that 3 4 meeting? 5 Α. MR. RICHMOND: Wes Richmond. T was the author. And those -- I don't believe those were 6 minutes. It's just a Minute Sheet. A Minute Sheet. I'm sorry, I didn't know there was a 8 9 difference, so my apologies. And when I go to the 10 Oil and Gas Conservation Act, the purposes of that 11 Act, which outline the Board's jurisdiction over Natural Resources in the Province of Alberta, 12 13 include, for example, the control of pollution above, 14 at or below the surface and the drilling of wells and in operations of the production for oil and gas and 15 16 in other operations. 17 Colonel Bruce, is it your understanding of the 18 Oil and Gas Conservation Act that, even though it 19 purports to regulate the industry, both above and 20 below, that that's not the Base's position because it 21 says here "only the subsurface"? 2.2 I just need a minute to go through the MAA because in Α. there it lays out what ERCB's role is on the Base in 23 24 accordance with the Master Access Agreement. 25 Ο. Sure.

1	Α.	I think if we go to Appendix 3 of the MAA. And it
2		for the purposes of this agreement, on page 5,
3		Paragraph 4 of the Appendix 3.
4	Α.	DR. ROWLAND: It's page 33 of 41.
5	MR.	DENSTEDT:
6	Q.	So I've got that in front of me, Colonel Bruce.
7	A.	LCOL BRUCE: Okay, if you can go down to
8		paragraph.
9	Q.	Yeah, I've seen it.
10	Α.	Okay, it says (as read):
11		"The purposes of this agreement,
12		the Energy Resources Conservation
13		Board is hereby designated as
14		though it was so designated
15		pursuant to Section 21 of the Act
16		as the person who may exercise the
17		powers of the Minister of the
18		Environment under Sections 26, 27,
19		29 and 30 of the Act in accordance
20		with Part 2 of these regulations
21		with respect to the drilling,
22		operation, and abandonment of wells
23		or construction."
24		And it goes on a little bit more to talk about
25		pipelines.

1	Q.	Right. And Section 4 of the Agreement is a power
2		giving clause; it gives the Energy Resources
3		Conservation Board certain powers but it in no way
4		restricts its overall jurisdiction in respect of
5		natural resources, does it, sir?
6	Α.	I think that's your interpretation of that particular
7		document. I think it's quite clear that it lays out
8		specific responsibilities for the ERCB with regards to
9		this particular contract.
10		But I do have a couple of other people that
11		would like to just weigh in on this.
12	Α.	MR. RICHMOND: Wes Richmond again.
13		Mr. Chairman, we've all heard how the MOAs have
14		evolved and people's interpretation of them over the
15		years and how they are being applied. What we have
16		found in our first-hand experience in dealing with the
17		AEUB over the years is that, yes, they do have issues
18		of concern with contamination, whether it be downhole
19		or above the surface, but there are certain limits as
20		to what they will act upon. It has to be a cubic
21		metre of spill, for example, and certain other aspects
22		that may have been left behind by drilling.
23		What they do not purport to become involved

in or have the authority over is overall environmental

effects of a project, for example. They look at a

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well-by-well, pipeline-by-pipeline situation with respect to the application that's before them. They do not look at cumulative effects, for example, or the overall effect of an entire project on the environment and its impact on the ecosystems.

Now, we at DND are mandated by our sustainability, sustainability development, or, yeah, Sustainable Development Strategy, rather, correction, and the myriad of other policy and environmental regulation that perhaps Alberta is not subject to that we are on our own DND lands, like CEPA, for example and then a number of other things. The Federal policy on wetlands. That sort of thing.

So we have a requirement and, as I've said in our Sustainable Development Strategy, a mandate to manage these lands for the ecological sustainability as well as for Military training sustainability.

So we realize that there is a regulatory gap in terms of the overall environmental impacts from oil and gas that the Board is not prepared to act upon.

And that's been our experience, through discussions, many discussions and meetings with the Board, and with the SEAC members.

A. LCOL BRUCE: And I think just to highlight the Sustainable Development Strategy, it's a National

1		Defence document that's	tabled in Parliament every
2		three years to ensure it	s currency and its accuracy.
3		So these things, as you	know, are also subject to
4		review by the Auditor Ge	neral. And many of us know
5		that she's a very thorough	gh individual. So these,
6		these documents and this	direction is taken very
7		seriously in terms of fu	lfilling our requirements.
8	A.	MR. RICHMOND:	And I would just like to add
9		one thing. We, we were	in fact audited, along with
10		another a number of o	ther environmental or, excuse
11		me, training areas acros	s the country in 2002 by the
12		office of the Auditor Ge	neral looking specifically at
13		the Sustainable Manageme	nt of Ranges Training Areas.
14	Q.	So just so the, the Pane	l is clear, Colonel Bruce, is
15		it the Government of Can	ada's position that the
16		Energy Resources Conserv	ation Board has no authority
17		in respect of energy dev	elopment on the Base?
18	MR.	LAMBRECHT:	I object to this question.
19	MR.	DENSTEDT:	If we're worried about
20		regulatory	
21	MR.	LAMBRECHT:	Colonel Bruce has answered
22	THE	CHAIRMAN:	Okay, well, what
23	MR.	LAMBRECHT:	with respect to the
24		Agreement. There is in	the end of the day going to be
25		legal argument on this.	What my friend is now doing

1		is attempting to get the witness	to revise the
2		evidence that he has received by	misstating the
3		evidence of the witness. That is	objectionable. My
4		friend asked his question. Got a	n answer. He doesn't
5		like it, so he is asking it in a	different way.
6	MR.	DENSTEDT: I didn't	get an answer, sir.
7		I got his speech about sustainabi	lity is what I got.
8	THE	E CHAIRMAN: I think	the question
9		Mr. Denstedt asked, in all fairne	ss, was the Base's
10		interpretation as to the role of	the ERCB. I don't
11		see why this that can't be asked	or responded to.
12	MR.	LAMBRECHT: All righ	t. If that's the
13		question, I don't object to it.	
14	THE	CHAIRMAN: If that	is my understanding
15		of your question, sir.	
16	MR.	DENSTEDT: It's a v	ery simple question.
17	Q.	What's the Government of Canada's	position? The Panel
18		is trying to figure out if there	are if and when
19		there are regulatory gaps what is	the Government of
20		Canada's position on the ERCB's a	uthority on CFB
21		Suffield?	
22	MR.	LAMBRECHT: If it is	the position if
23		he is asking about the Government	of Canada position,
24		that's submissions. If he wants	to ask what the Base
25		Commander's understanding is, tha	t's a matter of fact.

1 MR. DENSTEDT: Sure. 2 Colonel Bruce --Ο. MR. LAMBRECHT: Let's get this straight and 4 stop playing games. 5 MR DENSTEDT: I'm not playing a game, sir. 6 Ο. Colonel Bruce, what's your understanding? 7 LCOL BRUCE: Well, I think I've already Α. outlined what ERCB responsibilities are in para 4 of 8 9 Appendix 3 of the MAA is. So, yes, they do have 10 responsibilities. 11 And second of all, as you are well aware that they are the ones that issue licences for wells. 12 So 13 once that final process has been approved by me, it then goes off to the ERCB for well licensing, or 14 15 pipeline licensing, whatever it may be. So ERCB has a 16 very intimate role in activities that go on for oil 17 and gas development. 18 I will also highlight that ERCB has a very 19 important role and has been playing over the course of this summer on the three or four incidents that have 20 21 occurred, whether it be a spill, a venting of a gas 2.2 well, they come down to conduct their own 23 investigation on top of the ones that we of course 24 launch. So ERCB and ourselves continue to work 25 together on these issues because they do have

responsibilities on the Base.

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- Q. Thanks, Colonel. And in respect of the Range
 Sustainability Section, if they see a problem or an
 issue in respect of an energy facility, are they
 trained, instructed to call, to notify the ERCB as
 well?
- A. The ERCB are one of the resources that the Range

 Sustainability Section will go to for advice, guidance

 and, in the case of specific to them, ask them to come

 down and have a look for themselves.
- Q. Okay. And just so, again, I'm clear and the Panel is clear, because the regulatory gap is an issue, if there is one, does the Range Sustainability Section as a matter of course notify the ERCB when there is a problem?
- A. Again, I would highlight, depends on what the problem is. And, yes, they would if it concerns something that falls within the scope of the Agreement.

I do want to highlight, when you make proposal for -- or you've made reference that a regulatory gap -- I think we've already indicated that Alberta Environment has a responsibility in terms of environmental impacts from activities from, for example, oil and gas. And they are not on the Base, nor do they believe they have the authority on Federal

lands which we support, but I'm not putting words in their own mouth.

So I think that to say that there is only a perception of a regulatory gap I think is incorrect because one exists between ourselves and Alberta Environment's understanding of what they can and cannot do on the property.

- Q. And it's fair to say that Mr. Protti disagrees with that position.
- A. I think that's fair to say but, again, I'm not putting words in Alberta Environment's mouth, but I think they've been fairly clear on what their position is.
 - Q. So, again, so we understand this, this regulatory issue, Colonel Bruce, what is your understanding of what happens when there's a conflict between the Master Access Agreement and a regulation?
- A. Regulation in terms of a statute or in terms of a policy? What, what are you talking about?
- Q. We're starting with the statute.
- 20 A. Statutes will take precedence.

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- Q. And is it fair to say that any law would take
 precedent over a contract? Contract is subject to
 the law. Is that your understanding of it?
- 24 A. As a general statement I believe that to be correct.
- 25 | Q. And if we could turn up the Surface Access Agreement

1 one more time. If you go to the execution page, which I believe is 24. Twenty-four. 2 One final question I think on what your understanding of things are is, Colonel Bruce, and that is the portion of 5 this page which is just below the screen, if you 6 could scroll up, where it says (as read): "This Agreement is hereby approved and ratified as a binding 8 9 inter-governmental agreement of the Government of Alberta as evidenced 10 11 by the signature of the Minister of 12 federal and inter-governmental affairs." 13 14 Sorry. I was on a roll. 15 "... as evidenced by the signature of the Minister of Federal and 16 17 Inter-Governmental affairs." 18 What's your understanding of that part of the 19 contract? 20 Α. I believe it's fairly explanatory. It's, therefore, 21 it's a binding inter-governmental agreement, but it's 2.2 not law. 23 And Colonel Bruce, when the Surface Access Agreement 24 was signed by Canada and Alberta, they appointed 25 representatives to the SEAC committee, one member

from the ERCB, one member from Alberta Environment, and one member from the CWS. And do you have an understanding or an opinion of why SEAC was composed of that particular membership?

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A. I mean, obviously I wasn't there when the composition was formed, but I, I understand that it would make logical sense for that composition of that particular party given that we are -- the Federal land is situated within Alberta.

The vast majority of companies that are working on the Base from industry adhere to a number of Alberta rules and regulations and, therefore, it was up to us to ensure that we try to ensure best practices and something that was familiar to the other operators, whether they were on the left side of the Jenner Highway or off the Block or on the Block.

That process, as you know, has been very challenging given that we are trying to ensure that, one, we meet all our Federal statutes and responsibilities while still making sure that we are not changing things so radically that the average oil and gas worker on the Base doesn't really understand the rules that he is supposed to apply on or off the Block.

Q. Is it possible or perhaps even likely that the

composition of the SEAC was recognition of the shared
jurisdiction that Alberta and Canada had in respect
of the surface and mineral rights?

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- A. It's possible, but I think it's more plausible that the -- it's more a question of making sure that the federal government when it instituted its policies and procedures were not too far remiss and would be able to provide the Base Commander with the necessary expert advice to formulate those internal policies to the Base to ensure that they were, one, logical and, two, fell relatively in line with a number of other agencies.
- Q. And, Colonel Bruce, does the Range Sustainability
 Section have any independent representation on it
 from the ERCB or Alberta Environment?
- A. No, it's an internal organization that I have stood up to assist me in the management of industrial activity on the Base as well as all other users, as I've stated. When it comes to GIS or the management of the Range and Training Area Management System, I use that to, to -- use it to govern all stakeholders on the Base.
- Q. And, Colonel Bruce, when the Department of National

 Defence and EnCana disagree over an issue in respect

 of a well licence application, what happens?

A. It would depend on the context of your question. If they are looking to exceed 16 disturbances per section, as it stands now, I would deny the Application for Development. And, therefore, a landowner consent, to put it in laymen's terms, would not, would not have occurred.

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If it's with regards to some other matter, and I, and I think a good example is the -- in 1975, and I think it's -- and I go back to the Master Access Agreement, on Section 14(2) it talks about (as read):

"Alberta or its assignees shall not assign this agreement or any parts thereof save with prior approval thereof in writing of Canada."

And I think what's important here is, an example of what some of the concerns we had was with regards to how this all works, is in 1993 there was a natural gas storage facility underneath the Base. EnCana was running that and eventually sold that facility in 2005. And they were using the Master Access Agreement as the primary means to say that this was all part of the Access Agreement. They sold those rights. And the only way the Base found out about it was in the newspaper after the fact, so in contravention with this particular section.

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We then went back and asked for some further clarity and saying that this could not occur without our consent. And the long and the short of it is is that in 2007, in September, all the lawyers finally got together and decided that this, in fact, facility was no longer or was not actually part of the Master Access Agreement.

But what's important here is to note is that it is our understanding and it is our, it is our understanding that the Master Access Agreement provides for a number of things, including things like assignment of rights or roles and responsibilities.

And I think it's important to note that that does not always occur.

And the Niska facility is a great example because it was worth hundreds of millions of dollars, sold without our consent, and only after the fact, so 15 years after the fact did they determine it was not actually part of the Master Access Agreement.

And so when it comes to things like disturbances per section or whether or not I sign off on a well or not, it depends on what they want on whether or not they're going to come and ask me or they're not going to come and ask me. So I think that's an important aspect to hoist aboard.

Q. So, Colonel Bruce, in respect of the 16 disturbances
per section issue, if landowner consent is refused,
is the next step, then, to go to the ERCB?

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- A. That is where it's ending up right now. But as you can appreciate, and you've seen all our correspondence to the ERCB, we do not believe that the Government of Alberta has the authority to regulate access. And it's, and it's in our letter of 30 April, 2007.
- Q. Right. And I'm aware of that correspondence, Colonel Bruce. And it's also fair to say that the Department of National Defence has agreed that the ERCB has the right to issue the licences. The issue that you take -- the thing you take issue with is the access. Is that fair?
- A. That's correct. I've stated before that ERCB is the licence issuing for wells.
- Q. If I can move on to just another topic, Colonel Bruce.

 What's your understanding of the physical and
 biological aspects of reclamation?
- A. I think I would ask you for a bit more clarification on that line. I mean, I understand that ultimately we want to, we want to return what has been done back to the state it was before. And the question is what is that standard? Is it near to, is it close to, is it something that works? Our preference is obviously to

return to native prairie, particularly in the case of NWA. But if you would like me to be more specific, I think I'd probably need more.

- Q. No, I think it was actually beneficial for you to bring it back up to where I could understand it, too. And that's my, essentially, my question. I think, is it fair to say, and if we can, if we can just agree to use not technical terms so nobody will get mad at us for using non-technical terms, but is it fair to say that, at the end of the day, reclamation is about putting the land back the way it was?
- A. Generally speaking, I complete --
- 13 Q. Generally speaking.

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- A. -- I completely agree. I think -- and it goes back to an earlier comment where I said that it's important to understand what's going on off the Block as well. And that's why I'm holding meetings with the Minister, or, sorry, the Deputy Minister of Alberta because they have a process in place that works that we're trying to tap into.
 - Q. All right. And I guess that's my question. Because the one thing that I don't think I've heard here is that anybody disputes your authority to be the final arbiter on reclamation certificates. It seems like all the minutes agree, Mr. Protti agreed in his

testimony, that Base Commander, you're the final say.

If you don't like it, they've got to keep working at

it. So why hasn't the Range Sustainability Section

went out and developed a standard for you?

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Α. I think that's a fair question. As I said before, though, they've really just stood up. And I mean, I'm still in the process of hiring a couple of the folks to fill some of the positions, so. Their focus, shall we say, has been on other things. And, as you can tell by the number that I have here, preparation for the Joint Review Panel has been a significant undertaking by that particular group. As well as the British campaign season in terms of their activities kicks off on the 1st of April by and large and goes right through to the 31st of October. So in terms of managing the Range and Training Area, that has a, has a large -- it takes a large chunk of the time of the Range Sustainability Section.

Karen, do you want to add something?

A. MS. GUENTHER: Mr. Chair, also within the
Range Standing Orders, Chapter 7, we've outlined what
we would like to see, I guess, as a draft for
reclamation. So it basically just outlines what
Alberta Environment criteria is already in place and I
guess the way forward that we would like to see that

1 within that document.

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- Q. Thanks, Ms. Guenther. That's helpful, because --
 - A. MR. RICHMOND: Excuse me, sir, I would just like to reiterate something we've said in the last couple of days with respect to -- the SEAC reclamation subcommittee had had meetings to try and develop that sort of process and standard. And that we were intending to get back into that again, certainly with these meetings that the Colonel has talked about with the Province in January. So it's happening on a number of fronts so that we actually define that
 - Q. Thanks, Mr. Richmond. So I guess when my friend was talking about the vexed reclamation situation, that's why I was more perplexed than vexed because it seemed like the -- you had the authority to make it happen. It sounds like it is happening. So reclamation may not be as vexed as we thought it was.

reclamation document and the final standard.

- A. LCOL BRUCE: That is the hope, but I can't under or I can't overstate just what a large undertaking this is going to be given the fact that it has not occurred in terms of final sign-offs for a couple of decades.
- Q. And is it fair to say that there's lots of good criteria been provided by this panel, Dr. Walker and

1		Dr. Henderson, and Ms. E	Bradley all have provided some
2		forms of criteria and gu	uidance on some of those
3		issues, so that will be	helpful, won't it?
4	Α.	LCOL BRUCE:	I believe that will be very
5		useful.	
6	MR.	DENSTEDT:	Mr. Chairman if I could check
7		with my client, I believ	re I'm done.
8	THE	CHAIRMAN:	Please check, Mr. Denstedt.
9	Α.	MR. RICHMOND:	Mr. Chairman, it's Wes
10		Richmond.	
11	THE	CHAIRMAN:	Perhaps we can just wait a
12		moment.	
13	MR.	DENSTEDT:	Go ahead, Mr. Richmond.
14	Α.	MR. RICHMOND:	I just wanted to clarify a
15		little bit with respect	to the Range Sustainability
16		Section's mandate. One	of the things we haven't
17		talked about here alot i	s landowner involvement. And
18		that's a key part of any	oil and gas development is
19		the landowner's involvement	ment in that process. And I
20		don't think I'm overstat	ing the fact that if Farmer
21		Jones or Rancher Brown h	and a well or two going on his
22		property, he would be ou	at there with the oil and gas
23		company walking every in	ach of the ground and letting
24		the company know what is	sues he had and the things he
25		wanted to see happen wit	th the installation of that

well and pipeline and so on. And usually the companies would be fairly amenable to meeting their -- the expectations of the landowner.

Now, given the fact that we've got

2690 square kilometres, 10,500 wells, thousands and
thousands of kilometres of pipelines, you can
understand that that's a fairly onerous task for the
landowner.

Now, SEAC does play a role certainly in reviewing and providing a large oversight role, but there are day-to-day issues that the landowner must contend with to make sure that his, his rights and his needs are certainly complied with and are taken into account. So the RSS provides that on a manner of, or a large number of issues from, ranging from Military training, obviously, to oil and gas and other non, non-Military users of that land, so. A fairly all-encompassing and onerous task. Just starting to get up to speed now. And the evolution hopefully will put us in a better position to manage those lands in accordance with the expectations of the public of Canada and the Auditor General and all the various regulations and policies that we're bound by.

MR. DENSTEDT:

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O. Fair comment, Mr. Richmond. Is it also fair that it's

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1
           going to take cooperation from industry and the
 2
           governments and everyone?
           Yes, I would agree with that.
      Α.
      MR. DENSTEDT:
                                    Colonel Bruce, thanks very
 5
           much.
                  Always a pleasure.
 6
                    Thanks panel, I'm done.
                    And thanks, Mr. Chairman.
      THE CHAIRMAN:
                                     Thank you, Mr. Denstedt, for
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           your assistance with your questioning this morning.
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                    This is obviously a good time to take a lunch
           break since it's noon.
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                    I'm sorry, Mr. McDougall, did you -- I, I
12
           didn't notice you edging towards the podium there.
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           And you have something to say before we break?
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      MR. McDOUGALL:
                                     I was edging, sir.
16
           wondering whether it might be appropriate, and this is
17
           completely selfish on my part, that I might ask
18
           Colonel Bruce five or ten minutes worth of questions
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           as opposed to coming back after lunch and starting and
20
           doing it?
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      THE CHAIRMAN:
                                     Yes.
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      MR. McDOUGALL:
                                     If that's -- obviously if
23
           that's acceptable to everybody.
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      THE CHAIRMAN:
                                    That's acceptable.
                                                         We can
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           continue for a few more minutes, yes. I'm sorry, I
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1 did not ask to see if you had any questions at this 2 point. MR. McDOUGALL: No, that's quite alright. 4 And I don't have very many. But I thought that it 5 would be prudent that a, as I asked EnCana just a couple of questions about the role of SEAC that it 6 would be prudent to ask Colonel Bruce a couple of questions about SEAC as well. 8 THE CHAIRMAN: 9 Yes, please proceed. CROSS-EXAMINATION BY SEAC, BY MR. McDOUGALL: 10 11 MR. McDOUGALL: Thank you. Thank you, 12 everyone, for that. Good morning, everyone, and Colonel Bruce. 13 14 Just a couple of questions and specifically with Ο. respect to SEAC, you've spoken I think at length 15 16 about the Range Standing Orders and Chapter 7 of 17 that. I take it you would agree that Chapter 7 of 18 the Range Standing Orders does refer to SEAC within 19 it? 20 Α. LCOL BRUCE: It speaks to all manners of 21 oil and gas activities. 2.2 Did you consult with the, with the SEAC members prior Ο. 23 to the drafting or concurrently with the drafting of 24 that document when you were -- with respect to the roles of SEAC? 25

- 1 A. They have been involved with the consultation process, 2 yes.
 - Q. Similarly, sir, I take it you would agree that

 Section 8 of the, I think it's of the Regulations of
 the Memorandum of Agreement, indicates that SEAC has
 certain roles with respect to the AFD process.

 Section 8 of the Regs. I believe Mr. Mousseau
 outlined those last night in SEAC's evidence. That's
 it. Section 8.
- 10 A. Yes, they have a role.

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- 11 Q. But would you agree with me, sir, that the current
 12 regimen on the Base is that basically it's the Base
 13 and I guess specifically RSS that has drafted the
 14 necessary requirements for the AFDs?
 - A. I'm sorry, I don't follow the question. Could you just --
- Q. Sure. That it's essentially the Base that has
 determined what requirements industry is required to
 put in with respect to any Applications for
 Development?
- A. No, I don't, I don't think that's fair. I think, as I mentioned before, that the development of the Application for Development, AFD, has been an ongoing process. And I think that all stakeholders have had some input in it and that's why it is what it is

- today. And it's different from what it was a year ago and much different from what it was two years ago.
- Q. And did SEAC have any particular input in that process?
- A. MR. MARTINS: Fernando Martins. Former members of SEAC were directly involved in the development of the AFD process.
 - Q. Okay. Colonel Bruce, I take it you would agree that

 -- I think we've heard that the Range Sustainability

 Section has increased in size and scope over the last
 several years?
- 12 A. LCOL BRUCE: Very much so, yes.

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- Q. And would you agree that some of the roles of the Range Sustainability Section overlap or are similar to some of the roles and responsibilities of the members of SEAC?
 - A. I wouldn't necessarily agree with that. They do provide advice, much like SEAC does. They do provide inputs from their own expertise and understanding looking at it from a Base perspective. So while advice, yes, but not necessarily the same types of advice that I would get from SEAC.
 - Q. And, sir, would you agree that the RSS has taken over the need or has replaced the need for SEAC on an ongoing future basis?

A. Not at all. I think SEAC is a fundamental component of the way I managed industry in terms of the environmental effects and impacts and I would -- I would not entertain any request to actually have that organization stood down because I think I, I rely on them quite heavily for a number of things.

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- Q. Now, sir, you've mentioned a couple times the meetings with the ERCB Chair and the, I think it's the Deputy Minister of Alberta Environment. And I wasn't clear, first of all, whether you've had any conversations with those two individuals or, or, or not, and particularly with respect to the role of SEAC.
- A. Yes, I've had a number of conversations and meetings with the Deputy Minister of the Environment for Alberta. And we have discussed the role of SEAC.

 With regards to Mr. McFadden, the current Chair of the ERCB, no, my first meeting with him will be on the 26th of November, next month. And I think what's important is, as I've testified earlier, is that my recommendations for structure and resourcing of SEAC will stem largely out of this parallel process that's going on in terms of these meetings with both ERCB and Alberta Environment DM, as well as an all-stakeholders gathering, which date is to be confirmed, but we're looking for, hopefully, the end of January '09 where

we talk about cumulative effects assessment and we talk about reclamation. And those will drive, to a large degree, where we will need to reinforce SEAC to assist us in, in fulfilling some of that role, particularly on reclamation.

Q. Thank you, sir. Perhaps you could speak to specifically what structural changes or additions, deletions, whatever that you're looking for with respect to SEAC?

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A. I'm not sure yet. And, again, it will be largely driven by the end result, right. We're looking for an effect on the ground. We're looking for an effect for them to be able to provide to me. And if I can achieve some of that through other systems, that will drive largely the organization.

I think in all instances we want to fulfill the role assigned to it within the MAA. I think that's an important role, both advisory to the Base Commander, as well as inputs into reclamation. And I think that government body or that body -- resource levels will be largely determined about, well, how much can I have a system much like Alberta in terms of reclamation work for me and, therefore, not have to repeat it or build it into the SEAC capability.

Q. Okay, and, sir, I appreciate that you don't

necessarily know what that's going to look at at this point in time, but do you have any sort of impression now whether or not your vision for the future SEAC is going to require a change or a revision, amendment, whatever you want to call it, to the '75 Master

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- I can't answer that for certain. You know, as I said, Α. it's a very -- it's still a work in progress. until I get more information, I won't be able to turn around and say I think there needs to be amendment in I'm comfortable with, like I said, the the MAA. advice to Base Commander and their, and their, and their work on the reclamation piece, because I think they are -- they know what they're doing. As I said, SEAC represents key capabilities both from the Province and, of course, through Environment Canada. And I will make sure that as we go through this journey, those folks are part and parcel of the process.
- Q. Thank you, sir. I just have one last area of question. It has to do with EnCana's proposed changes to SEAC. I take it you would have not necessarily reviewed those in detail, but we're here to hear the evidence with respect to what EnCana sees SEAC as being in the future.

1	Α.	Again, I think what's important to note is that some
2		of the discussions that occurred between the
3		Department of National Defence and the senior
4		leadership of EnCana was the role of SEAC and how we
5		can move it forward. We both agreed that their
6		that given their current mandate, that they really are
7		not resourceed to do that yet. And, as I said, I'm,
8		I'm not prepared to settle on a one particular format
9		or structure yet until I've got all the other pieces
10		in place. And once I've lined those ducks up, then I
11		think what's important is we talk to all the
12		stakeholders again in this developmental process and
13		we come up with an agreed-to way ahead, because if we,
14		the parties, and the stakeholders, can say we are
15		happy with this, it's a heck of a lot easier to get
16		government buy-in who will be providing the resources
17		to it.
18	Q.	Okay, sir, so just as a final question, then, I take
19		it that you wouldn't necessarily be opposed to a
20		change in the structure of SEAC, whether it be

change in the structure of SEAC, whether it be increased or decreased, but as long as there is some consultation amongst all the parties, consensus between those parties as to what that role would be?

A. In terms of structure, I believe that's fair. I'm

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quite happy with the role SEAC has now, but I think in

1	The same of the sa
1	terms of structure, I tend to agree with your
2	comments.
3	MR. McDOUGALL: Those are all my questions,
4	sir. Thank you very much, Colonel Bruce.
5	THE CHAIRMAN: Thank you, Mr. McDougall for
6	those questions.
7	We will now break and perhaps we can try to
8	get back at noon. It's a bit shorter. Or, sorry,
9	noon. At 1 o'clock. We can't turn the clock back,
10	although some of us might wish to, but we'll meet at
11	1 o'clock if we can and return to questioning the
12	federal panel once again. Thank you.
13	(NOON RECESS)
14	(PROCEEDINGS ADJOURNED AT 12:09 P.M.)
15	(PROCEEDINGS RECONVENED AT 1:01 P.M.)
16	THE CHAIRMAN: Ladies and Gentlemen, welcome
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	back. We are going to start with cross-examination
18	from Mr. Mousseau.
18 19 20	from Mr. Mousseau.
19	from Mr. Mousseau. Please go ahead, Mr. Mousseau.
19 20	from Mr. Mousseau. Please go ahead, Mr. Mousseau. CROSS-EXAMINATION BY THE BOARD STAFF, BY MR. MOUSSEAU:
19 20 21	from Mr. Mousseau. Please go ahead, Mr. Mousseau. CROSS-EXAMINATION BY THE BOARD STAFF, BY MR. MOUSSEAU: MR. MOUSSEAU: Thank you, Mr. Chairman.
19 20 21 22	from Mr. Mousseau. Please go ahead, Mr. Mousseau. CROSS-EXAMINATION BY THE BOARD STAFF, BY MR. MOUSSEAU: MR. MOUSSEAU: Thank you, Mr. Chairman. Good afternoon, Panel.

1 Α. LCOL BRUCE: Can you? 2 THE CHAIRMAN: I, I will intervene and say you don't have to answer that one, Colonel Bruce. 3 4 MR. MOUSSEAU: It's a life-long dream 5 fulfilled. Okay. My first question for the Panel has to do with 6 Q. the actual permits that might be contemplated as a 7 result of this process and EnCana has proposed a 8 single permit be issued by DND for all the work 9 10 associated with the infill project and I just want to understand if, if DND accords with this view or does 11 12 it envision the issuance of multiple permits? MS. BOYD: At this point, it's difficult 13 Α. to predict exactly how the, the permitting will occur 14 15 and what form it will take. It is certainly 16 conceivable and possible that a single permit can be 17 issued, but I would suspect that it's much more likely 18 that multiple permits will be issued depending on how 19 the Project is presented and also the different tasks 20 that need to occur throughout the Project. 21 Okay and -- right. My next question deals with the Q. 2.2 issue of preliminarily assessed critical habitat and, and I think from our discussions in the last few 23 24 days, I, I understand where we are in terms of the

legal process for determining critical habitat.

1 And, and what I want to really understand is where are we from the, from the scientific 2 perspective in the process for determining critical habitat, and specifically what more work on the 5 ground is required to finalize the determination that 6 Mr. Ingstrup spoke to, to some degree? MR. INGSTRUP: I, I think the easiest way to 7 Α. address that would be on a -- for the five species 9 that we proposed, maybe talking on a 10 species-by-species basis. Is that ...? That would be helpful, sir. 11 Ο. I think the easiest then would be to start 12 Α. 13 maybe with Darcy Henderson on the, the plant species. 14 Α. DR. HENDERSON: Darcy Henderson here. With 15 respect to critical habitat for the three plant 16 species at risk, we've outlined in our Government of 17 Canada submission the criteria that we were using at that time when we prepared the submission for 18 19 identifying critical habitat. 20 As I pointed out to Mr. Denstedt, the maps 21 that appeared in our presentation here didn't 2.2 correspond entirely with the maps that appeared in our original Government of Canada submission. 23 That's 24 because the criteria we're using has changed and that

has changed as a result of our consultations, not only

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with some of the stakeholders like PFRA, DND, EnCana and other representatives of the Canadian Association of Petroleum Producers, but also internally amongst biologists at Environment Canada and with the people in -- on our recovery team for plant species at risk.

So we've met as recently as the first week of September this past year to go through and sort of confirm our, our stance on what criteria we're using at this point in time.

Now, about two years ago we started two parallel processes, one for identifying critical habitat, one for developing setback guidelines and what has occurred through those two parallel processes is they've begun to converge so that we're using the information that's been gathered to establish setback guidelines as the scientific criteria for identifying what constitutes critical habitat and what would constitute examples of activities likely to destroy critical habitat.

And I believe those setback criteria were provided in the response to Information Requests by the Government of Canada. I'm not sure what the exhibit number is on that, but that's the criteria that we would be using now.

Q. That, that's helpful, sir.

1	Α.	MS. DALE: Wi	th regard to Brenda
2		Dale. With regard to Sprag	que's Pipit, the portion for
3		Suffield is will of course sorry, I can't quite	
4		see Mr. Mousseau will, w	vill still go through some
5		further review by the scien	tific subcommittee of the
6		Sprague's Pipit recovery te	am and there is, at this
7		time, or this past summer,	there has been work done in
8		parts of Saskatchewan and t	here will be work done with
9		some databases we have for	some places in Alberta and
10		it is my understanding that	we should be in a position
11		to preliminarily assess som	ne additional critical
12		habitat in the coming year.	And it won't all use the
13		same process because we had	l an extraordinary data set
14		of many, many years. These	e others may take in only
15		two to three years of data.	I'm not sure by the look
16		of Mr. Mousseau whether I'm answering his question,	
17		okay.	
18		And I would pass it over to Dr. Duncan to	
19		comment further on the entire process.	
20	Α.	DR. DUNCAN: Da	ve Duncan. Just in regard

A. DR. DUNCAN: Dave Duncan. Just in regard to the Sprague's Pipit, there is a substantial amount of information that Ms. Dale alluded to was collected this summer in southwestern Saskatchewan and we're on a plan to identify critical habitat across a large portion of both southern Alberta and southern

Saskatchewan, possibly Manitoba in the next 12 months or so, looking at finalizing that December of 2009.

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So we have a couple different avenues to take with the Suffield critical habitat. It could get -it could be a part of a Provincial action plan for
Alberta; it could be part of a smaller action plan for
the Base. It could be an amendment to the recovery
strategy. There's different options that would, that
would sort of help in terms of the timeline, that
would frame the timeline that we haven't -- we might
go down. We haven't decided which way we're going for
finalizing the critical habitat for Sprague's Pipit in
Alberta yet.

A. MR. JENSEN: Olaf Jensen here. With respect to Ord's Kangaroo Rat, the modelling process in -- at CFB Suffield is most, mostly complete.

There's some refinements to the model that need to be done and there needs to be some discussion between the, the Provincial recovery team and whatever might develop for a Federal recovery team and the model might change a little bit once we look at habitat in the Great Sand Hills in Saskatchewan.

But it, it's fairly well progressed from a scientific point of view. There's some discussions and some refinements that need to take place.

A. MR. INGSTRUP: And, and just to summarize on that, too, I think as an overall comment, our, our level of certainty at CFB Suffield, as I think I said earlier, is probably a lot higher than, than some of the other areas of Canada that we have to work within because often our data sets aren't as robust as, as we have at Suffield in terms of known occurrences of some of these species at risk.

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And I think another point to emphasize, Dave brought it up, we do have to identify critical habitat across the range of these species, are -- the way we are doing that is in an incremental fashion. So that's certainly how we've approached the whole problem, if you will, of trying to identify it across the range.

And I think, just finally, just to remind the Panel that there is a significant consultation component with, with our identifications and that we're in the process of doing that and we're going to be continuing to consult right across the range of some of these species with people who are potentially impacted by, by the identification.

Q. And I, I wanted to follow up on something I think you might have said, either it was you, Mr. Ingstrup or you, Dr. Duncan, that this notion or concept of a

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preliminarily assessed critical habitat was something that was developed specifically for this proceeding.

And, and as I understand it, one of the recommendations based on this preliminary assessment is, is, is to not go forward with industrial activity.

Keeping that in mind, I'm wondering if this concept is something that Environment Canada is applying in other NWAs; in other words, we've preliminarily addressed some habitat, we don't want anything to happen until we finish that up?

A. In terms of other NWAs, it is, it -- certainly if we're aware that a critical habitat designation could be coming up in the very near future, that will certainly -- we would want to see that that's protected. It hasn't -- it's not really an issue on other NWAs because we don't have, you know, the issues that we do at Suffield.

We've also provided this sort of advice to other Federal departments who do, you know, who are finding themselves in the -- in a situation where perhaps it's an oil and gas issue. And if we are starting to identify it, we will let those Federal departments on Federal lands know about it and our position has been that you should work towards

striving to protect it, you know, and, and certainly until the, the identification is formalized.

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A good example is we've taken this position actually on some of the PFRA pastures in, in Saskatchewan where we provided advice to PFRA that's very consistent with the type of advice that we provided to the Panel.

- Q. Is, is it fair to say then that while this concept was developed for this proceeding its, its application isn't going to be restricted to this proceeding?
- A. I think that, that's a fair comment. I mean, the name we came up -- the label, if you will, of "Preliminarily Assessed Critical Habitat", we discussed this a lot coming up to this hearing because we've never been, you know -- the Act is relatively new and we are just starting to get into the process of formally identifying critical habitat for a number of species.

We wanted to convey the message to the Panel that we are very close to and, and with some certainty that there's going to be critical habitat on the NWA and we wanted to come up with a description for that, you know, in terms of where we're at in the process.

I think we've been pretty clear that it's not, you know, legally identified yet, but that we're

certainly on that course and we -- but we've got some more work to do.

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A. MR. NORTON:

I might just add to that
using a slightly different frame of reference, that
being the, the specifics of this and other processes
under the Canadian Environmental Assessment Act. And
under that particular piece of legislation in this
process and in most Federal EA processes that
Environment Canada is involved with in the Prairie
Provinces, we are in a Federal authority role and in
that role our responsibility is to provide advice to a
Responsible Authority department, so in the case of
the PFRA pastures in southwest Saskatchewan, we were
providing Federal authority advice to PFRA in a
screening level assessment.

I think the, the approach that we are on is that whenever called upon to provide advice as a Federal authority in a process like that, we will provide the best and most current advice that we can and because the process of identifying critical habitat takes sometime, there will be cases like this one, like the example in Saskatchewan that's recent as well, where the advice we provide is essentially partway through the process of the formal identification of critical habitat but where we have

1 gotten to the point where we have sufficient 2 confidence in the science that we, that feel it is appropriate and valid to provide recommendations to responsible authorities or to a Joint Review Panel in 5 respect of what we know about where that habitat is 6 and with respect to measures that are appropriate to ensure that it is appropriately protected. DR. HENDERSON: And this is Darcy Henderson. 8 Α. 9

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If I might add, we're following this same process for plants but with a different species of plant, Hairy Prairie Clover on actually another Military Base in Saskatchewan, 17 Wing Detachment Dundurn, and two PFRA pastures that are adjacent to that and we made that proposal more than a year ago and that proposal is evolving along the same lines as the proposal here with these three plant species at risk.

Also, for one of the species here Slender
Mouse-ear Cress, it occurs on another National
Wildlife Area in Saskatchewan and as part of its draft
recovery strategy, we are proposing critical habitat
identification on that National Wildlife Area as well
as Suffield.

Q. Thank you, Panel. Those, those answers are useful.

Colonel Bruce, I'm going to turn briefly to
the 1975 agreement and I'm going to put something to

you and, and you can agree with me or disagree with me, but when I read it, it struck me that one way you can interpret that agreement is that it recognizes that the Military has certain areas of expertise and it also recognizes that, in some areas, it may not have expertise. And, and I'll walk through that agreement with you and see if you agree with me. And if we start with Section 8 of the agreement.

A. LCOL BRUCE: I have it.

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- Q. Okay, sir. And, and when I read that section it struck me you could interpret this to suggest that with respect to matters relating to Military operations and the use of the Base as a Military asset, the Base Commander is, is the person to make those decisions and it gives him some instruments by which to make those decisions, including the RSOs and, and it refers to matters of safety and efficiency. Is that, is that a fair interpretation or a fair way to look at that section?
- A. I tend to, I tend to look at Section 8 in a broader context. I tie it back to paragraph 6 and the preamble as well, and I think I look at it in a broader context than perhaps you're defining it now.
- Q. Okay, sir, and maybe we'll come back to that, but when, when I looked at Section 12, which is the

1 section that, that establishes SEAC, and specifically Subsections 12, 7 and 9, it struck me that -- and 2 those are the two sections that allow the Base Commander to -- or require the Base Commander to act 5 on the advice of SEAC and, and it struck me that 6 maybe what that section was trying to do was recognize that the expertise in the Military is with respect to Military matters and that there's a board 8 9 that we're going to create that will have expertise 10 in environmental matters and oil and gas matters and, and they're really to guide the Base Commander on 11 12 those matters. 13 So that's how I interpreted that section to 14 be, is, is to recognize that the Military doesn't 15 have expertise in those areas and that's why it 16 created this body to provide that expertise for the 17 Military. 18 Α. I don't disagree with the establishment of SEAC for 19 those recommendations, but again, if I look at 20 paragraph 12(7), I, I do agree that it applies to this 21 but it must be taken in context with 12(1) where it 2.2 says, paragraph 12(1), and I quote: 23 "Not derogate from the powers and 24 responsibilities of the Base

Commander under the other

provisions of this agreement."

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So, I think, like all things in this agreement I find that you must be able to relate it to the whole and not just the individual part that you're looking at specifically.

- Q. Sure, and what I -- how I interpreted that section or how I thought you might interpret this section, and you can comment on that, was those other sections give you pretty broad powers. This section, in particular, provides a limitation, a specific limitation in two instances. With respect to approvals, you can only act on the recommendation of the Base -- or of SEAC. And with respect to operational concerns and, and perhaps non-compliance with environmental legislation, you again have to act on the advice of SEAC. Is that fair?
- A. Again, I wouldn't look at it as a constraint. I think of it as an enabler when I read through these things so I, I don't necessarily look at it as a, as a constraining set of impositions.
- Q. Fair enough, sir. And, and I guess my last question then is you heard some concerns from SEAC yesterday about the clarity of the 1975 agreement as it relates to the role of SEAC and the processes its require -- or its obligations under the agreement. And I guess

my question is a bit broader than that and I want to
know whether, from your perspective, the agreements
provide a regulatory process for oil and gas
activities that has sufficient certainty and clarity
to be -- to protect the environment which it was

intended to protect?

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- A. I think if I was to answer that question in the broadest context, I would say that I still believe there are regulatory gaps that exist currently and I think are caused from, or stem from, this original agreement. And I, I refer back to Alberta Environment's participation or the lack thereof in particular fields be given the particular jurisdictional nature of the lands itself, Federal being Provincial. So I'm not sure that this document provides for all of those contingencies. I do think that there are some gaps to be filled.
- Q. And maybe to follow up on that, sir, you said there were gaps both on the Federal side and on the Provincial side and there were suggestions that changes to legislation, both Federally and Provincially would be required. Is there a way to expand on that or is that maybe something your counsel is going to do in argument?
- A. I hope the counsel is going to do it in argument. I

think, you know, I look at it in very broad themes,
right. When I look at jurisdictional issues I look
at, okay, where do I have to go to get an answer? You
know, where am I going to get that answer to make a
decision? Or where am I going to find the knowledge?

And if that means that there are regulatory bodies out there that I can approach, there also is legal questions on -- in terms of the status of the Federal land versus Provincial interaction. And therefore, I find that at times I will be considering a decision that perhaps I don't have all the information or I have all the legal authority to perhaps necessarily take that decision, and that's where these jurisdictional gaps sort of result from.

- Q. Colonel Bruce, I'm going to move on to the, the latest version of the Range Standing Orders and I think this is 003-045.
- A. I have them.

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- Q. Okay, sir. The first thing I noticed was that the date of issuance is referred to as "D day". Does that mean anything or --
 - A. Other than we were at Juneo (phonetic), not me myself, but -- wait one please.
- Q. Okay. And, and my only question really, sir, is it your view that the RSOs -- well, Section 7 -- or,

sorry, Chapter 7 is going to apply to activities on the NWA?

A. That is correct.

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- Q. Okay, sir. Now I want to --
- 5 Α. MS. BOYD: Sorry, sorry, could I just 6 add something to the Base Commander's answer? It is true that Chapter 7 would minimally apply in the However, there would be National Wildlife Area. 8 9 additional conditions as part of the National Wildlife 10 Area permit and if there were any needed changes or 11 amendments to what was in RSO Chapter 7 that would be different in the NWA, it would be stipulated in that 12 13 permit.
 - Q. Okay, and just one, one more question there. I know it's been changed to disturbances, 16 disturbances per section and I know that's found under the drilling section. I just want to confirm that disturbances doesn't refer to pipelines. Is that fair?
 - A. LCOL BRUCE: It refers to anything that can cause a disturbance.
- Q. Okay, so I guess I need to understand then if, if

 16 wells were approved for a section and they needed

 to be interconnected by pipelines, would that exceed

 the, the 16 disturbance?

A. It, it may very well, yes. And as -- what we said, there may be more than 16 wells if they're going to do multi-well drilling from a single pad. You know, and we've also made references in the RSOs to if it's a multi-pad drilling then it will be a slightly larger footprint than would normally be found for a normal well, for example.

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- Q. Right. And, and I think I also read in the 16-well disturbance section, I think it was Section 70, that you retain some discretion. So based on information, scientific information about range health, for instance, you've retained the discretion to go beyond that but you need to see certain information before you're going to go there?
- A. That is correct, and as I, I -- and I think what's important to highlight is 16 disturbances per section is, is an interim cap in terms of the amount of disturbance on the training area. Until we have the science to determine what that threshold or carrying capacity of the land is and if, you know -- given all the other demands on the environment, if it can sustain more then we will allow more as long as it doesn't interfere with the primacy of the, the training area for Military operations.
- O. Okay, sir. I want to move on to the three-well

application that's in front of this Panel and my
question is, is this review process a surrogate for
SEAC review?

A. That's a very interesting question because I, I think

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fundamentally what has not happened, it has not been processed through the Base, so the three-well application has not come to me for either denial or approval yet. So, regardless of, of where we stand, I think what's important to note is that ultimately ERCB may recommend or decide on issuing three licences.

The question I have to determine is given all other policies, guidelines and directions that have been based out there do they fall within the 16 disturbances per section and all the other regulatory matters that I need to look at.

So, decision, yes, from the Panel, with respect, but it still needs to go through the Base process to make sure that it falls within all the other guidelines and processes.

- A. MR. MARTINS: Fernando Martins. Just to add to that, had these three well applications come to the Base being that they are in the National Wildlife Area, we would most certainly have processed them through SEAC to review.
- Q. Okay. And when I was questioning EnCana, their

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request was this, that this Panel approve those applications with a condition that they be reviewed by SEAC and the Base Commander and if SEAC and the Base Commander -- if the recommendation from SEAC to the Base Commander was to deny them that they would withdraw those applications. Does that address the concerns of the Base?

- A. LCOL BRUCE: As long as the process is followed so that it's a fair and open, transparent process, I'm quite happy to, to, to make sure that that does occur.
- Q. Thank you, sir. I'm going to move on to, to operations and inspections and I had a conversation with EnCana about this. I understand that the ERCB has conducted eight inspections on the NWA since 2003 and I'm wondering, from the Base's view, whether it's of the view that that's sufficient?
- A. It's a hard question to answer when you talk about —
 I'm not sure what the rate of inspection by ERCB on
 other areas of the Province are, off the top of my
 head. So is eight in relation to a similar
 organization or a similar size footprint somewhere
 else in Alberta acceptable? Don't know. I do know,
 though, that again I'm in discussions with ERCB to
 determine what more can be done because I personally

don't know enough about the subject in terms of inspection regimes, but it just sounds low given the amount of infrastructure that we have. But again, I -- it's not something I have a comparison against.

- Q. Okay, sir. And this is also a question I asked EnCana and it relates to the ERCB's inspection process and, to some degree, it's computer generated so they look at essentially three factors, so operator history, they look at site sensitivity and they look at inherent risk. And my question was given the nature of the lands upon which these wells are proposed, is it the Base's view that the site sensitivity factor should be higher than outside of the NWA?
- A. Yes, and that's a point for discussion in November.
- Q. Okay. Thanks, sir.

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Now, along the same lines, and I think we may have this already, but SEAC's inspections of wells currently is, is limited to an annual reconnaissance and I'm wondering if the Base sees an expanded inspection role for SEAC should the new infill Project go ahead, or is this inspection something that the Base would want to handle as part of its own shop?

A. I think it's -- I think the combination of both is probably appropriate, but, again, until I've had a

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sit-down with Alberta Environment and walked through how they do their sort of inspection process and their understanding of, of the systems that they use, I would be hesitant to say, if we cannot adopt their system almost complete, with some modifications obviously, or do we need to augment that whether that be with additional SEAC resources or additional resources to the RSS section itself, so I'm not, I'm not in a position yet to determine that and probably will not be for another few months.

- Q. Okay, sir. We've discussed -- Canada has discussed this, EnCana has discussed this, the Coalition has discussed it, and these are the two issues regarding abandonment of wells in Wetlands. And there's two examples that have been discussed on the record where after a long to'ing and fro'ing, EnCana removed two wells and my question is, do you think that if the process contemplated in the 1975 agreement was used, in other words if the Base Commander had immediately issued a stop order and referred those matters directly to SEAC and got a decision out of SEAC, do you think it would have taken as long as it did to resolve those problems?
- A. I'm not sure what was said the other day and -- with regards to the discussions with SEAC because I'm no

speed reader and I must admit it takes me about three hours to get through a day's worth of testimony and so I have yet to finish yesterday's testimony.

- Q. And just to be clear, I didn't talk to SEAC specifically about that issue.
- A. Okay. It is my opinion with regards to several of the

 -- or at least those two wells in question, they were

 not within those designated areas of, of restricted

 zones for development, but I may be wrong. I just

 need to clarify.

I think I just wanted to clarify. One was in a sensitive area and one was obviously in a wetland but not in, in the NWA per se, and it was only discovered once they applied for a tie-in of a pipeline, the actual construction of the well, because it was a routine application and when it was through its desktop review seemed to meet all the criteria, the well was allowed to go ahead and be constructed.

It was only after the fact on the demand for, or a request for a tie-in of the pipeline that the pipeline request came in with a notice that it was going to need to go through a wetland and that's when it twigged us to say that perhaps this is something we need to go have a look at on the ground.

So ERCB or -- correction. SEAC was not

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invited for that particular one initially because they were not -- it didn't meet any of the criteria that we would normally refer something to SEAC on. Would it have helped resolve the matter more quickly? I'm, I'm not convinced that -- I don't know when something is in a wetland or when it's not in a wetland, so I'm not sure if it would have facilitated speeding up the process at all.

However, as you know, we consult with SEAC on many occasions and I spoke to them in specific about the well and it -- until I got that in writing, that seemed to be the only thing that would satisfy EnCana for, you know, getting that well removed from the wetland. I wasn't here for the, the one in 2005.

- Q. Okay, sir, and I think I probably need to follow up on this a bit. My understanding of subsection 12(9) of the agreement is that if you observe a contravention, a contravention of environmental legislation regardless of the location of the well you can refer that to SEAC and they have 30 days to get your recommendation on that. So maybe if we can look at subsection (9) and you can confirm my understanding of that.
- A. No, your understanding is correct.
- Q. Okay. So in the future, if you encountered an issue

1 like this, is that an expedient way to deal with 2 these? Α. It is, yes. 4 Ο. Thank you, sir. 5 When I was examining EnCana, I asked them to give me some examples of Alberta Environment 6 exercising its jurisdiction over spills on the Base and I just wanted to give this Panel that same 8 opportunity to, if it has any examples of that 9 10 occurring? 11 MR. RICHMOND: Wes Richmond. As far as Α. we're aware, there's no involvement from Alberta 12 13 Environment other, other than the, the fact that 14 spills are reported to them and in turn they often 15 report those to, to Environment Canada as well. 16 Okay. And I have a few questions on reclamation. Ο. 17 think we covered that ground pretty clear, but I'm 18 wondering, from the Base perspective, reading the 19 regulations and the authorities, I guess the 20 jurisdiction put on to the ERCB, is it one possible 21 interpretation that in fact the ERCB is the 2.2 regulatory body that's supposed to be signing off on 23 reclamation? 24 LCOL BRUCE: Clarify "ERCB". That, that's Α. who you're talking about, not Alberta Environment? 25

- Q. No, I'm talking about the ERCB. If you read -- I
 think we were talking about Section 4 in the
 regulations that gave to the ERCB certain powers of
 the Minister of the Environment and those powers
 arguably included reclamation. I'm just wondering if
 one way to interpret that is that those -- that
 authority still rests with the ERCB?
 - A. I'm not, I'm not of the opinion that it does. I think time has moved on from that particular aspect.

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- Q. I think there's a lot of people upstairs who are pretty happy with that answer, sir, but...
- A. MR. RICHMOND: Could I interject for a second. It's Wes Richmond. I, I did think of one instance on your last question. It was a very recent one where there was a harvest oil spill on the Base and because there was wildlife involved, there were a number of birds that were killed; that the Alberta Wildlife people actually showed up on the Base along with EnCana -- Environment Canada enforcement people to look at the situation of the that is probably the only one I can recollect where we had involvement from Alberta Environment. That's not Alberta Environment. Sorry, it was another department of the Alberta Government then, closely related.
- Q. Okay. We're getting closer to the barn door, sir.

Colonel Bruce, you made a statement earlier today and
I'm not certain if it was intended to, to convey the
thought that it did, but I'm just wanting to
understand is it your understanding that the ERCB is
an independent body or board under the Minister of
Environment in Alberta?

- A. LCOL BRUCE: It is my understanding that it's an agency that works through the Alberta Energy Department, but it's an independent or a Crown corporation.
- Q. Okay, and similarly the Canadian Environmental

 Assessment Agency is an agency, an independent agency

 under the Federal Minister of the Environment?
- A. Correct.

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- Q. Okay. And, sir, I just want to confirm your understanding that this Panel is sitting both as a review Panel under CEAA and as a division of the ERCB?
- 19 A. That is my understanding.
- Q. Okay. And again just want to confirm your
 understanding that as a division of the ERCB it has
 the authorities of the ERCB but it doesn't report
 back or consult with the Chairman or other board
 members with respect to this decision?
 - A. Other board members of --

Q. The ERCB.

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- A. The ERCB? It was my understanding they're vested in the authority to make decisions on behalf of the ERCB.
 - Q. Right, and I've just realized I've completely misspoken because this is a hearing for which a notice of hearing was issued before January 1st, this is actually a division of the EUB and not the ERCB, so I guess you can confirm that understanding, sir?
 - A. Yes.
 - Q. Okay. There's been talk of a meeting proposed between you and the Chairman of the ERCB. I just want to confirm that none of the issues arising from this proceeding are going to be the nature of discussion with the Chairman?
 - A. No, the intent of the meeting is, as I, as I've stipulated before, is it's a parallel process. We're, we're trying to move the issues forward, so it is completely independent of this process. But, obviously, depending on the decisions made or recommendations made it will inform that process eventually. Now, when that will be is when the, when the recommendations come out.
 - Q. Okay, sir. And, and with those meetings established with the chair of the ERCB, was any thought given to having representatives from industry attend as well?

A. These are preliminary discussions that we're having and I think once we understand the sort of intent and concept that we're talking about, we will then broaden that inclusiveness to ensure that industry, amongst others, are representative.

And, and I just want to highlight that one of those first steps is this working group proposed for the end of January which will include all the stakeholders and the issues we are dealing with is cumulative effects as well as reclamation and the cumulative effects obviously, not ERCB but Alberta, with the land use framework, Environment Canada with a number of their initiatives as well as others will be sitting down to discuss how we can best incorporate all of that for use by CFB Suffield.

Q. Okay.

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THE CHAIRMAN: Mr. Mousseau, maybe before you move on to your next question, I, I should intervene and make a, make a clarification for the record here. I just want to be very clear there has been discussion of meetings with the chair of the ERCB and I want to make it very clear that at no time has this Panel received any direction at all from the chair of the ERCB on, on the matter of this Project under review, nor have we received any direction nor

has there been any discussion with the Minister of the Environment to whom we report our findings and I think lest there be any doubt I wanted to clarify this point for the record.

MR. MOUSSEAU: Okay.

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Q. My first question of this panel, the goal of that question was to crystallize for me and perhaps for the Panel that Canada's position and the answer Mr. Norton gave me and Colonel Lamarre gave me an answer, too, I'm just going to refer to Mr. Norton's answer and it was the amount of information that has been provided lead to uncertainties of a magnitude that lead to our conclusion that it is not possible to determine with confidence whether in fact likely significant adverse effects are likely to occur after taking into account mitigation measures.

And my question is, if this Panel were to recommend approval of the Project, what conditions could Canada recommend to address the uncertainties it has identified?

A. MR. NORTON: Somehow I knew we might receive that question and I need to provide just a little bit of a preamble to my answer so that I'm speaking primarily on behalf of Environment Canada.

I'm sure my colleagues from DND will answer here.

just want to provide a preamble so that our comments with respect to potential conditions of approval are provided in the clearest possible context.

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It's important to note that factoring in the information that has been made available prior to this hearing and the information that has been discussed, clarified, sometimes declarified over the last three weeks, that our fundamental recommendation remains the same, that is, that no industrial -- no additional industrial activity should be allowed to proceed in the NWA at this time and that's articulated quite clearly in our submission.

There are a number of conditions that I will try to paraphrase briefly here that we believe would need to be put in place or satisfied prior to any approval and those primarily related to the completion of what we would consider to be an adequate assessment of the cumulative effects of the Project. That would need to include considerably more detailed information related to the layout of the various components of the Project, in other words, the -- at least a preliminary siting of wells and pipelines.

There would need to be a more complete assessment of the mitigation measures to be employed, that a monitoring program would need to be designed in

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a much more detailed fashion than is represented in the Environmental Effects Monitoring Program that we have before us and, although it was not a concept that we specifically considered in formulating our submission, the notion of some form of piloting of either the actual physical activities to be contemplated and/or the -- sort of the regulatory and approvals process, in a location other than within the NWA at, relatively speaking, at first blush appear to be sound suggestions.

If on completion of those it was determined that the Project as a whole could in fact be constructed and operated in a manner that did not interfere with the conservation of wildlife within the NWA, and ensured the protection of species at risk, their residences and critical habitat, be it preliminarily assessed or in a relatively short period of time formally identified, if those conditions were met, then a couple of conditions that I think we would be looking for would be exclusion zones placed around species at risk, known locations of species at risk that is, their residences, critical habitat or preliminarily assessed critical habitat as well as setbacks from -- for other components relating to the, the biophysical environment including Wetlands and

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other sensitive wildlife features as well as conditions that I think are reasonably well articulated in our submission related to the, the reclamation plan as laid out by the, by the Proponent right now.

I turn to others on my team here to see if they wish to add.

A. MR. INGSTRUP: Just a few further comments on -- along the lines of the species at risk. As Mike said, I mean, the uncertainty -- we've got a lot of uncertainty in terms of what the adverse effects would be on the number of species at risk. We noted in the EIS that they found a significance rating of basically insignificant for a number of endangered, threatened and species of special concern. For example, the Sprague's Pipit, where there was an insignificant significance rating in the EIS.

We remain concerned. We don't think all the necessary information has been collected that, that would put us in an area of certainty, if you will, with regard to the impact of this Project on the species at risk, and as Mike said, or Mr. Norton, on critical habitat and their residences. So that, that remains a fairly large gap for us.

Another area is just with respect to the

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existing footprint of -- on the National Wildlife Area
where -- and I know DND got to it a bit in their
presentation in terms of identifying where the
threshold is for the National Wildlife Area. We think
there's a lot of uncertainty around that and further
work needs to be done to clearly articulate where
we're at on the National Wildlife Area with respect to
critical thresholds that we may be starting to exceed.
I think I'll leave it at that. Dave?

DR. DUNCAN:

Dave Duncan. I, I just might

A. DR. DUNCAN:

Dave Duncan. I, I just might want to add some things to our discussion of species at risk here. An important thing to remember is a species at risk, an endangered species is a species at imminent threat of extirpation or extinction and the notion of taking additional risks, and risks can come via uncertainties to a species already at risk is quite unpalatable.

We've got a lot of experience, not in this country but in the United States in terms of their Endangered Species Act. They've got one of the, one of the notions that's come across in the literature is that adaptive management has often been suggested as a way to move forward with species at risk.

In that body of literature, there's recognition that when you're dealing with species at

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risk the whole notion that the status quo can be better than experimenting and taking chances is a much more prudent and a precautious way to go when dealing with species at risk.

The concept of adaptive management has been referred to as a smoke screen in the United States to allow additional risk to be incurred on endangered species and species at risk. This is, to my knowledge, the first time there's been a Panel in Canada that's had so many species at risk issues in front of it, so much critical habitat, potentially, preliminarily assessed critical habitat in this country to date.

And I think there's something that we can learn from the United States, that we need to be precautious. The principle of precaution is alluded to both in the preamble and Section 36 or 38 of the Species At Risk Act, and this is not -- species at risk are not the kinds of flora and fauna to go experimenting with or to take additional risks with.

And the notion of adaptive management must be entered upon very, very carefully because it inherently involves unknowns, uncertainties and taking risks. And species at risk on a National protected area is not the kind of -- not the kinds of tracks or

groups of organisms to experiment with and take, take chances with, nor is it suitable within a National protected area.

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A. LCOL BRUCE: If I might just follow up with two points. I think fundamentally some of the, the issues I would like to see addressed would be -- the whole idea of the carrying capacity or the cumulative effect on the property as a whole and, and the reason why I continue to go back to the precautionary approach is just simply as I don't have all that information and therefore I am loath to make decisions of this nature without a broader understanding of the impacts that it will have overall.

And then finally it's about time. I'm just not sure that three years scale and magnitude of the Project -- I have no doubt they can drill that quantity of wells. I mean, they do that now in the, in the rest of the Base. It's a question of being able to adapt to, to those issues that do arise within the program that they have laid out and my ability to, you know, given the uniqueness of the NWA, support this with the resources that I currently have available to me.

A. MS. COULSON: Hi there. Jess Coulson,

1 I just wanted to -- I believe your question 2 doesn't necessarily apply to NRCan specifically because we were -- we're participating in this process 4 as an FA as per the 12(3) request under CEAA, but the recommendations we have provided before this Panel 5 6 were really to address the deficiencies and problems through the provision of additional data and analysis. So as far as conditions go, we don't have anything to 8 9 say on that. 10 MR. MOUSSEAU: Thank you, Panel. Those are 11 my questions. Thank you, Mr. Chairman. THE CHAIRMAN: Thank you, Mr. Mousseau. 12 13 This Panel also has some questions as well and I think 14 that they will -- the good news, Colonel Bruce, is 15 they will not all be directed to you. I think we're 16 going to mix it up a bit. I'll start with Mr. DeSorcy 17 on my right, please. 18 QUESTIONS BY THE JOINT REVIEW PANEL, BY MR. DESORCY 19 MR. DeSORCY: 20 Good afternoon, everyone, and welcome back, Colonel. Q. 21 On the last matter, the, the conditions, and this is 2.2 probably for you, Colonel Lamarre. Yesterday, or 23 sometime recently, there was a discussion about the 24 use of caissons and it wasn't clear to me whether you 25 were suggesting that if the Project were to be

approved and go ahead that DND would want caissons used or whether you were saying it was a matter that would have to be discussed later.

I noticed that you didn't include it in talking to Mr. Mousseau as a condition, so would you clarify for me what the situation is regarding DND and the use of caissons and underground wellheads?

- A. COL LAMARRE: Sir, believing that Colonel Bruce needs to keep busy at all times, otherwise he gets into trouble, I'll turn that one back to him. He's actually, as the Base Commander, in the best position to answer.
- O. That's well done.

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A. LCOL BRUCE: That's another monkey on my back.

It really -- it's a question of a little more now or, or a lot later. As you can appreciate we've indicated for reasons of national emergency like, for example, if we were about to go to war with a near competitor, meaning somebody that has the same or similar capabilities that we do, there may be a need to go back into the National Wildlife Area to assist in, in getting ready for that type of, that type of fight.

Regardless of what we do in there,

aboveground infrastructure inherently represents more danger for training troops simply because it's above ground and, and therefore can be damaged or, or destroyed. I think it was Mr. Kansas said -- indicated that when asked the question, sir, I'm not sure if it was from you whether or not a caisson represents significantly more disturbance. And I think his answer was, slightly, it is a larger disturbance but it's once.

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So, from my Military perspective, my preference is below ground. That said, I know the EIS was done on aboveground infrastructure and I think some of that would rest on the scale and magnitude of the Project and, and the time and tempo that this might have to go in.

- Q. And, sir, may I ask you, I understand that the wells there in the NWA now, I guess they're a mix, are they, in terms of wellhead location above or below ground?
- A. For the most part, sir, it is above ground, but there is some that is below.
- Q. That was my understanding and I guess I'm interested, does the position you're putting forward now represent a change because I assumed, rightly or otherwise, that you would have been part of the

earlier decision to put them generally above ground?

A. Obviously, sir, I was not in command during the time of decisions made at that particular time. I think, as we've mentioned, it is less of a disturbance initially.

However, as threats grow, as capabilities of the Military grow, I think we are now coming to realize that it's best if we can maintain that area for use for any potentially new capabilities and I, and I believe that given the knowledge we had at the time that those decisions were made it was probably the best decision at that time.

- Q. But in any case, sir --
- 14 A. MR. MARTINS: Excuse me, sir.
- 15 Q. Yes.

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A. Fernando Martins, if I may add, sir, reviewing documents from the past in earlier discussions in the process of developing the, the agreements, et cetera, it appears that DND made concessions that wells would be above ground in certain areas but with the concession that should Military require that that Alberta would recognize that they would have to put the wells below ground and there have been numerous other occasions where we have indicated such a stipulation over the course of years.

A. MR. RICHMOND: And if I could add just one thing. It's Wes Richmond again. Throughout the course of the -- of our preparations for these, these hearings it's caused, caused us to reflect fairly deeply into what the impacts of that -- of the 1275 wells would be and we've started looking very, very deeply at the Military requirements and what those impacts may have been on the Military.

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So I believe at the time the proposal was first put in place, we didn't have full, full grip on what, what those impacts could be and it's through this process of preparing for this hearing that we come to the, the realization that there could be some impacts and that's why we're going this way now.

A. COL LAMARRE: And, sir, I have to add one more thing. If you look at all of our training areas across Canada, but specifically in the west, we are doing things in those training areas that we never really anticipated or envisioned doing five to ten years ago. So if you take Wainwright as an example through which all Canadian troops go through prior to going on operations, we now have a highly digitized system that takes up a tremendous amount of space.

Since battle groups and formations from other parts of the country come to train there, the training

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area out here is quite crowded, at Wainwright that is, and as a result we have elements of formations at the battle group level and at the formation level that now have to go elsewhere to train.

So the demand on our training areas is growing. It used to be that when we went to Bosnia back in the early to mid-90s your training for deployment was approximately three months. Now training, high-readiness training to go overseas to Afghanistan, will take anywhere between six to nine months and you have to fit those training objectives within those training areas where the troops will get brought up to speed for the operations.

What Colonel Bruce alluded to also is that the new weaponries that we're using have extraordinarily different templates and we're bringing on board different capabilities to be able to go and take the fight overseas and those capabilities require more space, more time and more of an area where we can actually employ them and train them in a safe manner prior to going overseas so the demand on our training areas is growing right across Canada.

Q. Am I in effect hearing that the likelihood that the NWA will be required as an active Military training zone is greater today than it was several years ago

1 when development of gas wells started in the NWA and 2 that, that it's continuing to increase for the very logical reasons that were outlined? Am I, am I 3 4 hearing you correctly, gentlemen? 5 Α. COL LAMARRE: In my opinion, sir, there is 6 a high likelihood -- higher likelihood certainly than there was ten, 15, 20 years ago when drilling first 7 started going into large numbers. Does that mean that 8 9 we're going to have a call to go in there and start 10 rolling with tanks? I don't believe so. As Colonel Bruce was referring to, it's in the event that we have 11 12 an event that we do have an ERP event that is coming towards us, then we potentially to. 13 14 That said, even without that ERP, with the 15 new capabilities that we are bringing in, you can say 16 that the templates we are going to be having that will 17 overshadow into the NWA are larger certainly than they 18 used to be and will potentially continue to increase. 19 So I would say that it is safe to say that, 20 that NWA will continue to have an important role to 21 play and will probably grow in importance as well. 2.2 LCOL BRUCE: If I may just add, sir, as an Α. 23 example, that the Leopard 2 Tank, which Canada has 24 just acquired that is now overseas in the fight and

we'll be bringing the stock back to Canada here

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shortly, the only training area in the country it can fire and manoeuvre with Saabo (phonetic) ammunition, so wartime ammunition, is in Suffield. No other training area in the country can handle that template so this is just one weapon system of a capability.

Q. I'm going to go back to the beginning of my question again and just to make sure if you assume with me

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- again and just to make sure, if you assume with me that the Panel were to recommend in some form or another that the Project could go ahead, would DND wish us to take any position with respect to whether the wellheads should be above or beneath the surface?
- A. My preference is below surface, sir, for DND.
- Q. Thank you. I have a few other things that I wanted to review with, with other Panel Members, one or two, and perhaps I'll be back to you again, Colonel Bruce.

One for Mr. Gregoire. I know he's there, I haven't heard from him lately. And, sir, this is a question regarding your earlier description of the SARA permit process, the need for it and, as I understood you, one of the things you said was that should the Project go ahead and should an activity encroach upon setbacks, this would, as I took it down:

"Warrant further consideration to determine whether indeed a permit

1 would be required." 2 Now, that's what I think I heard you say, sir. Α. MR. GREGOIRE: Yes, that is correct. 4 Ο. And, sir, I want to know a little bit more about what, 5 what that means. I don't quite understand what you 6 mean by: "Further consideration to determine 7 whether or not a permit is 8 9 required." 10 Can you help me? 11 Α. The guidelines are set to provide some certainty to 12 industry of course because they want, they want to know whether they are in compliance with various 13 14 pieces of legislation. In this instance it would be 15 the prohibitions under SARA. We developed the 16 guidelines based on expert opinions and literature and 17 throwing in considerations of the prohibitions. 18 So the guidelines help us to show whether you 19 may be violating the prohibitions or not. So if you 20 were to encroach upon these agreed upon setback 21 distances, then there is reason to believe that you 2.2 may be in violation of the prohibitions and it 23 warrants closer consideration you need to look at it 24 on a case-by-case basis to decide whether a permit is

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required.

- 1 0. That helps me, sir, because I had missed the point 2 they were just quidelines. But I quess it creates one or two other questions. I heard -- I'm not sure it was you but either yourself or one of the others 5 -- describe some of the tests that would be applied before you issued a permit and I'm referring now to 6 things like whether all reasonable alternatives had been considered and whether all feasible measures had 8 been taken to minimize and whether or not it actually 9 10 represented a danger to, to the species, but what I 11 don't understand is how you would, what considerations would you take into account when 12 you're deciding whether or not a permit is needed? 13 14 Would they be along those lines or would it be quite 15 different? I'm not sure I follow.
 - A. Those are indeed the criteria we would use as a foundation and in addition, there's a scientific review, so there's a consultation with appropriate species experts to try and answer those very questions.

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Q. So, in terms of these considerations to see, to determine whether a permit is required, I take it then you would be having regard for the same kind of issues that you would deal with indeed if you were dealing with a permit application? Do I hear you

1 correctly?

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- A. Yes, I mean, what triggers my involvement would be a permit application and I have to fill that out and answer certain questions before we can move forward and these are some of the questions that need to be answered or brought to my attention.
- Q. And, sir, what, what I'm trying to get is a better feel for when a permit would be required and I take it from you that it would be through application of the guidelines on a case-by-case basis?
- A. Yes, the guidelines would be our basis to look at it for the need for a permit, that's correct.
- 13 A. MR. INGSTRUP: If I could add, too.
- 14 Q. Please.
 - A. There's a lot of information that we'll look towards in terms of -- that are in the recovery strategies for, for any particular species, so what you find in those strategies is things like recovery objectives for that species and that's where, if we put it in a strategy, there's a critical habitat that's identified for that species as well.

But -- and there's quite a bit of other information: What are the threats to that species; what constitutes destruction of critical habitat? So we'll look to those strategies to certainly help us

guide any determinations we make when we make a determination that an activity is jeopardizing the survival or the recovery of the species.

I think it's important to note that the Act says, or our test is survival and recovery, or recovery. So I just wanted to add that point. That's certainly an important information source for us and, and for people like Paul who will be faced with reviewing these permits.

Q. Thank you.

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One more for Colonel Lamarre just briefly, sir. Yesterday, I think it was, or earlier, you talked about the NWA management strategy and in response to questions, as I recall, you described generally how it was developed, who was involved, and I think you indicated that there was essentially no consultation and you gave reasons, but you also said something along the lines -- well, I've looked in the transcript and you did say:

"The strategy document was for folks who potentially are going to use this thing."

And I, I just want to make sure I'm understanding. Does that mean that the strategy document is really intended for the Base staff or is

its broader circulation intended -- and use intended once it's approved?

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It's just not clear to me what that document will -- how that document will be circulated, if at all, and are the folks who are -- have the potential to use it, do they include industrial users of the Base or are they limited to your folks?

A. COL LAMARRE: Thank you, sir. I will lead off but then I'll turn over to the Base Commander as well who will do the practical application of that strategy.

Really, the strategy is established as a resulting -- as a result of the assignment of a National Wildlife Area to CFB Suffield. Based on that assignment, and the delegated powers that were given from the Minister of National Defence to the Base Commander, there's also requirement for him to receive guidelines more so than just you have the National Wildlife Area. There's a strategy for how you will look after it and that was -- has occurred with the strategy itself.

The document is not really meant to be distributed to a whole bunch of users, for example, industry or individuals conducting research. The intent is to give guidelines to the Base Commander so

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that he in turn can do the proper management. And the way that I interpret that is that it means that with his ability to issue instructions, to issue orders and to run systems, that's what he will use as his guiding philosophy.

Mr. Mousseau yesterday also asked the question yesterday, if you were to point to one specific document that would be a good guideline for all to follow -- I turn to the Range Standing Orders and that was my answer yesterday. And within there, there are various aspects of the Base that are addressed under it including the environment, including a chapter on oil and gas and including a number of chapters related to training on the Base.

So, the strategy exists to give guidance to the Base Commander and his staff. It is certainly a document that is available in the public domain, if you will, but in reality it's a guidance to him to create then orders, instructions and his RTAM system to do the proper management of his responsibilities, specifically the Base, sir.

Q. That says I understood you yesterday, sir, and it was just that the comment, "Folks who potentially might use it" then led me to wonder whether it did have another use that I was missing. So I would welcome

further comment, but you've answered my question.

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I have a couple of things further with you,

Colonel Bruce, and they're certainly areas you've had

considerable discussion on with others, but I, I just

want to check a couple of things.

One of them relates to SEAC -- several relate to SEAC, and one of them is that I think you said, perhaps just this morning, that you were happy with the, the role that SEAC has now. I think I heard you say that. And I wanted to make sure, sir -- we heard last night, and I know you weren't here, but I expect you're well aware of what we heard, that at least some of the SEAC representatives believe that the role they're now playing is not the full role that their interpretation of the agreement would give them.

And I don't know if you agree whether or not they're playing the role that is set out in the agreement in its entirety, or whether you feel that as some of the members of SEAC do, that they're falling short in that regard and can you help me first on that?

A. LCOL BRUCE: I think, sir, I would divide that into two parts. I think in terms of their actual role, I believe their role is -- I, I support what has

been prescribed as their role, Base Commander advisors, you know, processes within the reclamation.

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I think the, the key part for them is the ability to fulfill those roles is really what's in question and I, and I think that goes to the heart of the matters. They are currently not resourced to be able to fulfill their mandates as prescribed. Some of their, some of their mandate has been, shall we say, modified over the course of time and I think primarily due to resource constraints but also because of the way the system was designed, for example, industry going directly to SEAC without knowledge of the Base, SEAC not necessarily informing the Base because they had thought that was a parallel process, and therefore giving advice without the Base's understanding.

And I think that's why, over the last few years, that's been tightened up a bit to ensure that there's situational awareness amongst all of those that need to have input into that decision process.

Q. Well, sir, I, I think you've confirmed that you said you're happy with the way SEAC is fulfilling its role now. You also said that they're falling short on some parts of the mandate because they aren't adequately resourced. We've heard that from many.

Tell me, would you be -- you're happy now.

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Would you be happier if they were resourced sufficiently that they could fill their mandate completely as set out in the agreement?

A. Yes.

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- Q. Thank you. One other aspect of, of SEAC as well, although it relates to the pre-disturbance assessment process, and I wonder, sir, if you could turn to your Opening Statement and the figure that showed the NWA permit flow. And it's on page 11 in my hard copy.

 Do you have that, sir?
- A. I do, sir.
- Q. And I appreciate that this is for a NWA permit and, as
 I understand it, you would require a permit for any
 activity surveys and the like. I'm going to focus on
 the activities related to drilling a well, the
 related flow lines and trails, so that part of the
 process.

And I take it, sir, if I, if I look at this chart that you have here that the PDA process that EnCana has proposed would, would fit in the sense that the results of the six steps that they proposed and which they indicated they would provide data to SEAC and the Base after each step, that that would mean a parallel flow through SIRC, I take it here, to both the Base and to SEAC through that six-step

1 process.

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And what I want, sir, is to hear what you think of the PDA process itself that they've proposed with the six steps, the notion that you'd get the data at each step. I think in elaboration they indicated they would do it in chunks, perhaps a battery size or more.

I'd, I'd like to hear the Base's reaction to the PPA process as proposed by EnCana assuming, as I've suggested, that it would fit into this chart feeding into SEAC and the Base; can you help me, sir?

A. I believe I can, sir. I think, I think with regards to that particular flow chart, I think the arrows would then have arrows going both ways because it would be an iterative process based on what my understanding of EnCana's PDA process is.

And, therefore, if you will, steps 1 through 6 would be an iterative process throughout that life cycle of the establishment of the PDA.

That said, eventually that PDA would be completed and form part of an Application for Development that would go through the normal staffing process.

As I highlighted in my Opening Statement, sir, I said having not gone through a full PDA process

I would be hesitant to say whether I liked it or

didn't like it, to be honest with you. But as I

mentioned, it looks like it has most, if not more of

the components of an EO, or an environmental overview

which is done now, and I think any process that is

more consultatative (sic) in, in this regards would be

My one concern is, is capacity and I'm just not convinced that SEAC nor my own staff would be able to meet the demands that this will potentially have on, on the Base.

- Q. And, sir, I, I heard your -- I heard comments earlier on the question of the pace of development and I guess that would be one way to address that capacity matter?
- 16 A. Correct, yes, sir.

beneficial.

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- Q. And, and, sir, I also heard comments on the notion of a test pilot of the process. We heard that from SEAC last night and I take it that you would also want to do that and to have input in the final form that the PDA would take?
 - A. That would be helpful, yes, sir.
- Q. Thank you very much for those responses and for your patience.
- 25 | Although I see -- I think I've got another

response?

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A. MR. NORTON: Sorry, sir, I just didn't want to interrupt your, your line of questioning. I, I wanted to add, cycling right, right back where you started, one further comment with regard to the issue of aboveground or below-ground wells.

The Base Commander stated his preference and my comments are not intended to take sides one way or the other. It's something I just wanted to propose and that is that you've heard from Canada that one of the dominant themes from us, in our view of the Project, relates to our uncertainty related to the, the environmental -- the impacts of the proposed Project on the environment and indeed on the Military uses of the Base.

The, the impacts related to putting wells below ground in caissons has not been assessed as part of the EIS and so they presumably would be associated with different -- I won't necessarily claim greater in every case, but simply different environmental effects and potentially different forms of mitigation might be appropriate and so on.

And I would simply suggest that in considering that question, that the level of uncertainty around the overall impact could be viewed

1	to be even greater than where we currently stand.
2	MR. DeSORCY: Thank you, sir. And thank
3	you to the full panel. That's all the questions that
4	I have.
5	THE CHAIRMAN: Thank you, Mr. DeSorcy.
6	Given it's about 2:30, I think we will break before
7	turning to Dr. Ross and his questions.
8	But I did want to add, just in terms of our
9	planning for the rest of the day and what the
10	implications of that will be.
11	We still need to, once we finish the
12	examination of the Government of Canada, we will of
13	course give Mr. Lambrecht the opportunity for any
14	redirect examination that he may wish to undertake.
15	We also have after that we'll want to hear from
16	SIRC and we also have the two panel experts that we
17	will want to hear from as well.
18	What this means, I believe, is that we will
19	need to continue into tomorrow. I don't see much
20	chance of completing this afternoon, in other words.
21	And for that reason, for your own planning, I
22	would suggest that we might try to finish at a
23	somewhat earlier hour than we did last night and
24	propose breaking around 5 o'clock or so and of course
25	we also have want to give EnCana the opportunity

1	for rebuttal and I forgot to add that into the
2	sequence of events that must occur.
3	So, with all of that, I think it, it is
4	appropriate to make sure we plan for some time to sit
5	tomorrow and we'll come back to that later.
6	So with that we'll break for 15 minutes and
7	reconvene at quarter to 3:00. Thank you.
8	(PROCEEDINGS ADJOURNED AT 2:30 P.M.)
9	(AFTERNOON BREAK)
LO	(PROCEEDINGS RECONVENED AT 2:47 P.M.)
L1	THE CHAIRMAN: Ladies and Gentlemen, I would
L2	like to reconvene. Mr. Denstedt, you wish the floor,
L3	please.
L4	MR. DENSTEDT: I can let the parties know it
L5	might be helpful to know what we're going to rebut
L6	tomorrow so people can have the right parties here and
L7	if others aren't necessary they can do some
L8	sight-seeing. Mr. Collister will be providing some
L9	rebuttal in respect of the snakes and, and birds.
20	Dr. Walker has a small amount of rebuttal in respect
21	of reclamation. Mr. L'Henaff and Mr. Heese has
22	have a small amount of rebuttal in respect of EnCana's
23	operations and Mr. Fudge has a piece of rebuttal on
24	water. It will take all in all it will take less
25	than an hour to do that.

THE CHAIRMAN: Yes. Thank you,

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2 Mr. Denstedt. That's very helpful for everyone to understand.

All right then. We'll turn to Dr. Ross with his questions.

DR. ROSS: Thank you, Mr. Chair.

- Q. My first few questions will be fairly straightforward and easier and, as I progress, they will become more complicated especially for me. The first one relates to your response, I guess, this is DND in particular and perhaps Mr. Richmond in particular -- especially your responsibility for the National Wildlife Area, emphasis mine. Yesterday Mr. Richmond you said "we don't manage wildlife" and I guess I would appreciate if you'd help me to understand what you meant better because I'm thinking maybe either you misspoke or I didn't take it in the right context.
- A. MR. RICHMOND:

 No, what I said was -- was correct, but I was speaking in, in terms of the larger ungulate populations and deer, elk and antelope. They roam freely on to -- on to the Base and off the Base just as they would any other landowner in the province and it's really Alberta Fish and Wildlife who are the responsible managers for -- excuse me, for wildlife in the province.

Q. I thought that was what you might have meant, but I thought I'd make certain I understood.

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The, the second one relates to -- this is probably more for Environment Canada -- relates to a discussion we had about offsets and, and just let me identify one offset that seems to make sense to me at least conceptually and see if you reject it as readily as you did all the other ones that you rejected yesterday.

There are areas in the National Wildlife Area today that have been seeded with Crested Wheatgrass, for example, and one might say as one of the offsets for further development in the National Wildlife Area one could do something with the existing Crested Wheatgrass as a -- as an offset so that there would be -- I guess this is the opposite of how it's usually posed -- no net gain in Crested Wheatgrass availability. Is that, is that any more constructive or is that still a crazy idea?

A. MR. INGSTRUP:

I'll start, since I made the statement yesterday in terms of sort of dismissing the, the notion of offsets I think on a landscape scale. We certainly have a concern about that. Your proposal here in terms of no, you know, not -- essentially not -- implementing, I guess, a no net

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gain in Crested Wheatgrass is what you're implying and that would offset some further development, it's difficult to comment on that specifically not knowing really, you know, are we introducing more of a problem here for wildlife in general? You know, is the trade-off there?

I, I really can't -- I can't comment on that.

So, so given that, not having that information, I

think I would still have a concern, you know,

certainly agreeing to that that would be a positive

thing for the National Wildlife Area. But I'll turn

that -- I mean, we've got a number of people here

particularly Darcy who's probably more versed than I

am in terms of Crested Wheatgrass and I think it would

be good to get his impressions as well.

A. DR. HENDERSON: Yes, Darcy Henderson here.

Pages 182 and 183 of the Government of Canada
submission actually make, make reference to that idea
of using some either preventative techniques to stop
invasion from further occurring or even some
restorative actions to try and eliminate the area
invaded by Crested Wheatgrass as one potential offset
that could be considered in this Project. I don't
know. We -- I guess, I say, it was an idea that was
discussed collaboratively amongst a few of us here.

- I wasn't sure if someone else had something to add.
- Q. My, my sense is less than overwhelming enthusiasm.
 - A. MR. INGSTRUP: Correct.

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Ο. The -- let me move on because Mr. Ingstrup suggested that removing Crested Wheatgrass could have an adverse effect on some wildlife and so I, I guess I'm a little concerned about how one might go about managing a National Wildlife Area and let me pick a very different example. It's my understanding that there are several wildlife species that rely on active sand dunes, and I'm seeing a couple of nodding heads over there. I will name a couple of those species and don't push me after the first two, but one of them was the Sprague's Pipit and another one -- another Sprague's Pipit. And not even the first one. I didn't -- I should have gone with the Ord's Kangaroo Rat where I know that's right. at least there are some species for whom the active sand dunes constitute their habitat and, and I -we've been told by a number of sources that the amount of active sand dunes over the last several decades has sharply decreased and yet there are other species and perhaps the same ones who, like the Crested Wheatgrass, that would benefit from turning active sand dunes into something with a bunch of

grass on it.

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And I guess my question is: Is the intention of managing the National Wildlife Area one of picking which species get to, to benefit? Or is it, in fact, as I might have understood it, he said, hinting, as I might have understood, somehow restoring the natural grasslands ecosystem which I thought -- my last question will be about reclamation, but -- and so let me stop there for now.

Do you choose which species benefit or do you attempt to, to restore natural grasslands ecosystems in -- in the National Wildlife Area?

A. LCOL BRUCE: Sir, if I could start off and I -- and I say this with being a very humble man saying that I'm not sure what all the technical answers are, but in my particular case, I look at the whole first and then I delve down in specific areas and in this particular case I'm looking at the whole ecosystem as a sustainable entity. But, most importantly, out of all the species at risk, the Kangaroo Rat is my little champion because he is -- he is not doing as well because we have been far too effective at minimizing the amount of disturbance in some cases, man, or, you know, natural-occurring disturbance like fires and, therefore, some of the

dunes have been stabilizing. So we've introduced a program to try and burn off, if you will, some of that new grass in those particular areas to get some of that movement back.

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Because out of all the species at risk, and I'm opening myself to be corrected from some of my team, the Kangaroo Rat is the one that I am -- that is not as healthy as all the rest of them nor do they see positive growth in their -- in their numbers necessarily.

- Q. Just before you continue, Mr. Jensen, I, I do want to indicate to Colonel Bruce that he has jumped ahead to the last part of this question and so I'll be happy to do that. But, Mr. Jensen, please?
- A. MR. JENSEN: Well, I believe two of the species you might be thinking about are, of course, Ord's Kangaroo Rat as mentioned and perhaps the Gold-edged Gem which is also a sand dune obligate.

 One of the concepts or principles, of course, in protected areas management is conserving process diversity as well as species diversity, so the intent there is if there's enough processes on the landscape, natural processes, that you've got heterogeneity or a diversity of landscapes that can support a broad diversity of species.

From a management point of view, and I'll let my colleagues with DND comment on this one, too, is there would -- there may be a concern, it may become difficult if there's so many users on a land base to be able to fully exercise all of your restoration and research options, so though we might want to restore dunes or, or -- or such -- or other habitats, it may become difficult if the National Wildlife Area becomes so busy it's difficult to do so.

- Q. I guess just before I get to the fire question,
 it's -- it's my understanding from the material that
 I've read that the fire suppression in the National
 Wildlife Area is the primary cause of the diminished
 active sand dunes. Is that reasonably correct?
- A. DR. WOLFE: This is Dr. Stephen Wolfe.

 I've been looking at this across the prairies

 considerably and I would have to say that probably

 disturbance suppression is what you're getting at

 could be a major role in that, that in some cases --
- Q. I'm sorry, disturbance --
- 21 A. I call it --

- 22 Q. Disturbance pressure?
- A. I call it disturbance suppression. What I mean is
 that there are disturbance mechanisms like fire and
 grazing, generally speaking, that would maintain

1 active sand dunes. So we've lost, for example, the 2 large, you know, the bison ungulates would have had a major impact particularly near river crossings. Fire, of course, is suppressed as a function of disturbance, 5 so those are the two, from -- from this context, major 6 areas. We really don't fully understand the past role of climate and in the consequence of today and its role today. Obviously drought and -- plays a 8 9 significant role as well and, in fact, most 10 researchers look more to climate and the whole area of disturbance has, has not been well researched as a 11 12 consequence of that. Let me be clear that I'm talking about the last few 13 Ο. 14 decades, so --15 Α. Yeah, in the last few decades --16 -- the loss of bison is not really --0. 17 Α. No. 18 -- on here. Q. 19 Right now --Α. 20 The feral horses, yes --Q. 21 Yeah. Α. 2.2 -- the offset of elk, I, I leave it in your hands to Ο. 23 tell me which is more important, but it seems to me

that one issue -- it seems to me, from the materials

submitted by a number of people, that a fire return

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period is supposed to be about seven years, in that

area, and you folks have turned it into 20 plus?

A. That seems to be the case.

Q. Okay, thank you.

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And I guess, if I understood you correctly,
Colonel Bruce, and I've heard hints of it earlier,
you now are introducing a mechanism of -- let me
put words in your mouth -- of restoring the
seven-year return period for fires in the National
Wildlife Area through some suitable mechanism?

- A. MS. BOYD: There have been some -- there have been some efforts to introduce fire very I would say surgically in the NWA through particular research. However, in terms of a large-scale plan for re-establishing a natural or emulating the historical fire regime, as you've suggested seven years, that's something that would be part of a plan that is intended to emerge out of the Suffield Sustainability Management Planning process.
- A. DR. WOLFE: Dr. Wolfe again. Just to be clear, the work that we have done has not been exclusive of fire. We have been looking also at grazing and even other aspects of what I would call managed disturbance, creating a small blowout which is quite different than vehicle activity. I would like

to make a point of that, that having an isolated dune
area which represents habitat I would not want to
suggest that that's the same as creating vehicle
disturbance, but we are looking at different
mechanisms, three in particular, of active blowouts,
grazing and fire.

- Q. This small blowout, I mean, in Suffield I have a certain image that would be a blowout, but I don't think that's what you mean.
- 10 A. I -- no, we haven't used any ammunition. There's

 11 been --
- 12 Q. How --

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- 13 A. Hand-dug, a hand-dug pit.
- 14 Q. I see, thank you.
 - A. Small to begin with and then monitor that through time and look at both the habitat 2 metres by 2 metres by 4 metres.
 - Q. Thank you. I'm going to change the subject. Routine and Non-Routine Applications, there are, so far as I can make out, three different meanings for the term.

 One is the term that EnCana uses when it uses its PDA process. I could probably describe it, but I'm going to leave that alone. The second routine and non-routine is your own terminology and the third routine and non-routine is a terminology that the

ERCB uses. As I understand it, all three are conceptually different and yet they're all the same English language words.

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Can you tell me whether in your opinion and in the opinion of the Government of Canada there is some commonality among the three terms or are they just completely different?

A. LCOL BRUCE: Sir, I would not necessarily agree with the difference of definition between EnCana and ours. I believe that they are describing what their desires are in terms of a PDA routine process, i.e. that 80 percent of their applications would be routine. So in terms of defining routine and non-routine, I think we pretty much have it in sync.

In terms of what the meanings of "off the Block" are, you're absolutely correct. A non-routine or an application becomes non-routine off the Block when a landowner does not give consent and then it goes off to the various ADR and then on to boards for reconciliation. Those terms do mean something different than what we are talking about.

For us, a routine application I think, as we described, is generally speaking we do a desktop, we do a verification of all the paperwork that's been provided and if there is nothing there that triggers,

there's no triggers that have been -- that have sort
of been switched on, then that application is
processed very rapidly in terms of approval.

- Q. I thought your -- any application in the National
 Wildlife Area would be --
 - A. Correct, sir, but I'm just saying in terms of "routine" and "non-routine" is the terms that you used.
- 9 Q. Yes.

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- 10 A. For non-routine, that means there's been some trigger
 11 and in the case of the NWA, everyone would be
 12 considered a Non-Routine Application.
- Q. So you only differ with EnCana on 80 percent of the wells?
 - A. No, I think in terms of the differences, we are -in terms of the terms, we are the same. It is my
 application of those terms, i.e. what I'm going to
 consider those applications as, and in the case of the
 NWA they are considered non-routine.
 - Q. Thank you.

Mr. Smith and Dr. Rowland, before carrying out your field studies, did you consult with EnCana?

And the reason I ask is it seems to me that some of the -- some of the results would have been more clearly delineated had you obtained information on

exactly when wells or pipelines were installed and how they were done and so on and so on. And that seemed to me the sort of information that you might have been able to obtain from EnCana. Did you do that before carrying out your field research?

- A. MR. SMITH: I have asked for some reclamation data historically, yes. In terms of the studies that I have done, I had not asked for specific reclamation data. I did ask for some last year to interpret the results of my data, but I haven't received anything yet, no.
- Q. Dr. Rowland?

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A. DR. ROWLAND: With regards to my study, I did, I did two studies and for the second study it was a little more focused on natural gas activity within the Wildlife Area. When I proposed this study it was mentioned to EnCana so I did come out and I met with Mr. Heese and I went through my methodology and what I was trying to do and why and I did emphasize that the reason behind this research was not for the JRP; it was for determining sustainability, but we went through the methodology. He had a few recommendations which I accepted and at that point I did ask for additional information.

At that point very little information was

1 provided. It was just mentioned that little records 2 were kept on sort of what techniques were used and when things were installed and stuff like that. I did use the best available information. 5 I'm going to move on then. Thank you. Q. 6 And perhaps, Mr. Jensen, I'm going to ask about our friends or Colonel Bruce's friends, the 7 Ord's Kangaroo Rat. Could you summarize -- I think 8 9 you're the Ord's Kangaroo Rat specialist on the panel 10 and so could you summarize for me what you understand 11 to be the most important impacts of this proposed 12 Project on the Ord's Kangaroo Rat? MR. JENSEN: I'll defer also to my 13 Α. 14 colleague Dr. Wolfe. With respect to the Project, of 15 course, we looked at a number of factors through our 16 systematic review and assessment of what might be 17 potential effects, so we were looking at fragmentation, bare ground, invasive plants, linear 18 19 disturbance and traffic on Ord's Kangaroo Rat. As I 20 mentioned a few days ago in testimony, the literature 21 is rather inconclusive with regards to what might be

With respect to this Project, some of the concerns again I believe would come around -- invasive plants would be a concern, linear habitats and these

significant effects on Ord's Kangaroo Rat.

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habitats potentially becoming sink habitats for Ord's Kangaroo Rat, as was discussed a couple of days ago.

I might refer you as well to the discussion in our submission around Ord's Kangaroo Rat which describes it in a bit more detail, but if you're looking for sort of the top two, I suppose, the potential for the development of sink habitats through the development or enhancement of roads or trails in the National Wildlife Area is certainly a concern as well as invasive plants. But, to be fair, the invasive plant issue seems somewhat inconclusive with respect to Ord's Kangaroo Rat with respect to our literature review anyway.

I think, again, as I said a couple of days ago, that likely relates to the fact that most of the studies on Ord's Kangaroo Rat have been done in the United States where they're not subject to the same climatic or population variability factors that they are here in Canada. I think that's -- unless Dr. Wolfe has more to add, I'll leave it there.

Q. Dr. Wolfe, please?

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A. DR. WOLFE: Yes, Dr. Wolfe. The only thing I have to add has been with regards to soil compaction and looking at the natural sand dune

habitats which have relatively loose sand compared to, say, road habitats that have compacted soils and the effects that that has on Kangaroo Rats. Specifically, for example, the thermal regime for winter, in the wintertime the compacted roads can be colder and that can affect winter mortalities of Kangaroo Rats.

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- Q. Sorry, so is the compaction the same as the sink habitats that were referred to earlier or is it compaction even in their, their normal homes?
- A. In that regard it's a sink in so much that if the population moves into an area like that, they may not do as well so that population declines and that's what's referred to I believe as the sink.
- A. MR. JENSEN:

 And to emphasize from
 yesterday's testimony, it may seem inconsequential,
 but again, when you've got a population that naturally
 loses up to 90 percent of its, of its numbers over a
 winter, any further perturbations can result in
 potential local I would say extirpation but loss of
 satellite populations, so it can be a significant
 factor.
- Q. I'm going to come back to you in a moment, Mr. Jensen.

 I'm just going to give Ms. Dale a heads-up that the

 next question will be exactly the same for Sprague's

 Pipits, but just before I get there, you alluded to

fragmentation and I wasn't sure I understood the nature of fragmentation that might have an adverse impact on Ord's Kangaroo Rats.

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A. MR. JENSEN: And there's a number of my colleagues that might want to address this issue as well with their species. It's, of course, become a fairly substantial point of conversation at these hearings as to whether or not the activities that are proposed in this Project would constitute any kind of fragmentation, so I'll try not to give too long of an answer, but of course we're talking about roads to some extent but generally trails and along those trails we're talking about some volume of traffic that's going to be using those particular trails.

Habitat fragmentation is sometimes viewed in a binary context; it's either/or. In this context we're really talking about some kind of linear feature, traffic moving along it and habitat being fragmented in the sense that animals are not absolutely not using that habitat, but their abundance or survival is reduced along those, those corridors. That does result in some form of habitat fragmentation in that there's either a local population sink or habitats are severed.

In the case of Ord's Kangaroo Rat, the

1 fragmentation might result in the fact that you've got 2 these habitat sinks that Ord's Kangaroo Rats are drawn in towards and they don't necessarily survive there. It means where they might have otherwise travelled across the landscape to more suitable habitats that 5 6 would allow for long-term persistence, they're either not travelling all the way to a further habitat because their animals are becoming trapped along the 8 9 road where it appears to be good habitat but isn't, 10 so the good habitats that used to be connected are now severed by a sink habitat along a road and are 11 12 fragmented. There's lots, I think, Ms. Dale might wish to 13 14 discuss with respect to birds. For Ord's Kangaroo

Rat, that is part of the explanation on fragmentation.

As I say, she's next. Okay, I think I understand your Ο. response in the context of Ord's Kangaroo Rats and I'm just looking at others to see if there may be -please, Dr. Henderson?

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DR. HENDERSON:

that there's been some confusion over this. Fragmentation is really a process that ultimately leads to habitat loss or degradation and there are different components to that process and they all have to do with human land use activities. So in the early

Yes, I agree with Mr. Jensen

1 stages of fragmentation there are different processes 2 such as perforation, which is the creation of holes in a landscape that could be quite small, and dissection which is usually by linear features. And as time goes 5 by, those linear features can start to grow in some 6 cases if there's an invasive species that established along them and that leads to the shrinkage of the patches that are created by all of this dissection 8 9 and perforation and as those patches shrink there's sometimes attrition, so complete loss of habitat 10 11 patches for one particular species.

In some cases, that also leads to the creation --

- Q. Could you help me to see how that would work for Colonel Bruce's little friends?
- A. For the Ord's Kangaroo Rat?
- 17 O. Yes.

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A. Well, in that case, if you compare this process of fragmentation to say a natural disturbance regime, natural disturbance regimes do not necessarily follow the same patterns of human land use. Drought, for example, will have a regional impact. It will affect everywhere all at the same time. Fire creates patches and space that are not connected to some other network of fires. Grazing also creates patches, but sometimes

these are connected by networks and trail networks that livestock have created.

So there's some similarities to some of our human land use patterns with natural disturbance regimes, but other forms of natural disturbance are completely unlike our human land use activities, especially industrial land uses and the creation of roads, pipeline rights-of-way, those are quite different from any, any type of natural disturbance on the landscape.

And for Kangaroo Rats, for example, the point that I think Mr. Jensen has been trying to make and also with Dr. Wolfe is that these sand dune patches are important for Kangaroo Rats and they will find their way between these patches to disperse and spread around the landscape. But when we create these linear features of disturbed ground it also attracts Kangaroo Rats, a long linear line of sand is not a naturally occurring feature, and vehicles driving back and over top of sand --

- Q. Yeah, I'm sorry, I was thinking of the spread of invasive vegetation.
- 23 A. Oh, okay.

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Q. The example I was looking for. I couldn't quite link that to a Kangaroo Rat.

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- Α. In that case I guess there's a couple of different issues. In one case, invasive species may establish on these disturbed trail networks and they will spread throughout the landscape along those networks and find their way to these isolated sand dune patches and some of those species can establish in sand dunes and may help lead to the, the rapid stabilization or more rapid stabilization of those Some of those species might also compete with dunes. food plants that are important to something like a Kangaroo Rat. Again, I'm not that familiar with the Kangaroo Rat, so I don't want to speak on any specific species.
- A. MR. JENSEN: The only other point to add perhaps on the invasive species is, Dr. Henderson mentioned invasive species displacing plants that may be of value to Ord's Kangaroo Rat. There is some literature, although still somewhat inconclusive, about the quality of the food that comes from invasive species, but I wouldn't lend too much weight to that. There, there is debate back and forth about whether or not invasive species plants are better or worse. It does appear there are differences, but how that affects survivorship in these northern populations is unknown.

Q. Thank you. And lest anyone else wants to stop me, I'm going to move on to Ms. Dale and, again, the same basic question: What are the most important impacts that the Project would have on Sprague's Pipits who don't care about sandy habitats?

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A. MS. DALE:

Brenda Dale. Well, the most important thing would be, as I understand, there will be about 350 kilometres, if I have my numbers right, of new linear disturbance and this species, Sprague's Pipit, is an area-sensitive species and it is a species that avoids edge and so it comes down to a question of whether or not they perceive these trails and pipelines as edge.

And I think I mentioned before that they kind of are making their choices on two levels: they're going to make it on a landscape level, on features that are on a landscape level and also on a microhabitat level and there is certainly, when I was speaking about knowing their area sensitivity and edge sensitivity, those are things we know from studies elsewhere. But we also know that they have very specific microhabitat kind of preferences and some of those things that are very important to them are the amount of residual material and mainly what is lying on the surface as well as standing, standing dead

material, and that's because of their particular habits.

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So what Sprague's Pipits are about, since this is my last opportunity, I will try and make this bird a little more real for you, you may have noticed in the picture that they're very -- they're colored very much to fit into the landscape and they're basically -- most of their life is about not being seen and they, they are -- they don't need any perches. They don't want to perch. They do all of their singing in the air. So their vision of the earth is a little bit like when you were flying out in a helicopter out on the Base during your visit. they're several hundred feet, maybe even higher, up in the air singing and they move around their territory and so for them a line on the ground that has more bare ground is visible and it is very likely that it could influence where they put their territory and the reason it could, and I am speculating here, but the reason I can see -- understand some of the effects we seem to be seeing, that some studies seem to be seeing, is that when they do come to earth they basically again don't want to be seen. So, for us, when they're in the sky, they're just merely a speck. When they come down, they come -- plummet to earth,

they go under the grass and they go to, say, their nest without being seen.

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So, for them to cross a barrier where there's more open ground, that would mean that that would very greatly limit the number of ways they could, say, approach their nest because they would have to cross this open ground in order to get there and their whole modus operandi is not to be seen.

So that's one way I can envision why it is that this is visible to them and that it might matter to how they select their territory. I'm not saying I know for sure because we couldn't know that, but this is something I know about their particular behavior that might explain why it is that they seem to be avoiding trails.

As I said, they perceive edge, they avoid edge. They do not like these invasive exotic species that have different structure and, again, this has to do with their different microhabitat needs -- sorry, I'm going too fast. I apologize.

So it's got to do with the kind of habitat they need to hide their nest in and so on and Crested Wheatgrass, for example, has too much space between the plants, open, open space between the plants. It doesn't tend to go into a nice recumbent structure so

that they can put their nest under it, that kind of thing. It doesn't offer them what they need.

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So I think these extensive linear development (sic) is going to be a fairly large issue for them and we are, we do see, I'm sorry, we do see some evidence, as I say, from, even from the data that was presented that -- that some tests that were not subject to -- sorry, not subject to observer bias or where there was a comparison between two habitats or two well densities did show differences. They were non-significant, but they were a fairly substantial size and the power was lacking to say for sure that they were not important differences.

When we re-analyzed our data, we found some patterns that seemed to show there was a problem as well and, as I say, there is literature related to edge and area and exotic vegetation that would support all this. There is Mr. Linnen's study which the one for gas did not show a significant effect, but he did note that it was very obvious to him, this is his professional judgment, that there was a pattern of avoidance of trails.

And so I think there is support. It's a very limited literature at this point. I would reference back to something Dr. Stelfox said that 20 years ago

nobody thought narrow linear openings in forests were
a problem, but we now realize they are and this is
sort of a new area of research that's just starting to
be followed.

So I'm sorry I went on for so long. I hope

So I'm sorry I went on for so long. I hope $\ensuremath{\text{I've}}$ answered your question.

- Q. That was certainly very helpful.
- A. MR. JENSEN: Sorry, Mr. Ross, if I may add one --
- 10 Q. Please.

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A. -- one thing that may be of use, just for the record,
I'll direct you perhaps to a couple of items in the
material that might be of use. As I mentioned, we've
discussed over the last few days quite a bit about
this sort of improbability that these small features
and relatively low traffic volumes could, could sever
habitat in some way. Environment Canada was, of
course, very interested in this topic and I believe
we took a very systematic and thorough approach with
our literature review.

I will point to, out of interest, the Government of Canada submission which is 003-012 and page 302 which you could look at at your leisure if you like and it presents a meta analysis or an analysis of linear disturbance features on grassland

birds and highlights the key papers and shows fairly conclusively that there is some kind of an effect.

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Secondly, I'll point you to the Environment Canada Reply to Information Request, 003-006, specifically the reply to EnCana Number 14 which is our re-analysis of the Linnen papers and, again, we found very significant evidence for the effect of these low-volume small trails on grassland birds and, finally, our response to EnCana Number 80 which, again, is a summary of the major papers we reviewed and the effects that we found. And I think there is fairly conclusive evidence in the literature to show even though it seems improbable at first glance that these small trails and low-volume traffic could cause fragmentation, that there is, there is an effect.

Q. Thank you. I certainly have read those documents more carefully than I might have wished and -- but I appreciated your oral responses today. They've been very helpful.

I'm going to move on to my last question or last set of questions which really relate to restoration or reclamation. Yesterday, when you were asked about what reclamation standards -- I hesitate to use the words "criteria" but restoration targets you would have, your response was: Restore it to

what it was. Now, the devil is in the detail and so let me give you an example of where I hope you want to change your mind, but you might not.

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There are within the National Wildlife Area places that have been disturbed where people 80 years ago or thereabouts came in and planted Crested Wheatgrass and other things and I'm assuming that if one of those were disturbed by "restore it to what it was", you mean restore it to natural Prairie grasslands of the appropriate qualifier, but -- and so I guess the devil is in the detail. Restore it -- have I captured your idea right, that you don't want to restore it to what it was before the well went in or before the pipeline went in but to what it was before when the bison were still here?

A. DR. HENDERSON: You bring up a very good point about context. Oh, sorry, it's Darcy Henderson. About context and certainly there are these old fields, formerly cultivated fields that were seeded to Crested Wheatgrass perhaps 80 years ago, perhaps as recently as 50 years ago by the PFRA and I agree that if you were to set some objective for a small one-hectare disturbance, to try and revegetate that to native species is not, is not a reasonable idea for a variety of reasons.

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One, Crested Wheatgrass is likely to re-invade that site if the entire area surrounding it is all Crested Wheat and the person implementing the reclamation or restoration on that site would be investing a lot of resources that might otherwise be wasted. So in that context of those particular landscapes, that might not be a good idea immediately. However, if it is part of a larger management strategy for the NWA to restore that whole area, that whole pasture simultaneously when some of this development is occurring or is being abandoned, there might be a complementary opportunity there to work synergistically together and restore both the old field and the industrial disturbances to a native Prairie. But, again, this has to do with the context of the location, the time, whether there's a management strategy that's detailed enough and in place at that time. So some flexibility should be there to account for all of those, those different situations.

Suppose that one wanted to establish, in this case I Q. want to use the word "criteria" very carefully, criteria for issuing reclamation certificates, if I listened -- when I listened to you folks yesterday I had the impression that the criteria consisted of

measures that would demonstrate the vegetation had been restored to whatever it was your target was, native Prairie grassland or whatever, but you also observed that that would take many decades.

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And so the question that I have for you is:

Are there early indicators that the revegetation, the reclamation has been successful and that even though the grassland may not look like a perfect Prairie grassland from 100 years ago, it's been successfully reclaimed and a rec cert, as the DND call them, a rec cert should be issued? Are there these early indicators of success?

I suppose that's one area of inquiry and research Α. that's ongoing and it's something that the Proponent has suggested. Their paired-pipeline analysis actually conceptually is is a good idea, it's something that I agree with. You're establishing a chrono sequence of sites to evaluate a trend over time. Trend analysis is probably better achieved with some other form of statistical analysis, maybe regression rather than the approach that was taken in In fact, the data they collected could this case. probably be re-analyzed with regression to actually try and demonstrate a trend.

The problem we have is if we have not

completely achieved what we would consider restoration, whatever those targets may be, we're trying to project into the future what is going to happen and we have not conducted necessarily enough research that shows all the intervals and stages of succession towards that successful recovery.

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So while I agree in principle with the idea that there could be indicators, early indicators of succession, I have not seen any information that would lead me to the conclusion that they've identified some of these indicators and that successful reclamation or restoration will actually occur and in part because we don't know what that end criteria, what that reference is supposed to look like. That's something that has not been agreed upon yet, something that the Base Commander has suggested will be discussed at a meeting in January, something that Ms. Boyd has also mentioned could be some additional condition in a National Wildlife Area permit that might be different from the existing Alberta reclamation criteria that's described in the Range Standing Order.

Q. My last question will be -- my last question and I need more water. My last question will be the same as my first question was on this one and that is the goal, the objective of reclamation. Except now I

1 want to target your two colleagues at the back from 2 PFRA, because it may well be, at least intuitively in my mind and others at this hearing have suggested, that the objectives of reclamation for the purpose of 5 grazing may be different and may even be incompatible 6 with the objective of restoring to native prairie. And so I ask PFRA whether there are important differences or whether reclamation to native grass 8 9 prairie would work for the use to which the grazing uses on -- in the National Wildlife Area? 10 11 Α. MR. COOK: Hugh Cook, PFRA. We've dealt 12 with some of the same issues that are happening here on PFRA community pastures where we have areas that 13 14 have been seeded down to Crested Wheat in the past and 15 they're difficult to manage when they're in with the 16 native range. When you bring cattle in, in the 17 spring, the Crested Wheat has already -- like, we 18 don't usually bring cattle in until close to the 1st 19 of June, so by the time you bring cattle in, that 20 Crested Wheat has already started to mature a bit and 21 the cattle tend 2.2 to want to make use of the native range, so it is 23 difficult then to capture the growth of that Crested 24 Wheat with, with the grazing season that we try to 25 operate and we operate that so that we can protect

those native grasses. We like to give them a nice
start in the spring so that we don't overgraze them.

When we bring cattle in they tend to want to go to
that native range and we don't get to use that Crested

Wheat.

So I guess, from our perspective, we can use Crested Wheat when it's in large enough blocks and we can fence it out and we can hold the cattle there. If it's mixed in, like what we see on Suffield where there's strips of it, very difficult to make use of that, if we could we could probably control the spread, if we could graze that, that grass and keep it from going to seed, you know, we could probably slow down the spread, but we're unable to do that just because of the, of the way it's laid out.

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- 17 A. So, from our perspective, you know, it either should
 18 be a seeded grass or a native range and then we get
 19 better use of it.
- 20 DR. ROSS: Thank you very much. Those 21 are all my questions, Mr. Chair.
- 22 A. MR. BRISTOL: Bill Bristol, if I could just
- 23 add --
- 24 DR. ROSS: Oh, sorry, please.
- 25 A. MR. BRISTOL: -- add one or two more

1 I guess PFRA has had, you know, quite a 2 growth or a knowledge curve on the use of Crested Wheatgrass and when our community pastures were 4 originally incorporated in the 30's, large areas were 5 essentially blowing dust and we seeded those to 6 Crested Wheatgrass just to stabilize them. And from my perspective, not being, you know, an expert on reclamation but somebody who is more versed in 8 9 wildlife ecology, I would have to say that, you know, 10 we've learned from that. I don't think we really do 11 any more seeding of Crested Wheatgrass and returning 12 something, you know, to as natural a state as possible 13 is probably our ultimate goal. 14 So I would see a great deal of agreement 15 with, with what Dr. Henderson was saying. Thank you very 16 DR. ROSS: All right. 17 much, Mr. Bristol, Mr. Cook. Indeed, thank you to the 18 entire panel. 19 THE CHAIRMAN: Thank you, Dr. Ross. 20 I have a number of questions that jump around a lot Q. 21 here, trying to fill in some of the blanks, I guess, and there's not too many left I don't think, but 2.2 23 other than in my mind perhaps on a couple issues.

But the first one I want to -- I want to belabor,

once again, the issue that my colleague Mr. DeSorcy

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raised about the caissons and ask Colonel Bruce some more questions in that respect.

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You indicated, and I guess what's behind my question is really trying to get a sense of the future use of that National Wildlife Area. We had not heard anything about caissons until the hearing started, actually, because it is our understanding that the Project before us and it is our understanding the Project before us involves proposals to construct above-ground wells and not caissons. I wonder, the example you gave, Colonel Bruce, about a potential expanded template for the use of leopard tanks, does that -- would that require the installation of caissons because I understand your template goes into that area now and you do have above-ground wells there?

A. LCOL BRUCE:

No, sir, that would not require it. I'm looking more long term and I'm looking at potential of the use of this Range and Training Area at a later date, particularly in a national emergency or in a fight if we were going to come to one with a near competitor, because that would mean that all that infrastructure would eventually have to go underground in order to ensure the training that occurred there would be done in a safe manner.

But no, in particular for new weapons systems, no,
that is not necessarily the case.

- Q. So your thinking, again, we all hope this will never happen, but your thinking is that for training purposes then you would need to have caissons because presumably you would have tanks and equipment in there, just like you have in the Military Training

 Area; is that correct?
- A. If it became a national emergency, I would say that is a potential, yes.
- Q. Just continuing on on this to try to understand your policy, is it your policy then to start replacing the current above-ground wells with caissons in the National Wildlife Area at this point?
- A. No, it is not.

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Q. Okay. Okay, thank you. That completes my questioning on that issue.

The next question I have is, again, a bit of a follow-up to the matter that Mr. Richmond responded to in one of Dr. Ross's questions about management of wildlife in the National Wildlife Area. I'm, I'm a bit perplexed. I, my understanding of wildlife is that they have a hard time understanding whether they're under Provincial or Federal jurisdiction and I get the sense that you're not going to manage those

species in that National Wildlife Area that are covered by Provincial jurisdiction? I may have misunderstood the answer.

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A. LCOL BRUCE:

No, sir, that's not the case at all, but as you can appreciate, given that it is, as you quite rightly mentioned, these animals do tend to move, it's important that we, we follow or at least adhere to some of the, the policies that Alberta is developing or in some cases Saskatchewan. And a case in point is chronic wasting disease. Saskatchewan has one particular policy in terms of, you know, let live so to speak, if it's -- they're not doing any kind of eradication process for it.

Well, Alberta has essentially on each identified fine they will cull every animal within a 10-kilometre circle from that point of where that animal was found and then a subsequent cull will occur every year thereafter for five to keep the population of a density of less than 1 percent. Saskatchewan doesn't do that, but given the nature of where we are there's a lot of those animals across the interprovincial boundaries as well.

Just so you are aware, sir, the -- I think -- I'm not sure if you were speaking about a specific herd or not, but in the case of the elk, for example,

their re-introduction has been quite successful and those animals, much like the Pronghorn we have seen, understand that they are relatively safe in the Suffield Block compared to other parts of the province or provinces and, therefore, we tend to have quite a large gathering of those animals on the ground.

However, as I've spoken to members of Alberta Fish and Wildlife is that we will be sitting down in the spring next year, and this is all part and parcel of what occurred this summer, to start talking about a strategy to come up managing the elk herd, for example, in conjunction with the Province of Alberta. So I think it's more of a partnership rather than a laissez faire attitude.

- Q. The example I was thinking of, actually, was Pronghorn that for which the winter range is, is very important in the National Wildlife Area. I presume that because this is a National Wildlife Area that you would offer those Pronghorn appropriate protection while they were in that range?
- A. Sir, by virtue of them actually being on the Base, they are protected. There is no hunting, as you know, on the Base.
- O. Right.

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A. Plus, there is not the sort of same human footprint,

1 as you were -- that you would get perhaps in other 2 places.

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Just to

1 area that we're talking about. 2 Α. MS. BOYD: And, sorry, I'll just add one additional point to that, just as a point of example, 3 4 say, with Pronghorn. We certainly, as Mr. Richmond 5 said, are not trying to interject ourselves into, say, the Pronghorn's lives, but we would do anything we 6 could to assist with wildlife management, for example, ensuring that our fences that are installed are 8 9 installed with appropriate height restrictions such 10 that it facilitates movement of wildlife, just as one 11 example. MR. INGSTRUP: 12 If I could add on that, in Α. terms of national wildlife areas across the country 13 we do manage them for all wildlife. 14 15 THE CHAIRMAN: That was my understanding. 16 We certainly welcome Federal land, even the Α. 17 Provincial species on to our areas. 18 But the other aspect I was just going to 19 mention is, as an example, Last Mountain Lake National 20 Wildlife Area in Saskatchewan. We do have hunting, 21 there is hunting allowed on that, for things like deer 2.2 and what have you, so there is active management going on on some of our national wildlife areas for 23 24 Provincial species.

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THE CHAIRMAN:

Okay, thank you for that

1 clarification.

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My next question is directed to Environment Canada. This has to do with the constraints mapping of the -- well, of your, in fact, to be more specific, constraints mapping for preliminary critical habitat. We've talked a lot in this, in these hearings about certainty and uncertainty and I wonder, you've used the term "preliminary critical habitat", but I, I don't really have much of an understanding of what the certainty is associated with your identification of critical habitat here overall.

I'm thinking of the, of the, the total amount of preliminary critical habitat you've identified which, if I recall, would cover about 94 percent of the National Wildlife Area.

- A. MR. NORTON:

 I'll just start with just a couple of very general comments to contextualize the way in which we have approached both the identification of preliminarily assessed critical habitat and critically our recommendation that, in fact, it be protected at this point.
- Q. Maybe, just as you do, I guess what I'm really trying to get at is: Can you give us any sense of the, of the difference that may occur between preliminary critical habitat and your final selection? I mean,

what kind of order of magnitude potentially are we talking about in terms of difference? What is the range of uncertainty, I guess, in your, in your prediction?

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Α. DR. DUNCAN: Dave Duncan. It does range from species to species. I think you've heard from Dr. Henderson when it comes to the three plants we are very far progressed in terms of our thinking and consultations and, in fact, rethinking of that, so there's a very high degree of certainty in the map in our presentation which Dr. Henderson pointed out is different from that in our submission. There's a very high certainty, extremely high certainty in that map for the three plants. There's less certainty for the Sprague's Pipit and the Kangaroo Rat. certainty, as much certainty as possible, that there will be critical habitat for those two species. much and where the boundaries are is questionable right now and I don't know how to explain or even guesstimate how much certainty there is or isn't because what will happen over the next year is that these exercises that are looking at critical habitat in Southern Saskatchewan and Southern Alberta will give us -- put it in more of a perspective, if you will, put Suffield in a more holistic perspective at

a larger scale so it will help us decide; is it everything that we have preliminarily assessed or is it some smaller portion of that which we have preliminarily assessed?

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In terms of the Kangaroo Rat, I would say there's quite a bit of certainty on where the active dunes are and, as Mr. Jensen explained, whether the roads are critical habitat is a big question mark for us in terms of Kangaroo Rat.

I think that's the best that I can offer, unless someone else whose got some more species-specific information can add on to that.

THE CHAIRMAN:

I think I'm about as comfortable as possible, I guess, at this stage with that answer. There obviously still is a fair bit of uncertainty, if I can summarize, in the overall identification of preliminary critical habitat and more so in some species than others to correct or to add to that.

I would like to move on to the matter of SARA and perhaps Dr. Duncan or Mr. Gregoire, you could respond to this. I believe we heard earlier that there are I think, if I recall, eight permits have been issued for research purposes I believe in the NWA and that's really not the essence of my question. But

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what I'm really trying to get a handle on is, is the extent to which you issue permits associated with industrial activity rather than research. In other words, I'm trying to get a sense as to whether this Act which is designed to protect species and critical habitat, in fact, frequently results in the issuance of permits for the destruction of that habitat or the species from industrial practices.

MR. GREGOIRE: I guess I can relate to my --Α. it's Paul Gregoire -- relate to you my experiences on that and from the number of years I've been dealing with the permitting, we do see that industry likes to streamline their processes and get their works underway and for the most part or almost entirely they prefer to avoid the need for permitting because it slows down their activities and their timelines so from what I've been seeing, industry has been using, for example, timing restrictions, setback distances in order to comply with the legislation so that they do not have the need to require permits. So that's what we've been seeing in this region for the most part.

THE CHAIRMAN: And I understand, from

EnCana's proposal, that's their intent here as well,

but I'm just trying to get a sense of, are there

situations where you do still issue permits where,

you know, you, you can't avoid some destruction of

critical habitat or the species? Is there evidence of

that?

- A. Yes, and so there are provisions in the legislation for the incidental harming of species or due to activities. And although we have not issued any within this region, I think it was mentioned in earlier evidence, we did mention examples in Ontario which had to do with bridge maintenance, another was a First Nations reserve, a cemetery maintenance and burial issues where they did issue permits, I guess, against harming a threatened plant and --
- 14 Q. I recall those examples.
- 15 A. Right.

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- Q. They didn't strike me as intense industrial development.
- 18 A. No.
- 19 Q. That was part of my question, so perhaps it's the
 20 nature of the fact that the Act implies in this
 21 instance you're looking at its application on Federal
 22 land and that's perhaps not a normal type of
 23 application that you see?
- A. MR. INGSTRUP: I was going to make that point. Prohibitions, being that they only apply on

1 Federal lands, I think you're absolutely right, that's a -- could be a reason why you don't see a lot of 2 permits being issued for, for industrial activity. 4 Q. Thank you. 5 My next question, and I think this one should 6 be directed to you, Colonel Bruce. In the Government of Canada's submission in February, there was a recommendation that new or additional Federal and Provincial legislation might be required to provide 9 10 you with the necessary authority and a couple comments there first. 11 12 I note also in the RIAS that it says -- and you don't need to look at it -- it just says that 13 this regulation, in other words, the Canada Wildlife 14 15 Act regulation, I'll quote: 16 "Will significantly strengthen DND 17 powers for protecting wildlife 18 compared with relying on the 19 National Defence Act which does not 20 contain provisions pertaining to 21 wildlife." 2.2 I wondered, given those additional powers that 23 you now have, why it was that you felt you might need 24 more powers beyond that. Was it the intention of that recommendation, although I believe it referred to both 25

Federal and Provincial legislation, would you be satisfied or would it meet the intent if the Alberta Environmental Protection, the EPEA, in fact, was applied on Federal land in the NWA, would that still necessitate in your view the need for additional Federal legislation?

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A. LCOL BRUCE: Sir, I think you've hit the sort of my concern in terms of existing legislation in that that jurisdictional gap I keep referring back to has no escalation of punitive action to be taken in case of breaches or non-compliance, much that is found in, for example, the Alberta Act. I'm not a lawyer by any stretch of the imagination, but I do believe that if, if powers in that nature were allocated, and I'm not sure if it's a Provincial law or something that we would adopt Federally and how that would apply, but yes, those are the type of things that I would be looking at.

So I'm not sure if I can say in absolutely certainty to take an Alberta law and apply it onto a Federal piece of land, but I think in terms of the powers and scope potentially, yes, that's what I would be looking for.

Q. We have heard earlier in testimony that I guess other, at least one other example where that Act does apply

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on Federal land is my understanding or it could apply on Federal land and I wondered if, in fact, if it did, would that be sufficient or do you feel that you need additional legislation on top of that? I ask this question because I'm trying to understand the legislative framework here under which you might operate and all the tools you might need to deal with this matter.

- A. I think it's a very interesting prospect, sir. To be honest with you, I, I'm not sure that I could give you a definitive answer. I am, I do understand that there are other precedents that have been set particularly in the North with regards to applying Provincial-type jurisdiction in a Federal context up in the Northwest Territories, for example, and I believe, I believe, as I say again, that that would be very helpful and I believe that would also satisfy most of my jurisdictional concerns.
- Q. Maybe I'll ask one final question on this. Has there been any discussion about additional -- about, about -- or let me put it this way: Has this matter been raised in a regulatory context within the federal government to create new legislation for the National Wildlife Area? Has there been any discussion to start that initiative, to your -- to

1 your knowledge? MR. INGSTRUP: 2 Not to my knowledge. Α. LCOL BRUCE: And not to my knowledge 4 either, sir. 5 Okay, thank you. 0. 6 My next question relates to the, the management strategy. I guess I had presumed earlier 7 with some questions that I had asked the Coalition 8 and EnCana that there might have been consultation 9 10 with stakeholders on this document and you have explained that this has not occurred and given 11 12 reasons why and I don't want to pursue that at this 13 stage, but I did have one specific question and then 14 a bit of a follow-up. 15 My question is: I noted in the -- well, the 16 first question, I'm sorry, is this strategy, once 17 it's signed off by the Minister, will this be issued 18 in draft form or will this be final? 19 Sir, once the Minister's signed it, it will be final. Α. 20 Q. Okay, so there is no further opportunity then for 21 consultation on it. Okay. In the strategy there is 2.2 an indication that there are numerous roles and services provided by the NWA and one listed is it 23 24 provides a source of native seed for re-claiming

anthropogenic disturbances in the Military Training

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Area and NWA. I was not aware from my reading that this sort of thing was occurring and I just wondered if you could confirm whether that is occurring now or whether that's a future plan?

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Α. MS. BOYD: For several years it has been the case that in that, in that area the Base has on a fairly I would say relatively small scale harvested particular seed, native seeds from the National Wildlife Area. We send those seeds away for cleaning and then have a small cache that can be used for, again, very small reclamation projects elsewhere on the Military Training Area and in this way I think that's an important example of how the National Wildlife Area not only has its own inherent benefits, but also in that same section where it indicates that it acts as a mitigation area for the Military to compensate for the impacts of operational requirements on other areas of the CFB Suffield Range.

I think this is an example of how, in terms of looking at the Base and managing it on a landscape scale, the NWA does provide for such things as acting as a seed source.

Q. It sounds like this is being done on a pilot scale in a sense when we're talking about small plots and I wonder if you could give me some indication of

success that you're seeing with, with that operation?

A. MR. SMITH: We've only undertaken one trial seeding project given up until now the limited -- pardon me, given the limited manpower to actually achieve some of these projects. So to date, while we have a few hundred pounds of seed we've only actually put in the ground maybe a couple hundred pounds. So to monitor large-scale studies, no, we haven't done that yet.

Q. Okay. Thank you.

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Related to the, I guess, management plan, if I can use that in a very generic context, and I appreciate there's a number of documents that you have that I think encompass that, you have talked about the need to develop thresholds for different, for different Valued Ecosystem Components and I guess when one develops thresholds there is considerable amount of value judgment that goes into the establishing of those thresholds and I wonder if it is your plan to consult more widely on the creation of those particular thresholds in order to establish some kind of upper capacity in the National Wildlife Area?

A. LCOL BRUCE: If I may, sir, we're going to actually do that across the entire Base. And the

whole Suffield Sustainable Management Plan which is, as we've said, been a little slower than we had originally hoped when we initiated this Project in 2006 will be distributed to all the stakeholders to have a look at to see what we want to do.

As you can appreciate, it behooves all of us to make sure that our science, which this would be largely science-based, will have an opportunity to verify and test our theories on those particular studies to ensure that we have the best available knowledge to make decisions on. So, yes, they will be. It's just not ready yet since I have only seen of the six boards I believe you were briefed on the other day, I have personally only seen the first draft of one board. So it's not ready for public consumption yet.

- Q. But your intention is to consult with other users in the Base? I think you mentioned stakeholders.

 Would that include --
- 20 A. Yes.

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- 21 Q. -- perhaps the public as well in that sense?
 - A. It will be for sure industry, PFRA, other government departments, in particular, you know, Environment

 Canada and we will I think -- it might be a reasonable suggestion to be able to say that we will brief it

at something like the Prairie Farm -- or Prairie

Conservation Forum is another venue that we

potentially will do that in.

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- Ο. Thank you. My next question goes into the area of, I guess, soils and perhaps Dr. Smith might be the person to best respond to this. I asked EnCana a question when they were sitting where you are as to whether any of their drilling -- I guess I was specific on drilling, but whether any of their drilling activities had actually resulted in slumping, visible slumping in the NWA. Their answer was -- was no. And I understand the approach that Dr. Smith has suggested and Dr. Wolfe I believe, but I wonder if soil slumping, as a result of oil and gas activity and pipelining, has been a serious problem in the NWA. I'm just trying to get a sense of this in practice. Can anybody respond to that for me, please?
- A. DR. SMITH: Rod Smith speaking. That I'm aware of, I would have no field data to corroborate that. Mine was purely based on a scientific evaluation. Slumping is certainly potential, though, but if we limited ourselves just to slumping, we're only considering the highest magnitude events which understandably also the lowest frequency. I

1 understand there may be something else that probably 2 could --I think we didn't hear the THE CHAIRMAN: 4 last part because the microphone --5 Α. DR. SMITH: The slumping themselves would 6 be the highest magnitude events, but clearly are the lowest frequency, but ... MR. MARTINS: Fernando Martins. 8 Α. THE COURT REPORTER: Your mic isn't on. 9 10 Α. MR. MARTINS: Fernando Martins. Sorry. number of years, sir, ago there was a site in Koomati 11 12 along one of the, the coulee breaks in the Riverbank zone in which a pipeline was installed and SEAC 13 14 visited the site and expressed some concerns to the 15 installation of that pipeline and associated erosion 16 issues that went with that, so not ideally slumping, 17 I guess, by definition but there were some serious 18 erosion issues associated with that coulee break site. 19 Do you recall whether that was in, within the Q. 20 100-metre setback that EnCana has proposed as 21 mitigation on this proposal? 2.2 This, this pipeline started Α. MR. MARTINS: 23 on the plateau, went over top of the, the coulee break 24 and down towards the actual river area so, yes, it 25 would be right through an entire coulee break.

Q.	It was within by the sound of it then, yeah. Okay,
	thank you. But, other than that, there has been no
	at least visible evidence of that kind of a problem
	in particular in the NWA but also on the Base. Thank
	you.

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A. DR. SMITH: Yeah, and Dr. Smith speaking, I would say we can't limit ourselves simply to the large magnitude of these slump events. There is the potential, as I've discussed, for rock topple, rock fall, that kind of event and that would require a careful monitoring to assess whether that had taken place or not but potentially could have a significant impact.

And further to the setbacks, it was never defined that the setbacks extended to coulees and seasonal watercourses. It was purely in the EIS, it was simply identified in relation to the South Saskatchewan River itself. There are clearly other slopes that should have this setback allowance and so there the considerations are routings of pipelines, roads in consideration of vibrational activity, and its potential to set these off.

Q. Thank you for that clarification.

My next and probably last area of questioning is -- no, I have one more, sorry -- I wanted to raise

1 the issue of groundwater and perhaps before this hearing ends, I will be a little bit more clearer 2 in terms of my understanding of the issue of groundwater, but I wondered, we heard earlier in the 5 testimony that DND -- and I think this is a question 6 for DND, actually -- had stopped using groundwater, if I understood properly, if my understanding was correct -- or stopped groundwater withdrawal. 8 that is a correct understanding, I wonder if you 9 could tell me the reason for that? 10 MR. RICHMOND: Wes Richmond. 11 Α. THE COURT REPORTER: 12 Your mic isn't on. 13 THE CHAIRMAN: I think you have to use the 14 other one. 15 MR. RICHMOND: Sorry about that. 16 Richmond. I'd probably need clarification as to which 17 water source you're talking about. The, the only 18 wells which we had used were for supply of water to 19 the Base. Is that what you're referring to? 20 THE CHAIRMAN: Well, I recall hearing, and 21 I didn't note the actual area in the transcript, but 2.2 I thought it was said that the Department of National 23 Defence had stopped withdrawals of groundwater and I 24 thought that was just throughout the whole of the 25 Base, but perhaps you could clarify that.

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Α.

Yeah, the only groundwater source that we had actually exploited was for the supply of water for the Base. Now, that's for public consumption, fire fighting purposes, that sort of thing. We had a number of wells that were drilled in I believe it was 1992, somewhere in that range. We had and still do have a river water source quite a number of kilometres south of the Base on the South Saskatchewan River and that system had become rather old and decrepit and we were looking at the possibility of replacing it and were actually forced into looking at another option which would be wells to draw water from the Lethbridge pre-glacial trench that you, you've heard about a number of times and those wells were actually developed in conjunction with a new water treatment plant for the Base and we began drawing water from those wells but had always experienced difficulties with those wells because of the -- there was a lot of sand coming up with them and so on, so there was a lot of pre-mature wear on the pumps and the water was of such a quality and the mineral content was such that there was a fair amount of chemical required for the treatment of it and softening and so on and so forth, so significant costs associated with the production of that water and always running into problems of having

1 to replace the pumps and so on.

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So we grew more and more reliant again on river water as opposed to well water and basically weaned ourselves off of river water -- or well water and then we're exclusively back to river water, but now we've begun to have problems again with our river water source because, of course, it had never been upgraded as we wanted to do back in the early '90s. So we've now got problems with both the river and the, the wells and I believe just recently we're back to I think 100 percent use of well water again, but I could stand corrected. The Base Commander I think has more recent knowledge.

- Q. Okay. I guess I was wondering. I maybe had an incorrect impression --
- 16 A. LCOL BRUCE: No, I think I understand what
 17 you're saying.
- Q. -- on groundwater and I wondered, the reason I
 wondered was whether, in fact, you had stopped using
 it was because of concerns of drawdown of the
 aquifer?
 - A. Well, in 2007 we stopped drawing any water from things like dugouts and the like out in the training area except on an emergency basis, so we used to I think in the past and I can stand corrected, I'm not sure how

many years ago, but we did used to draw water for fire fighting and the like for our trucks, but that's no longer the case and virtually stopped all of that as of 2007. So for the most part, we truck it out of the main water sources on the Base out to holding tanks at various locations within the training area to use for fire fighting capability.

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- A. MR. RICHMOND: Just one more thing, if I could. The use of water out on the Prairie was from dugouts that had been created not from actual withdrawal of groundwater. To my knowledge, I don't know if we've ever drawn groundwater in the Range and Training Area.
- Q. Thank you. And maybe my last question related to that is I know you did some recent studies with LandWise that looked at, I guess, the -- at some of the Wetlands and their state of, I guess, of or their environmental state, to use a general term. I wonder, with all of your photography work and mapping, if you have any idea as to whether over a long period of time you're seeing any trends in terms of reduction in Wetlands? I'm talking now about the whole of the MT -- the whole of the Base.
- A. MR. SMITH: Brent Smith. I've heard of only casual observations from people that have been

1		around for a number of years that have observed
2		declines in water levels around the Hamlet of Suffield
3		which could be as a result of the drawdown of the
4		aquifer, but there's no hard data to confirm that, and
5		that's all we have right now.
6	Q.	Nothing on the Base from your mapping, your

Q. Nothing on the Base from your mapping, your photographs going back over a number of years by the sound of it then?

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- A. MR. SMITH: The issue, sir, is that water levels fluctuate as a result of climate, so there's a lot of variability and to try to pin it down to, to groundwater drops in aquifers is, is difficult at this point.
- Q. I was thinking more of the surface ponding areas, not -- not the groundwater, but I think you've answered my question. Okay. Yes, Mr. Norton, did you have something to add to this?
- A. MR. NORTON:

 I got the impression that you were about to, to wrap
 up and I was going to first apologize that after three
 weeks my brain is working a little more slower than it
 may have been at the beginning and would ask whether
 you would be willing to turn back to your questioning
 around the certainty on the preliminary critical
 habitat for just a moment?

THE CHAIRMAN: If you have something more to add, that would be -- that would be helpful.

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A. MR. NORTON:

A few of us have been conferring and I'm not certain that we did an adequate job of conveying our best response to the question that you asked and, as I recall, your question was essentially trying to get a handle on the degree of uncertainty around the critical habitat that we have preliminarily assessed in our submission and I would like to note, I guess, that there's in this context at least two senses in which we could consider uncertainty.

One is uncertainty around the science behind which we have identified the maps that we have -- that we have presented and the other area is because this is only a preliminary assessment of critical habitat and, as has been discussed, there is a formal process that needs to be completed and I would label that as process uncertainty and I think it might be helpful to separate those two.

On the, on the scientific side, I think the uncertainty exists for sure, but the level of uncertainty is quite low. It's very low for the three plant species. It's quite low, very qualitative, I realize, but quite low for the Kangaroo Rat and a

little higher for the Sprague's Pipit.

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Where there definitely -- where we would definitely have to acknowledge uncertainly is around the remainder of the process that has been to unfold so, as we've discussed, there are consultations required that are not complete at this point and those may lead to revisions and ultimately the formal identification of critical habitat is a decision that our Minister must take and we can't purport at this point to have confidence as to how that process needs to unfold.

What we have tried to accomplish with the recommendations around preliminary critical habitat at this point can be characterized as us recommending that the opportunity be maintained, that these areas that we think from a biological perspective are likely to constitute critical habitat that the opportunity will be maintained that it can ultimately be formally identified as critical habitat and effects of the Project, should they proceed in the relatively near-term future before that process has had a chance to play out, could reduce the opportunity that exists as of today.

I hope that's helpful.

Q. Thank you, Mr. Norton. That's helpful.

1 That concludes my questions and I see a sigh of relief over there. That concludes all of our 2 questions, I guess, from this Panel. So I would like to also take the opportunity 5 to thank all of you for your presentation and also the response to all of our questions and those of 6 others in the proceedings the last number of days. Thank you very much. 8 We will now -- I'll ask Mr. Lambrecht, first, 9 if you wish to redirect, to have redirect examination 10 11 of this panel? MR. LAMBRECHT: 12 Just two very minor 13 questions. RE-EXAMINATION BY MR. LAMBRECHT: 14 15 First, panel, some of you used the term "litter" in 16 your evidence. What is litter in the sense that you 17 used it? 18 Α. DR. HENDERSON: As a plant ecologist, litter 19 that I'm commonly referring to is herbaceous plant 20 material that has senesced or died and 21 is accumulating on the soil surface, so it's not the 2.2 currently green growing vegetation but a lot of the 23 dead vegetation that would be existing at the soil 24 surface. 25 I understand that wildlife biologists and

1		people who do habitat analyses may have slightly
2		different definitions.
3	Α.	MS. DALE: My response would be that,
4		in many ways, bird biologists tend to use litter only
5		for that material that's lying loose on the ground.
6		In the case of the litter index, that I wish I had
7		called something else, we were referring to both
8		standing and fallen dead material, plant material.
9	Q.	All right. And, Colonel Bruce, just my note of your
10		evidence concerning the circulation of the draft
11		Range Standing Order after your arrival on the Base
12		was that you arrived in 2007 but circulated the draft
13		in December of 2005. Just for clarification, when
14		did the draft of that get circulated?
15	Α.	LCOL BRUCE: Draft Number 2, which is the
16		one that I had my involvement with, was circulated in
17		December of 2007, so that's the second draft of the
18		original document.
19	MR.	LAMBRECHT: All right, sir.
20		And, Mr. Chairman, that concludes the
21		re-examination.
22	THE	CHAIRMAN: Thank you, Mr. Lambrecht.
23		Our plan is to continue a little bit longer and I
24		believe that people from SIRC are present. If we
25		bring them forward to perhaps hear their presentation,

1	t	then I guess this would be an appropriate moment for
2	t	this panel to remove itself and to have SIRC come
3	£	forward. I would like to at least begin to perhaps
4	h	near their evidence and then determine the extent to
5	W	hich we might have cross-examination.
6		So, once again, I thank the Government of
7	C	Canada for their assistance before this Panel.
8	A. C	COL LAMARRE: And thank you, sir, and
9	M	Members of the Panel.
10	(DI	EPARTMENT OF NATIONAL DEFENCE, ENVIRONMENT CANADA, AND
11		NATURAL RESOURCES CANADA WITNESS PANEL EXCUSED)
12		(PROCEEDINGS ADJOURNED AT 4:23 P.M.)
13		(BRIEF BREAK)
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14		(PROCEEDINGS RECONVENED AT 4:32 P.M.)
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14		(PROCEEDINGS RECONVENED AT 4:32 P.M.)
14 15	W	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think
14 15 16	W Y	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think re're ready to start again. Mr. Miller, you've got
14 15 16	р У	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think we're ready to start again. Mr. Miller, you've got your Panel assembled here and I would like to start,
14 15 16 17	W Y MR. M	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think we're ready to start again. Mr. Miller, you've got rour Panel assembled here and I would like to start, blease.
14 15 16 17 18	w y p MR. M.	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think re're ready to start again. Mr. Miller, you've got rour Panel assembled here and I would like to start, please. ILLER: Thank you, Mr. Chairman. On
14 15 16 17 18 19	W Y P MR. M: J	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think re're ready to start again. Mr. Miller, you've got rour Panel assembled here and I would like to start, please. ILLER: Thank you, Mr. Chairman. On Tanuary 4th of this year, 2008, the Joint Review Panel
14 15 16 17 18 19 20	w y mR. M: J s	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think re're ready to start again. Mr. Miller, you've got rour Panel assembled here and I would like to start, please. ILLER: Thank you, Mr. Chairman. On Tanuary 4th of this year, 2008, the Joint Review Panel sent a letter to Suffield Industry Range Control Ltd.
14 15 16 17 18 19 20 21	w y p MR. Mi J s r	(PROCEEDINGS RECONVENED AT 4:32 P.M.) HAIRMAN: Ladies and Gentlemen, I think re're ready to start again. Mr. Miller, you've got rour Panel assembled here and I would like to start, please. ILLER: Thank you, Mr. Chairman. On Tanuary 4th of this year, 2008, the Joint Review Panel sent a letter to Suffield Industry Range Control Ltd. requesting it present evidence regarding roles and

1 In particular, the Panel expressed interest in learning more about SIRC's role in Pre-disturbance 2 Assessments and in the reclamation and closure, closure phases and that was set out in the letter. In response to the Panel's request, SIRC filed a written submission on February 25, 2008. 6 That document has been assigned Exhibit No. 008-002. On May 30, 2008 SIRC filed responses to 8 9 Information Requests from the Government of Canada and 10 that document has been assigned Exhibit No. 008-001. 11 The -- as you, as you've observed, SIRC is 12 presenting two witnesses to speak to its filed 13 evidence. Closest to the Panel is Mr. Steven Moffat, 14 15 who is the president of SIRC. He will address 16 questions concerning SIRC's policy and position 17 related to its roles and responsibilities; and to 18 Mr. Moffat's left is Mr. Robert Baron, who is SIRC's 19 supervisor, range safety. He will address questions 20 concerning operational aspects of SIRC's roles and 21 responsibilities. 2.2 And as I dealt with this morning, the CVs for 23 these gentlemen were marked collectively as 24 Exhibit 008-003. Sir, if the witnesses may now be 25 sworn.

1 THE CHAIRMAN: Thank you, Mr. Miller. SIRC WITNESS PANEL: 2 3 Stephen Moffat (Sworn) 4 Robert Baron (Affirmed) 5 THE CHAIRMAN: Please proceed. Please 6 proceed, Mr. Miller. 7 EXAMINATION IN CHIEF BY MR. MILLER: MR. MILLER: I'll start with you, 8 9 Mr. Moffat. Sir, were SIRC Exhibits 1 and 2 and your 10 curriculum vitae, being part of SIRC Exhibit 3 11 prepared by you or under your direction? MR. MOFFAT: Yes, sir. 12 Α. And do they have -- do you have any corrections to 13 Ο. make to those documents? 14 15 Α. No, sir. 16 Is the information contained in those documents 0. 17 accurate to the best of your knowledge or belief? 18 Α. Yes, sir. 19 And do you adopt SIRC Exhibits 1, 2 and 3 as the Q. 20 evidence of SIRC in this proceeding? 21 Yes, sir. Α. 2.2 And do you adopt your CV as your evidence in this Ο. 23 proceeding? 24 Yes, sir. Α.

And, Mr. Baron, were SIRC Exhibits 1 and 2 and your

1		curriculum vitae, being part of SIRC Exhibit 3
2		prepared by you or under your direction?
3	A.	MR. BARON: Yes, they were.
4	Q.	And do you have any corrections to make to those
5		documents?
6	A.	I do not.
7	Q.	Are those documents accurate to the best of your
8		knowledge or belief?
9	Α.	Yes, sir, they are.
10	Q.	And you adopt your CV as your evidence in this
11		proceeding?
12	A.	I do.
13	MR.	MILLER: With that, Mr. Chairman,
14		these witnesses are now available for questioning.
15		Thank you.
16	THE	CHAIRMAN: Thank you, Mr. Miller. And
17		welcome Mr. Moffat and Mr. Baron.
18		In order of questioning I see Ms. Klimek
19		would be first but as she is shaking her head I assume
20		that you have no questions then to or do not wish
21		to conduct cross-examination.
22		I next ask Mr. Lambrecht if he wishes to
23		raise questions with the members of this SIRC Panel.
24	MR.	LAMBRECHT: Yes, sir. If I might have
25		your indulgence, I realize it's late. I just need to

1 find one passage in my papers. 2 THE CHAIRMAN: Certainly, Mr. Lambrecht. CROSS-EXAMINATION BY GOVERNMENT OF CANADA, BY 4 MR. LAMBRECHT: 5 MR LAMBRECHT: Gentlemen, have you been able to inform yourselves 6 Ο. about the traffic volumes that enter CFB Suffield as a result of oil and gas development collectively, all 8 9 of it, on the Base recently? I'll start, sir. 10 Α. MR. MOFFAT: The short 11 answer is yes. As part of our regular duties we, we 12 track and count every vehicle that comes through, through our gates. And I will defer to Mr. Baron if 13 14 you want to get anymore details about that or indeed 15 how we track it over the years. 16 Well, in your tracking and counting, do you Ο. 17 distinguish between oil and gas vehicles and other 18 vehicles? 19 Α. MR. BARON: Yes, sir, we do. Each of my 20

- gate guards, every vehicle that passes through, as it
 enters the range is physically counted on a sheet. We
 only count oil and gas traffic. We do not count any
 transitory Military traffic entering the Base.
- 24 | O. And do you keep summaries of your counts annually?
- 25 A. Yes, \sin , we do.

- Q. And what would be the most current years for which you have annual counts?
- A. Right up to the end of September, 2008.
- Q. All right. And can you give us some idea, over the last few years, what the annual counts of oil and gas traffic on to the Base are?
- A. The rough daily average would be somewhere in the order of 300 to 325 vehicles per day.
- 9 Q. What about a total?

- 10 A. Annually, that would run from, I believe in the last
 11 few years, anywhere from between 105 to roughly
 12 120,000 per year.
- Q. All right. We heard a few moments ago -- were you here listening to the evidence this afternoon?
 - A. MR. MOFFAT: Yes, sir, we were both here.
- Q. There was some reference to a past practice, not a

 present practice, but a past practice, where SIRC may

 have signed some Applications for Development forms

 which went to ERCB and SIRC's signature may have sort

 of served as some kind of evidence of landowner

 consent without the knowledge of the Base. Do you

 know anything about such a practice in the past?
- A. Yes, sir, just give me a second. I'm going to get my reference material here.
- 25 Q. Thank you, sir.

1 Α. I believe the practice to which you refer, Mr. Lambrecht, is, is one that was initially laid out 2 when the 1999 Partial Access Agreement was signed. believe it is Schedule E and again -- forgive me, I 5 believe it will start at least with schedule E. 6 laid out the practice where it was -- in fact if you go to that particular schedule, if I may read it, would that be helpful? Schedule E of the Surface 8 9 Access Agreement says that there would be an annual 10 meeting and one of the aims of that annual meeting, 11 and I paraphrase up to that point, would be, and I 12 quote: "To obtain the approval of the Base 13 14 Commander in principle for the 15 proposed operations."

End of quote. That particular schedule then goes on, sir, to explain that with that approval in principle, the practice as laid out at that time was that then provided direction for range safety to conduct the, the procedures outlined in paragraph 4 of that schedule which would include, I would expect, I think what you were referring to.

Q. All right, thank you. And, and I can read the agreement and is it your understanding that that practice, whatever it was in the past, has now

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1	ceased?
2	A. That is my understanding, yes, sir.
3	Q. Yes, sir, okay.
4	MR. LAMBRECHT: Thank you very much,
5	Mr. Chairman, I don't have any other questions of
6	SIRC.
7	THE CHAIRMAN: Thank you, Mr. Lambrecht.
8	EnCana, do you have any questions?
9	MR. DENSTEDT: We have no questions, sir.
10	THE CHAIRMAN: Thank you, Mr. Denstedt.
11	Mr. Mousseau?
12	MR. MOUSSEAU: I have two questions, I
13	think, sir.
14	CROSS-EXAMINATION BY THE BOARD STAFF, BY MR. MOUSSEAU:
15	MR. MOUSSEAU:
16	Q. I've spoken with the, with the Base Commander and I've
17	spoken with EnCana about the existence of an accurate
18	and up-to-date map of trails in the NWA and I'm
19	wondering if that is a document, or if, if SIRC has a
20	map that accurately shows the authorized trails in
21	the NWA?
22	A. MR. BARON: We have battery maps that we
23	obtained from Midwest Surveys that my staff use.
24	Other than those battery maps, which we have obtained,
25	I believe in 2007, that's the most accurate maps we

have.

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- Q. Okay. And I understand one of the, one of the goals of EnCana over the next three to six months is to complete an access map and work with DND to finalize which trails within the NWA are authorized and which ones aren't. Are those discussions that SIRC would necessarily need to be involved in or want to have some input into?
- A. MR. MOFFAT: Thank you. I believe so,
 Mr. Mousseau, but clearly the, the decision process of
 which ones to be used are beyond what I am mandated to
 do. Certainly, once those decisions are made then,
 yes, I would hope to be involved so that we could
 adjust those aspects of access control and movement
 control that we are responsible for to organize those
 to conform with those routes that are chosen.
- Q. And, and once that's done and authorized trails are, are identified, does SIRC have any enforcement duties if it were to find out that an industry operator had gone off an authorized trail?
- A. The short answer, Mr. Mousseau, is yes. As is clearly, I believe at least, stated in the agreements, the Surface Access Agreement in particular, operators are to follow all these orders and directions and SIRC has been granted in the Surface Access Agreement the

1 authority to remove access rights from an operator who violates any of those instructions to include 2 directions as to what route to or not to take. I don't know if -- Mr. Baron, do you want to add anything anecdotally or not? No, I don't think 5 6 it's necessary. 7 Has SIRC ever taken such a step in the past? Q. MR. BARON: Yes, we have. I can't give a Α. 9 specific example as to -- for example, an operator 10 violation of using an access trail, but there's 11 numerous instances where an operator or one of their 12 service providers has breached a rule or a regulation, if you will, that we have given them and we have 13 14 removed them from the range, from as little as a 15 period of two weeks to lifetime suspensions for 16 various offences. 17 I guess that was my last question is -- is there a Q. 18 sliding scale of consequence? 19 Yes, there is. For example, there's a speeding policy Α. 20 in the Base Range Standing Orders which we enforce on 21 behalf of the Base Commander on oil and gas industry 2.2 vehicles and that has a sliding scale of suspension 23 starting at 14 days up to a lifetime suspension. 24 There are some things pertaining to, globally

what we call range safety, which would involve someone

out of curiosity or more likely out of stupidity,
fiddling with live ammunition or any type of
ammunition, that's an automatic lifetime suspension.

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Entering a live-fire template, either accidentally or purposely because they're curious, or again intellectually challenged, would result, would result in, depending on the situation, a six-month suspension all the way up to -- it could be a lifetime suspension. And that has happened -- I couldn't give you the frequency but it does happen.

- Q. That just -- that leads me to one last question. Is there similar consequences for unauthorized entry into the NWA?
- A. Yes. I started -- to make a simple answer a little more difficult. I started in 2002 with SIRC and in my initial training when I came there, it's always been our practice regardless of who the person is, if someone comes on the radio in the morning when they're going to work and they say, I'm here and I would like to go there, if the location they give that they are going through is the National Wildlife Area, one of the things our radio operators automatically do, if they don't know, for example, the -- if it's an EnCana operator, they know they have a right to go there.

If they don't recognize the call sign or the

1 individual who is going there, they immediately ask 2 them why are you going there and what is your reason and if, for example, they just say, well, it's quicker 4 for me to get from Point A to Point B by going through 5 the NWA. No, I'm sorry. And if in fact that individual did that, that 6 breaches another regulation of you did not stick to 7 the route you said you were going to and depending on 8 9 the day, for example, if there's live firing going on, 10 that person would be removed from the range for life. So even if they went into the National 11 12 Wildlife Area, it's going to get them kicked off for 13 two weeks. Thank you, Mr. Chairman. 14 MR. MOUSSEAU: 15 Those are my questions. 16 THE CHAIRMAN: I will turn to my colleagues 17 on the Panel. Okay, Dr. Ross. 18 QUESTIONS BY THE JOINT REVIEW PANEL, BY DR. ROSS: 19 DR. ROSS: 20 In your submission, you indicate that SIRC involvement Q. 21 in Pre-disturbance Assessments is normally limited to 2.2 the very initial stages involving coordination and 23 the facilitation of information gathering relevant to 24 a particular site. I couldn't figure out what that 25 meant. Do you go dig up soil?

1 Α. MR. MOFFAT: On the contrary, no, sir. What I was referring to, or what we were referring to 2 in that reply was more in line with our regular duties of coordination and gathering of information to be 5 submitted in most cases to the Base or whatever. That's all it was, is just a normal -- our normal 6 duties as outlined in the agreement. And, and the next item, I assume, has a very similar 8 Ο. 9 response and that is in terms of practices of 10 reclamation and abandonment are just part of your 11 normal core tasks, coordination, monitoring and verification -- same, same answer, is it? 12 13 Α. Yes, sir. 14 Thank you. Mr. Mousseau was asking you about your Ο. 15 monitoring of, of violations. How do you measure 16 speeding? Do you have secret radar tracks out there? 17 MR. BARON: Each of my staff and myself Α. 18 included, as a matter of fact before I became the 19

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1 we recently hired is a newly retired Military Policeman whom we poached from Colonel Bruce's staff. 2 That's twice I've tried to make a joke and found that Ο. 4 I was bang on. 5 The -- my last question. Yesterday we heard 6 from SIRC. Admittedly SIRC has been, has been around longer -- sorry, SEAC. I've, I've got a strange combination of letters written down here. SEAC is 8 what I was trying to do and I see I've put an "R" in 9 10 the middle of it. We heard from SEAC and the folks from SEAC 11 have encountered, over the last third of a century 12 13 that this has been around, some problems with 14 uncertainty, certain authority and responsibility and 15 especially resource challenges. 16 Now, you folks have yet to hit your first 17 decade and so I would expect different -- my real 18 question is: have you encountered any significant 19 problems by way of being able to fulfill your 20 responsibilities or making sure you have enough 21 resources? 2.2 MR. MOFFAT: Thank you, Dr. Ross. Α. The short answer is, no, as it stands, right now. 23 Since I 24 arrived last year I increased the -- we increased our

staff levels to where they are now and for the moment

they are adequate so we have not had any challenges in that respect.

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With respect to carrying out our mandate, unless my, my colleague tells me different, I also believe the answer to that is no -- I mean, yes, of course, sir, there are always challenges, but we've hired some good folks. We have a good -- at least in my opinion, a good working relationship with Colonel Bruce and, and his colleagues and of course there are speed bumps, the radar guns notwithstanding, but we work through those, so the short answer is no.

- Q. Would there be any difficulties if -- we've heard some discussion at this hearing about the prospect of using GPS units on all traffic so that you would be better able to monitor where they're going and presumably how fast they're going. Would that cause any complications for you folks?
- A. No, as a matter of fact we are looking into that right now. I think the Commander alluded to the fact that we have been working together to bring our practices more in line with what he, what he wants, not that they weren't bad before, but he is -- this is his responsibility and I do this on his behalf.

And one of the things we are looking at right now, in fact, in conjunction with the Cold Lake Air

1 Weapons Range, is a GPS chip that can be inserted into 2 different types of radio so I don't have to buy a completely different system. 4 So we're -- but it is very embryonic and we're, we're still not there but again, the short 5 6 answer is, yes, we are actively considering it. 7 DR. ROSS: Thank you very much, Mr. Chair. That's all the questions I have. 8 THE CHAIRMAN: 9 Thank you, Dr. Ross. 10 QUESTIONS BY THE JOINT REVIEW PANEL, BY MR. CONNELLY: 11 MR. CONNELLY: 12 I think I've just got one question. I understand that accidents and that sort of thing are reported to SIRC 13 14 if and when they happen on the Base? 15 Α. MR. MOFFAT: Yes, sir. 16 Do you also receive reports of, let's say, wildlife 0. 17 vehicle collisions and that sort of thing? 18 Α. MR. BARON: Yes, we do. 19 Could you give me a sense of, of the frequency of Q. 20 that? 21 Sir, I would have to say that would be less than 2.2 annually. I can't think of the last instance. 23 Sorry, no more than one per year, is that ...? 24 Yeah, maybe, sir. We had -- I can't believe it was Α. 25 last year or the year before, a vehicle struck an

1 antelope, for example. I couldn't give you a date on 2 that. It's relatively infrequent. THE CHAIRMAN: Thank you. That completes my 4 questioning. We've, we've heard quite a bit about 5 SIRC over the duration of our proceedings, so I think 6 that's also reflected in, I guess, the positive paucity of questions that we have here this evening. That concludes our questioning. 8 9 Mr. Miller, did you have any redirect that 10 you wish to raise? MR. MILLER: Even if I did, Mr. Chairman, 11 12 I think at five to 5:00 on a Friday afternoon after a long week I might get lynched if I did so -- but I 13 14 don't, in any event. Thank you, sir. 15 THE CHAIRMAN: Thank you, Mr. Miller. 16 (SIRC Witness Panel Excused) 17 THE CHAIRMAN: All right, Mr. Denstedt. 18 UNDERTAKING MATTERS SPOKEN TO: 19 MR. DENSTEDT: Mr. Chairman, we have an 20 undertaking to file that was given by -- given to 21 Mr. Mousseau on October 15th at page 1429, line 2 of 2.2 the transcript, and it's regarding the consolidated 23 list of commitments made throughout this proceeding. 24 We purport to mark that and I've kind of lost track of the numbers, 135 or 6. 25

1	THE CHAIRMAN: I think it would be if my
2	list is up to date it would be 136. Mine isn't up to
3	date but it is now, I guess so 136. Thank you.
4	EXHIBIT NO. 002-136: EnCana's commitments
5	from hearing
6	MR. DENSTEDT: And if there are any
7	commitments tomorrow we'll simply update this list.
8	THE CHAIRMAN: Okay. Thank you,
9	Mr. Denstedt.
10	CONCLUDING REMARKS:
11	I would like to thank the SIRC Panel and
12	Mr. Miller for your attendance and for the information
13	you've provided today.
14	That concludes our hearing today, but in
15	terms of tomorrow, just let me spend a moment about
16	starting time, and what will happen.
17	Tomorrow we will be hearing from the two
18	Panel experts and also rebuttal from EnCana. I would
19	propose that we start at the regular time at 8:30
20	tomorrow morning and hopefully with that, we will have
21	an earlier completion in the day and that would be, I
22	think, something that everybody would appreciate, I
23	hope, including me.
24	So with that we'll close the proceedings and
25	we'll see you tomorrow morning at 8:30. Thank you.

1	(PROCEEDINGS ADJOURNED AT 4:58 P.M.)
2	(PROCEEDINGS TO RECONVENE ON SATURDAY,
3	OCTOBER 25, 2008, AT 8:30 A.M.)
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1	REPORTER'S CERTIFICATION
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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 25th day of October, 2008.
15	
16	
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19	Tambi Balchen, CRR, CSR No. 9166
20	Official Realtime Reporter
21	
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